

Version 2 Release 1

*IBM DB2 Analytics Accelerator Loader  
for z/OS  
User's Guide*





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for z/OS  
User's Guide*



**Note:**

Before using this information and the product it supports, read the "Notices" topic at the end of this information.

**First Edition (February 2016)**

This edition applies to Version 2 Release 1 of IBM DB2 Analytics Accelerator Loader for z/OS (product number 5639-OLE) and to all subsequent releases and modifications until otherwise indicated in new editions.

This edition replaces SC19-4165-02.

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## About this information

IBM® DB2® Analytics Accelerator Loader for z/OS IBM DB2 Analytics Accelerator Loader for z/OS (also referred to as DB2 Analytics Accelerator Loader and Accelerator Loader) is a tool that you use to load data on IBM DB2 Analytics Accelerator for z/OS and on IBM DB2 for z/OS®.

These topics help database administrators, system programmers, application programmers, and system operators perform the following tasks:

- Plan the installation of DB2 Analytics Accelerator Loader
- Install and operate DB2 Analytics Accelerator Loader
- Customize the DB2 Analytics Accelerator Loader environment
- Diagnose and recover from DB2 Analytics Accelerator Loader problems
- Design and write applications for DB2 Analytics Accelerator Loader
- Use DB2 Analytics Accelerator Loader with other DB2 products

Always check the DB2 Tools Product Documentation page for the most current version of this information:

<http://www.ibm.com/software/data/db2imstools/db2tools-library.html>



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## Overview

IBM DB2 Analytics Accelerator Loader for z/OS is a tool that you can use to load data on IBM DB2 Analytics Accelerator for z/OS and on IBM DB2 without stopping update activity to the production tables while the data is being loaded into the accelerator.

You can load data from non-DB2 and remote DB2 sources directly to the accelerator in a single in-memory process. The source data is accessed, converted to the necessary format, and loaded to the accelerator in a single step without landing or loading the data into an intermediate file format. Accelerator Loader features provide performance and processing efficiency over the existing process in use by many z/OS installations. These features enable you to load a variety of non-DB2 data into the accelerator in a more automated manner, and enable true enterprise-wide analytics.

### Topics:

- “What's new”
- “What does Accelerator Loader do?” on page 1-6
- “Features and benefits” on page 1-6
- “Components and interfaces” on page 1-8
- “Tools Customizer overview” on page 1-9
- “Scenarios” on page 1-11
- “Service updates and support information” on page 1-10
- “Product documentation and updates” on page 1-10
- “Accessibility features” on page 1-11

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## What's new

Review a summary of changes for this edition.

New and changed information is indicated by a vertical bar (|) to the left of a change. Editorial changes that have no technical significance are not noted.

### **Version 2.1 SC27-6777-00 (First edition) - February 2016**

The Accelerator Loader provides the Accelerator Loader server. The server allows non-DB2 and non-z/OS data sources to be defined for the purpose of extracting data from the source, and loaded to the accelerator via the Accelerator Loader studio, a plugin to IBM Data Studio. Accelerator Loader studio enables you to load data to the accelerator without first landing the data in a flat file.

The Accelerator Loader integrates with DB2 tables in replication mode via IBM Change Data Capture for z/OS (CDC) when loading data to both a table in DB2 and a table on the accelerator from an external file.

You can append data to a DB2 table, the accelerator table, or both. The RESUME YES load utility keyword and the **Resume** field on the Load Accelerator and DB2 from External File and Load Accelerator from External File panels support this enhancement.

The Accelerator Loader supports appending data when loading from an external file into a DB2 table, the accelerator table, or both. The field **RESUME** on the ISPF panels generates RESUME YES into the LOAD utility control cards.

The ISPF interface has been enhanced to improve usability, as follows. For descriptions of each panel, see “Panel commands and fields reference” on page 12-10.

- New panels:
  - Save Profile panel
  - Create Profile panel
- Changed panels:
  - On the IBM DB2 Analytics Accelerator Loader for z/OS main menu, **Settings** is now **Setup, DB2 Analytics Accelerator Loader profiles** is now **Manage Loader profiles**, and the following options for creating profiles were added: **Load Accelerator and DB2 from External File, Load Accelerator from external file, Load Accelerator with consistent data, and Load Accelerator from a specified image copy.**
  - Profile Options panel was replaced by an options panel for each profile type.
  - Profile Display panel was replaced by the Manage Loader Profiles panel.
  - Load From External Options panel was replaced by the following panels:
    - Load Accelerator and DB2 from External File panel, which you use to specify options for a Dual load profile.
    - Load Accelerator from External File panel, which you use to specify options for an External load profile.
  - Consistent Load Options panel was replaced by the following panels:
    - Load Accelerator with Consistent Data panel, which you use to specify options for a Consistent load profile.
    - Load Accelerator from a specified Image Copy panel, which you use to specify options for an Image Copy load profile.
- The following profile types are now supported:
  - **Dual** specifies options for loading table data into both the accelerator and DB2 from an external data input file.
  - **Accelerator only** specifies options for loading table data into only the accelerator from an external data input file.
  - **Consistent** specifies options for loading data for multiple tables into the accelerator from a cataloged DB2 image copy.
  - **Image copy** specifies options for loading data for a single table into the accelerator from a user-defined DB2 image copy.

The FLOAT option is now supported.

You can add tables to the accelerator before the load job starts. The ISPF panel field **Add tables to accelerator** and the extended syntax options **ACCEL\_ADD\_TABLES** and **ACCEL\_REMOVE\_AND\_ADD\_TABLES** support this enhancement.

You can enable query acceleration for a table after a successful load. The options module parameter **Enable acceleration after successful load**, ISPF panel field **Acceleration on success**, and the extended syntax option **ACCEL\_ON\_SUCCESS\_ENABLE** support this enhancement.



You can use parameter MESSAGE in a call to ACCEL\_LOAD\_TABLES for tracing capabilities.

Tools Customizer provides the option of generating IVP jobs during customization. For more information, see “Worksheets: Gathering parameter values for Tools Customizer” on page 2-14.

On the Load Accelerator with Consistent Data panel, the default value of the **Log Reader copy preference** field is now **R1R2A1A2**. This value indicates that the product is to read the active logs first.

You can control case sensitivity in object names during searches. The field **Case sensitive** on the Enter Table and Creator Like to Display panel enables this feature.

When searching for profile types, you can use \* (asterisk) in the **Profile Type** field on the Manage Profiles panel to indicate all profile types.

The product detects that a table column information data set is from an UNLOAD utility. It parses out only the field specifications and includes them in the JCL that it generates. Manually deleting the LOAD control cards from the column information data set is no longer required.

When you use an Image Copy profile, you can specify an image copy for a load job in the ISPF interface and the product generates a consistent load job to load from that image copy.

SYSIN lines for the batch JCL generator cannot exceed 72 symbols. To split a long table name among multiple lines, enter the names in positions 1 - 72, and then start a new line in position 1.

Load profiles can be used by the version of the product that you used to create the profile and by later versions. For more information, see “Migrating load profiles” on page 2-4

The product's ability to clean up pipe common storage has been enhanced, and options have been added for manually cleaning common storage by table or by batch job. For more information, see “Cleaning up common storage after a job fails” on page 11-440.

When the SYSIN contains only one executable statement, such as the LOAD statement, if an error occurs during the load to the accelerator, then the product will terminate the utility and then delete the worklist from the utility tables.

When loading from an external file, the product supports parallelism with accelerator-only loads for nonpartitioned and partition-by-growth tables, improving performance for these loads. The ACCEL\_LOAD\_TASKS extended syntax option and options module option are supported when loading a nonpartitioned or partition-by-growth object to the accelerator only.

You can specify the maximum number of source records that are to be written on the discard data set. The **DISCARDS** field was added to the Load Accelerator and DB2 from an External File panel to support this enhancement.

Enhancements for loading data to a consistent time (consistent load) are as follows:

- Accelerator Loader supports a LOAD utility syntax that has no FORMAT clause and no field specifications. The field-specification restrictions for the DB2 LOAD utility also apply to Accelerator Loader.
- You can optimize product performance for either CPU usage or elapsed time for loads that meet the following criteria:
  - Loading data to both the accelerator and DB2 (Dual load profile).
  - Performing nonparallel processing.
  - Loading to a table that is not partitioned or is partitioned by growth.

The options module parameter **Optimize processing for CPU or elapsed time** and the extended syntax option ACCEL\_OPTIMIZE\_FOR support this enhancement.

- Use the **Load partitions individually** field to specify whether the SPACE statement is generated for each partition of a partitioned table, or for the entire table.
- DB2 Analytics Accelerator Loader provides an ISPF panel field (**Bypass SYSIBM.SYSLGRNX Proc**) and a syntax option (NO\_SYSLGRNX) that enable you to specify whether the product skips reading SYSIBM.SYSLGRNX and reads the entire DB2 log range from earliest start point to the latest end point when you perform a consistent data load.
- Accelerator Loader can read tape data sets that are stored in large block interface (LBI) format.

External load batch usability improvements, as follows:

- The product includes a snap dump of LDA control block that is triggered by the SNAPLDA DD to help diagnose S878 ABENDs. If you encounter an S878 ABEND, you can retain the SNAPLDA DD to send to IBM Software Support.
- The Load Accelerator and DB2 from External File and Load Accelerator from External File panels contain only one field for SYSREC and one field for SYSPUNCH.

## Version 1.1 SC19-4165-02 (third edition) - December 2014

Accelerator Loader now verifies that a specified migrated data set exists without recalling that data set.

When filtering objects to include in a load profile, you can select a view or an alias instead of a table in the ISPF panels, or specify a view or an alias instead of a table in the batch interface. The product resolves the view or alias to the base table space and includes the base table space in the generated JCL. Support is limited to views from a single base table. A view that was created from a join of more than one table is not supported.

A batch interface enables you to generate JCL for Accelerator Loader jobs and specify new table names at JCL build time. The batch interface can be useful if you have a process or procedure that determines dynamically what tables need to be loaded and when. The batch interface allows you to specify a profile for the basic options and a list of tables to be loaded, and enables you to override many options for each table that you specify. For any parameter that you do not specify in the batch interface, the value is taken from the profile.

The Tools Customizer Discover EXEC can discover and use existing information from a previously configured installation of the Accelerator Loader. Tools

Customizer can no longer use a control file from a previous installation of DB2 Change Accumulation Tool V3.1 to discover existing information to use with Accelerator Loader.

The following changes and enhancements were made to the load from an external file feature:

- Field specifications must be coded on the LOAD statement. Each INTO TABLE clause must have its own set of field specifications. The product issues a message and terminates the utility when field specifications are not coded on the LOAD statement.
- Accelerator Loader supports processing multiple partitions of the same table and loading them into the accelerator in parallel. To enable parallelism and improve performance when loading partitioned objects, you can specify multiple SYSREC data sets. The options module parameter ACCEL\_LOAD\_TASKS and extended syntax option ACCEL\_LOAD\_TASKS support this enhancement. When generating JCL through the ISPF interface, you can optionally generate load control cards that will enable parallelism by using new fields on the Load from External Options panel (HLOLEXLO).
- Accelerator Loader supports the IGNOREFIELDS clause of the DB2 LOAD utility. When loading only the accelerator (option IDAA\_ONLY), Accelerator Loader generates valid rows when a field specification name begins with "DSN\_". Previously, Accelerator Loader always behaved as though IGNOREFIELDS YES had been specified (though the product did not support the IGNOREFIELDS clause). Accelerator Loader behavior now matches that of the DB2 LOAD utility. That is, when the IGNOREFIELDS clause is omitted, Accelerator Loader behaves as though IGNOREFIELDS NO was specified.
- When performing a load to both the accelerator and DB2 (option IDAA\_DUAL), Accelerator Loader can pass the load job to the DB2 LOAD utility to load data to DB2 only (no data is loaded to the accelerator) when it encounters the need for a value to be generated for an identity column. The options module parameter ACCEL\_LOAD\_TASKS supports this enhancement.
- If the LOAD utility statement does not contain either a NUMRECS or SORTKEYS clause to provide an estimated number of records, the product estimates the number of SYSREC records. Using the estimated record count, it then adds a NUMRECS clause for each INTO TABLE clause.
- When loading data to both the accelerator and DB2, you can provide one or more standard DB2 LOAD discard data sets.
- Accelerator Loader supports the NULLIF and DEFAULTIF LOAD utility options.
- Accelerator Loader supports the DB2 GRAPHIC, VARGRAPHIC, and TIMESTAMP WITH TIMEZONE data types.

The following changes and enhancements were made to the consistent load feature:

- Debugging information is no longer included in the Accelerator Loader output by default. To include debugging and troubleshooting information in the job output, contact IBM Software Support for instructions.
- Accelerator Loader supports processing multiple partitions of the same table and loading them into the accelerator in parallel. You can specify the number of objects that the product is to process at the same time. When generating JCL through the ISPF interface, you can optionally specify the number of parallel log apply tasks on the Consistent Load Options panel (HLOLECLO). The specified value is used as the "y" value in the PARALLEL control card in the JCL.

- Accelerator Loader always uses the 31-bit code paths, regardless of whether the BUFFERS\_IN\_31\_BIT control card is present. The BUFFERS\_IN\_31\_BIT control card is obsolete and was removed from the documentation. If the control card is present, the product ignores it.
- You can specify an image copy and load the data from that image copy into the accelerator. Specifying an end time or rolling through the logs is not required; the product uses the image copy as the content of the object to be loaded.
- To enable parallel processing of multiple partitions of the same table, you specify the number of parallel log apply and load tasks. You can use the ISPF interface or the PARALLEL option.

### **Version 1.1 SC19-4165-01. (second edition) - March 2014**

The Accelerator Loader documentation was corrected to remove the following unsupported options from the sample JCL:

- DISCARD DN ISYSDISC
- TEMPLATE ISYSDISC
- NULLIF

---

## **What does Accelerator Loader do?**

Accelerator Loader provides capabilities for loading data into DB2 and IBM DB2 Analytics Accelerator for z/OS.

Accelerator Loader enables you to load data as follows:

- Use the Accelerator Loader server to load data from non-DB2 and remote DB2 sources into the accelerator in a single in-memory process, without landing or loading the data into an intermediate file format. This feature provides performance and processing efficiency over the existing process that many z/OS installations use. By enabling you to load a variety of non-DB2 data into the accelerator in a more automated manner, the product provides true enterprise-wide analytics.
- Load the accelerator with data from external sources without first loading the data into DB2. This feature eliminates the CPU and storage resources spent loading the data into DB2 when it is not required.
- Load data into DB2 and the accelerator in parallel from the same external load file, reducing the process from two steps to one.
- Load the accelerator with current DB2 data or with data from a historical point in time without stopping update activity to the production DB2 tables.
- Load the accelerator with data from an image copy that you specify.

#### **Related concepts:**

“Accelerator Loader terminology” on page 12-7

DB2 Analytics Accelerator Loader includes several unique terms. Ensure that you understand them before you begin to use the product.

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## **Features and benefits**

Accelerator Loader provides the following features.

## Non-DB2 and DRDA data load

Accelerator Loader allows data sources to be defined and analyzed for the purpose of extracting subsets of data from the source. It provides an interface that enables Accelerator Loader to retrieve data from a mapped source without first landing the data in a flat file.

Using the Accelerator Loader studio, a plugin to the IBM Data Studio, you can load non-DB2 data in a more streamlined manner and data from non-DB2 and remote DB2 sources into the accelerator with less effort and time. You can load data from many different sources directly to the accelerator in a single in-memory process. The source data is accessed, converted to the necessary format, and loaded to the accelerator in a single step without first landing or loading the data into an intermediate file format. This feature provides performance and processing efficiency over the existing process in use by many z/OS installations, and the ability to load a variety of non-DB2 data into the accelerator in a more automated manner, enabling enterprise-wide analytics.

## Consistent and historical data load

Accelerator Loader leverages the power, speed, and efficiency of IBM FlashCopy®. Accelerator Loader enables you to create a FlashCopy consistent image copy of the data that is being loaded from DB2 into the accelerator. Accelerator Loader then uses the consistent copy to load the data into the accelerator. This feature eliminates the need to take the tables offline during the load process.

Using a valid image copy of an object on DB2, Accelerator Loader applies log records forward up to the current time, or for multiple objects, to a consistent historical time. Accelerator Loader enables you to load data from multiple related DB2 tables without having to take them offline for updates. This feature eliminates downtime that is otherwise incurred with the accelerator load process.

Accelerator Loader enables you to specify any historical point in time to load the accelerator. This feature enables you to perform analytics against historical data or data at any chosen point in time. All related tables are loaded at a consistent point in time.

## Image copy load

Using a DB2 image copy that you specify, DB2 Analytics Accelerator Loader loads the data for a single table into the accelerator. Specifying an end time or rolling through the logs is not required. The product uses the image copy as the content of the object to be loaded.

## Enhanced load from an external file

DB2 Analytics Accelerator Loader loads the data into the accelerator and optionally to DB2 in parallel from the same input file. You can load data from the following source files:

- For DB2 data, a file that was created by the DB2 UNLOAD utility.
- For data from an external source, such as IMS™ or VSAM data, or a nonmainframe source, a file that is compatible with the DB2 LOAD utility.

When loading external data into the accelerator, DB2 Analytics Accelerator Loader does not require that you first load the data into DB2 before loading the data into

the accelerator. This feature eliminates the CPU and storage resources spent loading the data into DB2 when it is not necessary. This feature can be helpful when you are building a data warehouse on DB2. In this scenario, all queries of the tables that are being loaded must be eligible for acceleration, and the data must be maintained and backed up outside DB2.

---

## Components and interfaces

Accelerator Loader provides the following interfaces and components.

### ISPF interface

Use the ISPF interface to select options for building JCL to load or refresh data on the accelerator. After you select the options, use the ISPF interface to generate JCL to execute the function. The JCL is placed in the data set that you specify.

### Batch interface

The batch interface is an alternative to using the ISPF interface for loading or refreshing data on the accelerator. If your existing LOAD utility JCL meets certain requirements, you can use that JCL with only minor modifications.

### Accelerator Loader studio

The Accelerator Loader studio is a plugin that you access from the IBM Data Studio. The Data Studio client, which is built on Eclipse technology, provides an integrated development environment (IDE) for database and instance administration, routine and Java™ application development, and query tuning.

Use the Accelerator Loader studio to quickly transform and load relational and non-relational data to an accelerator. You are not required to extract and write data to a separate file before transforming and loading the data. You get real-time access to the data, which is read directly from the mapped source and transformed while it is loaded into the accelerator tables.

### Accelerator Loader server

The Accelerator Loader server resides on the mainframe and provides access to DB2 and non-DB2 data sources. This server enables you to map non-relational source data, such as VSAM, IBM IMS DB, and so on, to a relational table format. After you map source data, the server executes an industry-standard SQL statement to access the data to load to the accelerator. The SQL statement can select from a single data source or join data from several data sources. The server executes the SQL statement, accesses the data sources, and passes the data to a batch job that converts the data to the necessary format and loads it directly to the accelerator.

### Accelerator Loader started task

The Accelerator Loader started task receives input from the interfaces through the supervisor call (SVC) and then communicates with the DB2 subsystems to load data to the accelerator. A single started task can process simultaneous requests from multiple users across the system. After you start the started task, you can perform product functions.

**Related concepts:**

“Components and structure” on page 12-49

Accelerator Loader runs as a started task on a z/OS system. The started task communicates with DB2 to perform product functions and to store information about product activities in DB2 tables.

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## Tools Customizer overview

IBM Tools Customizer for z/OS (also referred to as Tools Customizer) standardizes many of the customization processes that are required to customize IBM Tools that run on z/OS. Tools Customizer is a component of IBM Tools Base for z/OS.

Tools Customizer provides a consistent ISPF interface to ensure that the customization process is the same for all IBM Tools products and solution pack components. It also provides the ability to "discover" parameter values from products or solution pack components that you previously customized manually or by using Tools Customizer.

### Features and benefits

Tools Customizer provides the following features:

- A single, consistent ISPF interface ensures that the customization process is the same for all IBM Tools products and solution pack components.
- A Discover EXEC discovers values for common product, LPAR, and DB2 parameters from a product or solution pack component that you previously customized manually or by using Tools Customizer. Each IBM Tools product and solution pack component has a unique Discover EXEC. The discovered parameters are stored in the data store. If the product or solution pack component that you want to customize exists in the Tools Customizer data store, Tools Customizer issues a warning before it overwrites existing values. Use the Discover EXEC by issuing the DISCOVER command on the Customizer Workplace panel.
- The data store retains discovered and manually specified parameter values. Because the parameter information is persistently stored, you have to manually specify or discover parameter values only once. Tools Customizer uses these parameter values where they are applicable.
- A metadata repository contains the members that define the following customization attributes for products and solution pack components:
  - Parameters, tasks, and steps for the product or solution pack component to be customized. Some product or solution pack parameters, tasks, and steps are required.
  - LPAR parameters for the local LPAR. All of the LPAR parameters are required.
  - DB2 parameters for the DB2 subsystem, DB2 group attach name, or DB2 data sharing member on which you will customize the product or solution pack component. All of the DB2 parameters are required.
- Multiple configurations let you save unique sets of parameter values, selected customization tasks and steps, and associated DB2 entries depending on your environment.
- Default values are provided for product parameters and solution pack component parameters, LPAR parameters, and DB2 parameters. The default values show examples of how to complete fields.

## Service updates and support information

Service updates and support information for this product, including software fix packs, PTFs, frequently asked questions (FAQs), technical notes, troubleshooting information, and downloads, are available from the web.

To find service updates and support information, see the following website:

[http://www.ibm.com/support/entry/portal/Overview/Software/Information\\_Management/DB2\\_Tools\\_for\\_z~OS](http://www.ibm.com/support/entry/portal/Overview/Software/Information_Management/DB2_Tools_for_z~OS)

## Product documentation and updates

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Search for a specific DB2 Tool product or browse the **Information Management > DB2 for z/OS family**.

IBM Redbooks® publications that cover DB2 Tools are available from the following web page:

<http://www.redbooks.ibm.com>

The Data Management Tools Solutions website shows how IBM solutions can help IT organizations maximize their investment in DB2 databases while staying ahead of today's top data management challenges:

<http://www.ibm.com/software/data/db2imstools/solutions/index.html>

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4. Click **Continue** to specify the types of updates that you want to receive.
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- Send your comments by email to [comments@us.ibm.com](mailto:comments@us.ibm.com). Include the name of the book, the part number of the book, the version of the product that you are using, and, if applicable, the specific location of the text you are commenting on, for example, a page number or table number.

## Accessibility features

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

The major accessibility features in this product enable users to perform the following activities:

- Use assistive technologies such as screen readers and screen magnifier software. Consult the assistive technology documentation for specific information when using it to access z/OS interfaces.
- Customize display attributes such as color, contrast, and font size.
- Operate specific or equivalent features by using only the keyboard. Refer to the following publications for information about accessing ISPF interfaces:
  - *z/OS ISPF User's Guide, Volume 1*
  - *z/OS TSO/E Primer*
  - *z/OS TSO/E User's Guide*

These guides describe how to use the ISPF interface, including the use of keyboard shortcuts or function keys (PF keys), include the default settings for the PF keys, and explain how to modify their functions.

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## Scenarios

Use Accelerator Loader to address issues that apply to both frequent and occasional tasks that you perform to refresh production or application table data.

### **Loading data from another z/OS data source, such as IMS, VSAM, or sequential**

You want to load IMS data into the accelerator so that you can write queries to join IMS and DB2 data. You need a process to easily map this data to a relational model and load it into the accelerator. Using Accelerator Loader, map non-DB2 data to the DB2 table on the accelerator. Accelerator Loader finds data from the specified source and loads the data to the accelerator.

## Loading DB2 data from a platform other than z/OS

You have DB2 data on another platform, such as in Linux, UNIX, or Microsoft Windows, and you want to move that data to z/OS. You map off-platform DB2 tables to the DB2 table on the accelerator. Accelerator Loader finds data from the specified source and loads the data to the accelerator.

## Loading data into IBM DB2 Analytics Accelerator for z/OS and DB2

You want to use IBM DB2 Analytics Accelerator for z/OS to perform analytics and speed up complex queries on DB2 data. You need to load the data into the accelerator and DB2.

To accomplish this goal without Accelerator Loader, you must complete the following manual steps to first load the data into DB2, and then the accelerator. While you perform the load, the production table remains inaccessible for query acceleration or data analysis.

1. Run a DB2 LOAD utility to load the data into DB2.
2. Write a program to pass the required parameters to the stored procedure `SYSPROC.ACCEL_LOAD_TABLES`.
3. Use the IBM DB2 Analytics Accelerator for z/OS stored procedure `SYSPROC.ACCEL_LOAD_TABLES` to load the data into the IBM DB2 Analytics Accelerator for z/OS. This stored procedure first runs the DB2 UNLOAD utility and passes the data to IBM DB2 Analytics Accelerator for z/OS.

By using Accelerator Loader, you run existing LOAD utility JCL with a few modifications. Accelerator Loader loads data into both DB2 and the accelerator in parallel. By using this feature of Accelerator Loader, the DBA eliminates the manual work that is otherwise required to load data into the accelerator. This feature also saves overall elapsed time.

You have the following options to automatically load data into both DB2 and into the accelerator at the same time:

- Add a new parameter and DD statement to existing LOAD utility batch jobs.
- Use the Accelerator Loader ISPF interface to generate the LOAD utility JCL.

## Loading external data into IBM DB2 Analytics Accelerator for z/OS only

You have non-DB2 data and you want to take advantage of the analytic capabilities of IBM DB2 Analytics Accelerator for z/OS on the data. To accomplish this goal without Accelerator Loader, you must first load non-DB2 data into DB2 tables. Then you must then use the IBM DB2 Analytics Accelerator for z/OS stored procedures to manually complete several tasks before you can use the analytic capabilities of IBM DB2 Analytics Accelerator for z/OS.

By using Accelerator Loader, you can load data just into IBM DB2 Analytics Accelerator for z/OS, and not into DB2 first. Accelerator Loader provides savings by reducing the overall CPU consumption, elapsed time, and DASD requirements to load non-DB2 data into the accelerator.

You have the following options to automatically load data into only the accelerator:

- Add a new parameter and DD statement to existing LOAD utility batch jobs.

- Use the Accelerator Loader ISPF interface to generate the LOAD utility JCL.

## **Refreshing current data in IBM DB2 Analytics Accelerator for z/OS for a group of related objects**

You want to refresh sets of related DB2 data in IBM DB2 Analytics Accelerator for z/OS. To accomplish this goal without Accelerator Loader, you must run the stored procedure SYSPROC.ACCEL\_LOAD\_TABLES on each object within the group and specify to LOCK the tables. This action requires that you stop update activity on the set of tables during the entire load.

By using Accelerator Loader, you can accomplish the goal in the following ways.

- Accelerator Loader can create a FlashCopy image copy for each table to the current point in time for all of the objects. It can then read the FlashCopy images and load the data into IBM DB2 Analytics Accelerator for z/OS.

With this option, CPU, I/O, and time required to create the image copies is nominal because the FlashCopy image copy leverages the speed and power of the storage processor to create the copies. During the entire process, the tables are available for update.

- Accelerator Loader can start with existing image copies of the objects. It then applies any log records to the image copy, and then loads a copy of the data into IBM DB2 Analytics Accelerator for z/OS to the current point in time.

With this option, you can load data into IBM DB2 Analytics Accelerator for z/OS to the current point in time without taking the tables offline for the update.

You have the following options to refresh current data:

- Use the example JCL to create a batch job.
- Use the Accelerator Loader ISPF interface to generate the batch job.

## **Loading historical data into IBM DB2 Analytics Accelerator for z/OS**

You want to load historical data into IBM DB2 Analytics Accelerator for z/OS to reset data on the accelerator to a point in time in the past, but IBM DB2 Analytics Accelerator for z/OS does not support this goal.

By using Accelerator Loader, you can load one or more tables into IBM DB2 Analytics Accelerator for z/OS to any historical time by specifying a time stamp or an RBA/LRSN at which to load the data. Accelerator Loader constructs the table data to the specified point in time by using an image copy taken before the specific point in time, and applying log records forward to the specified point in time. During the load, tables remain online for updates.

You have the following options to load historical data:

- Use the example JCL to create a batch job.
- Use the Accelerator Loader ISPF interface to generate the batch job.

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  - *z/OS TSO/E User's Guide*

These guides describe how to use the ISPF interface, including the use of keyboard shortcuts or function keys (PF keys), include the default settings for the PF keys, and explain how to modify their functions.



## Preparing to customize

Before you start to customize DB2 Analytics Accelerator Loader, determine all customization values that you must specify during the customization process, and familiarize yourself with the customization tasks.

The following tables describe each significant customization task. Use this checklist to guide you through the entire customization process. Print the checklist and the data set names and parameter values worksheets. Use the worksheets to record your values, and refer to them during the customization process.

Task	Link to detailed instructions	Status
<b>Tools Customizer basics</b>		
Prior to beginning the customization process, familiarize yourself with Tools Customizer terminology and data sets, and other basic information about Tools Customizer.	"Tools Customizer reference" on page 12-1	
<b>Hardware and software requirements</b>		
Verify that your environment meets the minimum hardware requirements.	"Verify that your environment meets hardware requirements" on page 2-5	
Verify that your environment meets the minimum software requirements. To install and use DB2 Analytics Accelerator Loader, your environment must be running a supported version of the z/OS operating system and of DB2 for z/OS. Additionally, certain levels of maintenance must be applied.	"Verify that your environment meets software requirements" on page 2-5	
<b>SMP/E installation</b>		
Verify that DB2 Analytics Accelerator Loader has been installed correctly. DB2 Analytics Accelerator Loader is installed by using standard SMP/E processing.	"Verify that DB2 Analytics Accelerator Loader has been installed successfully" on page 2-7	
Verify that Tools Customizer for z/OS has been installed correctly by using standard SMP/E processing.	"Verify that Tools Customizer has been installed successfully" on page 2-7	
<b>Code page requirement</b>		
Ensure that your BIND JCL uses the correct code page.	"Changing the BIND JCL to ENCODING(500) (optional)" on page 3-40	
<b>Region size requirements</b>		
Ensure that the correct minimum region size is used.	"Verify that your environment meets minimum region size requirements" on page 2-7	
<b>Started task requirements and considerations</b>		
Ensure that the Accelerator Loader started task will run under a user ID that has the required authority.	"Authorization requirements for the started task" on page 2-7	
If you have a very high volume of activity, you can run multiple started tasks concurrently to handle the workload more efficiently.	"Running multiple started tasks to monitor different DB2 subsystems" on page 2-9	
<b>Data sharing considerations</b>		

Task	Link to detailed instructions	Status
Review deployment and configuration issues for DB2 data sharing environments.	"Considerations for DB2 data sharing environments" on page 2-11	
<b>Workload Manager requirements</b>		
Ensure that the dispatching priority for the Accelerator Loader started tasks is set correctly with respect to other dispatching priorities. Review considerations for defining the server to WLM.	"WLM requirements for the Accelerator Loader process" on page 2-10	
<b>WTO messages for automated operations</b>		
Consider whether to use the write-to-operator (WTO) messages that Accelerator Loader issues for automated operations.	"WTO messages for automated operations" on page 2-12	
<b>Gather data set names</b>		
During the customization process, you must specify data set names for the following things: <ul style="list-style-type: none"> <li>• Tools Customizer</li> <li>• FEC (common code)</li> <li>• DB2 Analytics Accelerator Loader</li> </ul>	"Worksheets: Gathering required data set names" on page 2-12	
<b>Gather parameter values</b>		
During the customization process, you must specify parameter values for DB2 Analytics Accelerator Loader, for DB2, and for your LPAR.	"Worksheets: Gathering parameter values for Tools Customizer" on page 2-14	
<b>Customize DB2 Analytics Accelerator Loader</b>		
Start Tools Customizer by running a REXX EXEC from the ISPF Command Shell panel.	"Starting Tools Customizer" on page 3-5	
Set up Tools Customizer user settings. If you are running Tools Customizer for the first time, you must modify several user settings to suit your environment. Otherwise, if the user settings that you have already established are still appropriate, skip this step.	"Modifying Tools Customizer user settings" on page 3-6	
Complete the steps in the appropriate customization roadmap based on the type of customization that you are performing.		
<b>Customizing DB2 Analytics Accelerator Loader for the first time</b>  Follow this roadmap if you do not have a customized version of the product and you need to customize it for the first time.	"Roadmap: Customizing DB2 Analytics Accelerator Loader for the first time" on page 3-11	
<b>Customizing a different version of DB2 Analytics Accelerator Loader</b>  Follow this roadmap if you have already customized a version of the product and you want to use the same parameter values to customize a different version.	"Roadmap: Customizing a new version of DB2 Analytics Accelerator Loader from a previous customization" on page 3-12	
<b>Recustomizing DB2 Analytics Accelerator Loader</b>  Follow this roadmap if you have a customized version of the product and want to change parameter values and regenerate jobs.	"Roadmap: Recustomizing DB2 Analytics Accelerator Loader" on page 3-14	



Task	Link to detailed instructions	Status
<b>After using Tools Customizer to perform customization, complete the following required tasks.</b>		
<b>APF authorization</b>		
The following data sets must be APF authorized: <ul style="list-style-type: none"> <li>• SHLOLOAD</li> <li>• SFECLOAD</li> <li>• SHLVLOAD</li> </ul>	“APF-authorizing the load libraries (required)” on page 3-41	
<b>Make the started task address spaces available to user interfaces</b>		
Copy the Accelerator Loader and server started task PROCs to your system PROCLIB to make the started task address spaces available to the user interfaces for the product.	“Copying the started task PROC (required)” on page 3-41	
<b>Copy the DSNUTILF module</b>		
The DSNUTILF module must be in an APF-authorized library in the STEPLIB or JOBLIB concatenation for the DB2 LOAD utility jobs and the WLM application environment.	“Copying the DSNUTILF module (required)” on page 3-42	
<b>Set up the WLM-managed address space</b>		
This step enables the Accelerator Loader started task to perform DSNUTILB interception services.	“Setting up the WLM application environment (required)” on page 3-42	
<b>Start the started task</b>		
Before you can use the product, you must start the started task.	“Starting the started task (required)” on page 3-43	
<b>Accelerator Loader server requirements and considerations</b>		
You can use a security product such as IBM RACF®, ACF2, or Top Secret. You must define the Accelerator Loader server name for the security product and authorize the data set.	“Authorization requirements for the Accelerator Loader server” on page 2-8	
Start and stop the Accelerator Loader server running on z/OS. Under normal circumstances, Accelerator Loader server starts at system startup and stops before the system shuts down.	“Starting and stopping the server (required)” on page 3-43	
<b>Enable access to mainframe data sources</b>		
Accelerator Loader server supports access to many data sources, and you must configure access to mainframe data sources. Refer to the appropriate sections for those data sources that you want to use.	<ul style="list-style-type: none"> <li>• To configure the Accelerator Loader server to support DB2 data sources, see “Configuring access to DB2 subsystems and data” on page 3-46.</li> <li>• To configure the Accelerator Loader server to support IMS data sources, see “Configuring access to data in IBM IMS DB” on page 3-49.</li> <li>• To configure the Accelerator Loader server to support VSAM data sources, see “Configuring access to VSAM” on page 3-49.</li> <li>• To configure the Accelerator Loader server to support sequential files, see “Configuring access to sequential files” on page 3-49.</li> </ul>	
<b>Configure rules and events</b>		
If you use SMF, configure access to SMF files and set conditions for SMF.	<ul style="list-style-type: none"> <li>• “Creating SMF records from the server” on page 10-79</li> <li>• “Configuring access to SMF files” on page 3-49</li> </ul>	

Task	Link to detailed instructions	Status
<b>Install and configure the Accelerator Loader studio plugin</b>		
Accelerator Loader studio is an IBM Data Studio plugin. You must use Accelerator Loader studio to generate JCL to load data directly to the accelerator, without the need to first extract the data and write it to a file.	"Installing the Accelerator Loader studio (required)" on page 3-44	
Set the Accelerator Loader studio connection to the Accelerator Loader server.	"Connecting to the Accelerator Loader server" on page 5-6	
Create a source library.  A source library is a PDS on z/OS that contains the information that is required to map the data source to the target DB2 table on the accelerator.	"Creating virtual source libraries" on page 5-7	
Create a virtual table.  A virtual table extracts information from the data definitions.	"Creating virtual tables to access data using SQL" on page 5-8	

## Migrating load profiles

A migration program copies and migrates load profiles that you created in an earlier version of the product to the format that the current version requires.

To migrate existing load profiles, during the Tools Customizer customization process, complete the following steps:

1. On the Product Parameters panel (CCQPPRD), ensure that you specify the following:
  - Create profile data sets and migrate profiles
  - **Create profile data sets**
  - **Migrate profiles**
  - High-level qualifiers for the new profile data set and the data set that contains the existing profiles.
  - (optional) The volume serial number for the profile data sets.
  - Startup CLIST1 and CLIST2. After submitting the customization jobs, CLIST2 uses the high-level qualifier for the new profile data set.
2. After specifying values on the Product Parameters panel (CCQPPRD) and the DB2 Parameters panel (CCQPDB2), generate and submit customization jobs to
  - create the new profile data set
  - migrate profiles from the exiting data set to the new one
  - generate new CLIST1 and CLIST2

### Related concepts:

"Customizing DB2 Analytics Accelerator Loader" on page 3-1

After you install the product by following the installation instructions in the Program Directory, you must run Tools Customizer to specify the variables for each DB2 subsystem and to customize the configuration and user parameters.

### Related reference:

"Worksheets: Gathering parameter values for Tools Customizer" on page 2-14

During the customization process, you must provide parameter values for DB2 Analytics Accelerator Loader, DB2, IMS, and your LPAR.

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## Migrating batch jobs

With this version of Analytics Accelerator Loader, you can use jobs that you created with the previous version to build profiles in batch.

To migrate existing batch jobs to be used with Accelerator Loader version 2.1, change the product libraries in the JCL to use the latest libraries.

### Related tasks:

“Using the batch interface to build a load job from a profile” on page 8-2

You can use the batch interface to generate JCL to load data to the accelerator and DB2.

---

## Set up your environment prior to customization

Ensure that your environment meets all requirements, that you have installed all prerequisite software, and that you have considered how you want to customize optional features.

### Verify that your environment meets hardware requirements

DB2 Analytics Accelerator Loader can be used on any hardware environment that supports the required software.

### Verify that your environment meets software requirements

#### z/OS requirements

Ensure that you are using one of the following versions of z/OS at the latest maintenance level:

- Version 1.13.00

Required maintenance:

- UA75045
- UA75272

- Version 2.1

Required maintenance:

- UA75046
- UA75273

#### DB2 requirements

Ensure that you are using one of the following supported versions of DB2 for z/OS at the latest maintenance level:

- DB2 V10:

- DB2 V10 (5605-DB2)
- DB2 Value Unit Edition V10.1 (5697-P31)

Required maintenance:

- AI25214
- PI10162
- PM93789
- UI24305
- UI24307

- DB2 V11:
  - DB2 V11 (5615-DB2)
  - DB2 Value Unit Edition V11.1 (5697-P43)

Required maintenance:

- AI26321
- PI10162
- UI24306
- UI24308

### **Accelerator requirements**

Ensure that you are using a supported version of IBM DB2 Analytics Accelerator for z/OS:

- Version 3.1.0 (5697-DAA ) or later for basic processing
- Version 4.1.0 (5697-DAB) with PTF-5 applied or a later version to use all product features.

### **Other software requirements**

Ensure that you are using a supported version of the following software:

- ISPF V4 (5655-042) or later
- IBM SMP/E for z/OS V03.06.00 (5655-G44 ) or later
- DB2 Utilities Suite for z/OS V10.01.00 (5655-V41) or later
- IBM Tools Base for z/OS V01.04.00 (5655-V93 ) or later
- IBM DB2 Common Code for z/OS (FEC) V1R3 (5655-F55) or later.

Required maintenance:

- PK43912
- PK76167
- PM06651
- UK98321
- UK98680
- UI21883
- UI26834
- UI27815

### **Verify that your environment meets requirements for supported interfaces and data sources**

Ensure that you are using supported versions of the data sources from which you will load data at the latest maintenance level:

- DB2 for z/OS as listed in “Verify that your environment meets software requirements” on page 2-5
- IMS Database Control (DBCTL) Version 12.1.0 (5635-A03) or later
- VSAM with the z/OS PTFs listed in “Verify that your environment meets software requirements” on page 2-5

For optimal performance, ensure that the following VSAM APARs are applied:

- OA44111
- OA45279

OA45280

OA44277

OA44064

- To load data from distributed relational database architecture (DRDA<sup>®</sup>) sources (for example, Oracle), one of the following products:
  - IBM DB2 Advanced Enterprise Server Edition Version 10.5.0 (5725-L47) or later. For product documentation, visit the DB2 for Linux UNIX and Windows IBM Knowledge Center.
  - IBM InfoSphere<sup>®</sup> Federation Server Version 9.7.0 (5724-N97) or later. For product documentation, visit the InfoSphere Federation Server IBM Knowledge Center.
  - IBM InfoSphere BigInsights<sup>®</sup> Enterprise Edition Version 1.0.0 (5725-C09) or later. For product documentation, visit the InfoSphere BigInsights IBM Knowledge Center.

To load relational and non-relational data to an accelerator, ensure that you have met the following requirements:

- IBM Data Studio 4.1.x for Windows 32-bit or 64-bit is installed on your system.
- The Accelerator Loader studio plugin is installed on your system.
- Accelerator Loader studio can connect to the z/OS mainframe instance.

### **Verify that DB2 Analytics Accelerator Loader has been installed successfully**

For installation instructions, see the Program Directory for DB2 Analytics Accelerator Loader.

### **Verify that Tools Customizer has been installed successfully**

Tools Customizer is a component of IBM Tools Base for z/OS (5655-V93), which is available free of charge. Tools Customizer provides a standard approach to customizing IBM DB2 for z/OS Tools.

See the Program Directory for IBM Tools Base for z/OS, GI10-8819 for installation instructions.

### **Verify that your environment meets minimum region size requirements**

DB2 Analytics Accelerator Loader requires a minimum TSO region size of 50000.

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## **Security requirements**

Review the security requirements for DB2 Analytics Accelerator Loader.

### **Authorization requirements for the started task**

Make sure that the Accelerator Loader started task *hloidPROC* runs under a user ID that has the required authority.

The Accelerator Loader started task *hloidPROC* must run under a user ID that has

- a valid OMVS segment definition.
- one of the following authority levels:

- SYSADM
- SYSCTRL
- SYSOPR with MONITOR1 (minimum)

If you use the SYSOPR with MONITOR1 authority level, you must enter that user ID in the SET CURRENT SQLID field when you use Tools Customizer.

If you use the SYSOPR with MONITOR1 authority level for the started task authid, the GRANT SELECT ON TABLE SYSIBM.SYStable\_name is required to BIND the Accelerator Loader plan, as shown in the following list of table names:

- SYSIBM.SYSPLAN
- SYSIBM.SYSPLANDEP
- SYSIBM.SYSPACKAGE
- SYSIBM.SYSPACKLIST
- SYSIBM.SYSPACKDEP
- SYSIBM.SYSTABLES
- SYSIBM.SYSTABLESPACE
- SYSIBM.SYSINDEXES
- SYSIBM.SYSINDEXPART
- SYSIBM.SYSCOLUMNS
- SYSIBM.SYSTABLEPART
- SYSIBM.SYSRELS
- SYSIBM.SYSFOREIGNKEYS
- SYSIBM.SYSUSERAUTH
- SYSIBM.SYSKEYS
- SYSIBM.SYSVIEWDEP
- SYSIBM.SYSSYNONYMS
- SYSIBM.SYSDATABASE

## Authorization requirements for the Accelerator Loader server

To use an external security product, such as RACF, ACF2, or Top Secret, define the *hlvid*PROC started task name to the security product and authorize the data set.

### About this task

The following table summarizes the access requirements by data definition name:

*Table 2-1. Access requirements by data definition name*

Data definition name	Access
SHLVLOAD	READ, EXECUTE
SHLVRPC	READ, EXECUTE
SHLVEXEC	READ
TRACE	READ, WRITE
SYSCHK1	READ, WRITE
SHLVMAP	READ, WRITE
SHLVTXVTB	UPDATE

Make sure that your z/OS Security Administrator reviews the security definitions. You might need to change definitions to meet requirements at your site.

## Procedure

To define the server and other required permissions for your security product, edit one of the following jobs that are located in the *hlq*.SHLVCNTL library, and submit the job:

- HLVRVAVDB is for IBM Resource Access Control Facility (RACF) security.
- HLVA2VDB is for CA ACF2 (Access Control Facility) security.
- HLVTSVDB is for CA Top Secret Security (TSS).

## Authorization requirements for utilities

The user ID that is used to submit LOAD jobs must have a valid OMVS segment definition.

DB2 Analytics Accelerator Loader intercepts the UNLOAD utility and copies the SYSIN data for that utility to a temporary file. This process is performed for all utilities, including the UNLOAD jobs that run for any caller of the stored procedure SYSPROC.ACCEL\_LOAD\_TABLES. The user ID that runs the UNLOAD utility must have RACF authority to create and read temporary data sets.

## Authorization requirements to access data sources

Accessing data sources requires the following authorizations:

- To access non-DB2 or remote DB2 data sources, your user ID must have READ authority to the data sources in your security product.
- To load System Management Facility (SMF) data, your user ID must have UPDATE authority to file SHLVXVTB.

### Related tasks:

“Configuring user access to DB2 subsystems” on page 3-47  
Provide user access to DB2.

### Related reference:

“LUW authentication” on page 10-66

By default, Accelerator Loader server attempts to log on to DB2 on LUW with the same user ID that was presented for logon to z/OS. You can change a user’s logon credentials to access DB2 on LUW.

---

## Running multiple started tasks to monitor different DB2 subsystems

A single Accelerator Loader started task *hloid*PROC is usually sufficient to handle multiple user requests from the product interfaces to perform work on one or more DB2 subsystems. However, you can run multiple started tasks if necessary.

If you have a high volume of activity, to handle the workload more efficiently, run multiple Accelerator Loader started task *hloid*PROCs concurrently. Each started task monitors a different DB2 SSID. The following requirements apply when you run multiple concurrent started tasks:

- The SHLOSAMP library must contain a separate initialization options member for each started task.
- Each initialization options member must specify a unique SVC number and primary subsystem.

- Each Accelerator Loader started task must have its own set of product audit, logging, and DSNUTILB intercept tables.

Run Tools Customizer for each primary subsystem to generate the following items:

- DDL for creating the DB2 objects that the Accelerator Loader started task will use
- Statements for binding the DB2 plan and packages on the DB2 subsystems with which the Accelerator Loader started task will communicate
- The Accelerator Loader started task *hlvidPROC*
- The Accelerator Loader started task initialization options member
- The DSNUTILB intercept policy

A single Accelerator Loader server started task *hlvidPROC* is sufficient for processing a high volume of activity.

---

## WLM requirements for the Accelerator Loader process

Review the Workload Manager (WLM) requirements for the DB2 Analytics Accelerator Loader process.

The three components of the Accelerator Loader process are as follows. The component names are customized by using Tools Customizer.

- Accelerator Loader started task *hlvidPROC*
- Accelerator Loader server started task *hlvidPROC*
- server subsystem *hlvid*

## Setting WLM goals

Review recommendations for Accelerator Loader process goals with respect to other WLM performance goals.

The WLM Service Class and Classification rules determine the order in which a task uses the processor in a multitasking environment. The Accelerator Loader service classes priority values must be lower than those for the DB2 subsystems that Accelerator Loader will use, but higher than those for DB2 LOAD utilities that use the Accelerator Loader process. Set the goals for these items in the following order, from highest to lowest priority:

1. Address spaces of the DB2 subsystems that Accelerator Loader will use.
2. Accelerator Loader server started task, *hlvidPROC*, and the server subsystem, *hlvid*.
3. DB2 LOAD utility that Accelerator Loader intercepts (any service class under the Accelerator Loader server started task, *hlvidPROC*).
4. Accelerator Loader started task, *hlvidPROC*.

## Configuring WLM

To get optimum performance from the Accelerator Loader process, define the three components of the process to WLM.

### Procedure

1. Define the Accelerator Loader server subsystem, *hlvid*, to use a medium- to high- performing WLM velocity goal as its default service class:
  - a. Go to the WLM ISPF application, and select option **6** (Classification Rules).



- b. Select option 1 to create a new rule.
  - c. Set the Subsystem Type to HLVS, and provide a description.
  - d. Under the Class/Service Column next to DEFAULTS, set the desired default service class name. If a desired service class does not exist, then create one using option 4 (Service Classes) under the **Primary WLM** menu.
2. Define the Accelerator Loader started task, *hloidPROC* and the server started task, *hlvidPROC*. The goal of *hlvidPROC* should be equal to that of *hlvid*. Set a much lower, nonaggressive goal for *hloidPROC*.
    - a. Go to the WLM ISPF application, and select option 6 (Classification Rules).
    - b. For the STC WLM-subsystem type, select **Modify**.
    - c. Add entries for *hloidPROC* and *hlvidPROC*.
    - d. Add an appropriate service class for each started task and define each relative to existing workload resource management objectives.
    - e. Add a unique Report class for each started task.
  3. Activate the new WLM policy definition.

---

## Considerations for DB2 data sharing environments

Before you deploy Accelerator Loader in a DB2 data sharing environment, review information about deployment and configuration issues for the started task *hloidPROC*.

A DB2 data sharing group is composed of one or more DB2 subsystems that are located on the same z/OS image or on different z/OS images. The member subsystems share a common DB2 catalog and can directly access and change the same data while maintaining data integrity.

An Accelerator Loader started task *hloidPROC* can perform DSNUTILB intercept processing on the active subsystems within a data sharing group that have a DB2 version that Accelerator Loader supports. During customization, you must define at least one member subsystem as the *primary subsystem*. This subsystem must contain the Accelerator Loader audit and logging tables. Because all subsystems in a data sharing group share the same DB2 catalog, they can also share the same DSNUTILB intercept tables.

All members of the data sharing group share audit and logging tables on the primary subsystem and DSNUTILB intercept worklist tables on any active subsystem in the data sharing group. You can define these objects once on any active member subsystem in the data sharing group. If you define these objects on a subsystem that is not the primary subsystem, you must also define that subsystem as an *additional subsystem* during customization.

All members of the data sharing group that run on the LPAR where the Accelerator Loader is running must be included in the policy. You can use wildcards in the policy when specifying the SSID. For example, if members DB1A and DB1B are running on the same LPAR, in the policy, you can specify DB1% for the SSID.

So that the started task can communicate with the subsystems in a data sharing group, set **DB2\_CONNECT\_TO\_ALL\_SUBSYSTEMS** initialization option for the started task to YES. If you specify NO, the started task can connect only to the subsystem that is specified in the DB2\_SSID initialization option (that is, the primary subsystem).

If you use the ISPF interface, only one started task configuration and one intercept policy are required, even if the member subsystems are on different z/OS images.

In the Accelerator Loader server started task *hlvidPROC*, each database subsystem must be defined as a DRDA endpoint. A database can be an Oracle instance, a DB2 for LUW subsystem, or a DB2 for z/OS subsystem. If the database is a DB2 LUW or DB2 for z/OS subsystem, the DRDA endpoint is customized through Tools Customizer. For other data sources, you must manually define the DRDA endpoint in data set *hlq.SHLVEXEC* member *hlvidIN00*, where *hlvid* represents the name of the Accelerator Loader server started task that was customized by using Tools Customizer.

**Related concepts:**

“Managing DSNUTILB interception” on page 11-441

You can manage DSNUTILB interception by performing some routine and occasional tasks.

## WTO messages for automated operations

Accelerator Loader issues some messages as WTO messages that you can use to control the flow of automated operations in your environment.

The following messages report the beginning and end of the Accelerator Loader started task initialization and termination phases:

- HLOS0001I
- HLOS0002I
- HLOS0003I
- HLOS0004I

## Worksheets: Gathering required data set names

Identify and record the data set names that will be used during the customization process and make sure that requirements for certain data sets are met.

### Data set names for Tools Customizer

Identify and record the following Tools Customizer data set names.

Data set name	Description	Your data set name
SCCQDENU	Metadata library for Tools Customizer	
SCCQLOAD	Executable load module library for Tools Customizer	
SCCQMENU	ISPF messages for Tools Customizer	
SCCQPENU	ISPF panels for Tools Customizer	
SCCQSAMP	Sample members for Tools Customizer	
SCCQTENU <b>Note:</b> You must have write access to this data set.	Table library for Tools Customizer	

### Data set names for DB2 Analytics Accelerator Loader

Identify and record the following data set names. During the customization process, you will enter following values on panel CCQPPRD.

Data set name	Description	Your data set name
SHLOCLST	CLIST library for CLISTs that are used to start the product ISPF interface	
ISPSLIB	ISPF skeleton library to use with the product	
ISPMLIB	ISPF message library to use with the product	
ISPLLIB	ISPF panel library to use with the product	
ISPTLIB	ISPF table input library to use with the product	
SADBEXEC <b>Note:</b> Used only if you choose to add the product to the DB2 Admin Launchpad.	DB2 Admin Tool EXEC library	

### Data set names of other libraries used by Tools Customizer

Identify and record the following data set names. During the customization process, you will enter the following values on the Tools Customizer Settings panel (CCQPSET).

Data set name	Description	Your data set name
Product customization library <b>Note:</b> You must have write access to this data set.	<p>Contains the customization jobs that Tools Customizer generates for the product.</p> <p>To customize the product, submit the members of the data set in the order in which they are displayed on the Finish Product Customization panel. The data set naming convention is:</p> <p><i>hlq.\$LPAR-name\$.xyzvrm</i></p> <p>where:</p> <ul style="list-style-type: none"> <li><i>hlq</i> is the value of the Customization library qualifier field on the Tools Customizer Settings panel (CCQPSET)</li> <li><i>LPAR-name</i> is the four-character LPAR name</li> <li><i>xyzvrm</i> is the three-letter product identifier with the version, release, and modification level</li> </ul> <p>For example, the data set name might be DB2TOOL.PRODUCT.CUST. \$MVS1\$.XYZ410.</p>	
Discover output data set <b>Note:</b> You must have write access to this data set.	<p>Contains the output that is generated when you run the product Discover EXEC.</p> <p>The Discover EXEC retrieves the metadata and values for the parameters from a previous customization of the product.</p> <p>The default name of the data set is DB2TOOL.CCQ110. DISCOVER. You can change the default value on the Tools Customizer Settings panel or the Discover Customized Product Information panel.</p>	

Data set name	Description	Your data set name
Data store data set <b>Note:</b> You must have write access to this data set.	Contains product, LPAR, and DB2 parameter values, and DB2 entry associations. Tools Customizer uses this data set to permanently store all information that is acquired about the product, DB2 subsystems, and LPAR when you customize products on the local LPAR.  The default name of the data set is DB2TOOL.CCQ110. DATASTOR. You can change the default value on the Tools Customizer Settings panel.	

## Worksheets: Gathering parameter values for Tools Customizer

During the customization process, you must provide parameter values for DB2 Analytics Accelerator Loader, DB2, IMS, and your LPAR.

Use the following worksheets to record the appropriate parameter settings for your purposes, and then use these worksheets during the customization process. The worksheets are organized based on the order of the customization panels in Tools Customizer.

### Metadata library for DB2 Analytics Accelerator Loader

#### Description

Use the following worksheet to identify and record the value of the metadata library for DB2 Analytics Accelerator Loader. During the customization process, you enter this value on the Specify the Metadata Library panel (CCQPHLQ).

Parameter	Discovered?	Your value
<b>Metadata library</b> The default name of the metadata library after the product has been SMP/E installed is <i>hlq</i> .SHLODENU, where <i>hlq</i> is the high-level qualifier for DB2 Analytics Accelerator Loader.	No	

### Customization values for the Discover EXEC

#### Description

Use the following worksheet to identify and record the customization values for the Tools Customizer Discover EXEC. During the customization process, you enter these values on the Discover Customized Product Information panel (CCQPDSC).

**Tip:** Tools Customizer can use a control file and options module from a previous installation of DB2 Analytics Accelerator Loader to discover existing information. Specify values for **Previous installation control file** and **Previous installation OPTS module name**.

Parameter	Sample or default value	Your value
<b>Discover EXEC library</b> The fully qualified data set name that contains the product Discover EXEC.	<i>hlq</i> .SHLODENU	
<b>Discover EXEC name</b> The name of the Discover EXEC.	HLODISC	
<b>Discover output data set</b> The fully qualified name of the data set for the output from the product Discover EXEC.	The name that you specified in option 0 User Settings from the Tools Customizer main menu.	
<b>DB2 HLO User Indicator</b> The user indicator of Accelerator Loader. Configuration data related to the specified user indicator will be discovered in the previous installation control file. Valid values contain 1 to 3 characters.	HLO	
<b>Previous installation control file</b> The DB2 control file that was used with a previous installation of the Accelerator Loader. If the data set name is longer than 42 characters, you must enclose it in quotation marks.	DB2TOOL.V110110.CONTROL	
<b>Previous installation SHLOSAMP data set</b> The Accelerator Loader version 1.1 SHLOSAMP data set that contains the options module. The Discover EXEC reads the options module and populates the Product Parameters panel (CCQPPRD) with the discovered values. This process reduces the amount of time that is required to customize the product and enables you to review the values that were used previously. If the data set name is longer than 42 characters, you must enclose it in quotation marks.	HLO.V110.SHLOSAMP	
<b>Previous installation OPTS module name</b> The options module name that was used in Accelerator Loader. The Discover EXEC reads the options module and populates the Product Parameters panel (CCQPPRD) with the discovered values. The options module name pattern is <i>hloid</i> OPTS, where <i>hloid</i> is the four-character product ID that identifies your instance of Accelerator Loader.	No default.  Sample value: HLO1OPTS	

## Product to Customize section

The parameters in the Product to Customize section are read-only. They contain information that was provided on other panels, by Tools Customizer, or by the DB2 Analytics Accelerator Loader metadata data set.

Parameter	Discovered?	Source of this value
<b>Product metadata library</b> The library that you specified on the Specify the Product to Customize panel. This field is scrollable. Place your cursor anywhere on the field and press PF11 to view its full contents.	Yes	This value is specified on the Specify the Product to Customize panel (CCQPHLQ).
<b>LPAR</b> The LPAR on which you are customizing Accelerator Loader.	Yes	This value is supplied by Tools Customizer.
<b>Product name</b> The product that is being customized. In this example, DB2 Analytics Accelerator Loader should be displayed in this field. This field is scrollable. Place your cursor anywhere on the field and press PF11 to view its full contents.	Yes	The default value Accelerator Loader is provided by the product metadata file.
<b>Version</b> The version, release, and maintenance of the product that you are customizing in the format <i>Vn.Rn.mn</i> .	Yes	This value is provided by the product metadata file. The default value for this release is 2.1.0.
<b>Product customization library</b> The data set that will store the generated library customization jobs.	No	This value is derived from the user-specified customization library qualifier on the Tools Customizer Settings panel (CCQPSET).

## Product Parameters panel (CCQPPRD) tasks and parameters

The parameters in the Common parameters section are required for all customizations. During the customization process, you enter these values on the Product Parameters panel (CCQPPRD).

**Note:** Tools Customizer displays some parameters only after you select tasks or specify values on the Product Parameters panel (CCQPPRD). Therefore, you must first define a primary SSID on the DB2 Parameters panel (CCQPDB2), then select values on the Product Parameters panel (CCQPPRD). Return to the DB2 Parameters panel (CCQPDB2) to review options that were added as a result of your specifications on the Product Parameters panel (CCQPPRD).

Parameter	Required?	Discovered?	Default value	Your value
<b>Accelerator Loader Server high-level qualifier</b> The HLQ for the Accelerator Loader server data sets. The server code can be kept in the same set of libraries as the Accelerator Loader code or in a separate set of libraries. If the server code is kept in its own set of libraries, specify the server high-level qualifier.	No	No	No default	
<b>Accelerator Loader high-level qualifier</b> The HLQ for the product data sets, which can optionally include FEC load modules and Accelerator Loader server modules.	Yes	No	HLO.V210	

Parameter	Required?	Discovered?	Default value	Your value
<b>FEC common code high-level qualifier</b> The HLQ for the FEC load modules. The FEC common code programs can be kept in the same library with the Accelerator Loader load modules or in their own library. If the FEC code is kept in its own set of libraries, specify the high-level qualifier.	No	No	No default	

## Task: Configure the product CLISTs (required)

This required task configures the CLISTs that start the Accelerator Loader ISPF interface. During customization, enter these values on the Product Parameters panel (CCQPPRD).

### Jobs generated

The generated jobs are based on the HLOCLIST and HLOCLST2 templates, which are generated once per configuration. The generated jobs are stored in the Product Customization Library, which is displayed on the Finish Product Customization panel. The generated job names might vary, but the template names do not. When the jobs run, the CLISTs are stored in the product's *hlq.SHLOCLST* data set.

If you have an ISPTLIB that you want to use, concatenate it before the supplied ISPTLIB that is provided in the first CLIST. For more information, see the comments in HLOCLST.

Step or parameter	Required?	Discovered?	Default value	Your value
<b>Configure the startup CLISTs</b> When this step and the task <b>Configure product CLISTs</b> are selected, jobs are generated that configure the CLISTs that start the product ISPF interface.	Yes	No	Selected	
<b>Startup CLIST library</b> The CLIST library name for the first and second CLISTs that start the product ISPF interface.	Yes	No	HLO.SHLOCLST	
<b>Startup CLIST 1</b> The name of the first startup CLIST that starts the product ISPF interface.	Yes	No	HLOV21	
<b>Startup CLIST 2</b> The name of the second startup CLIST.	Yes	No	HLOV21C	
<b>User indicator</b> The name of your work environment. You can run multiple instances of the product on the same LPAR, DB2 subsystem, or both. All of these instances can use the same control file.	No	Yes	HLO	

## Task: Create the started task and its components (required)

This required task creates SAMPLIB members for the Accelerator Loader started task *hloidPROC* and creates maintenance members to clean up repository tables. During the customization process, you enter these values on the Product Parameters panel (CCQPPRD). The step **Create PROC, PLCY, and other SAMPLIB members** must be selected on the Product Parameters panel (CCQPPRD), and the SSID on which the JCL is being generated must be defined as the primary subsystem on the DB2 Parameters panel (CCQPDB2).

**Note:** To display the Accelerator Loader started task options that are associated with this task, you must first define a subsystem and designate it as the primary subsystem.

### Jobs generated

These jobs are based on the HLOSTCJ and HLOSMPJ templates, which are generated once per configuration. The generated jobs are stored in the Product Customization Library, which is displayed on the Finish Product Customization panel. The generated job names might vary, but the template names do not. When the job is run, the members are stored in the product's *hlq.SHLOSAMP* data set.

Step or parameter	Required	Discoverable	Default value	Your value
<b>Started task identifier</b> An identifier for the Accelerator Loader started task configuration (the <i>hloid</i> ). This value must contain four alphanumeric characters. Many started tasks can run, each monitoring different subsystems. This unique value identifies the started task.	Yes	Yes	HLO1	
<b>Create PROC, PLCY, and other SAMPLIB members</b> When this step and the task <b>Create the Started Task and its components</b> are selected, jobs are generated that create the SAMPLIB members for the Accelerator Loader started task. The SSID on which the JCL is generated must be defined as the primary subsystem on the DB2 Parameters panel.	Yes	No	Selected	
<b>The primary DB2 subsystem ID</b> Defines the primary DB2 subsystem on which auditing and logging will take place. <b>Note:</b> The primary subsystem is the DB2_SSID that is displayed in the Accelerator Loader started task initialization options module. You can manually add secondary subsystems to the policy member ( <i>hloidPLCY</i> ).	Yes	Yes	ABCD	
<b>Started task proc name</b> Specifies the proc name for the Accelerator Loader started task. This proc can be copied into the system PROCLIB.	Yes	No	HLO1PROC	
<b>The started task user ID</b> The RACF user ID under which the Accelerator Loader started task will run. <b>Important:</b> Ensure that this user ID has one of the following authorities on each DB2 subsystem where the Accelerator Loader plan will be bound: <ul style="list-style-type: none"> <li>• SYSOPR with MONITOR1 (minimum)</li> <li>• SYSADM</li> <li>• SYSCTRL</li> </ul>	Yes	No	HLOSTC	



Step or parameter	Required	Discoverable	Default value	Your value
<p><b>SYSOUT class</b></p> <p>Specifies a SYSOUT class for the SYSOUT data sets that Accelerator Loader dynamically allocates during DSNUTILB interception for the SYSPRINT output for a utility job. This value can be any valid one-character JES SYSOUT class. The default value is an asterisk (*), which indicates that the product should use the default SYSOUT class that is specified for the job, Accelerator Loader started task, or TSO session under which DSNUTILB is running. If you have an output management product that captures and deletes SYSOUT data sets automatically, set this option to a SYSOUT class that your output management product will not delete. Otherwise, your output management product might attempt to delete the SYSOUT data sets that the product dynamically allocates and cause DSNUTILB interception errors. If you specify a value other than an asterisk (*), the HLOSORT data sets (which are used in sort processing for the DSNUTILB intercept) still use the default asterisk (*) class.</p> <p><b>Note:</b> For JES3 environments: Customizing DYNAMIC_SYSOUT_CLASS=<i>class</i>; using the default value (*) is not recommended. Set this option to a SYSOUT class that is defined with the <b>HOLD=TSO</b> parameter so that the DSNUTILB intercept can recombine SYSOUT files that are produced by the product and the DSNUTILB utility. In this case, the SYSOUT will show up in the JES3 spool as multiple files. Some of the files will be named SYSPRINT, and others will have a system-generated file name such as SYS<i>nnnn</i>.</p>	Yes	Yes	*	
<p><b>STC audit active</b></p> <p>Controls whether Accelerator Loader records audit information in a DB2 table. Specify YES to record this information, or specify NO to not record this information.</p>	Yes	Yes	YES	
<p><b>Maximum STC audit age</b></p> <p>Indicates the maximum number of days to retain rows for audit information in the audit table (HLOAUDIT). This number of days is counted from the time when the rows are inserted into the table. When a row reaches this age limit, it is automatically deleted from the table the next time a new row is inserted into the table. Valid values are 0 - 32767. The value 0 prevents the automatic deletion of old rows from the audit table. If you specify 0, manually delete old rows from the audit table periodically to prevent the table from becoming too large. Use the sample SQL that is provided in the SHLOSAMP member HLOCLNUP.</p>	Yes	Yes	45	
<p><b>Connect to all DB2 subsystems</b></p> <p>Controls whether Accelerator Loader attempts to connect to all active DB2 subsystems on the z/OS system on which it is configured or only to the DB2 subsystem that is specified in the DB2_SSID initialization option (the subsystem that contains audit and logging information). If you specify YES (the default value) or omit this option from the initialization options member, the product attempts to connect to all active DB2 subsystems by default. If you specify NO, the product attempts to connect only to the primary subsystem that is specified in the DB2_SSID option. Only the primary subsystem is listed in the ISPF interface.</p>	Yes	Yes	YES	

Step or parameter	Required	Discoverable	Default value	Your value
<b>Connection idle timeout</b> Specifies the maximum amount of time (in seconds) that the DB2 connection for a Accelerator Loader task can have no activity. When this time limit is reached, the connection to DB2 closes. Valid values are 0 - 32767. If you specify 0, this timeout option is disabled and will not cause an inactive connection to close. This timeout option does not apply to the subtask for the Accelerator Loader connection to the DB2 subsystem that is specified by the DB2_SSID option.	Yes	Yes	300	
<b>DB2 tasks count</b> Specifies the maximum number of z/OS tasks that Accelerator Loader can start for connection to a single DB2 subsystem. Valid values are 1 - 2147483647.	Yes	Yes	2	
<b>DB2 task idle timeout</b> Specifies the maximum amount of time (in seconds) that a subtask for a product connection to DB2 can remain inactive after the connection closes. That is, after the timeout limit has been met. When this time limit is reached, the subtask ends. Valid values are 0 - 32767. If you specify 0, this timeout option is disabled and will not cause an inactive subtask to end. This timeout option does not apply to the subtask for the product connection to the DB2 subsystem that is specified by the DB2_SSID option.	Yes	Yes	900	
<b>STC logging active</b> Controls whether Accelerator Loader logs messages about product performance and operations in its DB2 log table. Specify YES to log messages, or specify NO to not log messages.	Yes	Yes	YES	
<b>Maximum STC log age</b> Indicates the maximum number of days to retain rows for logged messages in the logging table (HLOLOG). This number of days is counted from the time when the rows are inserted into the table. When a row reaches this age limit, it is automatically deleted from the table the next time a new row is inserted into the table. Valid values are 0 - 32767. The value 0 prevents the automatic deletion of old rows from the logging table. If you specify 0, manually delete old rows from the logging table periodically to prevent the table from becoming too large. To do so, use the sample SQL that is provided in the SHLOSAMP member HLOCLNUP.	Yes	Yes	45	
<b>SVC number</b> Specifies the numeric identifier for the product supervisor call (SVC) number. This number must be an integer from 200 - 255. Consult your system programmer to choose an available SVC number. The SVC is dynamically installed when the Accelerator Loader started task starts and is dynamically removed when the started task stops.	Yes	Yes	255	
<b>STC trace active</b> Controls whether the product collects trace information. Specify YES to enable tracing, or specify NO to disable tracing. A trace is a record of internal product processing and is primarily used by IBM Software Support to diagnose a problem.	Yes	Yes	YES	

Step or parameter	Required	Discovered	Default value	Your value
<b>Size of trace table</b> Specifies the size (in megabytes) of the table that stores product trace information. Valid values are 1 - 2147483647. A value of 0 results in no trace table allocation. A trace is a record of internal product processing and is primarily used by IBM Software Support to diagnose a problem.	Yes	Yes	1	
<b>Work file data class</b> The name of a valid SMS data class for the temporary DASD data sets that are allocated by the product, or the value NONE.	Yes	Yes	NONE	
<b>Work file management class</b> The name of a valid SMS management class for the temporary DASD data sets that are allocated by the product, or the value NONE.	Yes	Yes	NONE	
<b>Work file storage class</b> The name of a valid SMS storage class for the temporary DASD data sets that are allocated by the product, or the value NONE.	Yes	Yes	NONE	
<b>Work file unit</b> Specifies a unit name for the location where the temporary DASD data sets that are allocated by the product are stored. Specify the valid unit name of a storage device or the value NONE. You can specify the value VIO if VIO (virtual input/output) storage groups are supported on your system and you want the temporary data sets to reside entirely in paging storage to improve performance. The default value SYSALLDA indicates any available DASD device. If you specify NONE, the product does not use this parameter to determine where to store the work file data sets.	Yes	Yes	SYSALLDA	
<b>Maximum worklist table age</b> Specifies the maximum number of days to retain rows in the DSNUTILB intercept worklist-error tables. A DSNUTILB intercept worklist contains the enhanced SYSIN information for a DB2 utility. You can use the information for restart purposes if a utility terminates. Worklist data is moved to worklist-error tables, which are used by IBM Software Support to diagnose a problem. When a row reaches this age limit, it is automatically deleted from the table the next time that a row is inserted into the table.  Valid values are 0 - 32767. The default value is 0, which prevents the deletion of old rows from the worklist-error tables based on this option. If you specify 0, manually delete old rows from the table periodically to prevent the table from becoming too large. To do so, use the sample SQL that is provided in the SHLOSAMP member HLOCLNUP.	Yes	Yes	0	
<b>WTO routing code</b> Specifies the routing code for write-to-operator (WTO) messages about product operations. Routing codes identify the z/OS console to which to send WTO messages and are defined when DB2 is installed. Valid values are 1 - 28.	Yes	Yes	11	

Step or parameter	Required	Discovered	Default value	Your value
<p><b>Parallel load tasks</b> Specifies the number of partitions to load into the accelerator and optionally into DB2 in parallel when loading from an external file. Valid values are in the range 1 - 20.</p> <p>This value cannot exceed the value of the IBM DB2 Analytics Accelerator for z/OS parameter <b>AQT_MAX_UNLOAD_IN_PARALLEL</b>, which indicates the maximum number of partitions that can be loaded in parallel. If <b>AQT_MAX_UNLOAD_IN_PARALLEL</b> is set to 2, the maximum number of partitions that can be written to the accelerator at one time is 2, regardless of the value that you specify for <b>Parallel load tasks ACCEL_LOAD_TASKS</b>.</p>	Yes	Yes	4	
<p><b>Enable acceleration after successful load</b> Controls whether query acceleration is enabled for the table after a successful load. If DB2 discards any rows during the load, query acceleration is not enabled. Valid values are YES and NO.</p>	Yes	Yes	NO	
<p><b>Load DB2 if accelerator is offline</b> Specifies the action to take when the product detects that the accelerator is unavailable. Valid values are:</p> <ul style="list-style-type: none"> <li>• FAIL: The load job fails.</li> <li>• LOAD_DB2: Continue to load the table on DB2. No data is sent to the accelerator. The product issues message HLOU5717W and the utility step ends with RC=4. If the accelerator becomes unavailable during a load after the product determined that the accelerator was available, the job fails, regardless of the value that you specify for this option. You can rerun the job, and if the accelerator is still unavailable, then only DB2 is loaded.</li> </ul>	Yes	Yes	FAIL	
<p><b>Load DB2 if load to accelerator fails</b> Specifies the action to take if the load to the accelerator fails when running a dual load profile. Valid values are:</p> <ul style="list-style-type: none"> <li>• FAIL: Fail the load to DB2 if the load to the accelerator fails. This action keeps the table on the accelerator and the table on DB2 in sync.</li> <li>• LOAD_DB2: Continue to load the table on DB2 if the load to the accelerator fails.</li> </ul>	Yes	Yes	FAIL	
<p><b>Optimize processing for CPU or elapsed time</b> <b>Note:</b> This parameter applies to the following cases:</p> <ul style="list-style-type: none"> <li>• Loads that use a Dual load profile or the IDAA_DUAL extended syntax option</li> <li>• Nonparallel processing</li> <li>• Loads to tables that are not partitioned or are partitioned by growth</li> </ul> <p>Specifies whether to optimize the load for elapsed time or for CPU consumption. Valid values are:</p> <ul style="list-style-type: none"> <li>• BEST_ELAPSED_TIME: Reduces elapsed time.</li> <li>• BEST_CPU_TIME: Reduces CPU consumption.</li> </ul>	Yes	Yes	BEST_ELAPSED_TIME	

Step or parameter	Required?	Discovered?	Default value	Your value
<b>Create repository maintenance members</b> When this step and the task <b>Create the started task and its components</b> are selected, a job is generated that creates maintenance members to clean up Accelerator Loader started task tables.	No	No	Not selected	

### Task: Create the server and the server components (required)

This required task creates members for the Accelerator Loader server started task, load libraries, and other components that the Accelerator Loader server uses. During the customization process, you enter these values on the Product Parameters panel (CCQPPRD).

The steps **Create the server** and **Create the server parameters** must be selected, and **The primary DB2 subsystem ID** must be defined on the Product Parameters panel (CCQPPRD).

#### Jobs generated

These jobs are based on the templates HLOHDBS, HLOUMAP, HLODFDIV, HLOVOBJ, and HLOIN00, which are generated once per LPAR. The generated jobs are stored in the Product Customization Library, which is displayed on the Finish Product Customization panel. The generated job names might vary, but the template names do not.

Step or parameter	Required?	Discovered?	Default value	Your value
<b>Create the server</b> When this step and the task <b>Create the server and the server components</b> are selected, a job is generated that creates the Accelerator Loader server started task.	Yes	No	Selected	
<b>Server proc name</b> Specifies the name of the Accelerator Loader server started task PROC. The <i>hlvid</i> PROC can be copied into the system PROCLIB.	Yes	No	HLV1PROC	
<b>Server started task identifier</b> Identifies the Accelerator Loader server started task (the <i>hlvid</i> ). Many servers can be running, and each can monitor different DB2 and IMS subsystems. This value identifies the servers from each other. The specified identifier is the prefix for the server configuration PDS member <i>hlvid</i> IN00 in data set <i>hlq</i> .SHLVEXEC.	Yes	No	HLV1	
<b>Create the server parameters</b> When this step and the task <b>Create the server and the server components</b> are selected, a job is generated that creates parameters for the Accelerator Loader server.	No	No	Not selected	

Step or parameter	Required?	Discovered?	Default value	Your value
<b>Maximum rows to retain</b> Specifies the maximum number of messages to retain in the trace file. As the server processes data, it writes messages to the trace file. Older messages are deleted to make room for new messages.	Yes	No	300000	
<b>The server started task user ID</b> Specifies the Accelerator Loader server started task user ID that must be defined to your security product. If the started task user ID is specified, this value is used instead of the server started task name.	Yes	No	HLV1PROC	
<b>TCP/IP OE port number</b> Defines the Open Edition TCP/IP port number port number on the host on which the server listens to service ODBC or JDBC requests. OE sockets can run over OE TCP/IP, z/OS TCP/IP, and other TCP/IP implementations.	Yes	No	1200	
<b>Web service port number</b> Defines the web service port number that the Accelerator Loader studio uses to communicate with the server.	Yes	No	1201	
<b>SMF record number</b> Specifies the System Management Facility (SMF) number for the server to use as it creates SMF records using ODBC or JDBC connections.	No	No	No default Sample value: 249	
<b>IMS subsystem ID</b> Specifies the IMS subsystem ID that the server uses as a data source. The IMS subsystem must be on the LPAR for which the product is being configured. <b>Note:</b> If instructed to do so by IBM Software Support, modify IMS DB parameters. For more information, see "Modifying IMS parameters" on page 10-9.	No	No	No default	

Step or parameter	Required?	Discovered?	Default value	Your value
<b>IMS SDFSRESL library</b> Specifies the IMS load library that the server uses to connect to the IMS systems on the LPAR that you are configuring. If this value is defined, the server uses IMS as a data source. If this value is not defined, the server does not use IMS as a data source. <b>Note:</b> If instructed to do so by IBM Software Support, modify IMS DB parameters. For more information, see “Modifying IMS parameters” on page 10-9.	No	No	No default	
<b>Create the OBJ file</b> When this step and the task <b>Create the server and the server components</b> are selected, a job is generated that creates the OBJ file that the Accelerator Loader server uses during startup.	No	No	Not selected	
<b>Create a user-defined map data set</b> When this step and the task <b>Create the server and the server components</b> are selected, a job is generated that creates the <b>User-defined map file</b> .	No	No	Selected	
<b>User-defined map file</b> Specifies the fully qualified name of the user-defined map file to create for use by the server. This file contains definitions that associate fields in the source data record with columns in the target table for loading to the accelerator.	No	No	No default	
<b>Create the trace and checkpoint files</b> When this step and the task <b>Create the server and the server components</b> are selected, a job is generated that creates the <b>Trace browse file</b> and the <b>Global variable checkpoint file</b> .	No	No	Selected	
<b>Trace browse file</b> Specifies the high-level qualifier of the trace data set that the server uses. The trace browse file contains informational messages that the server generates as it processes source data.	Yes	No	No default	

Step or parameter	Required?	Discovered?	Default value	Your value
<b>Global variable checkpoint file</b> Specifies the high-level qualifier of the global variable data set that the server uses. This file contains parameters that define how the server processes source data.	Yes	No	No default	
<b>Volume serial number</b> Specifies the volume serial number that the server uses for the trace and checkpoint data sets. To let SMS choose the volume, leave the field blank.	No	No	No default	
<b>Trace browse file primary allocation</b> Specifies the primary allocation, in cylinders, for the trace data set. The trace data set must be large enough to contain the number of messages specified in the parameter <b>Maximum rows to retain</b> . Exactly 720 messages fit in a 3390 cylinder. Each message is 1024 bytes long.	Yes	No	525	
<b>Trace browse file secondary allocation</b> Specifies the secondary allocation, in cylinders, for the trace data set. The trace data set must be large enough to contain the number of messages specified in the parameter <b>Maximum rows to retain</b> . Exactly 720 messages fit in a 3390 cylinder. Each message is 1024 bytes long.	Yes	No	50	
<b>Global variable file primary allocation</b> Specifies the primary allocation, in cylinders, for the global variable checkpoint data set. Approximately 1180 variables can fit in one cylinder.	Yes	No	5	
<b>Global variable file secondary allocation</b> Specifies the secondary allocation, in cylinders, for the global variable checkpoint data set. Approximately 1180 variables can fit in one cylinder.	Yes	No	1	

### Task: Create DDL and BIND jobs (required)

This required task creates repository objects and the BIND job, and grants EXECUTE authority on the Accelerator Loader plan name. During the customization process, enter these values on panel CCQPPRD.

#### Jobs generated

These jobs are based on the templates HLODROP, HLODDL, HLOFREE, HLOBIND, and HLOGRNT, which are generated once per subsystem. The generated jobs are stored in the Product Customization Library, which is displayed on the Finish Product Customization panel. The generated job names might vary, but the template names do not.



Step or parameter	Required?	Discovered?	Default value	Your value
<b>Drop repository objects</b> When this step and the task <b>Create DDL and BIND jobs</b> are selected, a job is generated that drops the repository objects in preparation for creating a new set of repository objects. This step is helpful if you have previously customized Accelerator Loader and want to create a new installation.	No	No	Not selected	
<b>Create repository objects</b> When this step and the task <b>Create DDL and BIND jobs</b> are selected, a job is generated that creates repository objects. When the job is run, the DDL is created.	Yes	No	Selected	
<b>Free product packages and plans</b> When this step and the task <b>Create DDL and BIND jobs</b> are selected, a FREE job step is generated in the BIND job. When the job is run, the FREE job step is run.	No	No	Not selected	
<b>Free server packages on DB2 for /OS</b> When this step and the task <b>Create DDL and BIND jobs</b> are selected, a job is generated to free the Accelerator Loader server packages and plans before running the product BIND job.	No	No	Not selected	
<b>Bind packages and plans</b> When this step and the task <b>Create DDL and BIND jobs</b> are selected, a job is generated that creates the BIND job. When the job is run, the BIND statements are run.	Yes	No	Selected	
<b>Bind server packages on DB2 for /OS</b> When this step and the task <b>Create DDL and BIND jobs</b> are selected, a job is generated to bind product packages and plans for the Accelerator Loader server.	Yes	No	Selected	
<b>Grant EXECUTE authority</b> When this step and the task <b>Create DDL and BIND jobs</b> are selected, a job is generated that grants EXECUTE authority on the Accelerator Loader plan name. When the job is run, the GRANT statement is run.	Yes	No	Selected	
<b>Grant EXECUTE authority to server packages</b> When this step and the task <b>Create DDL and BIND jobs</b> are selected, a job is generated that grants users execute authority on the Accelerator Loader server plan.	Yes	No	Selected	

## Task: Create profile data sets and migrate profiles (required)

This required task creates jobs that create the profile data sets and optionally update existing profiles to the new format the product uses. During the customization process, you enter these values on panel CCQPPRD.

### Jobs generated

These jobs are based on the templates HLOCPROF and HLOMPROF, which are generated once per configuration. The generated jobs are stored in the Product Customization Library, which is displayed on the Finish Product Customization panel. The generated job names might vary, but the template names do not.

Step or parameter	Required?	Discovered?	Default value	Your value
<b>Create profile data sets</b> When this step and the task <b>Create profile data sets and migrate profiles</b> are selected, a job is generated that creates the profile repository data sets.	Yes	No	Selected	
<b>Profile data set high-level qualifier</b> Specifies the high-level qualifier of the profile data sets to be used. The profile data sets contain options that are specified during the generation of JCL to load data from the functions that are provided in the ISPF panels. Specify the HLQ of the KSDS VSAM data sets that will contain the profile information for Accelerator LoaderV2.1.	Yes	No	HLO.V210	
<b>Volume serial number</b> The volume serial number of the VSAM data set to use for the product profile data sets. To let SMS select the volume, leave the field blank.	No	No	No default	
<b>Migrate profiles</b> When this step and the task <b>Create profile data sets and migrate profiles</b> are selected, a job is generated that updates load profiles that were created for an earlier version of the product to the current format for profiles.	No	No	Not selected	
<b>Former profile data set high-level qualifier</b> Specifies the high-level qualifier of the profile data sets that were used by the previous version of the product and from which you want to update the profiles for use by the current version.	No	No	No default	

## Task: Create the control file, update it, or both

This optional task creates the control file if it does not exist, and updates the newly created control file or an existing control file with information from the configuration. The control file contains specific information about each DB2 subsystem on which DB2 Analytics Accelerator Loader might run. During the customization process, you enter these values on panels CCQPPRD and CCQPDB2.

### Jobs generated

These jobs are based on the templates HLOCCNTL, which is generated once per configuration, and HLOUCNTL, which is generated once per subsystem. The generated jobs are stored in the Product Customization Library, which is displayed on the Finish Product Customization panel. The generated job names might vary, but the template names do not.

Step or parameter	Required?	Discovered?	Default value	Your value
<b>Create a new control file</b> When this step and the task <b>Create control file, update it, or both</b> are selected, a job is generated that creates the control file if one does not exist already.	No	No	Not selected	
<b>Control file</b> The name of the data set that will contain product customization information, including DB2-specific information such as plan names. The control file contains configuration information for each DB2 subsystem against which the product can run. After customization, you can modify the control file by using the product main menu. Specify a name that has a maximum of 35 characters. Because the control is a VSAM file, the corresponding data and index low-level qualifiers will be appended to the file name.	Yes	No	HLO.DB2.CONTROL	
<b>Volume serial number for control file</b> The volume serial number of the VSAM data set that will be used as the control file. To let SMS select the volume, leave the field blank.	No	No	No default	
<b>Update the control file</b> When this step and the task <b>Create control file, update it, or both</b> are selected, a job is generated that updates the newly created control file or an existing control file with information from the configuration.	No	No	Not selected	

## Task: Create the IVP jobs

This optional task creates and customizes installation verification procedure (IVP) jobs. Under the direction of IBM Software Support, you run these jobs to test the configuration of DB2 Analytics Accelerator Loader.

**Note:** Do not run these jobs unless directed to do so by IBM Software Support.

### Jobs generated

These jobs are based on the HLOIVP template, which is generated once per configuration. The generated jobs are stored in the Product Customization Library, which is displayed on the Finish Product Customization panel. The generated job names might vary, but the template names do not. When the job is run, the members are stored in the product's *hlq.SHLOSAMP* data set and *hlq.SHLVSAMP* data set.

Step or parameter	Required?	Discovered?	Default value	Your value
<b>Customize IVP jobs</b> When this step and the task <b>Create the IVP jobs</b> are selected, two IVP jobs are created and customized for the DB2 subsystem that you are configuring.	No	No	Not selected	

## Task: Add product to the DB2 Admin Launchpad

This optional task adds DB2 Analytics Accelerator Loader to the DB2 Administration Tool Launchpad. During customization, enter these values on panel CCQPPRD. When the job is run, the REXX EXEC is copied to the product's *hlq.SHLOSAMP* data set and then run to add Accelerator Loader to the Launchpad.

### Jobs generated

This job is based on the template HLOADBI, which is generated once per configuration.

Step or parameter	Required?	Discovered?	Default value	Your value
<b>Create the REXX to add product to the Launchpad</b> When this step and the task <b>Add the Accelerator Loader to the DB2 Admin Launchpad</b> are selected, a two-part job is generated. Part 1 creates the REXX EXEC to add DB2 Analytics Accelerator Loader to the DB2 Administration Tool Launchpad.  Part 2 runs that REXX EXEC and adds DB2 Analytics Accelerator Loader to that Launchpad.	No	No	Not selected	
<b>DB2 Admin Tool Library high-level qualifier</b> The high-level qualifier (up to 36 alphanumeric characters) of the DB2 Administration Tool product data sets.	No	No	ADB.V102	

Step or parameter	Required?	Discovered?	Default value	Your value
<b>DB2 Admin Tool EXEC Library</b> The SADBEXEC library (up to 44 alphanumeric characters) for the DB2 Administration Tool.	If the task is selected, you must specify a value.	No	ADB.SADBEXEC	

## LPAR Parameters section

This section contains LPAR parameters. The LPAR Parameters panel is available only if you select the option to add the Accelerator Loader to the DB2 Admin Launchpad. All parameters are required. During the customization process, you enter these values on panel CCQFLPR.

Parameter	Required?	Discovered?	Default value	Your value
<b>Message library</b> The data set name of the ISPF message library. Valid names are 1 – 46 characters. Specify a valid name for the ISPF message library. Examples of valid data set names are ISP.SISPMENU and ISPF.SISPLIB.	Yes	No	ISP.SISPMENU	
<b>Panel library</b> The data set name of the ISPF panel library. Valid names are 1 – 46 characters. Specify a valid name for the ISPF message library. Examples of valid data set names are ISPF.SISPPENU and ISPF.SISPLIB.	Yes	No	ISP.SISPPENU	
<b>Skeleton library</b> The data set name of the ISPF skeleton library. Valid names are 1 – 46 characters. Specify a valid name for the skeleton library. Examples of valid data set names are ISP.SISPSENU and ISPF.SISPSLIB.	Yes	No	ISP.SISPSENU	
<b>ISPF table input library</b> The data set name of the ISPF table input library. Valid names are 1 – 46 characters. Specify a valid name for the ISPF table input library. Examples of valid data set names are ISP.SISPTENU and ISPF.SISPTLIB.	Yes	No	ISP.SISPTENU	
<b>ISPF table output library</b> The data set name of the ISPF table output library. Valid names are 1 – 46 characters. Specify a valid name for the ISPF table output library. An examples of a valid data set name is ISP.SISPTABL.	Yes	No	ISP.SISPTABL	

## DB2 Parameters section

This section contains DB2 parameters. During the customization process, you enter these values on the DB2 Parameters panel (CCQPDB2). You can create a DB2 entry as the primary subsystem or secondary subsystem and associate it with Accelerator Loader. When customizing Accelerator Loader, you must define a primary subsystem before you can define product parameters.

You can customize Accelerator Loader only on DB2 entries that are associated with Accelerator Loader. The list of DB2 entries is on the Customizer Workplace panel. You can customize any associated DB2 entries for Accelerator Loader.

**Note:** Tools Customizer displays some parameters only after you have selected tasks or specified values on the Product Parameters panel. Therefore, you must first define a primary SSID on the DB2 Parameters panel, then select values on the Product Parameters panel. Return to the DB2 Parameters panel to review options that were added as a result of your specifications on the Product Parameters panel.

Parameter	Required?	Discovered?	Default value	Your value
<b>DB2 subsystem ID</b> A distinct instance of a relational database management system (RDBMS) that is not part of a data sharing group. An example of a DB2 subsystem name is DB01.	Yes	Yes	No default	
<b>Group attach name</b> The generic attachment name that is used by the TSO/batch attachment, the call attachment facility (CAF), DL/I batch, utilities, and the Resource Recovery Services attachment facility (RRSAF). An example of a group attach name is DSG1.	No	No	No default	
<b>This is the primary subsystem</b> Specify YES if this DB2 SSID will be used as the primary subsystem.	Yes	Yes	YES	
<b>Mode</b> The mode in which the DB2 subsystem is running. Valid value for this product is NFM (new function mode on any DB2 version).	Yes	No	NFM	
<b>Level number</b> The version, release, and modification level of the DB2 subsystem. For system requirements, see "Set up your environment prior to customization" on page 2-5.	Yes	No	No default	
<b>Load library</b> The fully qualified data set name of the DB2 load library.	Yes	Yes	DSN.SDSNLOAD	
<b>Run library</b> The fully qualified data set name of the DB2 run library.	Yes	Yes	DSN.RUNLIB.LOAD	

Parameter	Required?	Discovered?	Default value	Your value
<b>Exit library</b> The fully qualified data set name of the DB2 exit library.	Yes	Yes	DSN.SDSNEXIT	
<b>Bootstrap data set</b> The fully qualified data set name of the DB2 bootstrap data set.	Yes	Yes	DSN.SDSNBSDS	
<b>SYSAFF for DB2 utilities</b> Generates the /*JOBPARM value in a batch job.	No	No	No default	
<b>DSNTEP2 plan name</b> The name of the plan (up to eight alphanumeric characters) that is used for the DB2 DSNTEP2 program.	Yes	No	DSNTEP2	
<b>Accelerator Loader plan name</b> The name of the DB2 plan (up to eight alphanumeric characters) that Accelerator Loader uses to access its internal repository tables. The plan name must be unique on the DB2 subsystem where the plan is bound or within the data sharing group to which that subsystem belongs.	Yes	Yes	HLOV21PL	
<b>BIND owner ID</b> The DB2 user ID (up to eight alphanumeric characters) that will be used as the OWNER in the bind job.	Yes	No	DB2USER	
<b>Server BIND collection ID</b> Specifies the collection ID for the Accelerator Loader server packages.	Yes	No	DB2USER	
<b>User ID for GRANT statement</b> Specifies the authorization ID to which usage privileges on the Accelerator Loader plan are granted.	Yes	No	PUBLIC	
<b>DB2 ZPARMs member</b> The ZPARM load module member name that is generated for the DB2 subsystem.	Yes	Yes	DSNZPARM	
<b>SET CURRENT SQLID</b> The DB2 user ID (up to eight alphanumeric characters) to use to create the product objects.	Yes	No	DB2USER	

Parameter	Required?	Discovered?	Default value	Your value
<b>Subsystem type</b> Specifies the type of subsystem that is being configured, as follows: <ul style="list-style-type: none"> <li>• GROUP: The DB2 subsystem is on z/OS and is a data sharing group.</li> <li>• MEMBER: The DB2 subsystem is on z/OS and is a member of a data sharing group or is a non-data sharing subsystem.</li> <li>• LUW: The database is a non-z/OS database.</li> </ul>	Yes	No	MEMBER	
<b>Subsystem location</b> Specifies the unique location name of the DB2 subsystem ID. This is the value from the LOCATIONS column in the LOCATIONS catalog table for the DB2 subsystem that is being configured.  For LUW, this value specifies the database on the LUW subsystem that you want to use with the product.	Yes	No	DEV1DNS1	
<b>Subsystem status</b> Specifies whether the subsystem is enabled or disabled in the Accelerator Loader server, as follows: <ul style="list-style-type: none"> <li>• ENABLE: The server will connect to the DB2 subsystem.</li> <li>• DISABLE: The server will not connect to the DB2 subsystem and will therefore not use the subsystem as a data source.</li> </ul>	Yes	No	ENABLE	
<b>Subsystem port number</b> Specifies the IP port number that is defined for DRDA access for this subsystem.  For LUW, this value specifies the port that was defined on the server on which the LUW database exists.	Yes	No	443	
<b>Subsystem domain name</b> Specifies the fully qualified name that identifies the IP address of the DB2 subsystem that is being configured. The domain name is used instead of an IP address.  For LUW, this value specifies the DNS name for the server on which the LUW database exists.	Yes	No	<i>host.domain.com</i>	



Parameter	Required?	Discovered?	Default value	Your value
<b>Subsystem CCSID value</b> Specifies the CCSID value of the DB2 subsystem that is being configured. The CCSID value for this subsystem is on the DB2 installation panel DSNTIPE, within option 7.	Yes	No	37	
<b>Subsystem LU name</b> Specifies the LU name of the subsystem that you are configuring and that is used for RACF PassTicket generations. To find this value, see the master address space of the DB2 subsystem that you are configuring, or issue the DISPLAY DDF command.	Yes	No	DSN1LU	
<b>Repository database name</b> The name of the database (up to eight alphanumeric characters) that contains the product repository tables.	Yes	No	HLOV21DB	
<b>Repository table schema</b> The creator (up to eight alphanumeric characters) for the product repository tables. This value is also used as the bind qualifier and as the collection ID for the packages.	Yes	No	HLOV21TB	
<b>Repository database STOGROUP</b> The storage group in which to create the product objects.	Yes	No	SYSDEFLT	
<b>Repository table space primary quantity</b> Defines the primary quantity in kilobytes to use to create the Accelerator Loader repository table spaces.	No	No	No default	
<b>Repository table space secondary quantity</b> Defines the secondary quantity in kilobytes to use to create the Accelerator Loader repository table spaces.	No	No	No default	
<b>Repository table space buffer pool</b> The buffer pool (up to six alphanumeric characters) that is used to create the DB2 table spaces.	Yes	No	BP0	
<b>Repository index STOGROUP</b> The storage group in which to create the product indexes.	Yes	No	SYSDEFLT	
<b>Repository index primary quantity</b> Defines the primary quantity in kilobytes to use to create the Accelerator Loader repository table indexes.	No	No	No default	

Parameter	Required?	Discovered?	Default value	Your value
<b>Repository index secondary quantity</b> Defines the secondary quantity in kilobytes to use to create the Accelerator Loader repository table indexes.	No	No	No default	
<b>Repository index buffer pool</b> The buffer pool (up to eight alphanumeric characters) that is used to create the DB2 indexes.	Yes	No	BP0	
<b>Utility region size</b> The default region size, in megabytes, to be used when JCL is generated. The region size is set on the job step and the value is used for all job steps. If you include a <b>REGION</b> parameter in your job card, the job card <b>REGION</b> parameter overrides the <b>REGION</b> parameter on the EXEC statement.  You can change this value after installation on the Accelerator Loader Parameters panel.	No	Yes	0000	
<b>Virtual storage</b> Specifies the virtual storage above the bar, in megabytes, for the Accelerator Loader server.	Yes	No	0200	
<b>Number of buffers</b> The number of buffers to be used by the product. Valid values are in the range 1 - 99.  You can change this value after installation on the Accelerator Loader Parameters panel.	No	Yes	5	
<b>Channel programs</b> The number of channel programs that the product uses. Valid values are in the range 0 - 99. The value 0 allows the product to use a predetermined channel program setting to attempt to gain optimal performance, or specify the number of channel programs.  The number of channel programs that you specify controls how many outstanding QSAM channel programs can run at the same time before the earliest one is checked for completion.  You can change this value after installation on the Accelerator Loader Parameters panel.	No	Yes	0	

Parameter	Required?	Discovered?	Default value	Your value
<b>Sort program installed</b> Specifies the installed sort program to use if DB2 Sort is not available. Valid values are S (Syncsort) and D (Dfsort).  You can change this value after installation on the Accelerator Loader Parameters panel.	No	Yes	D	
<b>Use DB2 Sort when possible?</b> Specifies whether to use DB2 Sort for internal data sorts. If N is specified, the product uses the system sort facility that is installed on the LPAR.  You can change this value after installation on the Accelerator Loader Parameters panel.	Yes	Yes	N	
<b>Sort work file device type</b> Specifies the sort work file unit device to use when utility JCL is generated. Sample values are SYSDA and DISK. You can change this value after installation on the Accelerator Loader Parameters panel.	Yes	Yes	SYSALLDA	
<b>Number of sort work DDs</b> Overrides the calculated number of sort work DD statements. Specify a value in the range 1 - 99. You can change this value after installation on the Accelerator Loader Parameters panel.	No	Yes	No default	
<b>Primary sort work space</b> Overrides the calculated primary sort work space, specified in cylinders. Specify a value in the range 1 - 999999. You can change this value after installation on the Accelerator Loader Parameters panel.	No	Yes	No default	
<b>Secondary sort work space</b> Overrides the calculated secondary sort work space, specified in cylinders. Specify a value in the range 1 - 999999. You can change this value after installation on the Accelerator Loader Parameters panel.	No	Yes	No default	
<b>Device type</b> The device type for any work data sets that the creates as it processes data. You can change this value after installation on the Accelerator Loader Parameters panel.	No	Yes	DISK	

Parameter	Required?	Discovered?	Default value	Your value
<b>Data set type</b> The type of data set that the product uses for work data sets it creates. Valid values are B (basic) and L (large). You can change this value after installation on the Accelerator Loader Parameters panel.	No	Yes	B	
<b>Track or cylinder</b> The allocation unit for work data sets that Accelerator Loader creates. Valid values are T (tracks) and C (cylinders).	No	Yes	T	
<b>Primary quantity</b> The primary quantity (in units specified in <b>Work file track or cylinder</b> ) for work data sets that the product creates. Specify a value in the range 1 - 16777215. You can change this value after installation on the Accelerator Loader Parameters panel.	No	Yes	10	
<b>Secondary quantity</b> The secondary quantity (in units specified in <b>Work file track or cylinder</b> ) for work data sets that the product creates. Specify a value in the range 1 - 16777215. You can change this value after installation on the Accelerator Loader Parameters panel.	No	Yes	50	
<b>Maximum volumes</b> The maximum number of tape volumes that can be used for the work data sets (if the specified device type is TAPE). Specify a value in the range 1 - 255. You can change this value after installation on the Accelerator Loader Parameters panel.	No	Yes	No default	
<b>SMS data class</b> The SMS data class (up to eight alphanumeric characters) for work data sets that the product creates. You can change this value after installation on the Accelerator Loader Parameters panel.	No	Yes	No default	
<b>SMS storage class</b> The SMS storage class (up to eight alphanumeric characters) for work data sets that the product creates. You can change this value after installation on the Accelerator Loader Parameters panel.	No	Yes	No default	

Parameter	Required?	Discovered?	Default value	Your value
<b>SMS management class</b> The SMS management class (up to eight alphanumeric characters) for work data sets that the product creates. You can change this value after installation on the Accelerator Loader Parameters panel.	No	Yes	No default	
<b>Device type</b> The device type (up to eight characters) for any SYSPRINT data sets that the product creates. You can change this value after installation on the Accelerator Loader Parameters panel.	No	Yes	DISK	
<b>Data set type</b> The type of data set that will be used for SYSPRINT data sets that the product creates. Valid values are B (basic) and L (large). You can change this value after installation on the Accelerator Loader Parameters panel.	No	Yes	B	
<b>Track or cylinder</b> The allocation unit for SYSPRINT data sets that the product creates. Valid values are T (tracks) and C (cylinders). You can change this value after installation on the Accelerator Loader Parameters panel.	No	Yes	T	
<b>Primary quantity</b> The primary quantity (in units specified in <b>SYSPRINT track or cylinder</b> ) for SYSPRINT sets data sets that the product creates. Specify a value in the range 1 -16777215. You can change this value after installation on the Accelerator Loader Parameters panel.	No	Yes	10	
<b>Secondary quantity</b> The secondary quantity (in units specified in <b>SYSPRINT track or cylinder</b> ) for SYSPRINT sets data sets that the product creates. Specify a value in the range 1 -16777215. You can change this value after installation on the Accelerator Loader Parameters panel.	No	Yes	50	

Parameter	Required?	Discovered?	Default value	Your value
<b>Maximum volumes</b> The maximum number of tape volumes that can be used for the SYSPRINT data sets (if the specified device type is TAPE). You can change this value after installation on the Accelerator Loader Parameters panel.	No	Yes	No default	
<b>SMS data class</b> The SMS data class (up to eight alphanumeric characters) for SYSPRINT data sets that the product creates. You can change this value after installation on the Accelerator Loader Parameters panel.	No	Yes	No default	
<b>SMS storage class</b> The SMS storage class (up to eight alphanumeric characters) for SYSPRINT data sets that the product creates. You can change this value after installation on the Accelerator Loader Parameters panel.	No	Yes	No default	
<b>SMS management class</b> The SMS management class (up to eight alphanumeric characters) for SYSPRINT data sets that the product creates. You can change this value after installation on the Accelerator Loader Parameters panel.	No	Yes	No default	

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## Customizing DB2 Analytics Accelerator Loader

After you install the product by following the installation instructions in the Program Directory, you must run Tools Customizer to specify the variables for each DB2 subsystem and to customize the configuration and user parameters.

Complete the following required customization steps in the order listed:

1. Start and prepare Tools Customizer for use.
2. Identify Accelerator Loader as the product to customize.
3. Define the primary DB2 subsystem for the customization and specify DB2 parameter values (DB2 Parameters panel).
4. Specify values for Accelerator Loader parameters (Product Parameters panel).
5. Return to the DB2 Parameters panel to specify values for parameters that were enabled by your selections on the Product Parameters panel.

Tools Customizer displays some DB2 parameters only after you select options or specify values on the Product Parameters panel.

6. Specify values on the LPAR parameters panel for the local LPAR that are required to customize Accelerator Loader.
7. Generate and submit the customization jobs.
8. Start and stop Accelerator Loader server.
9. Configure access to data sources.
10. Install and configure the Accelerator Loader studio.

### Topics:

- “Starting Tools Customizer” on page 3-5
- “Customizing DB2 Analytics Accelerator Loader” on page 3-11
- “Changing the BIND JCL to ENCODING(500) (optional)” on page 3-40
- “APF-authorizing the load libraries (required)” on page 3-41
- “Copying the started task PROC (required)” on page 3-41
- “Copying the DSNUTILF module (required)” on page 3-42
- “Setting up the WLM application environment (required)” on page 3-42
- “Starting the started task (required)” on page 3-43
- “Starting and stopping the server (required)” on page 3-43
- “Installing the Accelerator Loader studio (required)” on page 3-44
- “Configuring access to mainframe data sources (required)” on page 3-46
- “Configuring access to DRDA data sources (optional)” on page 3-50

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## Starting and preparing Tools Customizer for use

Use the provided REXX EXEC to start Tools Customizer. The first time that you use Tools Customizer, you must modify the settings that Tools Customizer uses to customize DB2 Analytics Accelerator Loader.

## Best Practice: SMP/E and runtime libraries maintenance strategy for Tools Customizer

Tools Customizer creates relationships between the values for the Product Parameters, LPAR Parameters, and DB2 Subsystem Parameters for each Tools Customizer enabled product. Determining the correct maintenance strategy for your Tools Customizer runtime libraries, after SMP/E processing, can reduce problems working with Tools Customizer and the enabled products through their life cycles.

Tools Customizer has very specific requirements for data set names:

- Only one DATASTOR data set exists per LPAR
- The product metadata library data set names do not change during the life of that release of the Tools Customizer enabled product.

The DATASTOR data set is the repository for all the information that Tools Customizer requires to generate customization JCL for enabled products.

When you update and save the Tools Customizer Settings panel (CCQPSET), as described in “Modifying Tools Customizer user settings” on page 3-6, the name of the DATASTOR data set is saved in the ISPF profile. This allows Tools Customizer to know the active DATASTOR data set when the TSO user id logs in and starts the Tools Customizer EXEC.

### Maintenance scenarios

IBM expects maintenance to be applied to libraries which are then used by Tools Customizer. In practice, different customer shops distribute SMP/E APPLY maintenance in different ways.

The following scenarios explains some considerations and alternatives for determining your maintenance strategy. The one overriding objective is to preserve and maintain the same data set names for the Tools Customizer instance.

#### Apply SMP/E maintenance to the same data sets (using the SMP/E APPLY command):

If you apply SMP/E maintenance (using the SMP/E APPLY command) using the same data set names with each maintenance cycle, you can either use these target libraries as your Tools Customizer runtime libraries or you can copy the SMP/E target data sets to the runtime libraries that are used by Tools Customizer to customize enabled products.

Tools Customizer assumes that if the product metadata library (\*DENU) has the same name, this metadata library is for the same release of the enabled product. For example, assume that you customize DB2 Log Analysis Tool v3.3 and name the metadata library SYS2.DB2T00L.SALADENU, with no indication of the version or release. You then upgrade to DB2 Log Analysis Tool v3.4 and employ the same naming convention, SYS2.DB2T00L.SALADENU. Tools Customizer will assume that you are continuing to work with DB2 Log Analysis Tool v3.3 and will report v3.3 on panels and continue to use the same v3.3 Customization Library data set.

A more sustainable approach to naming the data sets is to include a product version, release identifier, or other distinguishing qualifier in the name of the metadata library, so that Tools Customizer can determine the new product release when you upgrade. For example, using metadata



library names that include a product version, release identifier, or other distinguishing qualifier, similar to the following, can make product maintenance and upgrades easier:

- DB2T00L.R330.SALADENU for DB2 Log Analysis Tool v3.3
- DB2T00L.R340.SALADENU for DB2 Log Analysis Tool v3.4

**Apply SMP/E maintenance to new data sets (using the SMP/E APPLY command):**

If you apply SMP/E maintenance (using the SMP/E APPLY command) to new data sets rather than to the same data sets, the next time you open the product metadata library, Tools Customizer will return a data set error that indicates that the library name is being used by another product or component.

For example, assume that you name the DB2 High Performance Unload for z/OS target metadata libraries to reflect the date of an upgrade or to reflect a specific RSU, as follows:

- To reflect a specific upgrade date (August 2014):
  - DB2T00L.PTF420.SINZDBRM.D201408
  - DB2T00L.PTF420.SINZDENU.D201408
  - DB2T00L.PTF420.SINZLOAD.D201408
- To reflect a specific RSU (RSU 1406):
  - DB2T00L.PTF420.SINZDBRM.RSU1406
  - DB2T00L.PTF420.SINZDENU.RSU1406
  - DB2T00L.PTF420.SINZLOAD.RSU1406

Using either of these naming conventions, the next time you start the Tools Customizer EXEC, it will return a data set error.

To handle this type of SMP/E maintenance processing, you can do either of the following:

- Define aliases (using ALIAS control statements) to reference the appropriate libraries for Tools Customizer processing.
- Copy the SMP/E libraries to a set of runtime libraries that are specifically for Tools Customizer processing.

**Define aliases (using ALIAS control statements) to reference the appropriate libraries for Tools Customizer processing:**

Defining aliases (using ALIAS control statements) for the SMP/E created new product data set names is likely the best strategy when planning for Tools Customizer.

If you are setting up Tools Customizer for the first time, consider specifying the product library data set names with an indicator that these data sets will be used for Tools Customizer processing. For example, use data set names similar to the following names:

- TCZ.PTF420.SINZDBRM
- TCZ.PTF420.SINZDENU
- TCZ.PTF420.SINZLOAD

After applying maintenance using SMP/E, which creates new product library data sets, you should define aliases (using ALIAS control statements) for the new data set names to the data set names that Tools Customizer originally processed. For example, the following maintenance data sets have aliases defined to the original data sets:

- DB2TOOL.PTF420.SINZDBRM.RSU1406 --> TCZ.PTF420.SINZDBRM
- DB2TOOL.PTF420.SINZDENU.RSU1406 --> TCZ.PTF420.SINZDENU
- DB2TOOL.PTF420.SINZLOAD.RSU1406 --> TCZ.PTF420.SINZLOAD

You will need to define an alias (using ALIAS control statements) to each of the following IBM-distributed Tools Customizer data sets:

- SCCQDENU
- SCCQEXEC
- SCCQLOAD
- SCCQMENU
- SCCQPENU
- SCCQSAMP
- SCCQTENU

If you have already set up Tools Customizer and customized the product, you will have to define aliases (using ALIAS control statements) for the newly created data set names to the data sets that were specified when the product was originally customized using Tools Customizer.

After defining the aliases, you should be able to run Tools Customizer successfully.

**Note:** Only define aliases for IBM-distributed SMP/E libraries.

**Restriction:** Do not define an alias for any Tools Customizer created data sets, like the following three data sets on the Tools Customizer Settings panel (CCQPSET):

- Customization library qualifier
- Discover output data set
- Data store data set

Do not define an alias for any data sets that you create on behalf of a product, for example the DB2 High Performance Unload for z/OS parameter library (INFPLIB).

**Copy the SMP/E libraries to a set of runtime libraries that are specifically for Tools Customizer processing:**

If you are setting up Tools Customizer for the first time, consider specifying the product library data set names with an indicator that these data sets will be used for Tools Customizer processing. For example, use data set names similar to the following names:

- TCZ.R420.SINZDBRM
- TCZ.R420.SINZDENU
- TCZ.R420.SINZLOAD

After applying maintenance using SMP/E, which creates new product library data sets, you should copy the new data sets to the data sets that Tools Customizer originally processed. For example, copy the following maintenance data sets to the original data sets:

- DB2TOOL.PTF420.SINZDBRM.RSU1406 --> TCZ.R420.SINZDBRM
- DB2TOOL.PTF420.SINZDENU.RSU1406 --> TCZ.R420.SINZDENU
- DB2TOOL.PTF420.SINZLOAD.RSU1406 --> TCZ.R420.SINZLOAD

You will need to copy each of the following IBM-distributed Tools Customizer data sets:

- SCCQDENU
- SCCQEXEC
- SCCQLOAD
- SCCQMENU
- SCCQPENU
- SCCQSAMP
- SCCQTENU

If you have already set up Tools Customizer and customized the product, you will have to copy the newly created data sets to the data sets that were specified when the product was originally customized using Tools Customizer).

After copying the SMP/E data sets to the Tools Customizer instance libraries, you should be able to run Tools Customizer successfully.

**Note:** Only copy IBM-distributed SMP/E libraries.

**Restriction:** Do not copy any Tools Customizer created data sets, like the following three data sets on the Tools Customizer Settings panel (CCQPSET):

- Customization library qualifier
- Discover output data set
- Data store data set

Do not copy any data sets that you create on behalf of a product, for example the DB2 High Performance Unload for z/OS parameter library (INFPLIB).

**Related tasks:**

Modifying Tools Customizer user settings

Before you can customize a product or a component with Tools Customizer, you must review the settings that Tools Customizer uses.

**Related information:**

The SMP/E APPLY command

The APPLY command specifies which of the received SYSMODs are to be selected for installation in the target libraries.

Alias processing: SMP/E for z/OS Commands

When an element with aliases is processed, both the element and its aliases are updated. SMP/E does not check the aliases against elements maintained in the target zone.

## Starting Tools Customizer

Start Tools Customizer by running a REXX EXEC from the ISPF Command Shell panel.

## Before you begin

Tools Customizer must be SMP/E installed. You must know the high-level qualifier of where the Tools Customizer libraries reside. The high-level qualifier is considered to be all the segments of the data set name except the lowest-level qualifier, which is SCCQEXEC.

**Attention:** Ensure that Tools Customizer load libraries are not APF authorized. APF authorizing Tools Customizer libraries results in an abend.

## About this task

To run the REXX EXEC, you must either change the placeholder in the EXEC for the high-level qualifier of the Tools Customizer EXEC library or pass the high-level qualifier as a parameter when you run the EXEC. The REXX EXEC is in the CCQTCZ member of the EXEC library.

## Procedure

1. Optional: Change the placeholder for the high-level qualifier in the REXX EXEC:
  - a. Find the EXEC library data set for Tools Customizer. The name of the data set is *high\_level\_qualifier*.SCCQEXEC.
  - b. Edit data set member CCQTCZ and replace the <TCZ HLQ> string with the high-level qualifier of the EXEC library data set. For example, if the name of the Tools Customizer EXEC library is CCQTCZ.USABSAND.SCCQEXEC, replace <TCZ HLQ> with CCQTCZ.USABSAND.

You have to change the placeholder for the high-level qualifier only once. When you run the REXX EXEC, you do not have to pass the high-level qualifier as a parameter.

2. Run the REXX EXEC (CCQTCZ):
  - a. From the ISPF Primary Option Menu, select option 6. The ISPF Command Shell panel is displayed.
  - b. Specify the EX command to run the REXX EXEC. For example, if the Tools Customizer EXEC library is CCQTCZ.USABSAND.SCCQEXEC and you changed the placeholder for the high-level qualifier in the REXX EXEC, specify: EX 'CCQTCZ.USABSAND.SCCQEXEC(CCQTCZ)'  
If you did not change the placeholder for the high-level qualifier in the REXX EXEC, specify: EX 'CCQTCZ.USABSAND.SCCQEXEC(CCQTCZ)'  
'CCQTCZ.USABSAND'

## Results

The IBM Customizer Tools for z/OS main menu panel is displayed.

## What to do next

If you are running Tools Customizer for the first time, you must modify the Tools Customizer user settings. If you have already set the Tools Customizer user settings, either customize or recustomize DB2 Analytics Accelerator Loader.

## Modifying Tools Customizer user settings

Before you can customize DB2 Analytics Accelerator Loader with Tools Customizer, you must review the settings that Tools Customizer uses. You might have to

change the default values to suit your environment. In most cases, you can change the Tools Customizer values at any time. For example, after you have customized DB2 Analytics Accelerator Loader and are customizing a different product or solution pack, you might have to change the settings.

## Procedure

1. On the IBM Tools Customizer for z/OS main panel (CCQPHME), specify option 0, **User settings for Tools Customizer**. The Tools Customizer Settings panel (CCQPSET) is displayed, as shown in the following figure:

```

CCQPSET          Tools Customizer Settings          14:03:51
Command ==>
Enter the settings for customizing a product or press End to save and exit.

Commands: SAVE - Save user settings

Product Customization Settings
Customization library qualifier . . DB2TOOL.PRODUCT.CUST
Use DB2 group attach . . . . . YES (YES/NO)

Tools Customizer Library Settings
Metadata library . . . . . DB2TOOL.CCQ110.SCCQDENU
Discover output data set . DB2TOOL.CCQ110.DISCOVER
Data store data set . . . DB2TOOL.CCQ110.DATASTOR

User Job Card Settings for Customization Jobs
==> //          JOB
==>
==>
==>
==>

```

Figure 3-1. The Tools Customizer Settings panel (CCQPSET)

2. Review the values for the following required fields. Use the default value or specify your own value. You must have appropriate read and write access to the data sets that are specified.

### Customization library qualifier

The high-level qualifier that is used as the prefix for the customization library. The customization library is a data set in which the generated jobs to customize DB2 Analytics Accelerator Loader are stored. Write access to this qualifier is required.

For each product to be customized, the first value that is specified for the qualifier is always used, even if you change it after you have generated the customization jobs. For example, if you customize a product and then specify a new qualifier for recustomization, although the new qualifier is saved and displayed, the original value is used.

To maintain multiple instances of Tools Customizer, specify a unique customization library qualifier for each instance of Tools Customizer. Data set names that exceed 42 characters must be enclosed in single quotation marks (').

### Use DB2 group attach

Determines the value that is used in the CONNECT statements in the generated customization jobs. Specify YES for data sharing environments, which causes the group attach name to be used. Specifying NO, in most cases, causes the SSID to be used in the DB2 CONNECT statement.

**Important:** This field has no effect when you are customizing a product on a DB2 subsystem that is not a member of a data sharing group. In this case, the DB2 subsystem ID (SSID) is always used in the CONNECT statements in the generated customization jobs.

When you are customizing a product on a DB2 subsystem that is a member of a data sharing group, how the DB2 subsystem is defined and the value of the **Use DB2 group attach** field determines the value that is used in the CONNECT statements in the generated jobs. The following table shows whether the SSID or the group attach name is used:

*Table 3-1. The effect of the value of the Use DB2 group attach field in a data sharing environment*

DB2 subsystem definition	Value of the Use DB2 group attach field	Value that is used in the CONNECT statements
The DB2 subsystem is defined with an SSID.	Yes	Group attach name
	No	SSID <sup>1</sup>
The DB2 subsystem is not defined with an SSID.	Yes or No	Group attach name

**Note 1:** If you generate jobs for multiple DB2 subsystems that are defined with an SSID and belong to the same data sharing group, the SSID of the first DB2 subsystem that is selected is used.

For example, assume that on the Customizer Workplace panel, you generated jobs for the following DB2 subsystems:

- V91C, which is a stand-alone DB2 subsystem
- V91A, which is a DB2 subsystem that is a member of data sharing group DSG1
- A DB2 subsystem that was not defined with an SSID that is a member of data sharing group DSGA

The following figure shows how these DB2 entries might be listed on the Customizer Workplace panel:

```

Associated DB2 Entries and Parameter Status
Line commands: G - Generate jobs  E - Edit  B - Browse  C - Copy  R - Remove
Cmd SSID GrpAttach Lvl Mode User ID Date      Status      Message
V91C  --          910 NFM  SYSADM  2010/11/09 Ready to Customize
V91A  DSG1         910 NFM  SYSADM  2010/11/09 Ready to Customize
--    DSGA         910 NFM  SYSADM  2010/11/09 Ready to Customize
----- End of DB2 entries -----

```

The following table shows which values are used in the CONNECT statements in the generated jobs, based on the value of the **Use DB2 group attach** field.

*Table 3-2. Value that is used in the CONNECT statements in the generated jobs*

SSID	GrpAttach	Value of the Use DB2 group attach field	Value that is used in the CONNECT statements
V91C	--	Yes	SSID
		No	SSID

Table 3-2. Value that is used in the *CONNECT* statements in the generated jobs (continued)

SSID	GrpAttach	Value of the Use DB2 group attach field	Value that is used in the <i>CONNECT</i> statements
V91A	DSG1	Yes	Group attach name
		No	SSID
--	DSGA	Yes	Group attach name
		No	Group attach name

### Tools Customizer metadata library

The name of the data set that contains the metadata that is used to display the DB2 and LPAR parameters. The parameters that are displayed on the LPAR Parameters panel and the DB2 Parameters panel depend on the parameters that you define and the tasks and steps that you select on the Product Parameters panel for the product that you are customizing. For example, the DB2 parameters that are required, based on the selected tasks and steps, are displayed on the DB2 Parameters panel, and you can edit them. If they are not required, they are not displayed. Read access to this data set is required. Data set names that exceed 42 characters must be enclosed in single quotation marks (').

### Discover output data set

The name of the data set in which the output from the DB2 Analytics Accelerator Loader Discover EXEC is stored. Each product has its own Discover EXEC. The Discover EXEC retrieves the product, LPAR, and DB2 parameters from a previously customized product. Write access to this data set is required. Data set names that exceed 42 characters must be enclosed in single quotation marks (').

### Data store data set

The name of the data set where Tools Customizer stores information about product, LPAR, and DB2 parameter values. Information about which products are associated with which DB2 entries (DB2 subsystems, DB2 group attach names, and DB2 data sharing members) is also stored in this data set. Data set names that exceed 42 characters must be enclosed in single quotation marks ('). The specified data store data set can be used with only one invocation of Tools Customizer at a time. Data set names that exceed 42 characters must be enclosed in single quotation marks (').

### User job card settings for customization jobs

The job card information to be inserted into the generated jobs for customizing a product. The default value is the job statement information from the ISPF Batch Selection panel.

The first line of the job card automatically begins with the following information:

```
//          JOB
```

where characters 3 - 10 are reserved by Tools Customizer for the job name and includes a blank space after JOB. This name cannot be edited. Information that you specify on the first line of the job card cannot exceed 57 characters. This character limit includes a continuation character. All other lines of the job card cannot exceed 72 characters.

3. Press End to save and exit. If the Discover output data set and the data store data set that you specified do not exist, Tools Customizer creates them.

**Important:** If the ISPF sessions unexpectedly ends before you exit Tools Customizer, the fields on the Tools Customizer Settings panel (CCQPSET) will be repopulated with default values, and you will be required to review them or specify new values again.

## Results

The values are saved, and the IBM Tools Customizer for z/OS main menu panel (CCQPHME) is displayed again.

## What to do next

You are ready to customize or recustomize DB2 Analytics Accelerator Loader or to change parameter settings.

### Related concepts:

“Customizing DB2 Analytics Accelerator Loader” on page 3-11

Using Tools Customizer to customize DB2 Analytics Accelerator Loader consists of identifying the product to customize; defining any required DB2 Analytics Accelerator Loader, LPAR, and DB2 parameters; generating the customization jobs; and submitting the jobs.

## Hiding and displaying panel text

After you are familiar with Tools Customizer, you might want to hide the instructions and some of the basic descriptions that are displayed by default on Tools Customizer panels.

### About this task

By using the OPTIONS command, you can choose to show or hide the following information on Tools Customizer panels:

- The instructions on all panels
- The Product to Customize section on the Customizer Workplace panel (CCQPWRK)
- The Usage Notes section on the Product Parameters panel (CCQPPRD), the LPAR Parameters panel (CCQPLPR), and the DB2 Parameters panel (CCQPDB2).

By hiding this information, more data can be displayed on the panels. Later, you can redisplay this information also by using the OPTIONS command.

### Procedure

1. On any Tools Customizer panel, issue the OPTIONS command. The Panel Display Options panel (CCQPOPT) is displayed, as shown in the following figure. By default, all options are preselected with a slash (/) to be shown.



```

CCQPOPT                                Panel Display Options

Select panel display options and press Enter. To cancel, press End.

Panel Display Options
Specify a slash (/) to select options.
/ Show the panel instructions
/ Show the Product to Customize section
/ Show the Usage Notes section
Command ==>

```

Figure 3-2. The Panel Display Options panel (CCQPOPT)

2. To hide any of the options, remove the slash, and press Enter.

## Customizing DB2 Analytics Accelerator Loader

Using Tools Customizer to customize DB2 Analytics Accelerator Loader consists of identifying the product to customize; defining any required DB2 Analytics Accelerator Loader, LPAR, and DB2 parameters; generating the customization jobs; and submitting the jobs.

Customization roadmaps describe the steps that you must complete to customize DB2 Analytics Accelerator Loader. Separate roadmaps are provided for the three most common types of customizations.

Use the following table to determine which roadmap corresponds to your environment.

Table 3-3. Customization roadmaps

Environment description	Roadmap
You do not have a customized version of DB2 Analytics Accelerator Loader, and you need to customize it for the first time.	“Roadmap: Customizing DB2 Analytics Accelerator Loader for the first time”
You have already customized a version of DB2 Analytics Accelerator Loader, and you want to use the same parameter values to customize a different version.	“Roadmap: Customizing a new version of DB2 Analytics Accelerator Loader from a previous customization” on page 3-12
You have a customized version of of DB2 Analytics Accelerator Loader, but you want to change one or more parameter values.	“Roadmap: Recustomizing DB2 Analytics Accelerator Loader” on page 3-14

### Roadmap: Customizing DB2 Analytics Accelerator Loader for the first time

This roadmap lists and describes the steps that are required to customize DB2 Analytics Accelerator Loader for the first time.

If you are customizing a previous version of DB2 Analytics Accelerator Loader, see “Roadmap: Customizing a new version of DB2 Analytics Accelerator Loader from a previous customization” on page 3-12.

Before you complete these steps, ensure that the following prerequisites have been met:

- All of the product customization steps that must be done before Tools Customizer is started are complete.

- The LPAR ISPF libraries that are required to submit the jobs are known.
- Tools Customizer is started.
- The Tools Customizer settings have been reviewed or modified, and saved.

Complete the steps in the following table to customize DB2 Analytics Accelerator Loader for the first time.

*Table 3-4. Steps for customizing DB2 Analytics Accelerator Loader for the first time*

Step	Description	Instructions
1	Specify the product metadata library for the product that you want to customize. The name of this library is <i>hlq.SHLODENU</i> .	"Specifying the metadata library for the product to customize" on page 3-15
2	Create new DB2 entries and associate them with DB2 Analytics Accelerator Loader.	"Creating and associating DB2 entries" on page 3-18
3	Define the required parameters.	"Defining parameters" on page 3-26
4	Generate the customization jobs for the product or for the DB2 entries on which DB2 Analytics Accelerator Loader is ready to be customized.	"Generating customization jobs" on page 3-32
5	Submit the generated customization jobs.	"Submitting customization jobs" on page 3-33

The following table lists some of the common administrative tasks that you might need to do during the customization process.

*Table 3-5. Administrative tasks*

Description	Instructions
Manage multiple configurations of DB2 Analytics Accelerator Loader.	"Managing multiple configurations" on page 3-20
Browse the different types of parameters.	"Browsing parameters" on page 3-36
Copy an existing DB2 entry to the list of DB2 entries on which DB2 Analytics Accelerator Loader can be customized.	"Copying DB2 entries" on page 3-36
Remove one or more DB2 entries from the associated list.	"Removing DB2 entries" on page 3-38
Delete one or more DB2 entries from the master list.	"Deleting DB2 entries" on page 3-38
Display a list of customization jobs that have been previously generated.	"Displaying customization jobs" on page 3-39
Maintain the customization jobs in the customization library.	"Maintaining customization jobs" on page 3-39

## Roadmap: Customizing a new version of DB2 Analytics Accelerator Loader from a previous customization

This roadmap lists and describes the steps for customizing a new version of DB2 Analytics Accelerator Loader based on the existing customization values of a previous version of the same product.

Use this roadmap even if the previous version of DB2 Analytics Accelerator Loader was not customized by using Tools Customizer.

Before you complete these steps, ensure that the following prerequisites have been met:

- All of the product customization steps that must be done before Tools Customizer is started are complete.
- Tools Customizer is started.
- The Tools Customizer settings have been reviewed or modified, and saved.

Complete the steps in the following table to customize a new version of DB2 Analytics Accelerator Loader from a previous customization.

*Table 3-6. Steps for customizing a new version of DB2 Analytics Accelerator Loader from a previous customization*

Step	Description	Instructions
1	Specify the product metadata library for the product that you want to customize. The name of this library is <i>hlq.SHLODENU</i> .	"Specifying the metadata library for the product to customize" on page 3-15
2	Use the DB2 Analytics Accelerator Loader Discover EXEC to discover information about the version of DB2 Analytics Accelerator Loader that you previously customized manually.	"Discovering DB2 Analytics Accelerator Loader information automatically" on page 3-16
3	Define the required parameters.	"Defining parameters" on page 3-26
4	Generate the customization jobs for the product or for the DB2 entries on which DB2 Analytics Accelerator Loader is ready to be customized.	"Generating customization jobs" on page 3-32
5	Submit the generated customization jobs.	"Submitting customization jobs" on page 3-33

The following table lists some of the common administrative tasks that you might need to do during the customization process.

*Table 3-7. Administrative tasks*

Description	Instructions
Manage multiple configurations of DB2 Analytics Accelerator Loader.	"Managing multiple configurations" on page 3-20
Browse the different types of parameters.	"Browsing parameters" on page 3-36
Copy an existing DB2 entry to the list of DB2 entries on which DB2 Analytics Accelerator Loader can be customized.	"Copying DB2 entries" on page 3-36
Remove one or more DB2 entries from the associated list.	"Removing DB2 entries" on page 3-38
Delete one or more DB2 entries from the master list.	"Deleting DB2 entries" on page 3-38
Display a list of customization jobs that have been previously generated.	"Displaying customization jobs" on page 3-39
Maintain the customization jobs in the customization library.	"Maintaining customization jobs" on page 3-39

## Roadmap: Recustomizing DB2 Analytics Accelerator Loader

This roadmap lists and describes the steps to change parameter values and regenerate customization jobs for DB2 Analytics Accelerator Loader after you have customized it for the first time.

The new customization jobs will replace the customization jobs that were previously generated and stored in the customization library. Part of the recustomization process includes selecting or deselecting optional tasks or steps, changing the definitions of parameters that have already been defined, or both. Use the method in this roadmap instead of deleting customization jobs from the customization library.

Before you complete these steps, ensure that the following prerequisites have been met:

- All of the product customization steps that must be done before Tools Customizer is started are complete.
- Tools Customizer is started.

Complete the steps in the following table to recustomize DB2 Analytics Accelerator Loader.

*Table 3-8. Required steps for recustomizing DB2 Analytics Accelerator Loader*

Step	Description	Instructions
1	Specify the product metadata library for the product that you want to recustomize. The name of this library is <i>hlq.SHLODENU</i> .	"Specifying the metadata library for the product to customize" on page 3-15
2	Edit the specific tasks, steps, or parameters that need to be changed.	<ul style="list-style-type: none"> <li>• "Defining DB2 Analytics Accelerator Loader parameters" on page 3-26</li> <li>• "Defining LPAR parameters" on page 3-28</li> <li>• "Defining DB2 parameters" on page 3-30</li> </ul>
3	Generate the customization jobs for the product or for the DB2 entries on which DB2 Analytics Accelerator Loader is ready to be customized.	"Generating customization jobs" on page 3-32
4	Submit the new generated customization jobs.	"Submitting customization jobs" on page 3-33

The following table lists some of the common administrative tasks that you might need to do during the customization process.

*Table 3-9. Administrative tasks*

Description	Instructions
Manage multiple configurations of DB2 Analytics Accelerator Loader.	"Managing multiple configurations" on page 3-20
Browse the different types of parameters.	"Browsing parameters" on page 3-36

Table 3-9. Administrative tasks (continued)

Description	Instructions
Copy an existing DB2 entry to the list of DB2 entries on which DB2 Analytics Accelerator Loader can be customized.	"Copying DB2 entries" on page 3-36
Remove one or more DB2 entries from the associated list.	"Removing DB2 entries" on page 3-38
Delete one or more DB2 entries from the master list.	"Deleting DB2 entries" on page 3-38
Display a list of customization jobs that have been previously generated.	"Displaying customization jobs" on page 3-39
Maintain the customization jobs in the customization library.	"Maintaining customization jobs" on page 3-39

## Specifying the metadata library for the product to customize

You must specify a metadata library for the product that you want to customize.

### About this task

The product metadata library contains the information that determines which tasks, steps, and parameters are required to customize DB2 Analytics Accelerator Loader. This information controls what is displayed on the Product Parameters panel, the LPAR Parameters panel, and the DB2 Parameters panel.

After DB2 Analytics Accelerator Loader has been SMP/E installed, the default name of the product metadata library is *high\_level\_qualifier*.SHLODENU, where *high\_level\_qualifier* is all of the segments of the data set name except the lowest-level qualifier.

### Procedure

1. Specify option 1 on the Tools Customizer for z/OS panel. The Specify the Metadata Library panel is displayed. This panel contains a list of the product metadata libraries that you specified most recently. If you are using Tools Customizer for the first time, this list is empty, as shown in the following figure:

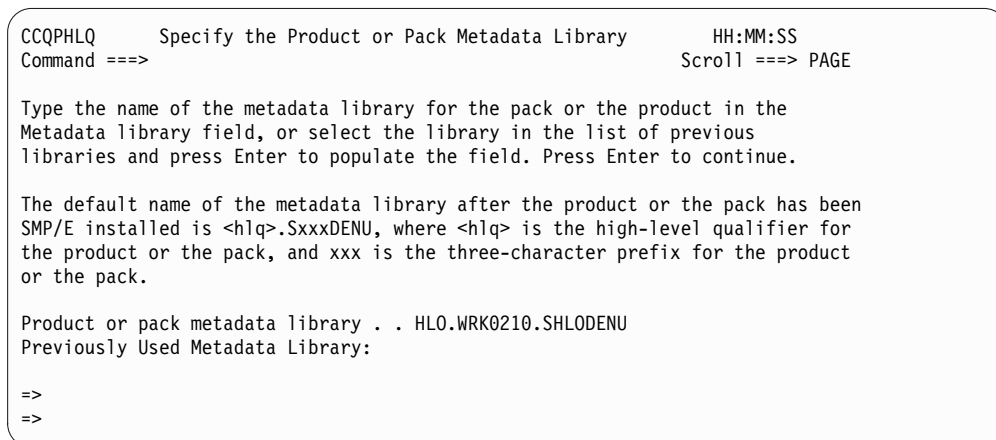


Figure 3-3. The Specify the Metadata Library panel

2. Use one of the following methods to specify the product metadata library:

- Type the name of a fully qualified partitioned data set (PDS) or an extended partitioned data set (PDSE) in the **Metadata library** field. Double quotation marks (") cannot be used around the name. Single quotation marks (') can be used but are not required. If you are customizing DB2 Analytics Accelerator Loader for the first time, you must use this method.
- Place the cursor on the library name in the Recent Metadata Libraries list, and press Enter.

## Results

If you are customizing DB2 Analytics Accelerator Loader for the first time, the Run Discover EXEC panel is displayed. Otherwise, the Customizer Workplace panel is displayed, if you have only the base configuration, or if you have multiple configurations, the Manage Multiple Configurations of a Product panel is displayed.

## What to do next

- Complete the steps that correspond to your environment:

### Customizing DB2 Analytics Accelerator Loader for the first time

Do not run the DB2 Analytics Accelerator Loader Discover EXEC. Press End. The Customizer Workplace panel is displayed. If your environment requires associated DB2 entries, ensure that they are created and associated. If your environment does not require associated DB2 entries, skip this step, and edit DB2 Analytics Accelerator Loader parameters.

### Customizing DB2 Analytics Accelerator Loader from a previous or current customization

You can use the DB2 Analytics Accelerator Loader Discover EXEC to discover information from a previous or current customization of DB2 Change Accumulation Tool V3.1. Press Enter to run the DB2 Analytics Accelerator Loader Discover EXEC. The Discover Customized Product Information panel is displayed. Specify the required information for running the EXEC.

### Customizing DB2 Analytics Accelerator Loader with multiple configurations that were discovered or manually defined

Select one or more configurations that you want to use.

## Discovering DB2 Analytics Accelerator Loader information automatically

You can use the DB2 Analytics Accelerator Loader Discover EXEC to discover information from a previous or current customization of DB2 Analytics Accelerator Loader.

### About this task

**Tip:** Using the DB2 Analytics Accelerator Loader Discover EXEC to discover information from a previous or current customization saves time and reduces errors that can occur when parameters are specified manually.

DB2 Analytics Accelerator Loader provides the Discover EXEC that you will run. Therefore, the information that can be discovered depends on DB2 Analytics Accelerator Loader.

Parameter values that are discovered and parameter values that are specified manually are saved in the data store. If parameter values for the product that you want to customize exist in the data store, Tools Customizer issues a warning before existing values are replaced.

## Procedure

1. On the Customizer Workplace panel, issue the DISCOVER command. If you chose to run the DB2 Analytics Accelerator Loader Discover EXEC on the pop-up panel after you specified the product to customize, skip this step.

**Tip:** You can run any Tools Customizer primary command by using either of the following methods:

- Place the cursor on the name of the primary command, and press Enter.
- Type the primary command name in the command line, and press Enter.

The Discover Customized Product Information panel is displayed, as shown in the following figure:

```

CCQPDS          Discover Customized Product Information          11:49:34
Command ==>>>                                         Scroll ==>> CSR

For the product you are customizing, the Discover EXEC retrieves product
information from an already customized product. Specify the required
information. To save your information and run the Discover EXEC, issue the RUN
command. To save your information and stay on this panel, issue the SAVE
command. To verify the syntax of your information without saving it, press
Enter. To save and exit, press End.

Commands: RUN  SAVE

Product to Customize
  Product metadata library . : HLO.WRK0210.SHLODENU > LPAR . . : RS22
  Product name . . . . . : DB2 Analytics Accelera > Version . . : 2.1.0

Discover EXEC for Extracting Information from an Already Customized product
Discover EXEC library . . . HLO.WRK0210.SHLODENU
Discover EXEC name . . . . : HLODISC
Discover output data set . . CSJENN.ALL.DISCOVER

Information for Discover EXEC
*DB2 HLO User Indicator . . . . . HLO
*Previous installation control file
  DB2TOOL.V110.CONTROL
*Previous installation SHLOSAMP data set
  HLO.V110.SHLOSAMP
*Previous installation OPTS module name . . HLO10PTS
  
```

Figure 3-4. The Discover Customized Product Information panel

2. Either accept the default values for the following input fields that Tools Customizer generates, or replace the default values with your own values:

### Discover EXEC library

The fully qualified data set name that contains the DB2 Analytics Accelerator Loader Discover EXEC.

### Discover EXEC name

The name of the DB2 Analytics Accelerator Loader Discover EXEC.

### Discover output data set

The fully qualified data set where output from the DB2 Analytics Accelerator Loader Discover EXEC is stored.

3. Either accept or change the default values in the **Information for Discover EXEC** fields. These fields are generated by DB2 Analytics Accelerator Loader. They show the information that is required to run the DB2 Analytics Accelerator Loader Discover EXEC.
4. Issue the RUN command to run the DB2 Analytics Accelerator Loader Discover EXEC. Alternatively, save your information without running the DB2 Analytics Accelerator Loader Discover EXEC by issuing the SAVE command. If you issue the RUN command to run the DB2 Analytics Accelerator Loader Discover EXEC, the parameter information is discovered for DB2 Analytics Accelerator Loader, and the Customizer Workplace panel is displayed.

## Results

The discovered parameter values for DB2 Analytics Accelerator Loader replace any existing values.

## What to do next

The next step depends on your environment:

- If DB2 entries were not discovered, or if you need to customize DB2 Analytics Accelerator Loader on new DB2 entries, create and associate the entries.
- If DB2 entries were discovered and you want to customize DB2 Analytics Accelerator Loader on only these entries, define the parameters.

### Related tasks:

“Creating and associating DB2 entries”

You can create new DB2 entries and associate them with DB2 Analytics Accelerator Loader.

“Defining parameters” on page 3-26

To customize DB2 Analytics Accelerator Loader, you must define DB2 Analytics Accelerator Loader parameters, LPAR parameters, and DB2 parameters, if your customization requires DB2 entries.

## Creating and associating DB2 entries

You can create new DB2 entries and associate them with DB2 Analytics Accelerator Loader.

### About this task

The list of associated DB2 entries is on the Customizer Workplace panel.

### Procedure

1. Issue the ASSOCIATE command on the Customizer Workplace panel. The Associate DB2 Entry for Product panel is displayed, as shown in the following figure:



```

CCQPDAD          Associate DB2 Entry for Product          10:07:28
Command ==>>>                                     Scroll ==>> CSR

Select any of the following DB2 entries to add them to the Customizer
Workplace panel. You use the Customizer Workplace panel to choose the DB2
subsystems, data sharing members, and group attach names on which to
customize the product.

Commands: CREATE - Create new DB2 entries

Product to Customize
Product metadata library : HLO.WRK0210.SHLODENU > LPAR . . : RS25
Product name . . . . . : IBM DB2 Analytics Accelerator
Product version . . . . : 2.1.0

Line commands: A - Associate C - Copy
Cmd SSID GrpAttch
----- End of DB2 entries -----

```

Figure 3-5. The Associate DB2 Entry for Product panel

2. Create DB2 entries. If you need to associate DB2 entries that are already in the master list, skip this step and go to step 3.
  - a. Issue the CREATE command. The Create DB2 Entries panel is displayed, as shown in the following figure:

```

CCQPDCR          Create DB2 Entries
Command ==>>>

Specify the SSID, the group attach name, or both in the appropriate columns
for each new DB2 entry and press Enter. To create additional entries, issue
the Inn line command, where nn is the number of entries to be inserted, and
press Enter. To cancel, press End.

New DB2 Entries
Line commands: I - Insert into list R - Remove from list
Cmd SSID GrpAttch Message
----- End of DB2 entries -----

```

Figure 3-6. The Create DB2 Entries panel

- b. In the appropriate columns, specify a DB2 subsystem ID, DB2 group attach name, or DB2 data sharing member name for the DB2 entry that you want to create, and press Enter. Valid values are 1 - 4 characters. You can use symbolic characters. You cannot use blanks.

**Tips:**

- To insert multiple DB2 entries, specify the *Inn* line command, where *nn* is the number of DB2 entries to be inserted.
- You will define specific parameters for these new DB2 entries, such as parameters that define a subsystem as primary, on the DB2 Parameters panel. This panel is displayed after you select these new DB2 entries and issue the line command to generate the jobs, after you issue the primary command to generate the jobs for all associated DB2 entries, or when you manually edit the DB2 parameters.

The Associate DB2 Entry for Product panel is displayed, and the new DB2 entry is displayed in the master list, as shown in the following figure:

```

CCQPDAD          Associate DB2 Entry for Product          Row 1 to 3 of 3
Command ==>>>          Scroll ==>>> CSR

Select any of the following DB2 entries to add them to the Customizer
Workplace panel. You use the Customizer Workplace panel to choose the DB2
subsystems, data sharing members, and group attach names on which to
customize the product.

Commands: CREATE - Create a new DB2 entry

DB2 Entries
  Line commands: A - Associate C - Copy D - Delete
  Cmd SSID Grpattch
    DBAA --
    DBAB --
    DBAC --
----- End of DB2 entries -----

```

Figure 3-7. Associate DB2 Entry for Product panel

- c. Repeat steps b and c for each DB2 entry that you want to create.
- d. When you have created all the DB2 entries, associate them with DB2 Analytics Accelerator Loader, or press End to display the Customizer Workplace panel.
3. Associate DB2 entries.
  - a. Specify A against one or more DB2 entries in the master list, and press Enter to associate them with DB2 Analytics Accelerator Loader.

## Results

The Customizer Workplace panel is displayed with the associated DB2 entries displayed in the associated list.

## What to do next

Define the parameters.

### Related concepts:

“Tools Customizer terminology” on page 12-1

Tools Customizer uses several unique terms that you should be familiar with before you begin to use Tools Customizer.

## Managing multiple configurations

DB2 Analytics Accelerator Loader supports multiple configurations. A configuration is a unique set of specified parameter values, selected tasks and steps, and associated DB2 entries that you use to generate the jobs that customize DB2 Analytics Accelerator Loader.

For example, you might create unique configurations for development, test and production environments.

You can manage multiple configurations for each metadata library. Customization jobs are generated for each configuration separately.

### Topics:

- “Selecting configurations” on page 3-21
- “Creating configurations” on page 3-21
- “Copying configurations” on page 3-22

- “Removing configurations” on page 3-23
- “Editing configurations” on page 3-25
- “Restoring configurations” on page 3-25

## Selecting configurations

You can select one configuration.

### Procedure

1. Issue the CONFIGURATION command on the Customizer Workplace panel. The Manage Multiple Configurations of a Product panel is displayed, as shown in the following figure:

```

CCQPCNF          Manage Multiple Configurations of a Product  Row 1 to 1 of 1
Command ==>>>                                     Scroll ==>>> CSR

Select the configuration that you want to use, or create a new configuration.
Press Enter to continue or End to cancel.

Commands: CREATE - Create a new product configuration

Product to Customize
Product metadata library . : HLO.WRK0210.SHLODENU    > LPAR . . : RS22
Product name . . . . . : DB2 Analytics Accelerato > Version . : 2.1.0

Line commands: / - Select  C - Copy  R - Remove  E - Edit

Cmd ID  Description
- ---->-----
      HLO  IBM DB2 Analytics Accelerator Loader for z/OS
----- End of Configurations -----

```

Figure 3-8. The Manage Multiple Configurations of a Product panel

2. Specify the / line command against the configuration that you want to use. The Customizer Workplace panel is displayed, as shown in the following figure:

```

CCQPWRC          Customizer Workplace
Command ==>>>                                     Scroll ==>>> PAGE

Use the Generate jobs line command to select the DB2 entries on which to
customize the product, and press Enter to generate the customization jobs.

Commands: ASSOCIATE DISCOVER GENERATEALL JOBLIST CONFIGURATION

Product to Customize
Product metadata library . : HLO.WRK0210.SHLODENU    > LPAR . . : RS22
Product name . . . . . : DB2 Analytics Accelerato > Version . : 2.1.0
Configuration ID: HLO > Description: DB2 Analytics Accelerator Loader >

Product and LPAR Parameter Status
Line commands: E - Edit  B - Browse
Product Parameters . : Incomplete
LPAR parameters . . . : Not Required

Associated DB2 Entries and Parameter Status
Line commands: G - Generate jobs  E - Edit  B - Browse  C - Copy  R - Remove
Cmd SSID GrpAttch Lvl Mode User ID Date          Status
----- End of DB2 entries -----

```

Figure 3-9. The Customizer Workplace panel

## Creating configurations

You can create multiple configurations in addition to your default configuration.

## Procedure

1. Issue the CONFIGURATION command on the Customizer Workplace panel. The Manage Multiple Configurations of a Product panel is displayed, as shown in the following figure:

```
CCQPCNF          Manage Multiple Configurations of a Product   Row 1 to 1 of 1
Command ==>>>                                         Scroll ==>> CSR

Select the configuration that you want to use, or create a new configuration.
Press Enter to continue or End to cancel.

Commands: CREATE - Create a new product configuration

Product to Customize
  Product metadata library . : HLO.WRK0210.SHLODENU      > LPAR . . : RS22
  Product name . . . . . : DB2 Analytics Accelerato > Version . : 2.1.0

Line commands: / - Select C - Copy R - Remove E - Edit

  Cmd ID  Description
  - ---->-----
    HLO  IBM DB2 Analytics Accelerator Loader for z/OS
  ----- End of Configurations -----
```

Figure 3-10. The Manage Multiple Configurations of a Product panel

2. Issue the CREATE command. The Create a New Configuration of a Product panel is displayed, as shown in the following figure:

```
CCQPCCN          Create a New Configuration of a Product
Command ==>>>                                         Scroll ==>> PAGE

Specify the ID of the new configuration of the product and a
description of the configuration. The new configuration will
contain the default values for all parameters. Press Enter to
continue or End to cancel.

  New Configuration
  ID. . . . . >
  Description . >
```

Figure 3-11. The Create a New Configuration of a Product panel

3. In the **ID** field, specify an ID for the configuration. The length of valid values is set by DB2 Analytics Accelerator Loader.
4. In the **Description** field, specify a description of the configuration. Valid values are 1 - 72 characters.
5. Press Enter. The Manage Multiple Configurations of a Product panel is displayed, and the new configuration is in the table.

## Copying configurations

You can copy configurations and rename them to reuse large sets of saved parameter values, selected tasks and steps, and associated DB2 entries.

### About this task

You might want to copy a configuration when you want to use most of the same values but you need to change several of them.

## Procedure

1. Issue the CONFIGURATION command on the Customizer Workplace panel. The Manage Multiple Configurations of a Product panel is displayed, as shown in the following figure:

```
CCQP CNF          Manage Multiple Configurations of a Product   Row 1 to 1 of 1
Command ==>>>                                         Scroll ==>> CSR

Select the configuration that you want to use, or create a new configuration.
Press Enter to continue or End to cancel.

Commands: CREATE - Create a new product configuration

Product to Customize
  Product metadata library . : HLO.WRK0210.SHLODENU      > LPAR . . . : RS22
  Product name . . . . . : DB2 Analytics Accelerato > Version . . : 2.1.0

Line commands: / - Select  C - Copy  R - Remove  E - Edit

  Cmd ID  Description
  - ---->-----
  HLO IBM DB2 Analytics Accelerator Loader for z/OS
  ----- End of Configurations -----
```

Figure 3-12. The Manage Multiple Configurations of a Product panel

2. Specify the C line command against the configuration that you want to copy. The Copy a Configuration of a Product panel is displayed, as shown in the following figure. The ID and description of the configuration from which you are copying information is in the From Configuration section.

```
CCQPCCY          Copy a Configuration of a Product
Command ==>>>                                         Scroll ==>> CSR

Specify the ID of the configuration to which information will be
copied, and specify a description of the configuration. Press Enter
to continue or End to cancel.

From Configuration
  ID. . . . . : HLO >
  Description . : IBM DB2 Analytics Accelerator Loader for z/OS >

To Configuration
  ID. . . . . >
  Description . >
```

Figure 3-13. The Copy a Configuration of a Product panel

3. In the **ID** field in the To Configuration section, specify an ID for the configuration. The length of valid values is set by DB2 Analytics Accelerator Loader.
4. In the **Description** field in the To Configuration section, specify a description of the configuration. Valid values are 1 - 72 characters.
5. Press Enter. The Manage Multiple Configurations of a Product panel is displayed, and the configuration that you copied is in the table.

## Removing configurations

You can remove configurations when you do not need them.

## About this task

You might want to remove configurations that you do not use. When you complete the following steps, configurations are removed only from the list on the Manage Multiple Configurations of a Product panel. They can be restored when you need them again.

If you remove a customized configuration, the customization jobs will be removed too.

**Restriction:** You cannot remove the configuration that you are currently using or the only configuration in the table.

## Procedure

1. Issue the CONFIGURATION command on the Customizer Workplace panel. The Manage Multiple Configurations of a Product panel is displayed, as shown in the following figure:

```
CCQPCNF          Manage Multiple Configurations of a Product   Row 1 to 1 of 1
Command ==>>>                                         Scroll ==>> CSR

Select the configuration that you want to use, or create a new configuration.
Press Enter to continue or End to cancel.

Commands: CREATE - Create a new product configuration

Product to Customize
  Product metadata library . : HLO.WRK0210.SHLODENU      > LPAR . . . : RS22
  Product name . . . . . : DB2 Analytics Accelerato > Version . . : 2.1.0

Line commands: / - Select  C - Copy  R - Remove  E - Edit

  Cmd ID  Description
  - ----> -----
      HLO  IBM DB2 Analytics Accelerator Loader for z/OS
  ----- End of Configurations -----
```

Figure 3-14. The Manage Multiple Configurations of a Product panel

2. Specify the R line command against the ID of the configuration that you want to remove. The Remove a Configuration of a Product panel is displayed, as shown in the following figure:

```
CCQPCRM          Remove a Customized Configuration of a Product
Command ==>>>                                         Scroll ==>> CSR

The following configuration was previously customized. If you
remove the configuration, it will be removed from the list, and
all customization jobs for this configuration will be removed.
Press Enter to remove this configuration and its customization
jobs, or press End to cancel.

Remove Configuration
ID. . . . . : HLO  >
Description .: New configuration                       >
```

Figure 3-15. The Remove a Configuration of a Product panel

3. Press Enter to remove the configuration. The Manage Multiple Configurations of a Product panel is displayed, and the configuration that you removed is not in the table.

## Editing configurations

You can edit the ID and description of configurations.

### Procedure

1. Issue the CONFIGURATION command on the Customizer Workplace panel. The Manage Multiple Configurations of a Product panel is displayed, as shown in the following figure:

```
CCQPCNF          Manage Multiple Configurations of a Product   Row 1 to 1 of 1
Command ==>>>                                     Scroll ==>> CSR

Select the configuration that you want to use, or create a new configuration.
Press Enter to continue or End to cancel.

Commands: CREATE - Create a new product configuration

Product to Customize
Product metadata library . : HLO.WRK0210.SHLODENU      > LPAR . . . : RS22
Product name . . . . . : DB2 Analytics Accelerato > Version . : 2.1.0

Line commands: / - Select  C - Copy  R - Remove  E - Edit

Cmd ID  Description
- ---->-----
   HLO  IBM DB2 Analytics Accelerator Loader for z/OS
----- End of Configurations -----
```

Figure 3-16. The Manage Multiple Configurations of a Product panel

2. Specify E next to the configuration ID, and press Enter. The Edit a Configuration of a Product panel is displayed, as shown in the following figure:

```
CCQPCEd          Edit a Configuration of a Product
Command ==>>>                                     Scroll ==>> CSR

Specify a new ID and description for the configuration and press Enter
to continue or End to cancel.

Configuration
ID. . . . . HLO  >
Description . IBM DB2 Analytics Accelerator Loader for z/OS  >
```

Figure 3-17. The Edit a Configuration of a Product panel

3. Edit the configuration ID, the configuration description, or both.
  - In the **ID** field, edit the ID of the configuration. The length of valid values is set by DB2 Analytics Accelerator Loader.
  - In the **Description** field, edit the description of the configuration. Valid values are 1 - 72 characters.
4. Press Enter. The Manage Multiple Configurations of a Product panel is displayed, and the modified configuration is listed in the table.

## Restoring configurations

You can restore configurations that you previously removed.

### About this task

Configurations that you remove are removed only from the list on the Manage Multiple Configurations of a Product panel. They are not deleted. You can restore them when you need them again.

## Procedure

1. Issue the CONFIGURATION command on the Customizer Workplace panel. The Manage Multiple Configurations of a Product panel is displayed, as shown in the following figure:

```
CCQPCNF          Manage Multiple Configurations of a Product   Row 1 to 1 of 1
Command ==>>>                                         Scroll ==>>> CSR

Select the configuration that you want to use, or create a new configuration.
Press Enter to continue or End to cancel.

Commands: CREATE - Create a new product configuration

Product to Customize
  Product metadata library . : HLO.WRK0210.SHLODENU      > LPAR . . . : RS22
  Product name . . . . . : DB2 Analytics Accelerato > Version . . : 2.1.0

Line commands: / - Select C - Copy R - Remove E - Edit

  Cmd ID  Description
  - ---->-----
    HLO   IBM DB2 Analytics Accelerator Loader for z/OS
  ----- End of Configurations -----
```

Figure 3-18. The Manage Multiple Configurations of a Product panel

2. Use one of the following methods to restore configurations:
  - Issue the CREATE command.
  - Specify the C line command against a configuration ID.
3. In the **ID** field, specify the ID of the configuration that you want to restore. The length of valid values is set by DB2 Analytics Accelerator Loader.
4. In the **Description** field, specify a description of the configuration. The description can be different than the description of the original configuration. Valid values are 1 - 72 characters.
5. Press Enter. The Manage Multiple Configurations of a Product panel is displayed, and the restored configuration is in the list.

## Defining parameters

To customize DB2 Analytics Accelerator Loader, you must define DB2 Analytics Accelerator Loader parameters, LPAR parameters, and DB2 parameters, if your customization requires DB2 entries.

### About this task

You must define the DB2 Analytics Accelerator Loader parameters first for the following reasons:

- If you ran the DB2 Analytics Accelerator Loader Discover EXEC, you must review the values that were discovered.
- If you select optional tasks and steps on the Product Parameters panel that affect the DB2 entry on which you will customize DB2 Analytics Accelerator Loader, additional parameters might be displayed on the DB2 Parameters panel.
- If other steps must be completed in a specific sequence, customization notes on the Product Parameters panel will display the correct sequence.

### Defining DB2 Analytics Accelerator Loader parameters

DB2 Analytics Accelerator Loader parameters are specific to DB2 Analytics Accelerator Loader.



## About this task

If you ran the DB2 Analytics Accelerator Loader Discover EXEC, you must review the parameters that were discovered.

## Procedure

1. Specify E next to the **Product parameters** field on the Customizer Workplace panel, and press Enter. The Product Parameters panel is displayed, as shown in the following figure. If other steps must be completed in a specific sequence before you define the DB2 Analytics Accelerator Loader parameters, a note labeled **Important** will display the correct sequence on this panel.

```
CCQPPRD                Product Parameters                11:42:56
Command ==>>>                Scroll ==>> CSR

Complete the following tasks to customize the products. The required tasks,
required steps within a required or selected task, and required parameters
are preceded by an asterisk (*). Ensure that values are specified for the
required parameters. Press End to save and exit.

Commands: SAVE - Save parameter values
Line Commands: / - Select

Product customization library : CSUSER.TESTB.$RS22$.HL0210

Usage Notes:
- Tools Customizer displays some parameters only after you have selected
tasks or specified values on the Product Parameters panel. Therefore, you
must first define a primary SSID on the DB2 Parameters panel, then select
values on the Product Parameters panel. Return to the DB2 Parameters panel
to review options that were added as a result of your specifications on
the Product Parameters panel.

Common parameters
Accelerator Loader Server high-level qualifier
  CSUSER.HLV
*Accelerator Loader high-level qualifier
  CSUSER.HLO
  FEC common code high-level qualifier
  CSUSER.FEC
* Configure the product CLISTs

* Configure the startup CLISTs
*Startup CLIST library CSUSER.HLO.SHLOCLST
*Startup CLIST 1 . . . . . HLOV21
*Startup CLIST 2 . . . . . HLOV21C
*User indicator . . . . . HLO

* Create the started task and its components
*Started task identifier . . . . . HL01

* Create PROC, PLCY, and other SAMPLIB members
```

Figure 3-19. The Product Parameters panel

2. Select any required tasks and steps, and specify values for any parameters. After you select a task or step with a slash (/), put the cursor in the selected field and press Enter. If tasks, steps, and parameters are required, they are preselected with a slash (/). Otherwise, they are not preselected. All of the required parameters have default values, which you can either accept or change.

### Tips:

- In the command line, specify the KEYS command, and map EXPAND to one of the function keys.

- For a detailed description of all input fields, put the cursor in the field, and press F1 or the key that is mapped to Help.
  - The following elements apply to specific fields:
    - **Add...** is displayed when parameters can have multiple values but currently have only one value. To specify multiple values in these fields, place the cursor on **Add...**, and press Enter. Use the displayed panel to add or delete additional values.
    - **List...** is displayed when the complete list of valid values for the fields is too long to be displayed on the panel. To see the complete list of values, place the cursor on **List...**, and press F1 or the key that is mapped to Help.
    - **More...** is displayed when input fields contains multiple values. To see all of the values in the field, place the cursor on **More...**, and press Enter.
3. Optional: Select other tasks and steps with a slash (/) and press Enter to activate the input fields. Either accept or change the default values that are displayed.
  4. Press End to save your changes and exit, or issue the SAVE command to save your changes and stay on the Product Parameters panel.

## Results

The Customizer Workplace panel is displayed, and the status of the product parameters is Ready to Customize.

## What to do next

If the status of other parameters on the Customizer Workplace panel is Incomplete or Discovered, edit these parameters.

### Related tasks:

“Defining LPAR parameters”

LPAR parameters are parameters on the local LPAR that are required to customize DB2 Analytics Accelerator Loader.

“Defining DB2 parameters” on page 3-30

DB2 parameters are parameters for a DB2 entry.

## Defining LPAR parameters

LPAR parameters are parameters on the local LPAR that are required to customize DB2 Analytics Accelerator Loader.

## Procedure

1. Specify E next to the **LPAR parameters** field, and press Enter. The LPAR Parameters panel is displayed, as shown in the following figure:

```

CCQPLPR                               LPAR Parameters                               12:34:14
Command ===>                           Scroll ===> PAGE

Ensure that values are specified for the required LPAR parameters. Press End
to save and exit.

Commands: SAVE - Save parameter values

Product to Customize
Product metadata library . : HLO.WRK0210.SHLODENU > LPAR . . : RS22
Product name . . . . . : DB2 Analytics Accelera > Version . : 2.1.0
Configuration ID: HLO > Description: DB2 Analytics Accelerator Load >

ISPF Libraries - common
*Message library . . . . . ISP.SISPMENU                               Add
*Panel library . . . . . ISP.SISPPENU                               Add
*Skeleton library . . . . . ISP.SISPSENU                             Add
*ISPF table input library ISP.SISPTENU                               Add

```

Figure 3-20. The LPAR Parameters panel

2. Specify values for all required parameters that are displayed. Many parameters have default values, which you can either accept or change.

**Tips:**

- In the command line, specify the KEYS command, and map EXPAND to one of the function keys.
- For a detailed description of all input fields, put the cursor in the field, and press F1 or the key that is mapped to Help.
- The following elements apply to specific fields:
  - **Add...** is displayed when parameters can have multiple values but currently have only one value. To specify multiple values in these fields, place the cursor on **Add...**, and press Enter. Use the displayed panel to add or delete additional values.
  - **List...** is displayed when the complete list of valid values for the fields is too long to be displayed on the panel. To see the complete list of values, place the cursor on **List...**, and press F1 or the key that is mapped to Help.
  - **More...** is displayed when input fields contains multiple values. To see all of the values in the field, place the cursor on **More...**, and press Enter.

The following LPAR parameters can contain 1 - 64 values:

- LPAR macro library
- Message library
- Panel library
- Skeleton library
- ISPF table input library
- ISPF user profile library
- File tailoring output library
- Link list library
- Command procedures library
- Macro library
- Link-edit library
- Load library
- Started task library name

3. Press End to save your changes and exit, or issue the SAVE command to save your changes and stay on the same panel.

## Results

The Customizer Workplace panel is displayed, and the status of the LPAR parameters is Ready to Customize.

## What to do next

If the status of other parameters on the Customizer Workplace panel is Incomplete or Discovered, edit these parameters.

### Related tasks:

“Defining DB2 Analytics Accelerator Loader parameters” on page 3-26  
DB2 Analytics Accelerator Loader parameters are specific to DB2 Analytics Accelerator Loader.

“Defining DB2 parameters”

DB2 parameters are parameters for a DB2 entry.

## Defining DB2 parameters

DB2 parameters are parameters for a DB2 entry.

## About this task

If you did not run the DB2 Analytics Accelerator Loader Discover EXEC, you must create and associate one or more DB2 entries before you can define the DB2 parameters. For more information, see “Creating and associating DB2 entries” on page 3-18.

## Procedure

1. Specify E next to one or more DB2 entries in the associated list, which is in the Associated DB2 Entries and Parameter Status section on the Customizer Workplace panel, and press Enter. The DB2 Parameters panel is displayed, as shown in the following figure:

```

CCQPDB2                DB2 Parameters                Top of data
Command ==>>>                Scroll ==>> CSR

Ensure that values are specified for the required DB2 parameters. Press End
to save and exit.

Commands: SAVE - Save parameter values

Product to Customize
Product metadata library . : HLO.WRK0210.SHLODENU > LPAR . . : RS22
Product name . . . . . : DB2 Analytics Accelera > Version . : 2.1.0
Configuration ID: HLO > Description: DB2 Analytics Accelerator Load >

DB2 subsystem ID . . . . . : DA1A
Group attach name . . . . . :
*This is the primary subsystem . . . . . YES (YES, NO)

General DB2 Information
*Mode . . . . . NFM (NFM, CM)
*Level number . . . . . 101 (101, 111)

DB2 Libraries - common
*Load library . . . . . DSN.SDSNLOAD                Add
*Run library . . . . . DSN.RUNLIB.LOAD                Add
*Exit library . . . . . DSN.SDSNEXIT                Add
DB2 Utilities - common
SYSAFF for DB2 utilities . . . . .
*DSNTEP2 plan name . . . . . DSNTEP2

Accelerator Loader BIND Parameters
*Accelerator Loader plan name . . . . . HLOV21PL
*BIND owner ID . . . . . DB2USER                >
*User ID for GRANT statement . . . . . PUBLIC

Accelerator Loader DB2 Parameters
*SET CURRENT SQLID . . . . . DB2USER
*Accelerator Loader database name . . . . . HLOV21DB
*Accelerator Loader Table schema . . . . . HLOV21TB                >
*Accelerator Loader database STOGROUP . . . . . SYSDEFLT                >
*Accelerator Loader index STOGROUP . . . . . SYSDEFLT                >
*Accelerator Loader table space buffer pool BP0

```

Figure 3-21. The DB2 Parameters panel

```

CCQPDB2                DB2 Parameters                11:18:05
Command ==>>>                Scroll ==>> PAGE

Ensure that values are specified for the required DB2 parameters. Press End
to save and exit.

Commands: SAVE VERIFYOFF
DB2 subsystem ID . . . . . : DSNB
Group attach name . . . . .
Started task name for MSTR services . . . . .

General DB2 Information - common
*Mode . . . . . NFM (CM, CM8, CM9, NFM)
*Level number . . . . . 111 (101, 111)

DB2 Utilities - common
SYSAFF for DB2 utilities . . . . . SY4A
*Plan name for the DSNTEP2 utility . . . . . DSNTEP2

```

Figure 3-22.

2. Specify values for all parameters that are displayed.

**Tips:**

- In the command line, specify the KEYS command, and map EXPAND to one of the function keys.
- For a detailed description of all input fields, put the cursor in the field, and press F1 or the key that is mapped to Help.
- The following elements apply to specific fields:
  - **Add...** is displayed when parameters can have multiple values but currently have only one value. To specify multiple values in these fields, place the cursor on **Add...**, and press Enter. Use the displayed panel to add or delete additional values.
  - **List...** is displayed when the complete list of valid values for the fields is too long to be displayed on the panel. To see the complete list of values, place the cursor on **List...**, and press F1 or the key that is mapped to Help.
  - **More...** is displayed when input fields contains multiple values. To see all of the values in the field, place the cursor on **More...**, and press Enter.

Many parameters have default values, which you can either accept or change.

3. Press End to save your changes and exit, or issue the SAVE command to save your changes and stay on the same panel.

## Results

The status of the DB2 entries that you selected on the Customizer Workplace panel is Ready to Customize.

## What to do next

If the status of other parameters on the Customizer Workplace panel is Incomplete or Discovered, edit these parameters.

### Related tasks:

“Defining DB2 Analytics Accelerator Loader parameters” on page 3-26  
DB2 Analytics Accelerator Loader parameters are specific to DB2 Analytics Accelerator Loader.

“Defining LPAR parameters” on page 3-28  
LPAR parameters are parameters on the local LPAR that are required to customize DB2 Analytics Accelerator Loader.

## Generating customization jobs

To generate customization jobs for DB2 Analytics Accelerator Loader and any associated DB2 entries, issue the GENERATEALL command, or select one or more DB2 entries on which to customize DB2 Analytics Accelerator Loader.

## Procedure

Generate the customization jobs by using one of the following methods.

- If you want to generate customization jobs at the product level and for any associated DB2 entries, issue the GENERATEALL command, and press Enter.
- If you want to generate customization jobs for specific DB2 entries, select the DB2 entries by specifying the G line command against them, and press Enter. The available DB2 entries are in the associated list in the Associated DB2 Entries and Parameter Status section.

**Important:** Regenerating customization jobs will replace any existing jobs, including jobs that you might have manually modified after they were generated.

## Results

If the status is Incomplete or Discovered for DB2 Analytics Accelerator Loader parameters, LPAR parameters, or DB2 parameters, Tools Customizer automatically starts an editing session for the types of parameters that are required. The session continues until the panel for each type of required parameter has been displayed.

## What to do next

If an automatic editing session is started, accept the displayed parameter values or define values for the required types of parameters, select optional parameters, tasks, or steps for your environment, and save the parameter values. Otherwise, the customization jobs are generated, and you can submit them.

**Tip:** If the customization jobs are generated, but you are not ready to submit them, you can see them later by issuing the JOBLIST command on the Customizer Workplace panel. The JOBLIST command displays the Finish Product Customization panel, which you can use to submit the jobs.

## Submitting customization jobs

Submit the customization jobs to customize DB2 Analytics Accelerator Loader.

### Before you begin

Ensure that the correct jobs are generated.

### About this task

The following figure shows part of the Finish Product Customization panel. The table on this panel shows the customization jobs that are generated by Tools Customizer. They are grouped by job sequence number.

```

CCQPCST                Finish Product Customization                Row 1 to 7 of 7
For a first-time customization, submit the jobs in the members in the order
in which they apply to the DB2 entries. Otherwise, submit only the necessary
jobs that were generated after changes were made. To submit jobs, browse
the members and issue the TSO SUBMIT command.

Line Commands: E - Edit  B - Browse

Product customization library .: TSUSRA.HL0210.$RS23$.HL0210                >

Cmd Member  SSID GrpAttch Template Date      Description
-----
A01CAA    --  --      HL01CLST 2015/12/19 Configures startup CLIST 1
A12CAA    --  --      HL02CLST 2015/12/19 Configures startup CLIST 2
A2STAA    --  --      HLOSTCJ 2015/12/19 Creates STC and components
A3SMAA    --  --      HLOSMPJ 2015/12/19 Creates repository maintenance
A4HLVS    --  --      HLOHLVS 2015/12/19 Creates the server
A5IN00    --  --      HLOIN00 2015/12/19 Creates the server parms
A6VOBJ    --  --      HLOVOBJ 2015/12/19 Creates OBJ file
A7UMAP    --  --      HLOUMAP 2015/12/19 Creates user map file
A8DFDIV   --  --      HLODFDIV 2015/12/19 Creates server files
A9DRAAAA DA1A  --      HLODROP 2015/12/19 Drops repository objects
B0DDAAAA DA1A  --      HLODDL  2015/12/19 Creates repository objects
B1RFAAAA DA1A  --      HLORFREE 2015/12/19 Frees packages and plans
B2VFAAAA DA1A  --      HLOVFREE 2015/12/19 Frees server packages
B3RBAAAA DA1A  --      HLORBIND 2015/12/19 Binds packages and plans
B4VBAAAA DA1A  --      HLOVBIND 2015/12/19 Binds server packages
B5RGAAAA DA1A  --      HLORGRNT 2015/12/19 Grants EXECUTE authority
B6VGAAAA DA1A  --      HLOVGRNT 2015/12/19 Grants EXEC to server pkgs
B7CPAA    --  --      HLOCPRUF 2015/12/19 Creates profile data sets
B8MPAA    --  --      HLOMPROF 2015/12/19 Migrates profiles
B9CCAA    --  --      HLOCCNTL 2015/12/19 Creates a new control file
C0UCAAAA DA1A  --      HLOUCNTL 2015/12/19 Updates control file
C1IVAA    --  --      HLOIVP  2015/12/19 Creates IVP jobs
C2ADAA    --  --      HLOADBI  2015/12/19 Configures the REXX EXEC
----- End of customized jobs -----

```

Figure 3-23. The Finish Product Customization panel

The member-naming conventions depend on whether the customization jobs are for DB2 entries, and LPAR, or the product.

### Customization jobs for DB2 entries

The members use the following naming convention:

<job\_sequence\_number><job\_ID><configuration\_ID><DB2\_entry\_ID>

where

#### *job\_sequence\_number*

Two alphanumeric characters, A0 - Z9, that Tools Customizer assigns to a customization job. The number for the first template in the sequence is A0, the number for the second template is A1, and so on.

#### *job\_ID*

Characters 4 - 5 of the template name, if the template name contains five or more characters. Otherwise, only character 4 is used. For example, for the XYZCRE8I template, the job ID is CR. For the XYZC template, the job ID is C. DB2 Analytics Accelerator Loader assigns the template name.

#### *configuration\_ID*

Two alphanumeric characters, AA - 99, that Tools Customizer assigns to a configuration.



### *DB2\_entry\_ID*

Two alphanumeric characters, AA - 99, that Tools Customizer assigns to a DB2 entry.

For example, the XYZBNDDDB2\_entry\_ID\_1 and XYZBNDDDB2\_entry\_ID\_2 jobs are generated from the XYZBNDGR template, and the XYZ4DB2\_entry\_ID\_1 and XYZ4DB2\_entry\_ID\_2 jobs are generated from the XYZ4 template. If the jobs are generated on two DB2 entries for two configurations, the following member names are listed sequentially: A0BNAAAA, A0BNABAB, A14AAAA, A14ABAB.

### **Customization jobs for an LPAR or the product**

The members use the following naming convention:

*<job\_sequence\_number><job\_ID>*

where

#### *job\_sequence\_number*

Two alphanumeric characters, A0 - Z9, that Tools Customizer assigns to a customization job. The number for the first template in the sequence is A0, the number for the second template is A1, and so on.

#### *job\_ID*

Characters 4 - 8 of the template name, if the template name contains five or more characters. Otherwise, only character 4 is used. For example, for the XYZMAKE template, the job ID is MAKE. For the XYZM template, the job ID is M. DB2 Analytics Accelerator Loader assigns the template name, and it is displayed in the Template column.

For example, the XYZBNDGR job is generated from the XYZBNDGR template, and the XYZ4 job is generated from the XYZ4 template. The following member names are listed sequentially: A0BNDGR, A14.

### **Customization jobs for configurations**

The members use the following naming convention:

*<job\_sequence\_number><configuration\_ID><DB2\_entry\_ID>*

where

#### *job\_sequence\_number*

Two alphanumeric characters, A0 - Z9, that Tools Customizer assigns to a customization job. The number for the first template in the sequence is A0, the number for the second template is A1, and so on.

#### *configuration\_ID*

Two alphanumeric characters, AA - 99, that Tools Customizer assigns to a configuration.

#### *DB2\_entry\_ID*

Two alphanumeric characters, AA - 99, that Tools Customizer assigns to a DB2 entry.

For example, for two configurations on the same DB2 entry, the XYZBIND job is generated from the XYZBNDGR template, and the XYZMAKE9 job is generated from the XYZ4 template. The following member names are listed sequentially: A0AAAA, A1ABAA.

## Procedure

1. Submit the generated customization jobs by following the process that you use in your environment or by using the following method:
  - a. Specify B against a customization job or the product customization library, and press Enter. An ISPF browsing session is started.
  - b. Browse the customization job or each member in the library to ensure that the information is correct.
  - c. Run the TSO SUBMIT command.
2. Press End.

## Results

DB2 Analytics Accelerator Loader is customized, and the Customizer Workplace panel is displayed. The status is Customized for the DB2 entries on which DB2 Analytics Accelerator Loader was customized.

## What to do next

You can generate more customization jobs for other DB2 entries, view a list of customization jobs that you previously generated, or recustomize DB2 Analytics Accelerator Loader.

## Browsing parameters

You can browse the product parameters, the LPAR parameters, and the DB2 parameters in read-only mode.

### Procedure

1. On the Customizer Workplace panel, specify B next to the **Product parameters** field, the **LPAR parameters** field, or the DB2 entry that you want to browse, and press Enter. The panel that corresponds to your specification is displayed.
2. Press End to exit.

## Copying DB2 entries

You can copy associated and not associated DB2 entries to other DB2 entries or to new DB2 entries.

### About this task

Go to the step that applies to your environment:

- To copy an associated DB2 entry to another associated DB2 entry or to an entry that is not associated, go to step 1.
- To copy an associated DB2 entry to a new entry, go to step 2.
- To copy a DB2 entry that is not associated to a new entry, go to step 3.

### Procedure

1. To copy an associated DB2 entry to another associated DB2 entry or to an entry that is not associated, complete the following steps:
  - a. Specify C against a DB2 entry in the associated list of DB2 entries on the Customizer Workplace panel, and press Enter. The Copy Associated DB2 Entry panel is displayed.

- b. Select one or more DB2 entries to which information will be copied by specifying the / line command, and press Enter. The Associated column indicates whether the DB2 entry is associated.

**Tip:** To copy information into all of the DB2 Entries in the list, issue the SELECTALL primary command, and press Enter.  
The Copy DB2 Parameter Values panel is displayed.

- c. Specify an option for copying common and product-specific DB2 parameter values. Common DB2 parameter values apply to all DB2 entries for all products that you have customized by using Tools Customizer. Product-specific DB2 parameter values apply only to the product that you are currently customizing.
  - To copy the common DB2 parameter values and the product-specific DB2 parameter values, specify option 1, and press Enter.
  - To copy only the product-specified DB2 parameter values, specify option 2, and press Enter.

In some cases, the DB2 parameter values might contain the DB2 subsystem ID as an isolated qualifier in data set names. For example, in the DB01.DB01TEST.DB01.SANLLOAD, data set name, the DB01 subsystem ID is isolated in the first and third qualifiers but is not isolated in the second qualifier. When the DB2 subsystem ID is an isolated qualifier in data set names, the Change DB2 Subsystem ID in DB2 Parameter Values panel is displayed. Otherwise, the Customizer Workplace panel is displayed.

- d. If the Change DB2 Subsystem ID in DB2 Parameter Values panel is displayed, specify an option for changing the subsystem IDs. Otherwise, skip this step.
  - To change the subsystem ID in isolated qualifiers in data set names, specify option 1, and press Enter.
  - To use the same subsystem ID in all values, specify option 2, and press Enter.

The Customizer Workplace panel is displayed with the copied associated entry in the list.

2. To copy an associated DB2 entry to a new entry, complete the following steps:
  - a. Specify C against a DB2 entry in the associated list of DB2 entries on the Customizer Workplace panel, and press Enter. The Copy Associated DB2 Entry panel is displayed.
  - b. Issue the CREATE command. The Create DB2 Entries panel is displayed.
  - c. Specify the SSID, the group attach name, or both in the appropriate columns for each new DB2 entry, and press Enter.

**Tip:** To add rows for additional entries, specify the *Imm* line command, where *m* is the number of entries to be created, and press Enter.  
The Copy Associated DB2 Entry panel is displayed with the new entries in the list. The new entries are preselected.

- d. Press Enter to complete the copy process. The Customizer Workplace panel is displayed with the copied entries in the list.
3. To copy a DB2 entry that is not associated to a new entry, complete the following steps:
    - a. Issue the ASSOCIATE command on the Customizer Workplace panel. The Associate DB2 Entry for Product panel is displayed.

- b. Select one or more DB2 entries by specifying the / line command, and press Enter. The Copy a DB2 Entry panel is displayed.
- c. Specify the SSID, the group attach name, or both in the appropriate columns for the new DB2 entry, and press Enter. The Associate DB2 Entry for product panel is displayed with the copied entry in the list.
- d. If you want to associate the copied entry, specify A against it, and press Enter. The Customizer Workplace panel is displayed with the copied entries in the list.

## What to do next

Edit any of the parameters or generate the jobs.

### Related concepts:

“Tools Customizer terminology” on page 12-1

Tools Customizer uses several unique terms that you should be familiar with before you begin to use Tools Customizer.

## Removing DB2 entries

You can remove DB2 entries from the associated list.

### About this task

When you remove DB2 entries from the associated list, any customization jobs for the entries are removed from the list of jobs on the Finish Product Customization panel, and they are deleted.

### Procedure

On the Customizer Workplace panel, specify R next to one or more DB2 entries that you want to remove, and press Enter. The selected DB2 entries are removed from the associated list and added to the master list on the Associate DB2 Entry for Product panel, and the customization jobs are deleted.

### Related concepts:

“Tools Customizer terminology” on page 12-1

Tools Customizer uses several unique terms that you should be familiar with before you begin to use Tools Customizer.

## Deleting DB2 entries

You can delete DB2 entries from the master list.

### About this task

When you delete DB2 entries from the master list, any associations and all customization jobs for products that are customized on the entries will be deleted.

### Procedure

1. On the Customizer Workplace panel, issue the ASSOCIATE command. The Associate DB2 Entry for Product panel is displayed.
2. Specify D next to one or more DB2 entries that you want to delete, and press Enter. If the entry is associated with any products, the Delete Associated DB2 Entry panel for the first DB2 entry that you selected is displayed. Otherwise, the Delete DB2 Entry panel is displayed.

3. To delete the DB2 entries, press Enter. If the DB2 entries are associated with any products in the table on the Delete Associated DB2 Entry panel, any associations and all customization jobs for the products that are customized on it are deleted. Otherwise, only the DB2 entries are deleted. If you selected multiple DB2 entries to delete, the next DB2 entry that you selected is displayed on either the Delete Associated DB2 Entry panel or the Delete DB2 Entry panel. Otherwise, the Associate DB2 Entry for Product panel is displayed.

### **What to do next**

If you selected multiple DB2 entries to delete, repeat step 3 until all selected entries are deleted. Then, continue the customization process.

## **Displaying customization jobs**

You can view a list of the members that contain the customization jobs before or after you submit the jobs.

### **About this task**

The customization jobs that you generate for one DB2 entry are also displayed when you customize DB2 Analytics Accelerator Loader for another DB2 entry later.

### **Procedure**

On the Customizer Workplace panel, issue the JOBLIST command. The Finish Product Customization panel is displayed. This panel shows the list of jobs that you have previously generated. They are grouped by job sequence number. Use this panel to browse or edit the generated jobs before you submit them.

## **Maintaining customization jobs**

Instead of deleting customization jobs outside of Tools Customizer, you can maintain the correct jobs for DB2 Analytics Accelerator Loader by completing the steps for recustomization.

### **About this task**

You cannot delete or rename customization jobs from the customization library by starting an ISPF browse or edit session from the Finish Product Customization panel. If you try to delete customization jobs by using this method, the CCQC034S message is issued. If you try to rename customization jobs, the CCQC035S message is issued.

If you delete or rename customization jobs from the customization library by using ISPF outside of Tools Customizer, Tools Customizer will not recognize that the jobs were deleted, and the Finish Product Customization panel will still display them. If you browse or edit jobs that were deleted from the library outside of Tools Customizer, the CCQC027S message is issued.

### **Procedure**

To maintain the correct customization jobs in the customization library, complete the steps for recustomization.

## Using Tools Customizer in a multiple-LPAR environment

Currently, Tools Customizer supports only the local LPAR; however, you can propagate customizations to additional LPARs by using either of two different methods.

### About this task

In a multiple-LPAR environment, Tools Customizer identifies the LPAR to which you are logged on. Tools Customizer uses this LPAR name for several different parameter settings, one of which is the data store. When you use the data store during the customization of DB2 Analytics Accelerator Loader that is on a different LPAR, Tools Customizer issues message CCQD586S, which indicates that the product has already been customized based on values from the data store on the first LPAR. This message is issued to prevent the data store from becoming corrupted.

This behavior occurs in the following conditions:

- Tools Customizer is installed on a DASD device that is shared by multiple LPARs.
- After a product is customized by using Tools Customizer, the data store is copied to another LPAR.

### Procedure

To customize products running against a DB2 subsystem on an LPAR where Tools Customizer is not installed, consider using one of the following methods:

#### Install one instance of Tools Customizer on one LPAR

If you intend to reuse the customization values for all the instances of your products on all LPARs, use this method.

1. Associate all the DB2 entries in this one instance of Tools Customizer. The LPARs on which the DB2 subsystems reside do not matter.
2. Generate the customization jobs for each DB2 entry.
3. Copy the generated customization jobs to the LPAR to run against the specific DB2 entries. Some LPAR-specific edits might be required. You can make these edits in the customized jobs that you copied. Note that this situation is one of the few situations where you might need to make manual changes to the jobs that are customized by Tools Customizer.

#### Install one instance of Tools Customizer on each LPAR

If you do not want to reuse previous customization values and you want to start new customizations, use this method.

**Important:** This method will likely not be the preferred approach for most organizations because most organizations tend to use similar or identical customization values for each product instance on all LPARs.

---

## Changing the BIND JCL to ENCODING(500) (optional)

By default, the Accelerator Loader plan and packages are bound using the character set ENCODING(EBCDIC). If your DB2 subsystem is defined with an EBCDIC code page in which the quotation character is not X'7F', you must change the BIND job to bind all plans and packages with ENCODING(500).

In the customized BIND JCL, run a CHANGE ALL command to change the character set from ENCODING(EBCDIC) to ENCODING(500).

---

## APF-authorizing the load libraries (required)

Before you run the customization jobs, APF authorize the product load libraries.

### About this task

This task makes the libraries available when you execute the customization jobs.

### Procedure

Include the following libraries in the system APF-authorized list:

- *hlq*.SHLVLOAD
- *hlq*.SHLOLOAD
- *hlq*.SFECLOAD

For example, issue the following z/OS operator command:

```
SETPROG APF,ADD,DSNAME=hlq.SHLOLOAD,VOLUME=volser
```

Where *volser* is the volume serial number of the DASD device where the load library resides.

APF authorize dynamically and then make the authorization permanent for the next IPL. Contact your system administrator if you encounter difficulties starting DB2 Analytics Accelerator Loader.

---

## Copying the started task PROC (required)

Copy the Accelerator Loader started task PROC and server PROC to your system PROCLIB to make the started task address space available to the user interfaces for the product.

### About this task

Run the job members that are associated with templates HLOSTCJ and HLOHDBS. The jobs are located in the data set that is specified in the **Product Customization Library** field on the Tools Customizer Finish Product Customization panel. These jobs create the *hloid*PROC member in the *hlq*.SHLOSAMP library and the *hlvid*PROC member in the *hlq*.SHLVSAMP library, where *hloid* and *hlvid* represent the names of the Accelerator Loader and Accelerator Loader server started tasks that were customized by using Tools Customizer.

These jobs are created when both of the following criteria are met:

- On the DB2 Parameters panel, the subsystem for which you are generating JCL is identified as the primary subsystem.
- You selected the Tools Customizer subtasks **Create PROC, PLCY, and other SAMPLIB members** and Create the server.

### Procedure

1. Copy the *hloid*PROC member that is created in the *hlq*.SHLOSAMP library to a member in the system PROCLIB.
2. Copy the *hlvid*PROC member that is created in the *hlq*.SHLVSAMP library to a member in the system PROCLIB.

3. In the EXEC statement of both PROCs, ensure that you have specified the following settings:
  - REGION=0M to avoid storage problems.
  - TIME=1440 in *hloid*PROC to allow the product to run for an unlimited amount of time.
4. Ensure that the STEPLIB and SVCLIB data sets are APF-authorized.
5. Ensure that all data sets that the PROCs reference are APF-authorized.
6. If you plan to use Accelerator Loader on multiple DB2 subsystems that have different DB2 versions, ensure that the STEPLIB concatenation of *hloid*PROC specifies the earliest DB2 version as the DSNLOAD library. Otherwise, connection problems might occur when you attempt to use the product on DB2 subsystems other than the primary subsystem that contains the audit and logging tables.

---

## Copying the DSNUTILF module (required)

This customization step is required for the Accelerator Loader started task *hloid*PROC to perform DSNUTILB interception services.

### About this task

When the DSNUTILF module is in the load library concatenation, the DSNUTILB program can operate normally even if the Accelerator Loader started task becomes unavailable.

### Procedure

1. Copy the DSNUTILF load module into one of the APF-authorized libraries in the STEPLIB or JOBLIB concatenation of the DB2 LOAD utility jobs.
2. Optional: Leave the DSNUTILF module in the Accelerator Loader LOAD library, and add it to the STEPLIB or JOBLIB concatenation of the DB2 LOAD utility jobs.

### Related tasks:

“Setting up the WLM application environment (required)”

This customization step is required for the Accelerator Loader started task to perform DSNUTILB interception services.

---

## Setting up the WLM application environment (required)

This customization step is required for the Accelerator Loader started task to perform DSNUTILB interception services.

### Procedure

1. Place the following SHLOLOAD modules in the WLM STEPLIB concatenation for the WLM application environment for the DB2 stored procedure SYSPROC.DSNUTILU:
  - DSNUTILF
  - HLOPIPE

**Note:** If Accelerator Loader and IBM DB2 Utilities Enhancement Tool must coexist at the same time in the same environment, concatenate the Accelerator Loader load library before the DB2 UET load library. This concatenation order



ensures that Accelerator Loader intercepts DSNUTILB only when loading the IBM DB2 Analytics Accelerator for z/OS and DB2 UET intercepts DSNUTILB for other appropriate processing.

2. Optional: Leave the DSNUTILF in the module in the Accelerator Loader load library and add it to the STEPLIB or JOBLIB concatenation of the WLM application environment.

**Related concepts:**

“Managing DSNUTILB interception” on page 11-441

You can manage DSNUTILB interception by performing some routine and occasional tasks.

**Related tasks:**

“Copying the DSNUTILF module (required)” on page 3-42

This customization step is required for the Accelerator Loader started task *hloid*PROC to perform DSNUTILB interception services.

---

## Starting the started task (required)

Start the Accelerator Loader started tasks so that you can begin using the product interfaces.

### About this task

The variable *hlostc* in the command represents the member name of the Accelerator Loader PROC in the system PROCLIB.

Tools Customizer generated the started task name based on the value that you specified in the Tools Customizer field **Create the Started Task and its components**, and then inserted that name in the started task PROC. If you changed the started task name in the PROC, make sure that you use that new name in the **Start** command.

### Procedure

Start the started task by using the z/OS console or the SDSF interface.

- From the z/OS console, issue the following operator command:

```
S hlostc
```

- From the SDSF interface, issue the following command, including the forward slash:

```
/S hlostc
```

---

## Starting and stopping the server (required)

The Accelerator Loader server runs as a z/OS started task. Under normal circumstances, the server starts at system startup and stops before the system shuts down.

### Before you begin

Ensure that you have the privileges that are described in “Authorization requirements for the Accelerator Loader server” on page 2-8 and “Authorization requirements to access data sources” on page 2-9.

## Procedure

1. To start the server use the following console command: `S server-name`  
Where *server-name* is the name you gave the Accelerator Loader server during customization.
2. If you use an automation package to start the system, associate the **START** command with the VTAM® initialization complete message (IST020I), the TCP/IP initialization complete message (EZB6473I), or both messages.
3. To verify that the startup is successful, look for the following entries in the server Job Entry Subsystem (JES) log.  

```
SD74391I OE stack binding port 1200 to IP address 0.0.0.0
SD74391I OE stack binding port 1201 to IP address 0.0.0.0
SD74391I OE stack binding port 1202 to IP address 0.0.0.0
```

## What to do next

To stop the server, issue the following command, where *hlvid* represents the name of the Accelerator Loader server started task that was customized by using Tools Customizer:

```
P hlvid
```

If you issue a **CANCEL** command, all available connections terminate with an abend, and the server shuts down immediately.

---

## Installing the Accelerator Loader studio (required)

Use the Accelerator Loader studio to load relational and non-relational data to the accelerator. It provides a single, enterprise view across all mainframe integration components and automatically discovers instances of the Accelerator Loader server running on the mainframe.

### Before you begin

Accelerator Loader studio is available with DB2 Analytics Accelerator Loader. You install Accelerator Loader studio as a plug-in to IBM Data Studio.

**Note:** IBM Installation Manager is not supported in this release.

- The Accelerator Loader server must be installed and configured on IBM z/OS.
- IBM Data Studio 4.1.x for Windows (32-bit or 64-bit) must be installed on the client machine.

**Note:** Updating software from IBM Data Studio can require that you log in as an administrator.

- Eclipse Kepler (4.3.x) or Luna (4.4x) is required for Accelerator Loader studio and is bundled with IBM Data Studio 4.1.x.
- Java 1.7 or 1.8 is required.
- 4 GB of system memory is recommended.
- 40 MB of hard disk space is recommended (the installed software will consume 20 MB).
- Verify that you have appropriate mainframe user log on credentials and user privileges, that you can connect to the Accelerator Loader server on the mainframe, and that the Accelerator Loader server can access other DBMS subsystems.

- Have the following information available for connecting to the mainframe system. These values are viewable in Accelerator Loader server messages, or get them from your system programmer:
  - Host name on which the Accelerator Loader server is running
  - JDBC port number. During customization with Tools Customizer, the port number is specified in the field **TCP/IP OE port number**. In the server configuration file, the parameter name is **OEPORTNUMBER**. On the mainframe, use SDSF to browse the server JOB output and search for **OEPORTNUMBER**.

### Procedure

1. Using File Transfer Protocol (FTP) in binary mode, perform a binary transfer of installation member *hlq.SHLVBIN(HLVBIN)* to a folder on your local workstation.
2. Rename the file to *loader.zip*.
3. From the IBM Data Studio, click **Help > Install New Software**, and then click **Add**.
4. On the Add Repository dialog box, click **Archive**.
5. Locate the *loader.zip* (HLVBIN file) and click **Open**.
6. Enter the file name for the software, a name for the repository, and then click **OK**.
7. Select the check box next to Accelerator Loader and click **Next**.
8. Complete the remaining installation wizard steps, and then restart your workstation.

### What to do next

You can now open the Accelerator Loader perspective from IBM Data Studio.

#### Related tasks:

“Uninstalling the Accelerator Loader studio”

Use the Workbench wizard to uninstall the Accelerator Loader studio from IBM Data Studio.

## Uninstalling the Accelerator Loader studio

Use the Workbench wizard to uninstall the Accelerator Loader studio from IBM Data Studio.

### Procedure

1. Click **Help > About**, and then click **Installation Details**.
2. On the **Installed Software** tab, select **Accelerator Loader** and click **Uninstall**.
3. Verify your selection to uninstall and click **Uninstall**.
4. After successfully uninstalling the software, you are prompted to restart the Workbench. Click **Yes**.

#### Related tasks:

“Installing the Accelerator Loader studio (required)” on page 3-44

Use the Accelerator Loader studio to load relational and non-relational data to the accelerator. It provides a single, enterprise view across all mainframe integration components and automatically discovers instances of the Accelerator Loader server running on the mainframe.

---

## Configuring access to mainframe data sources (required)

Configure Accelerator Loader server to enable secure access to mainframe data sources.

### Related tasks:

“Configuring access to DRDA data sources (optional)” on page 3-50

To configure the Accelerator Loader server to access data sources via DRDA, you must customize the server parameter file for each data source.

## Configuring access to DB2 subsystems and data

To configure the server, enable access to DB2 subsystems and provide user access to DB2.

## Configuring access to DB2 subsystems

To allow the Accelerator Loader server to access DB2 subsystem resources, you must execute BIND packages and GRANT user authority.

### Before you begin

Before you begin this task, you must know the host name and port number of the Accelerator Loader server, and your log on credentials, which must have the authority to process BIND and GRANT operations on the DB2 subsystem.

### About this task

Perform this task once for each DB2 subsystem that you want to access. These binds do not need to be run on the DB2 for z/OS subsystem that is attached to the accelerator. Those binds are generated through Tools Customizer and are run when the product is customized; they do not need to be run through the studio.

### Procedure

1. From Studio, click **Window > Open Perspective > Accelerator Loader**.
2. On the **Server** tab, click **Set Server**.
3. On the Set Current Server dialog box, complete the following fields:

Option	Description
<b>Host</b>	Enter the TCP/IP host name or IP address of the mainframe system.
<b>Port</b>	Enter the port number that is used to communicate with the Accelerator Loader server. The default is 1200.
<b>Userid</b>	Enter the mainframe user ID.
<b>User Password</b>	Enter the password for the mainframe user ID.

4. Click **OK**.
5. On the **Server** tab, expand **SQL > Data > Other Subsystems**.
6. Right-click the subsystem that requires DRDA processing and select **BIND/GRANT Packages**.
7. Complete the following fields:

Option	Description
<b>Package Prefix</b>	Enter the two character prefix to assign to the package. The package prefix must match the prefix that is defined on the mainframe server. If you change the default prefix of DS, you must also change it in data set <i>hlq.SHLVEXEC</i> member <i>hlvid</i> IN00, where <i>hlvid</i> represents the name of the Accelerator Loader server started task that was customized by using Tools Customizer.
<b>Number of Cursors</b>	Enter the number of cursors to use to process results. The default is 200.
<b>Collection</b>	Enter the value to use to bind packages. The default is NULLID. This value is normally determined by the DB2 Administrator.
<b>Table Qualifier</b>	Enter the value to use to qualify unqualified SQL. This value is normally determined by the DB2 Administrator.
<b>Owner UserId</b>	Enter the user ID of the package owner. This value is normally determined by the DB2 Administrator.
<b>Grant to</b>	Set only when granting authority for the target DB2 server. The default is PUBLIC.

8. Select one or more of the following package processing options, and then click **Execute**:

Option	Description
<b>Bind Package</b>	Binds the product packages.
<b>Grant Execute</b>	Grants access permission to the user ID that is specified in the <b>Grant to</b> field.
<b>Replace Packages</b>	Replaces an existing package, if one exists, for the specified subsystem. Select this option only if the package already exists. Some subsystems require the replacement of existing packages.

9. Depending on the options that you select, additional dialog boxes and messages might be displayed.
10. Review results in the **Results** text box, and click **BIND/GRANT**.

## Configuring user access to DB2 subsystems

Provide user access to DB2.

### Procedure

- Assign users READ authority.
  - For DRDA, assign users READ authority to the *ssid.DIST* profile.
- This step only applies to DB2 for z/OS. To grant users access to the DB2 subsystem and to enable RACF PassTicket logon processing, you must define one RACF PTKTDATA resource for each unique DRDA APPLNAME. To define each PTKTDATA resource, customize and run the appropriate job.
  - HLVRADB2 is for IBM Resource Access Control Facility (RACF) security.

- HLVA2DB2 is for CA ACF2 (Access Control Facility) security.
  - HLVTSDB2 is for CA Top Secret Security (TSS).
3. This step only applies to DB2 for LUW. Customize the ATH rule for member HLVALUWI. Customize the SQL rule for member HLVSLUWC. These rules must be auto-enabled.

Parameter	Description
ATH.AUDRSSID	The name that is defined to the LUW DRDA connection.
ATH.AUDROTUS	The userid that should be used to connect to this DB2 LUW.
PREFIX=HL	The password that is associated to the ATH.AUDROTUS userid.

For example:

```

WHEN ATH.AUDRSSID = "UDB1" THEN DO
  ATH.AUDROTUS = "db2luwu1"
  ATH.AUDROTPW = "8cHarMix"
  if _Tact = "Y" then do; /* Trace Active? */
    SAY _Twho||"Mod U/P:("ATH.AUDRSSID||":"||ATH.AUDRLONA)"
  end /* end Trace */
END

```

#### Related concepts:

“Authorization requirements to access data sources” on page 2-9

Accessing data sources requires the following authorizations:

“Accelerator Loader server restrictions and considerations” on page 5-1

Review the following usage restrictions and considerations before performing a load by using the Accelerator Loader server.

#### Related reference:

“Log on events” on page 10-22

This event occurs when a logon occurs.

## Verifying access to data in IBM DB2

To verify access to DB2 data, create a connection to the Accelerator Loader server and run a query. For information, see “Connecting to the Accelerator Loader server” on page 5-6.

### Procedure

Complete the following steps to create a DB2 query:

1. In the Server view, select **SQL > Data > DB2 > Subsystems**.
2. Select **Subsystem\_Name > Tables by Owner** Where *Subsystem\_Name* is replaced by a subsystem name for your environment.
3. Expand the **Tables by Owner** list, and select the table that you want to query.

**Note:** You must have authorization to access the table that you select.

4. Right-click the name of the table that you want to query, and select **Generate Query**. The Accelerator Loader studio creates a temporary JDBC data source and creates a connection to Accelerator Loader server.
5. Click **Execute** to run the query. Verify that data displays in the SQL Results View.

## Configuring access to data in IBM IMS DB

Configure access to IMS and the IMS environment.

### Configuring IMS DB

If your DFSPZP00 member is not configured properly, you may need to define your DRA startup table.

#### Procedure

The DRA startup parameter table provides the parameters that are needed to define the interface to the DBCTL subsystem. Review your DRA startup parameter table. If you need to change in the DRA startup parameter table, refer to your IBM documentation on defining the IMS DRA startup parameter table.

## Configuring access to VSAM

Accelerator Loader server is configured as part of the customization process (Tools Customizer task Create the IVP jobs). However, you should verify that the server has access to VSAM.

## Configuring access to sequential files

No modifications are needed to configure the SQL interface to access sequential files.

## Configuring access to SMF files

You can load System Management Facility (SMF) data into the accelerator by using the sequential file source method. To configure access to SMF files, you must configure an Accelerator Loader server JCL, the server configuration member, and the server virtual table member.

### Before you begin

- Ensure that your user ID has UPDATE authority for file SHLVXVTB.
- Ensure that the Accelerator Loader server stored procedure has UPDATE authority for the PDS member *hlq*.SHLVTXVTB(HLVSMFT2).
- Locate the SMF records of interest.

### Procedure

1. In data set *hlq*.SHLVXVTB member HLVSMT2, add to parameter GLOBAL2.SMFTBL2.DEFAULT the SMF data set that contains the SMF records of interest.
2. Update the server *hvid*PROC and add the SMF map data set to the HLVMAPP DD.

**Tip:** After you add the map data set, the Accelerator Loader studio will display many maps. To limit the list of maps to those that you use often, create Favorites in the studio.

3. To enable virtual table rule events, modify the SEFVTBEVENTS parameter in data set *hlq*.SHLVEXEC member *hvid*IN00 as follows:  
"MODIFY PARM NAME(SEFVTBEVENTS) VALUE(YES) "
4. Using the DB2 Analytics Accelerator Loader ISPF interface, enable SMF as a rule:
  - a. On the main menu, select **Server administration**.
  - b. On the Administer Accelerator Loader server panel, select **Manage Rules**.

- c. On the Event Facility (SEF) Control panel, select **SEF Rule Management**.
- d. On the Event Facility (SEF) Ruleset Entry Profile panel, accept the default value of "\*" (asterisk) in the field **Display Only the Ruleset Named** and press Enter.
- e. On the Event Facility Proc. Rulesets - Using SEF V4 Configuration panel, in the **S** column beside **VTB**, type "S" and press Enter.
- f. On the Event Facility (SEF) Event Procedure List panel, in the **S** column beside member **HLVSMFT2**, type "B" and press Enter.

**Related concepts:**

"Rules and events" on page 10-11

You can create one or more rules for each event. Within each rule, you specify an action to take in response to the event.

"Creating SMF records from the server" on page 10-79

The System Management Facility (SMF) provides ways to record usage information in SMF data sets.

## Configuring access to DRDA data sources (optional)

To configure the Accelerator Loader server to access data sources via DRDA, you must customize the server parameter file for each data source.

### Before you begin

You must know the DRDA endpoint details for the data source that you want to configure. For more information about the parameters, see the example that follows the procedure.

### About this task

Perform this task once for each data source that you want to access. To enable the server to read the source data, the server parameter file must contain a definition for each data source to which it is to connect.

This task applies to DRDA data sources only. To configure access to DB2 for z/OS data sources, you use Tools Customizer ( "Task: Create the server and the server components (required)" on page 2-23).

### Procedure

1. Locate data set *hlq*.SHLVEXEC member *hlvid*IN00, where *hlvid* represents the name of the Accelerator Loader server started task that was customized by using Tools Customizer.
2. Locate the section for DRDA data sources.

**Tip:** Perform a find using keywords DEFINE DATABASE.

3. Enter values for the following parameters once for each data source that you want to access. All values are required; there are no default values.



Table 3-10. DRDA data source parameters

Parameter	Description and valid values
TYPE	Specifies the type of subsystem that you are configuring. Valid values are as follows: <ul style="list-style-type: none"> <li>GROUP indicates that the DB2 subsystem is on z/OS and is a data sharing group.</li> <li>MEMBER indicates that the DB2 subsystem is on z/OS and is a member of a data sharing group or the subsystem is non-data sharing.</li> <li>LUW indicates that the subsystem is a non-z/OS database.</li> </ul>
NAME	Specifies an arbitrary name that is used to identify this definition. Valid values are any four-character alphanumeric string.
LOCATION	Specifies the name of the instance for the data source. Valid values are any eight-character alphanumeric string.
DDFSTATUS	Specifies whether the subsystem is enabled or disabled in the Accelerator Loader server. Valid values are as follows: <ul style="list-style-type: none"> <li>ENABLE indicates that the server will connect to the data source.</li> <li>DISABLE indicates that the server will not connect to the data source, and therefore will not use the entry as a data source.</li> </ul>
PORT	Specifies the IP port number that is defined for this data source. Valid values are any 96-character numeric string.
DOMAIN	Specifies the fully qualified name that identifies the IP address of the DB2 subsystem that you are configuring. Specify the domain name or an IP address. Valid values are any alphabetic character string up to 254 characters.

## Example

The following example defines an Oracle instance and provides an explanation of each parameter value:

```
"DEFINE DATABASE TYPE(LUW) "
      "NAME(ORCL) "
      "LOCATION(IDAA) "
      "DDFSTATUS(ENABLE) "
      "PORT(50000) "
      "DOMAIN(137.134.6.38)",
      "CCSID(37)"
```

- **Type:** The value LUW indicates that this is a DRDA data source.
- **Name:** The value ORCL is an example. You can specify any four-character alphanumeric string.
- **Location:** The value IDAA identifies the Oracle instance to which to connect. You can specify any alphanumeric string up to eight characters.
- **DDFSTATUS:** The value Enable allows the server to use this definition.
- **Port:** The value 50000 identifies the port that this Oracle instance was configured with.
- **Domain:** The value 137.134.6.38 identifies the domain on which this Oracle instance was configured. Alternatively, the value can identify the actual domain name, such as rs37.companynet.com.
- **CCSID:** The value 37 is the default character set identifier for code page 37.

**Related concepts:**

| "Configuring access to mainframe data sources (required)" on page 3-46  
| Configure Accelerator Loader server to enable secure access to mainframe data  
| sources.

---

## Getting started

Review information about opening the ISPF interface and using it to specify values for product set-up options.

### Prerequisites for using the product

- The product uses DB2 throughout its execution path, and therefore DB2 must be running in order for DB2 Analytics Accelerator Loader to start and run.
- You must have plan execution access on the DB2 Analytics Accelerator Loader plan for the DB2 subsystems on which you intend to run the product.
- Ensure that any table space that you attempt to load was created with DEFINE YES, or, if created with DEFINE NO, that the underlying VSAM linear data sets were created by an INSERT or a LOAD.

### Task roadmap

By using the product's ISPF interface, you can create JCL and control cards that are required to build the JCL to load data to DB2 and the accelerator. To use the ISPF interface, at a minimum, you must complete the following tasks. Complete optional tasks that are included in this section as needed.

1. Start the ISPF interface.
2. Configure at least one DB2 subsystem for use with the product.
3. Select the DB2 subsystem with which to work.

### Topics:

- "Starting the ISPF interface"
- "Configuring a DB2 subsystem" on page 4-3
- "Selecting a DB2 subsystem" on page 4-3
- "Specifying DB2 subsystem parameters" on page 4-4
- "Deleting a DB2 subsystem" on page 4-4
- "Specifying job card information" on page 4-5

---

## Starting the ISPF interface

Use the product's ISPF interface to create the JCL and control cards that are required to build the JCL to load data to DB2 and the IBM DB2 Analytics Accelerator for z/OS from an external file or an image copy.

### Before you begin

- Complete the customization steps.
- Ensure that the ISPF interface has the required minimum region size of 30000 KB.
- If you copied the CLISTs for running the interface to another data set or data set member, make sure that you specify the name of that data set or member in this procedure.

## About this task

The menu-driven interface allows you to create load jobs with specific command parameters, and then save that information in profiles that can be used again. In addition, subsystem information can be configured once and then is available to all users of the interface.

**Note:** To load data from the Accelerator Loader server, use the Accelerator Loader studio instead of the ISPF interface.

Detailed information about command parameters and other valid values on the panels is provided in the help panels and the panel command topic in the reference section. The panel fields are not described in detail in this procedure. Use the help system or the command reference topics if you need more information. An ISPF help panel for each product panel describes the purpose of the panel, and lists available commands, fields, and column data. To display a help panel, enter HELP or press PF1.

## Procedure

From the z/OS console, issue the following operator command:

```
TSO ex 'hlq.mlq.SHLOCLST(HLOV11)'
```

Where *hlq.mlq* represents the high-level and mid-level qualifiers that you specified during customization, and HLOV11 is the default value for the CLIST.

## Results

The Accelerator Loader main menu, shown in the following figure, is displayed.

```
DB2 Analytics Accelerator Loader 2015/10/29 17:37:38
0 Setup                               User ID . . : TSRDPA
1 Server administration               System ID . . : RS25
2 Manage Loader profiles              Appl ID . . : HLO
3 Load Accelerator and DB2 from external file  Version . . : 2.1
4 Load Accelerator from external file
5 Load Accelerator with consistent data   DB2 SSID . . : QAA5
6 Load Accelerator from a specified image copy  Server ID . . : QDB2
X Exit

Option ==>
```

Figure 4-1. IBM DB2 Analytics Accelerator Loader for z/OS main menu

**Note:** When you start DB2 Analytics Accelerator Loader for the first time after installing the product, verify your user settings. Select **Setup** and browse the subpanels to confirm that the specified values are correct.

The options on the main menu are:

**Setup** Specify DB2 subsystem and job card information, and set your defaults.

**Server administration**

Opens the Accelerator Loader server Administration panel, on which you can manage the Accelerator Loader server.

**Manage Loader profiles**

Work with load profiles, which you use to specify and save options for your load jobs.

| **Load Accelerator and DB2 from External File**

| Specify options for a Dual load profile.

| **Load Accelerator from external file**

| Specify options for an External load profile.

| **Load Accelerator with consistent data**

| Specify options for a Consistent load profile.

| **Load Accelerator from a specified image copy**

| Specify options for an Image copy load profile.

| **Exit** Exit the product.

---

## Configuring a DB2 subsystem

You must configure at least one DB2 subsystem for use with Accelerator Loader.

### About this task

After you have configured a DB2 subsystem for use with Accelerator Loader, you can also follow these steps to change information about that DB2 subsystem.

### Procedure

- | 1. From the main menu, select **Setup**.
- | 2. On the User Settings panel, select **DB2 subsystem**.
3. On the DB2 Subsystems panel, perform one of the following steps:
- To create a new DB2 subsystem, issue the CREATE command.
  - To copy information from one subsystem to another, type C in the **Cmd** line next to the SSID.
4. On the New DB2 Subsystem panel, specify the new DB2 subsystem ID and press Enter.
5. On the DB2 Subsystem Parameters panel, specify plan and data set information for the DB2 subsystem, select Accelerator Loader Options, and press Enter.
6. On the Accelerator Loader Parameters panel, specify or edit DB2 subsystem-specific options that the product uses during processing:
- The sort program to be used for internal sorts.
  - Log read and log apply preferences.
  - File allocation parameters.
  - Information for the data sets that the product creates.
  - Information for the product sort work data sets.
7. To save and return to the previous panel, press PF3.

#### Related reference:

"User Settings panel" on page 12-12

Select the DB2 subsystem on which to run the product and to specify the job card that you want to use when building JCL.

"Panel commands and fields reference" on page 12-10

This topic provides a reference to Accelerator Loader ISPF panel commands and fields. For more information about a panel, on that panel, press PF1.

---

## Selecting a DB2 subsystem

| After you configure a DB2 subsystem for use with Accelerator Loader, select it as the DB2 subsystem to use.

### Procedure

1. From the main menu, select **Setup**.
2. On the User Settings panel, select **DB2 subsystem**.
3. In the **Cmd** line beside the SSID, type S and press Enter.
4. To save and return to the previous panel, press PF3.

#### Related reference:

“Panel commands and fields reference” on page 12-10

This topic provides a reference to Accelerator Loader ISPF panel commands and fields. For more information about a panel, on that panel, press PF1.

---

## Specifying DB2 subsystem parameters

You can configure DB2 subsystem information in non-data sharing and data sharing environments. DB2 Analytics Accelerator Loader uses DB2 subsystem-specific options during batch processing.

### Before you begin

Configure a DB2 subsystem and select it for use with the product.

### Procedure

1. From the main menu, select **Setup**.
2. On the User Settings panel, select **DB2 subsystem**.
3. On the DB2 Subsystem Parameters panel, specify plan and data set information for the DB2 subsystem, select Accelerator Loader Options, and press Enter.
4. On the Accelerator Loader Parameters panel, specify or edit DB2 subsystem-specific options that the product uses during processing:
  - The sort program to be used for internal sorts.
  - Log read and log apply preferences.
  - File allocation parameters.
  - Information for the data sets that the product creates.
  - Information for the product sort work data sets.
5. To save and return to the previous panel, press PF3.

---

## Deleting a DB2 subsystem

If a subsystem is no longer of use, delete it from the control file.

### Procedure

1. From the main menu, select **Setup**.
2. On the User Settings panel, select **DB2 subsystem**.
3. In the **Cmd** line beside the SSID, type D, and press Enter.
4. In the Confirm Action panel:
  - a. Optional: To turn off the display of future delete confirmation panels, type a slash character (/) in the field **Set item delete confirmation off**.
  - b. To confirm that you want to delete the subsystem, press Enter.
5. To save and return to the previous panel, press PF3.

---

## Specifying job card information

Define a job card to include in batch jobs.

### Procedure

1. From the main menu, select **Setup**.
2. On the User Settings panel, select **Batch**.
3. On the Set Batch Job Card Information panel, specify how you want the batch job to be built when generating JCL with Accelerator Loader.
4. To add a line to the job card, issue the ADD command or type I in the **Cmd** field beside a line and then press Enter.
5. To delete a line from the job card, type D in the **Cmd** field beside the line and then press Enter.
6. To move a line in the job card, type M in the **Cmd** field beside the line and then press Enter.
7. To save and return to the previous panel, press PF3.

### Related reference:

“User Settings panel” on page 12-12

Select the DB2 subsystem on which to run the product and to specify the job card that you want to use when building JCL.

“Panel commands and fields reference” on page 12-10

This topic provides a reference to Accelerator Loader ISPF panel commands and fields. For more information about a panel, on that panel, press PF1.





---

## Loading data from non-DB2 and remote DB2 sources

DB2 Analytics Accelerator Loader enables you to load data from non-DB2 and from remote DB2 sources directly to the accelerator in a single in-memory process. The source data is accessed, converted to the necessary format, and loaded to the accelerator in a single step without landing or loading the data into an intermediate file format.

### Prerequisites

Before you can load data from a non-DB2 or a remote DB2 source, you must

1. Install the product (see the program directory).
2. Customize the product (see the customization checklist in “Preparing to customize” on page 2-1).  
During customization, you install the Accelerator Loader studio, start the Accelerator Loader server, and configure access to mainframe data sources.
3. Using the Accelerator Loader studio, prepare your system to read data from existing data sources and configure your system to transform that data to virtualized tables at run time (see the topics in this section).

### Topics:

- “Accelerator Loader server restrictions and considerations”
- “Getting started with the studio” on page 5-3
- “Accelerator Loader perspective” on page 5-4
- “Connecting to the Accelerator Loader server” on page 5-6
- “Creating virtual source libraries” on page 5-7
- “Creating virtual tables to access data using SQL” on page 5-8
- “Generating SQL queries” on page 5-16
- “Generating JCL” on page 5-17
- “Submitting JCL” on page 5-19
- “Using Server Trace” on page 5-19
- “Preferences” on page 5-25

---

## Accelerator Loader server restrictions and considerations

Review the following usage restrictions and considerations before performing a load by using the Accelerator Loader server.

The following restrictions and considerations apply when you use the Accelerator Loader server.

- The RACF PassTicket must be set up to enable cross-system DB2 access with IBM DB2 Analytics Accelerator for z/OS. Sample job is provided in *hlq.SHLVCNTL(HLVRADB2)* for setting up RACF PassTicket to enable users to access DB2 data through the server. For more information, see the *z/OS Security Server RACF Security Administrator’s Guide*.
- You use the server to load the accelerator only. Attempting to load data to DB2 causes IBM DB2 Analytics Accelerator for z/OS to fail.

- After first loading the entire table on the accelerator that includes all partitions (as required by IBM DB2 Analytics Accelerator for z/OS), you can load selected partitions of range partitioned objects. That is, you can specify the PART clause on the LOAD statement and load a subset of the table's partitions.
- The Accelerator Loader studio creates the target table DDL and JCL to load data to the accelerator. The generated JCL includes Accelerator Loader and Accelerator Loader server load libraries on the STEPLIB DD.
- When loading data from an external source, the following LOAD utility parameters are not supported:
  - Field specifications when loading from a Accelerator Loader server source. The information is provided in an SQLDA to the load process.
  - INDDN and ACCEL\_CURSOR options specified together
  - ACCEL\_HLV\_SSID and ACCEL\_HLV\_GRPNAME options specified together
- Ensure that you have set up DB2 LUW authentication appropriately to use DB2 LUW as a data source.
- Data source and target restrictions, considerations, and limitations are as follows: Accelerator Loader fails and issues a message if it detects incompatible source and target data types. The following table lists compatible source and target column data types. The first column lists the supported data types for the source Accelerator Loader server column. The second column lists the data type of the DB2 column that you are loading on the accelerator.

*Table 5-1. Compatible source and target column data types*

Source server column data type	Target DB2 column data type
CHAR, VARCHAR	CHAR
CHAR, VARCHAR	VARCHAR
DATE, CHAR, VARCHAR	DATE
TIME, CHAR, VARCHAR	TIME
TIMESTAMP, CHAR, VARCHAR	TIMESTAMP
INTEGER, SMALLINT	INTEGER
INTEGER, SMALLINT, BIGINT	BIGINT
SMALLINT	SMALLINT
DECIMAL	DECIMAL
REAL	REAL (Single precision floating point)
REAL, FLOAT	FLOAT (Double precision floating point)
GRAPHIC, VARGRAPHIC	GRAPHIC
GRAPHIC, VARGRAPHIC	VARGRAPHIC
BINARY, VARBINARY	BINARY
BINARY, VARBINARY	VARBINARY

- When the product directly uses a DB2 DRDA data source (which requires no virtual tables or virtual views), then an unsupported column type message might be displayed in the Accelerator Loader studio. The generated DDL with the unsupported columns is written as comments in the generated JCL.
- The IMS source data and the target DB2 subsystem to which the accelerator is configured must reside on the same LPAR.
- The target accelerator and DB2 subsystem must reside on the same LPAR.

- The order in which the columns are specified in the server query result set must match the order in which the columns are defined in the target DB2 table.
- The number of columns that are specified in the server query result set must equal the number of columns in the target table.
- If the source column in the result set is nullable, then the corresponding target DB2 column must also be nullable.
- The scale of a decimal target DB2 column must match the decimal scale of the corresponding result set column.
- If you are loading a DATE/TIME/TIMESTAMP column from a CHAR or VARCHAR result set column, the value must be in one of the date/time formats that Accelerator Loader supports. Specifying unsupported date/time values might cause invalid data to be loaded to the accelerator.

**Related concepts:**

“Restrictions and considerations for loading from an external file” on page 7-1  
Review usage restrictions and considerations before loading data from an external file.

**Related tasks:**

“Configuring user access to DB2 subsystems” on page 3-47  
Provide user access to DB2.

**Related reference:**

“LUW authentication” on page 10-66  
By default, Accelerator Loader server attempts to log on to DB2 on LUW with the same user ID that was presented for logon to z/OS. You can change a user’s logon credentials to access DB2 on LUW.

---

## Getting started with the studio

The Accelerator Loader studio plug-in is available with DB2 Analytics Accelerator Loader and is accessed from the IBM Data Studio.

The Data Studio client is built on Eclipse technology and provides an integrated development environment for database and instance administration, routine and Java application development, and query tuning.

Use the Accelerator Loader studio to quickly transform and load relational and non-relational data to an accelerator that is connected to an IBM z/OS mainframe system. You are not required to first extract and write data to a separate file before transforming and loading the data. You get real-time access to your data because the data is read directly from the mapped source and transformed during the load process.

Depending on your business needs, choose the parallel-data loading feature to further optimize load performance and gain even faster access to your most critical data. For example, a credit card service bureau would benefit by using this feature because they need real-time access to transactional data that is flagged as potentially suspicious credit card activity.

Accelerator Loader also supports data joins from different data sources. Supported data sources include DB2, IMS DB, VSAM data sets, physical sequential data sets, and distributed relational database architecture (DRDA) data sources (including Oracle and DB2 for Linux, Unix, and Windows (DB2 for LUW)).

After selecting the Accelerator Loader perspective, prepare your system to read data from existing data sources, configure your system to transform that data to virtualized tables at run time, and then load virtualized table data to accelerator tables through the Accelerator Loader server.

To load data to the accelerator, complete the following steps:

- Step 1: Connect to the Accelerator Loader server.
  - To access other DB2 subsystems, create bind packages and grant privileges.
- Step 2: Create a virtual source library.
- Step 3: Create a virtual table from a member selected in your source library.
- Step 4: Generate SQL queries against a virtual table.
  - For more complex SQL, consider creating a virtual view of the SQL.
- Step 5: Generate the JCL.
- Step 6: Submit the JCL.

**Related concepts:**

“Getting started with the studio” on page 5-3

The Accelerator Loader studio plug-in is available with DB2 Analytics Accelerator Loader and is accessed from the IBM Data Studio.

**Related tasks:**

“Connecting to the Accelerator Loader server” on page 5-6

Use the Accelerator Loader studio to connect to an Accelerator Loader server that is running on an instance of z/OS.

“Creating virtual source libraries” on page 5-7

A *virtual source library* is a reference to a library that is on the mainframe that contains the information that is required to virtualize the source data.

“Generating SQL queries” on page 5-16

To access SQL data, generate a SQL query from a virtual table.

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## Perspectives overview

The perspective that you choose determines the views and editors that become available in the workbench.

A perspective is an arrangement of views and editors in the workbench. You use perspectives to accomplish a specific task or set of tasks. When you open a perspective, menu items, tool bars, views, editors, and wizards that are associated with that perspective become available in the workbench.

**Note:** For details on using Eclipse features, see Eclipse documentation at <http://help.eclipse.org/mars/index.jsp>.

### Opening perspectives

From the **Window** menu, you can open a perspective by selecting **Open Perspective**, and then selecting the perspective from the list.

## Accelerator Loader perspective

The Accelerator Loader perspective provides the views, editors, and wizards that you use to perform tasks that are associated with getting and loading data from one or more data sources to the accelerator.

Use this perspective to perform the following tasks:

- Explore mainframe resources and view metadata.
- Create and manage data sources.
- Generate and modify SQL queries.
- Create virtual tables from SQL.
- Create virtual views for use with complex SQL queries.
- Generate, save, and submit JCL to load the accelerator.

## Views

The Accelerator Loader perspective includes the following views:

- **Active Connections:** lists the open JDBC connections between the studio and one or more servers. The current active connection is used by the SQL Editor to issue SQL queries over that JDBC connection. You can create new or delete existing server connections.
- **Explorer Views:** lists data resources, stored procedures, and metadata. You can perform tasks on selected objects in the tree. Explorer views include the following tabs:
  - **Client** tab: lists information that is related to data sources and application development on your local machine.
  - **Server** tab: lists the Accelerator Loader server to which you want to connect, view resources, or perform tasks.
  - **Network** tab: lists host and server connections within your network. You can choose to view or modify existing host and server settings.
  - **Favorites** tab: lists shortcuts to the mainframe resources that you frequently access.
- **Server Trace Import:** use to import Server Trace (.isx) files.
- **Labels:** apply labels to Server Trace messages for use when searching within the **Server Trace** view.
- **Lists:** use to display details for each tree node or object that is selected in an Explorer view.
- **Search:** use to search for a text string within Server Trace results.
- **Server Trace:** use to set and gather server diagnostic information for support purposes.
- **SQL Results:** use to display the result set returned from a SQL query in the **SQL Results** tab, and resulting trace information in the **SQL Messages** tab.
- **Studio Navigator:** use to list shortcuts to key task views and editors for this plug-in.
- **Properties:** use to display the properties of a selected object on the Server, Network, or Client navigation tabs.
- **Virtualization Facility:** displays virtual table mapping details.

## Editors

The Accelerator Loader perspective includes the following editors:

- **Data Source Editor:** use to edit connection definitions that are used to open active connections (see **Active Connections** view).
- **SQL Editor:** use to compose SQL statements and invoke queries against the server.
- **JCL Editor:** use to edit and submit JCL.

- **Virtualization Facility Editor:** use to edit metadata settings that are related to virtual tables and virtual views.

## Wizards

This perspective includes wizards that guide you through tasks, such as:

- Setting the server connection
- Creating data source libraries
- Creating virtual tables
- Generating SQL

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## Connecting to the Accelerator Loader server

Use the Accelerator Loader studio to connect to an Accelerator Loader server that is running on an instance of z/OS.

### Before you begin

When starting the Accelerator Loader studio, right-click Accelerator Loader studio, and select **Run as an administrator**.

### Procedure

1. From the menu, click **Window > Open Perspective > Accelerator Loader**.
2. On the **Server** tab, click **Set Server**.
3. In the Set Current<sup>®</sup> Server dialog box, complete the following:
  - **Host:** Select or enter the TCP/IP host name or IP address of the mainframe system on which the Accelerator Loader server is deployed.
  - **Port:** Enter the port number that the Accelerator Loader server uses. The default is 1200.
  - **Userid:** Enter the mainframe user ID.
  - **User Password:** Enter the password for the mainframe user ID.
4. Click **OK**.

#### Related concepts:

“Getting started with the studio” on page 5-3

The Accelerator Loader studio plug-in is available with DB2 Analytics Accelerator Loader and is accessed from the IBM Data Studio.

“Creating virtual tables to access data using SQL” on page 5-8

Use a wizard to create SQL virtual tables from which you can access mainframe data.

“Preferences” on page 5-25

Preferences allow you to customize several Accelerator Loader settings.

#### Related tasks:

“Creating virtual source libraries” on page 5-7

A *virtual source library* is a reference to a library that is on the mainframe that contains the information that is required to virtualize the source data.

“Generating SQL queries” on page 5-16

To access SQL data, generate a SQL query from a virtual table.

“Submitting JCL” on page 5-19

After generating JCL, you can save a reusable copy in the PDS on the mainframe, and submit the JCL.

## Locale considerations

The default Accelerator Loader studio uses code page US/English IBM 1047 to perform character data translations between the native Java character encoding (UTF-8) and the mainframe EBCDIC. You can modify data source connection definitions to use different local code pages.

### Procedure

To configure the data source connection definition:

1. In the **Active Connections** view, close all open connections.
2. On the **Client** tab, expand **Data Virtualization > Data Sources > JDBC**, and then browse for the data source that you want to modify.
3. Right-click the data source that you want to modify, and then click **Edit**.
4. In the **Data Source Editor**, click the **Connection String** tab.
5. Add or modify the **Charset** setting to use the appropriate EBCDIC based code page. For example, IBM037.
6. If **LGID=ENC** exists in the connection string, delete it to avoid potential interference with the **Charset** setting.
7. Save the data source definition.

To change the default Charset that the studio uses when creating connection definitions:

8. From the **Window** menu, select **Preferences**, expand **Accelerator Loader**, and then expand **Driver**.
9. Add the new **Charset** setting in **Connection Overrides**, and then click **OK**.
10. Create a new connection definition (DSN), and then confirm that the new setting displays in the connection string. When running queries using the new data source definition, the correct character data (including language specific glyphs) should now display in the SQL Results view.

---

## Creating virtual source libraries

A *virtual source library* is a reference to a library that is on the mainframe that contains the information that is required to virtualize the source data.

### About this task

For example, for a VSAM file, the library must contain the copybook that describes the structure of the records in the VSAM file. For an IMS database, you need to provide the database definition (DBD) and program specification block (PSB) files, and a copybook structure for each segment of the IMS database that you want to virtualize. You might need to create multiple virtual source libraries, depending on how the files or various types are organized in the z/OS file system.

The following virtual source library options are available:

**Data set:** A PDS or PDSE on z/OS. Members in the data set contain the structure definitions of the source files that you want to virtualize in a 80 byte record format.

- COBOL copybooks for IMS/DB segments, VSAM, and sequential files.
- IMS PSB and IMS DBD definitions for IMS databases.

## Procedure

1. On the **Server** tab, under **Admin**, expand **Source Libraries**.
2. Right-click **Create Virtual Source Library**, and select **Create Virtual Source Library**.
3. For the **Data Set** wizard, complete the following fields to identify the PDS on the mainframe where source members exist:

Field	Action
<b>Name</b>	Enter a name for the source library.
<b>Description</b>	Enter an optional description for the source library.
<b>Library Name</b>	Enter the name of the mainframe data set that the source library references.

4. Click **Finish**.

## Results

The new source library is displayed in the **Source Libraries** folder.

### Related concepts:

“Getting started with the studio” on page 5-3

The Accelerator Loader studio plug-in is available with DB2 Analytics Accelerator Loader and is accessed from the IBM Data Studio.

### Related tasks:

“Connecting to the Accelerator Loader server” on page 5-6

Use the Accelerator Loader studio to connect to an Accelerator Loader server that is running on an instance of z/OS.

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## Creating virtual tables to access data using SQL

Use a wizard to create SQL virtual tables from which you can access mainframe data.

After you create a virtual table, you use the table to generate the SQL that reads and extracts the data from the mainframe.

To edit the contents of a virtual collection, you must edit the SQL virtual table.

### Related tasks:

“Connecting to the Accelerator Loader server” on page 5-6

Use the Accelerator Loader studio to connect to an Accelerator Loader server that is running on an instance of z/OS.

## Creating virtual tables for DBMS (DB2) data

Create a new DBMS virtual table from an existing DBMS table, and optionally the plan name. Use DBMS virtual tables for DRDA sources, including DB2 for z/OS and DB2 for Linux, UNIX, and Windows.

### Before you begin

Have the following information available: DBMS (DB2) subsystem name and the plan name.



## Procedure

1. On the **Server** tab, verify that you are connected to the correct Accelerator Loader server.
2. Expand **Admin > Source Libraries** and verify that the required source libraries exist.
3. Expand **SQL > Data**, and then expand the server from which you want to create the virtual table.
4. Right-click **Virtual Tables**, and select **Create Virtual Table**.
5. Under **Wizards**, select the wizard to use, and then click **Next**.
6. Complete the following fields, and then click **Next**:

Option	Description
<b>Name</b>	Enter a unique name. The name can contain a maximum of 30 characters. Uppercase alphanumeric characters are allowed as well as numbers 0-9. The underscore (_) character is allowed; however, the initial character in the name must be an alphanumeric character.
<b>Target</b>	Select the target data set to store metadata (for example, HLQ.USER.MAP). Data sets are defined in the server configuration file.
<b>Description (optional)</b>	Enter an optional description.

7. Complete the following data collection fields, and then click **Next**:

Option	Description
<b>Table Browser</b>	Expand the DBMS source subsystem and table to use.
<b>Table Columns</b>	Select the columns representing the data that this virtual collection will access.
<b>Virtual Target System</b>	Accept the previously selected target system, select a different target system, or click <b>Create Target System</b> . If you choose to create a new target system, on the <b>New Virtual Target System</b> dialog, enter the new target system name, the connection to use, and optionally the DBMS default plan name to use, then click <b>Next</b> .

8. Optional: Enter the DBMS plan name to use, and then click **Next**.
9. Click **Finish**.

## What to do next

You can use the new virtual table to generate a SQL query.

## Creating virtual tables for IMS data

Create virtual tables for SQL access to IMS data.

## Before you begin

The PSB, DBD, and the copybooks for each segment must exist in the source library.

### Procedure

1. On the **Server** tab, verify that you are connected to the correct Accelerator Loader server.
2. Expand **Admin > Source Libraries** and verify that the required source libraries exist.
3. Expand **SQL > Data**, and then expand the server from which you want to create the virtual table.
4. Right-click **Virtual Tables**, and select **Create Virtual Table**.
5. Under **Wizards**, select the wizard to use, and then click **Next**.
6. Choose one of the following ways to get IMS definitions that define the data layout for the virtual collection, and then click **Next**:

Option	Description
<b>Extract DBD</b>	To download new members from DBD files in your source libraries, click <b>Extract DBD</b> .
<b>DBD</b>	Select previously downloaded DBD definitions from the <b>DBD</b> .
<b>Extract PSB</b>	To download new members from PSB files in your source libraries, click <b>Extract PSB</b> .
<b>PSB</b>	Select previously downloaded PSB definitions from the <b>PSB</b> .
<b>Use Copybook</b>	To select existing members from DBD and PSB, click <b>Create Virtual Table</b> .

7. Complete the following data set fields, and then click **Next**:

Option	Description
<b>Target</b>	Select the target data set to store metadata (for example, HLQ.USER.MAP). Data sets are defined in the server configuration file.
<b>Description</b>	Enter an optional description.

8. Complete the following source library fields, and then click **Next**:

Option	Description
<b>Available Source Libraries</b>	From the list of <b>Available Source Libraries</b> , select the source library that contains the data structure definition that you want to use when virtualizing data.
<b>Source Library Members</b>	Select PDS members that represent the data structures to include, and then click <b>Download</b> to copy the members from the mainframe to your desktop.
<b>Download Source Files</b>	Select previously downloaded members to include.

9. Complete the following data layout fields, and then click **Next**:

Option	Description
Source	Expand the source file to verify that it correctly displays the source (member).
Start Field	Accept the default root start field, or expand the file and select a different start field.
End Field	Accept the default root end field, or expand the file and select a different end field. By default, <b>End Field</b> is disabled.

10. Select the **DBD Name**, **Segment Name**, and optionally the **PSB Name** to use. You can optionally add new names.

11. Click **Finish**.

### What to do next

You can use the virtual table to generate a SQL query and to create a virtual view.

## Creating virtual tables for sequential data

Create virtual tables for SQL access to sequential data.

### Before you begin

Before creating the virtual table, add the copybook to the source library and have the data set name available.

### Procedure

1. On the **Server** tab, verify that you are connected to the correct Accelerator Loader server.
2. Expand **Admin > Source Libraries** and verify that the required source libraries exist.
3. Expand **SQL > Data**, and then expand the server from which you want to create the virtual table.
4. Right-click **Virtual Tables**, and select **Create Virtual Table**.
5. Under **Wizards**, select the wizard to use, and then click **Next**.
6. Complete the following fields, and then click **Next**:

Option	Description
Name	Enter a unique name. The name can contain a maximum of 30 characters. Uppercase alphanumeric characters are allowed as well as numbers 0-9. The underscore (_) character is allowed; however, the initial character in the name must be an alphanumeric character.
Target	Select the target data set to store metadata (for example, HLQ.USER.MAP). Data sets are defined in the server configuration file.
Description	Enter an optional description.

Option	Description
Convert VAR* fields to True VAR* fields	To convert existing VAR* fields to True VAR* fields, enable <b>Convert VAR* fields to True VAR* fields</b> . If the length of the field is greater than 254, all CHARACTER or BINARY fields become TRUE VARCHAR or TRUE VARBINARY fields. If the length of the field is less than 254, all CHARACTER or BINARY fields become TRUE VARCHAR or VARBINARY fields.
Arrays Handling	Enable one of the following array management options: <ul style="list-style-type: none"> <li>• <b>Flatten arrays into a single fixed table at runtime</b>: This supports both OCCURS and OCCURS DEPENDING ON statements.</li> <li>• <b>Return arrays into separate tables at runtime</b>: This supports both OCCURS and OCCURS DEPENDING ON statements. A subtable is generated for each array. Subtables only support SQL read access.</li> <li>• <b>Flatten arrays now</b>: This does not support the OCCURS DEPENDING ON statement. If you select this option, you cannot change array-handling after you save the virtual table.</li> </ul>

7. Complete the following source library fields, and then click **Next**:

Option	Description
Available Source Libraries	Select the source library that contains the data structure to use.
Source Library Members	Select PDS members that represent the data structures to include, and then click <b>Download</b> to copy the members from the mainframe to your desktop.
Download Source Files	Select previously downloaded members to include.

8. Complete the following data layout fields, and then click **Next**:

Option	Description
Source	Expand the source file to verify that it correctly displays the source (member).
Start Field	Accept the default root start field, or expand the file and select a different start field.
End Field	Accept the default root end field, or expand the file and select a different end field. By default, <b>End Field</b> is disabled.

9. Optional: Accept the default table redefines or expand **Redefine** to modify your selection, and click **Next**.

10. Complete the following data source fields, and then click **Next**:

Option	Description
<b>Data set name</b>	Enter a name for the data set. To use a PDS member as the data source, specify the partitioned data set name. Otherwise, specify a sequential data set or a generation data group (GDG) data set using the GDG syntax such as HLQ.DATA.SEQ(-1). To verify that the data set exists on the host, click <b>Validate</b> .
<b>Member</b>	If applicable, enter the PDS member name to use. To verify that the member exists on the host, click <b>Validate</b> .
<b>Post-Read Name Exit Name</b>	To manipulate the data after reading it from the source file, enter the name of the post-read exit to use. For example, a post-read exit that decompresses a compressed file.
<b>Pre-Write Exit Name</b>	To manipulate the data before writing it to the source file, enter the name of the exit to use. For example, a pre-write exit that compresses the source file.
<b>Pseudo Columns</b>	To use pseudo columns, enter the DSN and Member column names. You can also enable searching on those columns.
<b>Advanced</b>	To divide the data into logical partitions and process the partitions in parallel, click <b>Advanced</b> . Enter a <b>Thread Count</b> value for <b>MapReduce (Server Parrellism Settings)</b> . The number of zIIP processors is checked at runtime, and one thread is used for each processor that is discovered. The value that you specify overrides the default value (2) and the discovered value.  You can also disable MapReduce.

11. Click **Finish**.

## What to do next

You can use the virtual table to generate a SQL query.

## Creating virtual tables for VSAM data

Create virtual tables for SQL access to VSAM data.

### Before you begin

Have the following information available: VSAM cluster name (*sourcelibrary.copybook.filename*).

### Procedure

1. On the **Server** tab, verify that you are connected to the correct Accelerator Loader server.
2. Expand **Admin > Source Libraries** and verify that the required source libraries exist.

3. Expand **SQL > Data**, and then expand the server from which you want to create the virtual table.
4. Right-click **Virtual Tables**, and select **Create Virtual Table**.
5. Under **Wizards**, select the wizard to use, and then click **Next**.
6. Complete the following fields, and then click **Next**:

Option	Description
<b>Name</b>	Enter a unique name. The name can contain a maximum of 30 characters. Uppercase alphanumeric characters are allowed as well as numbers 0-9. The underscore ( _ ) character is allowed; however, the initial character in the name must be an alphanumeric character.
<b>Target</b>	Select the target data set to store metadata (for example, HLQ.USER.MAP). Data sets are defined in the server configuration file.
<b>Description</b>	Enter an optional description.
<b>Convert VAR* fields to True VAR* fields</b>	To convert existing <b>VAR*</b> fields to <b>True VAR*</b> fields, enable <b>Convert VAR* fields to True VAR* fields</b> . If the length of the field is greater than 254, all <b>CHARACTER</b> or <b>BINARY</b> fields become <b>TRUE VARCHAR</b> or <b>TRUE VARBINARY</b> fields. If the length of the field is less than 254, all <b>CHARACTER</b> or <b>BINARY</b> fields become <b>TRUE VARCHAR</b> or <b>VARBINARY</b> fields.
<b>Arrays Handling</b>	Enable one of the following array management options: <ul style="list-style-type: none"> <li>• <b>Flatten arrays into a single fixed table at runtime</b>: This supports both <b>OCCURS</b> and <b>OCCURS DEPENDING ON</b> statements.</li> <li>• <b>Return arrays into separate tables at runtime</b>: This supports both <b>OCCURS</b> and <b>OCCURS DEPENDING ON</b> statements. A subtable is generated for each array. Subtables only support SQL read access.</li> <li>• <b>Flatten arrays now</b>: This does not support the <b>OCCURS DEPENDING ON</b> statement. If you select this option, you cannot change array-handling after you save the virtual table.</li> </ul>

7. Complete the following source library fields, and then click **Next**:

Option	Description
<b>Available Source Libraries</b>	From the list of <b>Available Source Libraries</b> , select the source library that contains the data structure definition that you want to use when virtualizing data.

Option	Description
Source Library Members	Select PDS members that represent the data structures to include, and then click <b>Download</b> to copy the members from the mainframe to your desktop.
Download Source Files	Select previously downloaded members to include.

8. Complete the following data layout fields, and then click **Next**:

Option	Description
Source	Expand the source file to verify that it correctly displays the source (member).
Start Field	Accept the default root start field, or expand the file and select a different start field.
End Field	Accept the default root end field, or expand the file and select a different end field. By default, <b>End Field</b> is disabled.

9. Optional: Accept the default table redefines or expand **Redefine** to modify your selection, and click **Next**.

10. Complete the following fields, and then click **Next**:

Option	Description
Cluster Name	Enter the cluster name for the VSAM data set, and then click <b>Validate</b> .
Post-Read Exit Name	The server searches the catalog on the mainframe to confirm that the data set exists. If the data set exists, a dialog displays with a validation code. Enter the validation code in <b>Post-Read Exit Name</b> .  If your data is compressed, use the decompression routine provided to you by IBM to decompress your data after it has been read.
Alternate Indexes	Alternate indexes are VSAM files. The main cluster points to the alternate indexes, and these indexes provide an alternate way to search the VSAM file. Alternate indexes have an indirect relationship to the cluster name, but they must be defined separately. If you are using a KSDS VSAM or ESDS cluster, you can specify alternate indexes that are associated with the cluster, and then to add them, click <b>Get</b> to add them or click <b>Delete</b> to remove them.

Option	Description
<b>Advanced</b>	To divide the data into logical partitions and process the partitions in parallel, click <b>Advanced</b> . Enter a <b>Thread Count</b> value for <b>MapReduce (Server Parrellism Settings)</b> . The number of zIIP processors is checked at runtime, and one thread is used for each processor that is discovered. The value that you specify overrides the default value (2) and the discovered value.

11. Click **Finish**.

## What to do next

You can use the virtual table to generate a SQL query.

---

## Generating SQL queries

To access SQL data, generate a SQL query from a virtual table.

### About this task

The **SQL Generate Query Behavior** preference determines whether you are prompted to execute SQL, or if SQL executes automatically. To view SQL preferences, from the **Window** menu, select **Preferences > Accelerator Loader**.

### Procedure

1. On the **Server** tab, right-click the virtual table, and select **Generate Query**. The generated query selects all columns that do not have a **WHERE** predicate. The SQL lists the columns that you can use to create the DDL statements, and that are used to define the DB2 table and the target table.
2. Optional: In the **Generated.sql** view, modify the SQL to select only the data that you want. Any ANSI compliant SQL is acceptable.
3. Optional: To create a virtual view of the SQL, highlight the **SELECT** statement, right-click and select **Create a virtual view**. Virtual views are helpful for more complex queries and for using JOINS.
4. To execute the query, highlight the **SELECT** statement, and press **F5**.

### Results

After executing the SQL, the results display in the **SQL Results View**. In this view, you can:

- Double-click on a row to view additional details about that row.
- Select the **Export** option to export SQL results to a .csv file.
- Click **SQL Messages** to view query-related system messages.

#### Related concepts:

“Getting started with the studio” on page 5-3

The Accelerator Loader studio plug-in is available with DB2 Analytics Accelerator Loader and is accessed from the IBM Data Studio.

#### Related tasks:

“Connecting to the Accelerator Loader server” on page 5-6

Use the Accelerator Loader studio to connect to an Accelerator Loader server that



is running on an instance of z/OS.

## Creating virtual views

If columns in your table are missing, or if you want to join columns from different tables, consider creating a virtual view.

### Before you begin

To create a virtual view, you must generate a SQL statement from a virtual table in the Explorer view, or from selected SQL within a view. To customize the result set, edit the SQL in the SQL Results.

### About this task

A *virtual view* is the SELECT statement that contains the columns from the source data that are used to read data directly from the data source. In some cases, creating virtual views is more convenient than regenerating and editing SQL each time. To create a virtual view, complete the following steps:

### Procedure

1. On the **SQL Editor** tab, highlight and right-click the SQL statement from which you want to create the view.
2. Select **Create SQL View**.
3. Specify a name for the virtual view, the target, an optional description, and click **Next**.
4. Review the resulting SQL statement and make any necessary modifications.
5. Click **Validate** to validate the SQL.
6. If valid, click **OK**.
7. Click **Finish**.

### Results

On the **Server** tab, view the new virtual view from **SQL> Data> Views**.

### What to do next

After you create a virtual view, you can generate JCL from the view.

---

## Generating JCL

Generate the JCL that is used to load source data to the accelerator from a virtual table, virtual view, or selected SQL statement.

### Before you begin

Have the following information available before starting this task:

- Target subsystem name
- Accelerator name
- Data set names of the product and DB2 load libraries
- JCL library name
- Table creator name
- Table name

To enable the Load Resume feature, you must have IBM DB2 Analytics Accelerator for z/OS V4 PTF5 installed on the accelerator.

**Note:** If you have not yet specified **JCL** generation preferences, you can specify them while completing this task.

## About this task

JCL contains the SQL statement that is contained in the virtual view and the LOAD control cards that are used to load source data to the accelerator. You only need to specify this information the first time that you generate JCL.

To generate the JCL, complete the following tasks:

## Procedure

1. On the **Server** tab, expand **SQL >Data**.
2. Expand the server where the virtual view or table exists that was used to create the SQL.
3. Expand **Virtual Views**.
4. Right-click the virtual view and select **Generate JCL to Load Accelerator**.
5. On the Source Information page, select the target subsystem to use.
6. If you create your own SQL query, you must click **Validate** to verify that the SQL query is valid. If the validation fails, you can manually edit the SQL. The studio displays a pop up message with a subset of the original SELECT statement listing columns that you can use.
7. Click **Next**.
8. On the Target Information page, accept the displayed target DB2 subsystem or select a different subsystem from the **Target DB2 Subsystem** pull-down menu.
9. Accept the accelerator that displays or select a different accelerator from the **Accelerator** pull-down.
10. Enter the name of the table creator or select a previous creator from the pull-down.
11. Enter a name for the table or select a table from the pull-down.
12. Optional: Enter the database name.
13. Optional: If using parallel processing (map reduce), select **Enable**, and specify the number of parallel tasks. This option is disabled by default. To use previously specified Parallelism settings, click **Use Existing Table Attributes**.
14. Optional: Click **DDL Preview** to preview the DDL statements.
15. Click **Next**.
16. Specify the data set names of the following load libraries:
  - a. Accelerator Loader libraries (SHLVLOAD, SHLOLOAD).
  - b. DB2 load libraries (SDSNLOAD, SDSNEXT, and RUNLIB).  
RUNLIB.LOAD is necessary because the LOAD step for the EXEC SQL option is used, which uses a cursor to load the data.
17. Specify the target **DB2 Utility Plan Name**.
18. Optional: Click **JCL Settings** to view or modify JCL generation preferences, and click **OK** to close the Preferences dialog.
19. On the JCL Generation Details page, click **Next**.
20. Optional: On the Job Creation page, select the JCL library to use or enter the name. The JCL library that you select or enter is saved and displays the next

- time you open this page. If you do not plan to save the job on the host or if you do not know the location, leave this field blank.
21. To identify the generated JCL file, enter the **Member Name**. This name is also used to generate a local copy of the file. The product populates **Local File Name** based on this name.
  22. Modify or accept the Job Name that displays.
  23. Select from the following job options:
    - **DROP TABLE**: drops the existing target table definition. If you are loading data from DB2 to the accelerator, do not select this option.
    - **CREATE TABLE**: creates a new target table definition.
    - **LOAD REPLACE**: replaces the data in the table.
    - **LOAD RESUME**: loads new data to an existing table. Selecting **LOAD RESUME** disables the **DROP TABLE** and **CREATE TABLE** options.
  24. To review the JCL in an editor page, select **Open in Editor**.
  25. Optional: To automatically submit the JCL, select **Auto-run using JCL View**. If the JCL library is specified in the JCL view, a copy of the JCL is saved in a PDS on the host. You can use this copy for future data loads.
  26. To generate the JCL, click **Generate**.

## Results

Generating JCL creates a local copy of the file.

---

## Submitting JCL

After generating JCL, you can save a reusable copy in the PDS on the mainframe, and submit the JCL.

### About this task

To save or submit JCL from the **JCL View**, complete the following steps:

### Procedure

1. From the **Windows** menu, select **Show View > JCL View**.
2. Optional: In the JCL view, from the **JCL library** pull-down menu, select the PDS to use or enter a new PDS name. To save this location, click the + (plus sign).
3. To enable the JCL for submission, click **Enable/Disable Submit**. To ensure that **Submit** is enabled, hover over it.
4. To save or submit the JCL, click **Play**. To view a summary of processing, see the **Messages** tab. To review the entire job output (if you submitted the JCL), see the **Job** tab. You can also click F5 in the JCL Editor to save or submit the JCL, or right-click on the JCL, and then select **Run using JCL View**.

### Related tasks:

“Connecting to the Accelerator Loader server” on page 5-6

Use the Accelerator Loader studio to connect to an Accelerator Loader server that is running on an instance of z/OS.

---

## Using Server Trace

Use the **Server Trace** view to record and view server operations for troubleshooting purposes.

## About this task

From the **Server Trace** view, you can:

- Select a server from which to record and view server trace messages.
- Filter messages that display based on profile settings.
- Select the columns of information and the order in which those columns display.
- Label messages to allow you to search messages using labels.
- Import and export messages as `.isx` files.

### Related reference:

“Diagnostic information for Support” on page 11-438

If you encounter a problem and need to contact IBM Software Support, you must gather certain information about your Accelerator Loader system and the problem before contacting Support. Your Support representative will need this information to correctly diagnose and resolve the problem.

## Starting Server Trace

Start tracing Accelerator Loader server records in the Server Trace view.

### Before you begin

Before running a server trace, you must be able to connect to the Accelerator Loader server from which you want to collect trace information.

### Procedure

1. From the **Studio Navigator** view, on the **Common Tools** tab, click **Server Trace**.
2. In the **Server Trace** view, verify that the current server is the correct server from which to collect trace messages, or to select a different server, click **Set Server**.
3. To start tracing click **Play**. The **Server Trace** table displays trace records.
4. To open the Server Trace Zoom page, double-click a message. The page provides message details and allows you to search for specific details within the message.

## Enabling Server Trace for the studio

You can include Accelerator Loader studio calls in your server trace results.

### Before you begin

You must be able to connect to the Accelerator Loader server from which you want to collect trace information.

### Procedure

1. From the **Window** menu, select **Preferences**.
2. In the tree listing preferences, click **Accelerator Loader**.
3. To enable tracing, select the **Enable Server Tracing of Studio Calls** check box.
4. In the Accelerator Loader studio **HTTP Debug Option** drop-down menu, select one of the following HTTP debug options:

Option	Description
Off	Do not collect HTTP messages. All trace activities are deactivated, including interactive tracing.
Normal	Commands that complete with a failure status are traced after execution, including the return codes.
All	All instructions are traced before execution.
Commands	All commands are traced before execution. Return codes are also traced for commands that complete with an error or failure status.
Error	Commands that complete with an error status are traced after execution, including the return codes.
Failure	Commands that complete with a failure status are traced after execution, including the return codes.
Intermediates	All instructions are traced before execution. All terms, intermediate results, and substituted variable names are traced during expression evaluation. The final results of any expression that is evaluated also displays. Values assigned by <b>arg</b> , <b>parse</b> , or <b>pull</b> instructions are also traced.
Labels	Shows all labels when executed.
Results	All instructions are traced before execution. The final result of any expression that is evaluated also displays. Values assigned by <b>arg</b> , <b>parse</b> , or <b>pull</b> instructions are also traced.

## Filtering Server Trace results

Use the **Profile** option to filter the records that display in the Server Trace view.

### Before you begin

You must be able to connect to the Accelerator Loader server from which you want to filter trace information. You can set filtering criteria before or after you run a server trace. Your most current filtering selections are automatically saved as your default filtering profile.

### Procedure

1. On the **Server Trace** view, click **Profile**.
2. On the Server Trace Profile page, enable the fields that you want to include in the results.
3. To further filter your results, for each enabled field, click **Add**. You can either select from the values that display or enter the value when prompted.
4. To save changes to your profile and to apply profile to the results in the **Server Trace** table, click **OK**.

## What to do next

Use the **Display** option to select and sort columns that display in the filtered table. You can also choose to export the trace results.

## Using Server Trace Zoom

Use **Zoom** to view server trace message details.

### Before you begin

Server Trace must be running before you can use **Zoom**.

### About this task

Use **Zoom** to view all details for a selected server trace message in the Server Trace view. The message ID, type, and description are displayed. You can also view existing control block details.

### Procedure

1. In the **Server Trace** view, double-click the message for which you want to view **Zoom** details.
2. View message details on the **Zoom** dialog box, and choose from the following options:

Option	Description
<b>Previous</b>	To search for the previous occurrence of the specified text string, click <b>Previous</b> .
<b>Next</b>	To search for the next occurrence of the specified text string, click <b>Next</b> .
<b>Search</b>	Click <b>Search</b> , and then enter a search string. To search for the next occurrence of the text string, click <b>Search</b> again.
<b>Close</b>	To close the search dialog, click <b>Close</b> .

## Searching server trace messages

You can search server trace message results for a particular text string or message ID.

### Before you begin

You must start a server trace before you can begin searching within resulting server trace messages.

### Procedure

1. On the **Server Trace** view, click **View Menu** and click **Search**.
2. To specify how to search within the results, on the Search dialog box, under **From**, select one the following options:

Option	Description
<b>First</b>	Search for the first occurrence of the text string.

Option	Description
Last	Search for the last occurrence of the text string.
ID	Search starting from the message ID you enter.

- Under **For**, enter the text string to search within the message control blocks. Text strings cannot include spaces or special characters, and wildcard searches are not supported.
- To find previous occurrences of the text string, select **Previous**, or to find the next occurrence of the text string, select **Next**.
- To begin the search, click **Search**.

### What to do next

View messages that meet the search criteria in the Server Trace.

## Labeling Server Trace messages

Create labels to bookmark server trace messages that you frequently access.

### Before you begin

You must start Server Trace before you can begin labeling records.

### Procedure

- On the **Server Trace view**, right-click the message that you want to label, and select **Add Label**.
- On the Message Label dialog, enter text for the **Label**, and click **OK**.
- In the Labels view, to locate the message in the Server Trace view, double-click the label.

## Exporting Server Trace messages

Use the Server Trace view to export Server Trace messages to a file.

### About this task

You can export the resulting server trace messages from the **Server Trace** view. You can limit the number of messages that you can export into a file from Admin preferences.

### Procedure

- In the **Server Trace** view, click **View Menu** and select **Export**.
- Under **Export Type**, select one of the following message export options:

Option	Description
Summary	Exports minimum message information: <ul style="list-style-type: none"> <li>Message ID</li> <li>Date</li> <li>Time</li> <li>User ID</li> <li>Message text</li> </ul>

Option	Description
<b>Full</b>	Exports all available message information and all data about that message: <ul style="list-style-type: none"> <li>• Message ID</li> <li>• Date</li> <li>• Time</li> <li>• User ID</li> <li>• Message text</li> <li>• Zoom</li> </ul>
<b>Comma Separated Format</b>	Exports all table information to a .csv file. This file type cannot be imported for viewing in the Server Trace view.

- Under **Export Content**, select one of the following message content options and then click **Next**:

Option	Description
<b>Message ID Range</b>	Select a range of messages to export by entering the first message ID in <b>From</b> , and the last message ID to include in <b>To</b> .
<b>Transaction ID</b>	Exports only those messages with the resource recovery services (RRS) transaction ID value that you specify.
<b>Global Transaction ID</b>	Exports only those messages with the RRS global transaction ID that you specify.
<b>Message ID List</b>	This option is only available if the <b>Full</b> export type option is selected.

- To specify a file name and export location, click **Browse**.
- To save the file, click **Finish**.

## Importing Server Trace messages

Using the **Import File Viewer** tab, you can import and view server trace messages.

### Before you begin

Server Trace must be running before you can import a file.

### About this task

You can import .isx file server trace messages and view those messages on the **Import File Viewer** tab.

### Procedure

- On the **Import File Viewer** tab, click **Import**.
- Navigate to the .isx file that you want to import, and then double-click the file. Messages and message details display on the **Import File Viewer** tab.
- Optional: To view more details about a message, right-click on the message and select **Zoom**.
- Optional: To change how the messages display, click **Display**.



---

## Preferences

Preferences allow you to customize several Accelerator Loader settings.

Preferences are categorized as follows:

- Admin
- Console
- Dictionary
- Driver
- JCL
- SSL

### Related tasks:

“Connecting to the Accelerator Loader server” on page 5-6

Use the Accelerator Loader studio to connect to an Accelerator Loader server that is running on an instance of z/OS.

“Changing network connections” on page 11-448

If an attempt to create a virtual table or a source library fails with error message HTTP 401/403, changing network connections might resolve the issue.

## Admin preferences

On the Admin preferences screen, you can set the maximum number of server trace messages that you want to export.

From the **Window** menu, select **Preferences>Accelerator Loader> Admin**.

The default value for **Server Trace Export size limit** is 5000. Specifying a value greater than 5000 can cause a MAX CPU TIME EXCEEDED error to occur.

## Console preferences

Use **Console** preferences to view or modify console display settings.

From the **Window** menu, select **Preferences> Accelerator Loader> Console**, and then enter the following information:

### Fixed width console

Allows you to specify a fixed width for characters to display in the console.

#### Maximum character width

Specify the maximum character width for a fixed width console. The default setting is 80.

### Limit console output

Allows you to limit the console buffer size by number of characters.

#### Console buffer size (characters)

Specify the number of characters to limit the buffer size. The default setting is 80000.

#### Console entry size limit (characters)

Specify the maximum number of characters that are allowed for console entry. The default setting is 500.

## Dictionary preferences

Use Dictionary preferences to add or delete reserved words in dictionaries, and add or delete dictionaries, based on languages being used.

From the **Window** menu, select **Preferences > Accelerator Loader > Dictionary**, and then enter the following information:

### Dictionary

Lists the default dictionaries. You can add new dictionaries or delete existing dictionaries.

### Reserved word

Lists reserved words for each dictionary. You can add new words to the list, or delete existing words.

## Driver preferences

Driver preferences allow you to specify the default location of the driver configuration files.

### JDBC Driver Settings

The installer attempts to identify the location of the driver configuration files. You can specify a new location.

**Note:** You can also access data sources that are stored in other configuration files, by adding those configuration files from the **Client** view.

From the **Window** menu, select **Preferences > Accelerator Loader > Driver**, and then enter the following information:

### Enable Tracing

Enables tracing for the JDBC driver. This setting is disabled by default. If you change this option, you must restart the studio to complete the change.

### Default DSN File

Specifies the default location of the DSN file. This file is used to store the JDBC connection definitions that are generated for use in the **Active Connections** view.

### Connection Overrides

Allows you to override the connection settings that the studio uses when it creates JDBC connection definitions. Specify a single name-value pair or a semicolon-delimited list.

## JCL preferences

Accelerator Loader studio uses JCL preference settings to generate and submit the JCL batch job to the mainframe host.

### JCL

From the **Window** menu, select **Preferences > Accelerator Loader > JCL**, and then enter the following information:

General JCL settings:

### JCL Submit/Poll Timeout (secs)

The number of seconds that can pass before Accelerator Loader studio stops polling the host for a job to complete. If the host does not complete the job within that number of seconds, check the job status on the mainframe. The default is 300.

## Generation

Default settings for JCL generation:

### Job Name Suffix

Used to generate a default job name. This one-character suffix is appended to the user ID. The default setting is **A**.

### Job Account

Optional accounting information that you can add to the JOB statement. The default setting is blank.

### Execution Class

The execution class to be used in the JOB statement. The default setting is **A**.

### Message Class

The message class to be used in the JOB statement. The default setting is **X**.

### Region Size

The region size to be used in the JOB statement. The default setting is **0M**.

### Temporary DASD Name

Generic unit name to be used in the job step for use in allocating temporary work files. Job Name Suffix: The default setting is **SYSDA**.

## Trace/Debug

Trace and debug parameters for JCL submissions:

### Request Status Values

The default setting is **ALL**.

**Level** The default setting is **1**.

### Trace Function Stems

This check box is disabled by default.

### Dump REXX Variables

This check box is disabled by default.

### Enable SSI Tracing

Enables SSI tracing. This check box is enabled by default.

### Enable SSI SSOB dumps

This check box is disabled by default.

## SSL preferences

Enable SSL to secure JDBC and HTTP network communications between the Accelerator Loader studio and the Accelerator Loader server.

To enable SSL, from the **Window** menu, select **Preferences > Accelerator Loader > SSL**, and then select **Use SSL for Studio-Server communications (JDBC and HTTP)**.

After enabling SSL, choose the protocol to use for communications and specify the server and client authentication requirements.

## Communication

### Protocol

Select the protocol version to use for communications between the Accelerator Loader studio and the Accelerator Loader server. The default is TLS 1.2.

## Server Authentication strategies

Select the authentication strategy to use:

### Require Server Validation

To require that all Accelerator Loader server certificates be authenticated, enable **Require Server Validation**, and then enter the following information:

- **Truststore:** The path name of the file on the local machine. The file must contain the Accelerator Loader server certificate authority (CA ) certificate.
- **Password:** The password for the truststore file.
- **Type:** The truststore file type. For example, JKS, PKCS12, BKS, UBER.

### Allow Self-Signed Certificates

To allow the Accelerator Loader server to use self-signed certificates, enable **Allow Self-Signed Certificates**.

- **Truststore:** The path name of the file on the local machine. The file must contain the self-signed server CA certificate.
- **Password:** The password for the truststore file.
- **Type:** The truststore file type. For example, JKS, PKCS12, BKS, UBER.

### Trust All

To allow all Accelerator Loader server certificates, enable **Trust All**. If enabled, the Accelerator Loader studio does not validate the server certificate.

## Client Authentication

To enable client authentication by the Accelerator Loader server, select **Enable Client Authentication**, and then enter the following information:

### Keystore

The path name of the file on the local machine. The file must contain a client certificate which has been signed by the server CA.

### Password

The password for the keystore.

**Type** The keystore file type. For example, JKS, PKCS12, BKS, UBER.

**Alias** To confirm that the password is valid and that the alias (label) appears, click **Refresh**.

To save SSL preferences, click **Apply**, and then click **OK**. When setting the Accelerator Loader server, ensure that you enter the secure port number.

**Related concepts:**

| "Secure Sockets Layer (SSL)" on page 10-6  
| Secure Socket Layers (SSL) is transparently supported by the Application  
| Transparent Transport Layer Security (AT-TLS), an IBM TCP/IP facility.

| **Related tasks:**

| "Enabling SSL support" on page 10-6  
| Review instructions for enabling Secure Socket Layers (SSL) support.



---

## Loading data from a DB2 image copy

You can generate JCL that loads data from a DB2 image copy.

With a *Consistent* or *Historical* load, you can load multiple DB2 tables from a cataloged DB2 image copy without the need to take the tables offline for updates. You can specify any consistent or historical point in time to load the accelerator.

With an *Image Copy load*, you can load data for a single table into the accelerator from a DB2 image copy that you specify.

### Topics:

- “Restrictions and considerations for loading from a DB2 image copy”
- “Using the ISPF interface to create or edit a Consistent or Image Copy load profile” on page 6-2
- “Using the batch interface to load from an image copy” on page 6-4

---

## Restrictions and considerations for loading from a DB2 image copy

Review the following usage restrictions and considerations before performing a Consistent load, a Historical load, or an Image Copy load.

### All loads from a DB2 image copy

The following restrictions and considerations apply when you perform any load from a DB2 image copy (Consistent load, Historical load, or Image Copy load):

The following data types are supported:

- BIGINT
- BINARY\*
- CHAR
- DATE
- DECIMAL
- DOUBLE
- FLOAT
- GRAPHIC
- INTEGER
- REAL
- SMALLINT
- TIME
- TIMESTAMP
- TIMESTAMP WITH TIMEZONE\*
- VARBINARY\*
- VARCHAR
- VARGRAPHIC

\* This data type is loaded into only DB2.

Field procedures are not supported; however, edit procedures are supported.

The following considerations apply when you perform a parallel load:

- When you use existing image copies (that is, you do not create a new FlashCopy image copy) to perform a consistent load:
  - Partition-level image copies are required when you load from tape.
  - Partition-level image copies are recommended when you load from DASD.

Using individual partitions allows multiple parallel tasks to open more than one data set at a time, increasing throughput.

The product does not support loading many tables from a multiple-table table space. If the job specifies more than one table of a multiple-table table space, the product issues an error message and stops processing. If the value of the **Continue on error** field on the Load Accelerator with Consistent Data panel or the Load Accelerator from a specified Image Copy panel is **Yes**, or the CONTINUE\_ON\_ERROR control card is specified, the job finishes normally, but with return code 4 instead of 0.

When the job contains the NEW\_COPY keyword, the product creates a partition-level FlashCopy image copy. However, if the job does not specify the creator, table, and the PARTITION keyword, the product attempts to find and use a previous image copy, rather than using the new copy. If the table space does not have a previous DSNUM 0 image copy, the job might abend with code U0008.

Depending on the environment in which the job runs, a parallel load job might abend with system code S878, return code 10, and the product issues message HLO3601E. If this abend occurs, reduce the number of parallel log apply tasks and run the job again.

Building jobs that approach 20,000 objects requires significant resources for processing. If building with batch, use a region size of 0M, which is unlimited. If building from TSO, ensure a TSO region size of at least 30000.

The user ID that is used to run a Consistent, Historical, or Image Copy load job requires READ access to z/OS UNIX System Services.

### **Consistent and Historical loads only**

The following restrictions apply when you perform a Consistent load or a Historical load:

- A valid full image copy of the table space must be recorded in SYSCOPY, or a valid starting point must exist in SYSCOPY for each table space.
- The product must be able to access the DB2 archive and active logs that are required to build a new image copy.
- If you use the same end point for all spaces in a batch job, place all space (..) control cards under one group (..). Do not specify one group for every space.

---

## **Using the ISPF interface to create or edit a Consistent or Image Copy load profile**

A load profile is a group of options for building a job to load data into an accelerator. After you create a profile, you can reuse it to perform future load jobs.



## Before you begin

Review the information in “Restrictions and considerations for loading from a DB2 image copy” on page 6-1.

Review information about the profile types:

- **Consistent** specifies options for loading data for multiple tables into the accelerator from a cataloged DB2 image copy.
- **Image copy** specifies options for loading data for a single table into the accelerator from a user-defined DB2 image copy.

## About this task

When you add a DB2 table to the profile, you can filter on tables, views from a single base table, or aliases. The product resolves the view or alias to the base table space and includes the base table space in the generated JCL. A view that was created from a join of more than one table is not supported. The product checks for the existence of the specified DB2 table before generation. However, if you specify partitions, the product cannot validate the partitions, but uses the partitions as specified when generating JCL.

You can use an asterisk (\*) in the fields **Table creator like** and **Table name like**. Case sensitivity of this field is controlled by the **Case sensitive** field on the Enter Table and Creator Like to Display panel. Depending on your setting, the wildcard pattern abc\* might return different results from pattern ABC\*.

## Procedure

1. From the main menu, select **Manage Loader Profiles** and press Enter.
2. On the Manage Loader Profiles panel, to filter existing profiles by profile name or creator name, specify a wildcard pattern using an asterisk (\*) and press Enter.
3. On the Manage Loader Profiles panel, perform one of the following steps:
  - To create a new profile, issue the CREATE command, and then on the Create Profile panel, select the type of profile to create.
  - To create a new profile by copying an existing profile, type C in the **Cmd** line next to the profile that you want to copy.
  - To edit an existing profile, type E in the **Cmd** line next to the profile.
4. On the Load Accelerator with Consistent Data panel or the Load Accelerator from a specified Image Copy panel, specify a name and processing options for the profile, as follows:
  - Utility processing options for the DB2 LOAD utility.
  - If you want to create a FlashCopy image copy, specify FlashCopy options. If you do not use FlashCopy, no image copy is created, and DB2 Analytics Accelerator Loader uses a legacy image copy.
  - To define options for a FlashCopy DSN template, complete the following steps. If you do not use a FlashCopy DSN template, the product uses the default template in DSNZPARMS.
    - In the **Use FlashCopy DSN template** and **Update** fields, specify Yes.
    - On the FlashCopy DSN Template panel, specify qualifier codes to create the data set name mask.
    - Issue the SHOW command to see the resulting template DSN.
  - Specify log read and apply options.

5. To add a DB2 table to the profile, issue the T panel command.
6. On the DB2 Table List panel, issue one of the following commands:
  - To specify an object filter, issue panel command Add. The Enter Table and Creator Like to Display panel opens.  
You can specify a table, a view, or an alias.
  - To select one or more tables on the Referentially Dependent Table Selection panel, issue line command RIS.
  - To select all related tables, issue line command RIA.
7. On the Add DB2 Tables panel, use the **ALL** panel command or the S line command to select objects to add to the profile and press Enter.
8. Return to the Load Accelerator from a specified Image Copy panel or the Load Accelerator with Consistent Data panel by pressing F3.
9. To select the accelerator onto which you want to load data, issue the A panel command, and on the DB2 Analytics Accelerator Selection panel, select an accelerator and press Enter.
10. To save and return to the previous panel, press PF3.

---

## Using the batch interface to load from an image copy

You can use the batch interface to specify an image copy and load data from that image copy data set into the target table or tables on the accelerator.

### About this task

For more information about the options in this procedure and example JCL, see “Consistent load and Image Copy load jobs” on page 9-3 in the “DB2 Analytics Accelerator Loader syntax” section.

### Procedure

1. In the SHLOSAMP library, locate one of the following members to customize:
  - HLOSAMP1: Use this member to manually specify the source and target DBID/PSID/OBID numbers.
  - HLOSAMP2: Use this member to obtain translation information from the DB2 catalog by using the OBIDXLAT\_CATALOG option.
2. Replace the following variables:
  - <SSID> with the subsystem ID of the target object
  - #HLQ# with the SMP/E HLO LOADLIB
  - #HLQ# with the SMP/E FEC LOADLIB
  - <CONTROL FILE> with the HLO control file data set name
3. In the SYSINHLO DD, perform the following steps:
  - a. Replace the values for the CREATOR, NAME, TO\_IC, and ACCELNAME options with your values.
  - b. Specify translation information, if necessary.
4. Save a copy of the customized member in another library.

---

## Loading data from an external file

You can generate JCL that loads data from an external file into IBM DB2 Analytics Accelerator for z/OS and optionally into DB2.

You can add the Accelerator Loader extended syntax to an existing batch job that meets certain criteria. You can also use the ISPF interface or the batch interface to create a Dual load profile or an External load profile to generate JCL.

Accelerator Loader supports parallelism, and can process and load different partitions from the same table into DB2, the accelerator, or both in parallel.

### Topics:

- “Restrictions and considerations for loading from an external file”
- “Adding syntax to an existing load job” on page 7-6
- “Using the ISPF interface to create or edit a profile to load from an external file” on page 7-7

---

## Restrictions and considerations for loading from an external file

Review usage restrictions and considerations before loading data from an external file.

**Note:** In addition to the information in this section, make sure that your system meets requirements as listed in “Set up your environment prior to customization” on page 2-5.

### Data considerations

The following data types are supported:

- BIGINT
- BINARY\*
- CHAR
- DATE
- DECIMAL
- DOUBLE
- FLOAT
- GRAPHIC
- INTEGER
- REAL
- SMALLINT
- TIME
- TIMESTAMP
- TIMESTAMP WITH TIMEZONE\*
- VARBINARY\*
- VARCHAR
- VARGRAPHIC

\* This data type is loaded into only DB2.

The following SYSIBM.SYSCOLUMNS(DEFAULT) values are supported:

- Numeric: 0
- Fixed-length character or graphic string: Blanks
- Fixed-length binary string: Hexadecimal zeros
- Varying-length string: A string length of 0
- Date: The current date
- Time: The current time
- Time stamp: `TIMESTAMP(integer) WITHOUT TIME ZONE`
- `CURRENT TIMESTAMP(p) WITHOUT TIME ZONE` (where *p* is the corresponding time stamp precision).

## DB2 LOAD utility considerations

Accelerator Loader adheres to the DB2 LOAD utility restrictions. For more information, see *DB2 for z/OS Utility Guide and Reference* for your version of DB2. For example:

- For `FORMAT INTERNAL` data, the DB2 LOAD utility supports only one table in the LOAD utility command: `LOAD DATA INTO TABLE`. You cannot specify multiple `INTO TABLE` clauses.
- The field-specification restrictions for the DB2 LOAD utility also apply to DB2 Analytics Accelerator Loader.

## General restrictions and limitations

The following restrictions and limitations apply when loading data from an external file:

- DB2 Analytics Accelerator Loader supports nonpartitioned tables that were defined with `ORGANIZE BY HASH`. It does not support `PARTITION BY RANGE` tables that were defined with `ORGANIZE BY HASH`.
- Coded character set identifier (CCSID) conversions are not supported.
- Only EBCDIC code pages are supported.
- Trailing spaces in object names are not supported.
- Ensure that any table space that you attempt to load was created with `DEFINE YES`, or, if created with `DEFINE NO`, that the underlying VSAM linear data sets were created by an `INSERT` or a `LOAD`.
- Columns that are defined as `GENERATED` are not supported.
- Data in `FLOAT` columns might not be converted exactly.
- The `DEFAULTIF` option is not supported for partitioning key columns.
- You can specify only one `SYSREC` data set when you use the ISPF interface. To specify multiple `SYSREC` data sets, either use templates or manually add `SYSREC` data sets to the generated JCL.

Accelerator Loader converts data from external to DB2 internal format. Accelerator Loader does not detect DB2 restrictions, and DB2 issues error messages, if necessary. For more information about DB2 restrictions, see the syntax and options of the `LOAD` control statement in *DB2 10 for z/OS Utility Guide and Reference*.

The following syntax cannot be processed:

- ASCII (DB2 restriction)

- CCSID (DB2 restriction)
- CONTINUEIF
- DECFLOAT\_ROUNDMODE (DB2 restriction)
- EBCDIC (DB2 restriction)
- FORMAT INTERNAL
- FORMAT SQL/DS
- FORMAT UNLOAD
- FORMAT DELIMITED
- FORMAT SPANNED
- IDENTITYOVERRIDE (DB2 restriction)
- INCURSOR (DB2 restriction)
- NOSUBS (DB2 restriction)
- PRESORTED (DB2 restriction)
- ROWFORMAT
- SHRLEVEL CHANGE (DB2 restriction)
- STRIP
- TRUNCATE
- UNICODE (DB2 restriction)

### **Considerations for constraint checking, duplicate key processing, and sorting**

Accelerator Loader does not check the input file for violations or referential constraints and does not perform sorting. When you load data into only the accelerator, no constraint checking is performed. This limitation includes checking for duplicate keys.

When you load data to DB2 and the accelerator, the DB2 LOAD utility performs constraint checking and does not load violating records. That is, constraint-violating records are loaded into the accelerator, but are not loaded into DB2. Accelerator Loader detects when DB2 discards records that were loaded to the accelerator and disables query acceleration, making the accelerator table unavailable for queries. To correct this situation, run ACCEL\_LOAD\_TABLES to synchronize the accelerator table with the DB2 table, and then enable query acceleration.

### **IBM DB2 Analytics Accelerator for z/OS considerations**

Accelerator Loader adheres to the IBM DB2 Analytics Accelerator for z/OS restrictions for tables that can be accelerated. For example:

- You cannot use Accelerator Loader to load individual partitions of a table with the IBM DB2 Analytics Accelerator for z/OS status of InitialLoadPending.
- IBM DB2 Analytics Accelerator for z/OS does not support BINARY and VARBINARY data types. Therefore, Accelerator Loader processes BINARY and VARBINARY data as follows:
  - When loading data into DB2, Accelerator Loader converts BINARY and VARBINARY data to DB2 internal format and loads it into the DB2 table.
  - When loading data into the accelerator, Accelerator Loader skips BINARY and VARBINARY data.

For more information, see the IBM DB2 Analytics Accelerator for z/OS documentation.

## Considerations for loading only the accelerator

Accelerator Loader provides the option of loading data from an external file into only IBM DB2 Analytics Accelerator for z/OS, without loading the data into DB2 (option IDAA\_ONLY). Before choosing this option, consider the following points:

- Do not use this option if any of the following conditions exist:
  - You need the ability to update the data in DB2.
  - The data is not backed up and maintained where it originated.
  - You need a backup of the data. (DB2 does not provide backup or recovery of the data.)
- You must set the CURRENT QUERY ACCELERATION special register to ALL to ensure that all queries against the table are directed to IBM DB2 Analytics Accelerator for z/OS. For more information, see *DB2 for z/OS SQL Reference*.
- When you load data from an external file to the accelerator and to DB2 (option IDAA\_DUAL), Accelerator Loader relies on DB2 to detect referential integrity (RI) violations and unique index violations. When you load data to only the accelerator, these checks are bypassed. Consequently, query acceleration might be enabled after loading the accelerator with records that violate DB2 RI constraints or unique index constraints.
- When you load only the accelerator, discard data sets are not supported. If you specify the DISCARD option, the utility terminates with errors. Accelerator Loader does not write constraint-violating records to a DISCARD data set.

## Restrictions and considerations for adding data to a table (LOAD RESUME)

To add data to an existing accelerator table without replacing the existing data, use the DB2 LOAD utility RESUME YES clause. When loading to only the accelerator, no data is added to the DB2 table, but any existing data in DB2 is left intact. When loading to both DB2 and the accelerator, DB2 also appends the data to the DB2 table.

- When loading a range-partitioned or index-partitioned table, you can replace data in some partitions and append data to others. However, Accelerator Loader does not support mixing of append and replace operations.
- The options RESUME YES and ACCEL\_REMOVE\_AND\_ADD\_TABLES are mutually exclusive.
- On restart of a failed load to both the accelerator and DB2, to determine whether the prior failed job successfully loaded the accelerator, Accelerator Loader uses the last load timestamp that the accelerator stored procedures returned. Therefore, you must restart the job or use the HLOMAINT utility to resolve the failure. Then you can run a load to the accelerator table.

## Parallel load restrictions and considerations

When you load different partitions from the same table in parallel, the following additional restrictions and considerations apply:

- Before you can perform a parallel load into the accelerator, you must load the entire table to the accelerator. Then you can load selected partitions.

- Parallel load is available only for loading range-partitioned and index-partitioned table spaces. To load a partition-by-growth table space, do not define the parallel option.
- A separate SYSREC data set is required for each partition that you load, and each SYSREC data set can contain data for only one partition. Records that do not belong to the specified partition are discarded.
- The PRESORT option is not supported for partition-level SYSREC data sets. If PRESORT is specified in the LOAD utility statement, the utility terminates with errors and you must remove PRESORT before resubmitting the job.

## Discard data set restrictions and considerations

The following restrictions and considerations apply:

- When performing a load from an external file to both the accelerator and DB2, you can provide one or more standard DB2 LOAD discard data sets.
- When you load only the accelerator, discard data sets are not supported. If you specify the DISCARD DDN option, the utility terminates with errors. Accelerator Loader does not write constraint-violating records to a DISCARD DDN data set.
- The SYSREC data set must have a record format (RECFM) of F (Fixed) or V (Variable). The product does not support spanned record formats and formats D (variable-length ISO/ANSI tape records) and U (Undefined).
- When Accelerator Loader detects invalid data in a SYSREC record, it discards the record, issues a message, continues loading any remaining records, and the job step completes with return code 4 when records are discarded.
- All discarded SYSREC records are written to the discard data sets in their original format, not in DB2 internal row format.
- Regardless of the source of the discards (Accelerator Loader, DB2, or both), records are discarded to the appropriate discard data set, and your specified DISCARDS limits are honored.
- If DB2 discards leave the accelerator and the DB2 table out of sync after rows have been added to the accelerated table, Accelerator Loader detects this out-of-sync condition and disables acceleration. This condition occurs when DB2 detects violations such as referential integrity (RI) validation errors, when unique index violations are detected, even when no RI is defined on the table, and other violations.
- Query acceleration is disabled for the loaded table in the following situations:
  - The DB2 LOAD utility discards records after they were sent to the accelerator. This type of discard processing might occur if DB2 detects a unique index key violation during the INDEX BUILD phase of the DB2 LOAD utility.
  - The DB2 LOAD utility fails because it is possible that the accelerator was only partially loaded.
- Accelerator Loader can optionally enable query acceleration for the table at the conclusion of a successful load. To specify this action, use the ACCEL\_ON\_SUCCESS\_ENABLE extended syntax option or the **Enable acceleration after successful load** option in the options module.
- You can configure Accelerator Loader to load only DB2 when it detects that the accelerator is down. Specify this action by using the **Load DB2 if accelerator is offline** option in the options module.

## Considerations for CDC

When you use IBM Change Data Capture for z/OS (CDC) replication, if a job fails, use the HLOMAINT utility to clear out the failed job and set the object back to read-write (RW) status.

If you try to load a table that was defined with **DATA CAPTURE NONE** and you place the table into continuous replication mode, the load ends with an error. To verify whether continuous replication is enabled for an object, run the stored procedure **SYSPROC.ACCEL\_GET\_TABLES\_DETAILS** and look for the following setting:

```
<acceleratorSetting name="CONTINUOUS_REPLICATION_ENABLED" value="true />
```

To load the table with Accelerator Loader, alter the table to **DATA CAPTURE CHANGES** and then run the load job.

### Related concepts:

“Accelerator Loader server restrictions and considerations” on page 5-1  
Review the following usage restrictions and considerations before performing a load by using the Accelerator Loader server.

### Related tasks:

“Restarting a DB2 utility in exceptional circumstances” on page 11-446  
In certain circumstances, you can use the Accelerator Loader HLOMAINT utility to resume utility processing properly.

---

## Adding syntax to an existing load job

To quickly load data from an external file into both DB2 and an accelerator, modify an existing batch job.

### Before you begin

- You must have an existing LOAD utility batch job with a SYSREC file and a SYSPUNCH file.
- To perform a parallel load, you must have a SYSREC data set for each partition. For a parallel load, the product processes and loads different partitions from the same table in parallel.
- Review the information in “Restrictions and considerations for loading from an external file” on page 7-1.

### About this task

For more information about the extended syntax options, including examples, see “Loading from an external file” on page 9-22.

### Procedure

1. In the existing batch job, after the LOAD DATA parameter, add the following extended syntax:
  - To load data into only the accelerator:  
`IDAA_ONLY ON accelerator_name`
  - To load data into the accelerator and DB2:  
`IDAA_DUAL ON accelerator_name`
2. Add the following DD statement to the JCL:  
`//HLODUMMY DD DUMMY`
3. To perform a parallel load, complete the following steps:



- a. To control the number of partitions that are processed in parallel, specify the extended syntax option ACCEL\_LOAD\_TASKS in the LOAD utility statement.
- b. Include one INTO TABLE PART clause for each partition to load.
- c. For each INTO TABLE PART clause, specify the following:
  - SYSREC data set for each partition on the INDDN keyword.
  - Field specifications.
  - NUMRECS option.

If the LOAD utility statement does not provide the number of SYSREC records with a NUMRECS or a SORTKEYS clause, the product estimates the record count. Using the estimated record count, it then adds a NUMRECS clause for each INTO TABLE clause. The record count enables DB2 to size index-build sorts, and reduces the possibility of sort failures when loading to both the accelerator and DB2.
4. To enable query acceleration for the table at the conclusion of a successful load, specify the extended syntax option ACCEL\_ON\_SUCCESS\_ENABLE YES in the LOAD utility statement.
5. Specify other extended syntax options as needed.

---

## Using the ISPF interface to create or edit a profile to load from an external file

Dual and External load profiles are reusable groups of options for building a job to load data from an external file into DB2, an accelerator, or both. You can create a profile that saves your selections and reuse the profile to perform future loads from an external file.

### Before you begin

Review the information in “Restrictions and considerations for loading from an external file” on page 7-1.

### About this task

When you add a DB2 table to the profile, you can filter on tables, views from a single base table, or aliases. The product resolves the view or alias to the base table space and includes the base table space in the generated JCL. A view that was created from a join of more than one table is not supported. The product checks for the existence of the specified DB2 table before generation. However, if you specify partitions, the product cannot validate the partitions, but uses the partitions as specified when generating JCL.

You can use an asterisk (\*) in the fields **Table creator like** and **Table name like**. Case sensitivity of this field is controlled by the **Case sensitive** field on the Enter Table and Creator Like to Display panel. Depending on your setting, the wildcard pattern abc\* might return different results from pattern ABC\*.

### Procedure

1. From the main menu, select **Manage Loader Profiles** and press Enter.
2. On the Manage Loader Profiles panel, to filter existing profiles by profile name or creator name, specify a wildcard pattern using an asterisk (\*) and press Enter.

3. On the Manage Loader Profiles panel, perform one of the following steps:
  - To create a new profile, issue the CREATE command, and then on the Create Profile panel, select the type of profile to create.
  - To create a new profile by copying an existing profile, type C in the **Cmd** line next to the profile that you want to copy.
  - To edit an existing profile, type E in the **Cmd** line next to the profile.
4. On the Load Accelerator and DB2 from External File panel or the Load Accelerator from External File panel, specify a name and processing options for the profile. If you want to perform a parallel load:
  - For **Parallel load**, specify Yes.
  - Specify a **Load tasks** value.
  - Specify a **NUMRECS** value.

If the LOAD utility statement does not provide the number of SYSREC records with a NUMRECS or a SORTKEYS clause, the product estimates the record count. Using the estimated record count, it then adds a NUMRECS clause for each INTO TABLE clause. The record count enables DB2 to size index-build sorts, and reduces the possibility of sort failures when loading to both the accelerator and DB2.

When using the ISPF panels to generate LOAD JCL, you cannot specify a separate NUMRECS value for individual partitions. Specify either the average number of rows per partition or the largest number of records to be loaded into any single partition. The NUMRECS option will be generated once per INTO TABLE PART clause when the utility syntax is generated.
5. To add a DB2 table to the profile, issue the T panel command.
6. On the Enter Table and Creator Like to Display panel, specify an object creator name and object name pattern and press Enter to display matching objects. You can specify a table, a view, or an alias.
7. On the DB2 Table Selection panel, use the S line command to select the object to add to the profile and press Enter.
8. Return to the Load Accelerator and DB2 from External File panel or the Load Accelerator from External File panel by pressing F3.
9. To select the accelerator onto which you want to load data, issue the A panel command, and on the DB2 Analytics Accelerator Selection panel, select an accelerator and press Enter.
10. To edit the table column definitions, issue the C command.
11. To define options for a template DD, complete the following steps:
  - a. On the Load Accelerator and DB2 from External File panel or the Load Accelerator from External File panel, specify Yes in the **Update** field for any template DD.
  - b. On the Template Specification panel, issue the TEMPLATE command, and edit the template data set name mask.
  - c. On the DSN Template panel, specify qualifier codes to create the data set name mask.
  - d. To see the resulting DSN mask, issue the SHOW command.
  - e. To save and return to the previous panel, press PF3.
  - f. Update the template options as needed.
  - g. To save and return to the previous panel, press PF3.

---

## Using and managing load profiles

You can create reusable groups of load options in a profile. You also associate profiles with an accelerator and a table. You can then reuse the profile to generate JCL for future loads, rather than specifying the options again.

The following types of profiles are available:

- **Dual** specifies options for loading table data into both the accelerator and DB2 from an external data input file.
- **Accelerator only** specifies options for loading table data into only the accelerator from an external data input file.
- **Consistent** specifies options for loading data for multiple tables into the accelerator from a cataloged DB2 image copy.
- **Image copy** specifies options for loading data for a single table into the accelerator from a user-defined DB2 image copy.

From the main menu, you can choose to manage profiles or choose to create a profile for the type of load you want to perform.

Managing profiles includes the following tasks:

- Create a profile.
- Build the JCL for a profile.
- Delete a profile.
- Edit a profile.
- Rename a profile.
- View a profile.
- Copy a profile to save with a different name.

To select load profiles for display, you can specify filter criteria:

- By default, the panel displays all profiles and creators.
- To filter the profiles and creators, in the **Profile like** and **Creator like** fields, type a few letters with the asterisk wildcard (\*) and press Enter. These fields are case sensitive. The wildcard patterns abc\* and ABC\* return different results.
- To filter by the type of load profile, leave the default (ALL) or type an asterisk (\*) in the **Profile type** field and press Enter.

If no profiles meet your selection criteria, the profiles panel remains open and displays no profiles. Specify different filter criteria and try again.

If existing profiles meet your selection criteria, the profiles panel displays those matching profiles.

### Topics:

- “Using the ISPF interface to build a load job from a profile” on page 8-2
- “Using the batch interface to build a load job from a profile” on page 8-2
- “View load profile specifications” on page 8-10
- “Renaming a load profile” on page 8-10
- “Deleting a load profile” on page 8-11

**Related reference:**

“Create Profile panel” on page 12-18

Use this panel to choose the type of Accelerator Loader profile that you want to create.

---

## Using the ISPF interface to build a load job from a profile

Use the ISPF build feature to quickly generate a DB2 Analytics Accelerator Loader job by using a load profile.

### Before you begin

Create a load profile as described in one of the following topics:

- “Using the ISPF interface to create or edit a Consistent or Image Copy load profile” on page 6-2
- “Using the ISPF interface to create or edit a profile to load from an external file” on page 7-7

### Procedure

1. From the main menu, select Manage Loader Profiles and press Enter.
2. In the **Cmd** field next to a profile, type B and press Enter.
3. On the Build Load JCL panel, specify the data set name, and if necessary, the member name for the generated job. The product creates this data set if it does not exist.
4. Select processing options by typing a forward slash character (/) beside the options.
5. Specify a valid job card for your site.
6. Issue the BUILD command to build the JCL, or press PF3 to save and exit.
7. To perform the load, submit the generated JCL, or add the job to your job scheduler.

**Related tasks:**

“Using the batch interface to build a load job from a profile”

You can use the batch interface to generate JCL to load data to the accelerator and DB2.

---

## Using the batch interface to build a load job from a profile

You can use the batch interface to generate JCL to load data to the accelerator and DB2.

### Before you begin

Use the ISPF interface to create a load profile that specifies the options that you want to use. It is not necessary to specify a table when you create the profile in the ISPF interface.

### About this task

DB2 Analytics Accelerator Loader does not validate table names, data set names, and so on.

Specify SYSIN lines in positions 1 - 72. To split long table names into multiple SYSIN lines, start a new line in position 1.

SYSIN parameter values cannot contain the following characters:

- ' (apostrophe)
- " quotation mark)
- & (ampersand)
- < (less-than symbol)
- > (greater-than symbol)

Use the following encoding for symbols:

- &LT; for less than (<)
- &GT; for greater than (>)
- &AMP; for ampersand (&)
- &APOS; for apostrophe (')
- &QUOT; for quotation mark (")

For example, a table named <MY TABLE1> TABLE ' "NAME" requires the following encoding:

```
<TABLE NAME>='&LT;MY TABLE1&GT; TABLE&APOS; &QUOT;NAME&QUOT;'
```

When you add a DB2 table to the profile, you can filter on tables, views from a single base table, or aliases. The product resolves the view or alias to the base table space and includes the base table space in the generated JCL. A view that was created from a join of more than one table is not supported. The product checks for the existence of the specified DB2 table before generation. However, if you specify partitions, the product cannot validate the partitions, but uses the partitions as specified when generating JCL.

For a load from an external file, you can specify one SYSREC for each partition or each table if the table space is not partitioned. To specify multiple SYSREC data sets, use templates or manually add SYSREC data sets to the generated JCL. Before you can perform a parallel load to the accelerator, you must load the entire table. Then you can load selected partitions.

## Procedure

1. Locate one of the following members in the SHLOSAMP library:
  - For a Dual or Accelerator only load profile: HLODGEN
  - For a Consistent or Image copy load profile: HLOGEN
2. In the SYSIN statement, replace the variables in parameter values with your values. Remove the hash symbols (#) from the example JCL, but leave the quotation marks.
3. Save a copy of the customized member in another library.
4. To perform the load, submit the generated JCL, or add the job to your job scheduler.

### Related concepts:

“Migrating batch jobs” on page 2-5

With this version of Analytics Accelerator Loader, you can use jobs that you created with the previous version to build profiles in batch.

### Related tasks:

“Using the ISPF interface to build a load job from a profile” on page 8-2

Use the ISPF build feature to quickly generate a DB2 Analytics Accelerator Loader job by using a load profile.

### Related reference:

“Load profile parameter descriptions” on page 8-5  
The following table describes the load profile parameters and indicates the profile types to which the parameter applies.

## Example JCL

### Consistent load profile

```
//SYSIN DD *
  <JOBPREFIX>='HLO'
  <TARGET SSID>='DA1A'
  <PROFILE SSID>='QA1A'
  <PROFILE TYPE>='CONSISTENT'
  <PROFILE NAME>='CONSISTENT LOAD PROFILE'
  <PROFILE CREATOR>='TSNSB'
  <OUTPUT-DSN>='HLO.HLODSN.OUT'

  <TABLE>
    <TABLE NAME>='&LT;MY TABLE1&GT; TABLE&APOS; &QUOT;NAME&QUOT; '
    <TABLE CREATOR>='TABLECREATOR1'
    <PARTITION>='ALL'
  </TABLE>

  <TABLE>
    <TABLE NAME>='TABLENAME2'
    <TABLE CREATOR>='TABLECREATOR2'
    <PARTITION>='1-2,4:5'
  </TABLE>

  <TABLE>
    <TABLE NAME>='#VERY LONG TABLE NAME 12345678901234567890123456789012
345678901234567890123456789012345678901234567890#'
    <TABLE CREATOR>='TABLECREATOR3'
  </TABLE>
/*
```

## Dual load profile

```
//SYSIN DD *
<JOBPREFIX>='HLO'
<TARGET SSID>='DA1A'
<PROFILE SSID>='QA1A'
<PROFILE TYPE>='DUAL'
<PROFILE NAME>='DUAL LOAD PROFILE'
<PROFILE CREATOR>='TSNSB'
<LOAD BY PARTITION>='YES'
<OUTPUT-DSN>='HLO.HLODSN.OUT'
<NUMBER OF JOBS>='2'

<TABLE>
  <TABLE NAME>='&LT;MY TABLE1&GT; TABLE&APOS; &QUOT;NAME&QUOT; '
  <TABLE CREATOR>='TABLECREATOR1'
  <PARTITION>='ALL'
  <SYSREC-TEMPLATE-NAME>='ISYSDISC'
  <SYSREC-TEMPLATE-DSN>='&AMP;US..IDSD.&AMP;DB..ABC&AMP;PA.'
  <PARALLELISM>='20'
</TABLE>

<TABLE>
  <TABLE NAME>='TABLENAME2'
  <TABLE CREATOR>='TABLECREATOR2'
  <PARTITION>='1-2,4:5'
  <FIELDSPEC-DSN>='HLO.NSBTEST.LOADCAR1'
  <SYSREC-TEMPLATE-NAME>='ISYSDISC'
  <SYSREC-TEMPLATE-DSN>='&AMP;US..IDSD.&AMP;DB..ABC&AMP;PA.'
</TABLE>

<TABLE>
  <TABLE NAME>='#VERY LONG TABLE NAME 12345678901234567890123456789012
3456789012345678901234567890123456789012345678901234567890#'
  <TABLE CREATOR>='#TABLECREATOR3#'
  <SYSREC-DSN>='#HLO.LOAD.SYSREC3#'
</TABLE>
/*
```

## Load profile parameter descriptions

The following table describes the load profile parameters and indicates the profile types to which the parameter applies.

Parameter	Profile type	Required?	Default value
<p><b>&lt;JOBPREFIX&gt;='job_name_prefix'</b>  Specifies a prefix for the member name and job name in the job card. Specify a maximum of three characters.</p> <p>The product creates a separate six-character job name for each job. For example, if two jobs are generated and the default prefix of HLO is used, then all defined tables are generated into two jobs with the names HLOAAA and HLOAAB.</p> <p>Step names in the job begin with prefix S, followed by the job name and the step name in symbolic form. For example, the step names in the job HLOAAB are SAABAA and SAABAB.</p>	Dual Consistent	No	HLO
<p><b>&lt;TARGET SSID&gt;='ssid'</b>  Specifies the DB2 subsystem to which the generated jobs are directed for loading data.</p>	Dual Consistent	No	None. If omitted, the SSID that is specified in <PROFILE SSID> is used.
<p><b>&lt;PROFILE SSID&gt;='profile_ssid'</b>  Specifies the DB2 subsystem that contains the existing profile in the profile repository data sets. This parameter is used to qualify the profile because a profile that has the same creator, name, and type can exist on multiple subsystems, but a profile with the same creator, name, and type can only exist once per subsystem.</p>	Dual Consistent	Yes	None
<p><b>&lt;PROFILE TYPE&gt;='DUAL   CONSISTENT'</b>  Specifies the type of profile to build, either Dual for a load from an external file, or Consistent for a consistent or historical load.</p>	Dual Consistent	Yes	None
<p><b>&lt;PROFILE NAME&gt;='profile_name'</b>  Specifies the load profile name that was previously created. The values for &lt;PROFILE NAME&gt;, &lt;PROFILE CREATOR&gt;, and &lt;PROFILE TYPE&gt; qualify the specific profile on which you want to build JCL in batch. This profile must exist in the profile repository data sets.</p>	Dual Consistent	Yes	None



Parameter	Profile type	Required?	Default value
<p>&lt;PROFILE CREATOR&gt;=<i>'profile_creator'</i></p> <p>Specifies the existing load profile creator that corresponds to the profile name that is specified in &lt;PROFILE NAME&gt;=<i>'profile_name'</i>. The values for &lt;PROFILE NAME&gt;, &lt;PROFILE CREATOR&gt;, and &lt;PROFILE TYPE&gt; qualify the profile on which you want to build JCL in batch. This profile must exist in the profile repository data sets.</p>	Dual Consistent	Yes	None
<p>&lt;OUTPUT-DSN&gt;=<i>'data_set_name'</i></p> <p>Specifies the full path to the partitioned data set (PDS) that is to be used for the JCL generation. If the data set that you specify does not exist, the product allocates it.</p>	Dual	No	None. If omitted, the value from the existing profile, which is defined in the <b>Data set name</b> field on the Build Load JCL panel, is used.
<p>&lt;LOAD BY PARTITION&gt;=<i>'YES   NO'</i></p> <p>Specifies whether to use partition parallelism. Valid values:</p> <ul style="list-style-type: none"> <li>• 'YES' - One SYSREC per table partition is generated into the JCL using a template.</li> <li>• 'NO' - One SYSREC per table is generated into the JCL.</li> </ul>	Dual	No	None. If omitted, the value from the existing profile, which is defined in the <b>Parallel load</b> field on the Load Accelerator from External File panel or the Load Accelerator and DB2 from External File panel, is used.
<p>&lt;NUMBER OF JOBS&gt;=<i>'n'</i></p> <p>Specifies the number of jobs to generate (from 1 - 17576). The tables are divided evenly among the jobs. If the maximum number of steps in a job is reached, the same job card and job name are used to add another batch job automatically.</p>	Dual	No	1
<p>&lt;TABLE&gt;</p> <p>Specifies the table definition section that follows.</p> <p>(<i>Consistent load only</i>): Only one JCL file is generated.</p> <p>(<i>Dual load only</i>): The number of tables divided by the number of jobs must be less than or equal to 172380.</p> <p>For information about conditions that apply to the table, see "Considerations for the table definition section" on page 8-10,</p>	Dual Consistent	Yes	None

Parameter	Profile type	Required?	Default value
<p><b>&lt;TABLE NAME&gt;='table_name'</b>  Specifies the table, view, or alias name on which you want to generate JCL. This name does not have to be defined in the existing load profile. This object is generated into the JCL in addition to any objects that are defined in the load profile.</p> <p>If the name is too long for one line in the SYSIN, you can split it into several lines. You must complete the first line up to column 80 in the SYSIN and start from column 1 in the next line. No continuation character is required.</p>	Dual Consistent	Yes	None
<p><b>&lt;TABLE CREATOR&gt;='table_creator'</b>  Specifies the table creator for the table name that you specified in the &lt;TABLE NAME&gt; parameter. This value qualifies the table name.</p>	Dual Consistent	Yes	None
<p><b>&lt;PARTITION&gt;='ALL   1,2,3'</b>  Specifies the table partition on which you want to generate JCL.</p> <p>Valid values:</p> <ul style="list-style-type: none"> <li>• 'ALL' specifies that the number of partitions is requested from DB2.</li> <li>• A range of partition numbers in the format a[: -]b[,a[: -]b]*, where a,b is greater than 0. For example, &lt;PARTITION&gt;='1-2,4:5,8' and &lt;PARTITION&gt;='1'</li> </ul> <p>(Dual load only):</p> <ul style="list-style-type: none"> <li>• Use of this parameter results in multiple INTO TABLE clauses generated into the JCL.</li> <li>• If you specify &lt;PARTITION&gt;='ALL' and the table is not in the SYSTABLEPART table, then it is considered to be nonpartitioned.</li> </ul>	Dual Consistent	No	None. If omitted, the table is considered to be nonpartitioned.

Parameter	Profile type	Required?	Default value
<p>&lt;PARALLELISM&gt;='n'</p> <p>Specifies the number of parallel tasks to use when loading data into the accelerator. Valid values are in the range 1 - 20. In the JCL, the <b>ACCEL_LOAD_TASKS</b> value is set to <code>min(PARALLELISM, partitions count, 20)</code>. The value of this parameter should match the value of the IBM DB2 Analytics Accelerator for z/OS environment variable <b>AQT_MAX_UNLOAD_IN_PARALLEL</b>. The value of this environment variable indicates the number of partitions that can be loaded in parallel. If the value of <b>AQT_MAX_UNLOAD_IN_PARALLEL</b> is 2, the maximum number of partitions that can be written to the accelerator at one time is 2, regardless of the &lt;PARALLELISM&gt; value.</p>	Dual	No	None. If omitted, the value from the existing profile, which is defined in the <b>Load tasks</b> field on the Load Accelerator from External File panel or the Load Accelerator and DB2 from External File panel, is used.
<p>&lt;FIELDSPEC-DSN&gt;='fieldspec.dsn(mem1)'</p> <p>Specifies the data set of the table's column definitions that is to be used as input to the LOAD utility control cards.</p>	Dual	No, but is required if the table is not already defined in the existing profile.	None. If omitted, the value from the existing profile, which is defined in the <b>Column info DSN</b> field on the Load Accelerator from External File panel or the Load Accelerator and DB2 from External File panel, is used.
<p>&lt;SYSREC-DSN&gt;='sysrec.dsn(mem1)'</p> <p>Specifies the data set of the table's SYSREC that is to be used as input to the LOAD utility control cards. If the table is nonpartitioned, specify the fully qualified SYSREC file name. If the table is partitioned or for parallel processing, specify a template and include the variables &amp;PA or &amp;PART.</p>	Dual	No	None. If omitted, the value from the existing profile, which is defined in the <b>Input data set</b> field on the Load Accelerator from External File panel or the Load Accelerator and DB2 from External File panel, is used.
<p>&lt;SYSREC-TEMPLATE-DSN&gt;='&amp;AMP;US..IDSD.&amp;AMP;DB..ABC &amp;AMP;PA.'</p> <p>Specifies the template for SYSREC data set that contains the input data that you want to load into the specified table. The variable &amp;PA or &amp;PART must be included. Specify this parameter only for partitioned tables with &lt;LOAD BY PARTITION&gt;='YES'.</p>	Dual	No	None. If omitted, the value from the existing profile, which is defined in the <b>Input data set</b> field on the Load Accelerator from External File panel or the Load Accelerator and DB2 from External File panel, is used.

Parameter	Profile type	Required?	Default value
</TABLE> Closes the table definition section.	Dual Consistent	Yes	None

## Considerations for the table definition section

If the table exists in the profile that you specified, the following considerations apply:

- If you omit <PARTITION>, then the value is obtained from the existing profile.
- If <LOAD BY PARTITION>='No', then the SYSREC data set name is obtained from the existing profile.
- If you want to use the SYSREC data set from the existing profile when the **Input data set** field on the Load Accelerator from External File panel or the Load Accelerator and DB2 from External File panel is disabled, then you must specify a value of No in the **Parallel load** field on the Load Accelerator from External File panel or the Load Accelerator and DB2 from External File panel, and then specify the input data set.

If the table does not exist in the profile that you specified, the following considerations apply:

- Because there is no <PARTITION> value, the product assumes that the table is not partitioned. Parallel load is supported for partitioned tables only.
- To enable parallel load for the table and to use a SYSREC template, you must specify a value for <PARTITION>.
- To perform a non-parallel load, you must specify the name of the SYSREC data set for the table in the <SYSREC-DSN> parameter, or specify a value of No in the **Parallel load** field on the Load Accelerator from External File panel or the Load Accelerator and DB2 from External File panel.

### Related tasks:

"Using the batch interface to build a load job from a profile" on page 8-2  
You can use the batch interface to generate JCL to load data to the accelerator and DB2.

---

## View load profile specifications

You can view the options that are specified in your profiles and those that other users created. Viewing a profile enables you to see the settings that have been specified and determine whether you want to copy or edit that profile.

### Procedure

1. On the Manage Loader Profiles panel, type V in the **Cmd** line next to the profile that you want to view.
2. Review the specified options.
3. Press PF3 to return to the previous panel.

---

## Renaming a load profile

You can rename your own profiles or those that other users created if the profile was created with a **Share Option** of **Update**.

### Procedure

1. On the Manage Loader Profiles panel, type R in the **Cmd** line next to the profile that you want to rename. The Rename Profile panel opens.
2. In the **Profile Name** field, type the new profile name over the existing profile name.
3. Press Enter.

---

## Deleting a load profile

If a load profile is no longer of use, delete it from the profile set.

### About this task

You can delete all profiles that were created under your user ID, regardless of the **Share Option**. You can delete a profile created by another user if the profile was created with a **Share Option** of **Update**.

### Procedure

1. From the main menu, select Manage Loader Profiles and press **Enter**.
2. In the **Cmd** field next to the profile that you want to delete, type D, and press Enter.
3. On the confirmation panel, confirm the deletion, and press Enter.



---

## Syntax

Review information about DB2 Analytics Accelerator Loader example JCL and syntax diagrams and definitions. You can customize the example JCL according to the needs of your site. Syntax diagrams provide the information necessary for constructing valid DB2 Analytics Accelerator Loader syntax.

### Topics:

- “Loading data from non-DB2 and remote DB2 sources”
- “Consistent load and Image Copy load jobs” on page 9-3
- “Loading from an external file” on page 9-22

---

## Loading data from non-DB2 and remote DB2 sources

Before you build and run a job that loads data from a non-DB2 or a remote DB2 source, review all reference and conceptual information for the feature, including the correct syntax, usage considerations, and examples.

### Example JCL: Load the accelerator with data from another DB2 subsystem

The following sample syntax shows control cards to load only the accelerator with data from another DB2 subsystem. In the example, *hlvid* represents the name of the Accelerator Loader server started task that was customized by using Tools Customizer.

```
EXEC SQL
  DECLARE HLOCSR CURSOR FOR
  SELECT * FROM USER1.SOURCE_DB2_TABLE
ENDEXEC
```

```
LOAD DATA REPLACE
  IDAA_ONLY ON UB1AACC1
  LOG NO NOCOPYPEND
  ENFORCE NO
  ACCEL_CURSOR HLOCSR
  ACCEL_SOURCE_DB2 RA1B
  ACCEL_HLV_SSID hlvid
  ACCEL_REMOVE_AND_ADD TABLES
  ACCEL_ON_SUCCESS_ENABLE YES
  ACCEL_LOAD_TASKS 1
INTO TABLE USER1.TARGET_DB2_TABLE
```

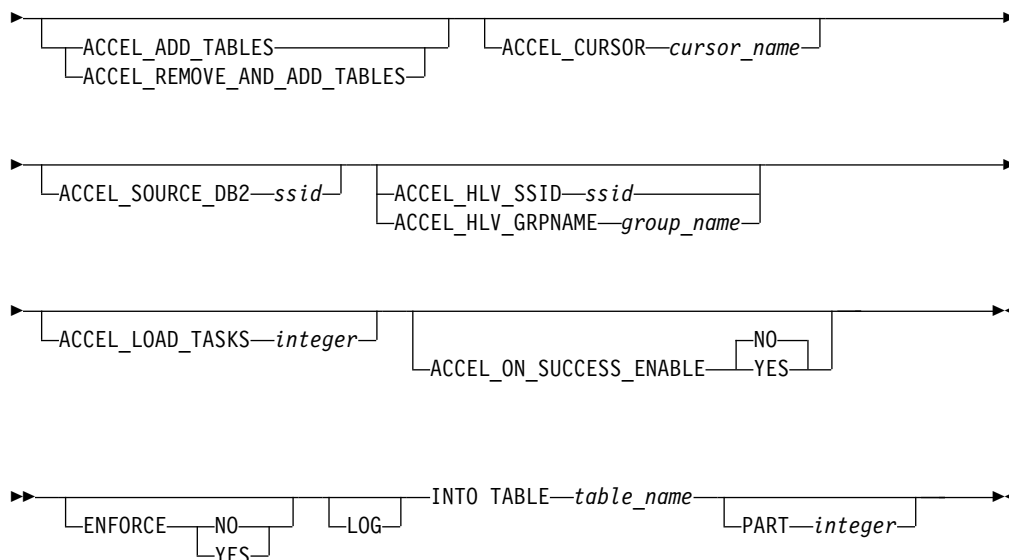
The sample syntax is converted to the following DB2 LOAD statement:

```
LOAD DATA REPLACE
  INTO TABLE USER1.TARGET_DB2_TABLE
  INDDN HLOREC FORMAT INTERNAL
```

### Load from non-DB2 or remote DB2 source syntax diagram

Review syntax for a job that loads data from a non-DB2 or remote DB2 source.

```
→→—LOAD—┌──DATA──┐—IDAA_ONLY ON—accelerator_name—→→
```



## Load from non-DB2 or remote DB2 source syntax definitions

Review descriptions of syntax elements that are valid for loading data from a non-DB2 or remote DB2 source.

### **ACCEL\_ADD\_TABLES**

Add missing tables to the accelerator before starting the load job.

### **ACCEL\_CURSOR** *cursor\_name*

Specifies the Accelerator Loader server cursor that retrieves the source data. Valid cursor names are a maximum of eight characters. The cursor must be declared via the EXEC SQL utility statement before the LOAD statement that references the cursor.

### **ACCEL\_HLV\_SSID** *ssid* | **ACCEL\_HLV\_GRPNAME** *group\_name*

Specify one of these options to identify the server to which DB2 Analytics Accelerator Loader connects. You can identify the server by SSID or group name.

### **ACCEL\_REMOVE\_AND\_ADD\_TABLES**

Remove and re-add existing tables to the accelerator before starting the load job.

### **ACCEL\_SOURCE\_DB2** *ssid*

Specify this option only when the data source is a DB2 subsystem. Because DB2 sources do not require server mappings, you must specify the subsystem ID to locate the source DB2 table.

### **ACCEL\_LOAD\_TASKS** *integer*

Specifies the number of partitions to load into the accelerator and optionally into DB2 in parallel when loading from an external file. Valid values are in the range 1 - 20.

This value cannot exceed the value of the IBM DB2 Analytics Accelerator for z/OS parameter **AQT\_MAX\_UNLOAD\_IN\_PARALLEL**, which indicates the maximum number of partitions that can be loaded in parallel. If **AQT\_MAX\_UNLOAD\_IN\_PARALLEL** is set to 2, the maximum number of partitions that can be written to the accelerator at one time is 2, regardless of the value that you specify for **Parallel load tasks ACCEL\_LOAD\_TASKS**.



| **ACCEL\_ON\_SUCCESS\_ENABLE YES | NO**

| Controls whether query acceleration is enabled for the table after a  
| successful load. If DB2 discards any rows during the load, query  
| acceleration is not enabled. Valid values are YES and NO.

| **ENFORCE YES | NO**

| Specifies whether to enforce check constraints and referential constraints.

| **IDAA\_ONLY ON *accelerator\_name***

| Indicates that you want to load data to the accelerator only. Replace  
| *accelerator\_name* with the name of the accelerator to load. If the load job  
| specifies LOAD REPLACE, existing data in the DB2 table or partition is  
| deleted.

| **LOG YES | NO**

| Indicates whether to enable logging.

---

## Consistent load and Image Copy load jobs

Review example JCL and syntax diagrams and definitions for Consistent load and Image Copy load jobs.

Before you build and run a Consistent load and Image Copy load job, review all reference and conceptual information for the features.

### Example JCL: Consistent load

Review JCL examples for Consistent load jobs.

#### Example 1: Nonparallel consistent load

The following JCL example loads data to the accelerator at a consistent time without parallel processing.

```
//JOB CARD JOB USER01,CLASS=A,MSGCLASS=X,MSGLEVEL=(1,1),
// USER=&SYSUID,NOTIFY=&SYSUID,REGION=0M
//*
//*
/**
/**
/** Job Generated by Accelerator Loader *
/**
/** DB2 SSID: QAA5 *
/** Profile: USER01.SAMPL1 *
/** Desc: Consistent Load *
/** User: USER01 *
/** Date: Thursday 15/12/13 *
/** Time: 09:34:14.89 *
/**
/**
/**
/** Step: HLOC0100 *
/**
/** Desc: This step will invoke *
/** Accelerator Loader *
/**
/**
/**HLOC0100 EXEC PGM=HLO#MAIN,
// REGION=0M,
// PARM=(QAA5)
//STEPLIB DD DISP=SHR,DSN=RSQA.HLO210.IBMTAPE.SHLOLOAD
```

```

//          DD DISP=SHR,DSN=RSQA.FEC130.IBMTAPE.SFECLOAD
//          DD DISP=SHR,DSN=QDS5.SDSNEXIT
//          DD DISP=SHR,DSN=DSN.VA10.SDSNLOAD
//DB2PARMS DD DISP=SHR,DSN=RSTEST.HLQ210.DB2CNTL
//SORAMSGS DD SYSOUT=*
//SR0AMSGS DD SYSOUT=*
//SORAWK00 DD UNIT=SYSDA,SPACE=(CYL,(00010,00010),,,ROUND)
//SORAWK01 DD UNIT=SYSDA,SPACE=(CYL,(00010,00010),,,ROUND)
//SORAWK02 DD UNIT=SYSDA,SPACE=(CYL,(00010,00010),,,ROUND)
//SR0AWK00 DD UNIT=SYSDA,SPACE=(CYL,(00010,00010),,,ROUND)
//SR0AWK01 DD UNIT=SYSDA,SPACE=(CYL,(00010,00010),,,ROUND)
//SR0AWK02 DD UNIT=SYSDA,SPACE=(CYL,(00010,00010),,,ROUND)
//SYSUDUMP DD SYSOUT=*
//SYSOUT   DD SYSOUT=*
//SORTMSGS DD SYSOUT=*
//INFOM    DD SYSOUT=*
//SYSINHLO DD *
          IDAA_CONSISTENT_LOAD
          (
            GROUP
            (
              SPACE
              (
                CREATOR 'USER01'
                NAME     'TBHLOA05_T01'
              )
              SPACE
              (
                CREATOR 'USER01'
                NAME     'TBHLOB05_T01'
              )
            )
            TO_CURRENT
          )
          ACCELNAME QDS5ACC1
          PARALLEL '0,1'
          LOG_COPY_PREFERENCE R1R2A1A2
          USER_INDICATOR HLQ
        )
/*
//

```

## Example 2: Parallel consistent load

The following JCL example shows a consistent load job with parallel processing of two 16-partition tables.

```

//JOB CARD JOB USER01,CLASS=A,MSGCLASS=X,USER=&SYSUID,NOTIFY=&SYSUID,
// REGION=0M
//*
//*
//*
//** * * * * *
//*
//* Job Generated by Accelerator Loader *
//*
//* DB2 SSID: QAA5
//* Profile: USER01.PARALLEL '16,07'
//* Desc:
//* User: USER01
//* Date: Thursday 14/03/13
//* Time: 17:54:28.50
//*
//** * * * * *
//*
//** * * * * *
//*
//* Step: HLOC0100

```

```

/**                                                                                      *
/** Desc:      This step will invoke                                                    *
/**          Accelerator Loader                                                         *
/**                                                                                      *
/** ** * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * *
//HLOC0100 EXEC PGM=HLO#MAIN,
//      REGION=0M,
//      PARM=(QAA5)
//STEPLIB DD DISP=SHR,DSN=RSQA.HLO210.IBMTAPE.SHLOLOAD
//      DD DISP=SHR,DSN=RSQA.HLO210.IBMTAPE.SFECLoad
//      DD DISP=SHR,DSN=QDS5.SDSNEXIT
//      DD DISP=SHR,DSN=DSN.VA10.SDSNLOAD
//DB2PARMS DD DISP=SHR,DSN=RSTEST.HLO210.DB2CNTL
/**
//SORAMSGS DD SYSOUT=*
//SR0AMSGS DD SYSOUT=*
//SORAWK01 DD UNIT=SYSDA,SPACE=(CYL,(00020,00001),,,ROUND)
//SORAWK02 DD UNIT=SYSDA,SPACE=(CYL,(00020,00001),,,ROUND)
//SORAWK03 DD UNIT=SYSDA,SPACE=(CYL,(00020,00001),,,ROUND)
//SR0AWK01 DD UNIT=SYSDA,SPACE=(CYL,(00020,00001),,,ROUND)
//SR0AWK02 DD UNIT=SYSDA,SPACE=(CYL,(00020,00001),,,ROUND)
//SR0AWK03 DD UNIT=SYSDA,SPACE=(CYL,(00020,00001),,,ROUND)
/**
//SORBMSGs DD SYSOUT=*
//SR0BMSGs DD SYSOUT=*
//SORBWK01 DD UNIT=SYSDA,SPACE=(CYL,(00020,00001),,,ROUND)
//SORBWK02 DD UNIT=SYSDA,SPACE=(CYL,(00020,00001),,,ROUND)
//SORBWK03 DD UNIT=SYSDA,SPACE=(CYL,(00020,00001),,,ROUND)
//SR0BWK01 DD UNIT=SYSDA,SPACE=(CYL,(00020,00001),,,ROUND)
//SR0BWK02 DD UNIT=SYSDA,SPACE=(CYL,(00020,00001),,,ROUND)
//SR0BWK03 DD UNIT=SYSDA,SPACE=(CYL,(00020,00001),,,ROUND)
/**
//SORCMSGS DD SYSOUT=*
//SR0CMSGS DD SYSOUT=*
//SORCWK01 DD UNIT=SYSDA,SPACE=(CYL,(00020,00001),,,ROUND)
//SORCWK02 DD UNIT=SYSDA,SPACE=(CYL,(00020,00001),,,ROUND)
//SORCWK03 DD UNIT=SYSDA,SPACE=(CYL,(00020,00001),,,ROUND)
//SR0CWK01 DD UNIT=SYSDA,SPACE=(CYL,(00020,00001),,,ROUND)
//SR0CWK02 DD UNIT=SYSDA,SPACE=(CYL,(00020,00001),,,ROUND)
//SR0CWK03 DD UNIT=SYSDA,SPACE=(CYL,(00020,00001),,,ROUND)
/**
//SORDMMSGs DD SYSOUT=*
//SR0DMMSGs DD SYSOUT=*
//SORDWK01 DD UNIT=SYSDA,SPACE=(CYL,(00020,00001),,,ROUND)
//SORDWK02 DD UNIT=SYSDA,SPACE=(CYL,(00020,00001),,,ROUND)
//SORDWK03 DD UNIT=SYSDA,SPACE=(CYL,(00020,00001),,,ROUND)
//SR0DWK01 DD UNIT=SYSDA,SPACE=(CYL,(00020,00001),,,ROUND)
//SR0DWK02 DD UNIT=SYSDA,SPACE=(CYL,(00020,00001),,,ROUND)
//SR0DWK03 DD UNIT=SYSDA,SPACE=(CYL,(00020,00001),,,ROUND)
/**
//SOREMSGs DD SYSOUT=*
//SR0EMSGs DD SYSOUT=*
//SOREWK01 DD UNIT=SYSDA,SPACE=(CYL,(00020,00001),,,ROUND)
//SOREWK02 DD UNIT=SYSDA,SPACE=(CYL,(00020,00001),,,ROUND)
//SOREWK03 DD UNIT=SYSDA,SPACE=(CYL,(00020,00001),,,ROUND)
//SR0EWK01 DD UNIT=SYSDA,SPACE=(CYL,(00020,00001),,,ROUND)
//SR0EWK02 DD UNIT=SYSDA,SPACE=(CYL,(00020,00001),,,ROUND)
//SR0EWK03 DD UNIT=SYSDA,SPACE=(CYL,(00020,00001),,,ROUND)
/**
//SORFMSGs DD SYSOUT=*
//SR0FMSGs DD SYSOUT=*
//SORFWK01 DD UNIT=SYSDA,SPACE=(CYL,(00020,00001),,,ROUND)
//SORFWK02 DD UNIT=SYSDA,SPACE=(CYL,(00020,00001),,,ROUND)
//SORFWK03 DD UNIT=SYSDA,SPACE=(CYL,(00020,00001),,,ROUND)
//SR0FWK01 DD UNIT=SYSDA,SPACE=(CYL,(00020,00001),,,ROUND)
//SR0FWK02 DD UNIT=SYSDA,SPACE=(CYL,(00020,00001),,,ROUND)
//SR0FWK03 DD UNIT=SYSDA,SPACE=(CYL,(00020,00001),,,ROUND)

```

```

/**
//SORGMSG DD SYSOUT=*
//SR0GMSG DD SYSOUT=*
//SORGWK01 DD UNIT=SYSDA,SPACE=(CYL,(00020,00001),,,ROUND)
//SORGWK02 DD UNIT=SYSDA,SPACE=(CYL,(00020,00001),,,ROUND)
//SORGWK03 DD UNIT=SYSDA,SPACE=(CYL,(00020,00001),,,ROUND)
//SR0GWK01 DD UNIT=SYSDA,SPACE=(CYL,(00020,00001),,,ROUND)
//SR0GWK02 DD UNIT=SYSDA,SPACE=(CYL,(00020,00001),,,ROUND)
//SR0GWK03 DD UNIT=SYSDA,SPACE=(CYL,(00020,00001),,,ROUND)
/**
//SYSUDUMP DD SYSOUT=*
//SYSOUT DD SYSOUT=*
//SORTMSG DD SYSOUT=*
//INFOM DD SYSOUT=*
//SYSINHLO DD *
    IDAA_CONSISTENT_LOAD
    (
        GROUP
        (
            SPACE
            (
                CREATOR 'USER01'
                NAME 'TBHLOA05_T01'
                PARTITION 1
            )
            SPACE
            (
                CREATOR 'USER01'
                NAME 'TBHLOA05_T01'
                PARTITION 2
            )
            SPACE
            (
                CREATOR 'USER01'
                NAME 'TBHLOA05_T01'
                PARTITION 3
            )
            SPACE
            (
                CREATOR 'USER01'
                NAME 'TBHLOA05_T01'
                PARTITION 4
            )
            SPACE
            (
                CREATOR 'USER01'
                NAME 'TBHLOA05_T01'
                PARTITION 5
            )
            SPACE
            (
                CREATOR 'USER01'
                NAME 'TBHLOA05_T01'
                PARTITION 6
            )
            SPACE
            (
                CREATOR 'USER01'
                NAME 'TBHLOA05_T01'
                PARTITION 7
            )
            SPACE
            (
                CREATOR 'USER01'
                NAME 'TBHLOA05_T01'
                PARTITION 8
            )
        )
    )

```

```

SPACE
(
  CREATOR 'USER01'
  NAME    'TBHLOA05_T01'
  PARTITION 9
)
SPACE
(
  CREATOR 'USER01'
  NAME    'TBHLOA05_T01'
  PARTITION 10
)
SPACE
(
  CREATOR 'USER01'
  NAME    'TBHLOA05_T01'
  PARTITION 11
)
SPACE
(
  CREATOR 'USER01'
  NAME    'TBHLOA05_T01'
  PARTITION 12
)
SPACE
(
  CREATOR 'USER01'
  NAME    'TBHLOA05_T01'
  PARTITION 13
)
SPACE
(
  CREATOR 'USER01'
  NAME    'TBHLOA05_T01'
  PARTITION 14
)
SPACE
(
  CREATOR 'USER01'
  NAME    'TBHLOA05_T01'
  PARTITION 15
)
SPACE
(
  CREATOR 'USER01'
  NAME    'TBHLOA05_T01'
  PARTITION 16
)
TO_CURRENT
)
ACCELNAME QDS5ACC1
PARALLEL '16,7'
LOG_COPY_PREFERENCE R1R2A1A2
USER_INDICATOR HLO
)
/*
//

```

### Example 3: Controlling whether to process all partitions individually or as a whole

In the ISPF interface, the **Load partitions individually** field controls whether to process all partitions individually or to process them as a whole. The following examples show the generated SYSIN statement for each value:

Figure 9-1. Load partitions individually=Yes

```

//SYSINHLO DD *
  IDAA_CONSISTENT_LOAD
  (
    GROUP
    (
      SPACE
      (
        CREATOR 'AATRGI'
        NAME 'XFDPSI'
        PARTITION 1
      )
      SPACE
      (
        CREATOR 'AATRGI'
        NAME 'XFDPSI'
        PARTITION 2
      )
      SPACE
      (
        CREATOR 'AATRGI'
        NAME 'XFDPSI'
        PARTITION 3
      )
      SPACE
      (
        CREATOR 'AATRGI'
        NAME 'XFDPSI'
        PARTITION 4
      )
      SPACE
      (
        CREATOR 'AATRGI'
        NAME 'XFDPSI'
        PARTITION 5
      )
      SPACE
      (
        CREATOR 'AATRGI'
        NAME 'XFDPSI'
        PARTITION 6
      )
    )
    TO_CURRENT
  )
  ACCELNAME QA1AACC1
  PARALLEL '0,4'
  LOG_COPY_PREFERENCE R1R2A1A2
  USER_INDICATOR HLO
)
/*
//

```

Figure 9-2. Load partitions individually=No

```

//SYSINHLO DD *
  IDAA_CONSISTENT_LOAD
  (
    GROUP
    (
      SPACE
      (
        CREATOR 'AATRGI'
        NAME 'XFDPSI'

```

```

)
TO_CURRENT
)
ACCELNAME QA1AACCC1
PARALLEL '0,4'
LOG_COPY_PREFERENCE R1R2A1A2
USER_INDICATOR HLO
)
/*
//

```

## Example JCL: Image Copy load

Review JCL examples for Image Copy load jobs.

### Example 1: Manually specifying object translation target ID number pairs

You can specify an image copy data set and load the data from that image copy to the accelerator.

In the following example, the OBIDXLAT and control card cluster options are used to manually specify the object translation target ID number pairs.

```

//HLOSAMP1 JOB <JOB PARAMETERS>,REGION=0M
//*
//*-----*
//*
//* Licensed Materials - Property of IBM
//* 5639-OLE
//* (c) Copyright Rocket Software, Inc. 2001-2015 All Rights Reserved.*
//* US Government Users Restricted Rights - Use, duplication or
//* disclosure restricted by GSA ADP Schedule Contract with IBM Corp.*
//*
//* Product : Accelerator Loader
//* Product #: 5639-OLE
//* Release : 2.1
//*-----*
//*
//* PURPOSE:
//*
//* RUN A BATCH STEP TO LOAD AN IMAGE COPY DIRECTLY INTO THE
//* ACCELERATOR WITH NO LOG APPLY PROCESSING.
//*
//*-----*
//*
//HLORUN EXEC PGM=HLO#MAIN,REGION=0M,PARM='<SSID>'
//STEPLIB DD DISP=SHR,
// DSN=#HLQ#.SHLOLOAD
// DD DISP=SHR,
// DSN=#HLQ#.SFECLOAD
// DD DSN=DSN.VA10.SDSNEXIT
// DD DSN=DSN.VA10.SDSNLOAD//DB2PARMS DD DISP=SHR,DSN=<CONTROL FILE>
//SORAMSGS DD SYSOUT=*
//SR0AMSGS DD SYSOUT=*
//SORAWK00 DD UNIT=SYSDA,SPACE=(CYL,(00010,00010),,,ROUND)
//SORAWK01 DD UNIT=SYSDA,SPACE=(CYL,(00010,00010),,,ROUND)
//SORAWK02 DD UNIT=SYSDA,SPACE=(CYL,(00010,00010),,,ROUND)
//SR0AWK00 DD UNIT=SYSDA,SPACE=(CYL,(00010,00010),,,ROUND)
//SR0AWK01 DD UNIT=SYSDA,SPACE=(CYL,(00010,00010),,,ROUND)
//SR0AWK02 DD UNIT=SYSDA,SPACE=(CYL,(00010,00010),,,ROUND)
//SYSUDUMP DD SYSOUT=*
//SYSOUT DD SYSOUT=*
//SORTMSGS DD SYSOUT=*
//INFOM DD SYSOUT=*
//SYSINHLO DD *

```

```

IDAA_LOAD_IC
(
  GROUP
  (
    SPACE
    (
      CREATOR 'USER01'
      NAME 'TBHLOA05_T01'
      TO_IC 'RSTEST.QA1A.DBHLOTS1.TSHLOSTA.DB2IC1'
      OBIDXLAT (
        DBID '863,868'
        PSID '2,2'
        OBID '3,3'
      )
    )
  )
  ACCELNAME QA1AAC1
  PARALLEL '0,1'
  LOG_COPY_PREFERENCE R1R2A1A2
  USER_INDICATOR HLO
)
/*
//

```

## Example 2: Obtaining object translation target ID number pairs from the DB2 catalog

In the following example, the OBIDXLAT\_CATALOG option is used to obtain the object translation target ID number pairs from the DB2 catalog of the specified object.

```

//HLOSAMP2 JOB <JOB PARAMETERS>,REGION=0M
/*
/*-----*
/*
/* Licensed Materials - Property of IBM
/* 5639-OLE
/* (c) Copyright Rocket Software, Inc. 2001-2015 All Rights Reserved.*
/* US Government Users Restricted Rights - Use, duplication or
/* disclosure restricted by GSA ADP Schedule Contract with IBM Corp. *
/*
/* Product : IBM DB2 ANALYTICS ACCELERATOR LOADER FOR Z/OS
/* Product #: 5639-OLE
/* Release : 2.1
/*-----*
/*
/* PURPOSE:
/*
/* RUN A BATCH STEP TO LOAD AN IMAGE COPY DIRECTLY INTO THE
/* ACCELERATOR WITH NO LOG APPLY PROCESSING.
/*
/*-----*
/*
//HLORUN EXEC PGM=HLO#MAIN,REGION=0M,PARM='<SSID>'
//STEPLIB DD DISP=SHR,
// DSN=#HLQ#.SHLOLOAD
// DD DISP=SHR,
// DSN=#HLQ#.SFECLOAD
// DD DSN=DSN.VA10.SDSNEXIT
// DD DSN=DSN.VA10.SDSNLOAD//DB2PARMS DD DISP=SHR,DSN=<CONTROL FILE>
//SORAMSGS DD SYSOUT=*
//SR0AMSGS DD SYSOUT=*
//SORAWK00 DD UNIT=SYSDA,SPACE=(CYL,(00010,00010),,,ROUND)
//SORAWK01 DD UNIT=SYSDA,SPACE=(CYL,(00010,00010),,,ROUND)
//SORAWK02 DD UNIT=SYSDA,SPACE=(CYL,(00010,00010),,,ROUND)
//SR0AWK00 DD UNIT=SYSDA,SPACE=(CYL,(00010,00010),,,ROUND)

```



```

//SR0AWK01 DD UNIT=SYSDA,SPACE=(CYL,(00010,00010),,,ROUND)
//SR0AWK02 DD UNIT=SYSDA,SPACE=(CYL,(00010,00010),,,ROUND)
//SYSUDUMP DD SYSOUT=*
//SYSOUT DD SYSOUT=*
//SORTMSG DD SYSOUT=*
//INFOM DD SYSOUT=*
//SYSINHLO DD *
    IDAA_LOAD_IC
    (
        GROUP
        (
            SPACE
            (
                CREATOR 'USER01'
                NAME 'TBHLOA05_T01'
                TO_IC 'RSTEST.QA1A.DBHLOTS1.TSHLOSTA.DB2IC1'
                OBIDXLAT_CATALOG
            )
        )
        ACCELNAME QA1AACC1
        PARALLEL '0,1'
        LOG_COPY_PREFERENCE R1R2A1A2
        USER_INDICATOR HLO
    )
/*
//

```

## Customizing the Consistent load and Image Copy load example JCL

The following steps describe the changes that you must make to customize the Consistent load and Image Copy load example JCL for your site.

### About this task

Use caution when adding DD names to the job step. The product dynamically allocates commonly used reserved name DD names during processing. If you must add DD names to facilitate control card separation by data set, use uncommon DD names that include "HLO" as part of the name. For example:

```

//SYSINHLO DD DSN=<dsn>
// DD DDNAME=SYSUT1HLO
// DD *
...
//SYSUT1HLO DD DSN=<dsn>
//

```

### Procedure

1. Enter a valid job card for your site. If you anticipate processing a large number of log records, allocate a large REGION size to avoid out-of-memory errors.
2. In the EXEC statement, enter the subsystem ID (*ssid*) for the subsystem on which you run the job. For example:  

```
//HLOC0100 EXEC PGM=HLO#MAIN,PARM='QB1A'
```
3. Change the STEPLIB DD data set file names to point to the DB2 Analytics Accelerator Loader program library.
4. Specify the appropriate INFOM DD, for example:  

```
//INFOM DD SYSOUT=*
```

**Note:** Both of the following INFOM DD definitions are valid:

```
//INFOM DD SYSOUT=*
```

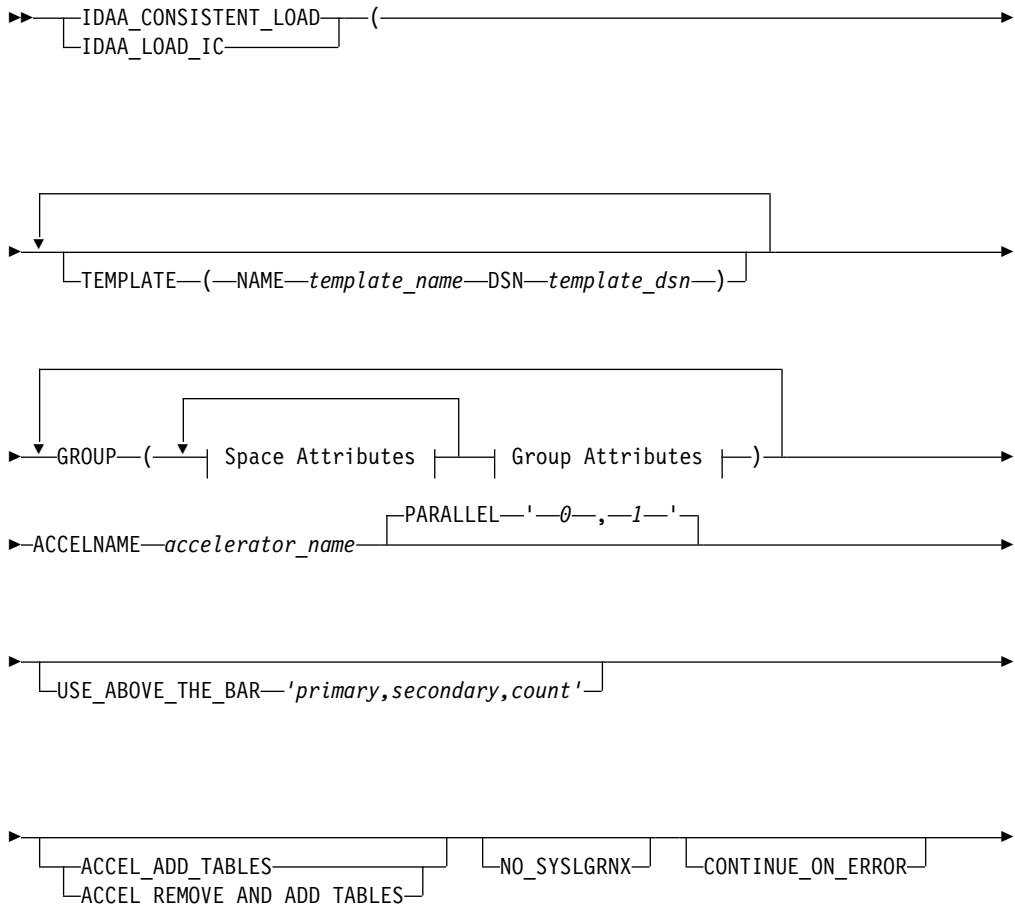
```
//INFOM DD DUMMY
```

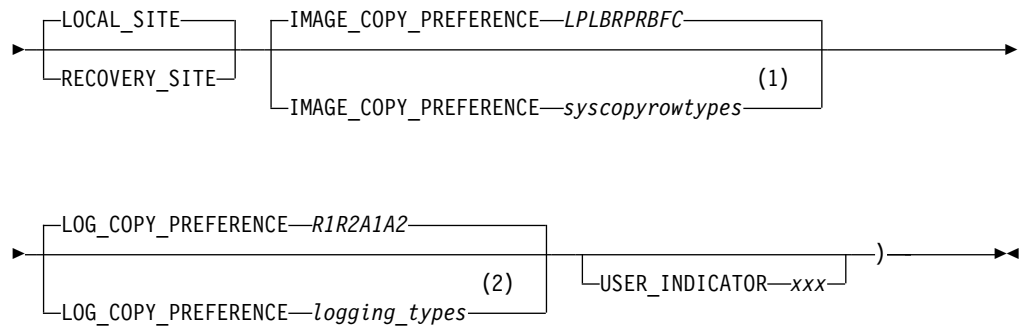
5. Optional: Include the SYSUDUMP DD statement to facilitate finding and correcting problems that occur when the job runs.
6. Specify a data set or \* for the SYSOUT.
7. Specify a data set or \* for messages for SORAMSGS -> SORBMSGs, for as many groups as are needed in the run.
8. Specify the VSAM control file for DB2 parameters.
9. The SYSINHLO data set holds the parameters that define the DB2 Analytics Accelerator Loader job options.
10. Modify the syntax as needed for your site.

## Syntax diagram: Consistent load and image copy load

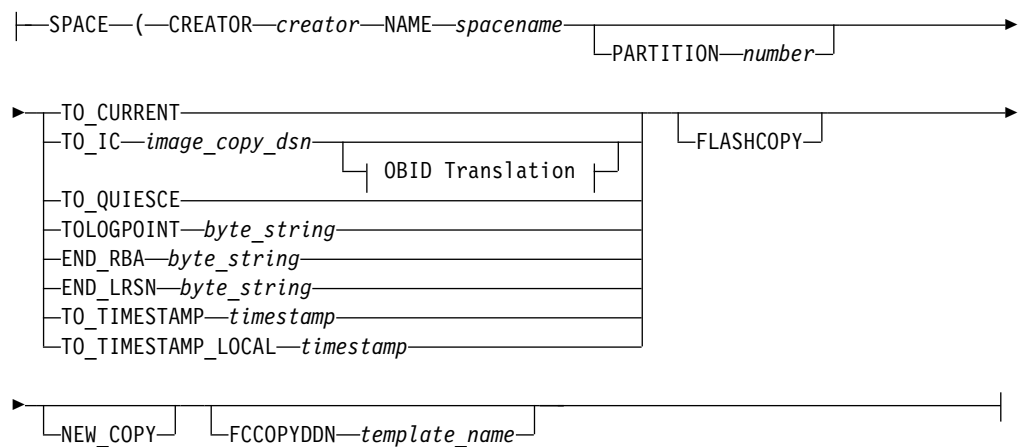
The following syntax diagram illustrates how to construct valid DB2 Analytics Accelerator Loader syntax for consistent load and image copy load jobs.

The syntax is as follows for the DB2 Analytics Accelerator Loader Consistent load and Image copy load control cards.

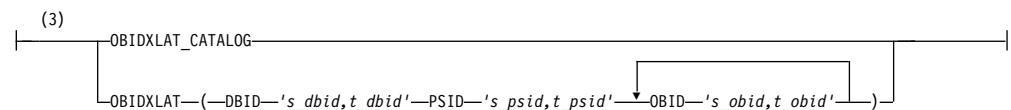




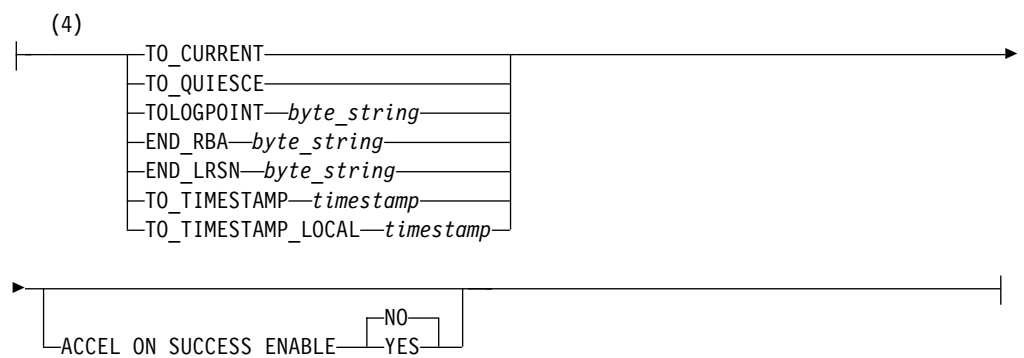
**Space Attributes:**



**OBID Translation:**



**Group Attributes:**



## Notes:

- 1 Refer to Accelerator Loader syntax for details about the valid values accepted for the IMAGE\_COPY\_PREFERENCE control card.
- 2 Refer to Accelerator Loader syntax for details about the valid values accepted for the LOG\_COPY PREFERENCE control card.
- 3 In the OBID Translation diagram, *s\_xxid* is the source ID, and *t\_xxid* is the target ID.
- 4 If you specify the control card at the SPACE level, you cannot also specify it at the GROUP level or vice versa. The specification of control cards at SPACE and GROUP levels is mutually exclusive.

## Syntax definitions: Consistent load and Image Copy load

DB2 Analytics Accelerator Loader supports the following syntax elements (presented alphabetically) for consistent load and image copy load jobs.

### ACCEL\_ADD\_TABLES

Add missing tables to the accelerator before starting the load job.

### ACCEL\_ON\_SUCCESS\_ENABLE YES | NO

Controls whether query acceleration is enabled for the table after a successful load. If DB2 discards any rows during the load, query acceleration is not enabled. Valid values are YES and NO.

### ACCEL\_REMOVE\_AND\_ADD\_TABLES

Remove and re-add existing tables to the accelerator before starting the load job.

### ACCELNAME *acceleratorName*

The name of the IBM DB2 Analytics Accelerator for z/OS to be loaded.

The ACCELNAME control card can be specified in the ISPF interface by using the **Accelerator Name** field on the Load Accelerator with Consistent Data panel or the Load Accelerator from a specified Image Copy panel.

### CONTINUE\_ON\_ERROR

Causes most errors to be ignored and processing to continue.

**Note:** If the CONTINUE\_ON\_ERROR control card is included in the JCL and errors that are higher than RC=4 are encountered, the errors are overridden. RC=4 is reported, and the job will not fail. I/O errors and other serious issues (such as out-of-memory issues) are not ignored and will still cause the job to fail.

The CONTINUE\_ON\_ERROR control card can be specified in the ISPF interface by using the Load Accelerator with Consistent Data panel or the Load Accelerator from a specified Image Copy panel, as follows:

**Continue on errors = Y**  
CONTINUE\_ON\_ERROR

**Continue on errors = N**  
omits the CONTINUE\_ON\_ERROR control card

### CREATOR '*creator\_name*'

For an image copy load, specifies the creator of the target table that will be loaded in the accelerator.

### DBID '*source\_dbid,target\_dbid*'

For an image copy load, used with the OBIDXLAT option to specify the

database IDs of the source and target DBIDs. (The source ID is only needed if the image copy is for a table space with multiple tables.)

#### END\_LRSN

END\_LRSN *byte string* directs DB2 Analytics Accelerator Loader to read the log and to incorporate data into the image copy up to the specified LRSN. Replace *byte string* with the hexadecimal value.

The END\_LRSN control card can be specified in the ISPF interface by using the **RBA or LRSN end point** field on the Load Accelerator with Consistent Data panel:

##### **RBA or LRSN end point *byte\_string***

If a hexadecimal end point is specified in the **RBA or LRSN end point** field and the job is built in a data sharing environment, END\_LRSN '*byte\_string*' will be added to the syntax.

#### END\_RBA

END\_RBA *byte string* directs DB2 Analytics Accelerator Loader to read the log and to incorporate data into the image copy up to the specified RBA. Replace *byte string* with the hexadecimal value.

##### **Note:**

- END\_RBA is not valid in a data sharing environment.
- If the RBA value that is specified on END\_RBA is a valid RBA, then DB2 Analytics Accelerator Loader will use this RBA as an end point for the DB2 Analytics Accelerator Loader image copy. If the RBA value specified is not a valid RBA, then DB2 Analytics Accelerator Loader will use the next higher valid RBA as an end point for the DB2 Analytics Accelerator Loader image copy.

The END\_RBA control card can be specified in the ISPF interface by using the **RBA or LRSN end point** field on the Load Accelerator with Consistent Data panel:

##### **RBA or LRSN end point *byte\_string***

If a hexadecimal end point value is specified in the **RBA or LRSN end point** field and the job is to be built in a non-data sharing environment, END\_RBA '*byte\_string*' is added to the syntax.

#### FCCOPYDDN (*template\_name*)

Use the FCCOPYDDN (*template\_name*) control card after the NEW\_COPY keyword to specify the FlashCopy data set template. The template is defined by the TEMPLATE control card. The data set for the Flash Copy is created based on the specified TEMPLATE DSN.

If Use FlashCopy DSN Template N is specified, the default template in DSNZPARMs for FlashCopy Image Copy will be used.

The FCCOPYDDN (*template\_name*) control card can be specified in the ISPF interface by using the **Use FlashCopy DSN Template** field on the Load Accelerator with Consistent Data panel, as follows:

##### **Use FlashCopy DSN Template = Y**

The FCCOPYDDN (*template\_name*) control card is generated into the JCL.

##### **Use FlashCopy DSN Template = N**

The default template that is specified in DSNZPARMs for the FlashCopy image copy will be used.

## FLASHCOPY

The FLASHCOPY control card can be specified in the ISPF interface by using the **Use Flashcopy** field on the Load Accelerator with Consistent Data panel:

### Use Flashcopy = Y

The control card FLASHCOPY is generated into the JCL with either a corresponding template name, or an image copy data set name. A NEW\_COPY keyword is also included in the JCL. A FlashCopy image copy is generated for each table space involved in the load process. Only this option causes a new DB2 image copy to be created.

### Use Flashcopy = N

A legacy image copy is used.

## GROUP

Use the GROUP keyword to enclose one or more SPACE keywords. You can specify multiple GROUP keywords in a single job, each holding one or more SPACE keywords. An open parenthesis must follow the GROUP keyword. Each GROUP keyword must contain one or more SPACE keywords.

## IDAA\_CONSISTENT\_LOAD

Use the IDAA\_CONSISTENT\_LOAD keyword to refresh the data on the IBM DB2 Analytics Accelerator for z/OS.

This keyword works with the Use FlashCopy option to

1. Create a new FlashCopy image copy for a single table or a list of tables that are transactionally consistent.
2. Load the data from the new image copies into the accelerator.
3. Load the data from the consistent image copies into the accelerator.

This keyword works with the TO\_CURRENT or TO\_QUIESCE control cards to begin with a valid image copy of the object on DB2 and apply log records forward through time up to a specified end point.

## IDAA\_LOAD\_IC

Use the IDAA\_LOAD\_IC keyword to load data on the IBM DB2 Analytics Accelerator for z/OS from an image copy data set (image copy load).

## IMAGE\_COPY\_PREFERENCE LPLBRPRBFC | IMAGE\_COPY\_PREFERENCE *syscopyrows*

This optional item works with the LOCAL\_SITE and RECOVERY\_SITE control cards and causes DB2 Analytics Accelerator Loader to use the user-specified scan preference. The SYSCOPY rows output by DB2 Analytics Accelerator Loader are determined by the presence of DD cards in the JCL.

- IMAGE\_COPY\_PREFERENCE uses the user-specified scan preference. This option accepts the following options:
  - LB: Scans for LB type image copies in SYSCOPY.
  - LP: Scans for LP type image copies in SYSCOPY.
  - LPLB: Scans first for LP type image copies, then for LB type image copies (and always uses LP type image copies on identically time-stamped SYSCOPY rows).
  - LPLBRB: Allows the SYSCOPY scan program to pick an RB if it came up first while scanning SYSCOPY backwards for a starting point.

- LPLBRPRBFC: (Default) Scans for LP, LB, RP, RB and FC type image copies (using the earlier listed image copy type on identically time-stamped SYSCOPY rows).

One to five codes in total can be entered in a packed 10-character maximum field. Valid codes are LP (local primary), LB (local backup), RP (recovery primary), RB (recovery backup), and FC (FlashCopy).

**Notes:**

1. This item is not required for the DB2 Analytics Accelerator Loader to run. If LOCAL\_SITE, RECOVERY\_SITE, and IMAGE\_COPY\_PREFERENCE are missing from the control cards, DB2 Analytics Accelerator Loader detects the operating mode DB2 is running under and automatically inserts either LOCAL\_SITE, RECOVERY\_SITE based on what is in ZPARM.
2. This option sets the mode in which DB2 Analytics Accelerator Loader operates. If LOCAL\_SITE is coded, only local site type image copies are scanned for use. If RECOVERY\_SITE is coded, only recovery site type image copies are scanned for use. If IMAGE\_COPY\_PREFERENCE is coded, the user-specified scanning preference is used.

The LOCAL\_SITE, RECOVERY\_SITE and IMAGE\_COPY\_PREFERENCE control cards can be specified in the ISPF interface by using the **SYSCOPY Scan Operating Mode** field on the Load Accelerator with Consistent Data panel:

**SYSCOPY Scan Operating Mode = L**  
LOCAL\_SITE

**SYSCOPY Scan Operating Mode = R**  
RECOVERY\_SITE

**SYSCOPY Scan Operating Mode = Z**  
omits the LOCAL\_SITE, RECOVER\_SITE, and IMAGE\_COPY\_PREFERENCE control cards; uses the value found in the ZPARAMs on the DB2

**SYSCOPY Scan Operating Mode = U**  
IMAGE\_COPY\_PREFERENCE *syscopyrowtypes*

**Note:** If U is specified in the **SYSCOPY Scan Operating Mode** field, you must also specify a *syscopyrows* value in the **SYSCOPY Selection Pref field**. The default *syscopyrows* value is LPLBRPRBFC.

**LOCAL\_SITE | RECOVERY\_SITE**

This optional item works with the IMAGE\_COPY\_PREFERENCE control card and tells DB2 Analytics Accelerator Loader which SYSCOPY rows to consider when finding a starting point for processing. LOCAL\_SITE uses the LP/LB rows, RECOVERY\_SITE uses the RP/RB rows. The SYSCOPY rows output by DB2 Analytics Accelerator Loader are determined by the presence of DD cards in the JCL.

- LOCAL\_SITE is the default setting and it refers to the LP/LB rows to find a starting point for processing. Equal priority is given to LP and LB rows, so if DB2 retrieves the LB row first, that will be used.
- RECOVERY\_SITE uses the RP/RB rows to find a starting point for processing. Equal priority is given to RP and RB rows, so if DB2 retrieves the RB row first, that will be used.

**Notes:**

1. This item is not required for the DB2 Analytics Accelerator Loader to run. If LOCAL\_SITE, RECOVERY\_SITE, and IMAGE\_COPY\_PREFERENCE are missing from the control cards, DB2 Analytics Accelerator Loader detects the operating mode DB2 is running under and automatically inserts either LOCAL\_SITE, RECOVERY\_SITE based on what is in ZPARM.
2. This option sets the mode in which DB2 Analytics Accelerator Loader operates. If LOCAL\_SITE is coded, only local site type image copies are scanned for use. If RECOVERY\_SITE is coded, only recovery site type image copies are scanned for use. If IMAGE\_COPY\_PREFERENCE is coded, the user-specified scanning preference is used.

The LOCAL\_SITE, RECOVERY\_SITE and IMAGE\_COPY\_PREFERENCE control cards can be specified in the ISPF interface by using the **SYSCOPY Scan Operating Mode** field on the Load Accelerator with Consistent Data panel:

**SYSCOPY Scan Operating Mode = L**  
LOCAL\_SITE

**SYSCOPY Scan Operating Mode = R**  
RECOVERY\_SITE

**SYSCOPY Scan Operating Mode = Z**  
omits the LOCAL\_SITE, RECOVER\_SITE, and IMAGE\_COPY\_PREFERENCE control cards; uses the value found in the ZPARMs on the DB2

**SYSCOPY Scan Operating Mode = U**  
IMAGE\_COPY\_PREFERENCE *syscopyrows*

**Note:** If U is specified in the **SYSCOPY Scan Operating Mode** field, you must also specify a *syscopyrows* value in the **SYSCOPY Selection Pref** field. The default *syscopyrows* value is LPLBRPRBFC.

**LOG\_COPY\_PREFERENCE R1R2A1A2 | LOG\_COPY\_PREFERENCE**  
*logging\_types*

Specifies the order in which the archive and active log lists in the BSDS are to be scanned when Accelerator Loader searches for a log to satisfy a need for log records. The value that you specify in this field must use the syntax R1 (archive log copy #1), R2 (archive log copy #2), A1 (active log #1), and A2 (active log #2). All four unique values must be specified, even if copy #2 is not used in DB2. For example:

- A1A2R1R2 - Scans the active logs before scanning the archive logs.

**Note:** Avoid using this setting because DB2 might attempt to open one of the active logs for output that Accelerator Loader is currently reading for input. Such an attempt might result in an open error within DB2.

- R1R2A1A2 - (Default) Scans the archive logs first and uses archive logs when the same range exists in an archive and active log.

The LOG\_COPY\_PREFERENCE control card can be specified in the ISPF interface by using the **Log Reader Copy Preference** field on the Load Accelerator with Consistent Data panel:

**Log Reader Copy Preference = log\_tokens**  
LOG\_COPY\_PREFERENCE *log\_tokens*



You can change the default value in the ISPF interface by using the **Log Reader Copy Preference** field on the Accelerator Loader Parameters panel.

**NAME** '*table\_name*'

For an image copy load, specifies the name of the target table that will be loaded in the accelerator.

**NEW\_COPY**

Indicates the name of the new FlashCopy data set template to be used.

The NEW\_COPY FCCOPYDDN (*template\_name*) control card can be specified in the ISPF interface by using the **Use FlashCopy DSN Template** and **Update** fields on the Load Accelerator with Consistent Data panel.

**NO\_SYSLGRNX**

Include this option if you want the product to skip reading SYSIBM.SYSLGRNX and read the DB2 log from the earliest object starting point to the latest object end point.

**Note:** Using this option might result in a significant increase in processing time due to the number of log data sets and log records read and reading the entire DB2 log.

**OBID** '*source\_obid,target\_obid*'

For an image copy load, used with the OBIDXLAT option to specify the object IDs of the source and target OBIDs. Define multiple OBID pairs as necessary.

**OBIDXLAT**

Specifies object translation information (DBID / PSID / OBID).

The source translation numbers are first in each pair of numbers. The target numbers are for the identical row structured object into which data is being copied. Define each pair on a new line.

**OBIDXLAT\_CATALOG**

For an image copy load, instructs the product to collect translation target numbers from the DB2 system on which the operation runs, and populate the output data pages with those numbers.

The product takes the target numbers from the DB2 catalog of the specified object (*creator.name*), skips the matching process, and treats all row data in the image copy with the target number from the DB2 catalog.

**Note:** This option is valid for an image copy with only one table. If the option is specified for a multi-table image copy, or if the catalog indicates that the number of tables in the table space is greater than one, an error results. For a multi-table image copy, specify the OBIDXLAT option, along with DBID, PSID, and OBID.

**PARALLEL** '*x,y*'

Indicates the number of parallel log read and log apply tasks that can run where:

**x** (Default 0) The number of parallel log read tasks. Valid values are integers, 0-16. Specifying a value of 0 for *x* means that a maximum of one task per data sharing group member will run at the same time. If a nonzero value is specified for *x*, then that number is the maximum number of parallel tasks that can run at the same time for log read. If there are more logs to read than the number of

parallel tasks that were specified for *x*, a task to read the remaining logs is started as soon as a running task finishes and until all necessary logs have been read.

**y** (Default 1)

The number of parallel log apply tasks. Valid values are integers, 1 - 10. If a value greater than 1 is specified, and there is a single GROUP(...) control card structure present, the DB2 Analytics Accelerator Loader batch process clusters and reorders partitioned objects to distribute the objects into the specified number of tasks, and load the partitions in parallel. If there are multiple GROUP(...) control card structures present, the *y* value is ignored, and each GROUP is assigned its own parallel task.

When partition-level image copies are on tape, and the value of *y* is greater than 1, the following conditions apply:

- If each image copy is on a different VOLSER, the specified number of parallel tasks will be used for log apply processing.
- If all image copies are stacked on the same VOLSER, only one log apply task will be performed.

The PARALLEL control card can be specified in the ISPF interface by using the **Number of PARALLEL log read** and **Number of PARALLEL log apply** fields on the Load Accelerator with Consistent Data panel:

**Number of PARALLEL log read = *x***  
**Number of PARALLEL log apply = *y***  
PARALLEL '*x,y*'

The default value for the batch option is 1. However, the default value of the **Number of PARALLEL log apply** field on the Load Accelerator with Consistent Data panel is 4.

**PSID 'source\_psid,target\_dbid'**

For an image copy load, used with the OBIDXLAT option to specify the pageset IDs of the source and target PSIDs. (The source ID is only needed if the image copy is for a table space with multiple tables.)

**TEMPLATE**

**NAME *template\_name***

**DSN *template\_dsn***

Used to define templates that are to be used with FCCOPYDDN to specify the Flash Copy image copy data set. You can specify one or more templates.

**TOLOGPOINT**

TOLOGPOINT *byte string* directs DB2 Analytics Accelerator Loader to read the log and to incorporate data into the image copy up to the specified log point. Replace *byte string* with the actual log point value.

TOLOGPOINT is valid for both non-data sharing and data sharing runs. If TOLOGPOINT is used, the value will be accepted as an RBA in non-data sharing and an LRSN in data sharing.

**TO\_TIMESTAMP | TO\_TIMESTAMP\_LOCAL**

TO\_TIMESTAMP *byte string* directs DB2 Analytics Accelerator Loader to read the log and to incorporate data into the image copy up to the specified timestamp. Replace *byte string* with the timestamp value.

**Note:** Timestamps are always handled in GMT/Universal time internally. If a local timestamp is presented to the process, it must conditionally be converted to GMT/Universal. TO\_TIMESTAMP is a GMT/Universal timestamp (no conversion necessary), while TO\_TIMESTAMP\_LOCAL is a local time zone timestamp that must be converted to GMT/Universal. The time zone in which the machine operates is given at IPL time, so no user input is required for the conversion from local to GMT/Universal.

The TO\_TIMESTAMP control card can be specified in the ISPF interface by using the **Timestamp end point** and **Time zone of timestamp** fields on the Load Accelerator with Consistent Data panel:

**TO\_CURRENT** | **TO\_IC** | **TO\_QUIESCE** | **END\_RBA** *byte string* | **END\_LRSN** *byte string*

This required choice enables you to specify the point up to which you want to make the image copy.

**Note:** DB2 Analytics Accelerator Loader enables you to specify an end point (RBA/LRSN) from SYSCOPY (START\_RBA) that is of ICTYPE "Y", "S", or "W".

The TO\_CURRENT and TO\_QUIESCE control cards can be specified in the ISPF interface by using the **Load time** field on the Load Accelerator with Consistent Data panel:

**Load time = C**  
TO\_CURRENT

**Load time = Q**  
TO\_QUIESCE

#### **TO\_CURRENT**

Reads the log and incorporates data into the image copy up to the current point in time, which is the end of the log file.

The TO\_CURRENT control card can be specified in the ISPF interface by using the **Load time** field on the Load Accelerator with Consistent Data panel:

**Load time = C**  
TO\_CURRENT

#### **TO\_IC** *'image\_copy\_dsn'*

Specifies the source image copy data set. The source data set and its associated image copy can be on the same or different DB2 subsystems. The source image copy can be a data set that you constructed, for example, from a SELECT against the SYSCOPY table on the source DB2 subsystem.

The source image copy cannot be a FlashCopy image copy.

#### **TO\_QUIESCE**

Reads the log and incorporates data into the image copy up to the previous quiesce point.

The TO\_QUIESCE control card can be specified in the ISPF interface by using the **Load time** field on the Load Accelerator with Consistent Data panel.

**Load time = Q**  
TO\_QUIESCE

### **USER\_INDICATOR xxx**

Specifies a group of control file records for operation. The startup CLIST supplies the value for the USER\_INDICATOR control card.

#### **Notes:**

1. If a USER\_INDICATOR value is supplied in the batch job, a control file that has been loaded with set-up information will be necessary.

The USER\_INDICATOR control card cannot be specified in the ISPF interface. The startup CLIST supplies the value for the USER\_INDICATOR control card.

### **USE\_ABOVE\_THE\_BAR 'primary,secondary,count'**

Allows the use of above-the-bar memory and specifies the number of primary, secondary, and maximum segments to be allocated:

- primary - The number of segments (megabytes) of above-the-bar storage obtained initially.
- secondary - The number of segments (megabytes) of above-the-bar storage obtained when the primary segments are used up.
- count - The limit placed on the total number of segments that can be obtained. This limit stops runaway getmains by failing if the limit is reached.

---

## **Loading from an external file**

Accelerator Loader provides options for the DB2 LOAD utility to enhance load processing for Analytics Accelerator. These options are in addition to those that the native DB2 LOAD utility provides. The options manipulate the data in the input records for the LOAD utility before the data is loaded.

Before you build and run a job that loads from an external file, review all reference and conceptual information for the feature, including the correct syntax, usage considerations, and examples. Also ensure that you have completed the following tasks:

- In the DSNUTILB intercept policy for the Accelerator Loader started task that you will use for implementing the LOAD options, verify that the correct DB2 subsystem is specified. Use the <DB2SYSTEM> element within the <POLICY> section to specify the subsystem on which you want the enhanced LOAD processing to occur.
- In the LOAD utility statement, add the Accelerator Loader options that you want to use.
- Ensure that the DSNUTILB intercept status is enabled. To display the intercept status, issue the DISPLAY INTERCEPT command from the z/OS console. If the intercept is disabled, activate it by using the ACTIVATE INTERCEPT command.
- Ensure that the batch utility JCL contains the DD statement HLO//DUMMY DD DUMMY.

#### **Related concepts:**

“Loading data from an external file” on page 7-1

You can generate JCL that loads data from an external file into IBM DB2 Analytics Accelerator for z/OS and optionally into DB2.

“Restrictions and considerations for loading from an external file” on page 7-1

Review usage restrictions and considerations before loading data from an external file.

“Managing DSNUTILB interception” on page 11-441

You can manage DSNUTILB interception by performing some routine and occasional tasks.

**Related tasks:**

“Adding syntax to an existing load job” on page 7-6

To quickly load data from an external file into both DB2 and an accelerator, modify an existing batch job.

“Using the ISPF interface to create or edit a profile to load from an external file” on page 7-7

Dual and External load profiles are reusable groups of options for building a job to load data from an external file into DB2, an accelerator, or both. You can create a profile that saves your selections and reuse the profile to perform future loads from an external file.

## **Example JCL: Loading from an external file**

### **Example: Nonparallel load**

The following figure contains example JCL to load data to both the accelerator and DB2 from an external file.

```

//JOB CARD JOB USER01,CLASS=A,MSGCLASS=X,MSGLEVEL=(1,1),
// USER=&SYSUID,NOTIFY=&SYSUID
//*
//*
//*
//** * * * * *
//*
//* Job Generated by Accelerator Loader
//*
//* DB2 SSID: QAA5
//* Profile: USER01.DUAL LOAD TEST
//* Desc: Load from External
//* User: USER01
//* Date: Friday 15/12/28
//* Time: 09:39:40.04
//*
//** * * * * *
//*
//** * * * * *
//*
//* Step: HL0D0100
//*
//* Desc: This step will invoke Accelerator Loader
//*
//** * * * * *
//HL0D0100 EXEC PGM=DSNUTILB,
// REGION=1024M,
// PARM=('QAA5','USER01.LOAD')
//STEPLIB DD DISP=SHR,DSN=QDS5.SDSNEXIT
// DD DISP=SHR,DSN=DSN.VA10.SDSNLOAD
//HL0DUMMY DD DUMMY
//SYSPRINT DD SYSOUT=*
//UTPRINT DD SYSOUT=*
//SYSIN DD *
    TEMPLATE ISYSREC
        DSN 'USER01.DA1A.HLOLAB2D.HLOTS2.SYSREC'
        DISP(SHR,KEEP,KEEP)
    TEMPLATE ISYSERR
        DSN &US..IDSE.&DB..&TS..&UQ.
        DISP(MOD,CATLG,CATLG)
        SPACE (10,100) CYL
    TEMPLATE ISYSMAP
        DSN &DB..&SN..&US..&JO.
        DISP(MOD,CATLG,CATLG)
        SPACE (10,100) CYL
    TEMPLATE ISYSUT1
        DSN &US..IDSU.&DB..&TS..&UQ.
        DISP(MOD,DELETE,CATLG)
        SPACE (10,100) CYL
    TEMPLATE ISORTOUT
        DSN &US..IDSO.&DB..&TS..&UQ.
        DISP(MOD,DELETE,CATLG)
        SPACE (10,100) CYL
    LOAD DATA
        IDAA_DUAL ON QDS5ACC1
        INDDN ISYSREC
        KEEPDICTIONARY
        SORTDEVT SYSALLDA SORTNUM 4
        ERRDDN ISYSERR
        MAPDDN ISYSMAP
        DISCARDN ISYSDISC
        WORKDDN(ISYSUT1,ISORTOUT)
        INTO TABLE
            "HLONW22"."HLOOBJSTAT"
            NUMRECS 10
            (
                "NAME"
                POSITION( 00004:00023) CHAR(00020)
                , "CABLE"
                POSITION( 00025:00044) CHAR(00020)
                , "STATE"
                POSITION( 00046:00065) CHAR(00020)
            )
//*
//

```

Figure 9-3. Nonparallel load from external file example JCL

## Example: Parallel load sample utility statement

```
LOAD DATA REPLACE
  IDAA_DUAL ON RAIBACC1
  ACCEL_LOAD_TASKS 2
  LOG NO
  INTO TABLE EXMTSTDB.PTB1
    PART 1 INDDN SYSR01
    NUMRECS 2000000
    ( INT_1 POSITION( 00001:00010 ) INTEGER EXTERNAL(10)
      ,CHAR_2 POSITION( 00020:00025 ) CHAR
    )
  INTO TABLE EXMTSTDB.PTB1
    PART 2 INDDN SYSR02
    NUMRECS 2000000
    ( INT_1 POSITION( 00001:00010 ) INTEGER EXTERNAL(10)
      ,CHAR_2 POSITION( 00020:00025 ) CHAR
    )
```

Figure 9-4. DB2 LOAD utility statement to perform a parallel load

## Customizing the example JCL to load from an external file

The following steps describe the changes that you must make to your existing LOAD JCL to match the example JCL. Steps are required unless otherwise noted.

### Procedure

1. Enter a valid job card for your site.
2. Change the STEPLIB DD data set file names to point to the DB2 Analytics Accelerator Loader program library. If you did not copy module DSNUTILF from the product library into your DB2 load library, then this step is required.
3. Specify the SYSREC file and the SYSPUNCH file.

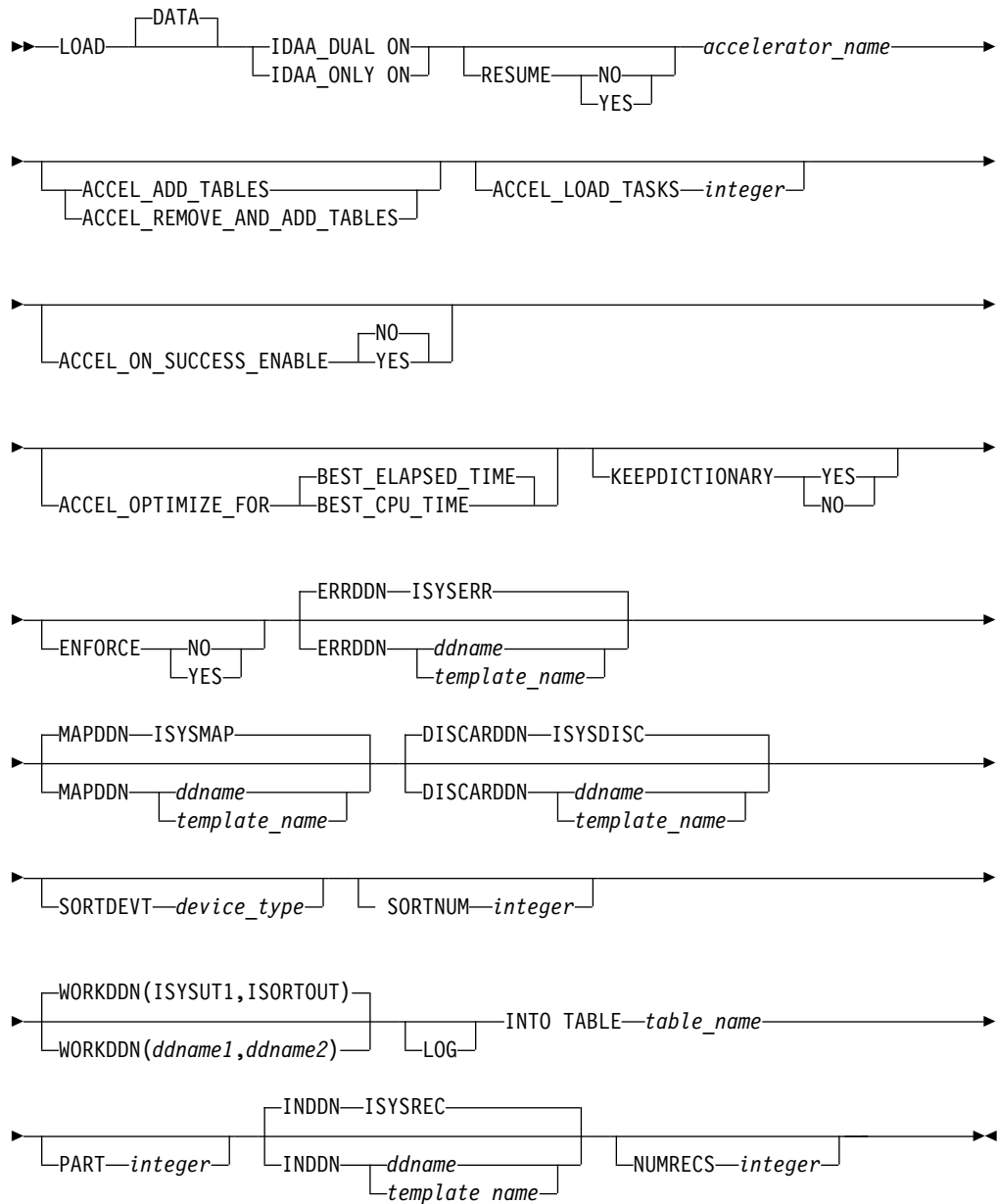
**Note:** The SYSPUNCH file is required unless you put the LOAD utility statement into the SYSIN DD in-stream.

4. If the SYSPUNCH DD will be used instead of the control cards that are supplied in-stream, then you must edit the syntax to include the required parameter.
5. If the LOAD control cards are supplied in the JCL in-stream, then after the LOAD DATA parameter, add one of the following extended syntax options:
  - To load data into only the accelerator:  
IDAA\_ONLY ON *accelerator\_name*
  - To load data into both the accelerator and DB2:  
IDAA\_DUAL ON *accelerator\_name*
6. Add the following DD statement to the JCL:  
//HLODUMMY DD DUMMY
7. Specify a data set or \* for the SYSPRINT.
8. Modify the LOAD utility syntax as needed for your site.

## Syntax diagram: Load from external file

The following syntax diagram illustrates how to construct valid DB2 Analytics Accelerator Loader syntax for a load from external job.

The syntax of the DB2 Analytics Accelerator Loader load from external control cards is as follows.



## Syntax definitions: Load from an external file

DB2 Analytics Accelerator Loader supports the following syntax elements (presented alphabetically) when you are loading data from an external file.

### ACCEL\_ADD\_TABLES

Add missing tables to the accelerator before starting the load job.

This option can be specified in the ISPF interface by using the **Add table to Accelerator** field on the Load Accelerator and DB2 from External File panel or the Load Accelerator from External File panel.

### ACCEL\_REMOVE\_AND\_ADD\_TABLES

Remove and re-add existing tables to the accelerator before starting the load job.



This option can be specified in the ISPF interface by using the **Add table to Accelerator** field on the Load Accelerator and DB2 from External File panel or the Load Accelerator from External File panel.

**ACCEL\_LOAD\_TASKS** *integer*

Specifies the number of partitions to load into the accelerator and optionally into DB2 in parallel when loading from an external file. Valid values are in the range 1 - 20.

This value cannot exceed the value of the IBM DB2 Analytics Accelerator for z/OS parameter **AQT\_MAX\_UNLOAD\_IN\_PARALLEL**, which indicates the maximum number of partitions that can be loaded in parallel. If **AQT\_MAX\_UNLOAD\_IN\_PARALLEL** is set to 2, the maximum number of partitions that can be written to the accelerator at one time is 2, regardless of the value that you specify for **Parallel load tasks ACCEL\_LOAD\_TASKS**.

Specify a value for NUMRECS also. For more information, see the description of the NUMRECS option.

The default value is 4.

The corresponding options module option is **Parallel load tasks**.

This option can be specified in the ISPF interface by using the **Load tasks** field on the Load Accelerator and DB2 from External File panel or the Load Accelerator from External File panel.

**ACCEL\_ON\_SUCCESS\_ENABLE** **YES | NO**

Controls whether query acceleration is enabled for the table after a successful load. If DB2 discards any rows during the load, query acceleration is not enabled. Valid values are YES and NO.

This option can be specified in the ISPF interface by using the **Acceleration on success** field on the Load Accelerator and DB2 from External File panel or the Load Accelerator from External File panel.

**ACCEL\_OPTIMIZE\_FOR** **BEST\_ELAPSED\_TIME | BEST\_CPU\_TIME**

**Note:** This parameter applies to the following cases:

- Loads that use a Dual load profile or the IDAA\_DUAL extended syntax option
- Nonparallel processing
- Loads to tables that are not partitioned or are partitioned by growth

Specifies whether to optimize the load for elapsed time or for CPU consumption. Valid values are:

- **BEST\_ELAPSED\_TIME**: Reduces elapsed time.
- **BEST\_CPU\_TIME**: Reduces CPU consumption.

**DATA** Specifies that data is to be loaded. This keyword is optional and is used for clarity only.

**DISCARD** **DD** *ddname*

Specifies the template or DD name for a data set to be used for discarding data rows.

This option can be specified in the ISPF interface by using the **DISCARD** **DD** **template DD name** field on the Load Accelerator and DB2 from External File panel.

**ENFORCE YES | NO**

Specifies whether to enforce check constraints and referential constraints. Valid only with **IDAA\_DUAL ON *accelerator\_name***. **ENFORCE YES** requires MAPDDN.

This option can be specified in the ISPF interface by using the **ENFORCE** field on the Load Accelerator and DB2 from External File panel.

**ERRDDN *ddname***

Specifies the template or DD name for an error processing data set. This data set is required with the **ENFORCE** option.

This option can be specified in the ISPF interface by using **ERRDDN template DD name** field on the Load Accelerator and DB2 from External File panel.

**IDAA\_DUAL ON *accelerator\_name***

Indicates that you want to load data to both the accelerator and DB2. Replace *accelerator\_name* with the name of the accelerator that you want to load.

This control card can be chosen in the ISPF interface by using the Load Accelerator and DB2 from External File panel.

**IDAA\_ONLY ON *accelerator\_name***

Indicates that you want to load data to the accelerator only. Replace *accelerator\_name* with the name of the accelerator that you want to load. If the load job specifies LOAD REPLACE, existing data in the DB2 table or partition is deleted.

This control card can be chosen in the ISPF interface by using the Load Accelerator from External File panel.

**INDDN *ddname***

Include this control card in the LOAD utility command to specify the fully qualified data set name of the SYSREC data set or template that contains the data to be loaded. If the data set is a PDS, the member name is required.

The **TEMPLATE ISYSREC *sysrec.file.name*** statement and **INDDN ISYSREC** control card can be specified in the ISPF interface by using the **Input data set name** field on the Load Accelerator and DB2 from External File panel or the Load Accelerator from External File panel.

**KEEPDICTIONARY**

Indicates whether the LOAD utility is to build a new compression dictionary.

This option can be specified in the ISPF interface by using **KEEPDICTIONARY=Yes** on the Load Accelerator and DB2 from External File panel.

**LOG YES | NO**

Indicates whether logging is to occur.

This option can be specified in the ISPF interface by using the **LOG** field on the Load Accelerator and DB2 from External File panel.

**MAPDDN *ddname***

Specifies the template or DD name for a map data set to be used for record processing. This data set is required with the **ENFORCE** option.

This option can be specified in the ISPF interface by using the **MAPDDN template DD name** field Load Accelerator and DB2 from External File panel.

**NUMRECS** *integer*

Specifies the number of input records for the specified table or table partition. Valid values are integers between 1 and 1099511627776, or blank.

If the LOAD utility statement does not provide the number of SYSREC records with a NUMRECS or a SORTKEYS clause, the product estimates the record count. Using the estimated record count, it then adds a NUMRECS clause for each INTO TABLE clause. The record count enables DB2 to size index-build sorts, and reduces the possibility of sort failures when loading to both the accelerator and DB2.

If the LOAD utility statement does not provide the number of SYSREC records with a NUMRECS or a SORTKEYS clause, the product estimates the record count. Using the estimated record count, it then adds a NUMRECS clause for each INTO TABLE clause. The record count enables DB2 to size index-build sorts, and reduces the possibility of sort failures when loading to both the accelerator and DB2.

This option can be specified in the ISPF interface by using the **NUMRECS** field on the Load Accelerator and DB2 from External File panel.

**RESUME**

Specify Yes to generate the control card LOAD RESUME YES into the JCL. The product appends data to the accelerator table rather than replacing it. When loading to both DB2 and the accelerator, DB2 will also append the data to the DB2 table. When loading to only the accelerator, no data is added to the DB2 table, but any existing data in DB2 is left intact. Specify No if you want the product to replace existing data rather than appending it.

This option can be specified in the ISPF interface by using the **RESUME** field on the Load Accelerator and DB2 from External File panel or the Load Accelerator from External File panel.

**SORTDEVT** *device\_type*

Specifies the device type to be used for temporary sort data sets. Valid values are 1 - 8 alphanumeric characters. Valid only with **IDAA\_DUAL ON**.

This option can be specified in the ISPF interface by using the **SORTDEVT** field on the Load Accelerator and DB2 from External File panel.

**SORTNUM** *integer*

Specifies the number of sort data sets that are to be allocated. Valid values are 2 - 255. Valid only with **IDAA\_DUAL ON**.

This option can be specified in the ISPF interface by using the **SORTNUM** field on the Load Accelerator and DB2 from External File panel.

**WORKDDN** (*ddname1,ddname2*)

Specifies the DD statements for the temporary work file for sort input and sort output. Temporary work files for sort input and output are required if the LOAD involves tables with indexes.

*ddname1* is the DD name for the temporary work file for sort input. The default value is ISYSUT1. This option can be specified in the ISPF interface

by using the **SYSUT1 template DD name** field on the Load Accelerator and DB2 from External File panel or the Load Accelerator from External File panel.

*ddname2* is the DD name for the temporary work file for sort output. The default value is ISORTOUT. This option can be specified in the ISPF interface by using the **SORTOUT template DD name** field on the Load Accelerator and DB2 from External File panel..

---

## Administering the Accelerator Loader server

You can perform tasks to manage the Accelerator Loader server and work with trace and events features.

### Topics:

- “Configuring server advanced security (optional)”
- “Modifying IMS parameters” on page 10-9
- “Configuring access to SMF files” on page 3-49
- “Rules and events” on page 10-11
- “LUW authentication” on page 10-66
- “Viewing Server Trace information” on page 10-70
- “Modifying the client time out parameter” on page 10-78
- “Creating SMF records from the server” on page 10-79

---

## Configuring server advanced security (optional)

System programmers typically configure advanced security during Accelerator Loader server customization. The Accelerator Loader server provides protection for its resources by using RACF classes, Top Secret classes, and ACF2 generalized resource rules.

The overall RACF class (or resource type for ACF2) for the server is specified with the configuration parameter RESOURCETYPE. This parameter is located in data set *hlq.SHLVEXEC* member *hlvidIN00*, where *hlvid* represents the name of the Accelerator Loader server started task that was customized by using Tools Customizer. If a value is not specified, RESOURCETYPE defaults to NON (none), which disables all product authorization checking.

If authorization checking is disabled, any user with a valid TSO user ID can access the product ISPF interface, where they are fully authorized to perform the functions that are provided by the interface.

To enable authorization checking, change the value of RESOURCETYPE to HLV:

```
"MODIFY PARM NAME(RESOURCETYPE) VALUE(HLV)"
```

The following table describes the resources that are protected by the product security mechanism.

**Note:** You cannot modify the resource names.

Name	Description
ATHZOOM	Access to server trace authorization event PF4 Zoom information.
GLOBALS	Access to global variables.
PARMS	Access to the ISPF/SDF parameter display.
SEF	Access to the Event Facility dialogs.
TRACEBROWSE	Access to the server trace facility.

Name	Description
TRACEDATA	Access to all trace data, including SQL and underlying binary file trace records.

When a user invokes a Accelerator Loader server resource, the user's ID and the class of the resource are passed to the security program for authorization. The security program uses rules that you specify to determine whether to grant access to the resource.

To expedite future authorization checks of an identical request, Accelerator Loader server keeps the results of all security checks in protected storage.

The “look-aside” security check information is saved on a Task Control Block (TCB) basis and remains in effect until the TCB terminates. If you are initially denied access, but later have your security profile that is changed to allow access, you must exit the ISPF/SDF application to terminate its TCB. Depending on the security package, you may have to take other actions. Under ACF2, for example, you must issue the **ACFRESET** command. All security authorization events are logged in the server trace facility, and if access is denied, a message is produced.

The type of access you request — ADD/ALTER, READ, or UPDATE — depends on which resource you are using. The ACF2 ADD is equivalent to the RACF ALTER. The following table shows the type of access that is required to use Accelerator Loader server facilities.

Table 10-1. Accelerator Loader server access requirements

Resources	Action	Suggested User	Access Required
ATHZOOM	Viewing server trace authorization event PF4 zoom information.	DBA, Program Products, VTAM, Operations	READ
CONTROLBLOCK	Using the HLV command.	DBA, Program Products, VTAM, Operations	READ
CONTROLBLOCK, HLV	Viewing product control blocks using the ISPF/SDF option <b>HLV Admin HLV Blocks</b> .	DBA, Program Products	READ
CONTROLBLOCK, HLV	Modifying product control blocks using a future facility.	DBA, Program Products	UPDATE
DATABASES	Viewing databases using the ADDRESS HLV DISPLAY DATABASE command.	DBA, Program Products, VTAM, Operations	READ
GLOBALS	Viewing global variables.	All (DBA, Program Products, Operations, Developers, End-Users)	READ
GLOBALS	Updating global variables.	DBA, Administrator, Developers	UPDATE
PARMS, HLV	Modifying Accelerator Loader server parameters using the ADDRESS HLV MODIFY PARM command.	DBA, Program Products, VTAM, Operations	UPDATE
PARMS, HLV	Viewing all server trace data.	DBA, Program Products, VTAM, Operations	READ

Table 10-1. Accelerator Loader server access requirements (continued)

Resources	Action	Suggested User	Access Required
SEF, DATAMAP	Refreshing Data Maps	DBA, Admin	READ access to SEF; UPDATE access to DATAMAP.
TRACEBROWSE, TRACEDATA, HLV	Issuing SQL statements via SPUFI.	DBA, Program Products, VTAM, Operations	READ

## Defining resources to RACF

### Procedure

1. Define a new RACF class to the RACF class descriptor table for the Accelerator Loader server subsystem. Use the following example JCL as a model.

```
//STEP1 EXEC ASMHCL
//C.SYSLIB DD DSN=SYS1.MODGEN,DISP=SHR
//C.SYSIN DD *
HLV ICHERCDE CLASS=HLV,
    ID=128,
    MAXLNTH=39,
    FIRST=ALPHANUM,
    OTHER=ANY,
    POSIT=25,
    OPER=NO
    ICHERCDE
/*
//L.SYSLMOD DD DSN=SYS1.LINKLIB,DISP=SHR
//L.SYSIN DD *
    INCLUDE SYSLMOD(ICHRRCDE)
    ORDER HLV
    ORDER *** Previous user-defined classes ***
    ORDER *** Previous user-defined classes ***
    ORDER ICHRRCDE
    NAME ICHRRCDE(R)
/*
```

2. To enable RACF to recognize the new class, complete the following tasks:
  - a. Restart the Accelerator Loader server.
  - b. Perform an IPL to change the RACF class descriptor table.
3. Define all RACF resource types to class HLV with the following command. Repeat the RDEFINE command for each RACF resource type.

```
RDEFINE HLV CONTROLBLOCKS UACC(NONE)
```
4. Provide access to the resource with the following command, where USERID is the ID of the user to whom you want to grant READ permissions access.

```
PERMIT CONTROLBLOCKS CLASS(HLV) ID(USERID) ACCESS(READ)
```
5. If you do not want the FACILITY class to be used, define the RACF class descriptor and router table according to the example in member *hlq.SHLVCNTL(HLVRADF2)*.
6. To define and add permissions for each resource that is required by your site, edit and submit the job that is located in member *hlq.SHLVCNTL(HLVRARES)*.
7. Activate the class to RACF with the following command:

```
SETROPTS CLASSACT(HLV)
```

## What to do next

These members must be updated every time a new security resource name such as ATHZOOM, USERS, HLV is added.

## Defining resources to Top Secret

### Procedure

1. Define an entry in the RDT, as shown in the following example, where *x* is the last character of the Accelerator Loader server subsystem name and *nn* is a hexadecimal code between 01 and 3F;

```
TSS ADDTO(RDT) RESCLASS(HLV) RESCODE(nn)-  
      ATTR(LONG,PRIV,LIB,DEFPROT,GENERIC)-  
      ACLST(NONE,ALL,ALTER=1COO,UPDATE,READ)DEFACC(READ)
```

2. Add all resources to an owner with the following command. Repeat the command for all resource types.

```
TSS ADDTO(owner) HLV(CONTROLBLOCKS)
```

3. Permit the resources to profiles or users with the following command:

```
TSS PERMIT(userid) HLV(TRACEDATA) ACC(READ)
```

4. To define and add permissions for each resource that is required by your site, edit and submit the job that is located in member *hlq*.SHLVCNTL(HLVTSRES).

## What to do next

These members must be updated every time a new security resource name such as ATHZOOM, USERS, HLV is added.

## Defining resources to ACF2

### Procedure

1. Define a generalized resource class named HLV.
2. Define resource rules for each resource class according to the example in member *hlq*.SHLVCNTL(HLVA2RES).
3. Allow users access to the resource rule with the following command:  

```
ACFNRULE KEY(TRACEBROWSE) TYPE(HLV) ADD(UID(*****userid) ALLOW
```
4. To define and add permissions for each resource that is required by your site, edit and submit the job that is located in member *hlq*.SHLVCNTL(HLVA2RES).

## Optionally restrict ISPF load modules

If you use TSO Command to restrict access to TSO commands, you must define the Accelerator Loader server ISPF load modules to your security product.

Table 10-2. Accelerator Loader server load modules

Load module	Description
HLV	TSO command to invoke S__ interactive application.
HLV2RU	Routine to invoke Accelerator Loader server ISPF application.
HLVI	REXX Implicit Interpreter TSO Command processor.
HLVICOMP	REXX Implicit Interpreter TSO Command processor.
HLVIDB	REXX Implicit Interpreter TSO Command processor.
HLVIMEX	REXX Implicit Interpreter TSO Command processor.



Table 10-2. Accelerator Loader server load modules (continued)

Load module	Description
HLVOB	Alias for HLVOCP.
HLVOCP	Server Trace (Trace Browse) routine.
HLVORU	Server Trace (Trace Browse) routine.
HLVX	REXX Implicit Interpreter TSO Command processor ( Server REXX).
HLVXCOMP	REXX Implicit Interpreter TSO Command processor.
HLVXDB	REXX Implicit Interpreter TSO Command processor.
HLVXSCAN	REXX Implicit Interpreter TSO Command processor.
HLVOCM	Host command environment for address HLV.
HLVISCBR	Display product control blocks.
HLVISSTR	Display product statistics.
HLVISTBR	General-purpose table display routine.
HLVISVAR	ISPF product variables display.
HLVLINK	Main product module.
HLVRXBR	Browse routine for REXX S__ line variables.
HLVRXDM	A REXX function to call new DMF parser.
HLVRXID	A REXX function for issuing commands to IDCAMS.
HLVRXIN	Initialize the REXX environment.
HLVRXLEL	Bridge REXX TO LE/370 main routine.
HLVRXPC	Product-related control block function.
HLVRXSG	REXX function for examining storage in another address space.
HLVRXST	Product-related control block function.
HLVRXTE	Terminate REXX environment.
HLVRXTK	REXX function for parsing strings into token.
HLVRXVA	REXX function for manipulating variables in a calling REXX exec.
HLVSLSVM	SSL
HLVSLUTC	SSL
HLVSLUTC	SSL
HLVSLUTD	SSL
HLVSLUTK	SSL
HLVSLUTP	SSL
HLVSLUTR	SSL

## Controlling information access with the TRACEDATA resource

The TRACEDATA resource controls access to information in the trace log.

### About this task

The two types of information that are contained within the Accelerator Loader server trace log:

- SQL source statements (the real SQL source statements, as taken from database request modules or prepared strings, which may contain table names, column names, and so on).
- Binary data that underlies the trace log.

Users who have READ authority for the TRACEDATA resource and READ authority for HLV and TRACEBROWSE can view the entire trace log. Users who do not have READ authority have only restricted access to this information.

For SQL events, if your user ID matches the user ID associated with the event, you are permitted to look at an uncensored log of the SQL event. Otherwise, you can only see a censored representation of the SQL statement. The censored version includes the SQL verb but does not include table names, column names, and so on.

## Secure Sockets Layer (SSL)

Secure Socket Layers (SSL) is transparently supported by the Application Transparent Transport Layer Security (AT-TLS), an IBM TCP/IP facility.

Accelerator Loader server supports connections in the following ways:

- Ports that recognize an SSL connection and automatically enable an SSL session.
- Ports that are for secure connections that always send encrypted data.

### Related concepts:

“SSL preferences” on page 5-27

Enable SSL to secure JDBC and HTTP network communications between the Accelerator Loader studio and the Accelerator Loader server.

## Enabling SSL support

Review instructions for enabling Secure Socket Layers (SSL) support.

### Before you begin

The user ID must have READ permission for the IRR.DIGTCERT.LISTRING and IRR.DIGTCERT.LIST profiles in the RACF FACILITY class. If SSLUSERID is not specified, the Accelerator Loader server address space default user ID is used.

### About this task

For a description of each parameter, see the table that follows the procedure.

### Procedure

1. In data set *hlq*.SHLVEXEC, locate member *hlvid*IN00, where *hlvid* represents the name of the Accelerator Loader server started task that was customized by using Tools Customizer.
2. Use the MODIFY PARM command to set the following parameters and ports:

```
"MODIFY PARM NAME(SSL) VALUE(YES)"
"MODIFY PARM NAME(SSLAUTODETECT) VALUE(NO)"
"MODIFY PARM NAME(SSLCLIENTAUTH) VALUE(LOCAL)"
"MODIFY PARM NAME(SSLCLIENTNOCERT) VALUE(ALLOW)"
"MODIFY PARM NAME(SSLUSERID) VALUE(USERID)"
```

### Required ports:

```
"MODIFY PARM NAME(OEPORTNUMBER) VALUE(XXXX)"
"MODIFY PARM NAME(WSOEPORT) VALUE(XXXX)"
```

### Optional ports:

"MODIFY PARM NAME(OENLPORTNUMBER) VALUE(0)"  
 "MODIFY PARM NAME(OESSLPORTNUMBER) VALUE(0)"  
 "MODIFY PARM NAME(WSOEBALANCEDPORT) VALUE(0)"  
 "MODIFY PARM NAME(WSOESSLPORT) VALUE(0)"

Parameter and description	Valid values
<b>SSL</b> Enables SSL connections.	<b>YES</b> (default) SSL connections enabled. <b>NO</b>
<b>SSLAUTODETECT</b> <i>(Optional)</i> Specifies whether the server automatically detects SSL connections that are sent on the port that is normally used for cleartext connections. <b>Note:</b> A separately configured SSL port accepts only SSL connections.	<b>YES</b> When set to YES, the server automatically detects SSL connections. <b>NO</b> (default) When set to NO, only cleartext connections can be handled on the cleartext port.
<b>SSLCLIENTAUTH</b> Specifies how SSL client certificates are authenticated.  Configuration of SSL support for use in Accelerator Loader server requires that you designate the location of the certificate and keystore that the IBM-supplied SSL components use. The SSL support for the server can be configured to use a pair of native IBM SSL key database and key stash files.	<b>LOCAL</b> (default) The server requests a client certificate during the SSL connection setup handshake. Certificates that are sent by the client are authenticated by using the certificate store that is designated by other SSL startup parameters. They are either a GSK SSL key database, or a RACF keyring.  <b>NONE</b> The server does not make SSL client certificate processing active and does not request client certificates.  <b>PASSTHRU</b> The server requests a client certificate during the SSL connection setup handshake. Certificates that are sent by the client are not authenticated upon receipt but are available for inspection by the transaction.
<b>SSLCLIENTNOCERT</b> <i>(Optional)</i> Specifies the action to take if an SSL client fails to provide a valid x501 certificate during session establishment. <b>Note:</b> <ul style="list-style-type: none"> <li>The failure by the client to provide a certificate might be because of the lack of mutually trusted signing authority. Lack of a certificate does not prevent the SSL session from being established and used.</li> <li>The SSL handshake at session establishment completes before application of the FAILURE action.</li> </ul>	<b>ALLOW</b> (default) Allows the server to continue processing, ignoring failure by the client or in ability to provide a certificate.  <b>FAIL</b> The server terminates its session with the client at the earliest possible opportunity.

Parameter and description	Valid values
<p><b>SSLUSERID</b>  Specifies the user ID under which the SSL resource manager subtask operates. If not specified, the SSL resource manager operates by using the subsystem's address-space-level user ID. This user ID must be authorized to open and read the SSL private key and certificate files. Using a separate user ID for this task prevents other transaction subtasks, and the server itself, from accessing this highly confidential information.</p>	Null
<p><b>OEPORNUMBER</b>  Sets the port number that is used to LISTEN for, and ACCEPT all inbound TCP/IP sessions that should not be considered candidates for load balancing to a different Accelerator Loader server in the same load-balancing group. The port number should be reserved for exclusive use by the main product address space. This must be different from the main OEPORNUMBER and the OESSLPORT number if it is used.</p>	0 (default)
<p><b>WSOEPOR</b>  Specifies the port number that is used to listen for all inbound Services and Accelerator Loader studio requests.</p>	0 (default)
<p><b>OENLPORTNUMBER</b>  <i>(Optional)</i> Sets the port number that is used to LISTEN for and ACCEPT all inbound TCP/IP sessions that should not be considered candidates for load balancing to a different Accelerator Loader server in the same load-balancing group. The port number should be reserved for exclusive use by the main product address space. This must be different from the main OEPORNUMBER and the OESSLPORT number if it is used.</p>	0 (default)

Parameter and description	Valid values
<b>OESSLPORTNUMBER</b> (Optional) Sets the port number that is used to LISTEN for and ACCEPT all inbound encrypted OE Sockets TCP/IP sessions. This port number should be reserved for use only by the main product address space. Each copy of the main product address space needs its own port number if SSL over OE Sockets is being used. There is no default value for the SSL port number if the value is not set in the initialization EXEC.	Null
<b>WSOEBALANCEDPORT</b> (Optional) Specifies the port number that is used to listen for Services requests that can be balanced to group members.	0 (default)
<b>WSOESSLPORT</b> (Optional) Specifies the port number that is used to listen for Services for encrypted sessions.	0 (default)

**Related concepts:**

“SSL preferences” on page 5-27

Enable SSL to secure JDBC and HTTP network communications between the Accelerator Loader studio and the Accelerator Loader server.

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## Modifying IMS parameters

Values for IMS parameters are set during customization. If instructed to do so by Software Support, modify IMS DB parameters as needed for your site.

### Procedure

1. In data set *hlq.SHLVEXEC*, locate member *hlvidIN00*, where *hlvid* represents the name of the Accelerator Loader server started task that was customized by using Tools Customizer.
2. Locate comment ENABLE IMS CCTL/DBCT SUPPORT.

The following table describes the IMS parameters:

Parameter and description	Default or sample values
<b>IMSID</b> IMSID of the IMS Database Control (DBCTL) region.	Sample value: IVP1
<b>IMSDBNAME</b> Name of the IMS database.	Sample value: IMSX10.SDFSRESL
<b>IMSMINTHREADS</b> Minimum number of threads.	Default value: 5
<b>IMSMAXTHREADS</b> Maximum number of threads.	Default value: 10

Parameter and description	Default or sample values
<b>IMSNBBUFFERS</b> Total number of normal buffer allocation (NBA) buffers.	Default value: 10
<b>IMSFPBUFFERS</b> Fast path buffers per thread.	Default value: 1
<b>IMSFPOVERFLOW</b> Fast path overflow buffers.	Default value: 1
<b>TRACEIMSDLIEVENTS</b> Trace IMS DLI events.	Valid values: <ul style="list-style-type: none"> <li>• YES</li> <li>• NO (default)</li> </ul>

## Configuring access to SMF files

You can load System Management Facility (SMF) data into the accelerator by using the sequential file source method. To configure access to SMF files, you must configure an Accelerator Loader server JCL, the server configuration member, and the server virtual table member.

### Before you begin

- Ensure that your user ID has UPDATE authority for file SHLVXVTB.
- Ensure that the Accelerator Loader server stored procedure has UPDATE authority for the PDS member *hlq.SHLVTXVTB(HLVSMFT2)*.
- Locate the SMF records of interest.

### Procedure

1. In data set *hlq.SHLVXVTB* member *HLVSMFT2*, add to parameter *GLOBAL2.SMFTBL2.DEFAULT* the SMF data set that contains the SMF records of interest.
2. Update the server *hlvidPROC* and add the SMF map data set to the *HLVMAPP DD*.

**Tip:** After you add the map data set, the Accelerator Loader studio will display many maps. To limit the list of maps to those that you use often, create Favorites in the studio.

3. To enable virtual table rule events, modify the *SEFVTBEVENTS* parameter in data set *hlq.SHLVEXEC* member *hlvidIN00* as follows:  
"MODIFY PARM NAME(SEFVTBEVENTS) VALUE(YES)"
4. Using the DB2 Analytics Accelerator Loader ISPF interface, enable SMF as a rule:
  - a. On the main menu, select **Server administration**.
  - b. On the Administer Accelerator Loader server panel, select **Manage Rules**.
  - c. On the Event Facility (SEF) Control panel, select **SEF Rule Management**.
  - d. On the Event Facility (SEF) Ruleset Entry Profile panel, accept the default value of "\*" (asterisk) in the field **Display Only the Ruleset Named** and press Enter.
  - e. On the Event Facility Proc. Rulesets - Using SEF V4 Configuration panel, in the **S** column beside **VTB**, type "S" and press Enter.

- f. On the Event Facility (SEF) Event Procedure List panel, in the S column beside member HLVSMT2, type "B" and press Enter.

**Related concepts:**

"Rules and events"

You can create one or more rules for each event. Within each rule, you specify an action to take in response to the event.

"Creating SMF records from the server" on page 10-79

The System Management Facility (SMF) provides ways to record usage information in SMF data sets.

---

## Rules and events

You can create one or more rules for each event. Within each rule, you specify an action to take in response to the event.

A rule can have the following parts:

- Criterion
- Header statement
- One or more process sections
- Return values
- Variables

You can create rules for the following types of events:

- Authorization (ATH) events that occur when the Accelerator Loader server performs authorization processing for a controlled resource.
- Command (CMD) events that occur when the Accelerator Loader server receives a command from a z/OS console.
- Exception (EXC) events that occur when tasks exceed limits or fail. These events are generated only when the SEFGLVENTS parameter is set to allow them.
- Global variable events (GLV) that occur when the value of a global variable is changed.
- SQL events occur before a SQL statement is run.
- Time-of-day (TOD) events occur at specific times.
- Virtual tables (VTB) rules allow you to have a single virtual table that can use to represent many data sets of the same structure.

Following are examples of rules and events:

- Create a rule to allow a critical application to download data any time, and allow a non-critical application to download data only during specific hours.
- For the LOGON event, create a rule that allows a user ID three logon requests within a 24-hour period, and rejects subsequent logon requests.
- For the LOGON event, create a rule that rejects all logs on attempts from a specific ID.

**Related tasks:**

"Configuring access to SMF files" on page 3-49

You can load System Management Facility (SMF) data into the accelerator by using the sequential file source method. To configure access to SMF files, you must configure an Accelerator Loader server JCL, the server configuration member, and the server virtual table member.

## Managing rules and events

Use the ISPF interface to view and work with rules and events.

### Procedure

1. On the main menu, select **Server administration**.
2. On the Administer Accelerator Loader server panel, select **Manage Rules**.
3. On the Event Facility (SEF) Control panel, select **SEF Rule Management**.
4. On the Event Facility (SEF) Ruleset Entry Profile panel, use **Display Only the Ruleset Named** to display rulesets as follows:
  - To display all rulesets, leave the asterisk and press Enter. Proceed with 6.
  - To display a specific type of ruleset, specify one of the following values and press Enter.
    - ATH for Authorization event rules
    - CMD for Command event rules
    - EXC for Exception event rules
    - SQL for SQL event rules
    - TOD for Time-of-day event rules
    - VTB for Virtual tables rules
5. On the Event Facility (SEF) Event Procedure List panel, in the **S** column beside a member, type a line command to take one of the following actions:
  - S: Select an event procedure for modification using the ISPF editor.
  - E: Enable an event procedure
  - D: Disable an event procedure.
  - A: Set the Auto-Enable (AE) flag for an event procedure member.
  - Z: Reset the Auto-Enable (AE) flag for an event procedure member.
  - B: Set the Auto-Enable (AE) flag and enable the event procedure.
  - C: Disable an event procedure and reset the Auto-Enable (AE) flag.
6. On the Event Facility Proc. Rulesets - Using SEF V4 Configuration panel, in the **S** column beside a ruleset, type a line command to take one of the following actions:
  - S: Display the list of members within the ruleset.
  - E: Enable all members of an entire ruleset.
  - D: Disable all members of an entire ruleset.
  - U: Display the ISPF/PDF utility panel to rename, delete, or print members.
  - A: Set the Auto-Enable (AE) flag for all members of a ruleset.
  - Z: Reset the Auto-Enable (AE) flag for all members of a ruleset.

### Automatic limits

A rule can include customizable limits that control queries, connections, sessions, and so on.

Rules are configured in data set *hlq.SHLVEXEC* member *hlvidIN00*, where *hlvid* represents the name of the Accelerator Loader server started task that was customized by using Tools Customizer.

During installation, a default value is specified for each of the following limits.



| **Overall per session CPU limit**

| When this limit is reached, the session is automatically terminated. The  
| security product or a product parameter can provide the limit.

| **Per DB2 connection CPU limit**

| When this limit is reached, the current DB2 connection is automatically  
| terminated, and all associated DB2 resources are released.

| **Per SQL query CPU limit**

| When this limit is reached, the current SQL query is automatically  
| terminated, and all associated DB2 releases are released.

| **Inactivity time-out**

| This limit automatically terminates the session of any user that is inactive  
| for the specified period. Use this limit to minimize security exposures and  
| release resources that are held by inactive users.

| **Maximum timer-on limit**

| This limit prevents the execution of any SQL statement that exceeds a  
| specified value. The limit prevents excessive resource utilization.

| **Maximum rows limit**

| This limit restricts the number of rows that a query returns.

| **Dropped connection detection**

| This mechanism detects clients that failed or are no longer connected to the  
| network. When a dropped connection is detected, the host session is  
| terminated, and all resources are released.

| **Lock control facility**

| This mechanism detects clients that are holding a DB2 lock (share, update,  
| or exclusive) for an excessive period. When the limit is reached, the session  
| is terminated, and the lock is released.

| **Dynamic SQL control facility**

| This mechanism allows dynamic SQL to be rejected on the host. Use this  
| mechanism to enforce the use of static SQL.

| **Maximum concurrent users**

| This limit controls the maximum number of concurrent users and is  
| enforced on the host.

| **Variables for rules**

| When you create a rule, you can use dynamic variables, global variables,  
| temporary variables, and event-specific variables. These variables are used in REXX  
| programming.

| **Dynamic variables**

| Dynamic variables are created when the process section of a rule references or sets  
| the value of a simple or compound variable. Dynamic variables exist only while a  
| rule runs and are freed when the REXX environment is deleted. Dynamic variables  
| cannot be accessed by non-REXX procedures and functions. The following code  
| fragment shows two simple variables, I and COUNT, and one compound variable,  
| stemvar.I:

| do I = 1 to COUNT  
| stemvar.I = "InitValue"  
| end

## Global variables

Global variables have one of the following stem values:

- GLOBAL
- GLOBAL $n$ , where  $n$  is an integer 1 - 9

Global variables are stored in the global variable checkpoint data set. When a global variable is referenced, the value of the variable is retrieved from the checkpoint data set. The value of a global variable persists across restarts of the product and is shared by all rules if the **SEFGLVEVENTS** parameter is set to YES. Parameter **SEFGLVEVENTS** is in data set *hlq.SHLVEXEC* member *hlvidIN00*. You can create a rule to intercept the change and perform additional processing.

## Temporary variables

Temporary variables, which begin with the stem value GLVEVENT, exist only during an event and are deleted when the event is over. Temporary variables are used by high-level language (HLL) routines that create and interrogate these types of variables. To create or access a temporary variable, use the HLVVALUE API function. A rule can reference a temporary variable by name.

## Event variables

When an event occurs, event variables are created. These variables pass information about the event to the rules for the event. For example, ATH.AUPWDBSS is an event variable for the LOGON event. The value of the ATH.AUPWDBSS variable is the DB2 subsystem name that the connection string provides. You can use this variable in a rule that restricts logons to a specific DB2 subsystem.

Most event variables are read-only; however, some can be modified. Changes to modifiable event variables are cumulative. The first rule that runs uses the original value of the variable. Each rule that later runs uses the value that the previous rule modified. Even if a rule modifies the value of a variable, all rules that are eligible to run still run.

## Authorization (ATH) events

This section describes the types of authorization (ATH) events.

### All authorization events

This event occurs when an authorization request is made. A rule for this event can reject, accept, or modify the request.

### Return values

When an ATH event ends, the rule sets a return value. The server evaluates the return value and invokes z/OS security routines.

Return value	Description
ACCEPT	Access to the requested resource is allowed, and additional processing by the z/OS security subsystem is not performed.

Return value	Description
REJECT	Access to the requested resource is denied, and additional processing by the z/OS security subsystem is not performed. The rule can include the ATH.OPAUERMG variable, which for most authorization requests, returns an error message to the requestor.
Other value	If another value or no value is returned, the z/OS security subsystem performs validation checking. The security product makes the final determine to allow or deny access to the requested resource.

## Variables

Values for these variables are set only when an ATH rule processes an ATH event. The data type of all variables is character, read-only except as noted.

Criterion	Variable name	Contents
ALL	ATH.OPAU13WA	The WAITS flag is on if the wait state is allowed and is off if wait state is not allowed. If the wait state is not allowed, actions that cause the task to enter a wait state are not allowed.
ALL	ATH.OPAUACSR	The type of access that is being requested. The following are valid values for the access type, except for LOGON requests: <ul style="list-style-type: none"> <li>• ADD</li> <li>• CONTROL</li> <li>• DISPLAY</li> <li>• DEFINE</li> <li>• EXECUTE</li> <li>• INFO</li> <li>• LIST</li> <li>• KILL</li> <li>• MODIFY</li> <li>• READ</li> <li>• SHOW</li> <li>• SET</li> <li>• WRITE</li> </ul>
ALL	ATH.OPAUERMG	A REXX program can specify the error message to send to the client.  Data type: Character, read-write.
ALL	ATH.OPAURQRC	The request return code. The following are valid values: <ul style="list-style-type: none"> <li>• 00: Request allowed</li> <li>• 04: Request must be modified</li> <li>• 08: Request failed</li> <li>• 12: Request abended</li> <li>• 16: Product address space is unavailable</li> </ul>

Criterion	Variable name	Contents
ALL	ATH.OPAURQSR	The type of request that is being processed. The following are valid values: <ul style="list-style-type: none"> <li>• CICSCONNECTIONS: CICS® connections</li> <li>• CONTROLBLOCKS: Product control blocks</li> <li>• DATABASES: Product databases</li> <li>• DATAMAP: Data map definitions</li> <li>• FILE: Shared server QSAM/BPAM data sets</li> <li>• GLOBALS: Global variables</li> <li>• LINKS: Communication links</li> <li>• LOGON: Password and user validation</li> <li>• PARMS: Product parameters</li> <li>• RPC: Remote procedure call</li> <li>• SDB: SDB command</li> <li>• SEF: Event Facility commands</li> <li>• TRACEDATA: Detailed server trace (Trace Browse) data</li> <li>• TRACEBROWSE: Server Trace (Trace Browse)</li> <li>• TSO: TSO command</li> <li>• USERS: Remote users</li> </ul>
ALL	ATH.OPAUSRID	The search ID, which is created by combining the request type with the access type, for example: <ul style="list-style-type: none"> <li>• PARMS.SHOW displays a product parameter</li> <li>• SEF.INFO obtains SEF information.</li> </ul>
ALL	ATH.OPAUUSID	The user ID that is being validated (LOGON), the user ID being logged off (LOGOFF), or the user ID for the task that is requesting access to the controlled resource.  Data type: Character, read-only, except as noted. <b>Note:</b> A rule for the LOGON event can change the value of the user ID so that the rule-generated user ID can be used for subsequent validation by the security product. Rules for other authorization events should not attempt to alter the ATH.OPAUUSID variable.
ALL	ATH.USER	The user area is passed to all rules that run in response to the same event.  Data type: Read-only

### Control block events

This event occurs when a control block is accessed or updated. A rule for this event can accept or reject the request or allow the security product to determine if the request is allowed.

### Return values

When an ATH event ends, the rule sets a return value. The server evaluates the return value and invokes z/OS security routines.

Return value	Description
ACCEPT	Access to the requested resource is allowed, and additional processing by the z/OS security subsystem is not performed.
REJECT	Access to the requested resource is denied, and additional processing by the z/OS security subsystem is not performed. The rule can include the ATH.OPAUERMG variable, which for most authorization requests, returns an error message to the requestor.
Other value	If another value or no value is returned, the z/OS security subsystem performs validation checking. The security product makes the final determine to allow or deny access to the requested resource.

## Variables

CONCROLBLOCK variables are used for events that pertain to accessing or updating a product control block.

Variable name	Contents	Data type
ATH.AUBKCBAD	The address of the control block.	Character, read-only
ATH.AUBKCBAS	The address space (ASID) of the control block.	Numeric, read-only
ATH.AUBKCBLN	The length of the control block.	Numeric, read-only
ATH.AUBKCBNA	The name of the control block.	Character, read-only

## Database events

This event occurs when a database is defined, accessed, or updated. A rule for this event can accept or reject the request or allow the security product to determine if the request is allowed.

## Return values

When an ATH event ends, the rule sets a return value. The server evaluates the return value and invokes z/OS security routines.

Return value	Description
ACCEPT	Access to the requested resource is allowed, and additional processing by the z/OS security subsystem is not performed.
REJECT	Access to the requested resource is denied, and additional processing by the z/OS security subsystem is not performed. The rule can include the ATH.OPAUERMG variable, which for most authorization requests, returns an error message to the requestor.

Return value	Description
Any other value	If another value or no value is returned, the z/OS security subsystem performs validation checking. The security product makes the final determine to allow or deny access to the requested resource.

## Variables

DATABASE variables are used for events that pertain to defining, accessing, or updating a product database.

Variable name	Contents	Data type
ATH.AUDBHOST	The host name of the database.	Numeric, read-only
ATH.AUDBNAME	The name of the database.	Character, read-only
ATH.AUDBTYPE	The type of the database.	Character, read-only

## IMSLTERM events

This event occurs when the IMSLTERM (IMS logical terminal) authorization event occurs. A rule for this event can accept or reject the request or allow the security product to determine if the request is allowed.

## Return values

When an ATH event ends, the rule sets a return value. The server evaluates the return value and invokes z/OS security routines.

Return value	Description
ACCEPT	Access to the requested resource is allowed, and additional processing by the z/OS security subsystem is not performed.
REJECT	Access to the requested resource is denied, and additional processing by the z/OS security subsystem is not performed. The rule can include the ATH.OPAUERMG variable, which for most authorization requests, returns an error message to the requestor.
Other value	If another value or no value is returned, the z/OS security subsystem performs validation checking. The security product makes the final determine to allow or deny access to the requested resource.

## Variables

The following variable is available. The IMSLTERM variable is used for events that pertain to IMSLTERM.

Descriptive name	Variable name	Contents	Data type
Virtual table name	ATH.AULTNAME	The name of the virtual table.	Character, read-only

## Communication link events

This event occurs when a communication link is defined, accessed, or updated. A rule for this event can accept or reject the request or allow the security product to determine if the request is allowed.

## Return values

When an ATH event ends, the rule sets a return value. The server evaluates the return value and invokes z/OS security routines.

Return value	Description
ACCEPT	Access to the requested resource is allowed, and additional processing by the z/OS security subsystem is not performed.
REJECT	Access to the requested resource is denied, and additional processing by the z/OS security subsystem is not performed. The rule can include the ATH.OPAUERMG variable, which for most authorization requests, returns an error message to the requestor.
Other value	If another value or no value is returned, the z/OS security subsystem performs validation checking. The security product makes the final determine to allow or deny access to the requested resource.

## Variables

LINKS variables are used for events that pertain to defining, accessing, or updating a communication link.

Variable name	Contents	Data type
ATH.AULIHOST	The host name for the link. This name might be truncated. To avoid the additional processing that is required to resolve the host name, the server does not usually obtain or provide the client host name.	Character, read-only
ATH.AULIIPAD	The TCP/IP address in 4-byte binary form.	Binary, read-only
ATH.AULILU	The LU 6.2 name that is set only for LU 6.2 links.	Character, read-only
ATH.AULIMODE	The LU 6.2 mode name that is set only for LU 6.2 links.	Character, read-only

Variable name	Contents	Data type
ATH.AULITYPE	The link type. The following are valid values: <ul style="list-style-type: none"> <li>• 6: LU 6.2 link</li> <li>• T: IBM TCP/IP link</li> <li>• I Interlink TCP/IP</li> </ul>	Character, read-only

## Log off events

This event occurs after the client session to the host is terminated. Therefore, no response data can be sent to the client.

A rule for this event can provide the following responses:

- Write messages to a console or to the server trace. The error message variable (ATH.OPAUERMG) can also be set. This value of this variable displays in the server trace if ATH messages are being traced.
- Write SMF records. The SDBINFO function can be used in addition to the ATH event variables passed to this routine.
- Access and update other resources. For example, a global variable can be modified to show that the current user is no longer connected.

## Return values

When an ATH event ends, the rule sets a return value. The server evaluates the return value and invokes z/OS security routines.

Return value	Description
ACCEPT	Access to the requested resource is allowed, and additional processing by the z/OS security subsystem is not performed.
REJECT	Access to the requested resource is denied, and additional processing by the z/OS security subsystem is not performed. The rule can include the ATH.OPAUERMG variable, which for most authorization requests, returns an error message to the requestor.
Any other value	If another value or no value is returned, the z/OS security subsystem performs validation checking. The security product makes the final determine to allow or deny access to the requested resource.

## Variables

LOGOFF variables are used for events that pertain to writing messages to a console or server trace, writing SMF records, or accessing and updating other resources.

Descriptive name and variable name	Contents	Data type
Termination code <b>ATH.AULGABCD</b>	The termination code, which is a 4-byte hexadecimal string. The value is 0000 if the current thread terminated normally.	Character, read-only



Descriptive name and variable name	Contents	Data type
Authorization scheme <b>ATH.AULGAUSC</b>	The authorization scheme. The following are valid values: <ul style="list-style-type: none"> <li>• SDBECURE: The user ID was created by using the SDBECURE API.</li> <li>• RA-PROXY: A RUNAUTH (proxy) user ID log off.</li> <li>• BASIC: An HTTP authorization, request header scheme.</li> </ul>	Character
Cache <b>ATH.AULGCAUS</b>	The user ID cache flag. The following are valid values: <ul style="list-style-type: none"> <li>• 0 (zero): The user ID is logged off.</li> <li>• 1: If the user ID was previously cached and is retained in the cache.</li> </ul>	Character, read-write
Connection token <b>ATH.AULGCNTK</b>	The connection token is an 8-byte hexadecimal string. To identify the terminating task, this value can be passed to the SDBINFO function. This value is only required for test (TSO) versions of the main product address space.	Character, read-only
CPU time <b>ATH.AULGCPTM</b>	The CPU time that is used by the current task, which is specified in seconds and fractions of a second.	Character, read-only
Elapsed time <b>ATH.AULGELTM</b>	The elapsed time of the current task, which is specified in seconds and fractions of a second.	Character, read-only
GMT logon time <b>ATH.AULGLGGM</b>	The GMT logon time, which is provided as a timestamp. The format is YYYY/MM/DD- HH:MM:SS.NNNNNN..	Character, read-only
Local logon time <b>ATH.AULGLGTM</b>	The local logon time, which is provided as a timestamp. The format is YYYY/MM/DD- HH:MM:SS.NNNNNN..	Character, read-only
Uncompressed bytes <b>ATH.AULGWRT0</b>	The total number of uncompressed bytes. It is provided by using the next field.	Character, read-only

Descriptive name and variable name	Contents	Data type
Wait <b>ATH.APAU13WA</b>	<p>The WAITS flag. The following are valid values:</p> <ul style="list-style-type: none"> <li>• 0 (zero): WAITS are not allowed.</li> <li>• 1: WAITS are allowed.</li> </ul> <p>If WAITS are not allowed, I/O and other services that might cause the task to enter a wait state are not allowed. Some logoff operations occur during end-of-task processing when it is important to monitor the wait-allotted flag to prevent unwanted subtask terminations.</p>	

## Log on events

This event occurs when a logon occurs.

A rule for this event can provide the following responses:

- Set or reset all of the execution limits for the current client user ID. The default values are passed to the rule. If the default values are not changed, they are used.
- Set the return value to REJECT, and use the ATH.OPAUERMG variable to send an error message.
- Set the return value to ACCEPT. Be aware that using this return value bypasses the password validation that the security product does. Use ACCEPT only if you do not have a security product installed and rely on
- Modify the user ID before the security product processes it.

## Return values

When an ATH event ends, the rule sets a return value. The server evaluates the return value and invokes z/OS security routines.

Return value	Description
ACCEPT	Access to the requested resource is allowed, and additional processing by the z/OS security subsystem is not performed.
REJECT	Access to the requested resource is denied, and additional processing by the z/OS security subsystem is not performed. The rule can include the ATH.OPAUERMG variable, which for most authorization requests, returns an error message to the requestor.
Any other value	If another value or no value is returned, the z/OS security subsystem performs validation checking. The security product makes the final determine to allow or deny access to the requested resource.

LOGON variables are used for events pertaining to setting or resetting execution limits for the current client user ID, rejecting the current logon attempt, bypassing password validation, or modifying a user ID before it is processed by RACF/ACF2.

Descriptive name and variable name	Contents	Data type
Security optimization <b>ATH.AUPWAEAC</b>	The Security Optimization flag. The following are valid values: <ul style="list-style-type: none"> <li>• 0 (zero): Security optimization is not active.</li> <li>• 1: Security optimization is active.</li> </ul>	Character, read-only
Security optimization cache <b>ATH.AUPWAERT</b>	The amount of time, in seconds, that the security optimization cache entry is retained for the user.	Character, read-only
Application name <b>ATH.AUPWAPNA</b>	The name of the application. This value is optionally set by the ODBC application.	Character, read-write
Authentication scheme <b>ATH.AUPWAUSC</b>	The authentication scheme for the logon. The following are valid values: <ul style="list-style-type: none"> <li>• SDBECURE: A logon using the SDBECURE API</li> <li>• RA-PROXY: A RUNAUTH (proxy) user ID logon</li> <li>• BASIC: An HTTP authorization, header user ID logon</li> </ul>	Character, read-write
User ID cache <b>ATH.AUPWCAUS</b>	A user ID cache flag. The following are valid values: <ul style="list-style-type: none"> <li>• 0 (zero): Suppresses caching for the user ID</li> <li>• 1: If the client user ID/acee is or could be cached for reuse.</li> </ul>	
ODBC connection string <b>ATH.AUPWCNSR</b>	The ODBC connection string from the client.	Character, read-write
Base CPU time interval <b>ATH.AUPWCPBA</b>	The base CPU time interval for time slicing.	Character, read-write
Error CPU time limit <b>ATH.AUPWCPER</b>	The error CPU time limit that is checked by the check limits task.	Character, read-write
Failure CPU time limit <b>ATH.AUPWCPFA</b>	The failure CPU time limit that is checked by the check limits task.	Character, read-write
Execution time interval <b>ATH.AUPWCPIN</b>	The execution time interval for time slicing.	Character, read-write

Descriptive name and variable name	Contents	Data type
CPU time limit <b>ATH.AUPWCPTM</b>	The CPU time limit that is checked by the ODBC task.	Character, read-write
Plan name <b>ATH.AUPWDBPN</b>	The plan name. This value is provided in the connection string.	Character, read-write
DB2 subsystem name <b>ATH.AUPWDBSS</b>	The DB2 subsystem name. This value is provided in the connection string.	Character, read-write
Database user ID <b>ATH.AUPWDBUS</b>	The database user ID that is used to connect to DB2. When you use CAF, you can switch the user ID, but you cannot switch the user ID with RRSAF unless you are using Enterprise Auditing.	Character, read-write
Task priority <b>ATH.AUPWPPR</b>	The z/OS task dispatch priority of the current task, which is a value 0 – 225.	Character, read-write
Enterprise auditing <b>ATH.AUPWENTL</b>	The enterprise auditing flag. If this flag is set to 1, enterprise auditing requests from the client are accepted. If the flag is set to any other value, requests are ignored.	Character, read-write
Exclusive lock <b>ATH.AUPWEXFA</b>	The exclusive lock time limit, which is checked by the check limits task.	Character, read-write
Application internal name <b>ATH.AUPWINNA</b>	The application internal name, if available. This value, which is available only for non-console-mode Windows 32-bit applications, is obtained from the Windows version resources.	Character, read-only
New plain-text password <b>ATH.AUPWLGW</b>	A new plain-text password, which the application provides. The PROVIDEPASSWORDS parameter controls this variable. If the PROVIDEPASSWORDS is set to YES, the variable is set to a non-blank string. Otherwise, the variable is set to blank characters. The password can only be changed if the PROVIDEPASSWORDS parameter is set to CHANGE.	Character, read-write

Descriptive name and variable name	Contents	Data type
Plain-text password <b>ATH.AUPWLGPW</b>	The plain-text password, which the application provides. The PROVIDEPASSWORDS parameter controls this variable. If the PROVIDEPASSWORDS is set to YES, the variable is set to a non-blank string. Otherwise, the variable is set to blank characters. The password can only be changed if the PROVIDEPASSWORDS parameter is set to CHANGE.	Character, read-write
Network user ID <b>ATH.AUPWLNID</b>	The network user ID from the client.	Character, read-write
Application module name <b>ATH.AUPWMDNA</b>	The application module name, if available. This is the name of the application that is using the .NET client.	Character, read-only
Maximum rows generated <b>ATH.AUPWMXCA</b>	The maximum number of rows that a call RPC can generate before an error is reported to the RPC.	Character, read-write
Maximum rows fetched <b>ATH.AUPWMXRW</b>	The maximum number of rows that can be fetched before SQL code +100 is simulated.	Character, read-write
Maximum timerons <b>ATH.AUPWMXTM</b>	The maximum timerons limit, which is checked by the client task.	Character, read-write
Single logon <b>ATH.AUPWNTLG</b>	The single logon flag from the client. The following are valid values: <ul style="list-style-type: none"> <li>• 0 (zero): The client did not use a single logon.</li> <li>• 1: The client used a single logon.</li> </ul>	Character, read-only
RPC enqueue limit <b>ATH.AUPWRPEH</b>	The RPC enqueue time limit that the check limits task checks.	Character, read-write
RPC execution limit <b>ATH.AUPWRPEL</b>	The RPC execution time limit.	Character, read-write
Share lock limit <b>ATH.AUPWSHFA</b>	The share lock time limit that the check limits task checks.	Character, read-write
Per SQL CPU limit <b>ATH.AUPWSQFA</b>	The per SQL CPU time limit that the check limits task checks.	Character, read-write

Descriptive name and variable name	Contents	Data type
Update lock limit <b>ATH.AUPWUPFA</b>	The update lock time limit that the check limit task checks.	Character, read-write
User parameter <b>ATH.AUPWUSPA</b>	The User parameter from the client.	Character, read-write
PassTicket authentication <b>ATH.AUPWSPT</b>	The RACF PassTicket flag. The following are valid: <ul style="list-style-type: none"> <li>• 0 (zero): The user is not using a RACF PassTicket for authentication.</li> <li>• 1: The user is using a RACF PassTicket for authentication.</li> </ul>	Character, read-write
Error wait time <b>ATH.AUPWWAER</b>	The error wait time limit that the check limits task checks.	Character, read-write
Failure wait time <b>ATH.AUPWWAFA</b>	The failure wait time limit that is checked by the check limits task.	Character, read-write
Warning wait time <b>ATH.AUPWWAWN</b>	The warning wait time limit that is checked by the check limits task.	Character, read-write
WAITS flag <b>ATH.OPAU13WA</b>	The WAITS flag. The following are valid values: <ul style="list-style-type: none"> <li>• 0 (zero): WAITS are not allowed</li> <li>• 1: WAITS are allowed</li> </ul> If WAITS are not allowed, I/O and other services that might cause the task to enter a wait state are not allowed.	Character, read-write
Accept type string <b>ATH.OPAUACSR</b>	The accept type string.	Character, read-only
Error message <b>ATH.OPAUERMG</b>	The error message.	Character, read-only
Request type string <b>ATH.OPAURQSR</b>	The request type string.	Character, read-only
Rule-invocation match string <b>ATH.OPAUSRID</b>	The rule-invocation match string.	Character, read-only
Client user ID <b>ATH.OPAUSID</b>	The client user ID being logged onto the system.	Character, read-only

**Related tasks:**

“Configuring user access to DB2 subsystems” on page 3-47  
Provide user access to DB2.

## MQ events

This event occurs when an IBM MQ resource is defined. A rule for this event can accept or reject the request or allow the security product to determine if the request is allowed.

## Return values

When an ATH event ends, the rule sets a return value. The server evaluates the return value and invokes z/OS security routines.

Return value	Description
ACCEPT	Access to the requested resource is allowed, and additional processing by the z/OS security subsystem is not performed.
REJECT	Access to the requested resource is denied, and additional processing by the z/OS security subsystem is not performed. The rule can include the ATH.OPAUERMG variable, which for most authorization requests, returns an error message to the requestor.
Any other value	If another value or no value is returned, the z/OS security subsystem performs validation checking. The security product makes the final determine to allow or deny access to the requested resource.

The MQSERIES variable is used for authorization of events pertaining to defining an MQ resource.

Descriptive name	Variable name	Contents	Data type
Queue manager	ATH.AUMQQMGR	The name of the queue manager. This name is set only for actions that are specific to one queue manager. This field is not set when the list of queue managers is being requested by a caller.	Character, read-only

## Parameter events

This event occurs when a parameter is updated or accessed. A rule for this event can accept or reject the request or allow the security product to determine if the request is allowed.

## Return values

When an ATH event ends, the rule sets a return value. The server evaluates the return value and invokes z/OS security routines.

Return value	Description
ACCEPT	Access to the requested resource is allowed, and additional processing by the z/OS security subsystem is not performed.
REJECT	Access to the requested resource is denied, and additional processing by the z/OS security subsystem is not performed. The rule can include the ATH.OPAUERMG variable, which for most authorization requests, returns an error message to the requestor.
Any other value	If another value or no value is returned, the z/OS security subsystem performs validation checking. The security product makes the final determine to allow or deny access to the requested resource.

The PARMS variable is used for authorization of events pertaining to accessing or updating a product parameter.

Descriptive name	Variable name	Contents	Data type
Product parameter name	ATH.AUPAPANA	The product parameter name.	Character, read-only

### SDB events

This event occurs when an attempt is made to run the SDB command. A rule for this event can accept or reject the request or allow the security product to determine if the request is allowed.

### Return values

When an ATH event ends, the rule sets a return value. The server evaluates the return value and invokes z/OS security routines.

Return value	Description
ACCEPT	Access to the requested resource is allowed, and additional processing by the z/OS security subsystem is not performed.
REJECT	Access to the requested resource is denied, and additional processing by the z/OS security subsystem is not performed.  The rule can include the ATH.OPAUERMG variable, which for most authorization requests, returns an error message to the requestor.
Any other value	If another value or no value is returned, the z/OS security subsystem performs validation checking. The security product makes the final determine to allow or deny access to the requested resource.

SDB variables are used for authorization of events pertaining to execution of an SDB command.



Descriptive name	Variable name	Contents	Data type
Options string	ATH.AUSDOTSR	The SDB command Options string, such as 5.2.	Character, read-only
Subsystem name	ATH.AUSDSSNA	The subsystem name for the subsystem name.	Character, read-only

## SEF events

This event occurs when an attempt is made to run the server event facility (SEF) command runs. A rule for this event can accept or reject the request or allow the security product to determine if the request is allowed.

## Return values

When an ATH event ends, the rule sets a return value. The server evaluates the return value and invokes z/OS security routines.

Return value	Description
ACCEPT	Access to the requested resource is allowed, and additional processing by the z/OS security subsystem is not performed.
REJECT	Access to the requested resource is denied, and additional processing by the z/OS security subsystem is not performed. The rule can include the ATH.OPAUERMG variable, which for most authorization requests, returns an error message to the requestor.
Any other value	If another value or no value is returned, the z/OS security subsystem performs validation checking. The security product makes the final determine to allow or deny access to the requested resource.

SEF variables are used for authorization of events pertaining to execution of an SEF command. The data type of all variables is Character, read-only.

Descriptive name	Variable name	Contents
Subcommand for the SEF ARCHIVE verb	ATH.AUSEARSB	The subcommand for the SEF ARCHIVE verb.
Current operation	ATH.AUSEAUOP	A flag that shows if the current operation affects the event procedure rule set. The following are valid values: <ul style="list-style-type: none"> <li>• 0 (zero):</li> <li>• 1:</li> </ul>
Rule set name	ATH.AUSEAURS	The ATH rule set name.
Command buffer length	ATH. AUSEBULN	The SEF command buffer length.
Command buffer	ATH.AUSECMBU	The SEF command buffer.
z/OS dsname	ATH.AUSEDNA	The SEF rule set z/OS dsname (dsname for file management commands).

<b>Descriptive name</b>	<b>Variable name</b>	<b>Contents</b>
Event procedure name	ATH.AUSERLNA	The SEF command event procedure name (member name for file management commands).
SEF rule set name	ATH.AUSERSNA	The SEF command rule set name (ddname for file-management commands).
SEF command verb string	ATH.AUSEVBSR	The SEF command verb string.

Descriptive name	Variable name	Contents
Command request	ATH.AUSERQTY	<p>The SEF command request type. The following values are valid for rule set commands:</p> <ul style="list-style-type: none"> <li>• A: Set auto-enable flags</li> <li>• B: Set auto-enable flags and enable them</li> <li>• C: Reset auto-enable flags and disable them</li> <li>• D: Disable rules</li> <li>• E: Enable rules</li> <li>• F: Refresh rules</li> <li>• I: Set dsname index (dsname with STAR)</li> <li>• L: List rule set or rule</li> <li>• R: Archive command</li> <li>• S: Set or reset subsystem string</li> <li>• T: Test timer rules or another test</li> <li>• U: Show rule</li> <li>• X: Transfer data</li> <li>• Y: Set or reset SYSID string</li> <li>• Z: Reset auto-enable flag</li> </ul> <p>The following values are valid for file-management commands:</p> <ul style="list-style-type: none"> <li>• 3: Open a data set</li> <li>• 4: Close a data set</li> <li>• 5: Refresh a data set</li> <li>• 6: File list</li> <li>• 7: Quiesce a data set</li> <li>• 8: Allocate a data set</li> <li>• 9: Deallocate a ddname</li> </ul> <p>The following values are valid for TSO server management commands:</p> <ul style="list-style-type: none"> <li>• F: TSOSRV_LIST</li> <li>• K: TSOSRV_QUEUES</li> <li>• M: TSOSRV_STOP</li> <li>• O: TSOSRV_RESETQ</li> <li>• P: TSOSRV_FREE</li> <li>• Q: TSOSRV_EXECSTATUS</li> </ul>

### Token events

This event occurs when a token is accessed. A rule for this event can accept or reject the request or allow the security product to determine if the request is allowed.

## Return values

When an ATH event ends, the rule sets a return value. The server evaluates the return value and invokes z/OS security routines.

Return value	Description
ACCEPT	Access to the requested resource is allowed, and additional processing by the z/OS security subsystem is not performed.
REJECT	Access to the requested resource is denied, and additional processing by the z/OS security subsystem is not performed. The rule can include the ATH.OPAUERMG variable, which for most authorization requests, returns an error message to the requestor.
Any other value	If another value or no value is returned, the z/OS security subsystem performs validation checking. The security product makes the final determine to allow or deny access to the requested resource.

TOKENS variables are used for authorization of events pertaining to the access of an execution token.

Descriptive name	Variable name	Contents	Data type
Host name	ATH.AUTKHONA	The host name field, which contains the host name of the client that created the current token. This field is not set for multiple token fetch requests.	Character, read-only
ID string	ATH.AUTKIDSR	The token ID string, which contains the token ID that is being accessed or deleted. Note that this field is not set for multiple token fetch requests.	Character, read-only
User data	ATH.AUTKUSDA	The user data field, which contains the user data of the token that is being accessed or deleted. This field is not set for multiple token fetch requests.	Character, read-only

Descriptive name	Variable name	Contents	Data type
User ID	ATH.AUTKUSID	The user ID field, which contains the user ID of the client that created the current token. This field is not set for multiple token fetch requests.	Character, read-only

### TSO events

This event occurs when a TSO command runs. A rule for this event can accept or reject the request or allow the security product to determine if the request is allowed.

### Return values

When an ATH event ends, the rule sets a return value. The server evaluates the return value and invokes z/OS security routines.

Return value	Description
ACCEPT	Access to the requested resource is allowed, and additional processing by the z/OS security subsystem is not performed.
REJECT	Access to the requested resource is denied, and additional processing by the z/OS security subsystem is not performed.  The rule can include the ATH.OPAUERMG variable, which for most authorization requests, returns an error message to the requestor.
Any other value	If another value or no value is returned, the z/OS security subsystem performs validation checking. The security product makes the final determine to allow or deny access to the requested resource.

TSO variables are used for authorization of events pertaining to execution of a TSO command.

Descriptive name	Variable name	Contents	Data type
Buffer length	ATH.AUOSBULN	The TSO command buffer length.	Character, read-only
Buffer	ATH.AUOSCMBU	The TSO command buffer.	Character, read-only
Command verb string	ATH.AUOSVBSR	The TSO command verb string.	Character, read-only

### User events

This event occurs when information about a remote user is accessed, when a remote user connection is terminated, and when a cancel DB2 thread operation occurs. A rule for this event can accept or reject the request or allow the security product to determine if the request is allowed.

## Return values

When an ATH event ends, the rule sets a return value. The server evaluates the return value and invokes z/OS security routines.

Return value	Description
ACCEPT	Access to the requested resource is allowed, and additional processing by the z/OS security subsystem is not performed.
REJECT	Access to the requested resource is denied, and additional processing by the z/OS security subsystem is not performed. The rule can include the ATH.OPAUERMG variable, which for most authorization requests, returns an error message to the requestor.
Any other value	If another value or no value is returned, the z/OS security subsystem performs validation checking. The security product makes the final determine to allow or deny access to the requested resource.

USERS variables are used for authorization of events pertaining to accessing or canceling connections of a remote user. The data type of all variables is character, read-only.

Descriptive name and variable name	Contents
Connection ID <b>ATH.AUUSCNID</b>	The connection ID, which is set only for connection cancel operations.
User name <b>ATH.AUUSKILL</b>	The name of the user connection to cancel.

Descriptive name and variable name	Contents
Connection type  <b>ATH.AUUSTYPE</b>	The connection type. The following are valid values: <ul style="list-style-type: none"> <li>• AMDETRT: If a user is requesting information about a specific APPC/MVS conversation information for each task with an active conversation.</li> <li>• AMINTSUM: If a user is requesting information about the APPC/MVS summary.</li> <li>• DETAIL: If a user is requesting information about user or interval detail data stored in the main product address space.</li> <li>• IDDETRT: If a user is requesting information about specific APPC/IDMS conversation information for each task with an active conversation.</li> <li>• REMOTE: If a user requesting information about all remote connections in the main product address space.</li> <li>• REMOTEGRP: If a user is requesting information about TCP/IP host name and port information.</li> <li>• RRRMINFO: If a user is requesting information about Resource Recovery Services.</li> <li>• SECOPT: If a user is requesting information about security optimization cache entries.</li> <li>• SUMMARY: If a user is requesting information about all of the summary interval data stored in the main product address space.</li> <li>• TASKS: If a user is requesting information about all tasks running in the main product address space.</li> </ul>

## Command (CMD) events

Command events control client/server access to the mainframe.

When the Accelerator Loader server receives a command from a z/OS console, a rule is scheduled to run. The console can be a physical console or extended software, such as System Display and Search Facility (SDSF) or CA OPS/MVS Event Management and Automation. The command consists of a command verb, followed by optional operands. The command verb string is matched against enabled CMD rules to find the rule to run.

CMD rules perform the following tasks:

- Examine the command, parse the operands, and perform necessary actions, such as read and set product parameters. Consequently, parameters can be displayed and changed from the z/OS console.
- Access and update REXX global variables.
- Use REXX SAY statement to communicate with the console that entered the command. All output from the SAY statement is routed to the console that

entered the original command. Consequently, ASO products to communicate with the Accelerator Loader server, interrogate the status of it, and control it.

**Note:** Because CMD rules can access and update any part of the product, you must control who can create, enable, and disable CMD rules.

All CMD rule processing is done by Accelerator Loader server/REXX. Processing in another programming language is not supported.

## Syntax

To trigger a CMD rule, use the z/OS STOP or MODIFY command, or use a z/OS command that specifies the subsystem name. The following commands are valid, where *hlvid* represents the name of the Accelerator Loader server started task that was customized by using Tools Customizer:

- `MODIFY hlvid, command text`
- `hlvid command text`
- `hlvid, command text`

When the z/OS STOP command triggers a CMD rule, the rule can control or reject product shutdown. The criterion of the rule must be STOP or a less specific criterion that matches the STOP command. The z/OS STOP (P) command can also trigger a CMD rule that has the matching criterion of STOP.

## Header statement

A CMD criterion is a string of 1 - 30 characters. To schedule the rule to run for all commands, use a single \* (asterisk) as the criterion. Use a trailing \* (asterisk) as a wildcard character.

Use the following format for the header statement:

```
/*CMD criterion
```

## Process section

A REXX process section is required.

## Return values

The following table lists the return values for CMD rules:

Return value	Action
None supplied	If the rule executes a RETURN command, the Accelerator Loader server sends a return code that indicates the successful completion of the rule.
ACCEPT	The command in the rule was successfully completed.
REJECT	The command in the rule was rejected. To specify why the command was rejected, you REXX SAY statements.

The return value for a STOP CMD rule determines how the Accelerator Loader server terminates. The following return values are valid:



Return value	Action
None supplied	Termination is allowed to continue.
ACCEPT	Termination is not allowed to continue.
REJECT	Termination is not allowed to continue.

## CMD event variables

Values for these variables are set only when a CMD rule processes a CMD event.

Variable	Contents	Data type
CMD.TEXT	Operands that are entered after the command name at the console.	Character, read-only
CMD.VERB	The command name entered at the console.	Character, read-only

## Exception (EXC) events

An exception event occurs when a task exceeds a specified limit.

The EXC procedure samples distributed with the server contain a sample for each of the exception types. Instructions in the samples explain the following information:

- The environment in which the exception is detected.
- The operational controls that affect subsequent processing by the server.
- The valid return values.

The header statement for an EXC rule is `/*EXC criterion`, where *criterion* is one of strings in the following table. A process section is required.

Criterion	Description	Default action
CPULIMIT	<p>A transaction task exceeded its maximum CPU time limit. This exception is detected only when multipart messages are being transmitted and only when a new message segment is being read. A rule for this event can take one or more of the following actions:</p> <ul style="list-style-type: none"> <li>• Use the return value IGNORE to ignore the exception.</li> <li>• Modify the limit for the current thread. This action prevents the exception from occurring again.</li> </ul> <p>Use the return value REJECT to terminate the ODBC connection, and use the EXC.OPERXRMG variable to send an error message to the client.</p> <p>The rule can use the SDBINFO API function and pass or not pass the connection token as the second parameter.</p>	Terminate the transaction task.

Criterion	Description	Default action
CPUTIME	<p>A transaction task exceeded its maximum CPU time limit. This exception can be detected any time while the task is running. A rule for this event can take one or more of the following actions:</p> <ul style="list-style-type: none"> <li>• Use the return value IGNORE to ignore the exception.</li> <li>• Modify the limit for the current thread. This action prevents the exception from occurring again.</li> </ul> <p>Use the return value KILL to terminate the ODBC connection. No message is sent to the client.</p> <p>The rule can use the SDBINFO API function and must pass the connection token as the second parameter. The connection token is required to identify the task that has the exception, rather than the current task.</p>	Terminate the transaction task.
IMSFAIL	<p>An IMS task detected a failing IMS operation. This exception can occur for any type of IMS processing. The rule can use the SDBINFO function without passing the connection token as the second parameter.</p>	Terminate the IMS operation and reflect the error to the client task.
LOCKEXCLUSIVE	<p>A transaction task exceeded its DB2 exclusive lock limit. A rule for this event can take one of the following actions:</p> <ul style="list-style-type: none"> <li>• Use the return value IGNORE to ignore the exception.</li> <li>• Modify the limit for the current thread. This action prevents the exception from occurring again.</li> </ul> <p>Use the return value KILL to terminate the ODBC connection. No message is sent to the client.</p> <p>The rule can use the SDBINFO API function and must pass the connection token as the second parameter. The connection token is required to identify the task that has the exception, rather than the current task.</p>	Terminate the transaction task.

Criterion	Description	Default action
LOCKSHARE	<p>A transaction task exceeded its DB2 share lock limit. A rule for this event can take one of the following actions:</p> <ul style="list-style-type: none"> <li>• Use the return value IGNORE to ignore the exception.</li> <li>• Modify the limit for the current thread. This action prevents the exception from occurring again.</li> </ul> <p>Use the return value KILL to terminate the ODBC connection. No message is sent to the client.</p> <p>The rule can use the SDBINFO API function and must pass the connection token as the second parameter. The connection token is required to identify the task that has the exception, rather than the current task.</p>	Terminate the transaction task.
LOCKUPDATE	<p>A transaction task exceeded its DB2 update lock limit. A rule for this event can take one of the following actions:</p> <ul style="list-style-type: none"> <li>• Use the return value IGNORE to ignore the exception.</li> <li>• Modify the limit for the current thread. This action prevents the exception from occurring again.</li> </ul> <p>Use the return value KILL to terminate the ODBC connection. No message is sent to the client.</p> <p>The rule can use the SDBINFO API function and must pass the connection token as the second parameter. The connection token is required to identify the task that has the exception, rather than the current task.</p>	
LOGFAILURE	<p>A DB2 database exceeded a pending logging requests limit. This exception can be detected at any time. A rule for this event can take one of the following actions:</p> <ul style="list-style-type: none"> <li>• Use the return value IGNORE to ignore the exception. This action preserves the contents of the pending request queue and prevents error messages from being issued.</li> <li>• Use the return value CLEAR to clear the pending request queue, release all associated storage, and send an error message that contains the number of cleared requests to the system console.</li> </ul> <p>Modify the limit so that the exception does not occur again.</p>	

Criterion	Description	Default action
PERSQLCPU	<p>A transaction task exceeded its per-SQL-statement CPU time limit. This exception is detected only by SQL operations that the server executes, for example for /*EXESQL rules. It is not detected when a user-written high-level language (HLL) program invokes long-running SQL operations. A rule for this event can take one of the following actions:</p> <ul style="list-style-type: none"> <li>• Use the return value IGNORE to ignore the exception.</li> <li>• Modify the limit for the current thread so that the exception does not occur again.</li> <li>• Use the return value KILL to terminate the ODBC connection.</li> <li>• Use the return value IGNORE to ignore the exception.</li> <li>• Modify the limit for the current thread. This action prevents the exception from occurring again.</li> </ul> <p>Use the return value KILL to terminate the ODBC connection. No message is sent to the client.</p> <p>The rule can use the SDBINFO API function and must pass the connection token as the second parameter. The connection token is required to identify the task that has the exception, rather than the current task.</p>	Terminates the transaction.
PGMDURATION	<p>An RPC stalled or was put it into an indefinitely long wait state. A rule for this event can take one of the following actions:</p> <ul style="list-style-type: none"> <li>• Examine the problematic program name and return no value, in which case the default action is taken.</li> <li>• Return the value IGNORE, which allows the problematic task and the RPC task to continue.</li> </ul> <p>Use the EXC.EXXDTMLM variable to modify the limit.</p>	If no rule is enabled to handle the exception or if no return value is specified, the default action is to cancel the problematic task and clear the RCP program.

Criterion	Description	Default action
RPCENQUEUE	<p>A transaction task detected that a client task exceeded its RPC enqueue time limit. This exception can be detected at any time. A rule for this event can take one of the following actions:</p> <ul style="list-style-type: none"> <li>• Return the value IGNORE to ignore the exception.</li> <li>• Modify the time limit for the current thread.</li> <li>• Return the value KILL to terminate the ODBC connection.</li> </ul> <p>The rule can use the SDBINFO API function and must pass the connection token as the second parameter. The connection token is required to identify the task that has the exception, rather than the current task.</p>	
RTMONITOR	The application exceeded the client response time. This exception is detected only for ODBC connections.	None
SESSIONFAILURE	<p>A transaction task detected that a client task exceeded the session failure limit. This exception can be detected at any time. A rule for this event can take one of the following actions:</p> <ul style="list-style-type: none"> <li>• Return the value IGNORE to ignore the exception.</li> <li>• Modify the time limit for the current thread.</li> <li>• Return the value KILL to terminate the ODBC connection. No message is sent to the client.</li> </ul>	Terminate the ODBC client task.
SQLFAIL	<p>A transaction task detected that a SQL statement failed. When a failure occurs, a negative SQL code is set. Only SQL operations that the server executes, such as for /*EXECSQL rules, detect this exception. The exception is not detected when a user-written high-level language (HLL) program invokes a long-running SQL operation.</p>	Reflect the SQL error code to the transaction task.

Criterion	Description	Default action
TIMERONLIMIT	<p>A transaction task detected that a prepare returned a timer-on value that exceeds the limit. Only SQL operations that the server executes, such as for /*EXECSQL rules, detect this exception. The exception is not detected when a user-written high-level language (HLL) program invokes a prepare. A rule for this event can take one of the following actions:</p> <ul style="list-style-type: none"> <li>• Return the value ALLOW, which allows the exception.</li> <li>• Modify the limit.</li> <li>• Return the value REJECT, which terminates the SQL statement, and use the EXC.OPERMG variable to return an error message to the client.</li> </ul> <p>The rule can use the SDBINFO function without passing the connection token as the second parameter.</p>	
WAITTIME	<p>A transaction task exceeded the wait time limit. This exception can be detected at any time. A rule for this event can take one of the following actions:</p> <ul style="list-style-type: none"> <li>• Return the value IGNORE to ignore the exception.</li> <li>• Modify the limit.</li> <li>• Return the value KILL to terminate the ODBC connection. No message is sent to the client.</li> </ul> <p>The rule can use the SDBINFO API function and must pass the connection token as the second parameter. The connection token is required to identify the task that has the exception, rather than the current task.</p>	
ZSQLALLIMSSEGMENTS	<p>SQL Solution determined that a SQL statement will cause all IMS segments that are specified as tables to be read because the child segments that are being joined are not constrained. The query does not specify the CHILD_ID and PARENT_ID columns in the WHERE clause.</p>	<p>Allow or terminate the SQL statement, based on the value of the SQLENGDFLTEXCACTION parameter.</p>
ZSQLFULLDBREAD	<p>SQL Solution determined that a SQL statement will cause all database source records to be read because the subtable query is not constrained. The query does not specify the CHILD_KEY and PARENT_KEY columns in the WHERE clause.</p>	<p>Allow or terminate the SQL statement, based on the value of the SQLENGDFLTEXCACTION parameter.</p>

Criterion	Description	Default action
ZSQLINCKEYBEGINNING	SQL Solution determined that only the beginning of an incomplete key was specified for one of the tables in a query. This situation might occur when multiple columns comprise the key and the query specified only the beginning columns. This situation is acceptable for VSAM access, but it might incur additional overhead for IMS access.	Allow or terminate the SQL statement, based on the value of the SQLENGDFLTEXCACTION parameter.
ZSQLINCKEYPARTIAL	SQL Solution determined that only part of an incomplete key was specified for one of the tables in the query and that the beginning portion of the key was not specified.	Allow or terminate the SQL statement, based on the value of the SQLENGDFLTEXCACTION parameter.
ZSQLNOKEYCOLUMNS	SQL Solution determined that no key columns were specified in the WHERE clause. This situation causes the entire database to be read.	Allow or terminate the SQL statement, based on the value of the SQLENGDFLTEXCACTION parameter.
ZSQLNOWHERECLAUSE	SQL Solution determined that no WHERE clause was provided for a table. This situation causes the entire database to be read.	Allow or terminate the SQL statement, based on the value of the SQLENGDFLTEXCACTION parameter.

### Variables for all EXC events

You can use the variables in the following table in any EXC rule:

Variable	Contents	Data type
EXC.OPEXACSR	The action string for the current exception. This string cannot be directly changed; however, the return value from some rules can change the action string. The following are valid values: <ul style="list-style-type: none"> <li>ACCEPT: Accept the current condition</li> <li>IGNORE: Ignore the current condition</li> <li>KILL: Kill the current client connection</li> <li>ALLOW: Allow the current exception</li> <li>NOACTION: Take no action</li> <li>REJECT: Reject the current exception</li> <li>TERMINATE: Terminate the current client connection</li> </ul>	Character, read-only
EXC.OPEXCNTK	The connection token that is used to obtain information about the thread where the exception occurred. You must use this field for all exceptions that the Check Limits task detects. The connection token is passed as the second parameter of the SDBINFO function. The connection token is only needed if the EXC.OPEXINFO flag is set to 0 (zero).	Character, read-only
EXC.OPEXERMG	The error message field. This field can be modified to send messages to the application.	Character, read-write
EXC.OPEXINFO	A variable that indicates whether the SDBINFO function can be used by the EXC rule. Valid values are: <ul style="list-style-type: none"> <li>0 (zero): SDBINFO cannot be used</li> <li>1: SDBINFO can be used</li> </ul>	Character, read-only
EXC.OPEXSRID	The search ID field contains the criterion that triggers the current rule. The valid values are listed in the previous table.	Character, read-only

Variable	Contents	Data type
EXC.OPEXWAOK	A variable that indicates whether the EXC rule is allowed to perform operations that cause the current subtask to be placed in a waiting state. An example of such a task is issuing an I/O request. Valid values are: <ul style="list-style-type: none"> <li>• 0 (zero): WAITS are not allowed</li> <li>• 1: WAITS are allowed</li> </ul>	Character, read-only
EXC.USER	The user area is passed among all rules that are triggered for the same event.	Character, read-write

### Variables for CPULIMIT events

Variable	Contents	Data type
EXC.EXCLSPLM	The CPU time limit. This variable can be modified to prevent the exception from occurring again. Set the variable to 0 (zero) to stop checking the CPU time.	Character, read-write
EXC.EXCLCPVL	The CPU time value shows how much CPU time the task has used.	Character, read-only

### Variables for IMSFAIL events

Variable	Contents	Data type
EXC.EXIMIMCD	The IMS code. This value is obtained from IMS.	Character, read-only

### Variables for LOCKEXCLUSIVE events

Variable	Contents	Data type
EXC.EXXCTMLM	The exclusive lock time limit. This variable can be modified to prevent the exception from occurring again. Set the variable to 0 (zero) to stop checking the CPU time.	Character, read-only
EXC.EXSHTMVL	The share lock time value shows long the current task has been holding a share lock.	Character, read-only

### Variables for LOCKUPDATE events

Variable	Contents	Data type
EXC.EXUPTMLM	The update lock time limit. This variable can be modified to prevent the exception from occurring again. Set the variable to 0 (zero) to stop checking the CPU time.	Character, read-only
EXC.EXUPTMVL	The update lock time value shows long the current task has been holding an update lock.	Character, read-only



## Variables for LOGFAILURE events

Variable	Contents	Data type
EXC.EXLGP.nlm	The pending request limit. This variable can be modified to prevent the exception from occurring again. Set the variable to 0 (zero) to stop checking the limit of all pending requests.  There are two request limits: the warning limit and the failure limit. If the rule is triggered for a warning limit, only the warning limit can be changed. If the rule is triggered for a failure limit, only a failure limit can be changed.	Character, read-only
EXC.EXLGP.nvl	The pending requests value shows the number of pending logging requests.	Character, read-only
EXC.EXLGS.sna	The database name is the DB2 subsystem that has too many pending logging requests.	Character, read-only

## Variables for PERSQLCPU events

Variable	Contents	Data type
EXC.EXPQC.plm	The per-SQL-statement CPU time limit. This variable can be modified to prevent the exception from occurring again. Set the variable to 0 (zero) to stop all per-SQL-statement time checking.	Character, read-write
EXC.EXPQC.pvl	The CPU time value shows the amount of CPU time that the current SQL statement used.	Character, read-only

## Variables for PGMDURATION rules

Variable	Contents	Data type
EXC.EXXD.tlm	The program duration time limit, in seconds. If the PGMDURATION rule returns IGNORE, which allows the RPC program to continue, each time that the limit is subsequently checked, an exception occurs.  To avoid raising additional exceptions, change this variable to increase the program duration limit, or set the variable to 0 (zero) to prevent additional events from being recognized.  If the rule puts a new limit into effect, the new limit applies only to the in-flight RPC program execution for which the current exception was raised. The new limit is not retained in memory.	Character, read-only
EXC.EXXD.tmv	The duration time value shows how long, in seconds, the RPC program has been running.	Character, read-only
EXC.EXXD.p.gna	The 8-byte name of the RPC program load module that is being executed. For SQL CALL statements, the full procedure name from the SQL statement is unavailable when this exception is recognized.  If no RPC rule matches the SQL CALL procedure name, the value of this variable is the first 8 characters of the procedure name. If a matching RPC rule contains a PROGRAM section, the value of the variable is the 8-byte load module name from the PROGRAM section of the RPC rule. In this case, the 8 characters might not match the leading characters of the CALL statement procedure name.	Character, read-only

### Variables for RPCENQUEUE rules

Variable	Contents	Data type
EXC.EXNQTMLM	The RPC enqueue time limit. This variable can be modified to prevent the exception from occurring again. Set the variable to 0 (zero) to stop all RPC enqueue time checking.	Character, read-write
EXC.EXNQTMVL	The RPC enqueue time value, which shows how long the current task has been holding an PRC enqueue.	Character, read-only

### Variables for RTMONITOR rules

Variable	Contents	Data type
EXC.EXCRTGRT	The client response time goal, which shows the acceptable response time.	Character, read-only
EXC.EXCRTMMI	The actual client response time for the transaction that produced the exception.	Character, read-only
EXC.EXCRTRTR	The total number of client response time records.	Character, read-only
EXC.EXCRSRTR	The sum of the total response time for all records.	Character, read-only
EXC.EXCRTMGR	The total number of client response time records that missed the response time goal.	Character, read-only
EXC.EXCRSMGR	The sum of the total response time for the records that missed the response time goal.	Character, read-only
EXC.EXCRIPAD	The IP address.	Character, read-only
EXC.EXCRUSID	The user ID.	Character, read-only
EXC.EXCRAPNM	The application name.	Character, read-only

### Variables for SESSIONFAILURE rules

Variable	Contents	Data type
EXC.EXSETMLM	The session failure time limit. This variable can be modified to prevent the exception from occurring again. Set the variable to 0 (zero) to stop all RPC enqueue time checking.	Character, read-write
EXC.EXSETMVL	The session failure time value, which shows how long the current task has been processing on behalf of a client.	Character, read-only

### Variables for SQLFAIL rules

Variable	Contents	Data type
EXC.EXSQSQCA	The SQLCA is built by prepare and is provided as a single binary data area.	Character, read-only
EXC.EXSQSQCD	The SQL code that is obtained from the SQLCA.	Character, read-only
EXC.EXSQSQSR	The SQL statement that failed.	Character, read-only

## Variables for TIMERONLIMIT rules

Variable	Contents	Data type
EXC.EXTMSQCA	The SQLCA is built by prepare and is provided as a single binary data area.	Character, read-only
EXC.EXTMSQSR	The SQL string that was prepared	Character, read-only
EXC.EXTMTMLM	The timer-on limit. This variable can be modified to prevent the exception from occurring again. Set the variable to 0 (zero) to stop all timer-on checking.	Character, read-only
EXC.EXTMTMVL	The timer-on value shows the timer-on value that is returned by prepare.	Character, read-only

## Variables for WAITTIME rules

Variable	Contents	Data type
EXC.EXWATMLM	The wait time limit. This variable can be modified to prevent the exception from occurring again. Set the variable to 0 (zero) to stop all wait time checking.	Character, read-write
EXC.EXWATMVL	The wait time value, which shows how long the current task has been waiting for a request from a client.	Character, read-only

## SQL events

A SQL event occurs when a SQL statement is processed.

A SQL rule runs before the SQL source is prepared. If a SQL source is modified, it is prepared or passed to execute immediately after the SQL rule runs. Use SQL rules for the following purposes:

### Modify a SQL source

To modify a SQL source, add or modify a WHERE clause.

### Reject a SQL statement

To reject a SQL statement, use the REJECT return value. You can also use the SQL.MESSAGE to send a message to the client. If the SQL statement is rejected, set the SQL.CODE variable to a negative value. Otherwise, the value -1 is used as the SQL code.

### Accept a SQL statement

To accept a SQL statement, set the return value to ACCEPT. If the SQL statement is accepted, DB2 does not execute it. Instead, the rule processes the statement. To send a warning or error message to the client, use the SQL.MESSAGE variable. For warnings, a positive value. For failures, use a negative value. If the return code is ACCEPT and a non-zero value is set for the SQL.CODE variable, a message is sent to the client. If a message is not provided, a default message is constructed and sent.

When a SQL event occurs, the system extracts information about the event and creates the following variables. These variables are instantiated when the SQL rule is scheduled to run. You can write a SQL rule that accesses the following variables:

Criterion	Variable	Contents	Data type
ALL	SQL.CODE	The code to return to the client	Character, read-write

Criterion	Variable	Contents	Data type
ALL	SQL.MESSAGE	The message to return to the client	Character, read-write
ALL	SQL.SEARCHID	The SQL verb that is extracted from the current SQL string	Character, read-only
ALL	SQL.TEXT	The actual SQL source	Character, read-only
ALL	SQL.USER	The user area that is passed among all rules	Character, read-write

## Time-of-day (TOD) events

A time-of-day event occurs when the z/OS timer that is associated with a rule expires.

To specify the header statement, use the following syntax:

```
/*TOD todspec, interval, endspec, maxexecs
```

where:

- *todspec* is the date or time. You must specify either *todspec* or *interval*. Use one of the following formats to specify *todspec*:
  - *ddMMMyyyy*, where *dd* is a 2-digit integer (01 - 31) that represents the day of the month; *MMM* is a 3-character abbreviation for the month (JAN, FEB, MAR, APR, MAY, JUN, JUL, AUG, SEP, OCT, NOV, DEC); and *yyyy* is a 4-digit year.
  - *yymmday*, where *yy* is a 2-digit year; *mm* is a 2-digit month; and *day* is the full name of a day of the week, for example, SUNDAY or MONDAY.
  - *hh:mm:ss*, where *hh* is a 2-digit integer (00 - 23) for the hour; *mm* is a 2-digit integer (00 - 59) for the minute; and *ss* is a 2-digit integer (00 - 59) for the seconds after the minute. The *ss* value is optional.
- *interval* is the amount of time to wait before running the rule again. You must specify either *todspec* or *interval*. Use the following format to specify the *interval*:
  - *n units*, where *n* is an integer that represents the number of times to run the rule, and *units* is the time to wait before running the rule again. For *units*, specify one of the following: DAY, DAYS, WEEK, WEEKS, HOUR, HOURS, MINUTE, MINUTES, SECOND, SECONDS.
- *endspec* is the time or date after which the rule stops running. This parameter is optional.
- *maxexecs* is an integer that represents the maximum number of times to run the rule. This parameter is optional.

**Note:** If you omit any parameter, code a comma in its place.

The value that is returned from a TOD rule has no special meaning.

When a TOD event occurs, the system extracts information about the event and creates the following variables. These variables are instantiated when the rule is scheduled for execution.

Criterion	Variable	Contents	Data type
ALL	TOD.NEXTFIRE	A value that indicates the next time that the rule runs. The following are valid values: <ul style="list-style-type: none"> <li>The date and time in <i>yyyy/mm/dd hh:mm:ss</i> format.</li> <li>NONE if the rule will not run again.</li> </ul>	Character, read-only
ALL	TOD.USER	An 8-byte field for passing information among multiple rules. This field is initialized to binary zeroes.	Character, read-write

## Virtual table (VTB) events

Virtual table events are generated by the SQL Engine when a table name is found in an SQL statement. These events are only generated if the **SEFVTBEVENTS** startup parameter is set to allow them. The rules allow for creating virtual tables dynamically from a DMF model map and for modifying certain table values.

No keywords are currently defined for VTB event procedures. Only the SQL engine schedules execution of enabled VTB event procedures for each table name in an SQL statement. VTB event procedures allow you to modify information in the DMF map. VTB event procedures make it possible to access multiple data sets using one DMF map by creating alias maps using a model map. Each alias map can specify a different data set name. The model map must be a map created using DMF.

Only the event procedure criterion value is allowed (and *must* be present).

To specify the header statement, use the following syntax:

```
/*VTB criterion
```

where:

- criterion* is the criterion value for VTB event procedures. This *criterion* is one of the two event types shown in the following table.

Each VTB event procedure has access to server-wide global variables.

In addition, VTB-specific variables are created before the VTB event procedure is invoked. The variables that are created differ depending on the criterion.

Criterion	Variable	Contents	Data type
Any criterion	VTB.USER	The user area is passed between all event procedures that fire for the same event.	Read-write
Any criterion	VTB.OPTBSRID	The search id field contains the criterion used to fire the current event procedure.  The format of the criterion is the string 'MODIFYTABLE.' followed by the table name found in the SQL statement.	Character Read-only

Criterion	Variable	Contents	Data type
Any criterion	VTB.OPTBTBNA	The 1 to 128-character table name from the SQL statement.	Character Read-only
MODIFYTABLE. <i>tablename</i>	VTB.OPTBMTNA	Set the model table name. This is the 1 to 50-character name of a DMF map that will be used to create a virtual table with the alias name <i>tablename</i>	Character, write
MODIFYTABLE. <i>tablename</i>	VTB.OPTBMRDI	Disable MapReduce. Set this value to 1 to disable map reduce.  Setting this value to 0 has no effect.  VTB.OPTBMRDI and VTB.OPTBMREN are mutually exclusive.	Character, write
MODIFYTABLE. <i>tablename</i>	VTB.OPTBMREN	Enable MapReduce. Set this value to 1 to enable map reduce.  Setting this value to 0 has no effect.  VTB.OPTBMREN and VTB.OPTBMRDI are mutually exclusive. Enabling MapReduce requires that the MapReduce feature is enabled.	Character, write
MODIFYTABLE. <i>tablename</i>	VTB.OPTBMRTC	Set the number of MapReduce thread to use.	Character, write
MODIFYTABLE. <i>tablename</i>	VTB.OPTBFLAT	Flatten this table. Set this value to 1 to flatten the table. All columns and occurrences are returned in a single table  Setting this value to 0 has no effect.  VTB.OPTBFLAT and VTB.OPTBSUBT are mutually exclusive.	Character, write

Criterion	Variable	Contents	Data type
MODIFYTABLE. <i>tablename</i>	VTB.OPTBSUBT	<p>Create subtables. Set this value to 1 to create subtables Columns that are part of an occurs or occurs-depending-on are returned as separate tables.</p> <p>Setting this value to 0 has no effect.</p> <p>VTB.OPTBFLAT and VTB.OPTBSUBT are mutually exclusive.</p>	Character, write
MODIFYTABLE. <i>tablename</i>	VTB.OPTBCLSQ	<p>Clear sequential data set map related fields. Set this value to 1 to clear the data set member name, pre-write exit name, and post read exit name.</p> <p>Setting this value to 0 has no effect.</p> <p>The fields are cleared before any other variables are processed.</p>	Character, write
MODIFYTABLE. <i>tablename</i>	VTB.OPTBCLCI	<p>Clear VSAMCICS map related fields. Set this value to 1 to clear the pre-write exit name, post read exit name, CICS file control table entry names, CICS connection name, and CICS transaction name fields.</p> <p>Setting this value to 0 has no effect.</p> <p>The fields are cleared before any other variables are processed.</p> <p>Clearing those fields will cause a VSAMCICS file to be processed as a native VSAM file.</p>	Character, write
MODIFYTABLE. <i>tablename</i>	VTB.OPTBCLD2	<p>Clear DB2 map related fields. Set this value to 1 to clear the table name, subsystem map name, table creator name, plan name, and user ID fields.</p> <p>Setting this value to 0 has no effect.</p> <p>The fields are cleared before any other variables are processed.</p>	Character, write

Criterion	Variable	Contents	Data type
MODIFYTABLE. <i>tablename</i>	VTB.OPTBCLIM	Clear IMS DB map related fields. Set this value to 1 to clear the segment name, DBD name, and PSB name fields.  Setting this value to 0 has no effect. The fields are cleared before any other variables are processed.	Character, write
MODIFYTABLE. <i>tablename</i>	VTB.OPTBCLIV	Clear IMS view map related fields. Set this value to 1 to clear the segment name, DBD name, and PSB name fields.  Setting this value to 0 has no effect.  The fields are cleared before any other variables are processed.	Character, write
MODIFYTABLE. <i>tablename</i>	VTB.OPTBDSNA	Set the 1 to 44-character VSAM or sequential data set name.	Character, write
MODIFYTABLE. <i>tablename</i>	VTB.OPTBMEMA	Set the 1 to 8-character sequential data set member name.	Character, write
MODIFYTABLE. <i>tablename</i>	VTB.OPTBPRWR	Set the 1 to 8-character VSAM, VSAMCICS, or sequential data set pre-write exit name.	Character, write
MODIFYTABLE. <i>tablename</i>	VTB.OPTBPSRD	Set the 1 to 8-character VSAM, VSAMCICS, or sequential data set post read exit name.	Character, write
MODIFYTABLE. <i>tablename</i>	VTB.OPTBVSBF	Set the 1 to 8-character CICS file control table entry name for the base file.	Character, write
MODIFYTABLE. <i>tablename</i>	VTB.OPTBCONN	Set the 1 to 4-character CICS connection name.	Character, write
MODIFYTABLE. <i>tablename</i>	VTB.OPTBCITR	Set the 1 to 4-character CICS transaction name.	Character, write
MODIFYTABLE. <i>tablename</i>	VTB.OPTBD2TN	Set the 1 to 128-character DB2 table name.	Character, write
MODIFYTABLE. <i>tablename</i>	VTB.OPTBD2SN	Set the 1 to 50-character DB2 subsystem map name.	Character, write
MODIFYTABLE. <i>tablename</i>	VTB.OPTBD2TC	Set the 1 to 8-character DB2 table creator ID.	Character, write
MODIFYTABLE. <i>tablename</i>	VTB.OPTBD2PN	Set the 1 to 8-character DB2 plan name.	Character, write
MODIFYTABLE. <i>tablename</i>	VTB.OPTBIMSN	Set the 1 to 8-character IMS DB segment name	Character, write



Criterion	Variable	Contents	Data type
MODIFYTABLE. <i>tablename</i>	VTB.OPTBIMDN	Set the 1 to 8-character IMS DB DBD name	Character, write
MODIFYTABLE. <i>tablename</i>	VTB.OPTBPSB	Set the 1 to 8-character IMS DB PSB name	Character, write
MODIFYTABLE. <i>tablename</i>	VTB.OPTBIVSG	Set the 1 to 8-character IMS view segment name	Character, write
MODIFYTABLE. <i>tablename</i>	VTB.OPTBIVDB	Set the 1 to 8-character IMS view DBD name	Character, write
MODIFYTABLE. <i>tablename</i>	VTB.OPTBIVPS	Set the 1 to 8-character IMS view PSB name	Character, write
GETALIASES. <i>tablename</i>	VTB.OPTBLIST	Set a list of 1 to 50-character table names that are the aliases of map <i>tablename</i> .  There is room for up to 637, 50-character alias names separated by a blank. More alias names are possible if they are shorter.	Character, write

## Host commands

Use host commands to retrieve output information from a specified host environment.

### DISPLAY command

Use the DISPLAY command to display information about all connected users.

### Displaying basic information

Use the following syntax to display basic information about all connected users:

```
"DISPLAY REMOTE USERS(*)"
```

This command displays the following information about each connected user:

- ACTUAL BLOCK ADDRESS
- APPLICATION NAME
- CONNECTION ID
- DB2 SUBSYSTEM
- HOST NAME
- ICUV PATH ID
- IP ADDRESS
- LINK TYPE
- LOCAL IP PORT NUMBER
- REMOTE IP PORT NUMBER
- SOCKET NUMBER
- TRUSTED HOST
- USER ID
- TASK TCB ADDRESS
- TRUSTED HOST

- USER ID

### **Displaying additional information**

Use the following syntax to display additional information about all connected users:

```
"DISPLAY REMOTE USERS(*) VERBOSE"
```

This command provides the following additional information about each connected user:

- ACEE SOURCE
- BUFFER FUNCTION CODE
- COMPRESSED SEND AMOUNT
- COMPRESSED TOTAL BYTES RECEIVED
- CPU TIME
- CUMULATIVE COMPRESSION
- CUMULATIVE RECEIVED COMPRESSION
- CURRENT COMPRESSED RECEIVED AMOUNT
- CURRENT RAW RECEIVED AMOUNT
- CURRENT STATE
- DB2 PLAN NAME
- DB2 REQUESTING SITE
- DB2 THREAD TOKEN
- DOMAIN NAME
- ELAPSED TASK TIME
- EXTENDED USER ID
- GENERIC USER ID
- HOST TIME
- INTERNAL NAME
- LAN USER ID
- LOCKS HELD
- MODULE NAME
- ODBC DRIVER DATE
- ODBC DRIVER VERSION
- PROGRAM NAME
- RAW BYTES RECEIVED
- RAW BYTES SENT
- RAW RECEIVED COMPRESSION
- RAW SEND AMOUNT
- RAW SEND COMPRESSION FACTOR
- SQL CODE
- SQL COUNT
- SQL CURSOR NUMBER
- SQL REASON CODE
- SQL RETURN CODE
- SQL STATEMENT NUMBER
- SQL STATEMENT TYPE

- STATE DURATION
- TELEPROCESSING TIME
- TELEPROCESSING TIME PERCENTAGE
- TOTAL RAW BYTES SENT
- USER PARAMETER
- WLM ENCLAVE COUNT
- WLM ENCLAVE CPU TIME

## API functions for rules

The following API functions are available for rules.

### SDBVALUE API function

Use the SDBVALUE function to manipulate global variables.

For example, use the SDBVALUE function to use compound symbols as a type of database. Use this function in a rule that performs special interrogation or serialization processing.

Under normal circumstances, you can use a REXX language statement to reference or set the value of a global variable. The following code shows an example of using a REXX statement:

```
SAVENAME = GLOBAL.COMPANY.NAME
GLOBAL.COMPANY.NAME = "Keroc Software"
GLVEVENT.MYDATA = "ABC"
```

### Return values

SDBVALUE returns a value from the function call, and for some action codes, places information in the external data queue.

### Action codes and syntax

The following table describes the actions that are performed for each action code and the values that are returned.

In the syntax, the variables are as follows:

- *derivedname* is the name of the symbol receiving the action. When you use this parameter without quotation marks, simple symbols (case sensitive) following the stem are replaced by their values.
- *actioncode* is the action to take on the symbol.
- *newval* is the new value to assign to the symbol.
- *oldval* is the value of the symbol before the action is taken.

Code, syntax, and description	Return value
<p>A (Add)</p> <p><i>val</i> = SDBVALUE(<i>derivedname</i>'A'<i>increment</i>)</p> <p>Adds a number, specified by <i>increment</i>, to the existing compound symbol given by <i>derivedname</i>. All references to the compound symbol are serialized during the add operation, so you can use this function to increment a counter that is set by concurrent tasks.</p>	<p>Returns 1 (true) if the comparison finds the pre-action value to be equal to the old value and the compound symbol was updated. Returns 0 (false) if the comparison finds unequal values and does not update the value of the compound symbol. Does not change the external data queue.</p>
<p>C (Compare and update)</p> <p><i>val</i> = SDBVALUE(<i>derivedname</i>, 'C', <i>newval</i>, <i>oldval</i>)</p> <p>Verifies the value of a compound symbol and then updates its value. Safely updates global symbols that more than one rule uses or global symbols that multiple copies of the same rule might access and update. Serializes the compare and update operations for global values.</p>	<p>Returns 1 (true) if the comparison finds the pre-action value to be equal to the old value and the compound symbol was updated. Returns 0 (false) if the comparison finds unequal values and does not update the value of the compound symbol. Does not change the external data queue.</p>
<p>D (Drop)</p> <p><i>val</i> = SDBVALUE(<i>derivedname</i>, 'D')</p> <p>Drops the compound symbol specified by <i>derivedname</i>. Resets the compound symbol to its uninitialized value or derived name. If <i>derivedname</i> specifies a stem, all compound symbols that belong to that stem are dropped and the virtual storage that is allocated to them is released. All other references see the compound symbol as it existed before the drop operation started or as it is after the drop operations finishes.</p>	<p>Returns the value of <i>derivedname</i>. Does not change the external queue.</p>
<p>E (Existence)</p> <p><i>val</i>=SDBVALUE(<i>derivedname</i>, 'E')</p> <p>Determines whether a global variable exists.</p>	<p>Returns one of the following values for the status of the global variable:</p> <ul style="list-style-type: none"> <li>• I: Initialized</li> <li>• U: Uninitialized. The variable exists in storage, but it is uninitialized so it is set to the value of its name.</li> <li>• N: Does not exist. The variable does not exist in storage.</li> </ul> <p>Does not change the external data queue.</p>

Code, syntax, and description	Return value
<p>F (Find)</p> <p><i>val</i>=SDBVALUE(<i>derivedname</i>, 'F')</p> <p>Determines whether a global variable exists. The maximum length for a string pulled from the external data queue is 350 bytes. Longer strings are truncated.</p>	<p>Returns one of the following values for the status of the global variable:</p> <ul style="list-style-type: none"> <li>• I: Initialized</li> <li>• U: Uninitialized. The variable exists in storage, but it is uninitialized so it is set to the value of its name.</li> <li>• N: Does not exist. The variable does not exist in storage.</li> </ul> <p>When the return value is I or U, the value of the node is returned in the external data queue.</p>
<p>I (Information)</p> <p><i>val</i>=SDBVALUE(<i>derivedname</i>, 'I')</p> <p>Returns information about all of the immediate subnodes of the <i>derivedname</i>.</p>	<p>For each subnode, places two lines in the external data queue. The first line contains the next segment of the <i>derivedname</i>. The second line contains the following information about the <i>derivedname</i>:</p> <ul style="list-style-type: none"> <li>• Word 1, length 8: Number of subnodes under this node.</li> <li>• Word 2, length 8: Create date, in the form yy/mm/dd.</li> <li>• Word 3, length 8: Create time, in the form hh:mm:ss.</li> <li>• Word 4, length 17: Create rule or program name.</li> <li>• Word 5, length 8: Create job name, task name, or TSO ID.</li> <li>• Word 6, length 8: Last modification date.</li> <li>• Word 7, length 8: Last modification time.</li> <li>• Word 8, length 17: Last modification rule or program name.</li> </ul> <p>Does not return partially updated symbol names.</p>
<p>L (List)</p> <p><i>val</i>=SDBVALUE(<i>derivedname</i>, 'L')</p> <p>Lists the derived name of each subnode of the <i>derivedname</i>.</p>	<p>Returns the number of subnodes listed in the external data queue. Returns dropped symbols, but does not return removed symbols.</p>
<p>O (Obtain)</p> <p><i>val</i>=SDBVALUE(<i>derivedname</i>, 'O')</p> <p>Obtains the value of a global variable.</p>	<p>Returns the value of a global variable. If the global variable does not exist, returns an error. Does not change the external data queue.</p>
<p>R (Remove)</p> <p><i>val</i>=SDBVALUE(<i>derivedname</i>, 'R')</p> <p>Removes the specified node and all of its subnodes. After a node is removed, it ceases to exist.</p>	<p>Returns the number of subnodes that were removed. Does not change the external data queue. Does not allow other accessories of compound symbols to see partially updated symbols.</p>

Code, syntax, and description	Return value
<p>S (Subtree)</p> <p><i>val</i>=SDBVALUE(<i>derivedname</i>, 'S')</p> <p>Lists the entire global variable name of all subnodes of the <i>derivedname</i>.</p>	<p>Returns the entire global variable name of all of the subnodes in the external data queue. Returns the number of subnodes that exist, as listed in the external data queue. Does not return partially updated symbol names.</p>
<p>T (Subtree and information)</p> <p><i>val</i>=SDBVALUE(<i>derivedname</i>, 'S')</p> <p>Lists the entire global variable name and all subnodes of the <i>derivedname</i>.</p>	<p>Returns the entire global variable name and two lines for each subnode in the external data queue. The first line contains the next segment of the <i>derivedname</i>. The second line contains the information, as described for the Information code, for each <i>derivedname</i>. Does not return partially updated symbol names.</p>
<p>U (Update)</p> <p><i>val</i>=SDBVALUE(<i>derivedname</i>, 'U', <i>newval</i>)</p> <p>Assigns <i>newval</i> as the value of the compound symbol that is specified by <i>derivedname</i>. If the compound does not exist, the compound is created and assigned the new value. Use Update to prevent others who access compound symbols from seeing partially updated symbols.</p>	<p>Returns the variable specified by <i>newval</i>. Does not change the external data queue.</p>
<p>V (Value)</p> <p><i>val</i>=SDBVALUE(<i>derivedname</i>, 'V')</p> <p>Returns the value of the specified compound symbol. Use Value to prevent the issuer of SDVALUE from seeing partially updated symbols.</p>	<p>Returns the current value of the node. If the node does not exist, it is created but it is not assigned a value. Instead, it is given the same value as its name. Does not change the external data queue.</p>

## SDBINFO API function

The SDBINFO function retrieves information about the Accelerator Loader server subsystem.

The syntax for the SDBINFO function is the following:

```
var=SDBINFO(arg1 [, arg2])
```

where *arg1* is a parameter from the following table, and *arg2* is the connection token, which is optional.

The function always returns a return value. If the value requested is not valid for the environment, a NULL string is returned.

Parameter	Return value
ASID	Returns the address space identifier (ASID) as a 2-byte binary value when invoked using the program API. Returns the ASIDD as a 4-byte value when invoked from REXX.
BYTES	Returns the number of saved bytes.

<b>Parameter</b>	<b>Return value</b>
CLOCK	Returns the current time-of-day (TOD) clock value as an 8-byte binary value. Note that this is the unadjusted STCK value.
CONNECTID	Returns the unique connection ID value.
CPUDELT	Returns the 8-byte task CPU time delta value.
CPUTIME	Returns the 8-byte task CPU time value.
DB2PLAN	Returns the name of the DB2 plan.
DB2SUBSYS	Returns the name of the DB2 subsystem.
EVENTTYPE	Returns the type of event that is associated with the rule or program.
HOSTDOMAIN	Returns the host (server) domain that is associated with the current request.
HOSTNAME	Returns the host name (client) associated with the current request.
IPADDRESS	Returns the fully formatted IP address for the current request in the form 10.17.16.164.
JOBNAME	Returns the z/OS job name that is related to the current primary address space.
LASTCONNECTID	Returns the last connection ID used on the current link.
LASTUSERID	Returns the last user ID used on the current link.
LINKTYPE	Returns the link type for the current request.
LU	Returns the LU name for the current request.
MAINPGM	Returns the name of the main REXX program or rule.
MODE	Returns the mode name for the current request.
ODBCDATE	Returns the compile date of the .NET Client (ODBC).
ODBCVERSION	Returns the version of the .NET Client (ODBC).
PRODUCT	Returns the product identification string.
PRODUCTSTATUS	Returns the current product status.
PROGRAM	Returns the name of the REXX program or rule.
ROWS	Returns the number of source rows.
SEFFEATURE	Returns a single blank if the Server Event Facility (SEF) is not enabled.
SUBSYS	Returns the accessed subsystem ID from the current OPMS image.
SUBSYSASID	Returns the ASID of the active subsystem from the real OPMS as a 2-byte binary value when invoked using the program API and as a 4-byte value when invoked from REXX.
SMFID	Returns the SMF ID.

Parameter	Return value
TASKTYPE	Returns the task type.
TRANSTYPE	Returns the transaction program type.
USERID	Returns the user ID value.
USERPARM	Returns the user parameter string from the client.
VERSION	Returns, as a string, the version of the product subsystem under which the rule or program is running.

## Examples

The following call sets the REXX variable, *IPA*, to the fully formatted TCP/IP address of the client program:

```
IPA = SDBINFO(IPADDRESS)
```

The following call sets the variable *USER* to the user ID value of the connection that caused the exception. In this example, *EXC.OPEXCNTK*, which contains the connection token, is used to obtain the user ID because the exception rule runs under the *OPCKLM* (check limits) task, not the user connection task:

```
USER = SDBINFO(USERID,EXC.OPEXCNTK)
```

## SDBECURE API function

The *SDBECURE* function performs security-authorization processing.

### Verify data set access

To verify that the current user has authorization to access a data set, use the following syntax:

```
var = SDBECURE('D','dsname','accesstype','volser')
```

where:

- *dsname* is the name of the data set.
- *accesstype* is the type of data set access to verify. If you do not specify a type, READ access is the default. Valid values are:
  - A: Verify ALTER access.
  - C: Verify CONTROL access.
  - R: Verify READ access.
  - U: Verify UPDATE access.
- *volser* is the volume serial number to validate. If you do not specify a *volser*, the parameter is blank, by default.

The function returns a message that indicates whether access is allowed.

### Retrieve logon ID field data

To retrieve security subsystem information from the current user's ACEE, use the following syntax:

```
var = SDBECURE('F','fieldname')
```

where *fieldname* is one of the fields in the following table:



Field	Description	Field format
ALTER	Alter authority flag	Bit
APPLICATION	Application name	Character
APPLICATIONDATA	Application data	Character
APPLICATIONLEVEL	Application level	Binary
AUDITOR	Auditor attribute	Bit
AUTOMATIC	Automatic attribute	Bit
CLASSAUTHORIZATIONS	Class authorizations	Binary
CONTROL	Control authority flag	Bit
DATE	Date	RACINT date
DEFINEUSERS	Authorized to define users	Bit
GROUP	Contents of the ACEE group field	Character
GROUPLIST	A list of groups	Character
GROUPLISTCONTAINS	Group list contents flag	Bit
INSTALLATIONDATA	Contents of the installation data field	Character
LOG	Logging on for most operations	Bit
NONE	None authority flag	Bit
OPERATIONS	Operations attribute	Bit
PORTOFENTRYDATA	Port of entry data	Character
PORTOFENTRYLEVEL	Port of entry level	Binary
PRIVILEGED	Accelerator Loader server with privileged flag	Bit
PROTECTDASD	Authorized to protect DASD	Bit
PROTECTTAPE	Authorized to protect tape	Bit
PROTECDTERMINALS	Authorized to protect terminals	Bit
RACF	RACF-defined user flag	Bit
READ	Read authority flag	Bit
SPECIAL	Special attribute	Bit
STCNAME	Accelerator Loader server name	Character
SURROGATEUSERID	Surrogate user ID	Character
TERMINAL	Terminal ID	Character
UPDATE	Update authority flag	Bit
USERDATA	Contents of the user data field	Character
USERID	Contents of the ACEE user ID field	Character
USERNAME	User name field	Character
VERSION	ACEE version code	Binary

The following conversions occur, based on the field format:

- Binary fields are converted to signed decimal values without leading zeros or blanks. The number zero is returned as 0.
- Character fields are returned as is. If a character field name exceeds the maximum allowed string length, it is truncated to the Accelerator Loader server/REXX-defined maximum string length.
- Date fields are converted to the format *yyyy/mm/dd*. Leading zeros are retained so that the result is always 10 non-blank characters. A date field that contains zero is returned as *\*\*\*\*/\*\*/\*\**.
- Bit fields are converted to 0 (false or off) or 1 (true or on).
- The GROUPLIST field inquiry returns an integer that represents the number of entries in the group list. Each group name is returned as a separate entry in the external data queue.

### Request security product information

To retrieve information about the security product, use the following syntax:

```
var = SDBECURE('i', 'name')
```

where *name* is one of values in the following table:

Value	Return value
MODE Valid only for systems that run ACF2.	Returns one of the following ACF2 operating modes: ABORT, LOG, OFF, WARN, QUIET.
PRODUCT	Returns the name of the security product or the message UNKNOWN SECURITY PRODUCT.
RELEASE	Returns the release and version number for the security product.

If the information cannot be obtained, a NULL string is returned.

### Verify access to a generalized resource

To verify that the current user has access to a generalized resource, use the following syntax:

```
var = SDBECURE('R', class, resource, requestcode)
```

where:

- *class* is the generalized resource class name or for ACF2, the type name.

**Note:** Rules that verify access to resources use SAF processing. If you use ACF2, you must define the ACF2 resource type as a SAF class name.

- *resource* is the 1- to 39-byte resource entity name.
- *requestcode* is the type of access to verify. If you do not specify a request code, READ access is the default. The following are valid values:
  - A: Verify ALTER access..
  - C: Verify CONTROL access.
  - R: Verify READ access.
  - U: Verify UPDATE access.

If access to the resource is allowed, the string ALLOW is returned. Otherwise, an error message is returned.

## Verify a user ID and password

Use the following syntax to verify the user ID and password. If the password is valid, the user is logged on to the system. This API call is valid only for ATH events.

```
var = SDBECURE('P', 'userid', 'password', 'newpassword')
```

where:

- *userid* is the user ID to validate.
- *password* is the password that is associated with the user ID.
- *newpassword* is the new password to associate with the user ID.

If you omit the *newpassword* parameter, the user ID and password are validated. If you specify the *newpassword* parameter, the password is changed.

If the password is correct, the return value is the string ALLOW. If the password is incorrect, an error message is returned. Note that for ACF2, the counter for invalid password violation for the specified user ID is incremented for each failed attempt.

## Use an implied password to validate a user ID

This request causes the specified user ID to be validated. If the password is valid, the user is logged on to the system. The password is not specified on the function call. Instead, the initial inbound transaction request transmits the password. Use this function to perform custom security checks without making the clear text password available to the procedure. This API call is valid only for ATH events.

Use the following syntax to use an implied password to validate a user ID:

```
var = SDBECURE('PI', 'userid', 'newpassword')
```

where:

- *userid* is the user ID to validate.
- *newpassword* is the new password to associate with the user ID.

If you omit the *newpassword* parameter, the function uses the implied password to validate the user ID. If you specify *newpassword*, the function changes the password. If the password is correct, the return value is the string ALLOW. If the password is incorrect, an error message is returned. Note that for ACF2, the counter for invalid password violation for the specified user ID is incremented for each failed attempt.

## SDBSUBMIT API function

Use the SDBSUBMIT function to submit JCL to the internal reader and return the JES2 or JES3 job ID for each submitted job.

The SDBSUBMIT function can be invoked as a function reference, which returns its result to the point of invocation, or as a REXX CALL statement. There is no corresponding TSO/E REXX or high-level language (HLL) API interface.

- The JCL statements read from the input stream can be any size; however, each individual statement is extended or truncated to be 80 bytes when submitted through the internal reader.
- In cases where the JCL input stream is ASCII or UTF-8 encoded, for example, for POSTED input, the function converts the JCL stream to IBM-1047 EBCDIC. Only

rudimentary UTF-8 support is available, so avoid including double-byte characters and ASCII characters above code point 0x7F.

- The function provides no editing and imposes no restrictions on the content and format of JOB statement names in the JCL that is submitted.
- To detect job boundaries, the function scans each JCL statement. The following situations indicate a job boundary:
  - The JCL statement begins with “//”, followed by an uppercase EBCDIC Latin letter or one of the IBM 1047 EBCDIC characters “@”, “\$”, or “#”.
  - The prefix is followed by 0 - 7 Latin letters or numbers or the IBM 1047 EBCDIC characters “@”, “\$”, or “#”.
  - The next blank-delimited word is JOB. After this word is found, the scan stops parsing the statement.
  - The scan does not take into account quoted string boundaries that enclose continued PARM= operands and does not detect, honor, and process JCL statement continuations.
- Jobs that are submitted while a client user ID logon is in effect are given a USER attribute that matches the logon ID of the client subtask. If the JCL USER= operand of the JOB statement is present and differs from the client task logon ID and PASSWORD= is not present, RACF surrogate user attribute assignment and authorization restrictions might be imposed.
- The SDBSUBMT function can be used only in REXX language rules. The function cannot be used in a rule that runs in cross-memory mode or one for which waiting for system services is specifically inhibited. Areas where SDBSUBMT cannot be used or can be used only conditionally include the following:
  - SDBSUBMT cannot be used during enabling or disabling a rule, which occurs when the PHASE variable is not set to PROC.
  - SDBSUBMT cannot be used in CMD, GLV, and TYP rules.
  - To determine when SDBSUBMT can be used, an ATH rule can check the value of the ATH.OPAU13WA variable, and an EXC rule can check the value of the EXC.OPEXWAOK variable. If SDBSUBMT can be used, the variable is preset to 1.

Use the following syntax:

```
SDBSUBMIT(arg1, arg2, arg3, arg4 )
```

or

```
CALL SDBSUBMIT(arg1, arg2, arg3, arg4 )
```

where:

- *arg1* and *arg2* specify the location of the input JCL stream.
- *arg3* specifies the 1-character JES class to which the internal reader is allocated.
- *arg4* is a string that specifies the type of tracing.

The following table lists the valid values for *arg1* and *arg2*:

Value	arg1: Location of the JCL input stream	arg2
STEM	The JCL is in a REXX stem variable array. The 0th entry in the array contains the count of entries. Entries 1 - <i>n</i> contain individual JCL statements.	The REXX variable stem name. The name must end with a period. Length 1- 12 character.
DSN	The JCL is in a z/OS data set.	A fully qualified z/OS data set name. The name can include a PDS(E) member name. Length 1- 54 bytes.
DDN	The JCL is in a z/OS data set that is preallocated to a DD name.	The DD name. Length 1- 8 bytes.
PATH	The JCL is in a USS HFS file.	The fully qualified HFS path name of the file. Length 1 - 256 bytes.
POSTED	The JCL is received as a posted file entity over HTTP.	The index number, 1 to <i>n</i> , of the posted file entity in the received HTTP request. If this argument is omitted, the default value is 1.

*arg3* is the 1-character JES class to which the internal reader is allocated. The character A - Z, 0 - 9, and \* (asterisk) are valid. Use \* to request the default job class. If you do not specify this parameter, \* is the default.

*arg4* is a string that is 1 - 5 bytes. Each character of the string must be Y or N to specify whether the corresponding trace function for that byte is enabled. The following table describes the byte positions and trace functions:

Byte position	Default	Trace function
1	Y	Trace JOB IDs that JES returns.
2	Y	Trace input source JCL.
3	Y	Trace the dynamic-allocation activity of the internal reader.
4	N	Trace writes to the internal reader.
5	N	Trace the decoding of posted data (conversion to EBCDIC).

Unless a REXX ERROR or FAILURE signal is generated because of a fault condition, *arg4* returns one of the following numeric results:

- 0: Successful completion
- 4: Parameterization error
- 8: Environmental error
- 12: System service error
- 16: ABEND condition trapped
- +100: If one or more jobs are submitted prior to a failure, the value +100 is added to a result. To determine the failure code, subtract 100.

### **JOBID. stem variables**

The function uses a REXX DROP on all JOBID. stem variables during entry-processing and presets variables to the values shown in the following table.

This reset operation occurs after initial parameter validation but before JCL processing. If the reset fails, the REXX invalid symbol signal is generated. After setup, unless a REXX signal is thrown, the JOBID.RC, JOBID.REASON, and outbidden variables are set as described. All other JOBID. stem variables are undefined.

Variable	Description
JOBID.RC	Contains the same value as the evaluated RESULT of the function call or, if a problem is detected before all other JOBID. stem variables are correctly set, contains a NULL string. JOBID.RC is set to a NULL string at entry, and setting this variable to the RESULT is the last action that the function takes prior to exit.
JOBID.REASON	When the function call ends with a non-zero RESULT, contains error text. This variable is set to a NULL string when the RESULT is zero.
JOBID.0	Contains an integer that indicates the number of jobs that were found in the input JCL stream and successfully submitted to the internal reader. If no jobs were successfully submitted or if a system failure prevented the return of any job IDs during processing, this variable contains 0 (zero). If one or more complete jobs are submitted before a failure, this variable contains the number of submitted jobs for which IDs were returned.
JOBID.n	Contains the job ID that is assigned to the first through <i>n</i> th job in the submitted JCL stream. Valid job IDs are in the format JOBxxxxx or Jxxxxx, where xxxxx is a system-assigned sequence number. Only the variables JOBID.1 through JOBID. <i>n</i> , where <i>n</i> is the numeric value assigned to JOBID.0 are set.

---

## LUW authentication

By default, Accelerator Loader server attempts to log on to DB2 on LUW with the same user ID that was presented for logon to z/OS. You can change a user's logon credentials to access DB2 on LUW.

Data centers often assign different user IDs for access to DB2 on z/OS and for access to DB2 on LUW (Linux/Unix/Windows). In the Accelerator Loader server.

A System Event Facility (SEF) authentication rule can be used to set user ID and password parameters for logon to DB2 on LUW. A sample rule is distributed in the authentication (ATH) rule set HLVALUWI that sets DB2LUWU as the default user ID for LUW and defaultp as its corresponding password. This rule, when active, is triggered at logon to an LUW subsystem because the first line is as follows:

```
/*ATH DRDA.UIDLW.*
```

To create a similar rule that is only triggered at logon to a particular LUW, the first line would be as follows:

```
/*ATH DRDA.UIDLW.PRODLW1
```

In the example line, an LUW1 is defined as LOCATION(PRODLW1) in data set *hlq*.SHLVEXEC member *hlvid*IN00 statement DEFINE DATABASE. The variable *hlvid* represents the name of the Accelerator Loader server started task that was customized by using Tools Customizer.

This type of rule can be modified to test for the incoming z/OS database (ATH.AUPWDBUS) or network (ATH.AUPWLNID) user ID and set the LUW user ID as appropriate.

Global variables can be shared by SEF event procedures. They are non-volatile and are saved across system IPLs and product restarts. Global variables are typically used to communicate between different REXX event procedures or between multiple executions of the same REXX event procedure. The HDBSINEF member in the configuration member can initialize the global variable pool during server initialization and checkpoints global variables periodically.

As an alternative to hard coding IDs and passwords in the SEF Rule, HLVALUWG is provided to resolve LUW credentials from global variables. Rule HLVALUWG should not be modified, except to toggle tracing of its execution.

Global variables are maintained between recycles of the server and between IPLs. Global variables are mapped as follows:

```
GLOBAL2.DRDA.ATH.grexx.GLOBAL.DEFAULT
GLOBAL2.DRDA.ATH.grexx.GLOBAL.userid
GLOBAL2.DRDA.ATH.grexx.ssid.GLOBAL.DEFAULT
GLOBAL2.DRDA.ATH.grexx.ssid.userid
```

Where:

- *grexx* is the name of the active SEF authentication rule, in this case HLVALUWG
- *ssid* is the target LUW subsystem name in in the following statement in data set *hlq.SHLVEXEC* member *hlvidIN00*:

```
DEFINE DATABASE NAME(ssid)
```

- *userid* is the incoming z/OS user ID

Searches use the following order to resolve the LUW credentials:

```
GLOBAL2.DRDA.ATH.HLVALUWG.ssid.userid
GLOBAL2.DRDA.ATH.HLVALUWG.GLOBAL.userid
GLOBAL2.DRDA.ATH.HLVALUWG.ssid.GLOBAL.DEFAULT
GLOBAL2.DRDA.ATH.HLVALUWG.GLOBAL.DEFAULT
```

## Variables

Descriptive name	Variable name	Contents	Data type
LUW User ID	ATH.AUDROTUS	User ID	Character
LUW Password	ATH.AUDROTPW	Password	Character

The following examples use the active SEF rule HLVALUWG to set default LUW credentials. The last node of each global variable sets the LUW user ID and password in the following format:

```
userid:password;comment
```

### Set default LUW credentials

To set the default LUW user ID and password to *luwuser/luwpswd*:

```
Set the subnode value of GLOBAL2.DRDA.ATH.HLVALUWG.GLOBAL.DEFAULT to
luwuser:luwpswd;Global Default for any LUW.
```

### Set default credentials for a specific LUW subsystem

To set a default LUW user ID and password for subsystem LUW1 to  
luw1user/luw1pswd:

Set the subnode value of GLOBAL2.DRDA.ATH.HLVALUWG.LUW1.GLOBAL.DEFAULT to  
luw1user:luw1pswd;Default for LUW subsystem named LUW1.

### Set unique credentials for users on a specific LUW subsystem

To set unique credentials for each user for subsystem LUW1:

- Set the subnode value GLOBAL2.DRDA.ATH.HLVALUWG.LUW1.ZOSUSER1 to  
luw1usera:pswda;LUW1 credentials for ZOSUSER1.
- Set the subnode value GLOBAL2.DRDA.ATH.HLVALUWG.LUW1.ZOSUSER2 to  
luw1userb:pswdb;LUW1 credentials for ZOSUSER2.

### Set unique credentials for users on all LUWs

To set unique default credentials for each user for all LUWs:

- Set the subnode value GLOBAL2.DRDA.ATH.HLVALUWG.GLOBAL.ZOSUSER1 to  
luw1usera:pswda;LUW credentials for ZOSUSER1.
- Set the subnode value GLOBAL2.DRDA.ATH.HLVALUWG.GLOBAL.ZOSUSER2 to  
luw1userb:pswdb;LUW credentials for ZOSUSER2.

#### Related concepts:

“Accelerator Loader server restrictions and considerations” on page 5-1  
Review the following usage restrictions and considerations before performing a  
load by using the Accelerator Loader server.

“Authorization requirements to access data sources” on page 2-9  
Accessing data sources requires the following authorizations:

## Enabling DB2 LUW authentication

A System Event Facility (SEF) Rule can be enabled through the ISPF panels to  
connect to the LUW (Linux/Unix/Windows) instance via DRDA.

### Procedure

1. On the main menu, select **Server administration**.
2. On the Administer Accelerator Loader server panel, select **Manage Rules**.
3. On the Event Facility (SEF) Control panel, select **SEF Rule Management**.
4. On the Event Facility (SEF) Ruleset Entry Profile panel, for **Display Only the Ruleset Named**, leave the asterisk to see a list of all rulesets, or specify ATH, (short for AUTHORIZATIONS), to see specific rules, and press Enter.
5. Beside **ATH**, type S and press Enter.
6. Beside **HLVALUWG**, type B and press Enter. The rule is enabled and auto-enabled so that, after an IPL, the server keeps this member enabled. The status next to this member is enabled.

## Creating global variables for LUW authorization

The SEF authentication rule HLVALUWG, when enabled, is called whenever a user attempts to access an LUW subsystem. Global variables are read by HLVALUWG to set the appropriate logon credentials for the LUW database.



## About this task

You can define credentials where:

- One set of credentials is used for ALL LUWs.
- One set of credentials is used for each different LUW.
- Credentials determined by incoming user ID.
- A combination of the previous options, with defaults.

## Procedure

### Adding credentials for all access to every LUW subsystem:

1. On the main menu, select **Server administration**.
2. Select **Manage rules** and press Enter.
3. Select **Global Variables** and press Enter.
4. In **Global Prefix** type GLOBAL2, over the existing value.
5. On the command line, type S DRDA and press Enter. This step creates a global variable named DRDA. Note that global variables are case-sensitive and for this process should all be in uppercase.
6. Beside DRDA, type S and press Enter to select DRDA. Global prefix displays GLOBAL2.DRDA.
7. On the command line, type S ATH. This step creates subnode ATH.
8. Beside ATH, type S and press Enter to select it. Global prefix displays GLOBAL2.DRDA.ATH.
9. On the command line, type S HLVALUWG and press Enter to select the rule HLVALUWG. The **Subnode Value** column displays GLOBAL2.DRDA.ATH.HLVALUWG.
10. If no other variable defines credentials for this attempt to access LUW, create default credentials that are used as a last resort.
  - a. Beside HLVALUWG, type S and press Enter.
  - b. On the command line, type S GLOBAL.
  - c. Beside GLOBAL, type S and press Enter to select it. Global prefix displays GLOBAL2.DRDA.ATH.HLVALUWG.GLOBAL.
  - d. On the command line, type S DEFAULT and press Enter. The **Subnode Value** column displays GLOBAL2.DRDA.ATH.HLVALUWG.GLOBAL.DEFAULT.
  - e. In the **Subnode Value** column, type over the existing value with new credentials in the format `userid:password;comment`. Note that this value is all lower case. For example, `luwuser:luwpswd; Global UserID for Everyone`.

You can use logon ID `luwuser` with password `luwpswd` for all access to every LUW subsystem.

### Adding credentials for a specific user:

You can create a set of credentials for individual users, for example, a DBA whose z/OS user ID is `DBA001` and needs LUW credentials `db2admin:admin`.

11. On the command line, issue the Select command for the user ID and press Enter. For example, type S `DBA001`.
12. In the **Subnode Value** column, type over the existing value with new credentials in the format `userid:password;comment`. Note that this value is all lower case. For example, `db2admin:admin; Only for the DBA`.

## Creating credentials for multiple LUW subsystems

If you have multiple LUW subsystems, for example, SOL1 on Solaris and AIX1 on AIX, you can create separate credentials for each. If no rule is matched, you can revert to previously created defaults.

### Before you begin

Create default credentials as described in “Creating global variables for LUW authorization” on page 10-68.

### About this task

This procedure uses example subsystem SOL1.

### Procedure

#### Adding credentials for all access to a specific subsystem:

1. In ISPF, navigate to the Global Prefix GLOBAL2.DRDA.ATH.HLVALUWG. See “Creating global variables for LUW authorization” on page 10-68.
2. On the command line, type S SOL1 and press Enter. This step create the LUW subsystem SOL1.
3. Beside SOL1, type S and press Enter to select the subsystem. Global Prefix displays GLOBAL2.DRDA.ATH.HLVALUWG.SOL1.
4. On the command line, type S GLOBAL and press Enter. The **Subnode Value** column displays GLOBAL2.DRDA.ATH.HLVALUWG.SOL1.GLOBAL.
5. On the command line, type S DEFAULT and press Enter.
6. For subnode DEFAULT, in the **Subnode Value** column, type over the existing value with new credentials. For example, sol1user:sol1pswd; Global for SOL1.

#### Adding credentials for a specific user to a subsystem:

In this example, the user ID is DBA001.

7. Press PF3 to return to the previous panel. Global Prefix displays GLOBAL2.DRDA.ATH.HLVALUWG.SOL1.
8. On the command line, type S DBA001 and press Enter.
9. For subnode DBA001, in the **Subnode Value** column, type over the existing value with new credentials. For example, db2admin:admin; For the DBA.
10. Repeat this procedure to create credentials for other LUW subsystems.

### Results

After you create Global Variables and enable the SEF ATH Rule, messages are created in the Server Trace to indicate which credentials are selected and why.

---

## Viewing Server Trace information

Accelerator Loader server provides powerful diagnostic tools that can record critical events in the life of individual transactions. This information can be used to diagnose, debug, and correct problems.

## Server Trace

Accelerator Loader server incorporates an extensive trace facility that is implemented by adding trace records to a trace buffer maintained in virtual storage. Trace operations are performed entirely with memory-to-memory instructions. Nothing is written to disk until the session is complete. At that point, the trace information is automatically saved on disk by using a VSAM data set. This approach combines the performance advantages of memory-to-memory tracing with the non-volatility of standard disk storage.

Trace records are created for a wide variety of events in the Accelerator Loader server address space. Trace records are written for the following items:

- SQL operations
- IMS calls
- Thread attach and detach events
- Message events
- Errors (abends)

Using server trace, you can perform the following actions:

- Display formatted columns of information, such as user ID and time
- Use FIND and LOCATE commands to search for data or a specific time and date
- Use the DISPLAY command to display additional columns of information
- Use the STATUS command to display the server trace status area

Typically, the trace buffer can accommodate a complete record of all client/server processing for several days. Accelerator Loader server supports multiple server trace data sets. Using hierarchical storage management, you can maintain an unlimited history of data. The server trace data collection routines support collection of all the data required for auditing, capacity planning, and trend analysis of usage patterns. You can set security for the server trace filter functionality to prohibit viewing of sensitive data by a non-authorized user.

### Related reference:

“Server Trace panel” on page 12-46

Use this panel to view the list of product events captured by the server that are executing in your environment.

“Diagnostic information for Support” on page 11-438

If you encounter a problem and need to contact IBM Software Support, you must gather certain information about your Accelerator Loader system and the problem before contacting Support. Your Support representative will need this information to correctly diagnose and resolve the problem.

## Using server trace log entries

By default, the Server Trace panel displays all entries. (To view a subset of the log entries, you can create a profile.) If the Accelerator Loader server is running on a zIIP server, entries that are related to work that runs on the zIIP server are displayed in pink. If the server is running on a zAAP server, entries that are related to work that runs on the zAAP server are displayed in turquoise.

### Procedure

1. The Server Trace panel displays the most recent entries, which are at the bottom of the list. By default, the time, host name, and description of the event are displayed.

2. On the main menu, select **Server administration**.
3. On the Administer Accelerator Loader server panel, select **Display server trace**.
4. On the Server Trace panel, you can navigate through the trace messages in the following ways:
  - Use the UP, DOWN, RIGHT, and LEFT scroll commands (or their PF key equivalents) to navigate this panel.
  - Use the MAX or M scroll operand to scroll the maximum amount in any direction.
  - If you are at the top or the bottom of the trace list (and it is full), press **ENTER** to scroll the list down. Messages are removed from the top and added to the bottom.
5. Optional: Perform any of the following steps:
  - To refresh the list, press Enter.
  - If you reposition the display, to see the most recent entries, issue the DOWN MAX command and then press **Enter**.
  - To display a different set of columns, type D on the command line, followed by the names of the columns to display.

### Server Trace panel columns

Use the DISPLAY command to display specific columns on the Server Trace panel.

Table 10-3. Server Trace panel columns

Column	Description
ACTION	Displays one of the following: <ul style="list-style-type: none"> <li>• ACC (accept)</li> <li>• REJ (reject)</li> <li>• NOA (no action)</li> </ul>
ADDRESS	The location in memory of the actual record.
ADDRJOB	The location in memory of the current record in the JOBNAME vector.
ADDRUSR	The location in memory of the current record in the USERID vector.
APMRC	The APPC/MVS return code.
ASID	The address space ID of the user who created the current record.
CLOCK	The timestamp of when the record was created.
CNID	The identifier assigned to each thread that is created.
CODE	The lowest level return code for each event.
COUNT	The number of rules that processed the event.
CPUTIME	The CPU time used by a particular thread. The format depends on how much CPU time the user has used: <ul style="list-style-type: none"> <li>• Fewer than 1000 seconds: <i>mm.nmms</i></li> <li>• Between 1000 seconds and 100 hours: <i>hh:mm:ss</i></li> <li>• 100 hours or more: <i>hhhh:mm</i></li> </ul>

Table 10-3. Server Trace panel columns (continued)

Column	Description
CVID	The conversation ID that LU 6.2 assigns when a conversation starts.
DATE	The date when the message was created, in <i>dd:mm:yy</i> format.
ELAPSED	The total time that the current event used, in decimal microseconds (millionths of a second). To derive the total, the STCK (clock store) value that is taken at the beginning of processing is subtracted from the STCK value that is taken at the end of processing.
EVENT	The type of event that created the entry.
GTRIDTKN	The global transaction.
HOSTNAME	The TCP/IP host name or LU 6.2 host name.
HOSTX	The TCP/IP host name extended or the IU6.2 host name/mode.
IPADDR	The IP address, which is the TCP/IP source or target that is associated with the entry.
ITCRC	The Interlink TCP/IP return code.
JOBID	The job ID of the job or address space that created the entry.
JOBNAME	The name of the job or address space that created the entry.
LENGTH	The length of the text section of the message.
LUNAME	The LU 6.2 source or target that is associated with the message.
MSGNO	The message number. When data collection begins, message 1 is the first message collected; message 2 is the second message; and so on. When there is no more room in the message area, the oldest message is discarded to make room for a new message. Therefore, the top message in the list might not be message 1.
MSGORIGN	The SIS/XCF member name where the message originated. A message origin has the following format: <i>SYSIDALS_SSIDSISID</i> where: <ul style="list-style-type: none"> <li>• <i>SYSID</i> is the system ID.</li> <li>• <i>ALS_SSID</i> is the Accelerator Loader server subsystem ID.</li> <li>• <i>SISID</i> is the Instrumentation Server ID.</li> </ul>
NODENAME	The name of the communications node that is associated with the message. The format of each entry depends on the communication link type.
OERC	The TCP/IP return code of the OE socket.

Table 10-3. Server Trace panel columns (continued)

Column	Description
PATHID	The IUCV path ID that is associated with the message. This column applies only to TCP/IP events.
RC	The highest level return code for the message.
REASON	The second-level return code for the message.
RULESET	The name of the first RULESET.RULE that processed an event on NONE.NONE.
SDBFLAGS	The bits that are set by the routines that created the trace.
SECONDS	The first four bytes of the binary timestamp, which indicates when the message was created.
SESSION	The communications session that is associated with the message. The format of each entry depends on the type of communication link.
SOCKET	The socket number that is associated with the message. This column applies only to TCP/IP events.
SQLRC	The SQL return code.
SSID	The subsystem ID, for example, DB2, IMS, or CICS.
TCBADDR	The TCB address field that contains the address of the TCB that created the message.
TERMNAME	The name of the terminal that is associated with the event.
TIME	The time that the message was created, in <i>hh:mm:ss</i> format.
TIMEX	The time that the message was created, calculated to the microsecond, in <i>hh:mm:ss.uuuuuu</i> format.
TRACE1	The trace data that is specific to the message.
USERID	The security product user ID that best identifies the message.
VCID	The unique virtual connection ID.
VERSION	The version of the product that generated the message.
VTAMRC	The VTAM return code.
XIDTOKEN	The XA token ID.

### Filtering log entries by creating a profile

To view a subset of the log entries, create a profile. In the profile, you specify the criteria to use to select entries to display, and you select the specific events to display. The profile that you create affects only how you view log entries. Other users can create their own profiles.

## Procedure

1. On the Server Trace panel, type PROFILE (with no operands) on the command line.
2. On the Trace Browse Profile panel, enter criteria in one or more of the following fields. If you enter multiple criteria, the values are joined with the logical AND operator. If you enter multiple values for a criterion, the values are joined with the logical OR operator. You can enter up to four values for each criterion.

Table 10-4. Profile filtering criteria

Criterion	Description
JOBNAME	Limits entries to those that contain the specified value in the JOBNAME column. You can use an asterisk (*) as a wildcard character.
USERID	Limits entries to those that contain the specified value in the USERID column. You can use an asterisk (*) as a wildcard character.
CONNECT	Limits entries to those that contain the specified value in the CONNECT column.
VCID	Limits entries to those that contain the specified value in the VCID (virtual connection ID) column.
HOST NAME	Limits entries to those that contain the specified value in the HOST NAME column. You can use an asterisk (*) as a wildcard character.
TCB	Limits entries to those that contain the specified value in the TCB column.
SSID	Limits entries to those that contain the specified value in the SSID column. You can use an asterisk (*) as a wildcard character.
XIDTOKEN	Limits entries to those that contain the specified value in the XIDTOKEN (XA token ID) column.
GTRIDTKN	Limits entries to those that contain a matching GTRIDTKN (global transaction ID).
CONVTKN	Limits entries to those that contain a matching CONVTKN (conversation token ID).
MSGORIGIN	Limits entries to those that contain a matching MSGORIGIN (message origin). You can use an asterisk (*) as a wildcard character. Use the following format to enter the values:  <i>SYSIDALS_SSISID</i> where: <ul style="list-style-type: none"><li>• <i>SYSID</i> is the system ID.</li><li>• <i>ALS_SSID</i> is the Accelerator Loader server subsystem ID.</li><li>• <i>SISID</i> is the instrumentation server ID.</li></ul>

3. Enter Y or N to include or exclude the following specific types of events from the result set:

*Table 10-5. Profile filtering events*

<b>Event</b>	<b>Description</b>
ABN	Abend entries.
APM	APPC/MVS entries.
ATH	Authorization entries.
BKR	ACI broker entries.
CMD	Command entries.
CPG	C program entries.
DET	Detach entries.
DIS	Disable entries.
ECI	CICS EXCI entries.
ENA	Enable entries.
EXC	Exception entries.
FIL	File entries.
GLV	Global variable entries.
IMS	IMS entries.
ITC	Interlink TCP/IP entries.
MFL	MicroFlow (MFL) entries.
MQS	MQ message entries.
OTC	IBM OE sockets TCP/IP entries.
OTM	IMS/OTMA entries.
PUB	Accelerator Loader server z/Events entries.
RPC	RPC entries.
RRS	RRS entries.
RSF	RRSAF entries.
SIS	Instrumentation Server entries.
SQL	SQL entries.
SOM	Security Optimization Management entries.
SQM	SQM entries.
SSL	SSL entries.
STG	Storage alteration entries.
STR	System trace entries.
TOD	Time-of-day entries.
TSO	TSO entries.
TXT	Product initialization, termination, and general execution entries.
TYP	TYP entries.
WLM	Workload Manager entries.
WWW	WWW entries.
XCF	Coupling Facility entries.



Table 10-5. Profile filtering events (continued)

Event	Description
XTX	Extended text entries.
ZSR	Services entries.
6.2	LLU 6.2 entries.

4. Press **Enter** to save the profile.

### Labeling and locating specific log entries

To quickly locate significant entries in the server log, replace the message number of an entry with a label.

#### Procedure

1. On the Server Trace panel, use the DISPLAY command to display the relevant columns. For example, enter DISPLAY msgno date.
2. When you locate the entry to which you want to add a label, edit the MSGNO column and enter a label that consists of a period and up to seven alphabetic characters. For example, enter .POINTA.
3. Enter the LOCATE command, followed by the criteria. For example, to find an entry that has the time 21:51:58, enter L 21:51:58.

### Finding character strings in the server log

Use the FIND and RFIND commands to find a specific character string in the server log. You can find a string in a specific column or in a range of columns.

#### Procedure

1. On the Server Trace panel, enter the FIND command to find the character string. To search for a string in the USERID, EVENT, or SSID column, use the following syntax:

```
FIND column-name string prefix direction
```

Where:

- *column-name* is USERID, EVENT, or SSID.
- *string* is the search string.
- *prefix* specifies that the search string is generic and specifies only the prefix characters. Specify this argument when you search EVENT or SSID columns.
- *direction* specifies the next match to find. Specify FIRST (default), LAST, PREV, or NEXT.

To search for the string in a range of columns, use the following syntax:

```
FIND TEXT string direction start-column end-column msgno
```

Where:

- TEXT is an optional keyword that indicates that you are searching only the text of the entries.
- *string* is the search string. If the search string contains blank spaces or is identical to a FIND keyword, enclose the string in quotation marks. Enter an asterisk (\*) to use the search string from the previous FIND command.
- *direction* specifies the next match to find. Specify FIRST (default), LAST, PREV, or NEXT.
- *start-column* specifies the number of the first column for the search.
- *end-column* specifies the number of the last column for the search.
- *msgno* is the maximum number of entries to search. The default is 5000.

The following FIND command searches for the string ADB1234W from the top message number, beginning at column 10 and ending at column 30, for 10,000 messages:

```
F 'HLV1234W XYZ' 10 30 10000
```

2. Optional: Enter RFIND to repeat the previous FIND command.

## Printing entries from the server log

Use the P, PP, and SS commands to print server log entries to the ISPF list data set.

### About this task

Each entry that you print contains the same columns that are displayed in the Server Trace panel and includes the entire contents of the text field. If the text field exceeds one line, the printed entry wraps to include three additional lines. Make sure that the ISPF list data set has enough space to hold the printed entries. The SS command requires more space than the PP command. The SS command prints 1 - 100 entries as they appear in the trace log, followed by the zoomed formatting for each entry, followed by the next 1 - 100 entries.

### Procedure

On the Server Trace panel, to print log entries, perform one of the following steps:

- To print a single entry, enter P in the MESSAGENUM column.
- To print the summary information for a range of entries, enter PP in the MESSAGENUM column on the first and last entry in the range.
- To print the summary and detailed information, enter SS in the MESSAGENUM column.

#### Related reference:

“Diagnostic information for Support” on page 11-438

If you encounter a problem and need to contact IBM Software Support, you must gather certain information about your Accelerator Loader system and the problem before contacting Support. Your Support representative will need this information to correctly diagnose and resolve the problem.

---

## Modifying the client time out parameter

You can change the maximum amount of time that a thread remains idle before the server closes it.

### About this task

The Accelerator Loader server uses multiple threads to read data from the source system. If one thread becomes idle and times out, the server stops processing all threads. The maximum amount of time that a thread remains idle before the server stops processing is controlled by the DSCLIENTCONNTIMEOUT parameter. The default value of DSCLIENTCONNTIMEOUT is 20 minutes. Valid values are in the range 1 - 1440 minutes. To change the time out value, complete the following steps.

### Procedure

1. In data set *hlq*.SHLVEXEC, locate member *hlvid*IN00, where *hlvid* represents the name of the Accelerator Loader server started task that was customized by using Tools Customizer.
2. Use the **MODIFY PARM** command to change the DSCLIENTCONNTIMEOUT parameter value:

## Creating SMF records from the server

The System Management Facility (SMF) provides ways to record usage information in SMF data sets.

SMF support provides a means for gathering and recording information that is used to evaluate system usage. SMF can also gather information about the Accelerator Loader server.

The server can create SMF records to log server activity. Enable the server to create SMF records as described in this section.

The following table lists the SMF parameters.

*Table 10-6. SMF parameters*

Parameter	Description	Valid values
CHECKSTORAGEINTERV	Controls how often (in seconds) statistics for allocated storage are gathered in Accelerator Loader server. A value of zero turns off this function.	0
LOGERRORSSMF	Controls whether DB2 SQL error information should be written to SMF. When set to YES, this value generates SMF subtype 13 records.  SMF Subtype 13: DB2 SQL Errors	<b>YES</b> <b>NO</b> This is the default value.
LOGINTERVALS	Controls whether session interval information is logged. Session interval information is logged by inserting rows in to a DB2 table. One row is inserted for each session at the end of each recording interval and at session termination time.	<b>YES</b> This is the default value. <b>NO</b>
LOGINTERVALSSMF	Controls whether session interval information should be written to SMF.	<b>YES</b> This is the default value. <b>NO</b>
LOGLSESSIONINTVALSMF	Controls whether interval type records are written to SMF. Interval records can also be written to the session log.  SMF Subtype 02: Interval Summary Records	<b>YES</b> This is the default value. <b>NO</b>

Table 10-6. SMF parameters (continued)

Parameter	Description	Valid values
LOGSTORAGESMF	Controls whether storage usage information should be written to SMF. Storage usage information can also be written to a DB2 table.  SMF Subtype 09: Storage Interval Summary Records	<b>YES</b> <b>NO</b> This is the default value.
RECORDINGINTERVAL	Controls how often interval summary and per-client SMF and/or SQL records are created. These records show what resources were used during the current recording interval. The interval value is specified in seconds and should be a factor of one hour. The value should divide evenly into 3600.	900 (default)
SMFNUMBER	Controls SMF recording. To enable SMF recording, set SMFNUMBER to the desired number. If set to zero, no logging takes place.	0 (default) no logging
SMFRULEDISABLE	Indicates whether this type of SMF record should be written.  SMF Subtype 03: SEF Rule Disablement Records	<b>YES</b> <b>NO</b> This is the default value.
SMFTRANSACT	Controls the creation of SMF transaction records. Possible values are YES and NO.  When set to YES, an SMF record is created for each inbound client request.  When set to NO, no per-transaction records are created.  SMF Subtype 06: Per Transaction SMF Records	<b>YES</b> <b>NO</b> This is the default value.

**Related tasks:**

“Configuring access to SMF files” on page 3-49

You can load System Management Facility (SMF) data into the accelerator by using the sequential file source method. To configure access to SMF files, you must configure an Accelerator Loader server JCL, the server configuration member, and the server virtual table member.

## Enabling Subtype 02 Records

Subtype 02 Records are written at the end of each interval and contain session information for all users who are connected during that specific interval. All the resources that are used by all connections during that interval are recorded here.

### About this task

The interval in which these records are written is determined by the RECORDINGINTERVAL parameter.

Interval summary records are automatically written if the LOGINTERVALS parameter is set to YES in data set *hlq.SHLVEXEC* member *hlvidIN00*, where *hlvid* represents the name of the Accelerator Loader server started task that was customized by using Tools Customizer. You must have LOGINTERVALS enabled in order to also record Interval records into SMF.

### Procedure

To log interval records in to the Accelerator Loader server Logging tables, but not log interval information in to SMF, the following parameter can be added to the Accelerator Loader server file. If LOGINTERVALS is set to YES, to disable SMF logging of interval information:

```
"MODIFY PARM NAME(LOGLSESSIONINTVALSMF) VALUE(NO) "
```

Where LOGLSESSIONINTVALSMF controls whether interval type records are written to SMF. Interval records can also be written to the session log.

### SMF Subtype 02: Interval Summary Records

The following table provides subtype 02 record information.

Table 10-7. Subtype 02 Record Information

Offset	Field Name	Field Subtype or Value	Description
1	SMFHFG	BL1	Header flag byte: <ul style="list-style-type: none"><li>• X'10' = MVS/ESA 4</li><li>• X'08' = MVS/XA</li><li>• X'04' = MVS/ESA</li><li>• X'02' = VS2</li></ul>
2	SMFHRCTY	BL1	Record Type
3	SMFHTIME	BL4	Record written time (TIME BIN)
7	SMFHDATE	PL4	Record written date (0CYDDDDF)
11	SMFHSYID	CL4	System identification (SMFID)
15	SMFHSSID	CL4	Subsystem ID ( <i>hlvid</i> , where <i>hlvid</i> represents the name of the Accelerator Loader server started task that was customized by using Tools Customizer)
19	SMFHSTUTY	BL2	Record subtype
21	SMFHVRCD	CL8	Accelerator Loader server version code
37	SM02SMID	CL4	Host system (SMF ID)
41	SM02PDSS	CL4	Product subsystem name

Table 10-7. Subtype 02 Record Information (continued)

Offset	Field Name	Field Subtype or Value	Description
45	SM02RCTY	C	Record type: C'T=INTERVAL SUMMARY Record type
53	SM02INST	CL8	Interval start time
61	SM02SQC�	F	SQL COUNT
69	SM02ENCP	CL8	Enclave CPU time
77	SM02CLCP	CL8	Client task CPU time
85	SM02DBCP	CL8	DB2 CPU time
93	SM02NTCP	CL8	Network CPU time
101	SM02OHCP	CL8	OTHER CPU time
109	SM02RXCP	CL8	REXX CPU time
117	SM02RPCP	CL8	RPC CPU time
125	SM02ELTM	XL8	CLIENT ELAPSED time (TOD)
133	SM02WRTO	XL8	RAW TOTAL BYTES WRITTEN
141	SM02USCN	F	USER count FOR THIS INTERVAL
145	SM02MXUS	F	MAX INTERVAL CONCURRENT USERS
149	SM02RPHW	F	RPC HIGH WATER MARK
153	SM02RPCU	F	CURRENT NUMBER EXECUTING RPCS
157	SM02CLWT	XL8	CLIENT WAIT time
165	SM02CLRC	F	CLIENT READ DATA count
173	SM02ENZQ	D	Enclave zIIP QUALIFIED CPU time
181	SM02ENZI	D	Enclave zIIP CPU time
189	SM02ENZC	D	Enclave zIIP time ON CP
197	SM02SLCP	D	SSL CPU time
205	SM02SRCP	D	SRB CPU time

## Enabling Subtype 03 Records

Subtype 03 Records are created whenever an Event Facility (SEF) rule is disabled. All the resources that are used by all connections during that interval are recorded here.

### About this task

These records are typically written at Accelerator Loader server shutdown. They are also written if a rule is manually disabled.

### Procedure

1. In data set *hlq.SHLVEXEC*, locate member *hlvidIN00*, where *hlvid* represents the name of the Accelerator Loader server started task that was customized by using Tools Customizer.
2. Add the following SMFRULEDISABLE parameter:  
"MODIFY PARM NAME(SMFRULEDISABLE) VALUE(YES)"

Where SMFRULEDISABLE indicates whether this type of SMF record should be written.

### SMF Subtype 03: SEF Rule Disablement Records

The following table provides subtype 03 record information.

Table 10-8. Subtype 03 Record Information

Offset	Field Name	Field Subtype or Value	Description
1	SMFHFG	BL1	Header flag byte: <ul style="list-style-type: none"> <li>• X'10' = MVS/ESA 4</li> <li>• X'08' = MVS/XA</li> <li>• X'04' = MVS/ESA</li> <li>• X'02' = VS2</li> </ul>
2	SMFHRCTY	BL1	Record Type
3	SMFHTIME	BL4	Record written time (TIME BIN)
7	SMFHDATE	PL4	Record written date (0CYYDDDF)
11	SMFHSYID	CL4	System identification (SMFID)
15	SMFHSSID	CL4	Subsystem ID ( <i>hlvid</i> , where <i>hlvid</i> represents the name of the Accelerator Loader server started task that was customized by using Tools Customizer)
19	SMFHSUTY	BL2	Record subtype
21	SMFHVRCD	CL8	Accelerator Loader server version code
37	SM03RLTY	C	Rule type flag
38	SM03LACK	XL8	Last time this rule fired (TOD)
49	SM03PRCN	F	Process count
53	SM03FILI	F	Firing limit
57	SM03FIMX	F	Firing high water mark per interval
61	SM03RSNM	CL8	Ruleset name
69	SM03RLNM	CL8	Rule name
77	SM03ENTM	BL4	Rule enablement time (TIME BIN)
81	SM03ENDT	PL4	Rule enablement date (0CYYDDDF)
85	SM03CR	CL128	Rule criterion
213	SM03ENTT	XL4	Total enabled time in seconds

### Enabling Subtype 06 Records

Subtype 06 records are written for each inbound client request.

#### About this task

Each SMF transaction record contains information about all the work that is done on behalf of the client for each transaction request. The inbound client request may have caused zero, one, or more SQL operations to be run. This feature can cause a high number of SMF records to be written in a high volume environment since one SMF record is created for each transaction.

## Procedure

Add the SMFTRANSACT parameter in the Accelerator Loader server member to enable Subtype 06 records:

```
"MODIFY PARM NAME SMFTRANSACT VALUE(YES)"
```

Where SMFTRANSACT controls the creation of SMF transaction records. When set to YES, an SMF record is created for each inbound client request.

### SMF Subtype 06: Per Transaction SMF Records

The following table provides subtype 06 record information.

Table 10-9. Subtype 06 Record Information

Offset	Field Name	Field Subtype or Value	Description
1	SMFHFG	BL1	Header flag byte: <ul style="list-style-type: none"> <li>• X'10' = MVS/ESA 4</li> <li>• X'08' = MVS/XA</li> <li>• X'04' = MVS/ESA</li> <li>• X'02' = VS2</li> </ul>
2	SMFHRCTY	BL1	Record Type
3	SMFHTIME	BL4	Record written time (TIME BIN)
7	SMFHDATE	PL4	Record written date (0CYYDDDF)
11	SMFHSYID	CL4	System identification (SMFID)
15	SMFHSSID	CL4	Subsystem ID ( <i>hlvid</i> , where <i>hlvid</i> represents the name of the Accelerator Loader server started task that was customized by using Tools Customizer)
19	SMFHSUTY	BL2	Record subtype
21	SMFHVRCD	CL8	Accelerator Loader server version code
37	SM06CLNA	CL16	Client machine's hostname
53	SM06CLTY	CL8	Client communication type
61	SM06IPAD	XL4	IP address for TCP/IP clients
65	SM06CLUS	CL8	Client user ID
73	SM06CNID	XL4	Unique client connection ID
77	SM06SQOP	XL2	SQL operation code
79	SM06GNID	CL8	Generic user ID
87	SM06EXSZ	H	Extended user ID size
89	SM06EXID	CL50	Extended user ID area
89	SM06SIID	CL16	SQLESETI client user identification
105	SM06WSNA	CL18	SQLESETI client workstation name
139	SM06GNVL	CL1	Validation of generic ID
140	SM06SETI	CL1	Extended user ID IS SQLESETI Y or N
141	SM06PDSS	CL4	4-character Accelerator Loader server subsystem name
145	SM06PLAN	CL8	DB2 plan name



Table 10-9. Subtype 06 Record Information (continued)

Offset	Field Name	Field Subtype or Value	Description
153	SM06SSNA	CL4	DB2 subsystem name
157	SM06ADLT	XL8	Client logon time adjusted for GMT to local time
165	SM06ADCU	XL8	Current time (adjusted for GMT)
173	SM06ELTM	XL8	Elapsed time of the client connection
181	SM06SQEL	XL8	Current SQL statement elapsed time
189	SM06SQCP	XL8	Current SQL statement CPU time
197	SM06SQRC	F	Current SQL statement return code
201	SM06SQRE	F	Current SQL statement reason code
205	SM06SQSQ	F	Current SQL statement SQL CODE
209	SM06SQAB	F	Current SQL statement Abend code
217	SM06VCID	F	VCID of current user
221	SM06APPL	CL32	SQLESETI application name
221	SM06APNA	CL18	Application name
253	SM06ATKN	CL22	SQLESETI accounting token
281	SM06NASB	CL8	Natural subprogram name
289	SM06SQAC	F	Actual SQL string length
293	SM06SQLN	F	SQL source length
297	SM06SQSR	CL256	SQL source string

## Enabling Subtype 09 Records

Subtype 09 Records are used to monitor Accelerator Loader server storage usage above and below the 16 MB line.

### About this task

These records are written at the end of every Accelerator Loader server storage recording interval. They are set by the CHECKSTORAGEINTERVAL parameter. If the CHECKSTORAGEINTERVAL parameter is set to 0 (the default), storage usage recording is disabled in the Accelerator Loader server.

### Procedure

1. In data set *hlq.SHLVEXEC*, locate member *hlvidIN00*, where *hlvid* represents the name of the Accelerator Loader server started task that was customized by using Tools Customizer.
2. Add the following LOGSTORAGESMF parameter:  

```
"MODIFY PARM NAME(LOGSTORAGESMF) VALUE(YES)"
```

Where LOGSTORAGESMF controls whether storage usage information should be written to SMF. Storage usage information can also be written to a DB2 table.

## SMF Subtype 09: Storage Interval Summary Records

The following table provides subtype 09 record information.

Table 10-10. Subtype 09 Record Information

Offset	Field Name	Field Subtype or Value	Description
1	SMFHFG	BL1	Header flag byte: <ul style="list-style-type: none"><li>• X'10' = MVS/ESA 4</li><li>• X'08' = MVS/XA</li><li>• X'04' = MVS/ESA</li><li>• X'02' = VS2</li></ul>
2	SMFHRCTY	BL1	Record Type
3	SMFHTIME	BL4	Record written time (TIME BIN)
7	SMFHDATE	PL4	Record written date (0CYDDDDF)
11	SMFHSYID	CL4	System identification (SMFID)
15	SMFHSSID	CL4	Subsystem ID ( <i>hlvid</i> , where <i>hlvid</i> represents the name of the Accelerator Loader server started task that was customized by using Tools Customizer)
19	SMFHSUTY	BL2	Record subtype
21	SMFHVRCD	CL8	Accelerator Loader server version code
37	SM09SMID	CL4	Host system SMFID
41	SM09PDSS	CL4	Product subsystem name
45	SM09RCTY	C	Record type
53	SM09INST	CL8	Interval start time
77	SM09MXUS	F	Max interval concurrent user
81	SM09TSSP	F	Transient subpool
85	SM09TSBE	F	Transient HI ALLOC BTL
89	SM09TSAB	F	Transient HI ALLOC ATL
93	SM09HWBA	246D	HI ALLOC BTL HI ALLOC ATL

## Enabling Subtype 13 Records

Subtype 13 Records are used for error recording via the LOGERRORSSMF parameter. These records contain DB2 SQL errors. This recording is in addition to the existing LOGERRORS parameter, which logs DB2 SQL errors to a DB2 table.

### Procedure

1. In data set *hlq.SHLVEXEC*, locate member *hlvidIN00*, where *hlvid* represents the name of the Accelerator Loader server started task that was customized by using Tools Customizer.
2. Add the following LOGERRORSSMF parameter:  
"MODIFY PARM NAME(LOGERRORSSMF) VALUE(YES)"

Where LOGERRORSSMF controls whether DB2 SQL error information should be written to SMF. Set the value to YES to generate SMF Subtype 13 records.

## SMF Subtype 13: DB2 SQL Errors

The following table provides subtype 13 record information.

Table 10-11. Subtype 13 Record Information

Offset	Field Name	Field Subtype or Value	Description
1	SMFHFG • SMFHESA4 • SMFHXA • SMFHESA • SMFHVS2	BL1	Header flag byte: • X'10' = MVS/ESA 4 • X'08' = MVS/XA • X'04' = MVS/ESA • X'02' = VS2
2	SMFHRCTY	BL1	Record Type
3	SMFHTIME	BL4	Record written time (TIME BIN)
7	SMFHDATE	PL4	Record written date (0CYDDDDF)
9	SM13GNVL	CL1	VALIDATION OF GENERIC ID
11	SMFHSYID	CL4	System identification (SMFID)
15	SMFHSSID	CL4	Subsystem ID ( <i>hlvid</i> , where <i>hlvid</i> represents the name of the Accelerator Loader server started task that was customized by using Tools Customizer)
19	SMFHSTUTY	BL2	Record subtype
21	SMFHVRCD	CL8	Accelerator Loader server VERSION CODE
37	SM13SMID	CL4	Host system SMFID
41	SM13PDSS	CL4	PRODUCT subsystem name
45	SM13RCTY	C	Record type
49	SM13SSAC	CL4	GROUP ATTACHMENT MEMBER name
69	SM13USID	CL8	CLIENT USER ID
77	SM13GNID	CL8	GENERIC USER ID
85	SM13EXID	CL(2+254)	EXTENDED USER ID
341	SM13HONA	CL(2+100)	CLIENT HOST name
441	SM13PRTY	CL(2+8)	PROTOCOL TYPE
453	SM13IPAD	XL4	IP ADDRESS FOR IP CLIENTS
457	SM13LUNA	CL(2+17)	LU name FOR LU 6.2 CLIENTS
477	SM13CNID	F	Session ID
481	SM13TMSP	CL8	CURRENT TIMESTAMP
489	SM13LGTM	CL8	LOGON TIMESTAMP
497	SM13APNA	CL(2+18)	APPLICATION name
517	SM13PLAN	CL8	DB2 plan name string
525	SM13SSNA	CL4	DB2 subsystem NAME STRING
529	SM13CUNM	F	Cursor number
533	SM13RC	F	Return code
537	SM13RECD	F	Reason code CODE
541	SM13SQCD	F	SQL CODE
545	SM13ABCD	F	ABEND CODE

Table 10-11. Subtype 13 Record Information (continued)

Offset	Field Name	Field Subtype or Value	Description
549	SM13STNM	F	STATEMENT NUMBER
553	SM13STTY	F	STATEMENT TYPE

---

# Troubleshooting

Use these topics to diagnose and correct problems that you experience with DB2 Analytics Accelerator Loader.

## Topics:

- “Messages and codes”
- “Tools Customizer troubleshooting” on page 11-438
- “Diagnostic information for Support” on page 11-438
- “Producing dumps for diagnostic use” on page 11-439
- “Cleaning up common storage after a job fails” on page 11-440
- “Managing DSNUTILB interception” on page 11-441
- “Accelerator Loader studio and Accelerator Loader server troubleshooting” on page 11-447

---

## Messages and codes

These topics contain information about the messages and codes that Tools Customizer and Accelerator Loader issue.

### Tools Customizer messages

Use the information in these messages to help you diagnose and solve Tools Customizer problems.

---

**CCQB000I** The product parameter data was saved in the data store.

**Explanation:** Changes that were made to the product parameters were saved in the data store.

**System action:** None.

**User response:** No action is required.

---

**CCQB001I** The DB2 parameter data was saved in the data store.

**Explanation:** Changes that were made to the DB2 parameters were saved in the data store.

**System action:** None.

**User response:** No action is required.

---

**CCQB002I** The LPAR parameter data was saved in the data store.

**Explanation:** Changes that were made to the LPAR parameters were saved in the data store.

**System action:** None.

**User response:** No action is required.

---

**CCQB003E** At least one step must be selected in a selected task. The selected task is *task\_description*.

**Explanation:** When a task is selected, at least one step must be selected. A selected step is missing from the specified task.

**System action:** Processing stops.

**User response:** Select a step in the specified task or deselect the task.

---

**CCQB004I** The required information to run the Discover EXEC was saved in the data store.

**Explanation:** The data store contains all the information that is required to run the Discover EXEC.

**System action:** None.

**User response:** No action is required.

---

**CCQB005E** The conflicting values for the *parameter\_name* parameter must be resolved before the information can be saved.

**Explanation:** Two values for one parameter conflict

## CCQB006E • CCQC007E

with each other, and they must be resolved to save the information.

**System action:** Processing stops.

**User response:** Resolve the conflicting values for the parameter.

---

### CCQB006E One row must be selected.

**Explanation:** One row in the table must be selected.

**System action:** Processing stops.

**User response:** Select one row.

---

### CCQB007E Only one row can be selected.

**Explanation:** Multiple rows in the table are selected, but only one row is allowed to be selected.

**System action:** Processing stops.

**User response:** Select only one row.

---

### CCQC000I The jobs have been customized on the selected DB2 entries.

**Explanation:** The jobs were customized on the DB2 entries that were selected.

**System action:** None.

**User response:** Press Enter to clear the message.

---

### CCQC001W The jobs were not generated on one or more of the selected DB2 entries. Press PF3 to check the DB2 entries that were not customized.

**Explanation:** The product was not customized on one or more of the DB2 entries that were selected.

**System action:** None.

**User response:** Press PF3 to see the DB2 entries on which the product was not customized. The status of these DB2 entries is Errors in Customization.

---

### CCQC002I The edit session was started automatically because values for required parameters are missing or must be verified.

**Explanation:** If product, LPAR parameters, or DB2 parameters are not defined or if parameter definitions must be verified, an editing session for the undefined or unverified parameters starts automatically.

**System action:** None.

**User response:** Define values for all required product, LPAR parameters, or DB2 parameters.

---

### CCQC003W The *template\_name* template in the *library\_name* metadata library does not contain any parameters.

**Explanation:** The specified template does not have parameters.

**System action:** None.

**User response:** No action is required.

---

### CCQC004S The value of the "type" attribute for the *template\_name* template in the *library\_name* metadata library does not match the value that was previously specified. The value is *value\_name*, and the previously specified value is *value\_name*.

**Explanation:** The value of the "type" attribute must match the value that was previously specified.

**System action:** Processing stops.

**User response:** See "Gathering diagnostic information" on page 11-438. Contact IBM Software Support.

---

### CCQC005S The *template\_name* template exceeds the number of allowed templates for a customization sequence. The template is in the *library\_name* metadata library.

**Explanation:** The customization sequence can process only *number* templates. The specified template cannot be processed because the customization sequence already contains the maximum number of templates.

**System action:** Processing stops.

**User response:** See "Gathering diagnostic information" on page 11-438. Contact IBM Software Support.

---

### CCQC006E The jobs could not be generated for the *group\_attach\_name* DB2 group attach name.

**Explanation:** The customization jobs could not be generated for the specified DB2 group attach name.

**System action:** Processing stops.

**User response:** See "Gathering diagnostic information" on page 11-438. Contact IBM Software Support.

---

### CCQC007E The jobs could not be generated for the *subsystem\_ID* DB2 subsystem.

**Explanation:** The customization jobs could not be generated for the specified DB2 subsystem.

**System action:** Processing stops.

**User response:** See “Gathering diagnostic information” on page 11-438. Contact IBM Software Support.

---

**CCQC008E** The jobs could not be generated for the *member\_name* DB2 member.

**Explanation:** The customization jobs could not be generated for the specified DB2 member.

**System action:** Processing stops.

**User response:** See “Gathering diagnostic information” on page 11-438. Contact IBM Software Support.

---

**CCQC009S** The jobs were not generated for the DB2 entries.

**Explanation:** One or more errors occurred while customization jobs were being generated for the selected DB2 entries.

**System action:** Processing stops.

**User response:** See “Gathering diagnostic information” on page 11-438. Contact IBM Software Support.

---

**CCQC010S** The *template\_name* template could not be accessed in the *library\_name* metadata library.

**Explanation:** The specified template could not be accessed because the user does not have RACF access to the data set, the data set has incorrect data characteristics, or the data set is not cataloged.

**System action:** Processing stops.

**User response:** Ensure that you have RACF access to the data set, that the characteristics are correct according to the specifications of the product that you are customizing, and that the data set is cataloged. If the problem persists, contact IBM Software Support.

---

**CCQC011S** The *template\_name* template could not be written to the *library\_name* customization library.

**Explanation:** The specified template could not be accessed because the user does not have RACF access to the data set, the data set has incorrect data characteristics, or the data set is not cataloged.

**System action:** Processing stops.

**User response:** Ensure that you have RACF access to the data set, that the characteristics are correct according to the specifications of the product that you are customizing, and that the data set is cataloged. If the problem persists, contact IBM Software Support.

---

**CCQC012W** The job card was generated with default values because the JOB keyword was missing.

**Explanation:** Default values were used to generate the job card because the JOB keyword was not specified in the first line of the job card.

**System action:** The job card was generated with default values.

**User response:** No action is required. To generate the job card with your own values, add the JOB keyword in the first line of the job card.

---

**CCQC013W** The job card was generated with the default value for the programmer name because the specified programmer name exceeded 20 characters.

**Explanation:** Default values were used to generate the job card because the specified programmer name contained too many characters.

**System action:** The job card was generated with default values.

**User response:** No action is required. To generate the job card with your own values, add a valid programmer name in the job card. A valid programmer name is 1 - 20 characters.

---

**CCQC014W** The job card was generated with default values because the JOB keyword was not followed by a space.

**Explanation:** Default values were used to generate the job card because a space did not follow the JOB keyword.

**System action:** The job card was generated with default values.

**User response:** No action is required. To generate the job card with your own values, add a space after the JOB keyword in the job card.

---

**CCQC015S** The *template\_name* template in the *library\_name* metadata library contains the following file-tailoring control statement: *statement\_name*. This control statement is not valid in a *template\_type* template.

**Explanation:** The *template\_type* template cannot contain the specified type of file-tailoring control statement.

**System action:** Processing stops.

**User response:** See “Gathering diagnostic information” on page 11-438. Contact IBM Software Support.

---

**CCQC016S** The )DOT file-tailoring control statement exceeded the number of allowed occurrences for the *template\_name* template in the *library\_name* metadata library.

**Explanation:** The )DOT file-tailoring control statement can occur only a limited number of times in the specified template.

**System action:** Processing stops.

**User response:** See “Gathering diagnostic information” on page 11-438. Contact IBM Software Support.

---

**CCQC017S** The nested )DOT file-tailoring control statements exceeded the number of allowed occurrences in the *template\_name* template in the *library\_name* metadata library.

**Explanation:** Nested )DOT file-tailoring control statements can occur only *number* times.

**System action:** Processing stops.

**User response:** See “Gathering diagnostic information” on page 11-438. Contact IBM Software Support.

---

**CCQC018S** The *template\_name* template in the *library\_name* metadata library is not valid because it does not contain any data.

**Explanation:** The specified template is missing required data.

**System action:** Processing stops.

**User response:** See “Gathering diagnostic information” on page 11-438. Contact IBM Software Support.

---

**CCQC019S** The *template\_name* template in the *library\_name* metadata library is not valid because an )ENDDOT file-tailoring control statement is missing.

**Explanation:** A )ENDDOT file-tailoring control statement is required in the specified template.

**System action:** Processing stops.

**User response:** See “Gathering diagnostic information” on page 11-438. Contact IBM Software Support.

---

**CCQC021S** The *template\_name* template in the *library\_name* metadata library is not valid because the template must start with the *parameter\_name* job card parameter.

**Explanation:** The specified template must start with

the specified job card parameter.

**System action:** Processing stops.

**User response:** See “Gathering diagnostic information” on page 11-438. Contact IBM Software Support.

---

**CCQC022S** The parameters used in a )DOT file-tailoring control statement exceeded the number of allowed parameters in the *template\_name* template. The template is in the *library\_name* metadata library. The error occurs in )DOT section *section\_number*.

**Explanation:** A )DOT file-tailoring control statement can contain only a limited number of parameters.

**System action:** Processing stops.

**User response:** See “Gathering diagnostic information” on page 11-438. Contact IBM Software Support.

---

**CCQC023S** The )DOT file-tailoring control statement must include the *table-name* table name in the *template\_name* template. The template is in the *library\_name* metadata library. The error occurs in )DOT section *section\_number*.

**Explanation:** The )DOT file-tailoring control statement is missing a required table name.

**System action:** Processing stops.

**User response:** See “Gathering diagnostic information” on page 11-438. Contact IBM Software Support.

---

**CCQC024S** ISPF file tailoring failed for the *template\_name* template in the *library\_name* metadata library.

**Explanation:** An error occurred during ISPF file tailoring for the specified template.

**System action:** Processing stops.

**User response:** Review the Tools Customizer-generated trace data set and the ISPF file tailoring trace data set. To create an ISPF file tailoring trace data set, complete the following steps:

1. Run Tools Customizer until the error is about to occur.
2. Specify the ISPFTRC command, and press Enter.
3. Issue the Tools Customizer command that issues the error.
4. Specify the ISPFTRC command, and press Enter. The ISPF file tailoring trace data set is created. It adheres the following naming convention:



*TSO\_ID*.ISPFT.TRACE, where *TSO\_ID* is the TSO user ID that is being used.

If the problem persists, gather the following information and contact IBM Software Support.

- A screen capture of the Tools Customizer error. Ensure that the complete error message is displayed by pressing PF1.
- The Tools Customizer trace data set. It adheres to the following naming convention: *TSO\_ID*.CCQ.TRACE, where *TSO\_ID* is the TSO user ID that is running Tools Customizer.
- The ISPF file tailoring trace data set.

---

**CCQC025I Customized jobs do not exist because they have not been generated.**

**Explanation:** The list of customized jobs cannot be displayed because the product has not been customized for any DB2 entries.

**System action:** None.

**User response:** Complete the steps to customize a product. Customized jobs are generated when all required product, LPAR parameters, and DB2 parameters are defined and at least one DB2 entry on which to customize the product has been selected.

---

**CCQC026S The value of the "customized" attribute for the *parameter\_name* parameter in the *library\_name* metadata library template does not match the value that was previously specified. The value is *value\_name*, and the previously specified value is *value\_name*.**

**Explanation:** The value for the "customized" attribute for a parameter must match the value that was previously specified.

**System action:** Processing stops.

**User response:** See "Gathering diagnostic information" on page 11-438. Contact IBM Software Support.

---

**CCQC027S The *job\_name* customization job was not found in the *library\_name* customization library.**

**Explanation:** The selected customization job does not exist in the customization library.

**System action:** Processing stops.

**User response:** See "Gathering diagnostic information" on page 11-438. Contact IBM Software Support.

---

**CCQC028S The *library\_name* customization library was not found.**

**Explanation:** The customization library does not exist.

**System action:** Processing stops.

**User response:** See "Gathering diagnostic information" on page 11-438. Contact IBM Software Support.

---

**CCQC029I The customization jobs were generated for *Product\_name*.**

**Explanation:** The customization jobs were generated for the specific product.

**System action:** None.

**User response:** No action is required.

---

**CCQC030S The customization jobs cannot be generated because at least one DB2 entry must be associated with this product.**

**Explanation:** The product that you are customizing requires at least one DB2 entry to be associated with it before customization jobs can be generated.

**System action:** None.

**User response:** Associate a DB2 entry with the product that you are customizing, and regenerate the jobs.

---

**CCQC031I The jobs were generated for the associated DB2 entries.**

**Explanation:** The customization jobs were generated for the DB2 entries that are associated with the product.

**System action:** None.

**User response:** No action is required.

---

**CCQC032S The customization jobs were not generated for *Product\_name*.**

**Explanation:** A severe error occurred while the jobs were being generated for the specified product.

**System action:** None.

**User response:** See "Gathering diagnostic information" on page 11-438. Contact IBM Software Support.

---

**CCQC033S The *customization\_library\_name* has no customized jobs.**

**Explanation:** The specified customization library cannot be browsed or edited because it is empty.

**System action:** None.

**User response:** Generate customization jobs for the specified library, and browse or edit the library again.

---

**CCQC034S** The specified operation is not allowed.

**Explanation:** Issuing commands against customization jobs from the customization library from an ISPF browse or edit session that was started on the Finish Product Customization panel is restricted.

**System action:** None.

**User response:** To make changes to customization jobs, follow the steps for recustomization.

---

**CCQC035E** Before you generate customization jobs, edit the product parameters to select one or more tasks or steps, and then issue the G line command or the GENERATEALL command again.

**Explanation:** One or more tasks or steps must be selected before customization jobs can be generated.

**System action:** None.

**User response:** Edit the product parameters to select one or more tasks or steps. Then, issue the G line command or the GENERATEALL command again.

---

**CCQC036E** Before you exit the Product Parameters panel, you must select one or more tasks or steps to generate customization jobs or issue the CANCEL command.

**Explanation:** One or more tasks or steps must be selected to generate customization jobs or the CANCEL command must be issued before you can exit the Product Parameters panel.

**System action:** None.

**User response:** Select one or more tasks or steps, or issue the CANCEL command.

---

**CCQD000W** The *member\_name* environment index member is not valid. The PL/I XML parser issued the following exception warning code: *code\_number*.

**Explanation:** While determining if the specified environment index member is valid, the PL/I XML parser issued an exception warning code.

**System action:** Processing continues.

**User response:** See the *Enterprise PL/I for z/OS Programming Guide* for more information about the warning.

---

**CCQD001S** The *member\_name* environment index member is not valid. The PL/I XML parser issued the following exception error code: *code\_number*.

**Explanation:** While determining if the specified environment index member is valid, the PL/I XML parser issued an exception error code.

**System action:** Processing continues.

**User response:** See the *Enterprise PL/I for z/OS Programming Guide* for more information about the error.

---

**CCQD002S** The XML structure of the *member\_name* environment index member is not valid. The *element\_name* element is unknown.

**Explanation:** The specified environment index member contains an unknown element.

**System action:** Processing stops.

**User response:** See “Gathering diagnostic information” on page 11-438. Contact IBM Software Support.

---

**CCQD003S** The XML structure of the *member\_name* environment index member is not valid. Content is not allowed for the *element\_name* element, but content was found.

**Explanation:** Content was found in an element that cannot contain content.

**System action:** Processing stops.

**User response:** See “Gathering diagnostic information” on page 11-438. Contact IBM Software Support.

---

**CCQD004S** The XML structure of the *member\_name* environment index member is not valid. Content is required for the *element\_name* element, but content was not found.

**Explanation:** The specified element does not contain required content.

**System action:** Processing stops.

**User response:** See “Gathering diagnostic information” on page 11-438. Contact IBM Software Support.

---

**CCQD005S** The XML structure of the *member\_name* environment index member is not valid. The content length for the *element\_name* element exceeds *maximum\_number* characters.

**Explanation:** The specified element contains too many characters.

**System action:** Processing stops.

**User response:** See “Gathering diagnostic information” on page 11-438. Contact IBM Software Support.

**CCQD006S** The XML structure of the *member\_name* environment index member is not valid. The *element\_name* element cannot occur more than *maximum\_number* times.

**Explanation:** The specified element occurs too many times in the environment index member.

**System action:** Processing stops.

**User response:** See “Gathering diagnostic information” on page 11-438. Contact IBM Software Support.

**CCQD007S** The XML structure of the *member\_name* environment index member is not valid. The *element\_name* element must occur at least *minimum\_number* times.

**Explanation:** The specified element does not occur enough times in the environment index member.

**System action:** Processing stops.

**User response:** See “Gathering diagnostic information” on page 11-438. Contact IBM Software Support.

**CCQD008S** The XML structure of the *member\_name* environment index member is not valid. The *attribute\_name* attribute in the *element\_name* element cannot occur more than *maximum\_number* times.

**Explanation:** The specified attribute occurs too many times in the environment index member.

**System action:** Processing stops.

**User response:** See “Gathering diagnostic information” on page 11-438. Contact IBM Software Support.

**CCQD009S** The XML structure of the *member\_name* environment index member is not valid. The *attribute\_name* attribute in the *element\_name* element must occur at least *minimum\_number* times.

**Explanation:** The specified attribute does not occur enough times in the environment index member.

**System action:** Processing stops.

**User response:** See “Gathering diagnostic

information” on page 11-438. Contact IBM Software Support.

**CCQD010S** The XML structure of the *member\_name* environment index member is not valid. Content is not allowed for the *attribute\_name* attribute in the *element\_name* element, but content was found.

**Explanation:** Content was found in an attribute that cannot contain content. The name of the attribute and the name of the element that contains it are indicated in the message text.

**System action:** Processing stops.

**User response:** See “Gathering diagnostic information” on page 11-438. Contact IBM Software Support.

**CCQD011S** The XML structure of the *member\_name* environment index member is not valid. Content is required for the *attribute\_name* attribute in the *element\_name* element, but content was not found.

**Explanation:** An attribute does not contain required content. The name of the attribute and the name of the element that contains it are indicated in the message text.

**System action:** Processing stops.

**User response:** See “Gathering diagnostic information” on page 11-438. Contact IBM Software Support.

**CCQD012S** The XML structure of the *member\_name* environment index member is not valid. The content length for the *element\_name* element exceeds *maximum\_number* characters.

**Explanation:** An element contains too many characters. The name of the element and the maximum number of allowed characters are indicated in the message text.

**System action:** Processing stops.

**User response:** See “Gathering diagnostic information” on page 11-438. Contact IBM Software Support.

**CCQD013S** The XML structure of the *member\_name* environment index member is not valid. The *attribute\_name* attribute in the *element\_name* element is unknown.

**Explanation:** The environment index member contains an unknown attribute. The name of the unknown

attribute and the name of the element that contains it are indicated in the message text.

**System action:** Processing stops.

**User response:** See “Gathering diagnostic information” on page 11-438. Contact IBM Software Support.

**CCQD050S** The following LPAR serial number is duplicated in the environment index member: *serial\_number*.

**Explanation:** The environment index member contains duplicate LPAR serial numbers. The duplicate serial number is indicated in the message text.

**System action:** Processing stops.

**User response:** See “Gathering diagnostic information” on page 11-438. Contact IBM Software Support.

**CCQD051S** The following DB2 serial number is duplicated in the environment index member: *serial\_number*.

**Explanation:** The environment index member contains duplicate DB2 serial numbers. The duplicate serial number is indicated in the message text.

**System action:** Processing stops.

**User response:** See “Gathering diagnostic information” on page 11-438. Contact IBM Software Support.

**CCQD052S** The following DB2 group attach name is duplicated in the environment index member: *group\_attach\_name*.

**Explanation:** The environment index member contains duplicate group attach names.

**System action:** Processing stops.

**User response:** See “Gathering diagnostic information” on page 11-438. Contact IBM Software Support.

**CCQD053S** The reference to the following DB2 subsystem for a DB2 group attach name is duplicated in the environment index member: *subsystem\_ID*.

**Explanation:** The environment index member contains duplicate references to a DB2 subsystem for a DB2 group attach name.

**System action:** Processing stops.

**User response:** See “Gathering diagnostic information” on page 11-438. Contact IBM Software Support.

**CCQD054S** The reference to the following DB2 subsystem for the *LPAR\_name* LPAR is duplicated in the environment index member: *subsystem\_ID*.

**Explanation:** The environment index member contains duplicate references to a DB2 subsystem for an LPAR. The duplicate subsystem ID is indicated in the message text.

**System action:** Processing stops.

**User response:** See “Gathering diagnostic information” on page 11-438. Contact IBM Software Support.

**CCQD055S** The following DB2 group attach name was not found in the environment index member: *group\_attach\_name*.

**Explanation:** A group attach name that is referenced by a DB2 member does not exist in the environment index member.

**System action:** Processing stops.

**User response:** See “Gathering diagnostic information” on page 11-438. Contact IBM Software Support.

**CCQD056S** The following LPAR was not found in the environment index member: *LPAR\_name*.

**Explanation:** The LPAR does not exist in the environment index member.

**System action:** Processing stops.

**User response:** See “Gathering diagnostic information” on page 11-438. Contact IBM Software Support.

**CCQD057S** The following LPAR is duplicated in the environment index member: *LPAR\_name*.

**Explanation:** The environment index member contains duplicate LPARs. The name of the duplicate LPAR name is indicated in the message text.

**System action:** Processing stops.

**User response:** See “Gathering diagnostic information” on page 11-438. Contact IBM Software Support.

**CCQD100W** The *member\_name* product index member is not valid. The PL/I XML parser issued the following exception warning code: *code\_number*.

**Explanation:** While determining if the product index member is valid, the PL/I XML parser issued the specified exception warning code.

**System action:** Processing continues.

**User response:** See the *Enterprise PL/I for z/OS Programming Guide* for more information about the specified exception warning code.

**CCQD101S** The *member\_name* product index member is not valid. The PL/I XML parser issued the following exception error code: *code\_number*.

**Explanation:** While determining if the product index member is valid, the PL/I XML parser issued the specified exception error code.

**System action:** Processing stops.

**User response:** See the *Enterprise PL/I for z/OS Programming Guide* for more information about the specified exception error code. Ensure that the Tools Customizer data store data set DCB is the same as the sample SCCQSAMP(CCQCDATS) data set DCB.

**CCQD102S** The XML structure of the *member\_name* product index member is not valid. The *element\_name* element is unknown.

**Explanation:** The specified product index member contains an unknown element.

**System action:** Processing stops.

**User response:** See “Gathering diagnostic information” on page 11-438. Contact IBM Software Support.

**CCQD103S** The XML structure of the *member\_name* product index member is not valid. Content is not allowed for the *element\_name* element, but content was found.

**Explanation:** Content was found for an element that cannot contain content.

**System action:** Processing stops.

**User response:** See “Gathering diagnostic information” on page 11-438. Contact IBM Software Support.

**CCQD104S** The XML structure of the *member\_name* product index member is not valid. Content is required for the *element\_name* element, but content was not found.

**Explanation:** The specified element does not contain required content.

**System action:** Processing stops.

**User response:** See “Gathering diagnostic information” on page 11-438. Contact IBM Software Support.

**CCQD105S** The XML structure of the *member\_name* product index member is not valid. The content length for the *element\_name* element exceeds *maximum\_number* characters.

**Explanation:** The specified element contains too many characters.

**System action:** Processing stops.

**User response:** See “Gathering diagnostic information” on page 11-438. Contact IBM Software Support.

**CCQD106S** The XML structure of the *member\_name* product index member is not valid. The *element\_name* element cannot occur more than *maximum\_number* times.

**Explanation:** The specified element occurs too many times in the product index member.

**System action:** Processing stops.

**User response:** See “Gathering diagnostic information” on page 11-438. Contact IBM Software Support.

**CCQD107S** The XML structure of the *member\_name* product index member is not valid. The *element\_name* element must occur at least *minimum\_number* times.

**Explanation:** The specified element does not occur enough times in the product index member.

**System action:** Processing stops.

**User response:** See “Gathering diagnostic information” on page 11-438. Contact IBM Software Support.

**CCQD108S** The XML structure of the *member\_name* product index member is not valid. The *attribute\_name* attribute in the *element\_name* element cannot occur more than *maximum\_number* times.

**Explanation:** An attribute occurs too many times. The name of the attribute and the element that contains it are indicated in the message text.

**System action:** Processing stops.

**User response:** See “Gathering diagnostic information” on page 11-438. Contact IBM Software Support.

---

**CCQD109S** The XML structure of the *member\_name* product index member is not valid. The *attribute\_name* attribute in the *element\_name* element must occur at least *minimum\_number* times.

**Explanation:** The specified attribute does not occur enough times in the product index member.

**System action:** Processing stops.

**User response:** See “Gathering diagnostic information” on page 11-438. Contact IBM Software Support.

---

**CCQD110S** The XML structure of the *member\_name* product index member is not valid. Content is not allowed for the *attribute\_name* attribute in the *element\_name* element, but content was found.

**Explanation:** An attribute cannot contain content. The name of the attribute and the element that contains it are indicated in the message text.

**System action:** Processing stops.

**User response:** See “Gathering diagnostic information” on page 11-438. Contact IBM Software Support.

---

**CCQD111S** The XML structure of the *member\_name* product index member is not valid. Content is required for the *attribute\_name* attribute in the *element\_name* element, but content was not found.

**Explanation:** An attribute requires content. The name of the attribute and the name of the element that contains it are indicated in the message text.

**System action:** Processing stops.

**User response:** See “Gathering diagnostic information” on page 11-438. Contact IBM Software Support.

---

**CCQD112S** The XML structure of the *member\_name* product index member is not valid. The content length for the *element\_name* element exceeds *maximum\_number* characters.

**Explanation:** The specified element contains too many characters.

**System action:** Processing stops.

**User response:** See “Gathering diagnostic information” on page 11-438. Contact IBM Software Support.

---

**CCQD113S** The XML structure of the *member\_name* product index member is not valid. The *attribute\_name* attribute in the *element\_name* element is unknown.

**Explanation:** The specified attribute in the product index member is unknown.

**System action:** Processing stops.

**User response:** See “Gathering diagnostic information” on page 11-438. Contact IBM Software Support.

---

**CCQD118S** The content of the *member\_name* product index member is not valid. The *configuration\_ID* configuration ID for the *configuration-name* configuration name is not unique.

**Explanation:**

**System action:** Processing stops.

**User response:** See “Gathering diagnostic information” on page 11-438. Contact IBM Software Support.

---

**CCQD120S** The content of the *member\_name* product index member is not valid. The pack ID *pack\_ID* that is referenced by product prefix *product\_prefix* in the metadata library *library\_name* could not be found.

**Explanation:** The specified pack ID could not be found in the metadata library.

**System action:** Processing stops.

**User response:** See “Gathering diagnostic information” on page 11-438. Contact IBM Software Support.

---

**CCQD121I** The specified pack contains the *component\_name*, which was previously specified as a stand-alone product.

**Explanation:** The specified component of the pack was previously specified as a stand-alone product.

**System action:** None.

**User response:** No action is required.

---

**CCQD122I** The specified component metadata library was previously specified as part of the *pack\_name*.

**Explanation:** The specified metadata library for the component was previously specified as part of a pack.

**System action:** None.

**User response:** No action is required.

---

**CCQD123E** The customization library name *library\_name* is being used by another product or component. Specify another customization library qualifier on the Tools Customizer Settings panel.

**Explanation:** A different product or component is using the specified customization library.

**System action:** None.

**User response:** Specify another customization library qualifier on the Tools Customizer Settings panel.

---

**CCQD300W** The *member\_name* product environment member is not valid. The PL/I XML parser issued the following exception warning code: *code\_number*.

**Explanation:** While determining if the product environment member is valid, the PL/I XML parser issued the specified exception warning code.

**System action:** Processing continues.

**User response:** See the *Enterprise PL/I for z/OS Programming Guide* for more information about the specified exception warning code.

---

**CCQD301S** The *member\_name* product environment member is not valid. The PL/I XML parser issued the following exception error code: *code\_number*.

**Explanation:** While determining if the product environment member is valid, the PL/I XML parser issued the specified exception error code.

**System action:** Processing stops.

**User response:** See the *Enterprise PL/I for z/OS Programming Guide* for more information about the specified exception error code.

---

**CCQD302S** The XML structure of the *member\_name* product environment member is not valid. The *element\_name* element is unknown.

**Explanation:** The specified product environment member contains an unknown element.

**System action:** Processing stops.

**User response:** See “Gathering diagnostic information” on page 11-438. Contact IBM Software Support.

---

**CCQD303S** The XML structure of the *member\_name* product environment member is not valid. Content is not allowed for the *element\_name* element, but content was found.

**Explanation:** Content was found for an element that cannot contain content.

**System action:** Processing stops.

**User response:** See “Gathering diagnostic information” on page 11-438. Contact IBM Software Support.

---

**CCQD304S** The XML structure of the *member\_name* product environment member is not valid. Content is required for the *element\_name* element, but content was not found.

**Explanation:** The specified element does not contain required content.

**System action:** Processing stops.

**User response:** See “Gathering diagnostic information” on page 11-438. Contact IBM Software Support.

---

**CCQD305S** The XML structure of the *member\_name* product environment member is not valid. The content length for the *element\_name* element exceeds *maximum\_number* characters.

**Explanation:** The specified element contains too many characters.

**System action:** Processing stops.

**User response:** See “Gathering diagnostic information” on page 11-438. Contact IBM Software Support.

---

**CCQD306S** The XML structure of the *member\_name* product environment member is not valid. The *element\_name* element cannot occur more than *maximum\_number* times.

**Explanation:** The specified element occurs too many times in the product environment member.

**System action:** Processing stops.

**User response:** See “Gathering diagnostic information” on page 11-438. Contact IBM Software Support.

---

**CCQD307S** The XML structure of the *member\_name* product environment member is not valid. The *element\_name* element must occur at least *minimum\_number* times.

**Explanation:** The specified element does not occur enough times in the product environment member.

**System action:** Processing stops.

**User response:** See “Gathering diagnostic

information” on page 11-438. Contact IBM Software Support.

---

**CCQD308S** The XML structure of the *member\_name* product environment member is not valid. The *attribute\_name* attribute in the *element\_name* element cannot occur more than *maximum\_number* times.

**Explanation:** The specified attribute occurs too many times. The name of the attribute and the element that contains it are indicated in the message text.

**System action:** Processing stops.

**User response:** See “Gathering diagnostic information” on page 11-438. Contact IBM Software Support.

---

**CCQD309S** The XML structure of the *member\_name* product environment member is not valid. The *attribute\_name* attribute in the *element\_name* element must occur at least *minimum\_number* times.

**Explanation:** The specified attribute does not occur enough times in the product environment member.

**System action:** Processing stops.

**User response:** See “Gathering diagnostic information” on page 11-438. Contact IBM Software Support.

---

**CCQD310S** The XML structure of the *member\_name* product environment member is not valid. Content is not allowed for the *attribute\_name* attribute in the *element\_name* element, but content was found.

**Explanation:** The specified attribute cannot contain content. The name of the attribute and the element that contains it are indicated in the message text.

**System action:** Processing stops.

**User response:** See “Gathering diagnostic information” on page 11-438. Contact IBM Software Support.

---

**CCQD311S** The XML structure of the *member\_name* product environment member is not valid. Content is required for the *attribute\_name* attribute in the *element\_name* element, but content was not found.

**Explanation:** The specified attribute requires content. The name of the attribute and the name of the element that contains it are indicated in the message text.

**System action:** Processing stops.

**User response:** See “Gathering diagnostic information” on page 11-438. Contact IBM Software Support.

---

**CCQD312S** The XML structure of the *member\_name* product environment member is not valid. The content length for the *element\_name* element exceeds *maximum\_number* characters.

**Explanation:** The specified element contains too many characters.

**System action:** Processing stops.

**User response:** See “Gathering diagnostic information” on page 11-438. Contact IBM Software Support.

---

**CCQD313S** The XML structure of the *member\_name* product environment member is not valid. The *attribute\_name* attribute in the *element\_name* element is unknown.

**Explanation:** The specified attribute in the product environment member is unknown.

**System action:** Processing stops.

**User response:** See “Gathering diagnostic information” on page 11-438. Contact IBM Software Support.

---

**CCQD350I** The *subsystem\_ID* DB2 subsystem is associated with this product.

**Explanation:** The specified DB2 subsystem was added and saved in the Tools Customizer data store for the product to be customized.

**System action:** Processing continues.

**User response:** No action is required.

---

**CCQD351I** The *member\_name* DB2 member for the *group\_attach\_name* DB2 group attach name is associated with this product.

**Explanation:** The specified DB2 member for the group attach name was added and saved in the Tools Customizer data store for the product to be customized.

**System action:** Processing continues.

**User response:** No action is required.

---

**CCQD352I** The *group\_attach\_name* DB2 group attach name is associated with this product.

**Explanation:** The specified DB2 group attach name was added and saved in the Tools Customizer data store for the product to be customized.

**System action:** Processing continues.



**User response:** No action is required.

---

**CCQD353E** The *subsystem\_ID* DB2 subsystem is already associated with this product.

**Explanation:** The specified DB2 subsystem cannot be added for the product to be customized because it already exists in the product environment in the data store.

**System action:** None.

**User response:** Ensure that the DB2 subsystem is specified correctly. If the problem persists, contact IBM Software Support.

---

**CCQD354E** The *member\_name* DB2 member for the *group\_attach\_name* DB2 group attach name is already associated with this product.

**Explanation:** The specified DB2 member for the group attach name cannot be added for the product to be customized because it already exists in the product environment in the data store.

**System action:** None.

**User response:** Ensure that the DB2 group attach name is specified correctly. If the problem persists, contact IBM Software Support.

---

**CCQD355E** The *group\_attach\_name* DB2 group attach name is already associated with this product.

**Explanation:** The specified DB2 group attach name cannot be added for the product to be customized because it already exists in the product environment in the data store.

**System action:** Processing stops.

**User response:** Ensure that the DB2 group attach name is specified correctly. If the problem persists, contact IBM Software Support.

---

**CCQD356S** The *library\_name* metadata library is already associated with the maximum number of allowed DB2 entries for this product.

**Explanation:** The specified metadata library cannot be associated with more DB2 entries because it is already associated with the number of DB2 entries that are allowed.

**System action:** Processing stops.

**User response:** Delete an associated DB2 entry, and associate the specified library with another DB2 entry again.

---

**CCQD357I** The *subsystem\_ID* DB2 subsystem is unassociated with this product.

**Explanation:** The specified DB2 SSID was unassociated with the product that you are customizing.

**System action:** Processing continues.

**User response:** No action is required.

---

**CCQD358I** The *member\_name* DB2 member for the *group\_attach\_name* DB2 group attach name is unassociated with this product.

**Explanation:** The specified DB2 member for the DB2 group attach name was unassociated with the product that you are customizing.

**System action:** Processing continues.

**User response:** No action is required.

---

**CCQD359I** The *group\_attach\_name* DB2 group attach name is unassociated with this product.

**Explanation:** The specified DB2 group attach name was unassociated with the product that you are customizing.

**System action:** Processing continues.

**User response:** No action is required.

---

**CCQD360S** The *library\_name* metadata library is not associated with the specified DB2 subsystem *subsystem\_ID*.

**Explanation:** The specified DB2 subsystem and metadata library are not associated with each other.

**System action:** None.

**User response:** Ensure that the DB2 subsystem and the metadata library are associated. If the problem persists, contact IBM Software Support.

---

**CCQD361S** The *library\_name* metadata library is not associated with the specified DB2 data sharing group member *member\_name* for the *group\_attach\_name* DB2 group attach name.

**Explanation:** The specified DB2 data sharing group member for the group attach name and metadata library are not associated with each other.

**System action:** None.

**User response:** Ensure that the DB2 data sharing group member for the group attach name and the metadata library are associated. If the problem persists, contact IBM Software Support.

---

**CCQD362S** The *library\_name* metadata library is not associated with the specified *group\_attach\_name* DB2 group attach name.

**Explanation:** The specified DB2 group attach name and metadata library are not associated with each other.

**System action:** None.

**User response:** Ensure that the DB2 group attach name and the metadata library are associated. If the problem persists, contact IBM Software Support.

---

**CCQD400W** The customization parser issued the *code\_number* warning code while it parsed the product customization member *member\_name*. See the PL/I programming guide for more information about this XML parser continuable exception code.

**Explanation:** While determining if the specified member is valid, the PL/I XML parser issued an exception warning code.

**System action:** Processing stops.

**User response:** See the *Enterprise PL/I for z/OS Programming Guide* for more information about the warning.

---

**CCQD401S** The customization parser issued the *code\_number* error code while it parsed the product customization member *member\_name*. See the PL/I programming guide for more information about this XML parser terminating exception code.

**Explanation:** While determining if the specified member is valid, the PL/I XML parser issued an exception error code.

**System action:** Processing stops.

**User response:** See the *Enterprise PL/I for z/OS Programming Guide* for more information about the error.

---

**CCQD500W** The *data\_set\_name* data store data set was not found.

**Explanation:** Tools Customizer could not find the specified data store data set.

**System action:** None.

**User response:** No action is required.

---

**CCQD501W** The *data\_set\_name* data store data set was not found, so it was created.

**Explanation:** Tools Customizer created the specified data set because it could not be found.

**System action:** None.

**User response:** No action is required.

---

**CCQD502E** The *data\_set\_name* data store data set is not writable.

**Explanation:** Tools Customizer cannot write to the specified data set.

**System action:** None.

**User response:** Ensure that the data set is writable.

---

**CCQD503E** The *data\_set\_name* data store data set could not be opened with the *disposition\_type* disposition.

**Explanation:** Tools Customizer could not open the data set with the specified disposition.

**System action:** Processing stops.

**User response:** Ensure that you have WRITE authority access to this data set.

---

**CCQD504E** The *data\_set\_name* data store data set could not be opened with the *option\_name* option.

**Explanation:** Tools Customizer could not open the data set with the specified option.

**System action:** Processing stops.

**User response:** Ensure that you have WRITE authority access to this data set.

---

**CCQD505E** The *data\_set\_name* data store data set could not be created.

**Explanation:** Tools Customizer could not create the specified data set.

**System action:** Processing stops.

**User response:** Ensure that you have the authority to create data sets and that the DASD is not full.

---

**CCQD510I** The DB2 SSID and DB2 group attach name were created.

**Explanation:** The DB2 SSID and DB2 group attach name were created and saved in the data store.

**System action:** None.

**User response:** No action is required.

---

---

**CCQD511E** The DB2 entry already exists in the list of DB2 entries to be associated.

**Explanation:** The DB2 entry cannot be added because it already exists in the list of DB2 entries to be associated.

**System action:** None.

**User response:** Specify a different DB2 entry.

---

**CCQD512S** An error occurred while a DB2 entry was being created.

**Explanation:** A severe error occurred while a DB2 entry was being created.

**System action:** Processing stops.

**User response:** See “Gathering diagnostic information” on page 11-438. Contact IBM Software Support.

---

**CCQD513E** The specified DB2 entry already exists and is associated with the current product on the Customizer Workplace panel.

**Explanation:** The DB2 entry cannot be added because it already exists, and it is already associated with the product to be customized.

**System action:** None.

**User response:** Press F3 to go to the Customizer Workplace panel to see the DB2 entry, or specify a different DB2 entry.

---

**CCQD514E** A value is required for a DB2 subsystem, a DB2 group attach name, or both before they can be created.

**Explanation:** Required information is missing. A DB2 subsystem, a DB2 group attach name, or both must be specified.

**System action:** None.

**User response:** Specify a DB2 subsystem, a DB2 group attach name, or both.

---

**CCQD515E** The specified DB2 entry already exists in the list of DB2 entries and is already associated with the current product.

**Explanation:** The DB2 entry has already been created and associated with the product that you want to customize.

**System action:** None.

**User response:** Specify a different DB2 entry.

---

**CCQD516E** The specified DB2 entry already exists in the list of DB2 entries on the Associate DB2 Entry with Product panel but is not associated with the current product.

**Explanation:** The DB2 entry exists, but it must be associated with the product to be customized.

**System action:** None.

**User response:** On the Customizer Workplace panel, issue the ASSOCIATE command to associate the DB2 entry with the product.

---

**CCQD517S** An error occurred while a DB2 entry was being copied.

**Explanation:** A severe error occurred while a DB2 entry was being copied

**System action:** Processing stops.

**User response:** See “Gathering diagnostic information” on page 11-438. Contact IBM Software Support.

---

**CCQD518E** A value is required for a DB2 subsystem, a DB2 group attach name, or both before they can be copied.

**Explanation:** Required information is missing. A DB2 subsystem, a DB2 group attach name, or both must be specified.

**System action:** None.

**User response:** Specify a DB2 subsystem, a DB2 group attach name, or both.

---

**CCQD519I** The DB2 entry was copied.

**Explanation:** The DB2 entry was copied and saved in the Tools Customizer data store.

**System action:** None.

**User response:** No action is required.

---

**CCQD520S** The DB2 entry was copied to the list of DB2 entries but was not associated because the product is already associated with the allowed number of DB2 entries.

**Explanation:** The DB2 entry was not completely copied because a product can be associated with only 1200 DB2 entries.

**System action:** Processing stops.

**User response:** Remove a DB2 entry from the list, and copy the specified DB2 entry again.

---

---

**CCQD521E** *Line\_command* is not a valid line command.

**Explanation:** The specified line command is not valid. Valid line commands are on the panel.

**System action:** Processing stops.

**User response:** Specify a valid line command.

---

**CCQD522E** The *subsystem\_ID* DB2 subsystem ID occurs more than once in the list. Each row must be unique.

**Explanation:** The specified DB2 subsystem ID can be used only once.

**System action:** Processing stops.

**User response:** Specify a different DB2 subsystem ID.

---

**CCQD523E** The *group\_attach\_name* DB2 group attach name occurs more than once in the list. Each row must be unique.

**Explanation:** The specified DB2 group attach name can be used only once.

**System action:** Processing stops.

**User response:** Specify a different DB2 group attach name.

---

**CCQD524E** The *member\_name* DB2 member for the DB2 group attach name occurs more than once in the list. Each row must be unique.

**Explanation:** The specified DB2 member for the DB2 group attach name can be used only once.

**System action:** Processing stops.

**User response:** Specify a different DB2 member for the DB2 group attach name.

---

**CCQD525I** The DB2 entries were created.

**User response:** No action is required.

---

**CCQD526E** The *subsystem\_ID* DB2 subsystem ID occurs more than once in the list. Each DB2 subsystem ID must be unique.

**Explanation:** The specified DB2 subsystem ID can be used only once.

**System action:** Processing stops.

**User response:** Specify a different DB2 subsystem ID.

---



---

**CCQD527I** DB2 group attach names cannot be created during the copy process.

**Explanation:** The ability to create DB2 group attach names is not available during the copy process.

**System action:** None.

**User response:** Create DB2 group attach names by issuing the CREATE command on the Customizer Workplace panel.

---

**CCQD528E** The *metadata\_library* metadata library is already associated with *number* DB2 entries. The maximum number of associated DB2 entries for this metadata library is 256.

**Explanation:** A metadata library can be associated with a maximum of 256 DB2 entries. The specified metadata library is already associated with 256.

**System action:** Processing stops.

**User response:** Remove an existing association between the specified metadata library and a DB2 entry, and associate the specified the metadata library with another entry.

---

**CCQD529I** At least one row is required.

---

**CCQD560E** The *subsystem\_ID* DB2 subsystem already exists and is associated with the current product on the Customizer Workplace panel.

**Explanation:** The specified DB2 subsystem exists and is associated with the product that you are customizing.

**System action:** None.

**User response:** Specify another DB2 subsystem.

---

**CCQD561E** The *member\_name* DB2 member for the *group\_attach\_name* DB2 group attach name already exists and is associated with the current product on the Customizer Workplace panel.

**Explanation:** The specified DB2 data sharing group for the DB2 group attach name exists and is associated with the product that you are customizing.

**System action:** None.

**User response:** Specify another DB2 subsystem.

---

**CCQD562E** The *group\_attach\_name* DB2 group attach name already exists and is associated with the current product on the Customizer Workplace panel.

**Explanation:** The specified DB2 group attach name exists and is associated with the product that you are

customizing. The subsystem is in the table on the Customizer Workplace panel.

**System action:** None.

**User response:** Specify another DB2 group attach name.

**CCQD563E** A value is required for a DB2 subsystem, a DB2 group attach name, or both before they can be created.

**Explanation:** A DB2 subsystem, a DB2 group attach name, or both are not specified so one or both of them cannot be created.

**System action:** None.

**User response:** Specify a value for the DB2 subsystem, the DB2 group attach name, or both.

**CCQD565E** The *subsystem\_ID* DB2 subsystem already exists in the list of DB2 entries and is already associated with the current product.

**Explanation:** The specified subsystem is already associated.

**System action:** None.

**User response:** Specify a different DB2 subsystem.

**CCQD566E** The *member\_name* DB2 member for the *group\_attach\_name* DB2 group attach name already exists in the list of DB2 entries and is already associated with the current product.

**Explanation:** The specified DB2 member is already associated.

**System action:** None.

**User response:** Specify a different DB2 member.

**CCQD567E** The *group\_attach\_name* DB2 group attach name already exists in the list of DB2 entries and is already associated with the current product.

**Explanation:** The specified DB2 group attach name is already associated.

**System action:** None.

**User response:** Specify another DB2 group attach name.

**CCQD568I** To customize *product\_name*, at least one DB2 entry must be associated with this product.

**Explanation:** The specified product requires at least one associated DB2 entry.

**System action:** None.

**User response:** To continue the customization process for the specified product, associate one or more DB2 entries with it.

**CCQD569I** To customize the *product\_name* product configuration, at least one DB2 entry must be associated with this configuration.

**Explanation:** The configuration for the specified product requires at least one associated DB2 entry.

**System action:** None.

**User response:** To continue the customization process for the configuration of the specified product, associate one or more DB2 entries with the configuration.

**CCQD577W** The *mode\_name* DB2 mode of the *subsystem\_ID* DB2 subsystem is not supported by the product.

**Explanation:** The product does not support the specified DB2 mode.

**System action:** None.

**User response:** Specify a supported DB2 mode.

**CCQD578W** The *mode\_name* DB2 mode of the *member\_name* DB2 member for the DB2 group is not supported by the product.

**Explanation:** The product does not support the specified DB2 mode.

**System action:** None.

**User response:** Specify a supported DB2 mode.

**CCQD579W** The *mode\_name* DB2 mode of the *group\_name* DB2 group attach name is not supported by the product.

**Explanation:** The product does not support the specified DB2 mode.

**System action:** None.

**User response:** Specify a supported DB2 mode.

**CCQD580S** The *subsystem\_ID* DB2 subsystem was copied to the list of DB2 entries but was not associated because the product is already associated with the allowed number of DB2 entries.

**Explanation:** The copied DB2 subsystem was not associated with the product because the product is associated with the maximum number of DB2 entries.

**System action:** None.

**User response:** Remove an associated DB2 entry and

associate the product with the copied DB2 subsystem.

---

**CCQD581S** The *member\_name* DB2 member for the *group\_attach\_name* DB2 group attach name was copied to the list of DB2 entries but was not associated because the product is already associated with the allowed number of DB2 entries.

**Explanation:** The copied DB2 member for the DB2 group attach name was not associated with the product because the product is associated with the maximum number of DB2 entries.

**System action:** None.

**User response:** Remove an associated DB2 entry and associate the product with the copied DB2 member.

---

**CCQD582S** The *group\_attach\_name* DB2 group attach name was copied to the list of DB2 entries but was not associated because the product is already associated with the allowed number of DB2 entries.

**Explanation:** The copied DB2 group attach name was not associated with the product because the product is associated with the maximum number of DB2 entries.

**System action:** None.

**User response:** Remove an associated DB2 entry and associate the product with the copied DB2 group attach name.

---

**CCQD584I** The *member\_name* DB2 member for the *group\_attach\_name* DB2 group attach name is copied to the *subsystem\_ID* DB2 subsystem.

**Explanation:** The specified DB2 member was copied.

**System action:** None.

**User response:** No action is required.

---

**CCQD585I** The *group\_attach\_name* DB2 group attach name cannot be copied because a DB2 member is required.

**Explanation:** The specified DB2 group attach name was not copied because a DB2 member was missing.

**System action:** None.

**User response:** No action is required.

---

**CCQD586S** The current LPAR is *LPAR\_name*, but the data store contains information about the *LPAR\_name* LPAR. You must use the *LPAR\_name* LPAR to customize the product.

**Explanation:** The LPAR that is stored in the data store

data set must be used to customize the product.

**System action:** Processing stops.

**User response:** Use the LPAR that is stored in the data store data set.

---

**CCQD587W** The *level\_number* DB2 level of the *subsystem\_name* DB2 subsystem is not supported by the product.

**Explanation:** The product does not support the specified DB2 level.

**System action:** Processing continues.

**User response:** Specify a supported level of DB2.

---

**CCQD588W** The *level\_number* DB2 level of the *member\_name* DB2 member of the *group\_name* DB2 group is not supported by the product.

**Explanation:** The product does not support the specified DB2 level.

**System action:** Processing continues.

**User response:** Specify a supported level of DB2.

---

**CCQD589W** The *level\_number* DB2 level of the *group\_name* DB2 group attach name is not supported by the product.

**Explanation:** The product does not support the specified DB2 level.

**System action:** Processing continues.

**User response:** Specify a supported level of DB2.

---

**CCQD593I** The *subsystem\_ID* DB2 subsystem was deleted.

**User response:** No action is required.

---

**CCQD594I** The *member\_name* DB2 for the *group\_attach\_name* DB2 group attach name was deleted.

**User response:** No action is required.

---

**CCQD595I** The *group\_attach\_name* DB2 group attach name was deleted.

**User response:** No action is required.

---

**CCQD596E** The *subsystem\_ID* DB2 subsystem was not deleted.

**Explanation:** An internal error occurred while the specified DB2 subsystem was being deleted.

**System action:** Processing stops.

**User response:** See “Gathering diagnostic information” on page 11-438. Contact IBM Software Support.

---

**CCQD597E** The *member\_name* DB2 member for the *group\_attach\_name* DB2 group attach name was not deleted.

**Explanation:** An internal error occurred while the specified DB2 member was being deleted.

**System action:** Processing stops.

**User response:** See “Gathering diagnostic information” on page 11-438. Contact IBM Software Support.

---

**CCQD598E** The *group\_attach\_name* DB2 group attach name was not deleted.

**Explanation:** An internal error occurred while the specified DB2 group attach name was being deleted.

**System action:** Processing stops.

**User response:** See “Gathering diagnostic information” on page 11-438. Contact IBM Software Support.

---

**CCQD600W** The *member\_name* product customization member is not valid. The PL/I XML parser issued the following exception warning code: *code\_number*.

**Explanation:** While determining if the XML structure of the product customization member is valid, the PL/I XML parser issued an exception warning code.

**System action:** Processing continues.

**User response:** See the *Enterprise PL/I for z/OS Programming Guide* for more information about the exception warning code.

---

**CCQD601S** The *member\_name* product customization member is not valid. The PL/I XML parser issued the following exception error code: *code\_number*.

**Explanation:** While determining if the XML structure of the product customization member is valid, the PL/I XML parser issued an exception error code.

**System action:** Processing stops.

**User response:** See the *Enterprise PL/I for z/OS Programming Guide* for more information about the exception error code.

---

**CCQD602S** The XML structure of the *member\_name* product customization member is not valid. The *element\_name* element is unknown.

**Explanation:** The data store member contains an unknown element.

**System action:** Processing stops.

**User response:** See “Gathering diagnostic information” on page 11-438. Contact IBM Software Support.

---

**CCQD603S** The XML structure of the *member\_name* product customization member is not valid. Content is not allowed for the *element\_name* element, but content was found.

**Explanation:** The specified element cannot contain content.

**System action:** Processing stops.

**User response:** See “Gathering diagnostic information” on page 11-438. Contact IBM Software Support.

---

**CCQD604S** The XML structure of the *member\_name* product customization member is not valid. Content is required for the *element\_name* element, but content was not found.

**Explanation:** The specified element is missing required content.

**System action:** Processing stops.

**User response:** See “Gathering diagnostic information” on page 11-438. Contact IBM Software Support.

---

**CCQD605S** The XML structure of the *member\_name* product customization member is not valid. The content length for the *element\_name* element exceeds *maximum\_number* characters.

**Explanation:** The specified element contains too many characters.

**System action:** Processing stops.

**User response:** See “Gathering diagnostic information” on page 11-438. Contact IBM Software Support.

---

**CCQD606S** The XML structure of the *member\_name* product customization member is not valid. The *element\_name* element cannot occur more than *maximum\_number* times.

**Explanation:** The specified element occurs too many times.

**System action:** Processing stops.

**User response:** See “Gathering diagnostic information” on page 11-438. Contact IBM Software Support.

---

**CCQD607S** The XML structure of the *member\_name* product customization member is not valid. The *element\_name* element must occur at least *minimum\_number* times.

**Explanation:** The specified element does not occur enough times.

**System action:** Processing stops.

**User response:** See “Gathering diagnostic information” on page 11-438. Contact IBM Software Support.

---

**CCQD608S** The XML structure of the *member\_name* product customization member is not valid. The *attribute\_name* attribute in the *element\_name* element cannot occur more than *maximum\_number* times.

**Explanation:** The specified attribute occurs too many times.

**System action:** Processing stops.

**User response:** See “Gathering diagnostic information” on page 11-438. Contact IBM Software Support.

---

**CCQD609S** The XML structure of the *member\_name* product customization member is not valid. The *attribute\_name* attribute in the *element\_name* element must occur at least *minimum\_number* times.

**Explanation:** The specified attribute does not occur enough times.

**System action:** Processing stops.

**User response:** See “Gathering diagnostic information” on page 11-438. Contact IBM Software Support.

---

**CCQD610S** The XML structure of the *member\_name* product customization member is not valid. Content is not allowed for the *attribute\_name* attribute in the *element\_name* element, but content was found.

**Explanation:** The specified attribute cannot contain content.

**System action:** Processing stops.

**User response:** See “Gathering diagnostic information” on page 11-438. Contact IBM Software Support.

---

**CCQD611S** The XML structure of the *member\_name* product customization member is not valid. Content is required for the *attribute\_name* attribute in the *element\_name* element, but content was not found.

**Explanation:** The specified attribute does not contain required content.

**System action:** Processing stops.

**User response:** See “Gathering diagnostic information” on page 11-438. Contact IBM Software Support.

---

**CCQD612S** The XML structure of the *member\_name* product customization member is not valid. The content length for the *element\_name* element exceeds *maximum\_number* characters.

**Explanation:** The specified element contains too many characters.

**System action:** Processing stops.

**User response:** See “Gathering diagnostic information” on page 11-438. Contact IBM Software Support.

---

**CCQD613S** The XML structure of the *member\_name* product customization member is not valid. The *attribute\_name* attribute in the *element\_name* element is unknown.

**Explanation:** The specified attribute in the data store member is unknown.

**System action:** Processing stops.

**User response:** See “Gathering diagnostic information” on page 11-438. Contact IBM Software Support.

---

**CCQD614S** The content of the *member\_name* product customization member is not valid. The value of the *element\_name* element is not valid. The value is *value\_name*.

**Explanation:** The specified value is not valid.

**System action:** Processing stops.

**User response:** See “Gathering diagnostic information” on page 11-438. Contact IBM Software Support.



information” on page 11-438. Contact IBM Software Support.

---

**CCQD700W** The *member\_name* DB2 data member is not valid. The PL/I XML parser issued the following exception warning code: *code\_number*.

**Explanation:** While determining if the XML structure of the DB2 data member is valid, the PL/I XML parser issued an exception warning code.

**System action:** Processing continues.

**User response:** See the *Enterprise PL/I for z/OS Programming Guide* for more information about the exception warning code.

---

**CCQD701S** The *member\_name* DB2 data member is not valid. The PL/I XML parser issued the following exception error code: *code\_number*.

**Explanation:** While determining if the XML structure of the DB2 data member is valid, the PL/I XML parser issued an exception error code.

**System action:** Processing continues.

**User response:** See the *Enterprise PL/I for z/OS Programming Guide* for more information about the exception error code.

---

**CCQD750W** The *value\_number* value in the DB2 parameter *parameter\_name* was skipped because only *maximum\_number* values are allowed.

**Explanation:** The specified value was skipped because it exceeds the number of allowed values in the DB2 parameter.

**System action:** Processing continues.

**User response:** No action is required. To stop this message from being issued, remove the extra values from the DB2 parameter.

---

**CCQD800W** The *member\_name* LPAR data member is not valid. The PL/I XML parser issued the following exception warning code: *code\_number*.

**Explanation:** While determining if the XML structure of the LPAR data member is valid, the PL/I XML parser issued an exception warning code.

**System action:** Processing continues.

**User response:** See the *Enterprise PL/I for z/OS Programming Guide* for more information about the exception warning code.

---

**CCQD801S** The *member\_name* LPAR data member is not valid. The PL/I XML parser issued the following exception error code: *code\_number*.

**Explanation:** While determining if the XML structure of the LPAR data member is valid, the PL/I XML parser issued an exception error code.

**System action:** Processing continues.

**User response:** See the *Enterprise PL/I for z/OS Programming Guide* for more information about the exception error code.

---

**CCQD850W** The *value\_number* value in the LPAR parameter *parameter\_name* was skipped because only *maximum\_number* values are allowed.

**Explanation:** The specified value was skipped because it exceeds the number of allowed values in the LPAR parameter.

**System action:** Processing continues.

**User response:** No action is required. To stop this message from being issued, remove the extra values from the LPAR parameter.

---

**CCQD851I** The *subsystem\_ID* DB2 subsystem is copied to the *member\_name* DB2 member for the *group\_attach\_name* DB2 group attach name.

**User response:** No action is required.

---

**CCQD852I** The *member\_name* DB2 member for the *group\_attach\_name* DB2 group attach name is copied to the *member\_name* DB2 member for the *group\_attach\_name* DB2 group attach name.

**User response:** No action is required.

---

**CCQD854I** The *member\_name* DB2 member for the *group\_attach\_name* DB2 group attach name is copied to multiple DB2 entries.

**User response:** No action is required.

---

**CCQD900W** The *member\_name* product data member is not valid. The PL/I XML parser issued the following exception warning code: *code\_number*.

**Explanation:** While determining if the XML structure of the product data member is valid, the PL/I XML parser issued an exception warning code.

**System action:** Processing continues.

**User response:** See the *Enterprise PL/I for z/OS*

*Programming Guide* for more information about the exception warning code.

---

**CCQD901S** The *member\_name* product data member is not valid. The PL/I XML parser issued the following exception error code: *code\_number*.

**Explanation:** While determining if the XML structure of the product data member is valid, the PL/I XML parser issued an exception error code.

**System action:** Processing continues.

**User response:** See the *Enterprise PL/I for z/OS Programming Guide* for more information about the exception warning code.

---

**CCQD950W** The *value\_number* value in the product parameter *parameter\_name* was skipped because only *maximum\_number* values are allowed.

**Explanation:** The specified value was skipped because it exceeds the number of allowed values in the product parameter.

**System action:** Processing continues.

**User response:** No action is required. To stop this message from being issued, remove the extra values from the product parameter.

---

**CCQD960I** The *subsystem\_ID* DB2 subsystem was changed to the *member\_name* DB2 member for the *group\_attach\_name* DB2 group attach name.

**User response:** No action is required.

---

**CCQD961I** The *member\_name* DB2 member for the *group\_attach\_name* DB2 group attach name was changed to the *subsystem\_ID* DB2 subsystem.

**User response:** No action is required.

---

**CCQD962I** The *member\_name* DB2 member for the *group\_attach\_name* DB2 group attach name was changed to the *member\_name* DB2 member for the *group\_attach\_name* DB2 group attach name.

**User response:** No action is required.

---

**CCQD963E** The DB2 group attach name cannot be blank when the DB2 subsystem ID is blank.

**Explanation:** A DB2 group attach name, DB2 subsystem ID, or both must be specified.

**System action:** Processing stops.

**User response:** Specify a DB2 group attach name, DB2 subsystem ID, or both.

---

**CCQE000S** The specified message field name or message *message\_ID* was not found.

**Explanation:** An error occurred while displaying a message field name or the specified message.

**System action:** Processing stops.

**User response:** See “Gathering diagnostic information” on page 11-438. Contact IBM Software Support.

---

**CCQE001E** An incorrect trace level was specified. Valid trace levels are 0 - 4.

**Explanation:** A wrong trace level was specified. Valid trace levels are 0 - 4.

**System action:** Processing stops.

**User response:** Specify a valid trace level 0 - 4.

---

**CCQH001W** The specified option *option\_name* is not valid.

**Explanation:** The option that was specified is not a valid option on the panel.

**System action:** Tools Customizer stops.

**User response:** Specify a valid option on the panel.

---

**CCQH006W** Before you customize a product, verify your user settings.

**Explanation:** The user settings must be verified before a product can be customized.

**System action:** Tools Customizer stops.

**User response:** Verify the user settings.

---

**CCQH007E** Check the user settings. One or more current values are not valid.

**Explanation:** One or more of the values in the user settings is not valid.

**System action:** Tools Customizer stops.

**User response:** Ensure that the specified values for the user settings are valid.

---

**CCQH008W** Before you use Tools Customizer, you must select option 0 to verify your user settings.

**Explanation:** The user settings must be changed before a product can be customized.

**System action:** Tools Customizer stops.

**User response:** Change the user settings.

---

**CCQH009E** You must select option 0 to change your user settings.

**Explanation:** User settings must be changed before a product can be customized.

**System action:** Tools Customizer stops.

**User response:** Change the user settings.

---

**CCQI000W** The XML structure of the *member\_name* DB2 parameter metadata member is not valid. The PL/I XML parser issued the following exception warning code: *code\_number*.

**Explanation:** While determining if the DB2 parameter metadata member is valid, the PL/I XML parser issued an exception warning code.

**System action:** Processing continues.

**User response:** See the *Enterprise PL/I for z/OS Programming Guide* for more information about the exception warning code.

---

**CCQI001S** The XML structure of the *member\_name* DB2 parameter metadata member is not valid. The PL/I XML parser issued the following exception error code: *code\_number*.

**Explanation:** While determining if the DB2 parameter metadata member is valid, the PL/I XML parser issued an exception error code.

**System action:** Processing stops.

**User response:** See the *Enterprise PL/I for z/OS Programming Guide* for more information about the exception warning code.

---

**CCQI002S** The XML structure of the *member\_name* DB2 parameter metadata member is not valid. The *element name* element is unknown.

**Explanation:** The specified element in the DB2 parameter metadata member is unknown.

**System action:** Processing stops.

**User response:** See "Gathering diagnostic information" on page 11-438. Contact IBM Software Support.

---

**CCQI003S** The XML structure of the *member\_name* DB2 parameter metadata member is not valid. Content is not allowed for the *element\_name* element, but content was found.

**Explanation:** The specified element cannot contain content.

**System action:** Processing stops.

**User response:** See "Gathering diagnostic information" on page 11-438. Contact IBM Software Support.

---

**CCQI004S** The XML structure of the *member\_name* DB2 parameter metadata member is not valid. Content is required for the *element\_name* element, but content was not found.

**Explanation:** The specified element requires content.

**System action:** Processing stops.

**User response:** See "Gathering diagnostic information" on page 11-438. Contact IBM Software Support.

---

**CCQI005S** The XML structure of the *member\_name* DB2 parameter metadata member is not valid. The content length for the *element\_name* element cannot exceed *maximum\_number* characters.

**Explanation:** The specified element contains too many characters.

**System action:** Processing stops.

**User response:** See "Gathering diagnostic information" on page 11-438. Contact IBM Software Support.

---

**CCQI006S** The XML structure of the *member\_name* DB2 parameter metadata member is not valid. The content length for the *element\_name* element must be at least *minimum\_number* characters.

**Explanation:** The specified element does not contain enough characters.

**System action:** Processing stops.

**User response:** See "Gathering diagnostic information" on page 11-438. Contact IBM Software Support.

---

**CCQI007S** The XML structure of the *member\_name* DB2 parameter metadata member is not valid. The *element\_name* element must occur at least *minimum\_number* times.

**Explanation:** The specified element does not occur enough times.

**System action:** Processing stops.

**User response:** See "Gathering diagnostic information" on page 11-438. Contact IBM Software Support.

---

---

**CCQI008S** The XML structure of the *member\_name* DB2 parameter metadata member is not valid. The *attribute\_name* attribute in the *element\_name* element cannot occur more than *maximum\_number* times.

**Explanation:** The specified attribute occurs too many times.

**System action:** Processing stops.

**User response:** See “Gathering diagnostic information” on page 11-438. Contact IBM Software Support.

---

**CCQI009S** The XML structure of the *member\_name* DB2 parameter metadata member is not valid. The *attribute\_name* attribute in the *element\_name* element must occur at least *minimum\_number* times.

**Explanation:** The specified attribute did not occur enough times.

**System action:** Processing stops.

**User response:** See “Gathering diagnostic information” on page 11-438. Contact IBM Software Support.

---

**CCQI010S** The XML structure of the *member\_name* DB2 parameter metadata member is not valid. Content is not allowed for the *attribute\_name* attribute in the *element\_name* element, but content was found.

**Explanation:** The specified attribute cannot have content.

**System action:** Processing stops.

**User response:** See “Gathering diagnostic information” on page 11-438. Contact IBM Software Support.

---

**CCQI011S** The XML structure of the *member\_name* DB2 parameter metadata member is not valid. Content is required for the *attribute\_name* attribute in the *element\_name* element, but content was not found.

**Explanation:** The specified attribute is missing required content.

**System action:** Processing stops.

**User response:** See “Gathering diagnostic information” on page 11-438. Contact IBM Software Support.

---

**CCQI012S** The XML structure of the *member\_name* DB2 parameter metadata member is not valid. The content length for the *element\_name* element cannot exceed *maximum\_number* characters.

**Explanation:** The specified element contains too many characters.

**System action:** Processing stops.

**User response:** See “Gathering diagnostic information” on page 11-438. Contact IBM Software Support.

---

**CCQI013S** The XML structure of the *member\_name* DB2 parameter metadata member is not valid. The *attribute\_name* attribute in the *element\_name* element is unknown.

**Explanation:** The specified attribute in the DB2 parameter metadata member is unknown.

**System action:** Processing stops.

**User response:** See “Gathering diagnostic information” on page 11-438. Contact IBM Software Support.

---

**CCQI014S** The content of the *member\_name* DB2 parameter metadata member is not valid because the value of the *element\_name* element is incorrect. The value is *value\_name*.

**Explanation:** The specified value of the element is not a valid value.

**System action:** Processing stops.

**User response:** See “Gathering diagnostic information” on page 11-438. Contact IBM Software Support.

---

**CCQI015S** The content of the DB2 parameter metadata member is not valid because the value of the *attribute\_name* attribute in the *element\_name* element is incorrect. The value of the attribute is *value\_name*.

**Explanation:** The specified value of the attribute is not a valid value.

**System action:** Processing stops.

**User response:** See “Gathering diagnostic information” on page 11-438. Contact IBM Software Support.

---

---

**CCQI016S** The content of the DB2 parameter metadata member is not valid because the data type of the *element\_name* element is incorrect. The value is *value\_name*.

**Explanation:** The specified data type is not a valid data type.

**System action:** Processing stops.

**User response:** See “Gathering diagnostic information” on page 11-438. Contact IBM Software Support.

---

**CCQI017S** The content of the DB2 parameter metadata member is not valid because the data type of the *attribute\_name* attribute in the *element\_name* element is incorrect. The value of the attribute is *value\_name*.

**Explanation:** The specified data type is not a valid data type.

**System action:** Processing stops.

**User response:** See “Gathering diagnostic information” on page 11-438. Contact IBM Software Support.

---

**CCQI050S** The *member\_name* DB2 parameter metadata member was not found in the *data\_set\_name* data set.

**Explanation:** Tools Customizer could not find the specified DB2 parameter metadata member.

**System action:** Processing stops.

**User response:** See “Gathering diagnostic information” on page 11-438. Contact IBM Software Support.

---

**CCQI051S** The *parameter\_name* LPAR parameter in the *template\_name* template does not have associated metadata in the *member\_name* LPAR parameter metadata member.

**Explanation:** The specified template does not contain metadata for an LPAR parameter. The name of the LPAR parameter metadata member, the name of the LPAR parameter, and the name of the template are indicated in the message text.

**System action:** Processing stops.

**User response:** See “Gathering diagnostic information” on page 11-438. Contact IBM Software Support.

---

**CCQI052S** The *parameter\_name* product parameter in the *template\_name* template does not have associated metadata in the *member\_name* product parameter metadata member.

**Explanation:** The specified template does not contain metadata for a product parameter. The name of the product parameter metadata member, the name of the product parameter, and the name of the template are indicated in the message text.

**System action:** Processing stops.

**User response:** See “Gathering diagnostic information” on page 11-438. Contact IBM Software Support.

---

**CCQI053E** The following metadata data set was not found: *data\_set\_name*.

**Explanation:** Tools Customizer could not find the specified metadata data set.

**System action:** Processing stops.

**User response:** Ensure that the metadata data set is specified correctly. If the problem persists, contact IBM Software Support.

---

**CCQI054E** The following metadata data set could not be opened: *data\_set\_name*.

**Explanation:** Tools Customizer could not open the specified LPAR metadata data set.

**System action:** Processing stops.

**User response:** Ensure the metadata data set was specified correctly.

---

**CCQI055S** The CCQ\$\$DB2 DB2 parameter metadata member was not found in the *data\_set\_name* Tools Customizer metadata data set.

**Explanation:** Tools Customizer could not find the DB2 parameter metadata member in the specified Tools Customizer metadata data set.

**System action:** Processing stops.

**User response:** See “Gathering diagnostic information” on page 11-438. Contact IBM Software Support.

---

**CCQI056S** The CCQ\$\$LPR LPAR parameter metadata member was not found in the *data\_set\_name* data set.

**Explanation:** Tools Customizer could not find the specified LPAR parameter metadata member.

**System action:** Processing stops.

**User response:** See “Gathering diagnostic information” on page 11-438. Contact IBM Software Support.

**CCQI057S** The *member\_name* product parameter metadata member was not found in the *data\_set\_name* data set.

**Explanation:** The product parameter metadata member was not found in the specified data set.

**System action:** Processing stops.

**User response:** See “Gathering diagnostic information” on page 11-438. Contact IBM Software Support.

**CCQI058I** *Product\_name* does not have any DB2 parameters.

**Explanation:** DB2 parameters are not required to customize the specified product.

**System action:** Processing continues.

**User response:** No action is required.

**CCQI059I** *Product\_name* does not have any LPAR parameters.

**Explanation:** LPAR parameters are not required to customize the specified product.

**System action:** Processing continues.

**User response:** No action is required.

**CCQI060S** The *parameter\_name* DB2 parameter in the *task\_description* task condition does not have associated metadata in the *member\_name* DB2 parameter metadata member.

**Explanation:** Associated metadata is missing for the specified DB2 parameter in a task.

**System action:** Processing stops.

**User response:** See “Gathering diagnostic information” on page 11-438. Contact IBM Software Support.

**CCQI061S** The *parameter\_name* LPAR parameter in the *task\_description* task condition does not have associated metadata in the *member\_name* LPAR parameter metadata member.

**Explanation:** Associated metadata is missing for the specified LPAR parameter in a task.

**System action:** Processing stops.

**User response:** See “Gathering diagnostic

information” on page 11-438. Contact IBM Software Support.

**CCQI062S** The *parameter\_name* product parameter in the *task\_description* task condition does not have associated metadata in the *member\_name* product parameter metadata member.

**Explanation:** Associated metadata is missing for the specified product parameter in a task.

**System action:** Processing stops.

**User response:** See “Gathering diagnostic information” on page 11-438. Contact IBM Software Support.

**CCQI063S** The *parameter\_name* DB2 parameter in the *task\_description* task and the *step\_description* step does not have associated metadata in the *member\_name* DB2 parameter metadata member.

**Explanation:** Associated metadata is missing for the specified DB2 parameter in a task and step.

**System action:** Processing stops.

**User response:** See “Gathering diagnostic information” on page 11-438. Contact IBM Software Support.

**CCQI064S** The *parameter\_name* LPAR parameter in the *task\_description* task and the *step\_description* step does not have associated metadata in the *member\_name* LPAR parameter metadata member.

**Explanation:** Associated metadata is missing for the specified LPAR parameter in a task and step.

**System action:** Processing stops.

**User response:** See “Gathering diagnostic information” on page 11-438. Contact IBM Software Support.

**CCQI065S** The *parameter\_name* product parameter in the *task\_description* task and the *step\_description* step does not have associated metadata in the *member\_name* parameter metadata member.

**Explanation:** Associated metadata is missing for the specified parameter in a task and step.

**System action:** Processing stops.

**User response:** See “Gathering diagnostic information” on page 11-438. Contact IBM Software Support.

---

**CCQI066S** The *parameter\_name* DB2 parameter in the *task\_description* task, *step\_description* step, and *template\_name* template condition does not have associated metadata in the *member\_name* DB2 parameter metadata member.

**Explanation:** Associated metadata is missing for the specified DB2 parameter in a task, step, and template.

**System action:** Processing stops.

**User response:** See “Gathering diagnostic information” on page 11-438. Contact IBM Software Support.

---

**CCQI067S** The *parameter\_name* LPAR parameter in the *task\_description* task, *step\_description* step, and *template\_name* template condition does not have associated metadata in the *member\_name* LPAR parameter metadata member.

**Explanation:** Associated metadata is missing for the specified LPAR parameter in a task, step, and template.

**System action:** Processing stops.

**User response:** See “Gathering diagnostic information” on page 11-438. Contact IBM Software Support.

---

**CCQI068S** The *parameter\_name* product parameter in the *task\_description* task, *step\_description* step, and *template\_name* template condition does not have associated metadata in the *member\_name* product parameter metadata member.

**Explanation:** Associated metadata is missing for the specified product parameter in a task, step, and template.

**System action:** Processing stops.

**User response:** See “Gathering diagnostic information” on page 11-438. Contact IBM Software Support.

---

**CCQI069S** Product metadata does not support multiple configurations, but the *template\_name* product template contains the *parameter\_name* parameter. Enable multiple configurations support for this product, and try again.

**Explanation:** The specified template contains a parameter for multiple configurations, but the product is not enabled to support multiple configurations.

**System action:** Processing stops.

**User response:** Enable multiple configurations support, and try again.

---

**CCQI070E** The *parameter\_name* DB2 parameter metadata member is not valid. The default length for the *parameter-element\_name* parameter element exceeds the length of the parameter. The default length is *default\_length*, and the specified length is *specified\_length*. The default length will be truncated accordingly.

**Explanation:** The specified length cannot be shorter than the default length.

**System action:** Processing stops.

**User response:** See “Gathering diagnostic information” on page 11-438. Contact IBM Software Support.

---

**CCQI071E** The *parameter\_name* LPAR parameter metadata member is not valid. The default length for the *parameter-element\_name* parameter element exceeds the length of the parameter. The default length is *default\_length*, and the specified length is *specified\_length*. The default length will be truncated accordingly.

**Explanation:** The specified length cannot be shorter than the default length.

**System action:** Processing stops.

**User response:** See “Gathering diagnostic information” on page 11-438. Contact IBM Software Support.

---

**CCQI072E** The *parameter\_name* product parameter metadata member is not valid. The default length for the *parameter-element\_name* parameter element exceeds the length of the parameter. The default length is *default\_length*, and the specified length is *specified\_length*. The default length will be truncated accordingly.

**Explanation:** The specified length cannot be shorter than the default length.

**System action:** Processing stops.

**User response:** See “Gathering diagnostic information” on page 11-438. Contact IBM Software Support.

---

**CCQI073S** The XML structure of the *member\_name* DB2 parameter metadata member is not valid. The following value of the *attribute\_name* attribute in the *element\_name* element already exists: *value\_name*.

**Explanation:** The specified value already exists for an attribute.

**System action:** Processing stops.

**User response:** See “Gathering diagnostic information” on page 11-438. Contact IBM Software Support.

**CCQI074S** The XML structure of the *member\_name* LPAR parameter metadata member is not valid. The following value of the *attribute\_name* attribute in the *element\_name* element already exists: *value\_name*.

**Explanation:** The specified value already exists for an attribute.

**System action:** Processing stops.

**User response:** See “Gathering diagnostic information” on page 11-438. Contact IBM Software Support.

**CCQI075S** The XML structure of the *member\_name* product parameter metadata member is not valid. The following value of the *attribute\_name* attribute in the *element\_name* element already exists: *value\_name*.

**Explanation:** The specified value already exists for an attribute.

**System action:** Processing stops.

**User response:** See “Gathering diagnostic information” on page 11-438. Contact IBM Software Support.

**CCQI076S** The XML structure of the *member\_name* DB2 parameter metadata member is not valid. The *parameter\_name* parameter refers to the *section-name* section. This section was not found in the DB2 parameter metadata member.

**Explanation:** The specified value already exists for an attribute.

**System action:** Processing stops.

**User response:** See “Gathering diagnostic information” on page 11-438. Contact IBM Software Support.

**CCQI077S** The XML structure of the *member\_name* LPAR parameter metadata member is not valid. The *parameter\_name* parameter refers to the *section-name* section. This section was not found in the LPAR parameter metadata member.

**Explanation:** The specified parameter refers to a section that is not in the LPAR parameter metadata member.

**System action:** Processing stops.

**User response:** See “Gathering diagnostic information” on page 11-438. Contact IBM Software Support.

**CCQI078S** The XML structure of the *member\_name* product parameter metadata member is not valid. The *parameter\_name* parameter refers to the *section-name* section. This section was not found in the product parameter metadata member.

**Explanation:** The specified parameter refers to a section that is not in the product parameter metadata member.

**System action:** Processing stops.

**User response:** See “Gathering diagnostic information” on page 11-438. Contact IBM Software Support.

**CCQI080S** The content of the *member\_name* DB2 parameter metadata member is not valid because the value of the *attribute\_name* attribute in the *element\_name* element is incorrect. The value of the attribute is *value\_name*.

**Explanation:** The specified value for an attribute in the DB2 parameter metadata member is not valid.

**System action:** Processing stops.

**User response:** See “Gathering diagnostic information” on page 11-438. Contact IBM Software Support.

**CCQI081S** The content of the *member\_name* LPAR parameter metadata member is not valid because the value of the *attribute\_name* attribute in the *element\_name* element is incorrect. The value of the attribute is *value\_name*.

**Explanation:** The specified value for an attribute in the LPAR parameter metadata member is not valid.

**System action:** Processing stops.

**User response:** See “Gathering diagnostic information” on page 11-438. Contact IBM Software Support.



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**CCQI082S** The content of the *member\_name* product parameter metadata member is not valid because the value of the *attribute\_name* attribute in the *element\_name* element is incorrect. The value of the attribute is *value\_name*.

**Explanation:** The specified value for an attribute in the product parameter metadata member is not valid.

**System action:** Processing stops.

**User response:** See “Gathering diagnostic information” on page 11-438. Contact IBM Software Support.

---

**CCQI090S** The product-defined DB2 parameter *parameter\_name* in the *member\_name* parameter metadata member references the *section\_ID* section ID, but this ID does not exist in either the parameter metadata member or the DB2 parameter metadata member.

**Explanation:** A section that does not exist in the parameter metadata member or the DB2 parameter metadata member is referenced by the specified DB2 parameter.

**System action:** Processing stops.

**User response:** See “Gathering diagnostic information” on page 11-438. Contact IBM Software Support.

---

**CCQI091S** The product-defined LPAR parameter in the *member\_name* parameter metadata member references the *section\_ID* section ID, but this ID does not exist in either the parameter metadata member or the LPAR parameter metadata member.

**Explanation:** A section that does not exist in the parameter metadata member or the LPAR parameter metadata member is being referenced by the specified LPAR parameter.

**System action:** Processing stops.

**User response:** See “Gathering diagnostic information” on page 11-438. Contact IBM Software Support.

---

**CCQI092S** The overridden DB2 parameter *parameter\_name* in the *member\_name* parameter metadata member does not exist in the DB2 parameter metadata member.

**Explanation:** The specified parameter does not exist.

**System action:** Processing stops.

**User response:** See “Gathering diagnostic

information” on page 11-438. Contact IBM Software Support.

---

**CCQI093S** The overridden LPAR parameter *parameter\_name* in the *member\_name* parameter metadata member does not exist in the LPAR parameter metadata member.

**Explanation:** The specified parameter does not exist.

**System action:** Processing stops.

**User response:** See “Gathering diagnostic information” on page 11-438. Contact IBM Software Support.

---

**CCQI094S** The CCQ\$\$PRD product customization parameter metadata member was not found in the *data\_set\_name* data set.

**Explanation:** The specified data set must contain the CCQ\$\$PRD product customization parameter metadata member

**System action:** Processing stops.

**User response:** See “Gathering diagnostic information” on page 11-438. Contact IBM Software Support.

---

**CCQI100W** The XML structure of the *member\_name* LPAR parameter metadata member is not valid. The PL/I XML parser issued the following exception warning code: *code\_number*.

**Explanation:** While determining if the LPAR parameter metadata member is valid, the PL/I XML parser issued an exception warning code.

**System action:** Processing continues.

**User response:** See the *Enterprise PL/I for z/OS Programming Guide* for more information about the exception warning code.

---

**CCQI101S** The XML structure of the *member\_name* LPAR parameter metadata member is not valid. The PL/I XML parser issued the following exception error code: *code\_number*.

**Explanation:** While determining if the LPAR parameter metadata member is valid, the PL/I XML parser issued an exception error code.

**System action:** Processing stops.

**User response:** See the *Enterprise PL/I for z/OS Programming Guide* for more information about the exception warning code.

---

**CCQI102S** The XML structure of the *member\_name* LPAR parameter metadata member is not valid. The *element\_name* element is unknown.

**Explanation:** The specified element in the LPAR parameter metadata member is unknown.

**System action:** Processing stops.

**User response:** See “Gathering diagnostic information” on page 11-438. Contact IBM Software Support.

---

**CCQI103S** The XML structure of the *member\_name* LPAR parameter metadata member is not valid. Content is not allowed for the *element\_name* element, but content was found.

**Explanation:** The specified element cannot contain content.

**System action:** Processing stops.

**User response:** See “Gathering diagnostic information” on page 11-438. Contact IBM Software Support.

---

**CCQI104S** The XML structure of the *member\_name* LPAR parameter metadata member is not valid. Content is required for the *element\_name* element, but content was not found.

**Explanation:** The specified element requires content.

**System action:** Processing stops.

**User response:** See “Gathering diagnostic information” on page 11-438. Contact IBM Software Support.

---

**CCQI105S** The XML structure of the *member\_name* LPAR parameter metadata member is not valid. The content length for the *element\_name* element cannot exceed *maximum\_number* characters.

**Explanation:** The specified element contains too many characters.

**System action:** Processing stops.

**User response:** See “Gathering diagnostic information” on page 11-438. Contact IBM Software Support.

---

**CCQI106S** The XML structure of the *member\_name* LPAR parameter metadata member is not valid. The content length for the *element\_name* element must be at least *minimum\_number* characters.

**Explanation:** The specified element does not contain enough characters.

**System action:** Processing stops.

**User response:** See “Gathering diagnostic information” on page 11-438. Contact IBM Software Support.

---

**CCQI107S** The XML structure of the *member\_name* LPAR parameter metadata member is not valid. The *element\_name* element must occur at least *minimum\_number* times.

**Explanation:** The specified element does not occur enough times.

**System action:** Processing stops.

**User response:** See “Gathering diagnostic information” on page 11-438. Contact IBM Software Support.

---

**CCQI108S** The XML structure of the *member\_name* LPAR parameter metadata member is not valid. The *attribute\_name* attribute in the *element\_name* element cannot occur more than *maximum\_number* times.

**Explanation:** The specified attribute occurs too many times.

**System action:** Processing stops.

**User response:** See “Gathering diagnostic information” on page 11-438. Contact IBM Software Support.

---

**CCQI109S** The XML structure of the *member\_name* LPAR parameter metadata member is not valid. The *attribute\_name* attribute in the *element\_name* element must occur at least *minimum\_number* times.

**Explanation:** The specified attribute did not occur enough times.

**System action:** Processing stops.

**User response:** See “Gathering diagnostic information” on page 11-438. Contact IBM Software Support.

---

**CCQI110S** The XML structure of the *member\_name* LPAR parameter metadata member is not valid. Content is not allowed for the *attribute\_name* attribute in the *element\_name* element, but content was found.

**Explanation:** The specified attribute cannot have content.

**System action:** Processing stops.

**User response:** See “Gathering diagnostic information” on page 11-438. Contact IBM Software Support.

---

**CCQI111S** The XML structure of the *member\_name* LPAR parameter metadata member is not valid. Content is required for the *attribute\_name* attribute in the *element\_name* element, but content was not found.

**Explanation:** The specified attribute is missing required content.

**System action:** Processing stops.

**User response:** See “Gathering diagnostic information” on page 11-438. Contact IBM Software Support.

---

**CCQI112S** The XML structure of the *member\_name* LPAR parameter metadata member is not valid. The content length for the *element\_name* element cannot exceed *maximum\_number* characters.

**Explanation:** The specified element contains too many characters.

**System action:** Processing stops.

**User response:** See “Gathering diagnostic information” on page 11-438. Contact IBM Software Support.

---

**CCQI113S** The XML structure of the *member\_name* LPAR parameter metadata member is not valid. The *attribute\_name* attribute in the *element\_name* element is unknown.

**Explanation:** The specified attribute in the LPAR parameter metadata member is unknown.

**System action:** Processing stops.

**User response:** See “Gathering diagnostic information” on page 11-438. Contact IBM Software Support.

---

**CCQI114S** The content of the *member\_name* LPAR parameter metadata member is not valid because the value of the *element\_name* element is incorrect. The value is *value\_name*.

**Explanation:** The specified value for an element in the LPAR parameter metadata member is not valid.

**System action:** Processing stops.

**User response:** See “Gathering diagnostic information” on page 11-438. Contact IBM Software Support.

---

**CCQI115S** The content of the *member\_name* LPAR parameter metadata member is not valid because the value of the *attribute\_name* attribute in the *element\_name* element is incorrect. The value of the attribute is *value\_name*.

**Explanation:** The specified value for an attribute in the LPAR parameter metadata member is not valid.

**System action:** Processing stops.

**User response:** See “Gathering diagnostic information” on page 11-438. Contact IBM Software Support.

---

**CCQI116S** The content of the *member\_name* LPAR parameter metadata member is not valid because the data type of the *element\_name* element is incorrect. The value is *value\_name*.

**Explanation:** The specified data type value for an element in the LPAR parameter metadata member is not valid.

**System action:** Processing stops.

**User response:** See “Gathering diagnostic information” on page 11-438. Contact IBM Software Support.

---

**CCQI117S** The content of the *member\_name* LPAR parameter metadata member is not valid because the data type of the *attribute\_name* attribute in the *element\_name* element is incorrect. The value is *value\_name*.

**Explanation:** The specified data type value for an attribute in the LPAR parameter metadata member is not valid.

**System action:** Processing stops.

**User response:** See “Gathering diagnostic information” on page 11-438. Contact IBM Software Support.

---

**CCQI120S** The XML structure of the *member\_name* DB2 parameter metadata member is not valid. The *element\_name* element in the *parameter\_name* parameter contains duplicate values for the *element\_name* element. The duplicate value is *value\_name*.

**Explanation:** An element contains the specified duplicate value.

**System action:** Processing stops.

**User response:** See “Gathering diagnostic

information” on page 11-438. Contact IBM Software Support.

---

**CCQI121S** The XML structure of the *member\_name* LPAR parameter metadata member is not valid. The *element\_name* element in the *parameter\_name* parameter contains duplicate values for the *element\_name* element. The duplicate value is *value\_name*.

**Explanation:** An element contains the specified duplicate value.

**System action:** Processing stops.

**User response:** See “Gathering diagnostic information” on page 11-438. Contact IBM Software Support.

---

**CCQI122S** The XML structure of the *member\_name* parameter metadata member is not valid. The *element\_name* element in the *parameter\_name* parameter contains duplicate values for the *element\_name* element. The duplicate value is *value\_name*.

**Explanation:** An element contains the specified duplicate value.

**System action:** Processing stops.

**User response:** See “Gathering diagnostic information” on page 11-438. Contact IBM Software Support.

---

**CCQI123S** The XML structure of the *member\_name* discover metadata member is not valid. The *element\_name* element in the *parameter\_name* parameter contains duplicate values for the *element\_name* element. The duplicate value is *value\_name*.

**Explanation:** An element contains the specified duplicate value.

**System action:** Processing stops.

**User response:** See “Gathering diagnostic information” on page 11-438. Contact IBM Software Support.

---

**CCQI124S** The XML structure of the *member\_name* product customization parameter metadata member is not valid. The *element\_name* element in the *parameter\_name* parameter contains duplicate values for the *element\_name* element. The duplicate value is *value\_name*.

**Explanation:** An element contains the specified duplicate value.

**System action:** Processing stops.

**User response:** See “Gathering diagnostic information” on page 11-438. Contact IBM Software Support.

---

**CCQI200W** The XML structure of the *member\_name* information metadata member is not valid. The PL/I XML parser issued the following exception warning code: *code\_number*.

**Explanation:** While determining if the information metadata member is valid, the PL/I XML parser issued an exception warning code.

**System action:** Processing continues.

**User response:** See the *Enterprise PL/I for z/OS Programming Guide* for more information about the exception warning code.

---

**CCQI201S** The XML structure of the *member\_name* information metadata member is not valid. The PL/I XML parser issued the following exception error code: *code\_number*.

**Explanation:** While determining if the information metadata member is valid, the PL/I XML parser issued an exception error code.

**System action:** Processing stops.

**User response:** See the *Enterprise PL/I for z/OS Programming Guide* for more information about the exception warning code.

---

**CCQI202S** The XML structure of the *member\_name* information metadata member is not valid. The *element name* element is unknown.

**Explanation:** The specified element in the information metadata member is unknown.

**System action:** Processing stops.

**User response:** See “Gathering diagnostic information” on page 11-438. Contact IBM Software Support.

---

**CCQI203S** The XML structure of the *member\_name* information metadata member is not valid. Content is not allowed for the *element\_name* element, but content was found.

**Explanation:** The specified element cannot contain content.

**System action:** Processing stops.

**User response:** See “Gathering diagnostic information” on page 11-438. Contact IBM Software Support.

---

**CCQI204S** The XML structure of the *member\_name* information metadata member is not valid. Content is required for the *element\_name* element, but content was not found.

**Explanation:** The specified element requires content.

**System action:** Processing stops.

**User response:** See “Gathering diagnostic information” on page 11-438. Contact IBM Software Support.

---

**CCQI205S** The XML structure of the *member\_name* information metadata member is not valid. The content length for the *element\_name* element cannot exceed *maximum\_number* characters.

**Explanation:** The specified element contains too many characters.

**System action:** Processing stops.

**User response:** See “Gathering diagnostic information” on page 11-438. Contact IBM Software Support.

---

**CCQI206S** The XML structure of the *member\_name* information metadata member is not valid. The content length for the *element\_name* element must be at least *minimum\_number* characters.

**Explanation:** The specified element does not contain enough characters.

**System action:** Processing stops.

**User response:** See “Gathering diagnostic information” on page 11-438. Contact IBM Software Support.

---

**CCQI207S** The XML structure of the *member\_name* information metadata member is not valid. The *element\_name* element must occur at least *minimum\_number* times.

**Explanation:** The specified element does not occur enough times.

**System action:** Processing stops.

**User response:** See “Gathering diagnostic information” on page 11-438. Contact IBM Software Support.

---

**CCQI208S** The XML structure of the *member\_name* information metadata member is not valid. The *attribute\_name* attribute in the *element\_name* element cannot occur more than *maximum\_number* times.

**Explanation:** The specified attribute occurs too many times.

**System action:** Processing stops.

**User response:** See “Gathering diagnostic information” on page 11-438. Contact IBM Software Support.

---

**CCQI209S** The XML structure of the *member\_name* information metadata member is not valid. The *attribute\_name* attribute in the *element\_name* element must occur at least *minimum\_number* times.

**Explanation:** The specified attribute did not occur enough times.

**System action:** Processing stops.

**User response:** See “Gathering diagnostic information” on page 11-438. Contact IBM Software Support.

---

**CCQI210S** The XML structure of the *member\_name* information metadata member is not valid. Content is not allowed for the *attribute\_name* attribute in the *element\_name* element, but content was found.

**Explanation:** The specified attribute cannot have content.

**System action:** Processing stops.

**User response:** See “Gathering diagnostic information” on page 11-438. Contact IBM Software Support.

---

**CCQI211S** The XML structure of the *member\_name* information metadata member is not valid. Content is required for the *attribute\_name* attribute in the *element\_name* element, but content was not found.

**Explanation:** The specified attribute is missing required content.

**System action:** Processing stops.

**User response:** See “Gathering diagnostic information” on page 11-438. Contact IBM Software Support.

---

**CCQI212S** The XML structure of the *member\_name* information metadata member is not valid. The content length for the *element\_name* element cannot exceed *maximum\_number* characters.

**Explanation:** The specified element contains too many characters.

**System action:** Processing stops.

**User response:** See “Gathering diagnostic information” on page 11-438. Contact IBM Software Support.

---

**CCQI213S** The XML structure of the *member\_name* information metadata member is not valid. The *attribute\_name* attribute in the *element\_name* element is unknown.

**Explanation:** The specified attribute in the information metadata member is unknown.

**System action:** Processing stops.

**User response:** See “Gathering diagnostic information” on page 11-438. Contact IBM Software Support.

---

**CCQI214S** The content of the *member\_name* information metadata member is not valid because the value of the *element\_name* element is incorrect. The value is *value\_name*.

**Explanation:** The specified value for an element in the information metadata member is not valid.

**System action:** Processing stops.

**User response:** See “Gathering diagnostic information” on page 11-438. Contact IBM Software Support.

---

**CCQI215S** The content of the *member\_name* information metadata member is not valid because the value of the *attribute\_name* attribute in the *element\_name* element is incorrect. The value is *value\_name*.

**Explanation:** The specified value for an attribute in the information metadata member is not valid.

**System action:** Processing stops.

**User response:** See “Gathering diagnostic information” on page 11-438. Contact IBM Software Support.

---

**CCQI216S** The content of the *member\_name* information metadata member is not valid because the data type of the *element\_name* element is incorrect. The value is *value\_name*.

**Explanation:** The specified data type value for an element in the information metadata member is not valid.

**System action:** Processing stops.

**User response:** See “Gathering diagnostic information” on page 11-438. Contact IBM Software Support.

---

**CCQI217S** The content of the *member\_name* information metadata member is not valid because the data type of the *attribute\_name* attribute in the *element\_name* element is incorrect. The value is *value\_name*.

**Explanation:** The specified data type value for an attribute in the information metadata member is not valid.

**System action:** Processing stops.

**User response:** See “Gathering diagnostic information” on page 11-438. Contact IBM Software Support.

---

**CCQI218S** The content of the *member\_name* information metadata member is not valid. The length of the *value\_name* value that of the *attribute\_name* attribute is longer than the *value\_name* value of the *attribute\_name* attribute.

**Explanation:** The first specified value cannot be longer than the second specified value.

**System action:** Processing stops.

**User response:** See “Gathering diagnostic information” on page 11-438. Contact IBM Software Support.

---

**CCQI219S** The content of the *member\_name* information metadata member is not valid. The *value\_name* value of the *attribute\_name* attribute contains the *value\_name* value.

**Explanation:** The first specified value cannot be longer than the second specified value.

**System action:** Processing stops.

**User response:** See “Gathering diagnostic information” on page 11-438. Contact IBM Software Support.

---

**CCQI220S** The XML structure of the *member\_name* information metadata member is not valid. Content for the *attribute\_name* attribute in the *element\_name* element exceed *maximum\_number* characters.

**Explanation:** The specified attribute contains too many characters.

**System action:** Processing stops.

**User response:** See “Gathering diagnostic information” on page 11-438. Contact IBM Software Support.

---

**CCQI223S** The XML structure of the *member\_name* information metadata member is not valid. The value that is specified for the DB2 Level already exists. The value is *value\_name*.

**Explanation:** The specified value already exists.

**System action:** Processing stops.

**User response:** Specify a different DB2 level. If the problem persists, contact IBM Software Support.

---

**CCQI224S** The XML structure of the *member\_name* information metadata member is not valid. The value that is specified for the DB2 Mode already exists. The value is *value\_name*.

**Explanation:** The specified value already exists.

**System action:** Processing stops.

**User response:** Specify a different DB2 mode. If the problem persists, contact IBM Software Support.

---

**CCQI250S** The information metadata member was not found in the *data\_set\_name* data set.

**Explanation:** Tools Customizer could not find the information metadata member in the specified data set.

**System action:** Processing stops.

**User response:** If this message was issued on the Specify the Metadata Library (CCQPHLQ) panel, specify the product metadata library. The name of this library is *hlq.SHLODENU*.

Do not specify the Tools Customizer metadata library, which is *hlq.SCCQDENU*.

If the problem persists, identify the name of the Tools Customizer trace data set and contact IBM Software Support.

---

**CCQI251E** The *member\_name* member was not accessible in the *data\_set\_name* data set.

**Explanation:** The specified member could not be accessed in the data set.

**System action:** Processing stops.

**User response:** Specify the correct metadata library.

---

**CCQI252S** The information metadata member was not found in the *library\_name* component metadata library that is part of the *library\_name* pack metadata library. The name of the pack is *pack\_name*.

**Explanation:** The specified component metadata library does not contain the information metadata member.

**System action:** Processing stops.

**User response:** Specify the correct metadata library.

---

**CCQI253E** The *library\_name* Tools Customizer metadata library is not current. Update the metadata library on the Tools Customizer Settings panel.

**Explanation:** The specified metadata library is not current.

**System action:** Processing stops.

**User response:** Specify a current metadata library on the Tools Customizer Settings panel.

---

**CCQI300W** The XML structure of the *member\_name* sequence metadata member is not valid. The PL/I XML parser issued the following exception warning code: *code\_number*.

**Explanation:** While determining if the sequence metadata member is valid, the PL/I XML parser issued an exception warning code.

**System action:** Processing continues.

**User response:** See the *Enterprise PL/I for z/OS Programming Guide* for more information about the exception warning code.

---

**CCQI301S** The XML structure of the *member\_name* sequence metadata member is not valid. The PL/I XML parser issued the following exception error code: *code\_number*.

**Explanation:** While determining if the sequence metadata member is valid, the PL/I XML parser issued an exception error code.

**System action:** Processing stops.

**User response:** See the *Enterprise PL/I for z/OS Programming Guide* for more information about the exception error code, and contact IBM Software Support.

**CCQI302S** The XML structure of the *member\_name* sequence metadata member is not valid. The *element\_name* element is unknown.

**Explanation:** The specified element in the sequence metadata member is unknown.

**System action:** Processing stops.

**User response:** See “Gathering diagnostic information” on page 11-438. Contact IBM Software Support.

**CCQI303S** The XML structure of the *member\_name* sequence metadata member is not valid. Content is not allowed for the *element\_name* element, but content was found.

**Explanation:** The specified element cannot contain content.

**System action:** Processing stops.

**User response:** See “Gathering diagnostic information” on page 11-438. Contact IBM Software Support.

**CCQI304S** The XML structure of the *member\_name* sequence metadata member is not valid. Content is required for the *element\_name* element, but content was not found.

**Explanation:** The specified element is missing required content.

**System action:** Processing stops.

**User response:** See “Gathering diagnostic information” on page 11-438. Contact IBM Software Support.

**CCQI305S** The XML structure of the *member\_name* sequence metadata member is not valid. Content length for the *element\_name* element cannot exceed *maximum\_number* characters.

**Explanation:** The specified element contains too many characters.

**System action:** Processing stops.

**User response:** See “Gathering diagnostic information” on page 11-438. Contact IBM Software Support.

**CCQI306S** The XML structure of the *member\_name* sequence metadata member is not valid. The *element\_name* element cannot occur more than *maximum\_number* times.

**Explanation:** The specified element occurs too many times.

**System action:** Processing stops.

**User response:** See “Gathering diagnostic information” on page 11-438. Contact IBM Software Support.

**CCQI307S** The XML structure of the *member\_name* sequence metadata member is not valid. The *element\_name* element must occur at least *minimum\_number* times.

**Explanation:** The specified element does not occur enough times.

**System action:** Processing stops.

**User response:** See “Gathering diagnostic information” on page 11-438. Contact IBM Software Support.

**CCQI308S** The XML structure of the *member\_name* sequence metadata member is not valid. The *attribute\_name* attribute in the *element\_name* element cannot occur more than *maximum\_number* times.

**Explanation:** The specified attribute occurs too many times.

**System action:** Processing stops.

**User response:** See “Gathering diagnostic information” on page 11-438. Contact IBM Software Support.

**CCQI309S** The XML structure of the *member\_name* sequence metadata member is not valid. The *attribute\_name* attribute in the *element\_name* element must occur at least *minimum\_number* times.

**Explanation:** The specified attribute does not occur enough times.

**System action:** Processing stops.

**User response:** See “Gathering diagnostic information” on page 11-438. Contact IBM Software Support.

**CCQI310S** The XML structure of the *member\_name* sequence metadata member is not valid. Content is not allowed for the *attribute\_name* attribute in the *element\_name* element, but content was found.



**Explanation:** The specified attribute cannot contain content.

**System action:** Processing stops.

**User response:** See “Gathering diagnostic information” on page 11-438. Contact IBM Software Support.

**CCQI311S** The XML structure of the *member\_name* sequence metadata member is not valid. Content is required for the *attribute\_name* attribute in the *element\_name* element, but content was not found.

**Explanation:** The specified attribute is missing required content.

**System action:** Processing stops.

**User response:** See “Gathering diagnostic information” on page 11-438. Contact IBM Software Support.

**CCQI312S** The XML structure of the *member\_name* sequence metadata member is not valid. The content length for the *element\_name* element cannot exceed *maximum\_number* characters.

**Explanation:** The specified element contains too many characters.

**System action:** Processing stops.

**User response:** See “Gathering diagnostic information” on page 11-438. Contact IBM Software Support.

**CCQI313S** The XML structure of the *member\_name* sequence metadata member is not valid. The *attribute\_name* attribute in the *element\_name* element is unknown.

**Explanation:** The specified attribute in the sequence metadata member is unknown.

**System action:** Processing stops.

**User response:** See “Gathering diagnostic information” on page 11-438. Contact IBM Software Support.

**CCQI314S** The content of the *member\_name* sequence metadata member is not valid because the value of the *element\_name* element is incorrect. The value is *value\_name*.

**Explanation:** The specified value for an element in the sequence metadata member is not valid.

**System action:** Processing stops.

**User response:** See “Gathering diagnostic information” on page 11-438. Contact IBM Software Support.

**CCQI315S** The content of the *member\_name* sequence metadata member is not valid because the value of the *attribute\_name* attribute in the *element\_name* element is incorrect. The value is *value\_name*.

**Explanation:** The specified value for an attribute in the sequence metadata member is not valid.

**System action:** Processing stops.

**User response:** See “Gathering diagnostic information” on page 11-438. Contact IBM Software Support.

**CCQI316S** The content of the *member\_name* sequence metadata member is not valid because the data type of the *element\_name* element is incorrect. The value is *value\_name*.

**Explanation:** The specified data type value for an element in the sequence metadata member is not valid.

**System action:** Processing stops.

**User response:** See “Gathering diagnostic information” on page 11-438. Contact IBM Software Support.

**CCQI317S** The content of the *member\_name* sequence metadata member is not valid because the data type of the *attribute\_name* attribute in the *element\_name* element is incorrect. The value is *value\_name*.

**Explanation:** The specified data type value for an attribute in the sequence metadata member is not valid.

**System action:** Processing stops.

**User response:** See “Gathering diagnostic information” on page 11-438. Contact IBM Software Support.

**CCQI350S** The XML structure of the *member\_name* sequence metadata member is not valid because the value of the *attribute\_name* attribute in the *element\_name* element is incorrect. The value is *value\_name*.

**Explanation:** A specified value for an attribute in the sequence metadata member is not valid.

**System action:** Processing stops.

**User response:** See “Gathering diagnostic information” on page 11-438. Contact IBM Software Support.

---

**CCQI351S** The *member\_name* sequence metadata member was not found in the *data\_set\_name* metadata data set.

**Explanation:** Tools Customizer could not find the specified sequence metadata member in the metadata data set.

**System action:** Processing stops.

**User response:** See “Gathering diagnostic information” on page 11-438. Contact IBM Software Support.

---

**CCQI352S** The *template\_name* product template was not found in the *data\_set\_name* metadata data set.

**Explanation:** Tools Customizer could not find the specified product template in the data set.

**System action:** Processing stops.

**User response:** See “Gathering diagnostic information” on page 11-438. Contact IBM Software Support.

---

**CCQI353S** The sequence metadata member was not found in the *data\_set\_name* component data set that is part of the *data\_set\_name* pack.

**Explanation:** Tools Customizer could not find the sequence metadata member.

**System action:** Processing stops.

**User response:** See “Gathering diagnostic information” on page 11-438. Contact IBM Software Support.

---

**CCQI360S** The XML structure of the *member\_name* sequence metadata member is not valid. The value of the *attribute\_name* attribute in the *element\_name* element already exists.

**Explanation:** The specified attribute contains a value that already exists.

**System action:** Processing stops.

**User response:** See “Gathering diagnostic information” on page 11-438. Contact IBM Software Support.

---

**CCQI361S** The XML structure of the *member\_name* sequence metadata member is not valid. The condition element on the *level\_type* level already contains a relational operator.

**Explanation:** A relational operator already exists for the condition element on the specified level.

**System action:** Processing stops.

**User response:** See “Gathering diagnostic information” on page 11-438. Contact IBM Software Support.

---

**CCQI362S** The XML structure of the *member\_name* sequence metadata member is not valid. The condition element on the *level\_type* level must contain only one content string or content number element.

**Explanation:** Only one content string element or content number element can be contained in the condition element on the specified level.

**System action:** Processing stops.

**User response:** See “Gathering diagnostic information” on page 11-438. Contact IBM Software Support.

---

**CCQI363S** The XML structure of the *member\_name* sequence metadata member is not valid. The condition element in the *element\_name* element with the *attribute\_name* attribute must contain either the content string element or content number element.

**Explanation:** Either the content string element or the content number element must be in the condition element.

**System action:** Processing stops.

**User response:** See “Gathering diagnostic information” on page 11-438. Contact IBM Software Support.

---

**CCQI400W** The XML structure of the *member\_name* parameter metadata member is not valid. The PL/I XML parser issued the following exception warning code: *code\_number*.

**Explanation:** While determining the parameter metadata member is valid, the PL/I XML parser issued an exception warning code.

**System action:** Processing continues.

**User response:** See the *Enterprise PL/I for z/OS Programming Guide* for more information about the exception warning code.

---

**CCQI401S** The XML structure of the *member\_name* parameter metadata member is not valid. The PL/I XML parser issued the following exception error code: *code\_number*.

**Explanation:** While determining if the parameter

metadata member is valid, the PL/I XML parser issued an exception error code.

**System action:** Processing stops.

**User response:** See the *Enterprise PL/I for z/OS Programming Guide* for more information about the exception warning code.

**CCQI402S** The XML structure of the *member\_name* parameter metadata member is not valid. The *element name* element is unknown.

**Explanation:** The specified element in the parameter metadata member is unknown.

**System action:** Processing stops.

**User response:** See “Gathering diagnostic information” on page 11-438. Contact IBM Software Support.

**CCQI403S** The XML structure of the *member\_name* parameter metadata member is not valid. Content is not allowed for the *element\_name* element, but content was found.

**Explanation:** The specified element cannot contain content.

**System action:** Processing stops.

**User response:** See “Gathering diagnostic information” on page 11-438. Contact IBM Software Support.

**CCQI404S** The XML structure of the *member\_name* parameter metadata member is not valid. Content is required for the *element\_name* element, but content was not found.

**Explanation:** The specified element requires content.

**System action:** Processing stops.

**User response:** See “Gathering diagnostic information” on page 11-438. Contact IBM Software Support.

**CCQI405S** The XML structure of the *member\_name* parameter metadata member is not valid. The content length for the *element\_name* element cannot exceed *maximum\_number* characters.

**Explanation:** The specified element contains too many characters.

**System action:** Processing stops.

**User response:** See “Gathering diagnostic

information” on page 11-438. Contact IBM Software Support.

**CCQI406S** The XML structure of the *member\_name* parameter metadata member is not valid. The content length for the *element\_name* element must be at least *minimum\_number* characters.

**Explanation:** The specified element does not contain enough characters.

**System action:** Processing stops.

**User response:** See “Gathering diagnostic information” on page 11-438. Contact IBM Software Support.

**CCQI407S** The XML structure of the *member\_name* parameter metadata member is not valid. The *element\_name* element must occur at least *minimum\_number* times.

**Explanation:** The specified element does not occur enough times.

**System action:** Processing stops.

**User response:** See “Gathering diagnostic information” on page 11-438. Contact IBM Software Support.

**CCQI408S** The XML structure of the *member\_name* parameter metadata member is not valid. The *attribute\_name* attribute in the *element\_name* element cannot occur more than *maximum\_number* times.

**Explanation:** The specified attribute occurs too many times.

**System action:** Processing stops.

**User response:** See “Gathering diagnostic information” on page 11-438. Contact IBM Software Support.

**CCQI409S** The XML structure of the *member\_name* parameter metadata member is not valid. The *attribute\_name* attribute in the *element\_name* element must occur at least *minimum\_number* times.

**Explanation:** The specified attribute does not occur enough times.

**System action:** Processing stops.

**User response:** See “Gathering diagnostic information” on page 11-438. Contact IBM Software Support.

---

**CCQI410S** The XML structure of the *member\_name* parameter metadata member is not valid. Content is not allowed for the *attribute\_name* attribute in the *element\_name* element, but content was found.

**Explanation:** The specified attribute cannot have content.

**System action:** Processing stops.

**User response:** See “Gathering diagnostic information” on page 11-438. Contact IBM Software Support.

---

**CCQI411S** The XML structure of the *member\_name* parameter metadata member is not valid. Content is required for the *attribute\_name* attribute in the *element\_name* element, but content was not found.

**Explanation:** The specified attribute is missing required content.

**System action:** Processing stops.

**User response:** See “Gathering diagnostic information” on page 11-438. Contact IBM Software Support.

---

**CCQI412S** The XML structure of the *member\_name* parameter metadata member is not valid. The content length for the *element\_name* element cannot exceed *maximum\_number* characters.

**Explanation:** The specified element contains too many characters.

**System action:** Processing stops.

**User response:** See “Gathering diagnostic information” on page 11-438. Contact IBM Software Support.

---

**CCQI413S** The XML structure of the *member\_name* parameter metadata member is not valid. The *attribute\_name* attribute in the *element\_name* element is unknown.

**Explanation:** The specified attribute in the parameter metadata member is unknown.

**System action:** Processing stops.

**User response:** See “Gathering diagnostic information” on page 11-438. Contact IBM Software Support.

---

**CCQI414S** The content of the *member\_name* parameter metadata member is not valid because the value of the *element\_name* element is incorrect. The value is *value\_name*.

**Explanation:** The specified value for an element in the parameter metadata member is not valid.

**System action:** Processing stops.

**User response:** See “Gathering diagnostic information” on page 11-438. Contact IBM Software Support.

---

**CCQI415S** The content of the *member\_name* parameter metadata member is not valid because the value of the *attribute\_name* attribute in the *element\_name* element is incorrect. The value is *value\_name*.

**Explanation:** The specified value for an attribute in the parameter metadata member is not valid.

**System action:** Processing stops.

**User response:** See “Gathering diagnostic information” on page 11-438. Contact IBM Software Support.

---

**CCQI416S** The content of the *member\_name* parameter metadata member is not valid because the data type of the *element\_name* element is incorrect. The value is *value\_name*.

**Explanation:** The specified data type value for an element in the parameter metadata member is not valid.

**System action:** Processing stops.

**User response:** See “Gathering diagnostic information” on page 11-438. Contact IBM Software Support.

---

**CCQI417S** The content of the *member\_name* parameter metadata member is not valid because the data type of the *attribute\_name* attribute in the *element\_name* element is incorrect. The value is *value\_name*.

**Explanation:** The specified data type value for an attribute in the parameter metadata member is not valid.

**System action:** Processing stops.

**User response:** See “Gathering diagnostic information” on page 11-438. Contact IBM Software Support.

---

**CCQI420S** The XML structure of the *member\_name* parameter metadata member is not valid. The *element\_name* element is unknown for the overridden DB2 parameter.

**Explanation:**

**System action:** Processing stops.

**User response:** See “Gathering diagnostic information” on page 11-438. Contact IBM Software Support.

---

**CCQI421S** The XML structure of the *member\_name* parameter metadata member is not valid. The *element\_name* element is unknown for the overridden LPAR parameter.

**Explanation:**

**System action:** Processing stops.

**User response:** See “Gathering diagnostic information” on page 11-438. Contact IBM Software Support.

---

**CCQI422S** The XML structure of the *member\_name* parameter metadata member is not valid. The *attribute\_name* attribute in the *element\_name* element is unknown for the overridden DB2 parameter.

**Explanation:**

**System action:** Processing stops.

**User response:** See “Gathering diagnostic information” on page 11-438. Contact IBM Software Support.

---

**CCQI423S** The XML structure of the *member\_name* parameter metadata member is not valid. The *attribute\_name* attribute in the *element\_name* element is unknown for the overridden LPAR parameter.

**Explanation:**

**System action:** Processing stops.

**User response:** See “Gathering diagnostic information” on page 11-438. Contact IBM Software Support.

---

**CCQI450S** The *member\_name* product parameter metadata member was not found in the *data\_set\_name* data set.

**Explanation:** Tools Customizer could not find the specified product parameter metadata member.

**System action:** Processing stops.

**User response:** See “Gathering diagnostic information” on page 11-438. Contact IBM Software Support.

---

**CCQI510W** The *data\_set\_name* data store data set does not exist.

**Explanation:** The specified data store data set does not exist.

**System action:** Processing continues.

**User response:** Ensure that the data store data set exists.

---

**CCQI511S** The *data\_set\_name* data store data set cannot be opened by using the *disposition\_type* disposition.

**Explanation:** The specified data store data set could not be opened with the specified disposition.

**System action:** Processing continues.

**User response:** See “Gathering diagnostic information” on page 11-438. Contact IBM Software Support.

---

**CCQI512S** The *data\_set\_name* data store data set cannot be opened by using the *option-type* option.

**Explanation:** The specified data store data set was unable to be opened with the specified option.

**System action:** Processing stops.

**User response:** See “Gathering diagnostic information” on page 11-438. Contact IBM Software Support.

---

**CCQI600W** The XML structure of the *member\_name* product customization parameter metadata member is not valid. The PL/I XML parser issued the following exception warning code: *code\_number*.

**Explanation:** While determining if the product customization parameter metadata member is valid, the PL/I XML parser issued an exception warning code.

**System action:** Processing continues.

**User response:** See the *Enterprise PL/I for z/OS Programming Guide* for more information about the warning.

---

**CCQI601S** The XML structure of the *member\_name* product customization parameter metadata member is not valid. The PL/I XML parser issued the following exception error code: *code\_number*.

**Explanation:** While determining if the product

customization parameter metadata member is valid, the PL/I XML parser issued an exception error code.

**System action:** Processing continues.

**User response:** See the *Enterprise PL/I for z/OS Programming Guide* for more information about the warning.

**CCQI602S** The XML structure of the *member\_name* product customization parameter metadata member is not valid. The *element\_name* element is unknown.

**Explanation:** The specified product customization parameter metadata member contains an unknown element.

**System action:** Processing stops.

**User response:** See “Gathering diagnostic information” on page 11-438. Contact IBM Software Support.

**CCQI603S** The XML structure of the *member\_name* product customization parameter metadata member is not valid. Content is not allowed for the *element\_name* element, but content was found.

**Explanation:** Content was found in an element that cannot contain content.

**System action:** Processing stops.

**User response:** See “Gathering diagnostic information” on page 11-438. Contact IBM Software Support.

**CCQI604S** The XML structure of the *member\_name* product customization parameter metadata member is not valid. Content is required for the *element\_name* element, but content was not found.

**Explanation:** The specified element does not contain required content.

**System action:** Processing stops.

**User response:** See “Gathering diagnostic information” on page 11-438. Contact IBM Software Support.

**CCQI605S** The XML structure of the *member\_name* product customization parameter metadata member is not valid. The content length for the *element\_name* element cannot exceed *maximum\_number* characters.

**Explanation:** The specified element contains too many characters.

**System action:** Processing stops.

**User response:** See “Gathering diagnostic information” on page 11-438. Contact IBM Software Support.

**CCQI606S** The XML structure of the *member\_name* product customization parameter metadata member is not valid. The *element\_name* element cannot occur more than *maximum\_number* times.

**Explanation:** The specified element occurs too many times in the product customization parameter metadata member.

**System action:** Processing stops.

**User response:** See “Gathering diagnostic information” on page 11-438. Contact IBM Software Support.

**CCQI607S** The XML structure of the *member\_name* product customization parameter metadata member is not valid. The *element\_name* element must occur at least *minimum\_number* times.

**Explanation:** The specified element does not occur enough times in the product customization parameter metadata member.

**System action:** Processing stops.

**User response:** See “Gathering diagnostic information” on page 11-438. Contact IBM Software Support.

**CCQI608S** The XML structure of the *member\_name* product customization parameter metadata member is not valid. The *attribute\_name* attribute in the *element\_name* element cannot occur more than *maximum\_number* times.

**Explanation:** The specified attribute occurs too many times in the product customization parameter metadata member.

**System action:** Processing stops.

**User response:** See “Gathering diagnostic information” on page 11-438. Contact IBM Software Support.

**CCQI609S** The XML structure of the *member\_name* product customization parameter metadata member is not valid. The *attribute\_name* attribute in the *element\_name* element must occur at least *minimum\_number* times.

**Explanation:** The specified attribute does not occur enough times in the product customization parameter metadata member.

**System action:** Processing stops.

**User response:** See “Gathering diagnostic information” on page 11-438. Contact IBM Software Support.

**CCQI610S** The XML structure of the *member\_name* product customization parameter metadata member is not valid. Content is not allowed for the *attribute\_name* attribute in the *element\_name* element, but content was found.

**Explanation:** Content was found in an element that cannot contain content.

**System action:** Processing stops.

**User response:** See “Gathering diagnostic information” on page 11-438. Contact IBM Software Support.

**CCQI611S** The XML structure of the *member\_name* product customization parameter metadata member is not valid. Content is required for the *attribute\_name* attribute in the *element\_name* element, but content was not found.

**Explanation:** The specified attribute does not contain required content.

**System action:** Processing stops.

**User response:** See “Gathering diagnostic information” on page 11-438. Contact IBM Software Support.

**CCQI612S** The XML structure of the *member\_name* product customization parameter metadata member is not valid. The content length for the *attribute\_name* attribute in the *element\_name* element cannot exceed *maximum\_number* characters.

**Explanation:** The specified attribute contains too many characters.

**System action:** Processing stops.

**User response:** See “Gathering diagnostic information” on page 11-438. Contact IBM Software Support.

**CCQI613S** The XML structure of the *member\_name* product customization parameter metadata member is not valid. The *attribute\_name* attribute in the *element\_name* element is unknown.

**Explanation:** The specified product customization parameter metadata member contains an unknown attribute.

**System action:** Processing stops.

**User response:** See “Gathering diagnostic information” on page 11-438. Contact IBM Software Support.

**CCQI614S** The XML structure of the *member\_name* product customization parameter metadata member is not valid. The value of the *element\_name* element is not valid. The value *value\_name*.

**Explanation:** The specified value of the element is not a valid value.

**System action:** Processing stops.

**User response:** See “Gathering diagnostic information” on page 11-438. Contact IBM Software Support.

**CCQI615S** The XML structure of the *member\_name* product customization parameter metadata member is not valid. The value of the *attribute\_name* attribute for the *element\_name* element is not valid. The value is *value\_name*.

**Explanation:** The specified value of the attribute is not a valid value.

**System action:** Processing stops.

**User response:** See “Gathering diagnostic information” on page 11-438. Contact IBM Software Support.

**CCQI616S** The XML structure of the *member\_name* product customization parameter metadata member is not valid. The data type of the *element\_name* element is 'not valid. The value of the element is *value\_name*.

**Explanation:** The specified data type is not a valid data type.

**System action:** Processing stops.

**User response:** See “Gathering diagnostic information” on page 11-438. Contact IBM Software Support.

**CCQI617S** The XML structure of the *member\_name* product customization parameter metadata member is not valid. The data type of the *attribute\_name* attribute for the *element\_name* element is not valid. The value of the attribute is *value\_name*.

**Explanation:** The specified data type is not a valid data type.

**System action:** Processing stops.

**User response:** See “Gathering diagnostic information” on page 11-438. Contact IBM Software Support.

**CCQI650S** The XML structure of the *member\_name* product customization parameter metadata member is not valid. The following value of the *attribute\_name* attribute in the *element\_name* element already exists: *value\_name*.

**Explanation:** The specified value for an attribute already exists.

**System action:** Processing stops.

**User response:** See “Gathering diagnostic information” on page 11-438. Contact IBM Software Support.

**CCQI651S** The XML structure of the *member\_name* product customization parameter metadata member is not valid. The *parameter\_name* parameter refers to the following section, which was not found in the *member\_name* product customization parameter metadata member: *section-name*.

**Explanation:** The specified section is not in the product customization parameter metadata member.

**System action:** Processing stops.

**User response:** See “Gathering diagnostic information” on page 11-438. Contact IBM Software Support.

**CCQI652S** The *member\_name* product customization metadata member not valid. The default length for the *element\_name* parameter element exceeds the length of the parameter. The default length is *default\_length*, and the specified length is *specified\_length*. The default length will be truncated accordingly.

**Explanation:** The specified length cannot be shorter than the default length.

**System action:** Processing stops.

**User response:** See “Gathering diagnostic information” on page 11-438. Contact IBM Software Support.

**CCQI653S** The content of the *member\_name* product customization parameter metadata member is not valid. The value of the *attribute\_name* attribute in the *element\_name* element is not valid. The value of the attribute is *value\_name*.

**Explanation:** The specified value of the attribute is not a valid value.

**System action:** Processing stops.

**User response:** See “Gathering diagnostic information” on page 11-438. Contact IBM Software Support.

**CCQI700W** The XML structure of the *member\_name* solution pack metadata member is not valid. The PL/I XML parser issued the following exception warning code: *code\_number*.

**Explanation:** While determining if the specified solution pack metadata member is valid, the PL/I XML parser issued an exception warning code.

**System action:** Processing continues.

**User response:** See the *Enterprise PL/I for z/OS Programming Guide* for more information about the warning.

**CCQI701S** The XML structure of the *member\_name* solution pack metadata member is not valid. The PL/I XML parser issued the following exception error code: *code\_number*.

**Explanation:** While determining if the specified solution pack metadata member is valid, the PL/I XML parser issued an exception error code.

**System action:** Processing stops.

**User response:** See the *Enterprise PL/I for z/OS Programming Guide* for more information about the error.

**CCQI702S** The XML structure of the *member\_name* solution pack metadata member is not valid. The *element\_name* element is unknown.

**Explanation:** The specified solution pack metadata member contains an unknown element.

**System action:** Processing stops.

**User response:** See “Gathering diagnostic information” on page 11-438. Contact IBM Software Support.

**CCQI703S** The XML structure of the *member\_name* solution pack metadata member is not valid. Content is not allowed for the *element\_name* element, but content was found

**Explanation:** Content was found in an element that cannot contain content.

**System action:** Processing stops.



**User response:** See “Gathering diagnostic information” on page 11-438. Contact IBM Software Support.

---

**CCQI704S** The XML structure of the *member\_name* solution pack metadata member is not valid. Content is required for the *element\_name* element, but content was not found.

**Explanation:** The specified element does not contain required content.

**System action:** Processing stops.

**User response:** See “Gathering diagnostic information” on page 11-438. Contact IBM Software Support.

---

**CCQI705S** The XML structure of the *member\_name* solution pack metadata member is not valid. The content length for the *element\_name* element cannot exceed *maximum\_number* characters.

**Explanation:** The specified element contains too many characters.

**System action:** Processing stops.

**User response:** See “Gathering diagnostic information” on page 11-438. Contact IBM Software Support.

---

**CCQI706S** The XML structure of the *member\_name* solution pack metadata member is not valid. The *element\_name* element cannot occur more than *maximum\_number* times.

**Explanation:** The specified element occurs too many times.

**System action:** Processing stops.

**User response:** See “Gathering diagnostic information” on page 11-438. Contact IBM Software Support.

---

**CCQI707S** The XML structure of the *member\_name* solution pack metadata member is not valid. The *element\_name* element must occur at least *minimum\_number* times.

**Explanation:** The specified element does not occur enough times.

**System action:** Processing stops.

**User response:** See “Gathering diagnostic information” on page 11-438. Contact IBM Software Support.

---

**CCQI708S** The XML structure of the *member\_name* solution pack metadata member is not valid. The *attribute\_name* attribute in the *element\_name* element cannot occur more than *maximum\_number* times.

**Explanation:** The specified attribute occurs too many times.

**System action:** Processing stops.

**User response:** See “Gathering diagnostic information” on page 11-438. Contact IBM Software Support.

---

**CCQI709S** The XML structure of the *member\_name* solution pack metadata member is not valid. The *attribute\_name* attribute in the *element\_name* element must occur at least *minimum\_number* times.

**Explanation:** The specified attribute does not occur enough times.

**System action:** Processing stops.

**User response:** See “Gathering diagnostic information” on page 11-438. Contact IBM Software Support.

---

**CCQI710S** The XML structure of the *member\_name* solution pack metadata member is not valid. Content is not allowed for the *attribute\_name* attribute in the *element\_name* element, but content was found.

**Explanation:** The specified attribute cannot have content.

**System action:** Processing stops.

**User response:** See “Gathering diagnostic information” on page 11-438. Contact IBM Software Support.

---

**CCQI711S** The XML structure of the *member\_name* solution pack metadata member is not valid. Content is required for the *attribute\_name* attribute in the *element\_name* element, but content was not found.

**Explanation:** The specified attribute is missing content.

**System action:** Processing stops.

**User response:** See “Gathering diagnostic information” on page 11-438. Contact IBM Software Support.

---

**CCQI712S** The XML structure of the *member\_name* solution pack metadata member is not valid. The content length for the *attribute\_name* attribute in the *element\_name* element cannot exceed *maximum\_number* characters.

**Explanation:** The specified attribute contains too many characters.

**System action:** Processing stops.

**User response:** See “Gathering diagnostic information” on page 11-438. Contact IBM Software Support.

---

**CCQI713S** The XML structure of the *member\_name* solution pack metadata member is not valid. The *attribute\_name* attribute in the *element\_name* element is unknown.

**Explanation:** The specified attribute in the solution pack metadata member is unknown.

**System action:** Processing stops.

**User response:** See “Gathering diagnostic information” on page 11-438. Contact IBM Software Support.

---

**CCQI714S** The XML structure of the *member\_name* solution pack metadata member is not valid because the value of the *element\_name* element is incorrect. The value is *value\_name*.

**Explanation:** The specified value of the element is not a valid value.

**System action:** Processing stops.

**User response:** See “Gathering diagnostic information” on page 11-438. Contact IBM Software Support.

---

**CCQI715S** The XML structure of the *member\_name* solution pack metadata member is not valid because the value of the *attribute\_name* attribute in the *element\_name* element is incorrect. The value of the attribute is *value\_name*.

**Explanation:** The specified value of the attribute is not a valid value.

**System action:** Processing stops.

**User response:** See “Gathering diagnostic information” on page 11-438. Contact IBM Software Support.

---

**CCQI716S** The XML structure of the *member\_name* solution pack metadata member is not valid because the data type of the *element\_name* element is incorrect. The value is *value\_name*.

**Explanation:** The specified data type is not a valid data type.

**System action:** Processing stops.

**User response:** See “Gathering diagnostic information” on page 11-438. Contact IBM Software Support.

---

**CCQI717S** The XML structure of the *member\_name* solution pack metadata member is not valid because the data type of the *attribute\_name* attribute in the *element\_name* element is incorrect. The value of the attribute is *value\_name*.

**Explanation:** The specified data type is not a valid data type.

**System action:** Processing stops.

**User response:** See “Gathering diagnostic information” on page 11-438. Contact IBM Software Support.

---

**CCQI720S** The XML structure of the *member\_name* solution pack metadata member is not valid. The msg element is required for the *component\_name* component that is not customizable.

**Explanation:** The msg element is required for the specified component, which cannot be customized by using Tools Customizer.

**System action:** Processing stops.

**User response:** See “Gathering diagnostic information” on page 11-438. Contact IBM Software Support.

---

**CCQI750S** The solution pack metadata member was not found in the *library\_name* metadata library.

**Explanation:** Tools Customizer could not find the solution pack metadata member in the specified library.

**System action:** Processing stops.

**User response:** See “Gathering diagnostic information” on page 11-438. Contact IBM Software Support.

---

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**CCQI751S** The version in the *library\_name* solution pack metadata library is different than the version in the *library\_name* component metadata library. The name of the pack is *pack\_name*, and the name of the component is *component\_name*.

**Explanation:** The version in the solution pack metadata library does not match the version in the component metadata library.

**System action:** Processing stops.

**User response:** See “Gathering diagnostic information” on page 11-438. Contact IBM Software Support.

---

**CCQI752S** The release in the *library\_name* solution pack metadata library is different than the release in the *library\_name* component metadata library. The name of the pack is *pack\_name*, and the name of the component is *component\_name*.

**Explanation:** The release in the solution pack metadata library does not match the release in the component metadata library.

**System action:** Processing stops.

**User response:** See “Gathering diagnostic information” on page 11-438. Contact IBM Software Support.

---

**CCQI753S** The modification level in the *library\_name* solution pack metadata library is different than the modification level in the *library\_name* component metadata library. The name of the pack is *pack\_name*, and the name of the component is *component\_name*.

**Explanation:** The modification level in the solution pack metadata library does not match the modification level in the component metadata library.

**System action:** Processing stops.

**User response:** See “Gathering diagnostic information” on page 11-438. Contact IBM Software Support.

---

**CCQM002E** The *command\_name* line command is not valid: .

**Explanation:** The specified line command is not valid.

**System action:** Processing continues.

**User response:** Specify a valid line command on the panel.

---

**CCQO000W** The XML structure of the *member\_name* discover parameter metadata member is not valid. The PL/I XML parser issued the following exception warning code: *code\_number*.

**Explanation:** While determining if the discover parameter metadata member is valid, the PL/I XML parser issued an exception warning code.

**System action:** Processing continues.

**User response:** See the *Enterprise PL/I for z/OS Programming Guide* for more information about the exception warning code.

---

**CCQO001S** The XML structure of the *member\_name* discover parameter metadata member is not valid. The PL/I XML parser issued the following exception error code: *code\_number*.

**Explanation:** While determining if the Discover metadata member is valid, the PL/I XML parser issued an exception error code.

**System action:** Processing stops.

**User response:** See the *Enterprise PL/I for z/OS Programming Guide* for more information about the exception warning code. Contact IBM Software Support.

---

**CCQO002S** The XML structure of the *member\_name* discover parameter metadata member is not valid. The *element\_name* element is unknown.

**Explanation:** The specified element in the discover parameter metadata member is unknown.

**System action:** Processing stops.

**User response:** See “Gathering diagnostic information” on page 11-438. Contact IBM Software Support.

---

**CCQO003S** The XML structure of the *member\_name* discover parameter metadata member is not valid. Content is not allowed for the *element\_name* element, but content was found.

**Explanation:** The specified element cannot contain content.

**System action:** Processing stops.

**User response:** See “Gathering diagnostic information” on page 11-438. Contact IBM Software Support.

---

**CCQO004S** The XML structure of the *member\_name* discover parameter metadata member is not valid. Content is required for the *element\_name* element, but content was not found.

**Explanation:** The specified element is missing required content.

**System action:** Processing stops.

**User response:** See “Gathering diagnostic information” on page 11-438. Contact IBM Software Support.

---

**CCQO005S** The XML structure of the *member\_name* discover parameter metadata member is not valid. The content length for the *element\_name* element cannot exceed *maximum\_number* characters.

**Explanation:** The specified element contains too many characters.

**System action:** Processing stops.

**User response:** See “Gathering diagnostic information” on page 11-438. Contact IBM Software Support.

---

**CCQO006S** The XML structure of the *member\_name* discover parameter metadata member is not valid. The *element\_name* element cannot occur more than *maximum\_number* times.

**Explanation:** The specified element occurs too many times.

**System action:** Processing stops.

**User response:** See “Gathering diagnostic information” on page 11-438. Contact IBM Software Support.

---

**CCQO007S** The XML structure of the *member\_name* discover parameter metadata member is not valid. The *element\_name* element must occur at least *minimum\_number* times.

**Explanation:** The specified element does not occur enough times.

**System action:** Processing stops.

**User response:** See “Gathering diagnostic information” on page 11-438. Contact IBM Software Support.

---

**CCQO008S** The XML structure of the *member\_name* discover parameter metadata member is not valid. The *attribute\_name* attribute in the *element\_name* element cannot occur more than *maximum\_number* times.

**Explanation:** The specified attribute occurs too many times.

**System action:** Processing stops.

**User response:** See “Gathering diagnostic information” on page 11-438. Contact IBM Software Support.

---

**CCQO009S** The XML structure of the *member\_name* discover parameter metadata member is not valid. The *attribute\_name* attribute in the *element\_name* element must occur at least *minimum\_number* times.

**Explanation:** The specified attribute does not occur enough times.

**System action:** Processing stops.

**User response:** See “Gathering diagnostic information” on page 11-438. Contact IBM Software Support.

---

**CCQO010S** The XML structure of the *member\_name* discover parameter metadata member is not valid. Content is not allowed for the *attribute\_name* attribute in the *element\_name* element, but content was found.

**Explanation:** The specified attribute cannot contain content.

**System action:** Processing stops.

**User response:** See “Gathering diagnostic information” on page 11-438. Contact IBM Software Support.

---

**CCQO011S** The XML structure of the *member\_name* discover parameter metadata member is not valid. Content is required for the *attribute\_name* attribute in the *element\_name* element, but content was not found.

**Explanation:** The specified attribute requires content.

**System action:** Processing stops.

**User response:** See “Gathering diagnostic information” on page 11-438. Contact IBM Software Support.

---

---

**CCQO012S** The XML structure of the *member\_name* discover parameter metadata member is not valid. The content length for the *attribute\_name* attribute in the *element\_name* element in the cannot exceed *maximum\_number* characters.

**Explanation:** The specified attribute contains too many characters.

**System action:** Processing stops.

**User response:** See “Gathering diagnostic information” on page 11-438. Contact IBM Software Support.

---

**CCQO013S** The XML structure of the *member\_name* discover parameter metadata member is not valid. The *attribute\_name* attribute in the *element\_name* element is unknown.

**Explanation:** The specified attribute is unknown.

**System action:** Processing stops.

**User response:** See “Gathering diagnostic information” on page 11-438. Contact IBM Software Support.

---

**CCQO014S** The content of the *member\_name* discover parameter metadata member is not valid because the value of the *element\_name* element is incorrect. The value is *value\_name*.

**Explanation:** A The specified value for an element in the discover parameter metadata member is not valid.

**System action:** Processing stops.

**User response:** See “Gathering diagnostic information” on page 11-438. Contact IBM Software Support.

---

**CCQO015S** The content of the *member\_name* discover parameter metadata member is not valid because the value of the *attribute\_name* attribute in the *element\_name* element is incorrect. The value is *value\_name*.

**Explanation:** The specified value for an attribute in the discover parameter metadata member is not valid.

**System action:** Processing stops.

**User response:** See “Gathering diagnostic information” on page 11-438. Contact IBM Software Support.

---

**CCQO016S** The content of the *member\_name* discover parameter metadata member is not valid because the data type of the *element\_name* element is incorrect. The value is *value\_name*.

**Explanation:** The specified data type value for an element in the discover parameter metadata member is not valid.

**System action:** Processing stops.

**User response:** See “Gathering diagnostic information” on page 11-438. Contact IBM Software Support.

---

**CCQO017S** The content of the *member\_name* product parameter metadata member is not valid because the data type of the *attribute\_name* attribute in the *element\_name* element is incorrect. The value is *value\_name*.

**Explanation:** The specified data type value for an attribute in the product parameter metadata member is not valid.

**System action:** Processing stops.

**User response:** See “Gathering diagnostic information” on page 11-438. Contact IBM Software Support.

---

**CCQO050S** The *data\_set\_name* Discover REXX EXEC data set could not be initialized or was not found.

**Explanation:** Tools Customizer could not find or could not initialize the specified Discover REXX EXEC data set.

**System action:** Processing stops.

**User response:** Ensure that the Discover REXX EXEC is specified correctly.

---

**CCQO051W** The *data\_sharing\_group\_ID* data sharing group ID cannot contain more than four characters.

**Explanation:** The specified data sharing group ID contains too many characters.

**System action:** Processing continues.

**User response:** Ensure that the specified data sharing group ID does not exceed four characters.

---

**CCQO052S** The *REXX\_EXEC\_name* Discover REXX EXEC was not found in the *data\_set\_name* Discover data set.

**Explanation:** Tools Customizer could not find the Discover REXX EXEC in the specified data set.

**System action:** Processing stops.

**User response:** Ensure that the Discover data set was specified correctly.

---

**CCQO053W** The *LPAR\_name* LPAR name cannot contain more than eight characters.

**Explanation:** The specified LPAR name contains too many characters.

**System action:** Processing continues.

**User response:** Ensure that the specified LPAR name does not exceed eight characters.

---

**CCQO054W** The *subsystem\_ID* DB2 SSID cannot contain more than four characters. The record was not processed.

**Explanation:** The specified DB2 SSID contains too many characters.

**System action:** Processing continues.

**User response:** Ensure that the specified DB2 SSID does not exceed four characters.

---

**CCQO055W** The *parameter\_name* DB2 group attach name parameter is in the *record\_name* Discover record, but a DB2 group attach name was not specified. The record was not processed.

**Explanation:** The Discover record contains a data sharing group parameter, but a DB2 group attach name was not specified.

**System action:** Processing continues.

**User response:** Ensure that information is specified correctly on the Discover Customized Product Information panel.

---

**CCQO056W** The *parameter\_name* DB2 parameter in the *record\_name* Discover record did not have a DB2 group attach name or a DB2 SSID. The record was not processed.

**Explanation:** The Discover record did not have a DB2 group attach name or a DB2 subsystem ID in the DB2 parameter.

**System action:** Processing continues.

**User response:** Ensure that information is specified correctly on the Discover Customized Product Information panel.

---

**CCQO057W** The Discover EXEC could not find the *parameter\_name* parameter in the metadata for the product to be customized. The record was not processed.

**Explanation:** The specified parameter could not be found in the metadata for the product to be customized.

**System action:** Processing continues.

**User response:** Ensure that information is specified correctly on the Discover Customized Product Information panel.

---

**CCQO058W** The *parameter\_name* product parameter name in the *record\_type* Discover record does not start with CCQ\_LPR\_, CCQ\_DB2\_, or CCQ\_PRD\_. The record was not processed.

**Explanation:** The parameter in the record does not start with CCQ\_DB2\_, CCQ\_LPAR\_, or CCQ\_PRD\_.

**System action:** Processing continues.

**User response:** See "Gathering diagnostic information" on page 11-438. Contact IBM Software Support.

---

**CCQO059W** The *parameter\_name* product parameter cannot contain more than 72 characters. The record was not processed.

**Explanation:** The specified product parameter contains too many characters.

**System action:** Processing continues.

**User response:** Ensure that the specified product parameter does not exceed 72 characters.

---

**CCQO060W** The *record\_name* Discover record from the REXX EXEC output must start with the following record type: *record\_type*. The record was not processed.

**Explanation:** A Discover record from the REXX EXEC output must start with the specified DB2 record type.

**System action:** Processing continues.

**User response:** See "Gathering diagnostic information" on page 11-438. Contact IBM Software Support.

---

**CCQO061I** If you do not have a previously customized version of the product, do not run the Discover EXEC. Press END to go to the Customizer Workplace panel.

**Explanation:** This message is issued when you customize a product for a the first time. It prompts you to use the Discover EXEC to discover data from a previous customization of the specified product.

**System action:** Processing continues.

**User response:**

**Tip:** Using the Discover EXEC saves time and reduces errors that can error when parameters are specified manually. If you want to use the Discover EXEC, specify the required information on the Discover Customized Product Information panel. Otherwise, press End to continue without discovering data from a previous customization of the product.

---

**CCQO062W** The Discover EXEC could not find the following *parameter\_name* parameter in the DB2 metadata. The record was not processed.

**Explanation:** The specified parameter is missing in the DB2 metadata.

**System action:** Processing continues.

**User response:** If this parameter is required, contact IBM Software Support.

---

**CCQO064W** The *Discover-record* Discover record did not have a parameter name. The record was not processed.

**Explanation:** A parameter name was missing in the Discover record.

**System action:** Processing continues.

**User response:** See “Gathering diagnostic information” on page 11-438. Contact IBM Software Support.

---

**CCQO065W** The value for the *parameter\_name* parameter is ignored because it has more than *maximum\_number* characters, which is the maximum length that is defined in the metadata. The value is *parameter\_value*.

**Explanation:** The specified value exceeded the maximum allowed length, which was defined in the metadata. Tools Customizer truncated the extra characters.

**System action:** Processing continues.

**User response:** See “Gathering diagnostic information” on page 11-438. Contact IBM Software Support.

---

**CCQO066W** The *record\_name* Discover record from the Discover REXX EXEC output does not have a parameter value. The record was not processed.

**Explanation:** The Discover record was missing a parameter value from the Discover EXEC output.

**System action:** Processing continues.

**User response:** Ensure that information was specified

correctly on the Discover Customized Product Information panel.

---

**CCQO067W** The *parameter\_name* parameter is defined in the metadata to support one value, but more than one value was found. The last value was used.

**Explanation:** The definition of the parameter in the metadata supports one value, but more than one value was specified. Only the last value was used.

**System action:** Processing continues.

**User response:** Ensure that information was specified correctly on the Discover Customized Product Information panel.

---

**CCQO068W** The value of the *parameter\_name* parameter is ignored because the parameter is defined as *internal=true*. The value is *value\_name*.

**Explanation:** The specified value of the parameter is ignored because it is defined as *internal=true*.

**System action:** Processing continues.

**User response:** Ensure that information was specified correctly on the Discover Customized Product Information panel.

---

**CCQO069W** The Discover EXEC did not find the *parameter\_name* parameter in the LPAR metadata. The record was not processed.

**Explanation:** The specified parameter is missing from the LPAR metadata.

**System action:** Processing continues.

**User response:** Ensure that information was specified correctly on the Discover Customized Product Information panel.

---

**CCQO070W** The *record\_type* Discover record contains an incorrect delimiter between the Environment section and the Data section. The record was not processed.

**Explanation:** Tools Customizer found an incorrect delimiter between the Environment section and the Data section.

**System action:** None.

**User response:** No action is required.

---

**CCQO071W** The *member\_name* member could not be found in the *data\_set\_name* Discover data set.

**Explanation:** Tools Customizer could not find the specified Discover data set.

**System action:** None.

**User response:** No action is required.

**CCQO072S** The *member\_name* discover metadata member was not found in the *data\_set\_name* metadata data set.

**Explanation:** Tools Customizer could not find the specified metadata member in the data set.

**System action:** Processing stops.

**User response:** See “Gathering diagnostic information” on page 11-438. Contact IBM Software Support.

**CCQO073E** The *member\_name* discover metadata member is not valid because the default length for the *element\_name* parameter element exceeds the length of the parameter. The default length is *default\_length*, and the specified length is *specified\_length*. The default length will be truncated accordingly.

**Explanation:** The default length for the specified parameter element is longer than the parameter.

**System action:** Processing continues.

**User response:** No action is required.

**CCQO074S** The content of the *member\_name* discover metadata member is not valid. The value of the *attribute\_name* attribute in the *element\_name* element is not valid. The value of the attribute is *value\_name*.

**Explanation:** The specified value is not valid.

**System action:** Processing stops.

**User response:** See “Gathering diagnostic information” on page 11-438. Contact IBM Software Support.

**CCQO075W** The *configuration\_ID* configuration ID in the *record\_name* Discover record is incorrect. The record was not processed.

**Explanation:** The specified configuration ID is not correct.

**System action:** Processing continues.

**User response:** No action is required.

**CCQO076W** The *configuration\_ID* configuration ID cannot contain more than *maximum\_number* characters. The record was not processed.

**Explanation:** The specified configuration ID contains too many characters.

**System action:** Processing continues.

**User response:** No action is required.

**CCQO077S** The discover metadata member was not found in the *data\_set\_name* component data set that is part of the *data\_set\_name* pack.

**Explanation:** The discover metadata member was not found in the specified component data set.

**System action:** Processing stops.

**User response:** See “Gathering diagnostic information” on page 11-438. Contact IBM Software Support.

**CCQO080I** *Product\_name* does not support the Discover process.

**Explanation:** The specified product does not support the Discover process.

**System action:** None.

**User response:** No action is required.

**CCQP000E** The value of the *mode\_name* DB2 mode is not valid for the *level\_name* DB2 level.

**Explanation:** The specified DB2 mode is not valid for the DB2 level.

**System action:** Processing stops.

**User response:** Specify a valid DB2 mode for the DB2 level.

**CCQP001E** The value of the *mode\_name* DB2 mode is missing.

**Explanation:** The specified DB2 mode is not defined.

**System action:** Processing stops.

**User response:** Specify a value for the DB2 mode.

**CCQP002E** The value of the *mode\_name* DB2 level is missing.

**Explanation:** The specified DB2 level is not defined.

**System action:** Processing stops.

**User response:** Specify a value for the DB2 level.

**CCQP003E** The value of the *level\_name* DB2 level is not valid.

**Explanation:** The specified DB2 level does not have a valid name.

**System action:** Processing stops.

**User response:** Specify a valid value for the DB2 level.



---

**CCQP004S** The *parameter\_name* parameter does not exist in the CCQ\$\$DB2 DB2 parameter metadata member.

**Explanation:** The CCQ\$\$DB2 DB2 parameter metadata member does not contain the specified parameter.

**System action:** Processing stops.

**User response:** See “Gathering diagnostic information” on page 11-438. Contact IBM Software Support.

---

**CCQP005E** The value of the *subsystem\_ID* DB2 SSID is missing.

**Explanation:** The specified DB2 SSID is not defined.

**System action:** Processing stops.

**User response:** Specify a valid value for the DB2 SSID.

---

**CCQP006E** The value of the *group\_attach\_name* DB2 group attach name is missing.

**Explanation:** The specified DB2 group attach name is not defined.

**System action:** Processing stops.

**User response:** Specify a valid DB2 group attach name.

---

**CCQQ000E** Specify a valid metadata library. Each qualifier of the library must start with an alphabetic character and must be 1-8 alphanumeric characters. The library name must be 1-44 characters.

**Explanation:** The metadata library was not specified in the correct format. The high-level qualifier must contain alphanumeric characters, and the first character cannot be numeric. The name cannot contain wildcard characters, such as asterisks (\*) and percent signs (%).

**System action:** Tools Customizer prompts for the correct library name.

**User response:** Specify a library in the correct format. If the message was issued on the Specify the Metadata Library (CCQPHLQ) panel, specify the product metadata library. The name of this library is *hlq*.SHLODENU.

Do not specify the Tools Customizer metadata library, which is *hlq*.SCCQDENU.

---

**CCQQ001E** The *data\_set\_name* data set name that was specified for the metadata library was not found.

**Explanation:** The data set does not exist, or the data set name was written in the incorrect format. The high-level qualifier must contain alphanumeric characters, and the first character cannot be numeric.

The name cannot contain wildcard characters, such as asterisks (\*) and percent signs (%).

**System action:** Tools Customizer prompts for the correct data set name.

**User response:** Specify a data set name in the correct format.

---

**CCQQ002E** The data set name that was specified for the *library\_name* metadata library cannot be opened.

**Explanation:** Tools Customizer could not open the data set.

**System action:** Tools Customizer prompts for an available data set.

**User response:** Ensure that the specified data set is available for Tools Customizer to open it.

---

**CCQQ003E** The *data\_set\_name* data set name that was specified for the metadata sample library is not valid. The data set must be in the following format:  
**HLQ.SxxxSAMP.**

**Explanation:** The specified data set name was not specified in the correct format.

**System action:** None.

**User response:** Specify the data set name in the following format: HLQ.SxxxSAMP, where *xxx* is the three-character prefix for the product.

---

**CCQQ004E** The *data\_set\_name* data set is being used by another user. Try again when the data set is not being used.

**Explanation:** Another user is using the specified data set.

**System action:** None.

**User response:** Ensure that the specified data set is not being used.

---

**CCQQ009E** The *data\_set\_name* data set name that was specified for the metadata library is not valid because the data set is empty.

**Explanation:** The specified data set is empty.

**System action:** Tools Customizer prompts for an available data set.

**User response:** Ensure that the specified data set is available for Tools Customizer to open it.

---

**CCQQ011E** The *library\_name* metadata library for the component that is part of the *library\_name* pack was not found in the catalog. The name of the pack is *pack\_name*, and the name of the component is *component\_name*.

**Explanation:** The specified metadata library is not in the catalog.

**System action:** None.

**User response:** Specify another metadata library.

---

**CCQQ012E** The *library\_name* metadata library for the component that is part of the *library\_name* pack cannot be opened.

**Explanation:** The specified metadata library cannot be opened.

**System action:** None.

**User response:** Ensure that the name of the library is specified correctly.

---

**CCQS000I** Tools Customizer is being invoked for the first time or the previous ISPF session ended before Tools Customizer was exited. In both cases, the fields on this panel are populated with default values. Review these default values or specify new values to be used to customize products or packs.

**Explanation:** When you customize a stand-alone product or a solution pack for the first time, or when an ISPF session unexpectedly ends before the ISPF profile is saved, you must specify or review your Tools Customizer user settings.

**System action:** Processing stops.

**User response:** Review and accept the default settings, or specify new settings.

---

**CCQS001E** The following command is not valid: *command\_name*.

**Explanation:** The specified command is not a valid command on the panel.

**System action:** Processing stops.

**User response:** Specify a valid command.

---

**CCQS002W** The *data\_set\_name* Discover data set could not be found.

**Explanation:** Tools Customizer could not find the specified data set.

**System action:** The data set will be allocated, and processing continues.

**User response:** Ensure that the data set name is specified correctly because the data set will be allocated with this name after the values are saved.

---

**CCQS003W** The *data\_set\_name* Discover data set was not found so it was created.

**Explanation:** Tools Customizer could not find the specified data set.

**System action:** Processing continues.

**User response:** Ensure that the data set name is specified correctly.

---

**CCQS004I** The settings were saved.

**Explanation:** The settings that you changed were saved.

**System action:** Processing continues.

**User response:** No action is required.

---

**CCQS006W** The length of a qualifier for the *data\_set\_name* customization library data set exceeds 26 characters.

**Explanation:** The qualifier for the customization library data set is too long. The qualifier cannot exceed 26 characters.

**System action:** Processing continues.

**User response:** Specify a qualifier that is 26 characters or less.

---

**CCQS007E** The discover data set *data\_set\_name* could not be opened with the *option-type* option.

**Explanation:** The specified option could not open the Discover data set.

**System action:** None.

**User response:** Specify a data set to which you have WRITE access.

---

**CCQS008E** An error occurred while the *data\_set\_name* Discover data set was being created.

**Explanation:** While the specified data set was being created, an error occurred.

**System action:** Processing continues.

**User response:** Ensure that you have WRITE authority access to this data set.

---

**CCQS010E** The customization library qualifier is not valid.

**Explanation:** The customization library qualifier that was specified is not valid.

**System action:** None.

**User response:** Specify a valid qualifier for the customization library.

---

**CCQS011E** The group attach option is not valid.

**Explanation:** The group attach option that was specified is not valid.

**System action:** None.

**User response:** Specify a valid option for the group attach option.

---

**CCQS012E** The Tools Customizer metadata library is not valid.

**Explanation:** The metadata library that was specified is not a valid data set.

**System action:** None.

**User response:** Specify a valid data set for the metadata library.

---

**CCQS013E** The Discover data set is not valid.

**Explanation:** The Discover data set that was specified is not a valid data set.

**System action:** None.

**User response:** Specify a valid Discover data set.

---

**CCQS014E** The data store data set is not valid.

**Explanation:** The data set that was specified is not a valid data set.

**System action:** None.

**User response:** Specify a valid data store data set.

---

**CCQS015E** Tools Customizer is already running.

**Explanation:** A session of Tools Customizer is already running in your environment. Only one Tools Customizer session is allowed.

**System action:** None.

**User response:** The trace data set is being used. Free the trace data set, and start Tools Customizer again.

---



---

**CCQS018E** Information on the first line of the job card exceeds 57 characters.

**Explanation:** The first line of the job card can contain only 57 characters. This character limit includes a continuation character.

**System action:** Tools Customizer clears the first line of the job card.

**User response:** Specify information that does not exceed 57 characters on the first line of the job card.

---

**CCQS019E** The required trace data set, *data\_set\_name*, is currently not accessible.

**Explanation:** The trace data set must be accessible.

**System action:** Processing stops.

**User response:** Ensure that the trace data set is accessible.

---

**CCQS020E** An error occurred while the customization library data set was being created. ALTER authority on the high-level qualifier for the customization library data set is required.

**Explanation:** To create the customization library data set, ALTER authority on the specified high-level qualifier must be granted.

**System action:** None.

**User response:** Ensure that ALTER authority for the specified customization library data set is granted.

---

**CCQS021E** The value *value\_name* in the field that contains the cursor position is not valid.

**Explanation:** The specified value is not valid.

**System action:** None.

**User response:** Specify a valid value.

---

**CCQS022E** An error occurred while the customization library data set was being opened. UPDATE authority on the high-level qualifier for the customization library data set is required.

**Explanation:** To open the customization library data set, UPDATE authority on the specified high-level qualifier must be granted.

**System action:** None.

**User response:** Ensure that UPDATE authority for the specified customization library data set is granted.

---

---

**CCQS023E** An error occurred while the customization library data set was being opened. UPDATE authority on the high-level qualifier for the customization library data set is required.

**Explanation:** To open the customization library data set, UPDATE authority on the specified high-level qualifier must be granted.

**System action:** None.

**User response:** Ensure that UPDATE authority for the specified customization library data set is granted, or specify a different high-level qualifier for the customization library data set on the Tools Customizer Settings panel.

---

**CCQS024E** An error occurred while the customization library data set was being created. ALTER authority on the high-level qualifier for the customization library data set is required.

**Explanation:** To create the customization library data set, ALTER authority on the specified high-level qualifier must be granted.

**System action:** None.

**User response:** Ensure that ALTER authority for the specified customization library data set is granted, or specify a different high-level qualifier for the customization library data set on the Tools Customizer Settings panel.

---

**CCQS030E** The following command is not a valid CREATE statement: *command\_statement*.

**Explanation:** The specified CREATE command statement is invalid because it contains blanks or alphabetic characters.

**System action:** Processing stops.

**User response:** Specify a valid CREATE command statement. The correct syntax is CREATE *nm*, where *nm* is 1 - 99.

---

**CCQS031E** The following command is not a valid CREATE statement: *command\_statement*. The number that can be specified with the CREATE command is 1 - 99.

**Explanation:** The specified CREATE command statement is invalid because it contains either 0 or a number greater than 99.

**System action:** Processing stops.

**User response:** Specify a valid CREATE command

statement. The correct syntax is CREATE *nm*, where *nm* is 1 - 99.

---

**CCQT000I** The product configuration ID *copied\_configuration\_ID* was successfully copied from *configuration\_ID*.

**Explanation:** The specified configuration ID was copied.

**System action:** None.

**User response:** No action is required.

---

**CCQT001E** The *command\_name* line command was specified more than once, which is not allowed.

**Explanation:** The specified line command cannot be specified more than one time.

**System action:** Processing stops.

**User response:** Specify the line command only once.

---

**CCQT002E** The *configuration\_ID* configuration ID already exists. Specify a different configuration ID.

**Explanation:** The specified configuration ID exists.

**System action:** Processing stops.

**User response:** Ensure that the specified configuration ID is unique.

---

**CCQT003I** The product configuration ID *configuration\_ID* was created.

**Explanation:** The specified configuration ID was created.

**System action:** None.

**User response:** No action is required.

---

**CCQT004I** The product configuration ID *configuration\_ID* was removed.

**Explanation:** The specified configuration ID was removed.

**System action:** None.

**User response:** No action is required.

---

**CCQT005E** The product configuration ID *configuration\_ID* is not valid. The product configuration ID cannot contain a colon (:).

**Explanation:** The specified configuration ID contains a colon (:), but a colon is not valid.

**System action:** Processing stops.

**User response:** Specify a configuration ID that does not contain a colon.

---

**CCQT006E** The *configuration\_ID* configuration ID exists. Specify a different configuration ID.

**Explanation:** The specified configuration ID exists.

**System action:** Processing stops.

**User response:** Specify another configuration ID.

---

**CCQT007E** The *configuration\_ID* configuration ID exists but was removed from the list of configurations. To use this configuration ID, you must restore it.

**Explanation:** The specified configuration ID exists but was removed from the list of available configuration.

**System action:** Processing stops.

**User response:** Specify another configuration ID. To restore the specified configuration ID, issue the CREATE command, and specify the same configuration ID again.

---

**CCQT008E** The *configuration\_ID* configuration ID exceeds *maximum\_number* characters.

**Explanation:** The specified configuration ID contains too many characters.

**System action:** Processing stops.

**User response:** Specify another configuration ID that does not exceed the maximum number of characters that was set by DB2 Analytics Accelerator Loader.

---

**CCQT010I** Create request for *configuration\_ID* configuration was cancelled by user.

**Explanation:** The request to create the specified configuration was canceled.

**System action:** Processing stops.

**User response:** No action is required.

---

**CCQT011I** The *configuration\_ID* configuration was not copied.

**Explanation:** The specified configuration was not copied.

**System action:** Processing stops.

**User response:** No action is required.

---

**CCQT012I** The *configuration\_ID* configuration was not removed.

**Explanation:** The specified configuration was not removed.

**System action:** Processing stops.

**User response:** No action is required.

---

**CCQT013I** None of the configurations were copied or removed. All of the previously selected configurations are deselected.

**Explanation:** The selected configurations were not copied or removed, and they are deselected.

**System action:** Processing stops.

**User response:** No action is required.

---

**CCQT014E** Specify Y or N and press Enter to continue, or press End to cancel.

**Explanation:** A function requires input.

**System action:** Processing stops.

**User response:** To continue, specify Y or N and press Enter. Otherwise, press End to cancel.

---

**CCQT015E** The *command\_name* command is not allowed during the process of "Select" configuration line command.

**Explanation:** The specified command is not allowed while the line command for selecting configurations is processing.

**System action:** Processing stops.

**User response:** Remove the specified line command.

---

**CCQT016I** The *configuration\_ID* configuration was not created

**Explanation:** The specified configuration was not created.

**System action:** Processing stops.

**User response:** No action is required.

---

**CCQT017I** The *configuration\_ID* configuration was not copied.

**Explanation:** The specified configuration was not copied.

**System action:** Processing stops.

**User response:** No action is required.

---

**CCQT018E** Specify Y or N, and press Enter.

**Explanation:** A function requires input.

**System action:** Processing stops.

**User response:** To continue, specify Y or N, and press Enter.

---

**CCQT019I** The select *configuration\_ID* configuration process ended.

**Explanation:** The select process for the specified configuration is finished.

**System action:** Processing stops.

**User response:** No action is required.

---

**CCQT020E** The *configuration\_ID* configuration was not created because the data store was not accessible.

**Explanation:** The specified configuration was not created because the data store could not be accessed.

**System action:** Processing stops.

**User response:** Ensure that the data store is accessible and create the configuration again.

---

**CCQT021E** The *configuration\_ID* configuration was not copied because the data store was not accessible.

**Explanation:** The specified configuration was not copied because the data store could not be accessed.

**System action:** Processing stops.

**User response:** Ensure that the data store is accessible and copy the configuration again.

---

**CCQT025I** The *configuration\_ID* configuration was not updated.

**Explanation:** The specified configuration was not updated because the edit process was canceled.

**System action:** Processing stops.

**User response:** No action is required.

---

**CCQT027I** The product configuration was successfully updated.

**Explanation:** The configuration was updated.

**System action:** Processing continue.

**User response:** No action is required.

---

**CCQX001S** *Product\_name* has already been customized by using values from *data\_set\_name* data store data set. Switch to the specified data store data set to continue customizing this product.

**Explanation:** The specified product was customized by using values from the specified data store data set.

**System action:** Processing stops.

**User response:** Use the specified data store data set to continue customizing the product.

---

**CCQX002S** *component\_name* has already been customized by using values from *data\_set\_name* data store data set. Switch to the specified data store data set to continue customizing this component.

**Explanation:** The specified component was customized by using values from the specified data store data set.

**System action:** Processing stops.

**User response:** Use the specified data store data set to continue customizing the component.

---

**CCQX011I** *Product\_name* was not found.

**Explanation:** The specified product was not found.

**System action:** Processing stops.

**User response:** Specify another product.

## Accelerator Loader messages

Look up Accelerator Loader messages to obtain information about them, including message explanations and suggested responses.

Each message has a unique message ID. The first three to four letters of an ID indicate the component for which the message was issued.

- HLO indicates the ISPF interface.
- HLOG indicates a global message that pertains to multiple components.
- HLOM indicates the maintenance utility (HLOMAINT).
- HLOP indicates a parser component. (These messages are primarily for use by Software Support.)
- HLOS indicates the Accelerator Loader started task.
- HLOU indicates the DSNUTILB intercept.
- HLV indicates the Accelerator Loader server.

All message IDs have a severity code as the last character, as follows:

- A: Action is required immediately. The associated task does not continue until the requested action is taken.
- D: Decision or action is required immediately. The associated task does not continue until the requested decision is made or action is taken.
- E: Error message. Some errors might be user-correctable. Read the User Response to determine the appropriate course of action.
- I: Information only. No user action is required.
- S: Severe error message. A severe internal or environmental error occurred. Usually, you must contact Software Support for assistance in resolving these errors.
- W: Warning message. Results might not be as expected.

In the messages output, a time stamp is often displayed after the message identifier and before the message text to indicate when the message was issued. The time stamp is composed of a Julian date followed by a time in the format HH:MM:SS:tt. The variables are defined as follows: *HH* is hours, *MM* is minutes, *SS* is seconds, and *tt* is hundredths of a second. This time stamp does not occur in messages that are issued from the ISPF interface or batch interface (HLO or HLOB messages) or in any messages that are issued as WTO messages. (The WTO messages include a system time stamp instead.)

---

**HLO002E**    **Insufficient region size. Available region size of at least 30000 is required.**

**Explanation:** The available region size is not large enough to work with the product.

**User response:** Contact your system administrator to increase the region size to 30000.

or contact your system administrator to increase the region size.

---

**HLO004E**    **Insufficient region size. Available region size of at least 50000 is required for Accelerator Loader server administration.**

**Explanation:** The available region size is not large enough to run Accelerator Loader server administration. An available region size of at least 50000 is required.

**User response:** Contact your system administrator to increase the region size to 50000.

---

**HLO003E**    **Not enough memory. Close other applications and try again or contact your system administrator to increase the region size.**

**Explanation:** The product requires an available region size of at least 30000 is required.

**User response:** Close other applications and try again

---

**HLO010E**    **No objects match the filter.**

## HLO011I • HLO124E

**Explanation:** No objects match the specified filter criteria.

**User response:** Change the filter values or add new objects to the list.

---

**HLO011I    Operation completed successfully.**

**Explanation:** This is an informational message.

**User response:** No action is required.

---

**HLO101E    ISPF error: <error\_message>.**

**Explanation:** An ISPF error occurred and caused the displayed message to be generated.

**User response:** Correct the error and retry the operation. If necessary, review the ISPF documentation to determine the cause of the error.

---

**HLO102E    An invalid command was entered in the command or option line.**

**Explanation:** Valid commands are listed on the panel.

**User response:** Enter a valid command.

---

**HLO103E    Enter a valid line command as listed at the top of the panel.**

**Explanation:** Valid line commands are listed at the top of the panel.

**User response:** Enter a valid line command.

---

**HLO104E    An invalid option was entered. Enter a valid option.**

**Explanation:** The specified option is not valid in the field.

**User response:** Enter another option.

---

**HLO105E    An invalid value was entered.**

**Explanation:** The specified value is not valid in the field.

**User response:** Enter a valid value in the field.

---

**HLO106I    Move is pending.**

**Explanation:** The M(Move) line command was entered but an A(After) or B(Before) command was not specified.

**User response:** Enter the A(After) or B(Before) line command to move the object after or before the position at which the line command is issued.

---

**HLO107E    Element was not found.**

**Explanation:** The specified element was not found.

**User response:** Verify the element name and reenter it.

---

**HLO108I    No element was selected from the list.**

**Explanation:** At least one element must be selected from the list.

**User response:** Select one or more elements.

---

**HLO120E    File was not opened.  
<error\_message\_text>.**

**Explanation:** An error occurred while opening file.

**User response:** See the user's guide for the routine for an explanation of error codes. If you are unable to determine the reason for the failure from the associated z/OS messages, contact IBM Software Support.

---

**HLO121E    File <file\_name> is not a valid KSDS file.**

**Explanation:** The file must be a valid KSDS file.

**User response:** Specify a valid KSDS file.

---

**HLO122E    I/O operation cannot be performed on closed file (<file\_name>).**

**Explanation:** File <file\_name> is closed. I/O operations are denied for closed file.

**User response:** Check the file availability and retry. If you are unable to determine the reason for the failure, contact IBM Software Support.

---

**HLO123E    Input operation cannot be performed on file (<file\_name>) because the file was opened in read only mode.**

**Explanation:** File <file\_name> was opened in read only mode. Writing operations are denied for the file.

**User response:** Check the file availability and retry. If you are unable to determine the reason for the failure, contact IBM Software Support.

---

**HLO124E    Record to be added to file <file\_name> already exists.**

**Explanation:** Records in the file must have different keys. The record to be added has the same key as an existing record.

**User response:** Check the file consistency and retry. If you are unable to determine the reason for the failure, contact IBM Software Support.



---

**HLO125E**    **Cannot add record to file.**  
                   <error\_message\_text>.

**Explanation:** An error occurred while adding the record to the file.

**User response:** For an explanation of the error codes, see the documentation for the routine. If you are unable to determine the reason for the failure from the associated z/OS messages, contact IBM Software Support.

---

**HLO126E**    **Record for update in file <file\_name>  
 does not exist.**

**Explanation:** An updatable record with the specified key must exist in the file.

**User response:** Check the file consistency and retry. If you are unable to determine the reason for the failure, contact IBM Software Support.

---

**HLO127E**    **Cannot update record in file.**  
                   <error\_message\_text>.

**Explanation:** An error occurred while updating a record in the file.

**User response:** For an explanation of the error codes, see the documentation for the routine. If you are unable to determine the reason for the failure from the associated z/OS messages, contact IBM Software Support.

---

**HLO128E**    **Record for replace in file <file\_name>  
 does not exist.**

**Explanation:** A record with the specified key must exist in the file.

**User response:** Check the file consistency and retry. If you are unable to determine the reason for the failure, contact IBM Software Support.

---

**HLO129E**    **Cannot replace record in file.**  
                   <error\_message\_text>.

**Explanation:** An error occurred while replacing a record in the file.

**User response:** For an explanation of the error codes, see the documentation for the routine. If you are unable to determine the reason for the failure from the associated z/OS messages, contact IBM Software Support.

---

**HLO130E**    **Record for delete from file <file\_name>  
 does not exist.**

**Explanation:** A record with the specified key must exist in the file.

**User response:** Check the file consistency and retry. If

you are unable to determine the reason for the failure, contact IBM Software Support.

---

**HLO131E**    **Cannot delete record from file.**  
                   <error\_message\_text>.

**Explanation:** An error occurred while removing a record from the file.

**User response:** For an explanation of the error codes, see the documentation for the routine. If you are unable to determine the reason for the failure from the associated z/OS messages, contact IBM Software Support.

---

**HLO132E**    **Cannot locate record in file.**  
                   <error\_message\_text>.

**Explanation:** An error occurred while locating a record in the file.

**User response:** For an explanation of the error codes, see the documentation for the routine. If you are unable to determine the reason for the failure from the associated z/OS messages, contact IBM Software Support.

---

**HLO133E**    **Cannot read record from file.**  
                   <error\_message\_text>.

**Explanation:** An error occurred while reading a record from the file.

**User response:** For an explanation of the error codes, see the documentation for the routine. If you are unable to determine the reason for the failure from the associated z/OS messages, contact IBM Software Support.

---

**HLO200E**    <message\_text>.

**Explanation:** An internal error occurred in the DB2 control file routine or VSAM data repository routine.

**User response:** See the user's guide for the routine for an explanation of its error codes. If you are unable to determine the reason for the failure from the associated z/OS messages, contact IBM Software Support.

---

**HLO201E**    **Accelerator Loader repository does not exist.**

**Explanation:** The base PDS is not a repository high-level qualifier (HLQ).

**User response:** Ensure that the high-level qualifier variable that is specified for the VSAM data repository in "CLIST" is correct. If you are unable to resolve the problem, contact IBM Software Support.

---

**HLO202E** Accelerator Loader control file does not exist.

**Explanation:** The base PDS is not a DB2 control file HLQ.

**User response:** Ensure that the high-level qualifier variable specified for the DB2 control file in "CLIST" is correct. If you are unable to resolve the problem, contact IBM Software Support.

---

**HLO203E** DB2 version *<version\_number>* is not supported by this version of the product.

**Explanation:** The product requires DB2 10 or later.

**User response:** Select a DB2 subsystem with a supported DB2 version.

---

**HLO204E** Data changes cannot be saved because the profile was opened in View mode or Share option prevents saving.

**Explanation:** You can save changes to a profile when the share option is Update, or you are the owner of the profile and you opened it in Edit or Build mode.

**User response:** Close the profile and open it again in a mode that supports saving.

---

**HLO206E** Access method for specified data set is not supported.

**Explanation:** The product supports sequential and partitioned data sets.

**User response:** Specify either a sequential or partitioned data set.

---

**HLO207I** No DB2 subsystem was defined in the DB2 control file.

**Explanation:** A DB2 subsystem must be defined in the DB2 control file.

**User response:** Specify a DB2 subsystem in the control file.

---

**HLO208E** An error occurred while saving JCL file: *<file\_name>*. Error codes: *<error\_codes>*.

**Explanation:** The specified error occurred.

**User response:** Correct the error and retry the operation.

---

**HLO209E** Profile repository error: *<error\_text>*.

**Explanation:** The specified repository error occurred.

**User response:** Correct the error and run the job again.

---

**HLO210E** *<profile creator>* element value is too long: *element\_value*. It cannot exceed 8 characters.

**Explanation:** The specified profile creator value is not valid because it exceeds the eight-character limit.

**User response:** Specify a valid value up to eight characters and run the job again.

---

**HLO211E** *<profile ssid>* element must be set in the SYSIN DD.

**Explanation:** The specified element is required.

**User response:** Specify a value and run the job again.

---

**HLO212E** *<profile name>* element must be set in the SYSIN DD.

**Explanation:** The specified element is required.

**User response:** Specify a value and run the job again.

---

**HLO213E** *<profile creator>* element must be set in the SYSIN DD.

**Explanation:** The specified element is required.

**User response:** Specify a value and run the job again.

---

**HLO214E** The output data set for Accelerator Loader load JCL generation must be a partitioned data set (PDS). The specified data set *<data\_set\_name>* does not exist and the member is empty in profile *<profile\_name>*.

**Explanation:** The *<output dsn>* element specifies the full path to the PDS that is to be used for the load JCL generation. If you do not specify this element, then the product uses the value from the profile. The value is defined in the **Data set name** field on the Build Load JCL panel.

**User response:** Specify the name of an existing data set or specify a value in the **Data set name** field on the Build Load JCL panel. After you change the data set name, run the job again.

---

**HLO215E** The output data set for Accelerator Loader *profile\_type* load generation must be a partitioned data set (PDS). The specified data set *data\_set\_name* is not a PDS.

**Explanation:** You must specify a PDS for the output JCL.

**User response:** Specify a PDS and run the job again.

---

---

**HLO216E** <table name> subelement must be set in the <table> element in the SYSIN DD.

**Explanation:** The specified subelement is required.

**User response:** Specify a value and run the job again.

---

**HLO217E** <table creator> subelement must be set in the <table> element in the SYSIN DD.

**Explanation:** The specified subelement is required.

**User response:** Specify a value and run the job again.

---

**HLO218E** Output data set *data\_set\_name* does not exist. An error occurred while the product was attempting to allocate the data set.

**Explanation:** The product was unable to allocate the specified data set.

**User response:** Verify that the <output data set> element contains a valid value. Make corrections, if necessary, and then run the job again.

---

**HLO219W** An error occurred while the product was setting ISPF statistics for member *member\_name* of data set *data\_set\_name*.

**Explanation:** The product was unable to set ISPF statistics for the specified member.

**User response:** No action is required.

---

**HLO220I** JCL file *file\_name* for profile *profile\_name*, *profile\_type*, and *ssid* was successfully generated to *data\_set\_name* data set.

**Explanation:** JCL generation was successful for the specified load profile name, type, and SSID.

**User response:** No action is required.

---

**HLO221E** The value that was specified for the <number of jobs> element is too small. Cannot create jobs *job\_names* for specified tables *table\_names*.

**Explanation:** The number of tables divided by the number of jobs is greater than 172380.

**User response:** Increase the value for <number of jobs> and run the job again.

---

**HLO222E** The value that was specified for <number of jobs> element is too large: *specified\_value*. Valid values are 1 - 17576.

**Explanation:** The <number of jobs> element specifies the number of jobs to generate. Valid values are 1 - 17576.

---

**User response:** Specify a valid value and run the job again.

---

**HLO223E** Unknown subelement *element\_name* found in the <table> element for profile type *profile\_type*.

**Explanation:** The specified subelement name is not valid in the SYSIN DD. JCL generation was stopped.

**User response:** See the product documentation for valid subelements. Correct the subelement and run the job again.

---

**HLO224E** Unknown element *element\_name* found for profile *profile\_type*.

**Explanation:** An unknown element was specified in the SYSIN DD. JCL generation was stopped.

**User response:** See the product documentation for valid elements. Correct the element and run the job again.

---

**HLO225E** Unknown profile type found: <*profile\_type*>. Valid values are: DUAL, CONSISTENT, ACCELERATOR ONLY, IMAGE COPY.

**Explanation:** The value for the <*profile\_type*> element is not valid. For descriptions of the profile types, see the DB2 Analytics Accelerator Loader terminology topic in the product documentation.

**User response:** Specify a valid value, as shown in the message text.

---

**HLO226E** No tables are defined for profile *profile\_name*.

**Explanation:** No <table> elements were found in the SYSIN DD for the batch JCL generator.

**User response:** Specify at least one table by using the <table name> element.

---

**HLO227E** The <profile type> element was not found.

**Explanation:** The <profile type> element is required.

**User response:** Specify the <profile type> element in the SYSIN DD.

---

| **HLO228E** The profile version <*version\_number*> is  
| not supported by this version of the  
| product.

| **Explanation:** The specified profile has an unsupported  
| version. The profile was saved with a later version of  
| the product.

| **User response:** Specify another profile or run the

| latest version of the product.

---

| **HLO229E**    **The profile was created by an earlier version of the product. Use the ISPF interface to convert the profile to the latest version.**

| **Explanation:** The chosen profile was created with an earlier version of the product. To use the profile, it must be updated for use with the current version.

| **User response:** To upgrade profile, use the ISPF interface to edit the profile. When the Confirm Action panel is displayed, choose to update the profile.

---

**HLO240E**    **The <template\_name> template name must be defined for table <table\_name>.**

**Explanation:** The specified template name is required.

**User response:** Specify a valid value and run the job again.

---

**HLO241E**    **The <data\_set\_name> template data set must be defined for table <table\_name>.**

**Explanation:** The specified data set is required.

**User response:** Specify a valid value and run the job again.

---

**HLO242E**    **The <template\_name> template disposition must be defined for table <table\_creator.table\_name>.**

**Explanation:** For the specified template name, you must specify a valid z/OS data set disposition as documented in the *DB2 for z/OS Utility Guide and Reference*.

**User response:** Enter a valid DD disposition in the **Data set disposition** field on the DD Template Specification panel and run the job again.

---

**HLO243E**    **The SYSREC data set must be defined for table <table\_name>.**

**Explanation:** The SYSREC data set is required.

**User response:** Specify a valid value and run the job again.

---

**HLO244E**    **The accelerator name must be defined for profile <profile\_name>.**

**Explanation:** The accelerator name is required.

**User response:** Specify a valid value and run the job again.

---

**HLO249E**    **SYSIN parsing error - invalid escape sequence: <escape\_sequence>.**

**Explanation:** An invalid escape sequence was found. The valid values are:

- &lt; for less than symbol (<)
- &gt; for greater than symbol (>)
- &amp; for ampersand (&)
- &apos; for apostrophe (')
- &quot; for double quotation marks (")

**User response:** Correct the sequence.

---

**HLO250E**    **SYSIN parsing error - unexpected close tag symbol.**

**Explanation:** The product encountered an incorrectly placed element close tag.

**User response:** Correct the tag and run the job again.

---

**HLO251E**    **SYSIN parsing error - value for tag is incorrectly placed.**

**Explanation:** The product encountered an incorrectly placed value for an element.

**User response:** Correct the value and run the job again.

---

**HLO252E**    **SYSIN parsing error - unexpected end of SYSIN.**

**Explanation:** The SYSIN contains an unclosed tag or invalid value.

**User response:** Correct the SYSIN and run the job again.

---

**HLO253E**    **<PARTITION> element must have a numeric value or numeric range with symbols '-,:'. The specified value is <partition\_value>.**

**Explanation:** You can specify a single partition by partition number, or a range of partition numbers in the format a[:l-]b][,a[:l-]b]]\*, where a,b are greater than 0. For example, <PARTITION>='1-2,4:5,8' and <PARTITION>='1'.

**User response:** Correct the value and run the job again.

---

**HLO254I**    **SYSREC data set supplied by profile <profile\_creator.profile\_name> for table <table\_creator.table\_name>. To override this value, use element <SYSREC-DSN>.**

**Explanation:** The input data set was obtained from the profile that is specified in the message.

**User response:** To change the SYSREC data set,

specify a value for the <SYSREC-DSN> element.

---

**HLO255I**    **SYSREC template DSN supplied by profile *profile\_creator.profile\_name* for table *table\_creator.table\_name*. To override this value, use element <SYSREC-TEMPLATE-DSN>.**

**Explanation:** The SYSREC template data set name was obtained from the profile that is specified in the message.

**User response:** To change the SYSREC template DSN, specify a value for the <SYSREC-TEMPLATE-DSN> element.

---

**HLO256I**    **SYSREC template name supplied by profile *profile\_creator.profile\_name* for table *table\_creator.table\_name*. To override this value, use element <SYSREC-TEMPLATE-NAME>.**

**Explanation:** The SYSREC template name was obtained from the profile that is specified in the message.

**User response:** To change the SYSREC template name, specify a value for the <SYSREC-TEMPLATE-NAME> element.

---

**HLO257I**    **Column info data set supplied by profile *<creator>.<name>* for table *<table\_creator>.<table\_name>*. To override this value, use element <FIELDSPEC-DSN>.**

**Explanation:** The column info data set was obtained from the profile that is specified in the message.

**User response:** To change the column info data set, specify a value for the <FIELDSPEC-DSN> element.

---

**HLO258E**    **Profile *<creator>.<name>* created by *<user-id>* has NO ACCESS share option and cannot be built by *<user-id>*.**

**Explanation:** For the specified profile, the value of Share option is No access, which means that other users cannot view or update the profile.

**User response:** Choose another profile or change the Share option value to Update or View only.

---

**HLO260E**    **DB2 table *<table\_creator.table\_name>* was not found in catalog.**

**Explanation:** The specified DB2 table, view, or alias does not exist.

**User response:** Specify a valid DB2 table, view, or alias.

---

**HLO261E**    **DB2 object *<object\_creator.object\_name>* of type *<object\_type>* is not supported.**

**Explanation:** The specified DB2 object is of an unsupported type.

**User response:** Specify a valid DB2 object. Valid DB2 object types are T (table), V (view), and A (alias).

---

**HLO262E**    **DB2 object *<object\_creator.object\_name>* of type *<object\_type>* has more than one base table.**

**Explanation:** The specified DB2 object is related to more than one base table.

**User response:** Specify a valid DB2 table, view, or alias. The object can have only one base table, which must be of type T.

---

**HLO263E**    **DB2 object *<object\_creator.object\_name>* of type *<object\_type>* has base table not of type T.**

**Explanation:** The specified DB2 object is related to a base table that is not of type T.

**User response:** Specify a valid DB2 table, view, or alias. The object can have only one base table, which must be of type T.

---

**HLO300E**    **DB2 subsystem ID is required. Enter a valid DB2 SSID.**

**Explanation:** You must specify a DB2 subsystem ID. You can enter a question mark (?) in the field to open a list of existing subsystems from which to choose.

**User response:** Choose or enter a valid DB2 SSID value.

---

**HLO301E**    **DB2 subsystem ID is invalid. Enter a valid DB2 SSID.**

**Explanation:** You must specify a DB2 subsystem ID. You can enter a question mark (?) in the field to open a list of existing subsystems from which to choose.

**User response:** Choose or enter a valid DB2 SSID value.

---

**HLO302E**    **DB2 subsystem ID already exists. Enter another DB2 SSID to create.**

**Explanation:** The specified DB2 subsystem is already defined in the program.

**User response:** Enter another valid value for the DB2 SSID.

## HLO303E • HLO330E

---

**HLO303E** DB2 subsystem profile has empty required fields. Select option 1 to enter Accelerator Loader parameters.

**Explanation:** You cannot save the profile without specifying values for the required fields.

**User response:** Select option 1 to enter the product parameters.

---

**HLO304E** Member with specified name was not found.

**Explanation:** The specified member could not be found.

**User response:** Verify that you specified the correct member name.

---

**HLO305E** Subsystem with specified SSID is not defined in the control file.

**Explanation:** The specified DB2 subsystem could not be found in the DB2 control data set that is specified in the CLIST.

**User response:** Enter another existing SSID value or define a new DB2 subsystem.

---

**HLO306E** Connection program load modules DSNALI, DSNHLI2, DSNWLI2, DSNTIAR were not found in specified load libraries for DB2 subsystem.

**Explanation:** The listed load modules were not found in the specified load libraries. The load library usually consists of a subsystem-specific DSNEXIT library, and the base DSNEXIT library and base DSNLOAD library for the current DB2 version.

**User response:** Specify the data set that comprises the current load library concatenation for DB2 and is used during batch job processing. To do this, use the DB2 Subsystems panel and line command E (Edit).

---

**HLO307I** DB2 subsystem <ssid> was successfully selected.

**Explanation:** The specified DB2 subsystem was successfully selected.

**User response:** No action is required.

---

**HLO308I** Successful selection.

**Explanation:** The DB2 subsystem <ssid> was successfully selected.

**User response:** No action is required.

---

---

**HLO308E** DB2 subsystem ID is required. Enter a valid DB2 SSID.

**Explanation:** You must specify a DB2 subsystem ID.

**User response:** Enter a valid DB2 SSID value.

---

**HLO309E** DB2 subsystem ID is invalid. Enter a valid DB2 SSID.

**Explanation:** You must specify a DB2 subsystem ID.

**User response:** Enter a valid DB2 SSID value.

---

**HLO310E** Space units field is invalid. Specify BLKS, TRKS, CYLS, KB, MB, or BYTES.

**Explanation:** The specified space units value is not valid. Valid values are BLKS, TRKS, CYLS, KB, MB, and BYTES.

**User response:** Specify a valid value.

---

**HLO311E** Primary quantity field is invalid. Specify a numeric value.

**Explanation:** The field requires a numeric value.

**User response:** Specify a numeric value.

---

**HLO312E** Invalid value.

**Explanation:** The secondary quantity field is invalid.

**User response:** Specify a numeric value.

---

**HLO313E** Block size field is invalid. Specify a numeric value.

**Explanation:** The field requires a numeric value.

**User response:** Specify a numeric value.

---

**HLO314E** Specified device type could not be found in MVS.

**Explanation:** The device type that was specified could not be found in MVS™.

**User response:** Specify another device type.

---

**HLO330E** File tailoring OPEN failed: file tailoring already in progress condition.

**Explanation:** An attempt to perform file tailoring for utility customization failed because a file tailoring session was already in progress. File tailoring sessions cannot be performed concurrently.

**User response:** Contact IBM Software Support. Have available the listing that contains this message.

---

---

**HLO331E** File tailoring OPEN failed: the output file is already in use condition -- ENQ failed.

**Explanation:** An attempt to access a file tailoring skeleton failed with an ENQ error (member-in-use).

**User response:** Verify that all required tailoring files are allocated, and that no other tailoring sessions are running concurrently.

---

**HLO332E** File tailoring OPEN returned the skeleton file or output file not allocated condition.

**Explanation:** An attempt to perform file tailoring failed because either the tailoring skeleton file or output file is not allocated.

**User response:** Ensure that the tailoring skeleton file and output file are allocated.

---

**HLO333E** File tailoring OPEN returned a severe error condition.

**Explanation:** An attempt to perform file tailoring failed because a severe error condition was encountered when the file was being opened.

**User response:** Verify that all required files are allocated and accessible before performing file tailoring.

---

**HLO334E** File tailoring OPEN returned an unknown code -- severe error.

**Explanation:** An attempt to perform file tailoring failed because a severe error condition was encountered on open.

**User response:** Verify that all required files are allocated and accessible before performing file tailoring.

---

**HLO335E** File tailoring CLOSE returned a file not open condition -- severe error.

**Explanation:** An attempt to perform file tailoring failed because a File-Not-Open condition was encountered on close.

**User response:** Verify that all required files are allocated and accessible and that no other tailoring sessions are running concurrently with your session.

---

**HLO336E** File tailoring CLOSE returned an output file in use condition.

**Explanation:** An attempt to perform file tailoring failed because an Output-File-Inuse condition was encountered on close.

**User response:** Verify that all required files are allocated and accessible and that no other tailoring sessions are running concurrently with your session.

---



---

**HLO337E** File tailoring CLOSE returned a skeleton file or output file not allocated condition.

**Explanation:** An attempt to close file tailoring failed because either a tailoring skeleton file or output file was not allocated.

**User response:** Verify that all required files are allocated and accessible and that no other tailoring sessions are running concurrently with your session.

---

**HLO338E** File tailoring CLOSE returned a severe error.

**Explanation:** An attempt to perform file tailoring failed because a severe error condition was encountered on close.

**User response:** Verify that all required files are allocated and accessible before performing file tailoring.

---

**HLO339E** File tailoring CLOSE returned an unknown code -- severe error.

**Explanation:** An attempt to perform file tailoring failed because a severe error condition was encountered on close.

**User response:** Verify that all required files are allocated and accessible before performing file tailoring.

---

**HLO340E** File tailoring CLOSE failed: an output member exists in the output library and NOREPL was specified.

**Explanation:** An attempt to perform file tailoring failed because the close process could not replace the preexisting tailored member in the output file.

**User response:** Change the output member name to a new name or ensure that the output library allows for member replacement.

---

**HLO341E** File tailoring INCLUDE returned a skeleton does not exist condition.

**Explanation:** An attempt to perform file tailoring failed because the tailoring process could not locate a required tailoring skeleton.

**User response:** Verify that all required files are allocated to perform file tailoring.

---

**HLO342E** File tailoring INCLUDE returned a skeleton in use -- ENQ failed condition.

**Explanation:** An attempt to access a tailoring skeleton failed with an ENQ error (member-in-use).

**User response:** Verify that all required tailoring files are allocated and that no other tailoring sessions are running concurrently.

---

## HLO343E • HLO447E

---

**HLO343E** File tailoring INCLUDE returned a data truncation, skeleton library, or output file not allocated condition.

**Explanation:** An attempt to perform file tailoring failed because data is truncated, or because the tailoring skeleton file or output file is not allocated.

**User response:** Verify that data is intact and that all required files are allocated before performing file tailoring.

---

**HLO344E** File tailoring INCLUDE returned a severe error condition.

**Explanation:** An attempt to perform file tailoring failed because a severe error condition was encountered on an include operation.

**User response:** Verify that all required files are allocated and accessible before performing file tailoring.

---

**HLO345E** File tailoring INCLUDE returned an unknown condition -- severe error.

**Explanation:** An attempt to perform file tailoring failed because a severe error condition was encountered on an include operation.

**User response:** Verify that all required files are allocated and accessible before performing file tailoring.

---

**HLO346E** An error was encountered while allocating the ISPF DD - Process did not complete.

**Explanation:** An allocation error occurred while allocating the ISPF DD.

**User response:** If you cannot determine the reason for the failure from the associated z/OS messages, contact IBM Software Support. Have available the listing that contains these messages.

---

**HLO347E** Allocation Error - An error was encountered while reading the ISPF DD. Process did not complete.

**Explanation:** An allocation error was encountered while reading the ISPF DD.

**User response:** If you cannot determine the reason for the failure from the associated z/OS messages, contact IBM Software Support. Have available the listing that contains these messages.

---

**HLO440E** Device type for work files could not be found in MVS. Enter a valid device type for work files.

**Explanation:** The device type that was specified for work files could not be found in MVS.

**User response:** Enter a valid DASD or tape device.

---

**HLO441E** Device type for work files is required. Enter an existing MVS device type.

**Explanation:** You must specify a device type for work files.

**User response:** Enter an existing DASD or tape device.

---

**HLO442E** Data set type for work files is invalid. Valid data set types are BASIC and LARGE.

**Explanation:** The product supports data set types BASIC and LARGE for work data sets.

**User response:** Enter a valid value.

---

**HLO443E** Data set type for work files is required. Valid data set types are BASIC and LARGE.

**Explanation:** You must specify either BASIC or LARGE for the data set type for work files.

**User response:** Enter a valid value.

---

**HLO444E** Track or cylinders for work files is invalid. Valid values are TRK for tracks and CYL for cylinders.

**Explanation:** You must specify a valid allocation unit for work data sets.

**User response:** Specify TRK (tracks) or CYL (cylinders).

---

**HLO445E** Track or cylinders for work files is required. Valid values are TRK for tracks and CYL for cylinders.

**Explanation:** You must specify a valid allocation unit for work data sets.

**User response:** Specify TRK (tracks) or CYL (cylinders).

---

**HLO446E** Primary quantity for work files is invalid. Enter a value of 1 - 16777215.

**Explanation:** You must specify a primary space quantity for work data sets.

**User response:** Enter a value of 1 - 16777215.

---

**HLO447E** Primary quantity for work files is required. Enter a value of 1 - 16777215.

**Explanation:** You must specify a primary space quantity for work data sets.

**User response:** Enter a value of 1 - 16777215.



---

**HLO448E** Secondary quantity for work files is invalid. Enter a value of 1 - 16777215.

**Explanation:** You must specify a secondary space quantity for work data sets.

**User response:** Enter a value of 1 - 16777215.

---

**HLO449E** Secondary quantity for work files is required. Enter a value of 1 - 16777215.

**Explanation:** You must specify a secondary space quantity for work data sets.

**User response:** Enter a value of 1 - 16777215.

---

**HLO450E** Maximum volumes for work files is invalid. Enter a value of 1 - 255.

**Explanation:** You must specify the maximum number of volumes for work data sets.

**User response:** Enter a value of 1 - 255.

---

**HLO451E** Maximum volumes for work files is invalid required. Enter a value of 1 - 255.

**Explanation:** You must specify the maximum number of volumes for work data sets.

**User response:** Enter a value of 1 - 255.

---

**HLO452E** Device type for SYSPRINT could not be found in MVS. Enter another device type.

**Explanation:** The device type that was specified for SYSPRINT files could not be found in MVS.

**User response:** Enter a valid DASD or tape device.

---

**HLO453E** Device type for SYSPRINT is required. Enter an existing MVS device type.

**Explanation:** You must specify a device type SYSPRINT files.

**User response:** Enter a valid DASD or tape device.

---

**HLO454E** Data set type for SYSPRINT is invalid. Valid data set types are BASIC and LARGE.

**Explanation:** The product supports data set types BASIC and LARGE for SYSPRINT files.

**User response:** Enter a valid value.

---



---

**HLO455E** Data set type for SYSPRINT is required. Valid data set types are BASIC and LARGE.

**Explanation:** The product supports data set types BASIC and LARGE for SYSPRINT files.

**User response:** Enter a valid value.

---

**HLO456E** Track or cylinders for SYSPRINT is invalid. Valid values are TRK for tracks and CYL for cylinders.

**Explanation:** You must specify a valid allocation unit for SYSPRINT files.

**User response:** Specify TRK (tracks) or CYL (cylinders).

---

**HLO457E** Track or cylinders for SYSPRINT is required. Valid values are TRK for tracks and CYL for cylinders.

**Explanation:** You must specify a valid allocation unit for SYSPRINT files.

**User response:** Specify TRK (tracks) or CYL (cylinders).

---

**HLO458E** Primary quantity for SYSPRINT is invalid. Enter a value of 1 - 16777215.

**Explanation:** You must specify a primary space quantity for SYSPRINT files.

**User response:** Enter a value of 1 - 16777215.

---

**HLO459E** Primary quantity for SYSPRINT is required. Enter a value of 1 - 16777215.

**Explanation:** You must specify a primary space quantity for SYSPRINT files.

**User response:** Enter a value of 1 - 16777215.

---

**HLO460E** Secondary quantity for SYSPRINT is invalid. Enter a value of 1 - 16777215.

**Explanation:** You must specify a secondary space quantity for SYSPRINT files.

**User response:** Enter a value of 1 - 16777215.

---

**HLO461E** Secondary quantity for SYSPRINT is required. Enter a value of 1 - 16777215.

**Explanation:** You must specify a secondary space quantity for SYSPRINT files.

**User response:** Enter a value of 1 - 16777215.

---

---

**HLO462E** Maximum volumes for SYSPRINT is invalid. Enter a value of 1 - 255.

**Explanation:** You must specify the maximum number of volumes for SYSPRINT files.

**User response:** Enter a value of 1 - 255.

---

**HLO463E** Maximum volumes for SYSPRINT is required. Enter a value of 1 - 255.

**Explanation:** You must specify the maximum number of volumes for SYSPRINT files.

**User response:** Enter a value of 1 - 255.

---

**HLO464E** Number of DDs is invalid. Enter a value of 1 - 99 for disk or 3 - 99 for tape device.

**Explanation:** You must specify the number of DD statements to be used.

**User response:** Enter a value of 1 - 99 for disk or 3 - 99 for a tape device.

---

**HLO465E** Number of DDs is required. Enter a value of 1 - 99 for disk or 3 - 99 for tape device.

**Explanation:** You must specify the number of DD statements to be used.

**User response:** Enter a value of 1 - 99 for disk or 3 - 99 for a tape device.

---

**HLO466E** Primary space in sort work parameters is invalid. Enter a value of 1 - 99999.

**Explanation:** You must specify the primary space quantity in the sort work files parameters.

**User response:** Enter a value of 1 - 99999.

---

**HLO467E** Primary space in sort work parameters is required. Enter a value of 1 - 99999.

**Explanation:** You must specify the primary space quantity in the sort work files parameters.

**User response:** Enter a value of 1 - 99999.

---

**HLO468E** Secondary space in sort work parameters is invalid. Enter a value of 1 - 99999.

**Explanation:** You must specify the secondary space quantity in the sort work files parameters.

**User response:** Enter a value of 1 - 99999.

---

---

**HLO469E** Secondary space in sort work parameters is required. Enter a value of 1 - 99999.

**Explanation:** You must specify the secondary space quantity in the sort work files parameters.

**User response:** Enter a value of 1 - 99999.

---

**HLO470E** Sort work unit device type is not recognized by OS/390 as a valid device type.

**Explanation:** You must specify the sort work file unit device to be used when Accelerator Loader generates utility JCL. Valid values are SYSALLDA, DISK, and so on.

**User response:** Enter a valid device type.

---

**HLO471E** Sort work unit device is required. Enter the unit device (SYSDA, DISK, etc.) that you want Accelerator Loader to generate when generating sort work file DDs.

**Explanation:** You must specify the sort work file unit device to be used when the product generates sort work file DDs. Valid values are SYSALLDA, DISK, and so on.

**User response:** Enter a valid device type.

---

**HLO472E** Utility REGION size is invalid. Enter the REGION size in megabytes that you want Accelerator Loader to use when generating utility JCL. Enter a value of 0 - 2047.

**Explanation:** You must specify the REGION size in megabytes that is to be used when the product generates utility JCL.

**User response:** Enter a value of 0 - 2047.

---

**HLO473E** Utility REGION size is required. Enter the REGION size in megabytes that you want Accelerator Loader to generate when generating utility JCL. Enter a value of 0 - 2047.

**Explanation:** You must specify the REGION size in megabytes that is to be used when the product generates utility JCL.

**User response:** Enter a value of 0 - 2047.

---

**HLO474E** When a tape device is used, data set type, tracks/cylinders, and primary/secondary space cannot be specified.

**Explanation:** Data set type, tracks/cylinders, and

primary/secondary space values are valid for DASD devices only.

**User response:** Change the device type to a DASD device, or remove the incompatible values for the tape device.

---

**HLO475E Accelerator Loader Plan is required. Enter a value.**

**Explanation:** You must specify the product plan to be used when connecting to the DB2 catalog. The value can contain up to 8 alphanumeric characters.

**User response:** Enter a valid plan.

---

**HLO476E Accelerator Loader Plan is invalid. Enter a valid value.**

**Explanation:** You must specify a valid product plan to be used when connecting to the DB2 catalog. The value can contain up to 8 alphanumeric characters.

**User response:** Enter a valid plan.

---

**HLO477E DB2 ZPARMs member is required. Enter a value.**

**Explanation:** You must specify the ZPARM load module member name that is generated for this DB2 subsystem. The value can contain up to 8 alphanumeric characters.

**User response:** Enter a valid value.

---

**HLO478E DB2 ZPARMs member is invalid. Enter a valid value.**

**Explanation:** You must specify the ZPARM load module member name that is generated for this DB2 subsystem. The value can contain up to 8 alphanumeric characters.

**User response:** Enter a valid value.

---

**HLO479E Bootstrap 01 data set could not be found in the MVS catalog.**

**Explanation:** You must specify the full data set name of the bootstrap data set that is being used by this DB2 subsystem.

**User response:** Enter a valid data set name.

---

**HLO480E DB2 Bootstrap DSN 01 is a required field. Enter the full DSN of the bootstrap data set.**

**Explanation:** You must specify the full data set name of the bootstrap data set that is being used by this DB2 subsystem.

**User response:** Enter the bootstrap data set name.

---

**HLO481E Bootstrap 02 data set could not be found in the MVS catalog.**

**Explanation:** You must specify the full data set name of bootstrap data set 02 that is being used by this DB2 subsystem.

**User response:** Enter the bootstrap data set name.

---

**HLO482E DB2 Bootstrap DSN 02 is a required field. Enter the full DSN of the bootstrap data set.**

**Explanation:** You must specify the full data set name of the bootstrap data set that is being used by this DB2 subsystem.

**User response:** Enter the bootstrap data set name.

---

**HLO483E DB2 Loadlib1 data set could not be found in the MVS catalog.**

**Explanation:** You must specify the full name of the data set that comprises the current load library concatenation for DB2, and is used during batch job processing; up to 47 alphanumeric characters.

**User response:** Enter the load library data set name.

---

**HLO484E DB2 Loadlib1 is a required field. Enter the DSN of the DB2 load library concatenation used during batch job processing.**

**Explanation:** You must specify the full name of the data set that comprises the current load library concatenation for DB2, and is used during batch job processing; up to 47 alphanumeric characters.

**User response:** Enter the load library data set name.

---

**HLO485E DB2 Loadlib2 data set could not be found in the MVS catalog.**

**Explanation:** You must specify the full name of the data set that comprises the current load library concatenation for DB2, and is used during batch job processing; up to 47 alphanumeric characters.

**User response:** Enter the load library data set name.

---

**HLO486E DB2 Loadlib3 data set could not be found in the MVS catalog.**

**Explanation:** You must specify the full name of the data set that comprises the current load library concatenation for DB2, and is used during batch job processing; up to 47 alphanumeric characters.

**User response:** Enter the load library data set name.

---

**HLO487E DB2 Loadlib4 data set could not be found in the MVS catalog.**

**Explanation:** You must specify the full name of the data set that comprises the current load library concatenation for DB2, and is used during batch job processing; up to 47 alphanumeric characters.

**User response:** Enter the load library data set name.

---

**HLO488E DB2 Loadlib5 data set could not be found in the MVS catalog.**

**Explanation:** You must specify the full name of the data set that comprises the current load library concatenation for DB2, and is used during batch job processing; up to 47 alphanumeric characters.

**User response:** Enter the load library data set name.

---

**HLO489E Specified data set for generated JCL could not be found in the MVS catalog.**

**Explanation:** You must specify a fully qualified data set name (without quotation marks).

**User response:** Enter the data set name.

---

**HLO490E Data set name for the generated JCL is required. Enter a valid data set name.**

**Explanation:** You must specify the fully qualified data set name (without quotation marks) in which to save the generated job. If the data set does not exist, the product creates it.

**User response:** Enter the data set name.

---

**HLO491E Member name for generated JCL is invalid.**

**Explanation:** If the data set that is to hold the generated job is a PDS, you must specify a valid member name for the job output. If the member does not exist, the product creates.

**User response:** Enter the PDS member name.

---

**HLO492E Member name for generated JCL is required.**

**Explanation:** If the data set that is to hold the generated job is a PDS, you must specify a valid member name for the job output. If the member does not exist, the product creates.

**User response:** Enter a valid PDS member name.

---

**HLO493E Enter either DFSORT or SYNCSORT in the Sort program field. This value indicates the program to be used for sort processing.**

**Explanation:** You must specify the sort program that is installed on the LPAR (DFSORT or SYNCSORT).

**User response:** Enter the sort program that you want to use.

---

**HLO494E Number of buffers value must be 1 - 99.**

**Explanation:** The value in the Number of buffers field is invalid.

**User response:** Enter a valid value.

---

**HLO495E Channel programs value must be numeric.**

**Explanation:** You must specify the number of channel programs to be used by the product. Specify 0 to use a predetermined channel program setting to attempt to gain optimal performance, or specify a value of 1 - 99.

**User response:** Enter a valid value.

---

**HLO496E Use DB2 Sort when possible value is invalid. Valid values are Yes and No.**

**Explanation:** The Use DB2 Sort when possible field indicates whether the DB2 Sort product is to be used for internal product sorts. If you specify No, then the product uses the sort program (DFSORT or SYNCSORT) that is specified in the Sort Program Installed field.

**User response:** Enter either Yes or No.

---

**HLO497E An error occurred while checking <data\_set\_name> bootstrap data set: <message\_text>.**

**Explanation:** The specified bootstrap data set (BSDS) is invalid for the reason that is indicated in the message text.

**User response:** Specify a valid BSDS.

---

**HLO500E Substring specification is invalid. Follow qualifier (start, length) notation with 1-based start and length.**

**Explanation:** If you specify the substring qualifier code, then you must specify the starting position and length of the substring.

**User response:** Enter valid values.

---

---

**HLO501E**    **Substring start position exceeds the qualifier length.**

**Explanation:** The substring start position exceeds the qualifier length.

**User response:** Enter a valid value.

---

**HLO502E**    **Substring end position exceeds qualifier length.**

**Explanation:** The substring end position exceeds the qualifier length.

**User response:** Enter a valid value.

---

**HLO503E**    **Unknown qualifier that starts with & was specified.**

**Explanation:** An unknown qualifier that starts with an ampersand was specified.

**User response:** Enter a valid value.

---

**HLO505E**    **First character of every node must be alphabetic or national.**

**Explanation:** The specified value is invalid.

**User response:** Enter a valid value.

---

**HLO506E**    **All characters in DSN must be alphanumeric or national.**

**Explanation:** The specified data set name is invalid.

**User response:** Enter a valid value.

---

**HLO507E**    **Consecutive periods are not allowed in data set names.**

**Explanation:** The specified value is invalid.

**User response:** Enter a valid value.

---

**HLO508E**    **Data set names cannot be terminated by a period.**

**Explanation:** The specified value is invalid.

**User response:** Enter a valid value.

---

**HLO509E**    **Data set name node must be less than 8 characters.**

**Explanation:** The specified value is invalid.

**User response:** Enter a valid value.

---



---

**HLO510E**    **Data set name cannot exceed 44 characters.**

**Explanation:** The specified value is invalid.

**User response:** Enter a valid value.

---

**HLO511E**    **GDG specification is invalid.**

**Explanation:** The generation data group (GDG) specification is invalid.

**User response:** Enter a valid value.

---

**HLO512E**    **GDG specification must be the last qualifier.**

**Explanation:** The generation data group (GDG) specification must be the last qualifier.

**User response:** Enter a valid value.

---

**HLO513E**    **Specified qualifier is valid only for TEMPLATE specification.**

**Explanation:** The specified qualifier is not valid in the field.

**User response:** Enter a valid value.

---

**HLO520E**    **Template name is required.**

**Explanation:** A required value is missing.

**User response:** Enter a template name.

---

**HLO521E**    **Member name is required for a partitioned data set.**

**Explanation:** A required value is missing.

**User response:** Enter a valid value.

---

**HLO522E**    **Data set name is required.**

**Explanation:** A required value is missing.

**User response:** Enter a valid value.

---

**HLO523E**    **SORTNUM is valid only when SORTDEVT is specified.**

**Explanation:** You cannot specify a value for SORTNUM unless you also specify a value for SORTDEVT.

**User response:** Enter a valid value for SORTDEVT or remove the SORTNUM value.

---

## HLO524E • HLO540E

---

**HLO524E** Primary and secondary space are valid only when Space unit is specified.

**Explanation:** You must specify a value in the Space units field when you specify primary and secondary space values.

**User response:** Enter a valid value.

---

**HLO525E** FlashCopy DSN template and template name are required.

**Explanation:** You must specify the FlashCopy template data set name.

**User response:** Enter valid values.

---

**HLO526E** Template DSN is required.

**Explanation:** You must specify the template data set name.

**User response:** Enter a valid value.

---

**HLO527E** Accelerator name is required.

**Explanation:** You must specify the name of the accelerator on which to load data.

**User response:** Enter a valid value.

---

**HLO528I** Table has no referentially dependent tables

**Explanation:** The specified line command is not valid because the table has no referentially dependent tables.

**User response:** Enter a valid line command or select another table.

---

**HLO532E** Member name is allowed only for partitioned data sets.

**Explanation:** If the data set to hold the generated job is a PDS, specify a member name. If the member does not exist, the product creates it.

**User response:** Remove the member name or specify a partitioned data set.

---

**HLO533E** Load time is CURRENT, but an end point was specified. Change load time to SPECIFIED or delete the end point.

**Explanation:** The value CURRENT directs the product to read the log and load data up to the current point in time, which is the end of the log file. An end point value is not valid.

**User response:** Change the load time to SPECIFIED or remove the end point.

---

**HLO534E** Load time is SPECIFIED. RBA end point or timestamp end point are required.

**Explanation:** The Load time value SPECIFIED directs the product to read the log and load data up to the end point that is specified in either the RBA/LRSN or the Timestamp End Point field.

**User response:** Change the load time to CURRENT or enter an RBA or time stamp end point.

---

**HLO535E** RBA end point and timestamp end point cannot be specified at the same time.

**Explanation:** You cannot specify both an RBA end point and a time stamp end point.

**User response:** Remove either the RBA end point or the time stamp end point.

---

**HLO536E** Both primary and secondary space must be specified at the same time.

**Explanation:** You must specify values for primary space and secondary space.

**User response:** Enter values in the primary and secondary space fields.

---

**HLO537E** All objects must be partitions of only one table.

**Explanation:** Partitions of multiple tables were selected.

**User response:** Select partitions of only one table.

---

**HLO538W** Some partitions of this table are already selected.

**Explanation:** Partitions of this table have been selected more than once.

**User response:** Select partitions only once.

---

**HLO539W** All partitions of this table are already selected.

**Explanation:** Selecting additional partitions is not necessary.

**User response:** You do not have to select any other partitions of this table.

---

**HLO540E** Quiesce end point is valid only for load time = QUIESCE.

**Explanation:** A quiesce end point is valid only for the Load time value QUIESCE.

**User response:** Either remove the quiesce end point value or change the load time value.

---

**HLO541E** Only quiesce end point is valid for load time = QUIESCE.

**Explanation:** With the load time value QUIESCE, only a quiesce end point is valid.

**User response:** Enter only a quiesce end point value for a Load time value of QUIESCE, or change the Load time value.

---

**HLO542E** Resume and Replace are mutually exclusive options.

**Explanation:** The LOAD job cannot contain both the RESUME and the REPLACE options.

**User response:** Remove one of the options from the job.

---

**HLO548E** Invalid timestamp. Use YYYY-MM-DD-hh.mm.ss.nnnnnn format.

**Explanation:** The format of the time stamp value is invalid.

**User response:** Enter the time stamp in the format YYYY-MM-DD-hh.mm.ss.nnnnnn.

---

**HLO549E** Invalid time zone. Valid values are LOCAL and GMT.

**Explanation:** The valid values for time zone are LOCAL and GMT.

**User response:** Enter a valid time zone.

---

**HLO550E** *field\_value* value is invalid. Valid values are YES and NO.

**Explanation:** Valid values for this field are YES and NO.

**User response:** Enter either YES or NO.

---

**HLO551E** Invalid qualifier code. Enter a numeric value of 1 - 27.

**Explanation:** Valid qualifier codes are 1 - 27.

**User response:** Enter a valid qualifier code.

---

**HLO552E** Specified qualifier code requires a free form literal.

**Explanation:** The Free Form Literal qualifier code was selected with no value entered for free form literal.

**User response:** Enter a value for Freeform Literal or remove the Freeform Literal qualifier code.

---

**HLO553E** Invalid accelerator name is specified.

**Explanation:** The name that was specified for the accelerator is not valid.

**User response:** Enter a valid accelerator name.

---

**HLO554E** FlashCopy = YES is valid only for load time = CURRENT.

**Explanation:** The value YES for FlashCopy can be specified only when the value in the Load time field is CURRENT.

**User response:** Change the FlashCopy value to NO or change the Load time value.

---

**HLO558E** Substring starting position must be 1 - 8.

**Explanation:** The starting position value must be 1 - 8.

**User response:** Enter a valid value.

---

**HLO559E** Substring length must be 1 - 8.

**Explanation:** The substring length value must be 1 - 8.

**User response:** Enter a valid value.

---

**HLO560E** Sum of starting position and length cannot exceed 9.

**Explanation:** The specified value is not valid.

**User response:** Enter a valid value.

---

**HLO561E** Invalid load time value. Valid values are CURRENT, SPECIFIED, and QUIESCE.

**Explanation:** The specified value is not valid.

**User response:** Enter a valid value.

---

**HLO562E** RBA or LRSN end point contains invalid hexadecimal character. Valid characters are 0 - 9 and A - F.

**Explanation:** The specified value is not valid.

**User response:** Enter a valid value.

---

**HLO563E** Timestamp end point has invalid year value. Valid values are 0000 through 9999.

**Explanation:** The specified value is not valid.

**User response:** Enter a valid value.

---

## HLO564E • HLO580E

---

**HLO564E** Timestamp end point has invalid month value. Valid values are 1 through 12.

**Explanation:** The specified value is not valid.

**User response:** Enter a valid value.

---

**HLO565E** Timestamp end point has invalid day value. Valid values are 1 through last day of specified month.

**Explanation:** The specified value is not valid.

**User response:** Enter a valid value.

---

**HLO566E** Timestamp end point has invalid hour value. Valid values are 0 through 23.

**Explanation:** The specified value is not valid.

**User response:** Enter a valid value.

---

**HLO567E** Timestamp end point has invalid minutes value. Valid values are 0 through 59.

**Explanation:** The specified value is not valid.

**User response:** Enter a valid value.

---

**HLO568E** Timestamp end point has invalid seconds value. Valid values are 0 through 59.

**Explanation:** The specified value is not valid.

**User response:** Enter a valid value.

---

**HLO569E** Timestamp end point has invalid microseconds value. Valid values are 000000 through 999999.

**Explanation:** The specified value is not valid.

**User response:** Enter a valid value.

---

**HLO570E** SYSCOPY scan operating mode is invalid. Valid values are LOCAL, RECOVER, ZPARM, and USER.

**Explanation:** The specified value is not valid.

**User response:** Enter a valid value.

---

**HLO571E** SYSCOPY selection preference is invalid. Valid value must consist of tokens LP, LB, RP, RB, and FC in any order.

**Explanation:** The specified value is not valid.

**User response:** Enter a valid value.

---

---

**HLO572E** Log reader copy preference value is invalid. Valid value must consist of tokens R1, R2, A1, and A2 in any order.

**Explanation:** The specified value is not valid.

**User response:** Enter a valid value.

---

**HLO573E** Number of PARALLEL log reads must be 0 - 16.

**Explanation:** The specified value is not valid.

**User response:** Enter a valid value.

---

**HLO574E** Invalid secondary space. Valid values are 1 through 1677215 or blank.

**Explanation:** The specified value is not valid.

**User response:** Enter a valid value.

---

**HLO575E** Enter a profile creator.

**Explanation:** You must specify the user ID of the user who created the profile.

**User response:** Enter a valid value.

---

**HLO576E** Enter a valid data set name.

**Explanation:** The specified value is not valid.

**User response:** Enter a valid value.

---

**HLO577E** Enter a valid member name.

**Explanation:** The specified value is not valid.

**User response:** Enter a valid value.

---

**HLO578E** Enter a valid profile name.

**Explanation:** The specified value is not valid.

**User response:** Enter a valid value.

---

**HLO579E** Invalid share option. Valid options are UPDATE, VIEW ONLY, and NO ACCESS.

**Explanation:** The specified value is not valid.

**User response:** Enter a valid value.

---

**HLO580E** Invalid value. Valid values are / or empty.

**Explanation:** The valid value is a forward slash ( / ), or you can leave the field blank.

**User response:** Enter a valid value.

---



---

**HLO581E** Invalid DISCARDS value. Valid values are 0 through 2147483647.

**Explanation:** The specified value is not valid.

**User response:** Enter a valid value.

---

**HLO582E** Invalid LOG value. Valid values are YES, NO, and NOCOPYPEND.

**Explanation:** The specified value is not valid.

**User response:** Enter a valid value.

---

**HLO583E** Invalid NUMRECS value. Valid values are 1 through 1099511627776 and blank.

**Explanation:** The specified value is not valid.

**User response:** Enter a valid value.

---

**HLO584E** Invalid SORTNUM value. Valid values are 2 through 255 and blank.

**Explanation:** The specified value is not valid.

**User response:** Enter a valid value.

---

**HLO585E** Invalid SORTDEVT value. Valid values are disk or tape devices and blank.

**Explanation:** The specified value is not valid.

**User response:** Enter a valid value.

---

**HLO586E** Invalid disposition. See documentation for valid syntax.

**Explanation:** You must specify a valid z/OS data set disposition as documented in the *DB2 for z/OS Utility Guide and Reference*.

**User response:** Enter a valid DD disposition. For more information, see the product documentation.

---

**HLO587E** Invalid unit type. Unit type must be a valid DASD type.

**Explanation:** The specified unit type is not a valid DASD type.

**User response:** Enter a valid unit type.

---

**HLO588E** Invalid space unit. Valid values are CYL, TRK, MB, and blank.

**Explanation:** The specified value is not valid.

**User response:** Enter a valid value.

---



---

**HLO589E** Invalid primary space. Valid values are 1 through 1677215 and blank.

**Explanation:** The specified value is not valid.

**User response:** Enter a valid value.

---

**HLO590E** Invalid PCTPRIME. Valid values are 0 through 100 and blank.

**Explanation:** The specified value is not valid.

**User response:** Enter a valid value.

---

**HLO591E** Invalid MAXPRIME. Valid values are 0 through 99999999 and blank.

**Explanation:** The specified value is not valid.

**User response:** Enter a valid value.

---

**HLO592E** Invalid NBRSECOND. Valid values are 1 through 10 and blank.

**Explanation:** The specified value is not valid.

**User response:** Enter a valid value.

---

**HLO593E** Invalid profile type. Valid profile types are CONSISTENT and DUAL.

**Explanation:** The specified value is not valid.

**User response:** Enter a valid value.

---

**HLO594E** Invalid profile type. Enter one of the listed values (ALL,1,2,3,4).

**Explanation:** The specified value is not valid. Valid values are 1 for Dual, 2 for Accelerator only, 3 for Consistent, 4 for Image Copy, and ALL.

**User response:** Enter a valid value.

---

**HLO595E** Invalid *templateName* template DD name.

**Explanation:** The specified template DD name is not valid for the TEMPLATE utility.

**User response:** Enter a valid value.

---

**HLO596E** Invalid quiesce end point. Valid values are 1 through 999.

**Explanation:** The specified value is not valid.

**User response:** Enter a valid value.

---

**HLO597E** Invalid template name.

**Explanation:** The specified value is not valid.

**User response:** Enter a valid value.

---

---

**HLO598E** Invalid substring qualifier code. Valid values are 1 through 25.

**Explanation:** The specified value is not valid.

**User response:** Enter a valid value.

---

**HLO599W** Incomplete profile was saved successfully.

**Explanation:** This is an informational message.

**User response:** Complete the profile before building the job.

---

**HLO600I** Edited profile was saved successfully.

**Explanation:** This is an informational message.

**User response:** No action is required.

---

**HLO601I** Created profile was saved successfully.

**Explanation:** This is an informational message.

**User response:** No action is required.

---

**HLO602I** Renamed profile was saved successfully.

**Explanation:** This is an informational message.

**User response:** No action is required.

---

**HLO603E** Cannot load profile description from repository.

**Explanation:** The product could not load the profile description from the repository.

**User response:** If unable to determine the reason for the failure, contact IBM Software Support. Have available the listing that contains this message.

---

**HLO604E** Incomplete profile. Edit profile to specify required options.

**Explanation:** Required profile options are missing.

**User response:** Specify values for the required profile options.

---

**HLO605E** Profile is inaccessible for specified action.

**Explanation:** The profile is not compatible with the specified action.

**User response:** Specify a valid action.

---

---

**HLO606E** Profile with the same creator, name, and type already exists.

**Explanation:** Profile information must be unique.

**User response:** Specify unique profile information.

---

**HLO607E** Cannot open table column info data set.

**Explanation:** The product cannot open the table column info data set.

**User response:** Make sure that the column info data set exists, and that you have the proper authority to read it.

---

**HLO608E** Cannot open data set for JCL generation.

**Explanation:** The product cannot open the data set for JCL generation.

**User response:** Make sure that the data set for JCL generation exists, and that you have the proper authority to write to it.

---

**HLO609E** Cannot create data set for JCL generation.

**Explanation:** The product cannot create the data set for JCL generation.

**User response:** Make sure that you have the proper authority to create the data set, and that enough space is available to allocate the data set. Check the data set allocation parameters on the Data set allocation parameters panel.

---

**HLO610I** Job was built successfully.

**Explanation:** This is an informational message.

**User response:** No action is required.

---

**HLO611E** Accelerators are not associated with this DB2 subsystem.

**Explanation:** The product received an empty list of accelerators from DB2.

**User response:** Select a DB2 subsystem on which Analytics Accelerator is installed, or contact your administrator to install Analytics Accelerator on the selected DB2 subsystem.

---

**HLO612I** Profile was deleted successfully.

**Explanation:** This is an informational message.

**User response:** No action is required.

---

---

**HLO613E** This table is not supported.

**Explanation:** The specified table is not supported. For more information about supported tables, see “Restrictions and considerations for loading from a DB2 image copy” on page 6-1 and “Restrictions and considerations for loading from an external file” on page 7-1.

**User response:** Select another table.

---

**HLO614W** Profile without tables was saved successfully.

**Explanation:** A profile can be saved without an associated table. To use the profile to build JCL to perform the load, you must edit the profile to add a table.

**User response:** Specify a table before building the JCL.

---

**HLO615E** No tables were specified in the profile.

**Explanation:** A profile can be saved without an associated table; however, to use the profile to build JCL to perform the load, you must add a table.

**User response:** Edit the profile to add a table.

---

**HLO616E** Invalid utility ID. Valid values are blank and strings of letters, numerals, and symbols (@, \$, #, !, ~).

**Explanation:** The specified utility ID contains invalid symbols. For the utility ID value, you can leave the field blank or specify a string. Valid string values are letters (A - Z), numerals (0 - 9), national characters (@, \$, #), exclamation point (!), and not symbol (~).

**User response:** Enter a valid value.

---

**HLO617E** Invalid parallel task value. Valid values are blank or 1 - 20.

**Explanation:** The specified value is not valid.

**User response:** Enter a valid value.

---

**HLO618E** Invalid *<template\_name>* DSN template. A valid template must contain the &&PART or &&PA variable.

**Explanation:** The specified value is not valid.

**User response:** Enter a valid value.

---

**HLO619E** Input DSN template and template name are required for parallel load.

**Explanation:** You must specify the input DSN template and template name when parallel load is enabled.

**User response:** Enter valid values.

---

**HLO620E** Number of PARALLEL log apply must be 1 - 10.

**Explanation:** The specified value is not valid.

**User response:** Enter a valid value.

---

**HLO621E** Invalid value. Enter one of the listed values (1,2,3,4).

**Explanation:** The specified value is not valid.

**User response:** Enter a valid value.

---

**HLO623I** The profile has been converted to the current product version.

**Explanation:** The profile was created with an earlier version of the product. Using the Copy line command converts it to the current version. The original profile remains unchanged. You can use the following line commands with the original profile: Build, Delete, Rename, View, Copy.

**User response:** No action is required.

---

**HLO624E** Invalid value. Enter a valid value (No, Add, or Refresh).

**Explanation:** The specified value is not valid.

**User response:** Enter a valid value.

---

**HLO627E** Invalid value. Adding table to accelerator with refresh is denied when RESUME is enabled.

**Explanation:** You cannot specify both Refresh for Add table to Accelerator and Yes for Resume.

**User response:** Change the option values in one of the following ways:

- Resume = No
  - Add table to Accelerator = No
  - Add table to Accelerator = Add
- 

**HLO700E** An error occurred while opening the DB2 load libraries: RC = *return\_code*.

**Explanation:** The product encountered the error with the specified return code while opening the DB2 load library data sets.

**User response:** Make sure that the load library data sets that are specified on the DB2 Subsystem Parameters panel exist, and that you have the proper authority to read them.

---

---

**HLO701E** An error occurred while attaching the DB2 attachment facility subtask: RC = *return\_code*.

**Explanation:** The product encountered the error with the specified return code while attaching the DB2 attachment facility subtask.

**User response:** See *DB2 for z/OS Codes* for information about the return code.

---

**HLO702E** The task is not running APF-authorized.

**Explanation:** The task requires load module HLOXDBT to be APF authorized.

**User response:** Set up APF authorization for load module HLOXDBT.

---

**HLO703S** The DB2 attachment facility subtask ended unexpectedly: RC = *return\_code*.

**Explanation:** The product encountered the error with the specified return code.

**User response:** Make sure that the DB2 subsystem is active.

---

**HLO706E** Access for the specified user ID *userID* has been revoked.

**Explanation:** A valid user ID and password with proper authority are required to establish a connection to the DB2 subsystem.

**User response:** Make sure that you have the proper authority to connect to the DB2 subsystem.

---

**HLO707E** An error occurred while performing authentication: SAF RC = *return\_code*, RC = *return\_code*, RSN = *return\_code*.

**Explanation:** You must have the proper authority to access the DB2 subsystem.

**User response:** Make sure that you have the proper authority. See *z/OS Security Server RACF Callable Services* guide for information about the codes.

---

**HLO708E** An invalid dynamic allocation parameter was specified: code = *code*.

**Explanation:** The DD allocation for the DB2 load library data set failed.

**User response:** If unable to determine the reason for the failure, contact IBM Software Support. Have available the listing that contains this message.

---

**HLO709E** A dynamic allocation error occurred: info code = *infoCode*, error code = *errorCode*.

**Explanation:** The product encountered an error with the specified codes.

**User response:** See *z/OS MVS Programming Authorized Assembler Services Guide* for information about the codes. If unable to determine the cause of the error, contact IBM Software Support. Have available the listing that contains this message.

---

**HLO710E** Dynamic allocation query error occurred: info code = *infoCode*, error code = *errorCode*.

**Explanation:** The product encountered an error with the specified codes.

**User response:** See *z/OS MVS Programming Authorized Assembler Services Guide* for information about the codes. If unable to determine the cause of the error, contact IBM Software Support. Have available the listing that contains this message.

---

**HLO711E** Dynamic free error occurred: info code = *infoCode*, error code = *errorCode*.

**Explanation:** The product encountered an error with the specified codes.

**User response:** See *z/OS MVS Programming Authorized Assembler Services Guide* for information about the codes. If unable to determine the cause of the error, contact IBM Software Support. Have available the listing that contains this message.

---

**HLO712E** Dynamic concatenation error occurred: info code = *infoCode*, error code = *errorCode*.

**Explanation:** The product encountered an error with the specified codes.

**User response:** See *z/OS MVS Programming Authorized Assembler Services Guide* for information about the codes. If unable to determine the cause of the error, contact IBM Software Support. Have available the listing that contains this message.

---

**HLO713E** SQL error occurred: SQL code = *sqlCode*, SQL state = *sqlState*.

**Explanation:** The product encountered an error with the specified codes.

**User response:** See *DB2 for z/OS Codes* for information about the codes. If unable to determine the cause of the error, contact IBM Software Support. Have available the listing that contains this message.

---

---

**HLO714E** SQL error occurred: error code = *errorCode*.

**Explanation:** The product encountered an error with the specified code.

**User response:** See *DB2 for z/OS Messages* for information about the code. If unable to determine the cause of the error, contact IBM Software Support. Have available the listing that contains this message.

---

**HLO715S** DB2 attachment facility error occurred: function = *functionCode*, RC = *return\_code*, reason = *reasonCode*.

**Explanation:** The product encountered an error with the specified codes.

**User response:** See *DB2 for z/OS Application Programming and SQL Guide* for information about the codes. If unable to determine the cause of the error, contact IBM Software Support. Have available the listing that contains this message.

---

**HLO716E** Input DB2 command is too long.

**Explanation:** The DB2 command failed because the command is not valid.

**User response:** If unable to determine the reason for the failure, contact IBM Software Support. Have available the listing that contains this message.

---

**HLO717E** Error occurred while making an IFI call.

**Explanation:** The product encountered an error while making the DB2 request that is described in the message.

**User response:** See *DDB2 for z/OS Codes* for information about the codes. If unable to determine the cause of the error, contact IBM Software Support. Have available the listing that contains this message.

---

**HLO722E** An error occurred while writing converted record (profile id=<*id*>, type=<*type*>, number=<*number*>).

**Explanation:** An I/O error occurred while the product was writing to the <HLQ>.PROFILE.RPT data set. This message follows a VSAM library message in the range HLO120-HLO133).

**User response:** Make sure that the VSAM file exists, that you have WRITE permission, and that writing to the file is possible.

---

**HLO723I** Profile <*profile creator*>.<*profile name*> for <*ssid*> was converted successfully.

**Explanation:** The product has converted the specified profile to the new version.

**User response:** No action is required.

---

**HLO724W** Profile <*profile creator*>.<*profile name*> for <*ssid*> was partially converted.

**Explanation:** An I/O error occurred while the product was writing to the <HLQ>.PROFILE.RPT data set; part of the profile was successfully written to the profile data set. This message follows HLO722E and a VSAM library message in the range HLO120-HLO133).

**User response:** Make sure that the VSAM file exists, that you have WRITE permission, and that writing to the file is possible.

---

**HLO725E** An error occurred while writing converted profile <*profile creator*>.<*profile name*> for <*ssid*>.

**Explanation:** An I/O error occurred while the product was writing to the <HLQ>.PROFILE.RPT data set. This message follows a VSAM library message in the range HLO120-HLO133).

**User response:** Make sure that the VSAM file exists, that you have WRITE permission, and that writing to the file is possible.

---

**HLO726I** Total read profile count: <*number\_of\_profiles*>.

**Explanation:** The product read the specified number of profiles.

**User response:** No action is required.

---

**HLO727I** Total converted profiles count: <*number\_of\_profiles*>.

**Explanation:** The product converted the specified number of profiles.

**User response:** No action is required.

---

**HLO728I** Total converted profiles count: <*number\_of\_profiles*>.

**Explanation:** The product converted the specified number of profiles.

**User response:** No action is required.

---

**HLO810E** Invalid CNUM parameter. Valid parameters are ON, OFF, or blank.

**Explanation:** CNUM was issued with an invalid parameter. Issuing CNUM with no parameter acts as an ON/OFF toggle. ON and OFF are the only parameters that are accepted. ON turns the CNUM display on. OFF turns the CNUM display off.

**User response:** Use a valid CNUM parameter (ON, OFF, or blank).

---

**HLO811E** Invalid COLS parameter. Valid parameters are ON, OFF, or blank.

**Explanation:** COLS was issued with an invalid parameter. Issuing COLS with no parameters acts as an ON/OFF toggle. ON and OFF are the only parameters that are accepted.

**User response:** Specify a valid value for the COLS parameter. COLS ON turns the COLS display on, and CCOLS OFF turns the COLS display off.

---

**HLO812I** The FIND command requires a match string

**Explanation:** No parameters were specified with the FIND command. A match string must be specified.

**User response:** Enter FIND parameters.

---

**HLO813E** The RFIND key can only be used after a FIND character string is entered.

**Explanation:** A repeat FIND (RFIND) command was issued before the FIND command was issued. You must issue FIND before RFIND.

**User response:** Issue FIND before attempting to issue RFIND.

---

**HLO814E** An unknown column *column* was specified.

**Explanation:** The product does not recognize the column that was specified with the SORT command.

**User response:** Verify that you correctly typed the name of the column or select another column.

---

**HLO815E** SORT is not supported for the specified column.

**Explanation:** The column that you attempted to SORT is not supported as a column on which to sort.

**User response:** See the Define Sort Columns panel for a list of valid columns on which the sort can be based, and redefine the sort.

---

**HLO816E** Max Sort Columns exceeded. Sorting first 9 columns.

**Explanation:** More columns were selected for sorting than are supported. Nine columns can be sorted at a time. Under certain circumstances, the limit is less than nine, due to internal constraints.

**User response:** Specify an allowable maximum number of sort columns.

---

---

**HLO817E** Invalid column selection. Set cursor to valid column.

**Explanation:** An invalid column was selected.

**User response:** Move the cursor to a valid column.

---

**HLO818E** Invalid command parameters.

**Explanation:** Invalid command parameters were entered.

**User response:** Correct the command input and resubmit.

---

**HLO819E** Invalid location for the moved column. The source column cannot be moved to the new position.

**Explanation:** The source column cannot be moved to the new position.

**User response:** Correct the command input and resubmit.

---

**HLO820E** Not enough space for scrolling unfixed columns.

**Explanation:** The screen has insufficient space for some unfixed columns.

**User response:** Leave enough space for unfixed columns on the right side of the panel.

---

**HLO821E** Operation not valid for specified column.

**Explanation:** An invalid operation was entered.

**User response:** Enter a valid operation.

---

**HLO822E** Fixed columns cannot be hidden.

**Explanation:** An attempt was made to hide a fixed column, but fixed columns cannot be hidden.

**User response:** Either make a selected column unfixed, or select another column to hide.

---

**HLO823E** Invalid value entered for column size: non-numeric data.

**Explanation:** An invalid Cmd value was entered. The column size value must be a number between the values in the MIN and MAX fields.

**User response:** Either remove the invalid number or enter a valid value.

---

---

**HLO824E**    **Invalid value entered for column size: out of range.**

**Explanation:** An invalid Cmd value was entered. The column size value must be a number between the values in the MIN and MAX fields. MIN is the smallest acceptable value, and MAX is the largest acceptable value.

**User response:** Either remove the invalid number or enter a valid one.

---

**HLO825E**    **SIZE is not supported for the specified column.**

**Explanation:** An attempt was made to change the size of a column, but SIZE is not supported for that column.

**User response:** You can change the size of another column in which the minimum and maximum sizes are not equal.

---

**HLO870E**    **TBCREATE failed. RC= return\_code.**

**Explanation:** The **TBCREATE** command was issued to create a VIEW, but it failed with a hexadecimal return code as indicated in the message.

**User response:** Review ISPTLIB allocation and data set characteristics. Review security controlled access to ISPTLIB data sets. For information about return codes, see the *ISPF Services Guide* under **TBCREATE**.

---

**HLO871E**    **TBOPEN failed. RC= return\_code.**

**Explanation:** The **TBOPEN** command was issued to open an existing VIEW, but the command failed with a hexadecimal return code as indicated in the message.

**User response:** Review ISPTLIB allocation and data set characteristics. Review security controlled access to ISPTLIB data sets. For information about return codes, see the *ISPF Services Guide* under **TBOPEN**.

---

**HLO872E**    **TBCLOSE failed. RC=return\_code.**

**Explanation:** The **TBCLOSE** command failed with a hexadecimal return code as indicated in the message.

**User response:** Review ISPTLIB allocation and data set characteristics. Review security controlled access to ISPTLIB data sets. For information about return codes, see the *ISPF Services Guide* under **TBCLOSE**.

---

**HLO873E**    **TBDELETE failed. RC=return\_code.**

**Explanation:** The **TBDELETE** command failed with a hexadecimal return code as indicated in the message.

**User response:** Review ISPTLIB allocation and data set characteristics. Review security controlled access to ISPTLIB data sets. For information about return codes, see the *ISPF Services Guide* under **TBDELETE**.

---

**HLO874E**    **TBMOD failed. RC= return\_code.**

**Explanation:** The **TBMOD** command failed with a hexadecimal return code as indicated in the message.

**User response:** Review ISPTLIB allocation and data set characteristics. Review security controlled access to ISPTLIB data sets. For information about return codes, see the *ISPF Services Guide* **TBMOD**.

---

**HLO875E**    **TBGET failed. RC= return\_code.**

**Explanation:** The **TBGET** command failed with a hexadecimal return code as indicated in the message.

**User response:** Review ISPTLIB allocation and data set characteristics. Review security controlled access to ISPTLIB data sets. For information about return codes, see the *ISPF Services Guide* under **TBGET**.

---

**HLO876E**    **View table is in use.**

**Explanation:** The ISPTLIB and ISPTABL DDs are in use; however, the "in use" state should not prevent the batch JCL generator from reading the DDs.

**User response:** Review the ISPTLIB and ISPTABLE allocations. For information about ISPTLIB and ISPTABL, see the ISPF user guides for your version of ISPF. If you cannot determine the reason for this message, contact IBM Software Support. Have available the listing that contains this message.

---

**HLO877E**    **View library not allocated.**

**Explanation:** The ISPTLIB and ISPTABL DDs have not been allocated. Batch JCL generation continues but the job card rows might not be read from the skeleton file.

**User response:** Review the ISPTLIB and ISPTABLE allocations. For information about ISPTLIB and ISPTABL, see the ISPF user guides for your version of ISPF. If you cannot determine the reason for this message, contact IBM Software Support. Have available the listing that contains this message.

---

**HLO878E**    **TBTOP failed. RC=return\_code.**

**Explanation:** The **TBTOP** command failed with a hexadecimal return code as indicated in the message.

**User response:** Review ISPTLIB allocation and data set characteristics. Review security controlled access to ISPTLIB data sets. For information about return codes, see the *ISPF Services Guide* under **TBTOP**.

---

**HLO879E**    **TBSKIP failed. RC= return\_code.**

**Explanation:** The **TBSKIP** command failed with a (hex) return code as indicated in the message.

**User response:** Review ISPTLIB allocation and data set characteristics. Review security controlled access to

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ISPTLIB data sets. For information about return codes, see the *ISPF Services Guide* under **TBSKIP**.

---

**HLO940E Invalid selection character. Valid values are "F" and "U".**

**Explanation:** An invalid Cmd character was entered. Valid characters are F (FIX) and U (UNFIX).

**User response:** Either remove the invalid character or enter a valid one.

---

**HLO941E Column move failed: invalid location.**

**Explanation:** An attempt to move a column was made, but the attempt failed because the new location was invalid. The new column number cannot be greater than the number of columns.

**User response:** Specify a column number that is less than the number of columns.

---

**HLO942E Invalid column size. Column size must be numeric.**

**Explanation:** An invalid Cmd value was entered. Column size must be a number between the values in the MIN and MAX fields.

**User response:** Either remove the invalid number or enter a valid one.

---

**HLO943E Invalid column size. The specified value is out of range.**

**Explanation:** An invalid Cmd value was entered. Column size must be a number between the values in the MIN and MAX fields. MIN is the smallest acceptable value. MAX is the largest acceptable value.

**User response:** Either remove the invalid number or enter a valid one.

---

**HLO944E Total fixed column sizes cannot exceed screen size.**

**Explanation:** The Cmd values entered would have caused the sum of the FIXEd column sizes to exceed the screen size. Because FIXEd columns are always displayed, they must fit on the screen. The FIXEd columns contain an F or P in the Fix column.

**User response:** Either change the FIXEd column sizes so that the total is less than the screen size, or CANCEL to return to the previous panel.

---

**HLO945E Configuration request failed: at least one unfixed column would not be displayed**

**Explanation:** The requested column sizes would cause at least one unfixed column to become undisplayable. The cursor is positioned on the value where the

problem was detected. The unfixed area on the screen would be too small to show the column where the cursor is placed.

**User response:** To correct the problem:

1. Decrease the size of the column at which the cursor is pointing so that it can fit in the available unfixed area.
2. Set the unfixed area to its maximum size (width).
3. Decrease the size of the fixed area.
4. CANCEL to return to the previous panel.

---

**HLO946E Configuration request failed: the unfixed area would be too small to display this column.**

**Explanation:** The requested column sizes would make the UNFIXEd column at which the cursor is positioned undisplayable. The UNFIXEd area on the screen would be too small to show this column.

**User response:** You can shrink the FIXEd area by either unfixing columns or making FIXEd columns smaller.

---

**HLO947E Configuration request failed: not all columns can be displayed.**

**Explanation:** Fixing the requested columns would shrink the available area for unfixed columns so that some might not display. The cursor is placed on a row that represents one of the columns that would cause the error.

**User response:** To change column sizes, cancel out of the CFIX function and invoke the CSIZE function. Either cancel to exit CFIX with no change, or blank out one or more FIX selections until an allowable fixed size is reached.

---

**HLO948E Invalid FIXEd selections. Operation would not leave enough space for this column.**

**Explanation:** Fixing the columns as requested would make at least one unfixed column undisplayable. The cursor is positioned on the row that represents one of the unfixed columns that would cause an error where the minimum displayable size would not fit in the available screen area.

**User response:** To shrink the requested fixed area: -

- Request fewer fixed columns.
- Unfix one or more fixed columns.
- Exit CFIX and invoke CSIZE to shrink one or more fixed columns so that all unfixed columns have the space that they require.



---

**HLO949E Duplicate Cmd values entered.**

**Explanation:** Duplicate Cmd numbers were entered. The cursor points to the second instance of a Cmd value.

**User response:** Either change this value, clear it, or exit the CORDER function.

---

**HLO950E Invalid sort number. Enter a valid numeric digit.**

**Explanation:** An invalid character was entered in the Srt column.

**User response:** Enter a valid character. Valid characters include the digits 1 through 9, or the number of sortable columns, whichever is less.

---

**HLO951E Duplicate sort sequence number.**

**Explanation:** The same sort sequence number was entered for more than one column. The screen is positioned to the second instance.

**User response:** Enter a unique sort sequence number.

---

**HLO952E Sort sequence skips a number.**

**Explanation:** The selected sorting sequence skips a number. The screen is positioned to a selection after the missing number in the sequence.

**User response:** Specify a valid sort sequence that does not skip a number.

---

**HLO953E Invalid Dir entered. Direction must be A (ascending) or D (descending).**

**Explanation:** The selected sorting direction is invalid.

**User response:** Enter a valid value. Valid values include "A" for ascending, "D" for descending, or leave the field blank to use the default direction (ascending).

---

**HLO954E Dir not valid without Ord.**

**Explanation:** A sorting direction (Dir) was selected for a column that was not selected to be sorted (Ord). Sorting direction is only a valid choice for selected columns.

**User response:** Specify a column to be sorted (Ord) before specifying a sort order direction.

---

**HLO955E Fixed columns cannot exceed screen size.**

**Explanation:** More columns were selected to be FIXEd than will fit on the screen.

**User response:** Remove the FIXEd (F) selection character from one or more columns.

---

---

**HLO956E Invalid entry. Cmd values must be numeric.**

**Explanation:** An invalid Cmd value was entered. Cmd values must be numeric.

**User response:** Either remove the invalid number or enter a valid one.

---

**HLO957E Invalid entry for permanent column.**

**Explanation:** An invalid entry was made for a permanent column.

**User response:** Enter a valid value.

---

**HLO958E Invalid entry for fixed column.**

**Explanation:** An invalid Cmd value was entered for a FIXEd column. Valid selections for a FIXEd column are numeric values from 1 through n, where n is the total number of fixed columns.

**User response:** Either remove the invalid number or enter a valid number.

---

**HLO959E Invalid entry for unfixed column.**

**Explanation:** An invalid Cmd value was entered for an UNFIXEd column. The number must be less than the total number of columns, and greater than the number of FIXEd columns.

**User response:** Either remove the invalid number or enter a valid number.

---

**HLO960E Invalid Column Function value. Valid values: 1, 2, 3, and 4.**

**Explanation:** An invalid character was entered in the Column Function field. Valid characters are 1, 2, 3, and 4.

**User response:** Correct the field or issue the CANCEL command.

---

**HLO961E Invalid Permanent View value. Valid values: Y, N.**

**Explanation:** An invalid character was entered in the Permanent View field. Valid characters are Y (Yes), and N (No).

**User response:** Correct the field or issue the CANCEL command.

---

**HLO962E Invalid Reset View value. Valid values are Y, N.**

**Explanation:** An invalid character was entered in the Reset View field. Valid characters are Y (Yes), or N (No).

---

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**User response:** Correct the field or issue the CANCEL command.

---

**HLO963E Invalid Stop Sorting value. Valid values:** Y, N.

**Explanation:** An invalid character was entered in the Stop Sorting field. Valid characters are Y (Yes), or N (No).

**User response:** Correct the field or issue the CANCEL command.

---

**HLO964E Invalid data set name.**

**Explanation:** The data set name entered is syntactically incorrect. A data set name can be one name segment, or a series of joined name segments. Segments are limited to eight characters, the first of which must be alphabetic (A to Z) or special (# @ \$). The remaining seven characters are either alphabetic, numeric (0 - 9), special, a hyphen (-). Name segments are separated by a period (.). Including all name segments and periods, the length of the data set name must not exceed 44 characters. Thus, a maximum of 22 name segments can make up a data set name.

**User response:** Enter a valid data set name.

---

**HLO965E Invalid member name.**

**Explanation:** A member name can be up to eight characters long, and it can consist of the characters A-Z, 0-9, \$, #, and @.

**User response:** Enter a valid member name.

---

**HLO966E Unable to allocate the report file.**

**Explanation:** Unable to allocate the report file.

**User response:** No action is required.

---

**HLO967E Unable to open the report file.**

**Explanation:** Unable to open the report file.

**User response:** No action is required.

---

**HLO968E Invalid selection character. Valid values:** "H" and "U".

**Explanation:** An invalid Cmd character was entered. Valid characters are H (HIDE) and U (UNHIDE).

**User response:** Either remove the invalid character or enter a valid one.

---

**HLO970E TBCREATE failed. RC = return\_code.**

**Explanation:** The TBCREATE command was issued to create a VIEW, but it failed with a (hex) return code as indicated in the message.

**User response:** Review ISPTLIB allocation and data set characteristics. Review security controlled access to ISPTLIB data sets. For information about return codes, see the ISPF Services Guide under TBCREATE.

---

**HLO971E TBOPEN failed. RC = return\_code.**

**Explanation:** The TBOPEN command was issued to open an existing VIEW, but the command failed with a (hex) return code as indicated in the message.

**User response:** Review ISPTLIB allocation and data set characteristics. Review security controlled access to ISPTLIB data sets. For information about return codes, see the ISPF Services Guide under TBOPEN.

---

**HLO972E TBCLOSE failed. RC = return\_code.**

**Explanation:** The TBCLOSE command failed with a (hex) return code as indicated in the message.

**User response:** Review ISPTLIB allocation and data set characteristics. Review security controlled access to ISPTLIB data sets. For information about return codes, see the ISPF Services Guide under TBCLOSE.

---

**HLO973E TBDELETE failed. RC = return\_code.**

**Explanation:** The TBDELETE command failed with a hexadecimal return code as indicated in the message.

**User response:** Review ISPTLIB allocation and data set characteristics. Review security controlled access to ISPTLIB data sets. For information about return codes, see the *ISPF Services Guide* under TBDELETE.

---

**HLO974E TBMOD failed. RC = return\_code.**

**Explanation:** The TBMOD command failed with a (hex) return code as indicated in the message.

**User response:** Review ISPTLIB allocation and data set characteristics. Review security controlled access to ISPTLIB data sets. For information about return codes, see the ISPF Services Guide under TBMOD.

---

**HLO975E TBGET failed. RC = return\_code.**

**Explanation:** The TBGET command failed with a (hex) return code as indicated in the message.

**User response:** Review ISPTLIB allocation and data set characteristics. Review security controlled access to ISPTLIB data sets. For information about return codes, see the ISPF Services Guide under TBGET.

---

**HLO976E View table is in use.**

**Explanation:** The ISPTLIB and ISPTABL DDs are in use. Only temporary views will be available.

**User response:** Review the ISPTLIB and ISPTABLE allocations. For information about ISPTLIB and ISPTABL, see the ISPF user guides for your version of ISPF. If you cannot determine the reason for this message, contact IBM Software Support. Have available the listing that contains this message.

---

**HLO977E View library not allocated.**

**Explanation:** The ISPTLIB and ISPTABL DDs have not been allocated. Only temporary views will be available.

**User response:** Review the ISPTLIB and ISPTABLE allocations. For information about ISPTLIB and ISPTABL, see the ISPF user guides for your version of ISPF. If you cannot determine the reason for this message, contact IBM Software Support. Have available the listing that contains this message.

---

**HLO980I Discovery process completed successfully.**

**Explanation:** This is an informational message.

**User response:** No action is required.

---

**HLO981E Control file <control\_file\_name> not found.**

**Explanation:** The discovery process could not locate the specified product control file.

**User response:** Enter a valid control file name.

---

**HLO982E Configuration <configuration\_ID> was not found in the control file.**

**Explanation:** The discovery process could not locate the specified configuration.

**User response:** Enter a valid configuration ID.

---

**HLO983E Previous installation library <installation\_library\_name> not found.**

**Explanation:** The discovery process could not locate the specified installation library.

**User response:** Enter a valid installation library.

---

**HLO984E Options module <options\_module> was not found. Enter a valid previous installation location and options module name.**

**Explanation:** The discovery process could not locate the specified options module.

**User response:** Enter a valid previous installation

location and options module name.

---

**HLO001 IBM\* Rocket\*\* Licensed Materials - Property of IBM 5697-P45 (c) Copyright Rocket Software, Inc. 2001 - 2016 All Rights Reserved. \*Trademark of International Business Machines \*\*Trademark of Rocket Software, Inc.**

**Explanation:** This informational message details the copyrights for DB2 Analytics Accelerator Loader.

**User response:** No action is required.

---

**HLO002E The subsystem ID field must have a valid DB2 subsystem identifier present.**

**Explanation:** The DB2 subsystem ID that was specified is not a valid.

**User response:** Correct the DB2 subsystem ID.

---

**HLO004E The startup CLIST did not define the control file name for Accelerator Loader to use. Processing cannot continue.**

**Explanation:** The CLIST you are trying to invoke does not define a control file name for DB2 Analytics Accelerator Loader to use. A control file name is required to be in the CLIST in order for DB2 Analytics Accelerator Loader to proceed with processing.

**User response:** Edit the startup CLIST to include a valid control file name for use with DB2 Analytics Accelerator Loader.

---

**HLO005E The startup CLIST defined a control file for Accelerator Loader to use, but it could not be allocated.**

**Explanation:** DB2 Analytics Accelerator Loader was not able to allocate the control file defined in the startup CLIST.

**User response:** Verify and correct the control file specified in the startup CLIST.

---

**HLO006I Subsystem ID entered is not yet completely defined.**

**Explanation:** The DB2 subsystem ID is not valid or has not been completely defined via the User Settings panels.

**User response:** Enter a valid DB2 subsystem and verify that the User Settings panels (which can be accessed from the main menu option 0) contain the correct information for your installation of DB2 Analytics Accelerator Loader.

## HLO007E • HLO020E

---

**HLO007E** An error has occurred obtaining ZPARM code Hex.

**Explanation:** An internal error has occurred.

**User response:** Contact IBM Software Support.

---

**HLO008E** Command is not supported on this screen. Please enter a valid command or clear the primary command line.

**Explanation:** You entered an invalid command for the screen.

**User response:** Clear the primary command line and re-enter a valid command.

---

**HLO009E** You are not authorized to enter any line commands for this profile. The creator of the profile is restricting all activity.

**Explanation:** You do not have the authority to enter a line command for the profile because activity has been restricted by the profile's creator.

**User response:** No action is required.

---

**HLO010E** You are not authorized to update or delete this profile. Enter a "V" if you would like to view this profile.

**Explanation:** You do not have the authority to update or delete the profile.

**User response:** View the profile or, if you need to update or delete the profile, verify your current authorization with your system administrator.

---

**HLO011E** Invalid line command entered.

**Explanation:** The line command you entered was invalid.

**User response:** Enter a valid line command.

---

**HLO012E** This profile's data has been corrupted in the HLO tables. It must be re-created.

**Explanation:** The profile you have selected has been corrupted and cannot be used.

**User response:** Re-create the profile and resubmit the job.

---

**HLO013I** Profile *profilecreator.profilename* has been successfully added to your jobs profile.

**Explanation:** The indicated profile that has been added to your jobs profile.

**User response:** No action is required.

---

---

**HLO014W** No profiles were found that match your selection criteria. Press enter to create a new profile or change the selection criteria.

**Explanation:** No profiles matched the selection criteria you specified.

**User response:** Either create a new profile to match your criteria or change your selection criteria.

---

**HLO015E** The profile creator is a required field. Please enter a valid creator.

**Explanation:** You did not enter a profile creator.

**User response:** Enter a valid profile creator.

---

**HLO016E** The Profile Name is a required field. Please enter a unique name.

**Explanation:** You did not enter a profile name.

**User response:** Enter a unique profile name.

---

**HLO017E** Invalid value. Enter a "U" to allow other users to update your profile, a "V" to allow other users to just view your profile, or "N" to disallow other users from viewing or updating your profile.

**Explanation:** You entered an invalid value.

**User response:** Enter U to allow other users to update your profile, V to allow other users to view your profile, or N to disallow users from viewing or updating your profile.

---

**HLO018E** Profile *profile\_creator.profile\_name* already exists in DB2 SSID *ssid*. Please enter a unique Profile Name and press Enter.

**Explanation:** The profile you specified is not unique.

**User response:** Enter a unique profile name and press enter.

---

**HLO019I** Profile *profile\_creator.profile\_name* saved.

**Explanation:** The profile was saved successfully.

**User response:** No action is required.

---

**HLO020E** Invalid value. The only valid values are "Y" and "N".

**Explanation:** The value you entered for the field was not valid.

**User response:** Enter either Y or N.

---

---

**HLO021E**    **The options cannot be altered if they are not first selected.**

**Explanation:** You did not select the options you want to alter.

**User response:** Select the options before attempting to alter them.

---

**HLO022E**    **Invalid value. Enter a "U" to allow other users to update your profile, a "V" to allow other users to just view your profile, or "N" to disallow other users from viewing or updating your profile.**

**Explanation:** You entered an invalid value. Valid values include U, V, and N.

**User response:** Enter U to allow other users to update your profile, V to allow other users to view your profile, or N to disallow other users from viewing or updating your profile.

---

**HLO023E**    **Unknown command.**

**Explanation:** The command you entered is not known.

**User response:** Enter a valid command.

---

**HLO024E**    **This profile's Mini Log DSN options have been set to "Y" but the Mini Log information has not yet been entered.**

**Explanation:** In your profile, you have specified the use of a mini log data set but have not yet entered the needed mini log information.

**User response:** Enter the appropriate mini log information in the profile.

---

**HLO025E**    **This profile's Image Copy DSN options have been set to "Y" but the Image Copy information has not yet been entered.**

**Explanation:** In your profile, you have specified Y for the use of an image copy data set but have not yet entered the needed image copy information.

**User response:** Enter the appropriate image copy information in the profile.

---

**HLO026E**    **The specified qualifier code is not a supported value.**

**Explanation:** The qualifier code that you entered is not supported.

**User response:** Select a valid qualifier code from those listed on the bottom half of the product panel.

---

**HLO027W**    **The symbolic data set name generation field is full.**

**Explanation:** You tried to add information to the data set name generation field when it was full.

**User response:** Edit the data set name generation field to include the appropriate information as allowed by the field length.

---

**HLO028W**    **Truncation has occurred in building the data set qualifier.**

**Explanation:** When DB2 Analytics Accelerator Loader attempted to build the data set qualifier you specified the data set name was truncated.

**User response:** Re-specify the data set name generation qualifier string before proceeding.

---

**HLO029W**    **An error may occur on this data set at job build time due to the fact that the GDG qualifier might extend beyond the 44 byte maximum data set name size.**

**Explanation:** The GDG qualifier extends beyond the 44 byte maximum data set name size.

**User response:** Edit the GDG qualifier data set name to be 44 bytes or less.

---

**HLO030E**    **An error was encountered while generating the data set name. The data set name was not completely formatted.**

**Explanation:** The data set name you specified was not created due to an error.

**User response:** Verify that the data set name generation qualifier string you specified is valid.

---

**HLO031E**    **This field cannot be left blank.**

**Explanation:** You did not specify a value in a required field.

**User response:** You must enter a value in the field.

---

**HLO032E**    **The entered device type is not recognized by OS/390 as a valid device type.**

**Explanation:** The device type you specified is not recognized.

**User response:** Specify a valid device type.

---

**HLO033E**    **When using disk type devices, expiration date and retention period are not valid.**

**Explanation:** The expiration date and retention period are not valid because you are using a disk type device.

## HLO034E • HLO045E

**User response:** Specify a different device type or do not specify an expiration date nor retention period.

---

**HLO034E** If a tape device is selected, either retention period or expiration date must be specified.

**Explanation:** You specified a tape device but did not specify a retention period or expiration date.

**User response:** Specify a retention period or expiration date.

---

**HLO035E** The entered value must be numeric.

**Explanation:** The value you entered was not numeric.

**User response:** Enter a numeric value.

---

**HLO036E** The year in the expiration date must be in a range of 1999 and higher.

**Explanation:** The expiration date is not within the valid range of 1999 and higher.

**User response:** Correct the year in the expiration date to be of the specified format.

---

**HLO037E** The day in the expiration date must be in the range of 1 to 366.

**Explanation:** The day in the expiration date you specified is not within the valid range.

**User response:** Specify a day within the range of 1 to 366.

---

**HLO038E** A utility profile can only select one of Mini Log processing or Image Copy processing or OBID Report Job Generation.

**Explanation:** You selected more than one processing option. Only one can be selected.

**User response:** Select only one of the available processing options (mini log processing, image copy processing, or OBID Report Job Generation).

---

**HLO039E** The only valid values for End Point are To "C"urrent, To "Q"uiresce, "U"nified, "S"pecified or "T"o Consistent IC.

**Explanation:** The value you specified for End Point is not valid.

**User response:** Specify C for To Current, Q for To Quiesce, S for Specified or T for To Consistent IC.

---

**HLO040E** If the End Point is set to "S"pecified, you must enter a valid 12 digit hex value for the ending RBA/LRSN.

**Explanation:** You set the End Point to S (specified) so you must also enter a value for the end RBA/LRSN. The end RBA/LRSN value must be a valid 12-digit hex value.

**User response:** Correct the JCL and resubmit the job.

---

**HLO041E** The specified end point contains an invalid hexadecimal character.

**Explanation:** The end point you specified contains a hexadecimal character that is not valid.

**User response:** Verify that you specified the correct end point.

---

**HLO042E** If the value in the End Point field is set to "C"urrent then a Specified Hex End Point/Quiesce # is not allowed.

**Explanation:** You must specify S or Q in the End Point field if you intend to specify a hex end point or quiesce number.

**User response:** Either remove the value you specified in the Specified Hex End Point/Quiesce Number field or adjust the value in the End Point field to be S or Q.

---

**HLO043E** The only valid values for the scan copy type are "L"ocal site, "R"ecovery site, "Z"parm to fetch from the startup zparm startup parameter in DB2, and "U"ser to specify the IC type directly.

**Explanation:** You did not specify a valid value for the scan copy type.

**User response:** Specify a valid scan copy type value (L, R, Z, or U).

---

**HLO044E** The only valid values for the Process Indexes are "Y"es, "N"o and "P"arallel rebuild.

**Explanation:** You specified an invalid value.

**User response:** Specify Y, N or P.

---

**HLO045E** If mini log mode is used, SYSCOPY rows are never involved. This option must be left at "N"o.

**Explanation:** You cannot specify Y in the SYSCOPY rows field if you also intend to use mini log mode.

**User response:** Specify N in the SYSCOPY rows field if you intend to use mini log mode.

---

**HLO046E** At least one image copy type must be selected.

**Explanation:** You did not select an image copy type.

**User response:** Select at least one image copy type.

---

**HLO047E** When this type of processing is selected on this utility profile, required fields on subsequent panels must also be entered. Enter a "Y" and press Enter to proceed.

**Explanation:** You must specify required fields on subsequent panels.

**User response:** Enter a Y and press Enter to proceed.

---

**HLO048E** Either the Date or Age field must be specified.

**Explanation:** You must specify either a date or an age (these fields are mutually exclusive).

**User response:** Specify either a date or an age.

---

**HLO049E** The date and age fields cannot be specified together.

**Explanation:** You must specify either a date or an age (these fields are mutually exclusive).

**User response:** Specify only a date or an age value, not both.

---

**HLO050E** Invalid date. Enter a valid date in the form of YYYYMMDD.

**Explanation:** The date you entered was not in the format YYYYMMDD.

**User response:** Correct the date so it is of the valid form YYYYMMDD.

---

**HLO051E** The age field has a valid range of 1-32767.

**Explanation:** The age you specified is not valid.

**User response:** Specify a valid age in the range of 1-32767.

---

**HLO054E** There was an error allocating the DB2 Control File *filename*. DB2 Analytics Accelerator Loader cannot run without allocating a valid Control File. Please verify that the control file in your execution CLIST is correct.

**Explanation:** DB2 Analytics Accelerator Loader cannot allocate the DB2 Control File specified in the product's execution CLIST.

**User response:** Verify that the correct DB2 Control File

is specified in your DB2 Analytics Accelerator Loader CLIST.

---

**HLO055E** The only valid values for the Write Mode are "I"mage copy for image copies only, "V"sam to write to the space file(s), and "B"oth to make an image copy while writing to the space file.

**Explanation:** The value you specified for the Write Mode is invalid.

**User response:** Specify a valid value for Write Mode.

---

**HLO056E** When producing mini logs, the write mode must remain in the default state of "I" for image copies.

**Explanation:** If you are producing mini logs, the write mode must remain in the default state of I for image copies.

**User response:** Specify a write mode of I for image copies.

---

**HLO057E** When not producing image copies due to the setting of the write mode, the Image Copy Data Set Name Generation field must be "N".

**Explanation:** If you are not producing image copies, they you must specify that the generation of an image copy data set name is not necessary.

**User response:** Specify N in the Image Copy Data Set Name Generation field.

---

**HLO058E** When the generation options are both set to no, the write mode must be set to "V" for write to VSAM.

**Explanation:** If you specify no for all generation options, then you must set the write mode to V so changes are written to the underlying VSAM.

**User response:** Specify V in the Write Mode field.

---

**HLO059E** One or more of the load libraries allocated for DB2 Analytics Accelerator Loader is not APF Authorized. APF Authorization is required for all load libs allocated in the DB2 Analytics Accelerator Loader startup clist.

**Explanation:** One or more of the load libraries allocated in your DB2 Analytics Accelerator Loader startup clist is not APF authorized.

**User response:** DB2 Analytics Accelerator Loader requires that the target load libraries SHLOLOAD, SHLOMLOAD, and SHLOLOAD be APF authorized. Include the highlevel.SHLOLOAD, highlevel.SHLOMLOAD, and highlevel.SHLOLOAD

libraries as part of your system APF-authorized list.

---

**HLO060E DB2 Subsystem *ssid* could not be found on this MVS Operating System**

**Explanation:** The DB2 subsystem indicated in the message could not be found.

**User response:** Verify that the DB2 subsystem you specified in the DB2 Subsystem ID field on the DB2 Analytics Accelerator Loader main menu is a valid DB2 subsystem and that it is currently running.

---

**HLO061E A critical error has occurred attempting to resolve the subsystem RC=*returncode***

**Explanation:** DB2 Analytics Accelerator Loader requires that the target load libraries *highlevel.SHLOLOAD* and *highlevel.SFECLOAD* be APF authorized. This messages indicates that insufficient APF authorization is available.

**User response:** Ensure the following APF authorization requirements have been met:

- Include the *highlevel.SHLOLOAD* and *highlevel.SFECLOAD* libraries as part of your system APF-authorized list. Contact your systems administrator if you encounter difficulties starting DB2 Analytics Accelerator Loader.
- Add the program *FEC\$TSOC* to the *AUTHPGM* and *AUTHTSF* sections of member *IKJT000* in *SYS1.PARMLIB*. For more information on *IKJT000*, refer to the OS/390® MVS Initialization and Tuning Reference.
- Changes you make to *SYS1.PARMLIB* require an IPL command for the *PARMLIB* updates to take effect. Perform an IPL for the *PARMLIB* updates to take effect.

---

**HLO062E DB2 Subsystem *ssid* is currently not active. Starting DB2 is required to continue.**

**Explanation:** A data sharing member (not the group attach name) has been specified in the **DB2 Subsystem ID** field on the DB2 Analytics Accelerator Loader main menu and the data sharing member is running on a different MVS.

**User response:** Specify the group attach name in the **DB2 Subsystem ID** field or specify a DB2 subsystem ID that is running on the current MVS.

---

**HLO063E The retention period and expiration date fields cannot be entered at the same time.**

**Explanation:** You entered a value in both the **Expiration Date** and **Retention Period** fields. This combination is not allowed.

**User response:** Clear the value from either the

**Expiration Date** or the **Retention Period** field.

---

**HLO065W Line commands were cleared for a cursor sensitive screen command.**

**Explanation:** You issued a cursor sensitive screen command while line commands were specified so DB2 Analytics Accelerator Loader has cleared the line commands.

**User response:** No action is required.

---

**HLO066E In order to use mini log #2, mini log #1 must also be specified.**

**Explanation:** If you specify a secondary mini log data set, you must also specify a primary mini log data set.

**Note:** If you specify a primary mini log data set, you are not required to specify a secondary mini log data set.

**User response:** To resolve this issue, do one of the following:

- remove the specification of mini log #2,
- specify both mini log #1 and mini log #2, or
- specify only mini log #1

---

**HLO068E If the SYSCOPY selection mode is set to "U"ser, the Image Copy Preference field must be entered.**

**Explanation:** The SYSCOPY Scan Operating Mode has been set to "U" (user). If you desire to enter a specific order in which the image copy data sets are scanned for selection, their order must be entered in the **SYSCOPY Selection Preference** field.

**User response:** Either modify the SYSCOPY Scan Operating Mode to be something other than "U" (user) or define a SYSCOPY Selection Preference.

---

**HLO069E The only valid codes are LP, LB, RP, and RB each specified a maximum of one time.**

**Explanation:** The only valid 2-character codes are "LP" for Local Primary, "LB" for Local Backup, "RP" for Recovery Primary, and "RB" for recovery backup.

**User response:** These can be entered, with 1-4 codes in total, in a packed 8 character maximum field. "LPLBRPRB" would select the locals before the recovery site copies. "RPRBLPLB" would select the recovery site copies first. "RB " would cause an error if a recovery site backup type image copy could not be found. Each two character code can only be specified once.



---

**HLO070E** The only valid values are R1 for archive log 1, R2 for archive log 2, A1 for active log 1, and A2 for active log 2.

**Explanation:** You entered an invalid value.

**User response:** Enter four codes, each two characters long (R1, R2, A1, A2) consecutively to form a preference command. The DB2 logs will then be selected in this order when HLO attempts to read the DB2 logs. Each code must be specified, and each can only be specified once in the whole string.

---

**HLO071E** The specified quiesce number must be 1–3 digits in a range of 1-999.

**Explanation:** The quiesce number specified is not 1–3 digits within the valid range of 1-999.

**User response:** Specify a 1–3 digit quiesce number in the range of 1-999.

---

**HLO072E** The specified quiesce number must be numeric.

**Explanation:** The quiesce number specified is not a numeric value.

**User response:** Specify a 1–3 digit numeric value for the quiesce number, in the range of 1-999.

---

**HLO073E** If the Restore Before Point is specified, you must enter a valid 12 digit hex value for the RBA/LRSN.

**Explanation:** You have specified an invalid value in the Restore Before Point field.

**User response:** Specify a valid 12-digit hexadecimal value in the Restore Before Point field.

---

**HLO074E** The only valid values are "G"roup level and "S"pace level.

**Explanation:** You have specified an invalid value in the ML Control Card Level field.

**User response:** Specify a valid value. Valid values are G (places mini log control cards at the group level) and S (places mini log control cards at the space level). When the mini log data set control card level is set to S (space), DB2 Analytics Accelerator Loader will allocate mini log data sets one at a time for each object during the course of the mini log run. When set to G (group) DB2 Analytics Accelerator Loader will allocate mini log data sets once for the entire group.

---

**HLO075E** Invalid values. The only valid values are "Y", "N" and "W".

**Explanation:** You have specified an invalid value in the Unified End Points In Group field.

**User response:** Specify a valid value. Valid values are:

- **Y** - Includes the UNIFIED keyword in the syntax. This means DB2 Analytics Accelerator Loader will not make image copies unless every object in the GROUP or SPACE can be copied to the specified end point. This inhibits anything being written to SYSCOPY and takes the abend disposition of the DDs.
- **N** - Does not include the UNIFIED keyword in the syntax. This means DB2 Analytics Accelerator Loader will make image copies even if some objects in the GROUP or SPACE cannot be copied to the specified end point.
- **W** - Includes the UNIFIED\_WARNING keyword in the syntax. This means DB2 Analytics Accelerator Loader makes image copies even if some objects in the GROUP or SPACE cannot be copied to the specified end point. Processing will end with a RC=4 and messages HLO2810I and HLO2811I will be output.

---

**HLO076E** The specified number must be 1-4 digits in a range of 1-9999.

**Explanation:** The specified number is not valid.

**User response:** Specify a value 1-4 digits in a range of 1-9999.

---

**HLO077E** When not using above the bar storage, this field must be blank.

**Explanation:** If you specify N in the Allow usage of above the bar memory field, you must not specify a value in this field.

**User response:** Remove the value from the field or specify Y in the Allow usage of above the bar memory field.

---

**HLO078E** The only valid values are "R" for Sharelevel "R"eference, "C" for Sharelevel "C"hange, and blank to not generate the card.

**Explanation:** You have specified an invalid value in the ML Sharelevel field.

**User response:** Specify a valid value. Valid values are REFERENCE (creates SHRLEVEL REFERENCE mini logs) and Change (Creates SHRLEVEL CHANGE mini logs).

**Note:** If the field is left blank, it defaults to REFERENCE.

## HLO079E • HLO092E

---

**HLO079E** If Volume Count is specified, it must have a value of 1-255 or you can leave the field blank.

**Explanation:** If you specify a value for Volume Count, it must be a numeric value in the range of 1 to 255 or you can leave this field blank.

**User response:** Specify a valid value for **Volume Count** or leave the field blank. If blank, the volume count defaults to the system default.

---

**HLO080E** If PARALLEL is specified, it must have a value between 0 - 16

**Explanation:** The value specified is not valid. PARALLEL must be between 0-16.

**User response:** Specify a value between 0-16. If you specify a value of 0, then a maximum of 1 task per data sharing group member will run at the same time.

---

**HLO081E** If Check After Quiesce is set to "Y", the End Point must be set to "Q"uiesce.

**Explanation:** If the Check After Quiesce field is set to Y, the End Point must be set to Q.

**User response:** Specify a valid combination of values for Check After Quiesce and End Point.

---

**HLO082E** If Check After Quiesce is set to "Y", the Bypass SYSIBM.SYSLGRNX Proc must be set to "N"o.

**Explanation:** If the Check After Quiesce field is set to Y, the Bypass SYSIBM.SYSLGRNX Proc must be set to N.

**User response:** Specify a valid combination of values for Check After Quiesce and Bypass SYSIBM.SYSLGRNX Proc.

---

**HLO083E** If Check After Quiesce is set to "Y", the Unified End Points In Group must be set to "N"o.

**Explanation:** If the Check After Quiesce field is set to Y, the Unified End Points In Group must be set to N.

**User response:** Specify a valid combination of values for Check After Quiesce and Unified End Points In Group.

---

**HLO084E** Action aborted, MCLN internal error

**Explanation:** An internal error occurred.

**User response:** Contact IBM Software Support.

---

**HLO085I** Action complete. No row was found.

**Explanation:** Action complete. No row was found.

**User response:** No action is required.

---

**HLO086I** Action skipped. Please change input params

**Explanation:** The action was skipped.

**User response:** Change the input parameters.

---

**HLO087E** Action aborted. Error delete data set: &GMESSAG2. Processed: &GMESAGE &GMESAG1

**Explanation:** The action was aborted.

**User response:** The message provides information about the error.

---

**HLO088I** Action completed. Processed: &GMESAGE &GMESAG1

**Explanation:** The action was completed.

**User response:** No action is required.

---

**HLO089I** Action aborted by user. Processed: &GMESAGE &GMESAG1

**Explanation:** The action was aborted by the user.

**User response:** No action is required.

---

**HLO090E** When the end point type is "T"o Consistent IC the write mode must be "I"mage copy.

**Explanation:** The write mode was not Image Copy.

**User response:** Change the write mode to Image Copy.

---

**HLO091E** If the value in the End Point field is set "T"o Consistent IC then a Specified Hex End Point/Quiesce# is not allowed.

**Explanation:** An end point or quiesce number was specified but is not allowed.

**User response:** Remove the end point or quiesce number.

---

**HLO092E** If Parallel log apply is specified, it must have a value between 1 - 10

**Explanation:** The value specified for **Number of PARALLEL log apply** is not valid. Valid values are between 1-10. If multiple GROUP(...) sets are present in the your DB2 Analytics Accelerator Loader syntax, the only valid value for the **Number of PARALLEL log apply** field is 1 (it is invalid to specify a value of log

apply tasks greater than 1 if there are multiple GROUP(...) sets).

**User response:** Specify valid value in the **Number of PARALLEL log apply** field.

**HLO902E**    **A DB2 subsystem ID has to be entered for processing.**

**Explanation:** You did not specify a DB2 subsystem ID.

**User response:** Specify the appropriate DB2 subsystem ID.

**HLO903E**    **The default GDG base data set name could not be located.**

**Explanation:** DB2 Analytics Accelerator Loader could not locate the default GDG base data set name.

**User response:** Verify that you specified a GDG base data set name.

**HLO904E**    **The specified data set could not be opened for I/O.**

**Explanation:** DB2 Analytics Accelerator Loader was unable to open the specified data set for I/O.

**User response:** Verify that you specified the correct data set for processing and ensure it is not currently in use.

**HLO905E**    **An unexpected return code from VSAM was encountered while doing a read of the control file. RC=*returncode***

**Explanation:** An internal error occurred.

**User response:** Contact IBM Software Support.

**HLO906I**    **The control file record for DB2 subsystem *ssid* has been successfully updated.**

**Explanation:** The specified control file record has been updated successfully.

**User response:** No action is required.

**HLO907E**    **An unexpected return code from VSAM was encountered while doing an update operation of the control file.**

**Explanation:** An internal error occurred.

**User response:** Contact IBM Software Support.

**HLO908I**    **The control file record for DB2 subsystem *ssid* has been successfully added.**

**Explanation:** The specified control file record has been added successfully.

**User response:** No action is required.

**HLO909E**    **Invalid value. Valid values are 1, 2, and 3.**

**Explanation:** The value you entered was invalid.

**User response:** Enter the appropriate option (1, 2, or 3).

**HLO910E**    **An unexpected return code from VSAM was encountered while doing an add operation to the control file.**

**Explanation:** An internal error occurred.

**User response:** Contact IBM Software Support.

**HLO911E**    **The only valid dataset types at this time are "B"asic and "L"arge**

**Explanation:** You specified an invalid data set type.

**User response:** Specify a valid value of either B (basic) or L (large) for the data set type.

**HLO912E**    **The "L"arge option is only supported on z/OS V1.7 or higher.**

**Explanation:** You specified a data set type of L (large) but your z/OS level is not V1.7 or higher.

**User response:** Specify a data set type of B (basic).

**HLO913E**    **Invalid data set/member/alias. The data set, member name, or alias entered does not meet the MVS data set naming standards.**

**Explanation:** The data set, member name, or alias entered does not meet the MVS data set naming standards.

**User response:** Correct the data set member name or alias.

**HLO914E**    **The data set and corresponding member name, if specified, have to be specified together.**

**Explanation:** You omitted the data set or corresponding member name.

**User response:** Specify the data set and the member name.

**HLO915E**    **The Other LPAR Jobs Data Set and XML Alternate SSID Template if specified, have to be specified together.**

**Explanation:** You specified one but not both of the fields **Other LPAR Jobs Data Set** and **XML Alternate**

## HLO915E • HLO949E

**SSID Template.** These fields have to be specified together.

**User response:** Specify values for both of the **Other LPAR Jobs Data Set** and **XML Alternate SSID Template** fields.

---

**HLO915E** When the **Process Indexes** options is set to "P" arallel **Rebuild the Write Mode** must be set to "V" for write to VSAM or "B" for write to both

**Explanation:** **Process Indexes** was set to P but the **Rebuild the Write Mode** field was not set to V or B.

**User response:** Specify a valid value for the **Rebuild the Write Mode** field.

---

**HLO917E** DB2 **Rebuild Index ALL step** and **Process Indexes** options are mutually exclusive.

**Explanation:** You specified both the **DB2 Rebuild Index ALL step** and the **Process Indexes** options. These fields are mutually exclusive.

**User response:** Specify either **DB2 Rebuild Index ALL step** or **Process Indexes**.

---

**HLO938E** The **Plan Name** is a required field. Please enter a value.

**Explanation:** The **Plan Name** is a required field.

**User response:** Specify a value in the **Plan Name** field.

---

**HLO939E** The only valid values are "T" for tracks and "C" for cylinders.

**Explanation:** The value you entered is not valid.

**User response:** Enter T for tracks or C for cylinders.

---

**HLO940E** The specified data set could not be found in the MVS catalog.

**Explanation:** The data set could not be found.

**User response:** Verify that the data set you specified is correct.

---

**HLO941E** The quantity fields must be numeric and within the specified range.

**Explanation:** You entered non-numeric values in the quantity fields.

**User response:** Enter numeric values in the quantity fields.

---

**HLO943E** When a TAPE device is used, **Data Set Type, Tracks/Cylinders** and **Primary/Secondary space** can not be specified.

**Explanation:** You cannot specify a value for the number of primary tracks if the device type is TAPE.

**User response:** Remove the value specified for the number of primary tracks or change the device type to DISK.

---

**HLO944E** The specified device could not be found in MVS.

**Explanation:** The device you specified could not be found in MVS.

**User response:** Verify that you have specified the correct device.

---

**HLO945E** The **Number of Buffers** field must be numeric.

**Explanation:** You entered a non-numeric value in the **Number of Buffers** field.

**User response:** Enter a numeric value in the **Number of Buffers** field.

---

**HLO946E** The **Number of Buffers** field must be greater than 0.

**Explanation:** You entered a value in the **Number Of Buffers** field that is less than or equal to 0.

**User response:** Enter a value greater than 0 in the **Number Of Buffers** field.

---

**HLO947E** The **Channel Programs** field must be numeric.

**Explanation:** You entered a non-numeric value in the **Channel Programs** field.

**User response:** Enter a numeric value in the **Channel Programs** field.

---

**HLO948E** The **Channel Programs** field must be greater than 0.

**Explanation:** You entered a value in the **Channel Programs** field that is less than or equal to 0.

**User response:** Enter a value greater than 0 in the **Channel Programs** field.

---

**HLO949E** Tape devices cannot be used for mini logs.

**Explanation:** You specified a tape device but a tape device is not allowed for mini log data sets.

**User response:** Specify a disk device.

---

**HLO1001A** The SYSOUT data set could not be opened for output.

**Explanation:** The SYSOUT data set defined in your DB2 Analytics Accelerator Loader JCL could not be opened for output.

**User response:** Verify that the SYSOUT data set you specified in your DB2 Analytics Accelerator Loader JCL is available for use and resubmit the DB2 Analytics Accelerator Loader job.

---

**HLO1002E** The SYSOUT DD must have a 133 byte LRECL.

**Explanation:** The SYSOUT DD specified in your DB2 Analytics Accelerator Loader JCL does not have a 133-byte LRECL.

**User response:** Ensure your SYSOUT DD has a 133-byte LRECL and resubmit the DB2 Analytics Accelerator Loader job.

---

**HLO1010E** The following space is not set to LOG for a required log range.

**Explanation:** The space listed in the messages is not set to LOG for a required log range.

**User response:** No action is required.

---

**HLO1012E** No valid full image copy in the SYSCOPY history was found for space(s): *spaces*

**Explanation:** DB2 Analytics Accelerator Loader was unable to find a valid full image copy in the SYSCOPY history for the table space(s) indicated in the message. DB2 Analytics Accelerator Loader requires a full image copy registered in SYSCOPY.

**User response:** Ensure the image copy is registered in SYSCOPY and that it is valid.

---

**HLO1013E** A table update ICTYPE was found in SYSCOPY that did not log for space(s): *spaces*

**Explanation:** There were multiple spaces being processed for which it was impossible for DB2 Analytics Accelerator Loader to process due to the fact that some operation (such as LOAD REPLACE LOG(NO), REORG LOG(NO), etc.) occurred at some point between the selected starting point and the specified end point.

**User response:** No action is required.

---

**HLO1014I** Database: *database* Space: *space* Partition: *partition*

**Explanation:** This message is issued in conjunction with other DB2 Analytics Accelerator Loader messages to indicate the database, space, and partition for which other messages apply.

**User response:** No action is required.

---

**HLO1015E** Could not determine disk/tape status of unit name.

**Explanation:** The device type for work data sets entered in the control file is invalid.

**User response:** Enter the correct device type.

---

**HLO1016E** The device type of the unit name from the control file could not be determined.

**Explanation:** The device type for work data sets entered in the control file is invalid.

**User response:** Enter the correct device type.

---

**HLO1017E** The REPORT utility returned an unrecoverable error.

**Explanation:** An internal error occurred.

**User response:** Contact IBM Software Support.

---

**HLO1018E** The FULL image copy DD CA(LP/LB/RP/RB) {1} is missing from the JCL. Each CAxxxxxx DD correlates to each SPACE(...) control card group.

**Explanation:** The full image copy data set is not included in your DB2 Analytics Accelerator Loader JCL.

**User response:** Verify that the JCL is formatted correctly and contains the necessary information for your DB2 Analytics Accelerator Loader job.

---

**HLO1019E** The FULL image copy DD CA {1} refers to a DSNAME already in SYSCOPY.

**Explanation:** You specified a full image copy data set name that already exists in SYSCOPY.

**User response:** Specify a different image copy data set name.

---

**HLO1020I** Each CAxxxxxx DD correlates to each SPACE(...) control card group.

**Explanation:** Each CAxxxx DD statement must be associated with a corresponding SPACE(...) control card group.

**User response:** Verify that the JCL is formatted correctly and that each CAxxxx DD statement is associated with a SPACE(...) control card group.

---

**HLO1021E** The TO\_QUIESCE control card was specified, but no quiesce point was found.

**Explanation:** The TO\_QUIESCE control card directs DB2 Analytics Accelerator Loader to read the log and incorporate data into the image copy up to the most recent quiesce point but no quiesce point was found.

**User response:** No action is required.

---

**HLO1022E** The stop point precedes the start point for space: Database: *database* Table space: *table\_space* Partition: *partition* Start point X'*startpoint*' End point X'*endpoint*'.

**Explanation:** The DB2 Analytics Accelerator Loader job will not run if the stop point proceeds the start point for the listed database, table space, partition.

**User response:** Correct the JCL and resubmit the job.

---

**HLO1023I** The version of DB2 subsystem *ssid* is *ver*.

**Explanation:** Displays the SSID and the version of the DB2 subsystem.

**User response:** No action is required.

---

**HLO1024I** The version of DB2 group attach member *name* is *version*.

**Explanation:** Displays the version of DB2 group attach that the DB2 group attach member subsystem is running.

**User response:** No action is required.

---

**HLO1025I** Control card stream process complete. Selected space count = *space count*.

**Explanation:** This is an informational message stating that the control card scanning process has finished. The number of objects found in the control card set is indicated by the *space count* variable.

**User response:** No action is required.

---

**HLO1027I** DB2 Analytics Accelerator Loader will process *dataset* for table space *tablespace*.

**Explanation:** Indicates the data set name that DB2 Analytics Accelerator Loader will process.

**User response:** No action is required.

---

**HLO1028I** The image copy is of all parts.

**Explanation:** Indicates that the image copy is of all partitions of the table space.

**User response:** No action is required.

---

**HLO1029I** The image copy contains one partition (*partition*).

**Explanation:** Indicates the one partition that the image copy contains.

**User response:** No action is required.

---

**HLO1030E** A concurrent image copy was found in the SYSCOPY history. It cannot be used.

**Explanation:** The DFDSS concurrent image copy that was found cannot be read by DB2 Analytics Accelerator Loader.

**User response:** Select an alternative mechanism by which to recover the space.

---

**HLO1031I** Only partition *partition* within the image copy will be updated with log data and written to an individual partition copy.

**Explanation:** DB2 Analytics Accelerator Loader will only update the partition within the image copy with log data and will write to an individual partition image copy.

**User response:** No action is required.

---

**HLO1032I** All partitions will be updated with log data.

**Explanation:** DB2 Analytics Accelerator Loader will update all partitions with log data.

**User response:** No action is required.

---

**HLO1033E** A partial recovery point was found in SYSCOPY and its data set name does not match the data set name specified in the STARTING\_IC control card.

**Explanation:** Although you specified a particular starting point, it cannot be used because a partial recovery point was found in SYSCOPY and the data set associated with it has to be used instead.

**User response:** You must remove the STARTING\_IC control card from your DB2 Analytics Accelerator Loader syntax.

---

**HLO1034I** DB2 Analytics Accelerator Loader will process the log only for table space *table\_space* PART *part*.

**Explanation:** DB2 Analytics Accelerator Loader will process only the log for the indicated table space and partition.

**User response:** No action is required.

---

---

**HLO1035E** An image copy was found, but its RBA precedes the logging start point.

**Explanation:** This message indicates that although an image copy was found, it could not be used since its RBA precedes the logging start point.

**User response:** No action is required.

---

**HLO1036I** DB2 Analytics Accelerator Loader processing ends.

**Explanation:** Indicates that DB2 Analytics Accelerator Loader processing has completed.

**User response:** No action is required.

---

**HLO1038E** An incremental image copy was marked as cataloged in SYSCOPY, but was not found in the MVS catalog.

**Explanation:** This message indicates that although an incremental image copy was marked as cataloged in SYSCOPY, it was not found in the MVS catalog.

**User response:** No action is required.

---

**HLO1039E** At least two end points within a single GROUP() are not the same.

**Explanation:** At least two end points within a GROUP are not the same.

**User response:** Verify that the end points you defined are correct.

---

**HLO1040I** The SPACE(...) set involved that the error was detected in was #'XXXXX'

**Explanation:** There was an error in the SPACE set indicated in the message.

**User response:** Verify the correct SPACE syntax has been specified.

---

**HLO1041W** An error occurred during processing, but was overridden. Check all messages.

**Explanation:** An error occurred.

**User response:** Check messages for an error in processing.

---

**HLO1042W** All objects are marked to skip. Log reading and further processing skipped.

**Explanation:** All objects are marked to skip so DB2 Analytics Accelerator Loader will skip further processing and log reading.

**User response:** No action is required.

---



---

**HLO1044W** *error\_message*

**Explanation:** This is a warning message that is associated with the ADD\_TABLES and REMOVE\_AND\_ADD\_TABLES keywords. If the stored procedure returns anything other than a successful return code, the error messages it provides are output under this error message.

**User response:** Review the warning messages generated by the stored procedure for accuracy. Contact IBM Software Support for assistance.

---

**HLO1045E** An error occurred while attempting to load the DB2 call attach service.

**Explanation:** A z/OS load error occurred for the DB2 call attach service.

**User response:** Ensure that the //STEPLIB has the correct version of the DB2 loadlib data sets including SDSNLOAD.

---

**HLO1046I** The space processing DATABASE\_NAME.SPACE\_NAME partition NUMBER was set to TO\_CURRENT

**Explanation:** The end point for the object indicated in the message was set to TO\_CURRENT.

**User response:** No action is required.

---

**HLO1047I** The stop point precedes the start point for space: *space part: part* Start timestamp: *start timestamp* End timestamp: *end timestamp*

**Explanation:** The resolved end point for this object was determined to be illogical.

**User response:** Contact IBM Software Support.

---

**HLO1048E** The &HLO. runtime environment is not consistent. Installation error.

**Explanation:** Modules in the product load library have names inconsistent with the product load library.

**User response:** Contact IBM Software Support.

---

**HLO1049E** *databaseName.tablespaceName* Part #nnnnn Consistent RBA/LRSN = X'*rba/lrsn*'.

**Explanation:** Consistent Load applied all committed units of work up to RBA/LRSN *rba/lrsn*. This message is issued for each table. In a DB2 data sharing environment, a decimal format timestamp is converted from the hexadecimal RBA/LRSN and displayed in the message.

**User response:** No action is required.

---

---

**HLO1050I** Tape image copy process was optimized.  
Space count *x*. Group count 1.

**Explanation:** When a DSNUM 0 image copy is on tape and the value of the PARALLEL *y* parameter is greater than 1, only one log apply task is performed.

**User response:** No action is required.

---

**HLO1051I** Unused groups were dropped.

**Explanation:** Empty groups were found and deleted.

**User response:** See related messages for details.

---

**HLO1052I** IC process order requires single task log apply.

**Explanation:** The tape optimization process determined that tape volume sequences prohibited the multiple groups specified in the control cards. The groups were combined to avoid runtime errors.

**User response:** No action is required.

---

**HLO1053E** The target table space cannot be configured for multiple tables.

**Explanation:** A multi-table image copy cannot be specified when the OBIDXLAT\_CATALOG control card is specified.

**User response:** Specify a single-table image copy or remove the OBIDXLAT\_CATALOG control card from the job.

---

**HLO1053W** Space order collision detected.

**Explanation:** Spaces could not be processed in the supplied order. To avoid space process lock, space redistribution will be performed.

**User response:** No action is required.

---

**HLO1054W** Space order collision detected.

**Explanation:** The order of the objects specified in the control cards is inconsistent with the order on the tape data set sequence. Objects will be rearranged.

**User response:** No action is required.

---

**HLO1054W** Space order collision detected.

**Explanation:** The order of the objects specified in the control cards is inconsistent with the order on the tape data set sequence. Objects will be rearranged.

**User response:** No action is required.

---



---

**HLO1055I** Space #<*space\_count*> round robin distribution used. Group #<*group\_count*>.

**Explanation:** Space redistribution was performed by round robin algorithm.

**User response:** No action is required.

---

**HLO1056I** Space #<*space\_count*> sequential distribution used. Group #<*group\_count*>.

**Explanation:** Space redistribution was performed by sequential algorithm.

**User response:** No action is required.

---

**HLO1057E** Add tables macro internal error.

**Explanation:** An internal error occurred processing the table add function for the ADD\_TABLES or REMOVE\_AND\_ADD\_TABLES keyword.

**User response:** Contact IBM Software Support.

---

**HLO1058E** Add or Remove+Add tables function could not connect to DB2.

**Explanation:** An attempt to connect to DB2 failed.

**User response:** Check the //STEPLIB loadlibs for versioning and completeness. Contact IBM Software Support.

---

**HLO1059W** Warnings generated by the ADD\_TABLES stored procedure:  
*warnings*

**Explanation:** When processing the tables for the ADD\_TABLES or REMOVE\_AND\_ADD\_TABLES keyword, the internal stored procedure returned a warning condition. The stored procedure warning messages are displayed.

**User response:** Contact IBM Software Support.

---

**HLO1060E** Add or Remove+Add tables stored procedure error.

**Explanation:** When processing the tables for the ADD\_TABLES or REMOVE\_AND\_ADD\_TABLES keyword, the internal stored procedure returned a warning condition. The stored procedure warning messages are displayed.

**User response:** Contact IBM Software Support.

---



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**HLO1061E**    **Unknown Add or Remove+Add tables stored procedure return code.**

**Explanation:** An internal error occurred.

**User response:** Contact IBM Software Support.

---

**HLO1062E**

**Explanation:** A general error occurred during the ADD\_TABLES or REMOVE\_AND\_ADD\_TABLES stored procedure call. The error messages from the stored procedure are displayed under this error message prefix.

**User response:** Contact IBM Software Support.

---

**HLO1063E**    **Error call**  
**sysproc.accel\_get\_tables\_details table**  
*owner.name severity severity, reason*  
*reason.*

**Explanation:** There was an error in the call to stored procedure *owner.name* table. See also HLO1058I, HLO1059I, HLO1060I.

**User response:** Review the error codes and correct the problem.

---

**HLO1064I**    **Error text:** *text*

**Explanation:** This message displays the error text from the stored procedure.

**User response:** No action is required.

---

**HLO1065I**    **Error description:** *text*

**Explanation:** This message displays the error description from the stored procedure.

**User response:** No action is required.

---

**HLO1066I**    **Error action:** *text*

**Explanation:** This message displays the error action text from the stored procedure.

**User response:** No action is required.

---

**HLO1067E**    **Error; could not parse XML output. XML output follows.**

**Explanation:** An error was encountered parsing the XML output from the stored procedure. The XML output will be dumped after this message.

**User response:** Provide the output to IBM Software Support.

---

**HLO1068I**    **Space**  
*<database\_name>.<space\_name>.<partition>*  
**not loaded.**

**Explanation:** The space load process ended abnormally. See previous messages for more information.

**User response:** No action is required.

---

**HLO1069I**    **Cannot enable acceleration for table**  
*<table\_name>.*

**Explanation:** Acceleration for the specified table could not be enabled. The table is in an error state.

**User response:** No action is required.

---

**HLO1070I**    **There is no table for which to enable acceleration.**

**Explanation:** There is no table for which to enable acceleration.

**User response:** No action is required.

---

**HLO1071I**    **Acceleration enabled for table**  
*<table\_name>.*

**Explanation:** Acceleration has been enabled for the specified table.

**User response:** No action is required.

---

**HLO1101E**    **The first control card was not a request for DB2 Analytics Accelerator Loader.**

**Explanation:** The JCL you submitted did not specify IDAA\_CONSISTENT\_LOAD as the first control card in the DB2 Analytics Accelerator Loader syntax.

**User response:** Correct the DB2 Analytics Accelerator Loader syntax. IDAA\_CONSISTENT\_LOAD is the main DB2 Analytics Accelerator Loader keyword. An open parenthesis must follow this keyword and the remainder of the DB2 Analytics Accelerator Loader keywords must be contained within.

---

**HLO1103E**    **Invalid syntax after**  
**IDAA\_CONSISTENT\_LOAD control**  
**card. Expected "(".**

**Explanation:** The syntax after the IDAA\_CONSISTENT\_LOAD control card is not valid.

**User response:** Ensure the DB2 Analytics Accelerator Loader control cards are enclosed in parentheses.

---

---

**HLO1105E** Invalid syntax after SPACE control card.  
Expected "(".

**Explanation:** The syntax after the SPACE control card is not valid.

**User response:** Ensure the DB2 Analytics Accelerator Loader control cards are enclosed in parentheses.

---

**HLO1106E** The data base parameter was specified but no value was found with it.

**Explanation:** You specified the DATA\_BASE parameter but did not specify a corresponding value.

**User response:** Enter the 8-character database name following the DATA\_BASE keyword.

---

**HLO1107E** The table space name parameter was specified, but no value was found with it.

**Explanation:** You specified the SPACE\_NAME parameter but did not specify a corresponding value.

**User response:** Enter the 8-character database name following the SPACE\_NAME keyword.

---

**HLO1108E** The partition parameter was specified, but no value was found with it.

**Explanation:** You specified the PARTITION parameter but did not specify a corresponding value.

**User response:** Enter a partition number next to the PARTITION keyword.

---

**HLO1109E** The data base parameter is invalid.

**Explanation:** The DATA\_BASE syntax is invalid.

**User response:** Verify that the DATA\_BASE keyword has been properly specified in your JCL.

---

**HLO1110E** The space name parameter is invalid.

**Explanation:** The SPACE\_NAME syntax is invalid.

**User response:** Verify that the SPACE\_NAME keyword has been properly specified in your JCL.

---

**HLO1111E** The partition parameter is invalid.

**Explanation:** The PARTITION syntax is invalid.

**User response:** Verify that the PARTITION keyword has been properly specified in your JCL.

---

**HLO1112E** The end RBA parameter was specified, but no value was found with it.

**Explanation:** You specified the END\_RBA keyword but did not specify a corresponding value.

**User response:** Enter a valid value for the END\_RBA keyword.

---

**HLO1113E** Syntax error around end RBA value.  
Form is X'<6 byte hex value>'.

**Explanation:** The end RBA must be in the format x'nnnnnn' where nnnnnn is the hexadecimal value of the end RBA.

**User response:** Enter the end RBA value in the correct format.

---

**HLO1114E** The end RBA value contains an invalid hexadecimal value.

**Explanation:** The hexadecimal value specified for the end RBA is not valid.

**User response:** Correct the end RBA value.

---

**HLO1115E** The end RBA value cannot be 0.

**Explanation:** The value specified for the END\_RBA keyword cannot be 0.

**User response:** Specify a valid value for the END\_RBA keyword.

---

**HLO1116E** The end RBA value was already specified before end LRSN in a control group.

**Explanation:** In the DB2 Analytics Accelerator Loader JCL, the end RBA value is specified before end LRSN for the group.

**User response:** You can only specify end RBA or End LRSN, not both. Correct the JCL and resubmit the job.

---

**HLO1117E** The end LRSN parameter was specified, but no value was found with it.

**Explanation:** The END\_LRSN keyword is missing its parameter value.

**User response:** Enter the end LRSN following the END\_LRSN keyword.

---

**HLO1118E** Syntax error around end LRSN value.  
Form is X" <6 byte hex value >".

**Explanation:** The end LRSN must be in the format X"nnnnnn", where nnnnnn is the hex value of the end LRSN.

**User response:** Enter the end LRSN value in the correct format.

---

**HLO1119E** The end LRSN value contains an invalid hexadecimal value.

**Explanation:** The hexadecimal value entered is invalid.

**User response:** Enter the correct value.

---

**HLO1120E** The end LRSN value cannot be 0.

**Explanation:** The end LRSN cannot be 0.

**User response:** Enter the correct value.

---

**HLO1121E** The end LRSN value was already specified before end RBA in a control group.

**Explanation:** In the DB2 Analytics Accelerator Loader JCL, the end LRSN value is specified before end RBA for the group.

**User response:** You can only specify end RBA or End LRSN, not both. Correct the JCL and resubmit the job.

---

**HLO1122E** One of the following options must be specified: TO\_CURRENT, TO\_QUIESCE, END\_RBA, END\_LRSN, TO\_IC, TO\_TIMESTAMP, TO\_TIMESTAMP\_LOCAL, or TOLOGPOINT.

**Explanation:** The product requires a log range end point to complete the process.

**User response:** Ensure that the control card set includes a valid end point control card or a single end point control card factored out at the group level. You can use one of the options listed in the message text.

---

**HLO1123E** Only one end point (END\_RBA, END\_LRSN, TO\_CURRENT, TO\_QUIESCE, TO\_TIMESTAMP, TO\_TIMESTAMP\_LOCAL, TO\_IC, or TOLOGPOINT) can be specified.

**Explanation:** You specified more than one end point parameter.

**User response:** Specify only one end point parameter.

---

**HLO1124E** The starting image copy value has mismatched apostrophes.

**Explanation:** An apostrophe is missing from the starting image copy data set name on the STARTING\_IC keyword.

**User response:** Ensure the DB2 Analytics Accelerator Loader control cards are enclosed in parentheses.

---

**HLO1125E** The starting image copy value has no contents.

**Explanation:** There is a problem with the starting image copy data set name included with the STARTING\_IC keyword. Either the data set name is missing or spelled incorrectly, the data set cannot be opened, or the data set is not a valid image copy data set.

**User response:** Specify the correct data set.

---

**HLO1126E** A token value was found that was either no DB2 Analytics Accelerator Loader command set or was misplaced in the DB2 Analytics Accelerator Loader control cards. The value of the invalid token is:

**Explanation:** An invalid keyword appears in the control cards.

**User response:** Check the list of valid keywords and parameters, correct the keyword, and resubmit.

---

**HLO1127E** A table/index space name pair or index name pair is incomplete.

**Explanation:** One of the table/index space name pairs you specified is incomplete.

**User response:** Verify that all table/index space name pairs have been specified correctly. Edit your JCL as needed and resubmit the job.

---

**HLO1128E** The space *space* was not found in the DB2 catalog. Space *space*.

**Explanation:** The table space you specified in your DB2 Analytics Accelerator Loader JCL does not exist in the DB2 catalog.

**User response:** Correct the JCL and resubmit the job.

---

**HLO1129E** A partition was specified for {x} but the space is non-partitioned.

**Explanation:** A partition was specified for a non-partitioned table space.

**User response:** Correct the DB2 Analytics Accelerator Loader JCL and resubmit the job.

---

**HLO1130E** A partition was specified for {x} but the partition is not defined.

**Explanation:** A partition was specified but no partition is defined for that table space.

**User response:** Specify the correct table space partition information.

---

---

**HLO1131E** In a data sharing environment, specifying RBA values is not allowed.

**Explanation:** You specified an RBA value in a data sharing environment. RBA values are not available for use in data sharing environments.

**User response:** Correct the JCL and resubmit the job. If necessary use LRSN values instead of RBA values.

---

**HLO1132E** In a non data sharing environment, specifying LRSN values is not allowed.

**Explanation:** You are currently using a data sharing environment so the LRSN values you specified are not allowed.

**User response:** Do not use an LRSN value in your JCL or profile.

---

**HLO1133E** The command set must end with a close parenthesis ")".

**Explanation:** There is no close parenthesis following the DB2 Analytics Accelerator Loader input cards.

**User response:** Enter a close parenthesis following the DB2 Analytics Accelerator Loader input cards.

---

**HLO1134E** The command set has extra parameters after the close parenthesis.

**Explanation:** A command is outside the close parenthesis.

**User response:** Ensure the DB2 Analytics Accelerator Loader control cards are enclosed in parentheses.

---

**HLO1135E** The SYSINHLO DD card could not be found in the JCL.

**Explanation:** DB2 Analytics Accelerator Loader requires the SYSINHLO DD as input to the job. The SYSINHLO DD could not be found in the JCL.

**User response:** Specify this DD as instream or as a data set.

---

**HLO1136E** The SYSINHLO DD card could not be opened for input.

**Explanation:** The SYSINHLO DD points to a data set but that data set could not be opened for input.

**User response:** Verify that the SYSINHLO DD is not being accessed by other resources and resubmit the job.

---

**HLO1137E** The SYSINHLO DD input stream is empty.

**Explanation:** No control cards appear in the instream file or the input data set.

**User response:** Correct the JCL and resubmit the job.

---

**HLO1138E** The parsing process gave an invalid return code.

**Explanation:** There is an error in your DB2 Analytics Accelerator Loader JCL.

**User response:** Correct the JCL and resubmit the job.

---

**HLO1139E** The functional limit of DB2 Analytics Accelerator Loader is 20000 Space control card groups.

**Explanation:** You specified more than 20000 DB2 Analytics Accelerator Loader SPACE control card groups.

**User response:** Specify less than 20000 SPACE control card groups.

---

**HLO1140E** The following object is specified at least 2 times in the control cards:

**Explanation:** You specified the listed object twice or more in the control cards.

**User response:** Specify the object at most once in the control card.

---

**HLO1141E** Duplicate objects found in control card stream: PART *part* SPACE NUMB *space numb*.

**Explanation:** Duplicate object detected in control card stream.

**User response:** Remove the duplicate object.

---

**HLO1142E** The DATABASE keyword has already been coded for this space group.

**Explanation:** You specified the DATABASE parameter more than once for the SPACE group.

**User response:** Correct the JCL and resubmit the job.

---

**HLO1143E** The SPACE\_NAME keyword has already been coded for this space group.

**Explanation:** You specified the SPACE\_NAME parameter more than once for the SPACE group.

**User response:** Correct the JCL and resubmit the job.

---

**HLO1144E** The PARTITION keyword has already been coded for this space group.

**Explanation:** You specified the PARTITION parameter more than once for the SPACE group.

**User response:** Correct the JCL and resubmit the job.

---

**HLO1145E** The END\_RBA keyword has already been coded for this space group.

**Explanation:** You can only specify the END\_RBA once for each SPACE group.

**User response:** Correct the DB2 Analytics Accelerator Loader JCL and resubmit the job.

---

**HLO1146E** The END\_LRSN keyword has already been coded for this space group.

**Explanation:** You specified the END\_LRSN parameter more than once for the SPACE group.

**User response:** Specify the END\_LRSN parameter at most once in the JCL and resubmit the job.

---

**HLO1147E** The TO\_CURRENT keyword has already been coded for this space group.

**Explanation:** You specified the TO\_CURRENT keyword more than once for the SPACE group.

**User response:** Correct the JCL and resubmit the job.

---

**HLO1148E** The TO\_QUIESCE keyword has already been coded for this space group.

**Explanation:** You specified the TO\_QUIESCE parameter more than once for the SPACE group.

**User response:** Correct the JCL and resubmit the job.

---

**HLO1149E** The STARTING\_IC keyword has already been coded for this space group.

**Explanation:** You specified the STARTING\_IC parameter more than once for the SPACE group.

**User response:** Correct the JCL and resubmit the job.

---

**HLO1150E** The MINI\_LOG\_DSN\_2 keyword has already been coded for this run.

**Explanation:** You specified the MINI\_LOG\_DSN\_2 keyword multiple times for the DB2 Analytics Accelerator Loader GROUP keyword. Only one MINI\_LOG\_DSN\_2 keyword can be specified for each GROUP keyword.

**User response:** Remove the extra MINI\_LOG\_DSN\_2 keywords, leaving at most one.

---

**HLO1151E** The NO\_SYSCOPY\_ROW keyword has already been coded for this run.

**Explanation:** You specified the NO\_SYSCOPY\_ROW parameter more than once for the job.

**User response:** Correct the JCL and resubmit the job.

---



---

**HLO1152E** The RECOVERY\_SITE keyword has already been coded for this run.

**Explanation:** You specified the RECOVERY\_SITE parameter more than once for the job.

**User response:** Correct the JCL and resubmit the job.

---

**HLO1153E** The LOCAL\_SITE keyword has already been coded for this run.

**Explanation:** You specified the LOCAL\_SITE parameter more than once for the job.

**User response:** Correct the JCL and resubmit the job.

---

**HLO1154E** The SPACE(...) set involved that the error was detected in was #.

**Explanation:** This message indicates the SPACE set number for which the error was detected.

**User response:** Correct the JCL and resubmit the job.

---

**HLO1155I** Control card stream processed by Consistent Load follows...

**Explanation:** Indicates the control card stream that was processed by DB2 Analytics Accelerator Loader.

**User response:** No action is required.

---

**HLO1156I** Consistent Load processing messages follow...

**Explanation:** Indicates that there are DB2 Analytics Accelerator Loader messages that follow.

**User response:** Evaluate the message as necessary.

---

**HLO1157E** The MINI\_LOG\_DSN/ MINI\_LOG\_DSN\_1 keyword has already been coded for this run.

**Explanation:** You specified the MINI\_LOG\_DSN or MINI\_LOG\_DSN\_1 keywords multiple times for the DB2 Analytics Accelerator Loader GROUP keyword. Only one MINI\_LOG\_DSN or MINI\_LOG\_DSN\_1 keywords can be specified for each GROUP keyword.

**Note:** MINI\_LOG\_DSN and MINI\_LOG\_DSN\_1 are functionally identical.

**User response:** Code only a single MINI\_LOG\_DSN or MINI\_LOG\_DSN\_1 keyword per group.

---

**HLO1158E** The GROUP(...) set involved that the error was detected in was #{x}'.

**Explanation:** Indicates the GROUP set for which an error was detected.

**User response:** Verify the syntax of the indicated GROUP set and correct as needed.

---

---

**HLO1160E** Either all groups need a mini-log data set or all groups must be without them.

**Explanation:** You have specified a mini log data set for some but not all groups in the JCL.

**User response:** Either specify a mini log data set for all groups or none of the groups within the JCL.

---

**HLO1161E** Each group must have it's own unique mini log data set name.

**Explanation:** The mini log data sets you specified are not all unique.

**User response:** Rename mini log data sets so the each have a unique name.

---

**HLO1162E** The data set *dataset* already exists in the Consistent Load mini log control table.

**Explanation:** The data set you specified in the data set name generation qualifier string already exists in the DB2 Analytics Accelerator Loader mini log control table.

**User response:** Specify a unique mini log data set name.

---

**HLO1163E** The specified mini log data set *data\_set* already exists in the MVS catalog.

**Explanation:** The mini log data set shown in the message is not unique and already exists in the MVS catalog.

**User response:** Specify a unique mini log data set name.

---

**HLO1164W** The NO\_SYSCOPY\_ROW control card is ignored when producing mini logs.

**Explanation:** You used the NO\_SYSCOPY\_ROW control card in the JCL but this parameter is ignored when producing mini logs.

**User response:** Correct the JCL and resubmit the job.

---

**HLO1165E** The mini log data set value has mismatched apostrophes.

**Explanation:** The value you specified for MINI\_LOG\_DSN is not enclosed in matching apostrophes.

**User response:** Correct the apostrophes in your JCL and resubmit the job.

---

---

**HLO1166E** The mini log data set value has no contents.

**Explanation:** The MINI\_LOG\_DSN keyword has been specified without a value.

**User response:** Specify a valid value for the MINI\_LOG\_DSN keyword.

---

**HLO1167E** Operations on the DB2 directory are not allowed.

**Explanation:** You attempted to image copy the DB2 directory table space. This operation is not allowed.

**User response:** Do not perform operations on the DB2 directory.

---

**HLO1168E** Operations on the DB2 Catalog table space DSNDB06.SYSCOPY are not allowed.

**Explanation:** You attempted to image copy the DB2 catalog table space. This operation is not allowed.

**User response:** Do not perform operations on the DB2 catalog.

---

**HLO1169E** Space can be designated as DATA\_BASE SPACE\_NAME pair, or CREATOR INDEX pair.

**Explanation:** Control cards within the SPACE() group refer to both indexes and tables. This is not allowed.

**User response:** Edit your JCL so the SPACE() group control cards refer to either indexes or tables (but not both).

---

**HLO1170E** The index creator name parm was specified, but no value was found with it.

**Explanation:** If you specify an index creator name, you must specify a value with it.

**User response:** Specify a value for the index creator parameter.

---

**HLO1171E** The index creator parameter is invalid.

**Explanation:** The parameter you specified for the index creator is not valid.

**User response:** Specify a valid index creator value.

---

**HLO1172E** The CREATOR keyword has already been coded for this space group.

**Explanation:** You specified multiple CREATOR keywords for a space group. You can only specify the CREATOR keyword once for the space group.

**User response:** Remove all extra CREATOR keywords

and resubmit your DB2 Analytics Accelerator Loader job.

---

**HLO1173E** The index name parameter was specified, but no value was found with it.

**Explanation:** You specified the INDEX\_NAME parameter but no value was specified with it.

**User response:** Specify a value for the INDEX\_NAME keyword or remove the keyword.

---

**HLO1174E** The index name parameter is invalid.

**Explanation:** The specification of the INDEX\_NAME parameter is not valid.

**User response:** Correct the INDEX\_NAME parameter specification.

---

**HLO1175E** The NAME keyword has already been coded for this space group.

**Explanation:** The NAME keyword was specified more than once for the space group.

**User response:** Remove all unnecessary NAME keywords from the space group. Only one NAME keyword can be specified for the group.

---

**HLO1176E** The object *object* was not found in the DB2 catalog.

**Explanation:** The object indicated in the message was not found in the DB2 Catalog. Processing cannot proceed for the indicated object.

**User response:** Contact IBM Software Support.

---

**HLO1177E** The value was not properly enclosed with apostrophes.

**Explanation:** The syntax you specified was not valid. The value must be enclosed in apostrophes but was not.

**User response:** Correct the syntax by enclosing the value in apostrophes.

---

**HLO1178E** The index does not currently have COPY=YES activated in DB2.

**Explanation:** The index cannot be copied because COPY=YES is not specified.

**User response:** Specify COPY=YES for the index.

---

**HLO1179E** The index *index* was mapped to *indexspace* *indexspace* Space# *space#*.

**Explanation:** This informational message displays the database name and indexspace name for the index specified in the control cards

**User response:** No action is required.

---

**HLO1180E** The LOCAL\_SITE and RECOVERY\_SITE control cards cannot be specified together.

**Explanation:** LOCAL\_SITE and RECOVERY\_SITE control cards are mutually exclusive.

**User response:** Specify either LOCAL\_SITE or RECOVERY\_SITE but not both.

---

**HLO1181E** The WRITE\_TO\_VSAM keyword has already been coded for this run.

**Explanation:** The WRITE\_TO\_VSAM control card was specified multiple times. It should be specified at most once.

**User response:** Correct the syntax and resubmit the job.

---

**HLO1182E** The NO\_MINILOG\_CHECKPOINTS keyword has already been coded for this run.

**Explanation:** Multiple instances of the NO\_MINILOG\_CHECKPOINTS keyword have been coded in your DB2 Analytics Accelerator Loader job. This keyword can only be coded once for your run.

**User response:** Remove all extraneous instances of the NO\_MINILOG\_CHECKPOINTS keyword from your DB2 Analytics Accelerator Loader syntax.

---

**HLO1183E** The NO\_SYSCOPY\_ROW control card is ignored when writing directly to VSAM.

**Explanation:** The NO\_SYSCOPY\_ROW control card is used if you want DB2 Analytics Accelerator Loader to skip updating the SYSCOPY catalog table with a new row for the new image copy. If you specify WRITE\_TO\_VSAM or WRITE\_TO\_BOTH, this is not applicable and therefore, the NO\_SYSCOPY\_ROW control card will be ignored and the SYSCOPY catalog table will be updated with a new row for the image copy.

**User response:** No action is required. If you do not want the SYSCOPY catalog table to be updated with a new row for the image copy, specify WRITE\_TO\_COPIES.

## HLO1184E • HLO1194E

---

**HLO1184E** The `WRITE_TO_VSAM` and `MINI_LOG_DSN` control cards are mutually exclusive.

**Explanation:** Your DB2 Analytics Accelerator Loader syntax includes both the `WRITE_TO_VSAM` and `MINI_LOG_DSN` control cards. The `WRITE_TO_VSAM` control card cannot be used with the `MINI_LOG_DSN` control card.

**User response:** Correct your DB2 Analytics Accelerator Loader syntax.

---

**HLO1185E** The control card set ended prematurely. Ensure proper continuation syntax

**Explanation:** The `IDAA_CONSISTENT_LOAD` control card set contains an error and as a result ended prematurely.

**User response:** Check and correct your DB2 Analytics Accelerator Loader syntax.

---

**HLO1186E** The `WRITE_TO_COPIES` keyword has already been coded for this run.

**Explanation:** The `WRITE_TO_COPIES` keyword has been specified more than once in a `IDAA_CONSISTENT_LOAD` run.

**User response:** Correct your syntax by removing any extra `WRITE_TO_COPIES` keywords.

---

**HLO1187E** The `WRITE_TO_BOTH` keyword has already been coded for this run.

**Explanation:** The `WRITE_TO_BOTH` keyword has been specified more than once for a single `IDAA_CONSISTENT_LOAD` run.

**User response:** Correct your syntax by removing any extra `WRITE_TO_BOTH` keywords.

---

**HLO1188E** Only one `WRITE_TO_` control card can be specified per run.

**Explanation:** Multiple `WRITE_TO_` (`WRITE_TO_VSAM`, `WRITE_TO_COPIES`, `WRITE_TO_BOTH`) control cards have been specified in your JCL. Only one is allowed per run.

**User response:** Remove all extraneous `WRITE_TO_` control cards and resubmit the job. If you want to write to VSAM and to image copies, specify `WRITE_TO_BOTH`.

---

**HLO1190E** An unexpected error occurred while trying to read the ZPARM information.

**Explanation:** DB2 Analytics Accelerator Loader encountered an unexpected error when attempting to read ZPARM information.

**User response:** Contact IBM Software Support.

---

**HLO1191E** Mini log data set #1 must be specified if mini log data set #2 is specified.

**Explanation:** If you specify a secondary mini log data set, you must also specify a primary mini log data set. Thus, if you include the `MINI_LOG_DSN_2` control card in your DB2 Analytics Accelerator Loader syntax, you must also include the `MINI_LOG_DSN_1` control card in your DB2 Analytics Accelerator Loader syntax.

**Note:** If you specify a primary mini log data set, you are not required to specify a secondary mini log data set.

**User response:** To resolve this issue, you must do one of the following:

- remove the `MINI_LOG_DSN_2` control card from your syntax
- specify both `MINI_LOG_DSN_1` and `MINI_LOG_DSN_2`
- specify only `MINI_LOG_DSN_1`

---

**HLO1192E** The `TOLOGPOINT` parameter was specified, but no value was found with it.

**Explanation:** Your syntax includes the `TOLOGPOINT` control card but no value was specified. The `TOLOGPOINT` control card must specify a valid log point to which you want to make the image copy.

**User response:** Verify that the correct `TOLOGPOINT` syntax is specified in your syntax. Ensure that a log point value is specified for the `TOLOGPOINT` control card.

---

**HLO1193E** Syntax error around `TOLOGPOINT` value. Form is 'X'<6 byte hex value>'.

**Explanation:** A syntax error was detected for the `TOLOGPOINT` control card.

**User response:** Verify that the log point you specified is a six-byte hexadecimal value.

---

**HLO1194E** The `TOLOGPOINT` value contains an invalid hexadecimal value.

**Explanation:** The value specified for the `TOLOGPOINT` control card is not a valid hexadecimal value.

**User response:** Correct the value specified for the `TOLOGPOINT` control card. Ensure that you specify a valid hexadecimal value to indicate the point up to which you want to make the image copy.



---

**HLO1195E** The TOLOGPOINT value can not be 0.

**Explanation:** The value specified for the TOLOGPOINT control card is not valid. You cannot specify a value of 0.

**User response:** Correct the value specified for the TOLOGPOINT control card. Ensure that you specify a valid hexadecimal value that indicates the point up to which you want to make the image copy.

---

**HLO1196E** The TOLOGPOINT value was already specified before end LRSN in a control group.

**Explanation:** The TOLOGPOINT value overrides the specified END\_LRSN control card.

**User response:** Remove the unnecessary END\_LRSN control card and adjust the TOLOGPOINT value as needed or remove the TOLOGPOINT control card.

---

**HLO1197E** The TOLOGPOINT keyword has already been coded for this space group.

**Explanation:** The TOLOGPOINT control card need only be specified once for a space group.

**User response:** Remove the extra TOLOGPOINT control card and ensure that the TOLOGPOINT control card that remains in your syntax is set to the correct log point.

---

**HLO1198E** The grouping end point conflicts/duplicates a SPACE() level end point.

**Explanation:** The GROUP end point is invalid and conflicts with that of the SPACE level.

**User response:** Correct the syntax.

---

**HLO1199E** The FORCE\_COPIES keyword has already been coded for this run.

**Explanation:** You coded the FORCE\_COPIES control card multiple times for the run.

**User response:** Check your syntax and remove any unnecessarily FORCE\_COPIES control cards. Only one FORCE\_COPIES control card is allowed per run.

---

**HLO1200E** The subsystem Consistent Load was started with could not be found in JES2.

**Explanation:** The subsystem Consistent Load was started with could not be found in JES2.

**User response:** Verify that you have specified the correct subsystem.

---

**HLO1201E** The subsystem Accelerator Loader was started with is not active in JES2.

**Explanation:** This message indicates that the subsystem that DB2 Analytics Accelerator Loader was started with is not active in JES2.

**User response:** No action is required.

---

**HLO1202E** There are no active DB2 members on this machine for this data sharing group.

**Explanation:** The data sharing group you specified does not have any active DB2 members so Accelerator Loader processing cannot proceed.

**User response:** Specify a valid data sharing group attach name or a valid subsystem on which the DB2 Analytics Accelerator Loader processing can run.

---

**HLO1203I** DB2 subsystem is not defined to OS/390. Using group attach name instead.

**Explanation:** The DB2 subsystem you specified is not defined on OS/390. If you use a group attach name, you will be able to connect to a DB2 subsystem that is active on OS/390.

**User response:** Edit your DB2 Analytics Accelerator Loader setup to connect to a group attach name or to connect to a DB2 subsystem that is active on OS/390.

---

**HLO1204I** DB2 subsystem is not active on OS/390. Using group attach name instead.

**Explanation:** The DB2 subsystem you specified is not active on OS/390. If you use a group attach name, you will be able to connect to a DB2 subsystem that is active on OS/390.

**User response:** Edit your DB2 Analytics Accelerator Loader setup to connect to a group attach name or to connect to a DB2 subsystem that is active on OS/390.

---

**HLO1205I** The subsystem Accelerator Loader was started with is the group attach name.

**Explanation:** This message indicates the subsystem group attach name that Accelerator Loader process is using.

**User response:** No action is required.

---

**HLO1206I** The following subsystems are part of the data sharing group.

**Explanation:** This message, in conjunction with message HLO1207I, provides the following information about the subsystem on which your DB2 Analytics Accelerator Loader job ran:

- Subsystem—the subsystem.

## HLO1207I • HLO1402E

- Member ID—the member ID.
- Defined to OS/390—whether this member is defined to OS/390.
- Active—whether this member is known to this OS/390 running on OS/390.

**Note:** DB2 Analytics Accelerator Loader cannot detect the status of a member that is not running on this OS/390. Although a DB2 member may appear to be inactive, it may be running on another OS/390. Regardless, DB2 Analytics Accelerator Loader reads the logs and processes all of the necessary files from each member of the data sharing group.

**User response:** No action is required.

---

**HLO1207I**    **Subsystem:** *subsystem*    **Member ID:** *memberid*    **Defined to OS/390:** *system*  
**Active:** *status*

**Explanation:** This message, in conjunction with message HLO1206I, provides the following information about the subsystem on which your DB2 Analytics Accelerator Loader job ran:

- The subsystem.
- The member ID.
- Whether or not this member is defined to OS/390.
- Whether or not this member is running on OS/390.

**Note:** DB2 Analytics Accelerator Loader cannot detect the status of a member that is not running on this OS/390. Although a DB2 member may appear to be inactive, it may be running on another OS/390. Regardless, DB2 Analytics Accelerator Loader reads the logs and processes all of the necessary files from each member of the data sharing group.

**User response:** No action is required.

---

**HLO1208I**    *ssids*

**Explanation:** This message displays the SSIDs that accompany messages HLO1206I and HLO1207I.

**User response:** No action is required.

---

**HLO1209A**    **Accelerator Loader is not in an APF authorized concatenation. It needs to be.**

**Explanation:** To run, DB2 Analytics Accelerator Loader requires that the target load libraries SHLOLOAD and SHLOLOAD are APF authorized.

**User response:** Include the *highlevel.SHLOLOAD* and *highlevel.SHLOLOAD* libraries as part of your system APF authorized list.

---

**HLO1210A**    **Accelerator Loader needs to run from a //STEPLIB concatenation.**

**Explanation:** Your JCL does not specify a //STEPLIB concatenation.

**User response:** Correct your JCL and resubmit the job.

---

**HLO1211A**    **The following data set in the //STEPLIB concatenation is not APF authorized:**  
*data\_set*

**Explanation:** The data set indicated in the message requires APF authorization.

**User response:** APF authorize the data set indicated in the message.

---

**HLO1212A**    **An internal error occurred while attempting to ascertain APF authorization status.**

**Explanation:** An internal error occurred.

**User response:** Contact IBM Software Support.

---

**HLO1300I**    **The ENQs for the spaces were successful.**

**Explanation:** This message indicates that the ENQs for the table spaces completed successfully.

**User response:** No action is required.

---

**HLO1301E**    **The ENQ for database *database* PART *part* was not successful.**

**Explanation:** Indicates the database and partition for which the ENQs did not complete successfully.

**User response:** No action is required.

---

**HLO1400I**    **Incremental image copy *image\_copy* could not be allocated.**

**Explanation:** Indicates the incremental image copy that could not be allocated .

**User response:** No action is required.

---

**HLO1402E**    **Could not start log record writer.**

**Explanation:** A z/OS attachment error occurred attempting to start a component of the load read phase process.

**User response:** Ensure the product library is complete. Contact IBM Software Support.

---

**HLO1403I**    **The desired incremental image copy could not be opened.**

**Explanation:** DB2 Analytics Accelerator Loader could not open the incremental image copy you specified.

**User response:** Verify that the file is not in use.

---

**HLO1404I**    **The incremental image copy work file could not be opened.**

**Explanation:** DB2 Analytics Accelerator Loader could not open the incremental image copy work file.

**User response:** Verify that the file is not in use and that you have the proper authority to access this file.

---

**HLO1405I**    **The incremental image copy sort input file could not be opened.**

**Explanation:** DB2 Analytics Accelerator Loader could not open the incremental image copy sort input file.

**User response:** Verify that the file is not in use and that you have the proper authority to access this file.

---

**HLO1406I**    **A read request to the current incremental image copy failed.**

**Explanation:** A request to read the current incremental image copy was not successful.

**User response:** Verify that the file is not in use and that you have the proper authority to access this file.

---

**HLO1407I**    **Could not allocate the sort input work file for incr. IC processing.**

**Explanation:** DB2 Analytics Accelerator Loader was not able to allocate the sort input work file for incremental image copy processing.

**User response:** Verify that the file is not in use and that you have the proper authority to allocate this file.

---

**HLO1408I**    **Could not allocate the sort output work file for incr. IC processing.**

**Explanation:** DB2 Analytics Accelerator Loader was not able to allocate the sort output work file for incremental image copy processing.

**User response:** Verify that the file is not in use and that you have the proper authority to allocate this file.

---

**HLO1409I**    **An invalid return code was detected from the SORT program.**

**Explanation:** DB2 Analytics Accelerator Loader detected an invalid return code when attempting to SORT.

**User response:** Contact IBM Software Support.

---



---

**HLO1410I**    **Dynamic allocation return code =return code**

**Explanation:** Dynamic allocation produced the return code shown in the message.

**User response:** Diagnose the problem using the return code. Refer to *DB2 UDB for z/OS V8 Messages* (GC18-9602-01) and *DB2 UDB for z/OS V8 Codes* (GC18-9603-01) for more information.

---

**HLO1411I**    **The last reported incremental image copy returned an immediate EOF.**

**Explanation:** DB2 Analytics Accelerator Loader encountered an immediate end of file for the last reported incremental image copy.

**User response:** No action is required.

---

**HLO1412I**    **Image copy name=*image\_copy* RBA=*rba*.**

**Explanation:** Indicates the image copy name and RBA.

**User response:** No action is required.

---

**HLO1413I**    **The accumulation of incremental image copies failed.**

**Explanation:** The accumulation of incremental image copies was not successful.

**User response:** No action is required.

---

**HLO1414I**    **The DB2 log will be used instead of the unusable incremental image copies.**

**Explanation:** This message indicates that the DB2 log will be used in the DB2 Analytics Accelerator Loader process since the incremental image copies are unusable.

**User response:** No action is required.

---

**HLO1415I**    **The sort of the incremental image copies was successful.**

**Explanation:** This message indicates that the sort of the incremental image copies completed successfully.

**User response:** No action is required.

---

**HLO1416E**    **A FTR sort program could not be started.**

**Explanation:** The SORT program could not be started.

**User response:** Contact IBM Software Support.

---

---

**HLO1417E** An invalid return code was detected from the SORT program (FTR).

**Explanation:** The SORT program ended with an error.

**User response:** Contact IBM Software Support.

---

**HLO1418I** All start points are Sharelevel Reference; checkpoint processing skipped.

**Explanation:** This informational message indicates that checkpoint processing has been skipped since all start points are Sharelevel Reference.

**User response:** No action is required.

---

**HLO1419E** A mismatch between passed Zparm information and the JES SSCT was found.

**Explanation:** The ZPARM member for the source subsystem could not be found.

**User response:** Verify that the ZPARM information is accurate in the log apply job. Verify that the correct data sets containing the ZPARM member for the source subsystem are allocated. Contact IBM Software Support if the problem persists.

---

**HLO1420E** An unexpected error occurred while trying to read the ZPARM information.

**Explanation:** The ZPARM member could not be found.

**User response:** Verify that the ZPARM information is accurate in the log apply job. Verify that the correct data sets containing the ZPARM member are allocated. Contact IBM Software Support if the problem persists.

---

**HLO1421E** An unexpected error occurred while trying to read the bootstrap data set.

**Explanation:** The ZPARM member could not be found.

**User response:** Verify that the ZPARM information is accurate in the log apply job. Verify that the correct data sets containing the ZPARM member are allocated. Contact IBM Software Support if the problem persists.

---

**HLO1500I** An invalid return code was detected from the SORT program (log).

**Explanation:** DB2 Analytics Accelerator Loader encountered an invalid return log.

**User response:** Correct the JCL and resubmit the job.

---



---

**HLO1501E** The following log data set is required for processing but got an error: *error*.

**Explanation:** DB2 requires the log data set for processing but received the indicated error code when attempting to access the data set.

**User response:** Verify that the file is not in use and that you have the proper authority to access this file.

---

**HLO1502E** A gap was found in the logs needed for processing. Last usable log was:

**Explanation:** A gap found in the logs required for processing was found. Logs after the gap were not usable. Subsequent message HLO1503I indicates the log data set name of the last usable log.

**User response:** No action is required.

---

**HLO1503I** *data\_set\_name*

**Explanation:** This message accompanies HLO1502I and indicates the log data set name that was last usable.

**User response:** No action is required.

---

**HLO1504E** A desired log range cannot be found in any active/archive log.

**Explanation:** The log range is not available in any of the active or archive logs.

**User response:** No action is required.

---

**HLO1506W** *db2\_ssid* The start point for log processing was not within any archive/active log range.

**Explanation:** No log records for the objects in this run were found in this *db2\_ssid*

**User response:** No action is required.

---

**HLO1510I** Error code #1:'code' #2: 'code'

**Explanation:** This message indicates an internal error that occurs when the log reader process cannot allocate an active or archive log file

**User response:** Diagnose the problem using the return codes listed in the message. Refer to *DB2 UDB for z/OS V8 Messages* (GC18-9602-01) and *DB2 UDB for z/OS V8 Codes* (GC18-9603-01) documentation to for more information.

---

**HLO1512E** An unexpected error occurred while trying to read the bootstrap data set.

**Explanation:** Accelerator Loader was unable to read the bootstrap data set.

**User response:** No action is required.

---

---

**HLO1513E** An unexpected error occurred while trying to read the ZPARM information.

**Explanation:** An unexpected error occurred while trying to read the ZPARM information.

**User response:** No action is required.

---

**HLO1514E** An error was detected during end log processing for subsystem *ssid* RC=*rc*.

**Explanation:** Accelerator Loader encountered an error for the indicated subsystem.

**User response:** Refer to *DB2 UDB for z/OS V8 Messages* (GC18-9602-01) and *DB2 UDB for z/OS V8 Codes* (GC18-9603-01) for more information

---

**HLO1515I** Log accumulated processing is beginning on subsystem *ssid*.

**Explanation:** Log accumulated processing has started on the subsystem indicated in the message.

**User response:** No action is required.

---

**HLO1516I** Above the bar storage exhausted.

**Explanation:** The above the bar storage has been exhausted due to system or control card limits.

**User response:** The limit set by the maximum secondary allocation parameter has been met.

---

**HLO1518I** Reading *type* log log.

**Explanation:** The ACTIVE/ARCHIVE log *log\_dataset\_name* is about to be read for log records associated with the specified objects.

**User response:** No action is required.

---

**HLO1519I** Log reader operating in no consistency checking mode.

**Explanation:** When operating with mini log SHARELEVEL CHANGE, no consistency checks are don on uncommitted work found in the log.

**User response:** No action is required.

---

**HLO1519W** Log reader operating in no consistency checking mode.

**Explanation:** Either mini logs are being written in SHARELEVEL CHANGE mode or a WRITE\_TO\_VSAM operation is taking place and all end points are TO\_CURRENT.

**User response:** No action is required.

---

**HLO1520I** The log reader task #*task\_number* finished.

**Explanation:** This message indicates that the processing of the log reader has completed.

**User response:** No action is required.

---

**HLO1521I** Issuing HRECALL for log dataset *dsname*

**Explanation:** This is an informational message indicating that the log data set needed for processing has been recalled from migration.

**User response:** No action is required.

---

**HLO1600E** The file used to hold log records as input to sort could not be allocated.

**Explanation:** DB2 Analytics Accelerator Loader could not allocate the file used to hold log records as input to sort.

**User response:** Verify that the file is not in use.

---

**HLO1601E** The file used to hold log records as input to sort could not be opened.

**Explanation:** DB2 Analytics Accelerator Loader could not open the file used to hold log records as input to sort.

**User response:** Verify that the file is not in use.

---

**HLO1602E** The file used to hold log records after they are sorted could not be allocated.

**Explanation:** DB2 Analytics Accelerator Loader could not allocate the file used to hold log records after they have been sorted.

**User response:** Verify that the file is not currently in use or damaged.

---

**HLO1603E** The mini log data set *mini\_log\_dsn* could not be allocated.

**Explanation:** DB2 Analytics Accelerator Loader could not allocate the mini log data set.

**User response:** Verify that the file is not currently in use or damaged.

---

**HLO1604E** The mini log data set *min\_log\_dsn* could not be opened.

**Explanation:** There was a problem encountered when attempting to open the mini log data set.

**User response:** Verify that the file is not currently in use or damaged.

---

---

**HLO1605E** Dynamic allocation return code 'rc'.

**Explanation:** This diagnostic message indicates data set allocation failure.

**User response:** Diagnose the problem using the return code. Refer to *DB2 UDB for z/OS V8 Messages* (GC18-9602-01) and *DB2 UDB for z/OS V8 Codes* (GC18-9603-01) for more information.

---

**HLO1606I** The DB2 log record sort DD *ddname* was allocated.

**Explanation:** This message displays the input DDNAME. This message is output if DB2 Analytics Accelerator Loader dynamically allocates the SORTIN2/SORTOUT2 DDNAMES. If the SORTIN2/SORTOUT2 DDNAMES are specified by the user in the step JCL, the messages does not appear and those DDs will be used as specified.

**User response:** No action is required.

---

**HLO1607I** The DB2 log record sort DD *ddname* was allocated.

**Explanation:** This message displays the output DDNAME. This message is output if DB2 Analytics Accelerator Loader dynamically allocates the SORTIN2/SORTOUT2 DDNAMES. If the SORTIN2/SORTOUT2 DDNAMES are specified by the user in the step JCL, the messages does not appear and those DDs will be used as specified.

**User response:** No action is required.

---

**HLO1608E** The mini log data set *dsn* could not be located for append purpose.

**Explanation:** The mini log data set could not be located.

**User response:** Ensure the mini log data set is available.

---

**HLO1609E** The mini log data set *dsn* could not be renamed for append purpose.

**Explanation:** The mini log data set could not be renamed.

**User response:** Ensure the mini log data set is available.

---

**HLO1610E** The sysout dataset for FTR "*name*" could not be allocated.

**Explanation:** While preparing data set for a sort in the FTR runtime context, a SYSOUT=\* dynamic allocation request failed.

**User response:** Contact IBM Software Support.

---

---

**HLO1800E** The most recent full image copy could not be allocated.

**Explanation:** This message indicates that the most recent full image copy could not be allocated during the DB2 Analytics Accelerator Loader process.

**User response:** No action is required.

---

**HLO1801E** The work file for sorting the full image copy file could not be allocated.

**Explanation:** DB2 Analytics Accelerator Loader could not allocate the full image copy file.

**User response:** Verify that the full image copy file has not been damage. Check with your systems administrator to verify that you have proper authorizations to access the necessary file.

---

**HLO1802E** The work file for re-keying the full image copy file could not be allocated.

**Explanation:** DB2 Analytics Accelerator Loader could not allocate the work file for re-keying the full image copy file.

**User response:** Verify that the full image copy file has not been damage. Check with your systems administrator to verify that you have proper authorizations to access the necessary file.

---

**HLO1803E** The most recent full image copy could not be opened.

**Explanation:** DB2 Analytics Accelerator Loader could not open the most recent full image copy.

**User response:** Verify that the full image copy is not currently being used and resubmit the job.

---

**HLO1804E** The temporary file used to re-key the full IC could not be opened.

**Explanation:** DB2 Analytics Accelerator Loader could not open the temporary file used to re-key the full image copy.

**User response:** Verify that the file is not in use and that you have the proper authority to access this file.

---

**HLO1805I** Dynamic allocation return code=*rc*.

**Explanation:** This message indicates the dynamic allocation return code.

**User response:** No action is required.

---

---

**HLO1806I** Image copy name=*image\_copy\_name*  
RBA=*rba*

**Explanation:** Indicates the image copy name and RBA.

**User response:** No action is required.

---

**HLO1807E** An invalid return code was detected from the SORT program.

**Explanation:** DB2 Analytics Accelerator Loader encountered an invalid return code from the SORT program.

**User response:** Contact IBM Software Support.

---

**HLO1808I** The full image copy *image\_copy* could not be deallocated.

**Explanation:** DB2 Analytics Accelerator Loader could not deallocate the full image copy.

**User response:** Verify that the file is not in use or damaged. Check with your systems administrator to ensure you have proper authorizations to access this file.

---

**HLO1809E** The full image copy file returned an immediate EOF.

**Explanation:** DB2 Analytics Accelerator Loader could not deallocate the full image copy.

**User response:** Verify that the file is not in use or damaged. Check with your systems administrator to ensure you have proper authorizations to access this file.

---

**HLO1810E** This error occurred during the re-key process for a full IC.

**Explanation:** An error occurred during the re-key process for a full image copy.

**User response:** Contact IBM Software Support.

---

**HLO1811I** The sort of the REORG inline full image copy file was successful.

**Explanation:** This message indicates that the REORG inline full image copy completed successfully.

**User response:** No action is required.

---

**HLO1812I** The sort of the re-keyed REORG inline full image copy file was successful.

**Explanation:** This informational message indicates that the sort process for the re-keyed REORG inline full image copy completed successfully.

**User response:** No action is required.

---

**HLO1813I** The sort of the LOAD inline full image copy file was successful.

**Explanation:** This message indicates the LOAD inline full image copy file sorted successfully.

**User response:** No action is required.

---

**HLO1814I** The sort of the re-keyed LOAD inline full image copy file was successful.

**Explanation:** This message indicates that the re-keyed LOAD inline full image copy file completed successfully.

**User response:** No action is required.

---

**HLO1815E** The catalog check on the most recent image copy failed.

**Explanation:** The catalog check on the most recent image copy did not complete successfully.

**User response:** No action is required.

---

**HLO1816E** Error processing was aborted by repeated error.

**Explanation:** An internal error occurred.

**User response:** Contact IBM Software Support.

---

**HLO1817E** Unexpected EOF was detected while reading full IC page.

**Explanation:** An internal error occurred inside the full image copy reader component.

**User response:** Contact IBM Software Support.

---

**HLO1818E** Error to Close full IC.

**Explanation:** An internal error occurred inside the full image copy reader component.

**User response:** Contact IBM Software Support.

---

**HLO1819E** An invalid return code from a sequential VSAM read was detected.

**Explanation:** An internal error occurred inside the full image copy reader component. In this case, a VSAM LDS file was used as the input image copy starting point.

**User response:** Contact IBM Software Support.

---

**HLO1820I** DB2Sort block mode used.

**Explanation:** The DB2 Sort program returned that block mode was used.

**User response:** No action is required.

---

---

**HLO1821I** The sort of the COMPRESSED full image copy file was successful.

**Explanation:** Normal SORT program processing on a compressed object image copy.

**User response:** No action is required.

---

**HLO1822I** The sort of the rekeyed COMPRESSED full image copy file was successful.

**Explanation:** A normal sort of an 8K / 16K / 32K page-sized compressed object input copy took place.

**User response:** No action is required.

---

**HLO1900I** Log range LRSN X'lrsn' to X'lrsn' is being processed.

**Explanation:** Indicates the log range that is being processed by DB2 Analytics Accelerator Loader.

**User response:** No action is required.

---

**HLO1901I** Log range RBA X'rsa' to X'rsa' is being processed.

**Explanation:** Indicates the log range that is being processed by DB2 Analytics Accelerator Loader.

**User response:** No action is required.

---

**HLO2000E** The output full image copy *image\_copy* could not be opened.

**Explanation:** DB2 Analytics Accelerator Loader could not open the output full image copy.

**User response:** Verify that the file is not in use and that you have the proper authority to access this file.

---

**HLO2001E** Dynaloc function error DSN DSN rc= *rc* reason= *reason*.

**Explanation:** A call to z/OS dynamic allocation failed.

**User response:** Contact IBM Software Support.

---

**HLO2002E** Error process IDCAM output. Output follows: *output*

**Explanation:** IDCAMS system service request returned an error condition. The IDCAMS output and error messages follow.

**User response:** Verify IDCAMS output. Contact IBM Software Support.

---

**HLO2003E** An internal error occurred in the Accelerator Loader merge section.

**Explanation:** An internal error occurred.

**User response:** Contact IBM Software Support.

---



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**HLO2004I** The number of pages in the full image copy is inconsistent with the page size.

**Explanation:** The page size you specified is not consistent with the number of pages in the full image copy.

**User response:** Correct the page size specified and resubmit the job.

---

**HLO2005E** The number of pages in the incr. image copy is inconsistent with the page size.

**Explanation:** The page size you specified is not consistent with the number of pages in the incremental image copy.

**User response:** Correct the number of pages specified and resubmit the job.

---

**HLO2006E** An unexpected EOF was encountered on the sorted log records file.

**Explanation:** An unexpected end of file was encountered.

**User response:** Contact IBM Software Support.

---

**HLO2007E** The selected full IC has a DBID/PSID mismatch to the DB2 catalog.

**Explanation:** The DBID/PSID for the selected full image copy does not match those in the DB2 catalog.

**User response:** Correct the DBID/PSID for the selected full image copy.

---

**HLO2008I** Number of pages read from the full image copy file(s)=*n*.

**Explanation:** This informational message indicate the number of pages that were read from the full image copy files.

**User response:** No action is required.

---

**HLO2009I** Number of pages read from the incremental image copy file(s)=*n*.

**Explanation:** This informational message indicates the number of pages that were read from the incremental image copy data set(s).

**User response:** No action is required.

---

**HLO2010I** Number of records read from the log apply file=*n*.

**Explanation:** This informational message indicates the number of pages that were read from the log apply file.

**User response:** No action is required.

---



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**HLO2011I**    **Number of pages written to the new full image copy file(s)=n.**

**Explanation:** This informational message indicates the number of pages that were written to the new full image copy data set(s).

**User response:** No action is required.

---

**HLO2012I**    **Number of pages written to the table/index space file(s)=n.**

**Explanation:** Indicates the number of pages written to the table/index space files.

**User response:** No action is required.

---

**HLO2013I**    **Since no changes were found for this data set, it has been deleted: dsn**

**Explanation:** This message appears during dynamic allocation of an output image copy data set and no output was written to that data set. It is similar to the other message that is reported when no output is written to an output image copy data set in JCL.

**User response:** No action is required.

---

**HLO2014E**    **Error to start rebuild indexes thread.**

**Explanation:** An attempt to start the rebuild indexes process returned an error.

**User response:** Verify STEPLIB contents for complete install. Contact IBM Software Support.

---

**HLO2015E**    **A open failure occurred on the VSAM I/O module.**

**Explanation:** An open failure occurred for the VSAM I/O module.

**User response:** Refer to message HLO2023E for any dynamic allocation return codes and consult with your systems programmer. For information about the dynamic allocation return codes received, see the *MVS Programming Authorized Assembler Service Guide (SA22-7608)*.

---

**HLO2016E**    **A close failure occurred on the VSAM I/O module.**

**Explanation:** A close failure occurred for the VSAM I/O module.

**User response:** Contact IBM Software Support.

---

**HLO2017E**    **A write failure occurred on the VSAM I/O module.**

**Explanation:** A write failure occurred for the VSAM I/O module.

**User response:** Contact IBM Software Support.

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**HLO2018E**    **An open for update failure occurred on the VSAM I/O module.**

**Explanation:** An open failure occurred for the VSAM I/O module.

**User response:** Contact IBM Software Support.

---

**HLO2019E**    **A random fetch failure occurred on the VSAM I/OI module.**

**Explanation:** A fetch failure occurred for the VSAM I/O module.

**User response:** Contact IBM Software Support.

---

**HLO2020E**    **A random write failure occurred on the VSAM I/O module.**

**Explanation:** A write failure occurred for the VSAM I/O module.

**User response:** Contact IBM Software Support.

---

**HLO2021E**    **A random close failure occurred on the VSAM I/O module.**

**Explanation:** A close failure occurred for the VSAM I/O module.

**User response:** Contact IBM Software Support.

---

**HLO2022E**    **The underlying table/index space data set could not be found in MVS.**

**Explanation:** The table/index space could not be found in MVS.

**User response:** No action is required.

---

**HLO2023E**    **Dynamic allocation return code ='*return\_code*'.**

**Explanation:** This diagnostic message indicates data set allocation failure.

**User response:** Diagnose the problem using the return code. Refer to *DB2 UDB for z/OS V8 Messages (GC18-9602-01)* and *DB2 UDB for z/OS V8 Codes (GC18-9603-01)* for more information.

---

**HLO2024I**    **Object Database=*database* Space Name=*space\_name* Partition=*partition* will have an image copy written anyway due to control card FORCE\_COPIES.**

**Explanation:** Accelerator Loader will write an image copy for the object indicated in the message and override the WRITE\_TO\_VSAM control card, because the control card FORCE\_COPIES has been specified with a value of Y.

**User response:** No action is required. If you do not

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want an image copy produced, specify FORCE\_COPIES N.

---

**HLO2026E** A CELL64 free request failed.

**Explanation:** An internal error occurred.

**User response:** Contact IBM Software Support.

---

**HLO2027E** Rebuild indexes thread returned error.

**Explanation:** An internal error occurred.

**User response:** Contact IBM Software Support.

---

**HLO2028E** Log apply process cancelled by request from task manager.

**Explanation:** An internal error occurred.

**User response:** Contact IBM Software Support.

---

**HLO2029I** Space *database.spacename* Part # *number* will be written to DSN.

**Explanation:** SWITCH\_VCAT keyword in effect, data set name *dsn* was generated to place WRITE\_TO\_VSAM result.

**User response:** None.

---

**HLO2030E** Data set organization is not VSAM DSN DSN.

**Explanation:** A WRITE\_TO\_VSAM operation to a specified data set with the REUSE option could not be completed because the data set is not VSAM.

**User response:** Check the data sets that were involved. Contact IBM Software Support.

---

**HLO2031E** The LP image copy spanned tape could not be freed for a device switch.

**Explanation:** The dynamic allocation of the image copy data set to the spanned tape failed because the tape could not be freed for a device switch.

**User response:** Verify that the spanned tape is available for allocation.

---

**HLO2032E** The initial LP image copy could not be allocated on the tape device.

**Explanation:** The allocation of the image copy data set to the tape device failed.

**User response:** Verify that the tape device is available for allocation.

---

**HLO2033E** The LP image copy data set to be created on tape could not be opened.

**Explanation:** The image copy data set that is to be created cannot be opened.

**User response:** Verify that the image copy data set you specified in your DB2 Analytics Accelerator Loader JCL is available for use and resubmit the DB2 Analytics Accelerator Loader job.

---

**HLO2034E** The LP image copy could not be allocated to the DASD device.

**Explanation:** The dynamic allocation of the data set to the DASD device failed.

**User response:** Verify that the device name is correct and that it is available for allocation.

---

**HLO2035E** The LP image copy data set to be created on DASD could not be opened.

**Explanation:** The image copy data set that is to be created cannot be opened.

**User response:** Verify that the image copy data set you specified in your DB2 Analytics Accelerator Loader JCL is available for use and resubmit the DB2 Analytics Accelerator Loader job.

---

**HLO2036E** The spanned LP image copy on tape could not be opened.

**Explanation:** The image copy data set that is to be created cannot be opened.

**User response:** Verify that the image copy data set you specified in your DB2 Analytics Accelerator Loader JCL is available for use and resubmit the DB2 Analytics Accelerator Loader job.

---

**HLO2037E** The LB image copy spanned tape could not be freed for a device switch.

**Explanation:** The dynamic allocation of the image copy data set to the spanned tape failed because the tape could not be freed for a device switch.

**User response:** Verify that the spanned tape is available for allocation.

---

**HLO2038E** The initial LB image copy could not be allocated onto the tape device.

**Explanation:** The allocation of the image copy data set to the tape device failed.

**User response:** Verify that the tape device is available for allocation.

---

**HLO2039E** The LB image copy data set to be created on tape could not be opened.

**Explanation:** The image copy data set that is to be created cannot be opened.

**User response:** Verify that the image copy data set you specified in your DB2 Analytics Accelerator Loader JCL is available for use and resubmit the DB2 Analytics Accelerator Loader job.

---

**HLO2040E** The LB image copy could not be allocated to the DASD device.

**Explanation:** The dynamic allocation of the data set to the DASD device failed.

**User response:** Verify that the device name is correct and that it is available for allocation.

---

**HLO2041E** The LB image copy data set to be created on DASD could not be opened.

**Explanation:** The image copy data set that is to be created cannot be opened.

**User response:** Verify that the image copy data set you specified in your DB2 Analytics Accelerator Loader JCL is available for use and resubmit the DB2 Analytics Accelerator Loader job.

---

**HLO2042E** The spanned LB image copy on tape could not be opened.

**Explanation:** The image copy data set that is to be created cannot be opened.

**User response:** Verify that the image copy data set you specified in your DB2 Analytics Accelerator Loader JCL is available for use and resubmit the DB2 Analytics Accelerator Loader job.

---

**HLO2043E** The RP image copy spanned tape could not be freed for a device switch.

**Explanation:** The dynamic allocation of the image copy data set to the spanned tape failed because the tape could not be freed for a device switch.

**User response:** Verify that the spanned tape is available for allocation.

---

**HLO2044E** The initial RP image copy could not be allocated onto the tape device.

**Explanation:** The allocation of the image copy data set to the tape device failed.

**User response:** Verify that the tape device is available for allocation.

---



---

**HLO2045E** The RP image copy data set to be created on tape could not be opened.

**Explanation:** The image copy data set that is to be created cannot be opened.

**User response:** Verify that the image copy data set you specified in your DB2 Analytics Accelerator Loader JCL is available for use and resubmit the DB2 Analytics Accelerator Loader job.

---

**HLO2046E** The RP image copy could not be allocated to the DASD device.

**Explanation:** The dynamic allocation of the data set to the DASD device failed.

**User response:** Verify that the device name is correct and that it is available for allocation.

---

**HLO2047E** The RP image copy data set to be created on DASD could not be opened.

**Explanation:** The image copy data set that is to be created cannot be opened.

**User response:** Verify that the image copy data set you specified in your DB2 Analytics Accelerator Loader JCL is available for use and resubmit the DB2 Analytics Accelerator Loader job.

---

**HLO2048E** The spanned RP image copy on tape could not be opened.

**Explanation:** The image copy data set that is to be created cannot be opened.

**User response:** Verify that the image copy data set you specified in your DB2 Analytics Accelerator Loader JCL is available for use and resubmit the DB2 Analytics Accelerator Loader job.

---

**HLO2049E** The RB image copy spanned tape could not be freed for a device switch.

**Explanation:** The dynamic allocation of the image copy data set to the spanned tape failed because the tape could not be freed for a device switch.

**User response:** Verify that the spanned tape is available for allocation.

---

**HLO2050E** The initial RB image copy could not be allocated onto the tape device.

**Explanation:** The allocation of the image copy data set to the tape device failed.

**User response:** Verify that the tape device is available for allocation.

---

---

**HLO2051E** The RB image copy data set to be created on tape could not be opened.

**Explanation:** The image copy data set that is to be created cannot be opened.

**User response:** Verify that the image copy data set you specified in your DB2 Analytics Accelerator Loader JCL is available for use and resubmit the DB2 Analytics Accelerator Loader job.

---

**HLO2052E** The RB image copy could not be allocated to the DASD device.

**Explanation:** The dynamic allocation of the data set to the DASD device failed.

**User response:** Verify that the device name is correct and that it is available for allocation.

---

**HLO2053E** The RB image copy data set to be created on DASD could not be opened.

**Explanation:** The image copy data set that is to be created cannot be opened.

**User response:** Verify that the image copy data set you specified in your DB2 Analytics Accelerator Loader JCL is available for use and resubmit the DB2 Analytics Accelerator Loader job.

---

**HLO2054E** The spanned RB image copy on tape could not be opened.

**Explanation:** The image copy data set that is to be created cannot be opened.

**User response:** Verify that the image copy data set you specified in your DB2 Analytics Accelerator Loader JCL is available for use and resubmit the DB2 Analytics Accelerator Loader job.

---

**HLO2055I** A volume written to and left on the system could not be found.

**Explanation:** When Accelerator Loader finishes writing to a tape data set, the tape cartridge is not rewound and ejected. It is left on the tape drive in case another data set needs to be written afterwards. Once any one data set is written, it is closed and code then goes back and reads internal MVS control blocks to get specifics about that data set. If this subsequent code can't find the data set just written and closed, the error occurs.

**User response:** Contact IBM Software Support.

---

**HLO2057E** The following mini log data set could not be deallocated from OS/390:

**Explanation:** The mini log data set could not be deallocated from OS/390 and could therefore not be used in DB2 Analytics Accelerator Loader processing.

This message is followed by HLO2060I which displays the name of the mini log data set that could not be deallocated.

**User response:** Verify that the mini log data set is available for use.

---

**HLO2058E** The following mini log data set could not be opened:

**Explanation:** The mini log data set could not be opened and could therefore not be used in HLO processing. This message is followed by HLO2060I which displays the name of the mini log data set that could not be opened.

**User response:** Verify that the mini log data set is available for use.

---

**HLO2059E** The following mini log data set could not be allocated:

**Explanation:** The mini log data set could not be allocated and could therefore not be used in DB2 Analytics Accelerator Loader processing. This message is followed by HLO2060I which displays the name of the mini log data set that could not be allocated.

**User response:** Verify that the mini log data set is available for use.

---

**HLO2060E** *dsname*

**Explanation:** This message displays a data set name that is associated with other messages.

**User response:** No action is required.

---

**HLO2061I** The mini log file *filename* has been processed.

**Explanation:** The mini log indicated in the messages has been processed.

**User response:** No action is required.

---

**HLO2062I** HLO will attempt to use the MINI\_LOG\_DSN\_2 data set instead.

**Explanation:** DB2 Analytics Accelerator Loader was unable to use the MINI\_LOG\_DSN\_1 data set so it will now attempt to use the MINI\_LOG\_DSN\_2 data set.

**User response:** No action is required.

---

**HLO2063E** A corrupted row was found in the mini log control table.

**Explanation:** DB2 Analytics Accelerator Loader was unable to use the mini log control table due to a corrupted row.

**User response:** No action is required.

---

**HLO2064E** Both mini log data sets for this space could not be opened.

**Explanation:** DB2 Analytics Accelerator Loader attempted to open both mini log data sets for the space but was unable to do so.

**User response:** Verify that the mini log data sets are available for use.

---

**HLO2066E** An unexpected EOF was encountered on a merged mini log records file.

**Explanation:** DB2 Analytics Accelerator Loader encountered an unexpected EOF on a merged mini log record file.

**User response:** No action is required.

---

**HLO2067E** XLAT\_DSN <DSN> will be used for <XLAT\_TARGET>

**Explanation:** XLAT\_DSN <DSN> was not found and there is no XLAT\_VSAM or XLAT\_COPY specified. XLAT\_TARGET will be determined by format of DSN. So if DSN conforms to DB2 space name format, new VSAM data set will be allocated, if not new sequential data set will be allocated.

**User response:** No action is required.

---

**HLO2068E** The XML sequence number update process failed.

**Explanation:** Coordinating the internal XML sequence number during OBIDXLAT processing could not be completed.

**User response:** Contact IBM Software Support.

---

**HLO2069I** The space space resulted in the error condition.

**Explanation:** Generic message that follows many other error messages.

**User response:** No action is required.

---

**HLO2070E** The alternative SSID XML sequence column update program failed.

**Explanation:** Coordinating the internal XML sequence number during OBIDXLAT processing could not be completed.

**User response:** Contact IBM Software Support.

---

**HLO2071E** An XML update job is needed, but the XML output DSN is missing.

**Explanation:** The XML output DSN was not specified.

**User response:** Specify an XML output DSN.

---



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**HLO2072E** An XML update job is needed, but the XML output prefix is missing.

**Explanation:** The XML output prefix was not specified.

**User response:** Specify the XML output prefix.

---

**HLO2073E** An XML update job is needed, but the XML template DSN is missing.

**Explanation:** The XML template DSN was not specified.

**User response:** Specify an XML template DSN.

---

**HLO2074E** The XML template data set could not be allocated.

**Explanation:** Unable to allocate the needed DSN.

**User response:** Make sure the DSN exists and is accessible.

---

**HLO2075E** Control file loadlib information could not be obtained for *ssid*

**Explanation:** The control file is not up to date with this DB2 SSID.

**User response:** Update it via setup option 0.

---

**HLO2076E** The XML template data set could not be opened.

**Explanation:** The data set was allocated but could not be opened.

**User response:** Contact IBM Software Support.

---

**HLO2077E** The XML job output data set/member could not be allocated.

**Explanation:** The supplied data set could not be allocated.

**User response:** Make sure authority exists to allocate.

---

**HLO2078E** The XML job output data set/member could not be opened.

**Explanation:** The data set was allocated but could not be opened.

**User response:** Check for proper access authority.

---

**HLO2079E** The XML template does not conform to the automatically generated guidelines.

**Explanation:** The XML template generated by DB2 Analytics Accelerator Loader has been altered to the point that it does not conform to expected design.

**User response:** Regenerate the XML template.

---

---

**HLO2080E** The target SSID for XML translation is missing in the control cards.

**Explanation:** There is a missing parameter.

**User response:** Correct the JCL and resubmit the job.

---

**HLO2081I** The SPACE(...) set involved that the error was detected in was *spacesetnumber*

**Explanation:** Generic message that follows many other messages.

**User response:** No action is required.

---

**HLO2082E** The XML target SSID/DBname/TSname control cards are missing.

**Explanation:** Missing control cards in the Space(...) set.

**User response:** No action is required.

---

**HLO2083E** The XML target SSID/DBname/TSname control cards are invalid.

**Explanation:** Syntax error in control cards.

**User response:** Correct the syntax.

---

**HLO2084I** XML update job created for SSID='ssid'.

**Explanation:** The job has been created.

**User response:** No action is required.

---

**HLO2085E** No references to subsystem could not be found in the JES SSCT.

**Explanation:** The specified DB2 SSID is not defined to z/OS.

**User response:** Ensure that the name is correct or contact IBM Software Support.

---

**HLO2086E** The sorted log file could not be allocated.

**Explanation:** An allocation error has occurred.

**User response:** Verify that the proper authorization is set.

---

**HLO2087E** The sorted log file could not be opened.

**Explanation:** After allocating, could not open.

**User response:** Ensure proper authorization exists, or contact IBM Software Support.

---



---

**HLO2088E** A log record page number exceeded the extent size boundary.

**Explanation:** A DB2 internal error occurred. The page number encoded into the log record points beyond the number of allowable pages for a DB2 extent.

**User response:** Send the dump and any table space / table creation details to IBM Software Support.

---

**HLO2089E** The XML template member does not exist in the PDS.

**Explanation:** The template name specified does not exist.

**User response:** Verify the PDS member names and data set names involved.

---

**HLO2090E** The incoming FTRB LCB is corrupt.

**Explanation:** An internal error occurred.

**User response:** Contact IBM Software Support.

---

**HLO2091E** The mini log data set *minilog\_dsname* could not be allocated.

**Explanation:** The mini log data set could not be allocated and therefore could not be used in DB2 Analytics Accelerator Loader processing.

**User response:** Verify that the mini log data set is available for use.

---

**HLO2092E** The mini log data set *minilog\_dsname* could not be opened.

**Explanation:** The mini log data set could not be opened and therefore could not be used in DB2 Analytics Accelerator Loader processing.

**User response:** Verify that the mini log data set is available for use.

---

**HLO2095I** The sort of the applicable log records was successful.

**Explanation:** This message indicates that the sort of the applicable log records completed without error.

**User response:** No action is required.

---

**HLO2097E** The allocate cellpool request for accelerator buffers failed.

**Explanation:** An out of memory or internal error occurred.

**User response:** Verify region=0M on job step. Contact IBM Software Support.

---

---

**HLO2098E** An invalid return code was detected from the SORT program.

**Explanation:** This attempt to SORT returned an error.

**User response:** Verify SORT program error messages. Contact IBM Software Support.

---

**HLO2099E** Invalid image copy DSN:  
*image\_copy\_dsnname*

**Explanation:** This message indicates that an error occurred when trying to process the image copy.

**User response:** Verify that the image copy specified in the message is available for use. If the problem persists, contact IBM Software Support.

---

**HLO2100I** The following objects will not be added to the SYSCOPY DB2 table because a UNIFIED check failed, updates could not be found either in incremental image copies or the log(s), OBID translation took place on the image copy, or an error triggering a skip condition to be placed on the object:

**Explanation:** The objects listed in the message will not be added to the SYSCOPY DB2 table. A UNIFIED check failed or updates could not be located.

**User response:** No action is required.

---

**HLO2101I** The following data set information was added to the SYSCOPY DB2 table:

**Explanation:** This message indicates the data set information that was added to the SYSCOPY DB2 table.

**User response:** No action is required.

---

**HLO2102I** The following data set information would have been added to the SYSCOPY DB2 table but was not because of control card NO\_SYSCOPY\_ROW:

**Explanation:** You specified the NO\_SYSCOPY\_ROW in your DB2 Analytics Accelerator Loader JCL so the data set information that would have otherwise been added to the SYSCOPY DB2 table was not added.

**User response:** No action is required.

---

**HLO2103I** Object: *object* Database: *database* Table Space: *table\_space* Partition: *partition* ICBBackup

**Explanation:** This message, in conjunction with messages HLO2100, HLO2101, or HLO2102I, indicates the database affected by the condition described in the associated message.

**User response:** No action is required.

---

**HLO2104I** DSN: ICBBackup ( )

**Explanation:** This is a continuation of message HLO2103I.

**User response:** No action is required.

---

**HLO2105I** Since no changes were found for this data set, it has been deleted.

**Explanation:** An output image copy data set (like CPLP0001) is set to catalog as normal disposition (as disp=(new,catlg,delete)), but in the course of processing, there was no reason to output the new data set (no log records, no incrementals). No records are written to the file, so the normal disposition for the data set is overridden to "delete".

**User response:** No action is required.

---

**HLO2106I** The following partial recovery information was added to the SYSCOPY DB2 table:

**Explanation:** This message precedes an output of the partial recovery information that was added to the SYSCOPY DB2 table.

**User response:** No action is required.

---

**HLO2107I** Even though NO\_SYSCOPY\_ROW was specified for this run, the following partial recovery information was added to the SYSCOPY DB2 table:

**Explanation:** This message precedes an output of the partial recovery information that was added to the SYSCOPY DB2 table.

**User response:** No action is required.

---

**HLO2108I** Object: *object* Database: *database* Table Space: *table\_space* Partition: *partition* PIT LRSN/RBA X" Starting LRSN/RBA X"

**Explanation:** This message indicates the object, database, table space, partition, PIT, LRSN/RBA and starting LRSN/RBA information.

**User response:** No action is required.

---

**HLO2109E** The following tape data set could not be cataloged: *dsn*

**Explanation:** Normally, JCL end step disposition processing catalogs a data set, if desired. This message displays if DB2 Analytics Accelerator Loader has made a catalog attempt against a tape data set that has failed due to control card and dynamic allocation processing.

**User response:** No action is required.

---

**HLO2110I**    **The following tape data set was cataloged: Unit (X'*device\_code*) DSN: *dsn* Sequence: *label#***

**Explanation:** When the catalog attempt against a tape data set is successful, this message is displayed. The *unit* is the actual 8 character device on which the data set was created. The *device\_code* is a 4-byte hexadecimal number that represents the internal MVS device designation. The *dsn* is the data set name cataloged. The *label#* is the file sequence number of the data set on the stacked tape. The volsers are reported by the tape management facility elsewhere in the job output.

**User response:** No action is required.

---

**HLO2200I**    **The following data set information was added to the HLO mini log table:**

**Explanation:** This informational message indicates the data set information that was added to the DB2 Analytics Accelerator Loader mini log table. This message is used in conjunction with HLO2201I, HLO2202I, HLO2203I, and HLO2204I.

**User response:** No action is required.

---

**HLO2201I**    **Database *database* Table Space *table\_space* Partition *partition***

**Explanation:** The content of this message is used in conjunction with message HLO2200I. The database, table space, and partition indicated in this message correspond to those of the data set added to the DB2 Analytics Accelerator Loader mini log table.

**User response:** No action is required.

---

**HLO2202I**    **DSN:**

**Explanation:** The content of this message is used in conjunction with message HLO2200I. The DSN indicated in this message correspond to those of the data set added to the DB2 Analytics Accelerator Loader mini log table.

**User response:** No action is required.

---

**HLO2203I**    **Begin LRSN/RBA: X" End LRSN/RBA: X"**

**Explanation:** The content of this message is used in conjunction with message HLO2200I. The begin LRSN/RBA indicated in this message corresponds to that of the data set added to the DB2 Analytics Accelerator Loader mini log table.

**User response:** No action is required.

---

**HLO2204I**    **( ) ( )**

**Explanation:** The content of this message is used in conjunction with message HLO2200I. The end LRSN/RBA indicated in this message corresponds to that of the data set added to the DB2 Analytics Accelerator Loader mini log table.

**User response:** No action is required.

---

**HLO2205E**    **The ENQ prior to Insert activity on the Minilog Control Table failed.**

**Explanation:** Another DB2 Analytics Accelerator Loader job is running in the mini log control table update phase that has exclusive control of the minilog control table. The system could not serialize this action and aborted. No updates took place.

**User response:** Ensure that no other mini log create DB2 Analytics Accelerator Loader jobs are running and resubmit the job.

---

**HLO2206I**    **The following data set information was updated to the HLO mini log table:**

**Explanation:** This message indicates the data set information that was added to the DB2 Analytics Accelerator Loader mini log table.

**User response:** No action is required.

---

**HLO2300E**    **An internal error occurred unloading a mini log data set.**

**Explanation:** An internal error occurred.

**User response:** Contact IBM Software Support.

---

**HLO2301E**    **The following mini log data set could not be deallocated from OS/390:**

**Explanation:** The specified mini log data set could not be deallocated from OS/390.

**User response:** Verify that you have specified the correct mini log data set name generation string.

---

**HLO2302E**    **The following mini log data set could not be opened:**

**Explanation:** The specified mini log data set could not be opened.

**User response:** Verify that the file is not in use and that you have the proper authority to access this file.

---

**HLO2303E**    **The following mini log data set could not be allocated:**

**Explanation:** The specified mini log data set could not be allocated.

**User response:** Verify that the file is not in use and



that you have the proper authority to access this file.

---

**HLO2304I** *dsn*

**Explanation:** Indicates the mini log DSN. This message is issued in conjunction with message HLO2303I.

**User response:** No action is required.

---

**HLO2305I** **Dynamic allocation return code =**  
*'return\_code'*

**Explanation:** This diagnostic message indicates data set allocation failure.

**User response:** Diagnose the problem using the return code. Refer to *DB2 UDB for z/OS V8 Messages* (GC18-9602-01) and *DB2 UDB for z/OS V8 Codes* (GC18-9603-01) for more information.

---

**HLO2306E** **The CELL64 service could not be initialized.**

**Explanation:** An internal error occurred.

**User response:** Contact IBM Software Support.

---

**HLO2307E** **A get cell function call failed.**

**Explanation:** An internal error occurred.

**User response:** Contact IBM Software Support.

---

**HLO2310I** **The mini log file: *mini\_log\_file* has been processed.**

**Explanation:** This message indicates the mini log file that has been processed.

**User response:** No action is required.

---

**HLO2311I** **HLO will attempt to use the**  
**MINI\_LOG\_DSN\_2 data set instead.**

**Explanation:** DB2 Analytics Accelerator Loader was unable to use the MINI\_LOG\_DSN\_1 data set specified in your JCL so it will attempt to use the MINI\_LOG\_DSN\_2 data set specified in your data set instead.

**User response:** No action is required.

---

**HLO2312E** **A space level mini log DSN has the**  
**same name as a group level mini log**  
**DSN.**

**Explanation:** Different groups of spaces in the log apply control card have the same mini log data set specified.

**User response:** Adjust the naming in the control cards.

---

**HLO2313E** **Mini log data set *dsn* could not be**  
**appended because a gap is found for the**  
**object in the mini log control table.**

**Explanation:** There is a gap for the object in the mini log chain in the mini log control table. For this reason, the mini log data set indicated in the message could not be appended.

**User response:** To resolve this issue, either remove the mini log DSN from the mini log control table and MVS catalog or specify a new DSN for the mini log.

---

**HLO2400E** **The accelerator conversion program**  
**could not be attached.**

**Explanation:** A z/OS attach function for the row converter program failed.

**User response:** Verify the install in the STEPLIB. Contact IBM Software Support.

---

**HLO2401E** **The space *space* PART *part* has an**  
**unknown space status.**

**Explanation:** This message ensures that the indicated space is to be stopped before proceeding with the WRITE\_TO\_VSAM process. DB2 Analytics Accelerator Loader checks the space with a call similar to a '-display db(dbname) spacename(tsname) part(0)' to verify that the space is in 'stop' status. This message displays when the space comes back with a status not equal to RO, STOP, RW, or UT.

**User response:** Stop the indicated space before attempting to proceed with the WRITE\_TO\_VSAM process.

---

**HLO2402E** **The stop status check for space *space***  
**PART *part* timed out.**

**Explanation:** This message is output when DB2 Analytics Accelerator Loader tries to start and it has to ensure that when doing WRITE\_TO\_VSAM processing that the spaces are indeed stopped. The stop step that is generated (prior to DB2 Analytics Accelerator Loader) to do this sends commands to DB2 to stop the data sets, but it does not wait for the spaces to actually stop. If an in-flight URID is processing against the object and the stop is done, the space changes to 'STOPP' or stop pending until the URID finishes. It may also take DB2 some time to flush buffers. In either case, DB2 Analytics Accelerator Loader does a check on the spaces before doing any real processing. If any of the spaces do not come back 'stop,' it waits a few seconds and checks again. After a few checks like this, it aborts, producing this message.

**User response:** Diagnose why the space will not stop.

---

**HLO2500E** Fetching SYSIBM.SYSLOGRANGE data produced an error

**Explanation:** Accelerator Loader encountered an error when attempting to fetch SYSIBM.SYSLOGRANGE data.

**User response:** No action is required. The report utility's output will be output after this message.

---

**HLO2501E** REPORT utility text follows: *text*

**Explanation:** This message is the header line for the REPORT utility output that follows on the next line.

**User response:** No action is required.

---

**HLO2502I** Skipping SYSIBM.SYSLGRNX processing.

**Explanation:** This informational messages indicates that DB2 Analytics Accelerator Loader is not processing SYSIBM.SYSLGRNX because NO\_SYSLGRNX was specified.

**User response:** No action is required.

---

**HLO2600E** The USER\_INDICATOR parameter was specified, but no value was found with it.

**Explanation:** No value has been specified for the USER\_INDICATOR parameter.

**User response:** Specify a valid parameter for the USER\_INDICATOR parameter.

---

**HLO2601E** The USER\_INDICATOR keyword has already been coded.

**Explanation:** More than one USER\_INDICATOR keyword has been specified.

**User response:** Remove the extra USER\_INDICATOR keyword.

---

**HLO2602E** The USER\_INDICATOR parameter specified is invalid.

**Explanation:** The value specified for the USER\_INDICATOR parameter is not valid.

**User response:** Specify a valid value for USER\_INDICATOR.

---

**HLO2603E** The INCREMENTAL parameter was specified, but no value was found with it.

**Explanation:** Your JCL includes the INCREMENTAL parameter but no value is specified with it.

**User response:** Specify a valid value for the INCREMENTAL parameter.

---

---

**HLO2604E** The INCREMENTAL keyword has already been coded.

**Explanation:** The INCREMENTAL keyword has been coded multiple times in the Accelerator Loader syntax.

**User response:** Remove the extra keyword and resubmit the JCL.

---

**HLO2605E** The INCREMENTAL parameter specified is invalid.

**Explanation:** The INCREMENTAL parameter specification in your Accelerator Loader job is not valid.

**User response:** Specify a valid value for the INCREMENTAL parameter.

---

**HLO2606E** Control file values could not be read. Check for a user indicator mismatch.

**Explanation:** The control file values could not be read.

**User response:** Check for a user indicator mismatch.

---

**HLO2607E** The DB2 subsystem ID was not found in the control file.

**Explanation:** The control file does not have a DB2 subsystem ID.

**User response:** Specify a DB2 subsystem ID in your control file.

---

**HLO2608E** The DB2 subsystem member *member* was not found in the control file.

**Explanation:** The DB2 subsystem member was not found in the control file.

**User response:** Verify that the correct DB2 subsystem member is specified in the control file.

---

**HLO2609I** The LOG\_COPY\_PREFERENCE parameter was specified, but no value was found with it.

**Explanation:** Your JCL includes the LOG\_COPY\_PREFERENCE parameter but no value is specified with it.

**User response:** Specify a valid value for the LOG\_COPY\_PREFERENCE parameter.

---

**HLO2610E** The LOG\_COPY\_PREFERENCE keyword has already been coded.

**Explanation:** The LOG\_COPY\_PREFERENCE keyword has been coded multiple times in the Accelerator Loader syntax.

**User response:** Remove the extra keyword and resubmit the JCL.

---

---

**HLO2611E** The LOG\_COPY\_PREFERENCE parameter specified is invalid.

**Explanation:** The LOG\_COPY\_PREFERENCE parameter specification in your Accelerator Loader job is not valid.

**User response:** Specify a valid value for the LOG\_COPY\_PREFERENCE parameter.

---

**HLO2612E** The IMAGE\_COPY\_PREFERENCE parameter was specified, but no value was found with it.

**Explanation:** Your JCL includes the IMAGE\_COPY\_PREFERENCE parameter but no value is specified with it.

**User response:** Specify a valid value for the IMAGE\_COPY\_PREFERENCE parameter.

---

**HLO2613E** The IMAGE\_COPY\_PREFERENCE keyword has already been coded.

**Explanation:** The IMAGE\_COPY\_PREFERENCE keyword has been coded multiple times in the Accelerator Loader syntax.

**User response:** Remove the extra keyword and resubmit the JCL.

---

**HLO2614E** The IMAGE\_COPY\_PREFERENCE parameter specified is invalid.

**Explanation:** The IMAGE\_COPY\_PREFERENCE parameter specification in your Accelerator Loader job is not valid.

**User response:** Specify a valid value for the IMAGE\_COPY\_PREFERENCE parameter.

---

**HLO2615E** LOCAL\_SITE, RECOVERY\_SITE, and IMAGE\_COPY\_PREFERENCE are mutually exclusive.

**Explanation:** Your Accelerator Loader syntax includes more than one of the following parameters: LOCAL\_SITE, RECOVERY\_SITE, or IMAGE\_COPY\_PREFERENCE. These parameters are mutually exclusive and only one can be defined.

**User response:** Correct your DB2 Analytics Accelerator Loader syntax.

---

**HLO2620E** Invalid syntax after the IC\_LP control card. Must be IC\_LP (...).

**Explanation:** The syntax that follows the IC\_LP control card contains an error.

**User response:** Verify that the correct syntax follows the IC\_LP control card. The parameters that accompany

the IC\_LP control card must be enclosed in parenthesis ().

---

**HLO2621E** Invalid syntax after the IC\_LB control card. Must be IC\_LB (...).

**Explanation:** The syntax that follows the IC\_LB control card contains an error.

**User response:** Verify that the correct syntax follows the IC\_LB control card. The parameters that accompany the IC\_LB control card must be enclosed in parenthesis ().

---

**HLO2622E** Invalid syntax after the IC\_RP control card. Must be IC\_RP (...).

**Explanation:** The syntax that follows the IC\_RP control card contains an error.

**User response:** Verify that the correct syntax follows the IC\_RP control card. The parameters that accompany the IC\_RP control card must be enclosed in parenthesis ().

---

**HLO2623E** Invalid syntax after the IC\_RB control card. Must be IC\_RB (...).

**Explanation:** The syntax that follows the IC\_RB control card contains an error.

**User response:** Verify that the correct syntax follows the IC\_RB control card. The parameters that accompany the IC\_RB control card must be enclosed in parenthesis ().

---

**HLO2624E** The IC\_DSN keyword has already been coded.

**Explanation:** You specified the IC\_DSN keyword more than once for the SPACE group.

**User response:** Correct the JCL and resubmit the job.

---

**HLO2625E** Syntax error around IC\_DSN value. Form is "dsn".

**Explanation:** The syntax defining the IC\_DSN value is incorrect. The data set name must be enclosed in quotes.

**User response:** Verify and correct the syntax of the IC\_DSN value. Ensure that the data set name is enclosed in quotes.

---

**HLO2626E** The IC\_DSN parameter was specified, but is either empty or too long.

**Explanation:** You specified the IC\_DSN parameter but the values specified with it is either missing or too long.

**User response:** Specify a valid value with the IC\_DSN

parameter. Ensure that the data set name value you specify is enclosed in quotes.

---

**HLO2627E** The IC\_CATALOG keyword has already been coded.

**Explanation:** You specified the IC\_CATALOG keyword more than once for the IC\_\*\* group (where \*\* is LP, LB, RP or RB).

**User response:** Correct the JCL and resubmit the job.

---

**HLO2628E** The IC\_DEVICE parameter was specified, but no value was found with it.

**Explanation:** You specified the IC\_DEVICE parameter but did not specify a corresponding value. The IC\_DEVICE parameter requires that you specify a device name (up to 8-characters).

**User response:** Specify a 1-8 character device name with the IC\_DEVICE parameter or remove the optional IC\_DEVICE parameter.

---

**HLO2629E** The IC\_DEVICE keyword has already been coded.

**Explanation:** You specified the IC\_DEVICE keyword more than once for the IC\_\*\* group (where \*\* is LP, LB, RP or RB).

**User response:** Correct the JCL and resubmit the job.

---

**HLO2630E** The IC\_DEVICE parameter specified is invalid.

**Explanation:** The IC\_DEVICE parameter syntax contains an error.

**User response:** Verify that you have properly defined the IC\_DEVICE parameter and corresponding value. The IC\_DEVICE control card accepts a 1-8 character device name value.

---

**HLO2631E** The IC\_SPACE parameter was specified, but no value was found with it.

**Explanation:** You specified the IC\_SPACE parameter but did not specify a corresponding value. The IC\_SPACE parameter requires that you specify a space name.

**User response:** Specify a space name with the IC\_SPACE parameter or remove the optional IC\_SPACE parameter.

---

**HLO2632E** The IC\_SPACE keyword has already been coded.

**Explanation:** You specified the IC\_SPACE keyword more than once for the IC\_\*\* group (where \*\* is LP, LB, RP or RB).

**User response:** Correct the JCL and resubmit the job.

---

**HLO2633E** The IC\_SPACE parameter specified is invalid.

**Explanation:** The IC\_SPACE parameter syntax contains an error.

**User response:** Verify that you have properly defined the IC\_SPACE parameter and corresponding value.

---

**HLO2634E** The IC\_MGMT\_CLASS parameter was specified, but no value was found with it.

**Explanation:** You specified the IC\_MGMT\_CLASS parameter but did not specify a corresponding value. The IC\_MGMT\_CLASS parameter requires that you specify a management class.

**User response:** Specify a management class with the IC\_MGMT\_CLASS parameter or remove the optional IC\_MGMT\_CLASS parameter.

---

**HLO2635E** The IC\_MGMT\_CLASS keyword has already been coded.

**Explanation:** You specified the IC\_MGMT\_CLASS keyword more than once for the IC\_\*\* group (where \*\* is LP, LB, RP or RB).

**User response:** Correct the JCL and resubmit the job.

---

**HLO2636E** The IC\_MGMT\_CLASS parameter specified is invalid.

**Explanation:** The IC\_MGMT\_CLASS parameter syntax contains an error.

**User response:** Verify that you have properly defined the IC\_MGMT\_CLASS parameter and corresponding value.

---

**HLO2637E** The IC\_DATA\_CLASS parameter was specified, but no value was found with it.

**Explanation:** You specified the IC\_DATA\_CLASS parameter but did not specify a corresponding value. The IC\_DATA\_CLASS parameter requires that you specify a data class.

**User response:** Specify a data class with the IC\_DATA\_CLASS parameter or remove the optional IC\_DATA\_CLASS parameter.

---

**HLO2638E** The IC\_DATA\_CLASS keyword has already been coded.

**Explanation:** You specified the IC\_DATA\_CLASS keyword more than once for the IC\_\*\* group (where \*\* is LP, LB, RP or RB).

**User response:** Correct the JCL and resubmit the job.

---

**HLO2639E** The IC\_DATA\_CLASS parameter specified is invalid.

**Explanation:** The IC\_DATA\_CLASS parameter syntax contains an error.

**User response:** Verify that you have properly defined the IC\_DATA\_CLASS parameter and corresponding value.

---

**HLO2640E** The IC\_STOR\_CLASS parameter was specified, but no value was found with it.

**Explanation:** You specified the IC\_STOR\_CLASS parameter but did not specify a corresponding value. The IC\_STOR\_CLASS parameter requires that you specify a storage class.

**User response:** Specify a storage class with the IC\_STOR\_CLASS parameter or remove the optional IC\_STOR\_CLASS parameter.

---

**HLO2641E** The IC\_STOR\_CLASS keyword has already been coded.

**Explanation:** You specified the IC\_STOR\_CLASS keyword more than once for the IC\_\*\* group (where \*\* is LP, LB, RP or RB).

**User response:** Correct the JCL and resubmit the job.

---

**HLO2642E** The IC\_STOR\_CLASS parameter specified is invalid.

**Explanation:** The IC\_DATA\_CLASS parameter syntax contains an error.

**User response:** Verify that you have properly defined the IC\_STOR\_CLASS parameter and corresponding value.

---

**HLO2643E** The IC\_EXP\_DATE parameter was specified, but no value was found with it.

**Explanation:** You specified the IC\_EXP\_DATE parameter but did not specify a corresponding value. The IC\_EXP\_DATE parameter requires that you specify an expiration date in the format YYYYDDD.

**User response:** Specify an expiration date with the IC\_EXP\_DATE parameter or remove the optional IC\_EXP\_DATE parameter.

---

**HLO2644E** The IC\_EXP\_DATE keyword has already been coded.

**Explanation:** You specified the IC\_EXP\_DATE keyword more than once for the IC\_\*\* group (where \*\* is LP, LB, RP or RB).

**User response:** Correct the JCL and resubmit the job.

---

**HLO2645E** The IC\_EXP\_DATE parameter specified is invalid.

**Explanation:** The IC\_EXP\_DATE parameter syntax contains an error.

**User response:** Verify that you have properly defined the IC\_EXP\_DATE parameter and corresponding value.

---

**HLO2646E** The IC\_RETPD parameter was specified, but no value was found with it.

**Explanation:** You specified the IC\_RETP parameter but did not specify a corresponding value. The IC\_RETP parameter requires that you specify a 4-digit retention period.

**User response:** Specify a retention period (4-digit) with the IC\_RETP parameter or remove the optional IC\_RETP parameter.

---

**HLO2647E** The IC\_RETPD keyword has already been coded.

**Explanation:** You specified the IC\_RETPD keyword more than once for the IC\_\*\* group (where \*\* is LP, LB, RP or RB).

**User response:** Correct the JCL and resubmit the job.

---

**HLO2648E** The IC\_RETPD parameter specified is invalid.

**Explanation:** The IC\_RETPD parameter syntax contains an error.

**User response:** Verify that you have properly defined the IC\_RETPD parameter and corresponding value.

---

**HLO2649E** DASD and tape allocation parameters cannot be specified together.

**Explanation:** You specified both DASD and TAPE allocation parameters.

**User response:** Specify only DASD or TAPE allocation parameters but not both.

---

**HLO2650E** Five or more errors have been detected in the control cards.

**Explanation:** More than five errors have been identified in the control cards and Accelerator Loader processing cannot proceed.

**User response:** Verify the syntax of your Accelerator Loader JCL and respecify as needed to correct syntax errors.

---

**HLO2651E** The Restore Before parameter was specified but no value was found with it.

**Explanation:** You specified the RESTORE\_BEFORE parameter but did not specify a corresponding value.

**User response:** Specify a byte string with the RESTORE\_BEFORE parameter. Enclose the bytes string in single quotes.

---

**HLO2652E** Syntax error around Restore Before RBA value. Form is X"<6 byte hex value>".

**Explanation:** The RESTORE\_BEFORE parameter syntax contains an error.

**User response:** Verify that you have properly defined the RESTORE\_BEFORE parameter and corresponding value.

---

**HLO2653E** The Restore Before RBA value contains an invalid hexadecimal value.

**Explanation:** The hexadecimal value you specified with the RESTORE\_BEFORE parameter is not valid.

**User response:** Verify that you have properly defined a 6-byte hexadecimal value for the RESTORE\_BEFORE parameter.

---

**HLO2654E** The Restore Before RBA value cannot be 0.

**Explanation:** You specified a value of 0 for the RESTORE\_BEFORE parameter. This is not valid.

**User response:** Specify a 6-byte hexadecimal value for the desired RBA or LRSN or remove the optional RESTORE\_BEFORE parameter.

---

**HLO2655E** The Restore Before RBA/LRSN value was already specified.

**Explanation:** You specified the RESTORE\_BEFORE parameter more than once.

**User response:** Correct the JCL and resubmit the job.

---

**HLO2656E** Invalid TO\_QUIESCE(#nnn) control card syntax.

**Explanation:** The TO\_QUIESCE syntax contains an error.

**User response:** Verify that you have properly defined the TO\_QUIESCE(#nnn) parameter.

---

**HLO2657E** The TO\_QUIESCE keyword has already been coded for this group.

**Explanation:** The TO\_QUIESCE keyword was coded more than once for the group.

**User response:** Remove the extra TO\_QUIESCE keywords.

---

**HLO2658E** The UNIFIED keyword has already been coded for this group.

**Explanation:** The UNIFIED keyword has already been coded for this group.

**User response:** Remove the extra UNIFIED keywords.

---

**HLO2659E** The UNIFIED keyword has already been coded for this space group.

**Explanation:** You specified the UNIFIED keyword more than once for the SPACE group.

**User response:** Remove the extra UNIFIED keywords from the SPACE group.

---

**HLO2660E** The NO\_SYSLGNRX keyword has already been coded for this run.

**Explanation:** The NO\_SYSLGNRX keyword was coded more than once for the run.

**User response:** Remove the extra NO\_SYSLGNRX keywords.

---

**HLO2661E** Mini log particulars cannot be specified at both the GROUP and SPACE levels.

**Explanation:** Mini log control cards are valid for specification either at the GROUP or the SPACE level, not both.

**User response:** Specify mini log parameters either at the GROUP or SPACE level but not both.

---

**HLO2662E** The NO\_MINILOG\_CHECKPOINTS keyword is ignored when not writing minilogs.

**Explanation:** The NO\_MINILOG\_CHECKPOINTS keyword was specified but the job did not specify to write mini logs so it was ignored.

**User response:** No action is required.

---

**HLO2663E** The USE\_ABOVE\_THE\_BAR parameter was specified, but no value was found with it.

**Explanation:** You specified the USE\_ABOVE\_THE\_BAR parameter but did not include a primary segments allocation, secondary segments allocation, and maximum secondary allocation values.

**User response:** The primary segments allocation, secondary segments allocation, and maximum secondary allocation values must be 1-4 digits and contained within single quotes and be separated by commas. Specify the appropriate segment allocations with the USE\_THE\_ABOVE\_THE\_BAR parameter.

---

**HLO2664E The USE\_ABOVE\_THE\_BAR keyword has already been coded.**

**Explanation:** The USE\_ABOVE\_THE\_BAR keyword should only be specified once.

**User response:** Check your DB2 Analytics Accelerator Loader syntax and remove the extra USE\_ABOVE\_THE\_BAR keyword.

---

**HLO2665E The USE\_ABOVE\_THE\_BAR keyword parameter specified is invalid.**

**Explanation:** The USE\_ABOVE\_THE\_BAR parameter syntax is invalid. The primary segments allocation, secondary segments allocation, and maximum secondary allocation values must be 1-4 digits and contained within single quotes and be separated by commas.

**User response:** Check your syntax and correct.

---

**HLO2666E Use of the USE\_ABOVE\_THE\_BAR keyword requires z/OS V1.5 or above.**

**Explanation:** Your z/OS version is not 1.5 or above, z/OS V1/5 or above is required for you to use the USE\_ABOVE\_THE\_BAR keyword.

**User response:** Remove the USE\_ABOVE\_THE\_BAR keyword from your syntax.

---

**HLO2667E The MINILOG\_SHARELEVEL was specified, but no value was found with it.**

**Explanation:** You specified the MINILOG\_SHARELEVEL parameter but did not specify a corresponding value.

**User response:** Enter a valid value following the MINILOG\_SHARELEVEL keyword or remove the keyword. Valid values are REFERENCE and CHANGE.

---

**HLO2668E The MINILOG\_SHARELEVEL keyword has already been coded.**

**Explanation:** You specified the MINILOG\_SHARELEVEL keyword more than once.

**User response:** Remove all extra occurrences of the MINILOG\_SHARELEVEL keyword.

---

**HLO2669E The MINILOG\_SHARELEVEL parameter specified is invalid.**

**Explanation:** The MINILOG\_SHARELEVEL parameter specification is not valid.

**User response:** The MINILOG\_SHARELEVEL parameter accepts either REFERENCE or CHANGE as valid values. Correct your JCL and resubmit.

---

**HLO2670I The MINILOG\_SHARELEVEL keyword is ignored when not producing mini logs.**

**Explanation:** You included the MINILOG\_SHARELEVEL keyword in your JCL indicating the type of SHARELEVEL for mini logs but did not specify the production of producing mini logs. The MINILOG\_SHARELEVEL keyword is therefore ignored.

**User response:** No action is required.

---

**HLO2671E The REPAIR\_RECOVER\_PENDING keyword has already been coded.**

**Explanation:** You specified the REPAIR\_RECOVER\_PENDING keyword more than once.

**User response:** Correct the JCL and resubmit the job.

---

**HLO2672W The REPAIR\_RECOVER\_PENDING keyword is ignored when only writing to copies.**

**Explanation:** The REPAIR\_RECOVER\_PENDING keyword is specified but this parameter is ignored when writing to copies.

**User response:** REPAIR\_RECOVER\_PENDING is ignored when writing to copies so the REPAIR\_RECOVER\_PENDING control card can be removed.

---

**HLO2673E The OBIDXLAT keyword group has already been coded.**

**Explanation:** You specified the OBIDXLAT keyword more than once.

**User response:** Correct the JCL and resubmit the job.

---

**HLO2675E Invalid OBIDXLAT(...) keyword syntax.**

**Explanation:** The OBIDXLAT syntax you specified is not valid.

**User response:** Correct the OBIDXLAT syntax and resubmit the job.

---

**HLO2676E** The XLAT\_IN\_DSN keyword has already been coded.

**Explanation:** You specified the XLAT\_IN\_DSN keyword more than once.

**User response:** Correct the JCL and resubmit the job.

---

**HLO2677E** Invalid XLAT\_IN\_DSN syntax.

**Explanation:** The XLAT\_IN\_DSN syntax you specified is not valid.

**User response:** Correct the XLAT\_IN\_DSN syntax and resubmit the job.

---

**HLO2678E** The XLAT\_IN\_DSN parameter was specified, but no value was found with it.

**Explanation:** The XLAT\_IN\_DSN parameter requires that a dsn value be specified with it.

**User response:** Specify a dsn with the XLAT\_IN\_DSN parameter. Enclose the dsn value in single quotes.

---

**HLO2679E** Invalid OBID syntax.

**Explanation:** The OBID syntax you specified is not valid.

**User response:** OBID syntax is of the form OBID 'obid,obid'.

**Note:** When specifying OBID pairs, all pairs should be space separated and the source ID is listed first with the target ID listed second. Each pair should be defined on a new line. Define multiple OBID pairs as necessary.

---

**HLO2680E** The OBID parameter was specified, but no value was found with it.

**Explanation:** The OBID parameter requires that you specify with it an obid pair.

**User response:** OBID syntax is of the form OBID 'obid,obid'.

**Note:** When specifying OBID pairs, all pairs should be space separated and the source ID is listed first with the target ID listed second. Each pair should be defined on a new line. Define multiple OBID pairs as necessary.

---

**HLO2681E** The OBID parameter was specified, but one of the subparms was out of range.

**Explanation:** The OBID subparameter you specified was out of range.

**User response:** Verify that you specified the correct OBID pair.

---



---

**HLO2682W** DB2 Sort was called for, but was not found in z/OS.

**Explanation:** The control file options set by the setup screens are calling for DB2 Sort. An attempt to load DB2 Sort failed.

**User response:** Verify the STEPLIB for DB2 Sort.

---

**HLO2683W** Parallel log apply values greater than 1 ignored in minilog mode.

**Explanation:** If mini log processing is called for in multiple groups, the optimization process will be skipped.

**User response:** No action is required.

---

**HLO2684W** If manual group configurations are used, parallel log apply value is ignored.

**Explanation:** If there are multiple GROUP(...) control card sets as input, that organization will be used for parallel task organization instead of any internal optimization of group structure based on the parallel log apply value.

**User response:** No action is required.

---

**HLO2692E** The DBID keyword has already been coded.

**Explanation:** The DBID keyword group has already been coded.

**User response:** Correct the JCL and resubmit the job.

---

**HLO2693E** Invalid DBID syntax.

**Explanation:** The DBID syntax you specified is not valid.

**User response:** Correct the DBID syntax and resubmit the job.

---

**HLO2694E** The DBID parameter was specified, but no value was found with it.

**Explanation:** The DBID parameter requires that a source and target DBID pair be specified with it.

**User response:** Correct the DBID syntax and resubmit the job.

---

**HLO2695E** The DBID parameter was specified, but one of the subparms was out of range.

**Explanation:** The DBID parameter you specified but one of the sub parameters defined with it was out of range.

**User response:** Verify that you specified the correct DBID pair.

---



---

**HLO2696E** The PSID keyword has already been coded.

**Explanation:** The PSID keyword has already been coded.

**User response:** Correct the JCL and resubmit the job.

---

**HLO2697E** Invalid PSID syntax.

**Explanation:** The PSID syntax you specified is not valid.

**User response:** Correct the PSID syntax and resubmit the job.

---

**HLO2698E** The PSID parameter was specified, but no value was found with it.

**Explanation:** The PSID parameter requires that a source and target PSID pair be specified with it.

**User response:** Correct the PSID syntax and resubmit the job.

---

**HLO2699E** The PSID parameter was specified, but one of the subparms was out of range.

**Explanation:** The PSID subparameter was out of range.

**User response:** Verify that you specified the correct PSID pair.

---

**HLO2700E** A needed incremental image copy could not be allocated.

**Explanation:** A required incremental image copy could not be allocated.

**User response:** Verify that the image copy is available.

---

**HLO2701E** A needed incremental image copy could not be opened.

**Explanation:** DB2 Analytics Accelerator Loader processing could not proceed because an incremental image copy could not be opened.

**User response:** Verify that all necessary incremental image copies are available for use.

---

**HLO2702E** Dynamic allocation return code 'rc'.

**Explanation:** Dynamic allocation failed with the return code indicated in the message.

**User response:** Diagnose the problem using the return code. Refer to *DB2 UDB for z/OS V8 Messages* (GC18-9602-01) and *DB2 UDB for z/OS V8 Codes* (GC18-9603-01) for more information.

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**HLO2703I** Image copy name=*image\_copy\_name*  
RBA=*rba*'.

**Explanation:** Indicates the image copy name an RBA.

**User response:** No action is required.

---

**HLO2704E** The catalog check on the most recent image copy failed.

**Explanation:** The catalog check failed for the most recent image copy.

**User response:** No action is required.

---

**HLO2705E** An internal error occurred during input incremental tape stacking processing.

**Explanation:** An internal error occurred.

**User response:** Contact IBM Software Support.

---

**HLO2706I** Accelerator Loader will process the following incremental image copy file(s):

**Explanation:** DB2 Analytics Accelerator Loader will process the incremental image copy file(s) listed in this message.

**User response:** No action is required.

---

**HLO2707I** For table space: *table\_space* PART *part*

**Explanation:** This message indicates the table space and partition related to other DB2 Analytics Accelerator Loader messages that have been issued.

**User response:** No action is required.

---

**HLO2801E** A log record read service program could not be started.

**Explanation:** An internal error has occurred.

**User response:** Contact IBM Software Support.

---

**HLO2802E** The writer service returned an error, RC=*rc*.

**Explanation:** An internal error occurred.

**User response:** Contact IBM Software Support.

---

**HLO2803E** The reader service returned an error, RC=*rc*.

**Explanation:** An internal error occurred.

**User response:** Contact IBM Software Support.

---

## HLO2804E • HLO2904I

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**HLO2804E** An unexpected error occurred while trying to read the bootstrap data set.

**Explanation:** An unexpected error was encountered.

**User response:** Contact IBM Software Support.

---

**HLO2805E** An unexpected error occurred while trying to read the ZPARM information.

**Explanation:** An unexpected error occurred.

**User response:** Contact IBM Software Support.

---

**HLO2806I** The log apply process will begin at RBA=*rba*.

**Explanation:** The log apply process will start at the RBA indicated in the message.

**User response:** No action is required.

---

**HLO2807I** The log apply process will begin at LRSN: X'*lrsn*'

**Explanation:** The message indicates the LRSN value at which the log apply process will begin.

**User response:** No action is required.

---

**HLO2812E** A mismatch between passed Zparm information and the JES SSCT was found.

**Explanation:** This is an internal error indicating that the Zparm array that is being passed to DB2 Analytics Accelerator Loader is inconsistent with the subsystem list found inside MVS' data structures.

**User response:** Contact IBM Software Support.

---

**HLO2813I** The log reader process will launch a total of *nnnn* tasks.

**Explanation:** This message indicates the total number of tasks that will be launched.

**User response:** No action is required.

---

**HLO2814I** The log reader will launch total of 1 task per member.

**Explanation:** Indicates that processing of the log reader will launch a total of one task per member since PARALELL has been set to 0.

**User response:** No action is required.

---

**HLO2815I** The log reader process will start with PARALLEL tasks = *nnnn*

**Explanation:** The log reader process will start with the indicated maximum number of tasks.

---

**User response:** No action is required.

---

**HLO2816I** The log reader task #*task\_number* finished.

**Explanation:** Indicates that processing of the log reader finished.

**User response:** No action is required.

---

**HLO2817E** The log reader task init failed.  
RC=X'*return\_code*'

**Explanation:** The log apply processing failed to initialize a task necessary for reading logs. The reason code is specified in the error message.

**User response:** Contact IBM Software Support.

---

**HLO2900I** The sorted log record file could not be opened.

**Explanation:** The sorted log record file could not be opened.

**User response:** No action is required.

---

**HLO2901I** The mini log data set *data\_set* could not be allocated.

**Explanation:** The mini log data set could not be allocated.

**User response:** No action is required.

---

**HLO2902I** The mini log data set *dsn* could not be opened.

**Explanation:** DB2 Analytics Accelerator Loader was unable to open the mini log data set indicated in the message.

**User response:** No action is required.

---

**HLO2903I** Dynamic allocation return code=*rc*

**Explanation:** Dynamic allocation failed with the return code listed in the message.

**User response:** No action is required.

---

**HLO2904I** An unexpected EOF was encountered on the sorted log record file.

**Explanation:** An unexpected EOF was encountered on the sorted log record file.

**User response:** No action is required.

---

---

**HLO2905I** The mini log dataset dsn could not be located for resort purpose.

**Explanation:** The data set in the control cards could not be found in the MVS catalog.

**User response:** Ensure the data set is correct.

---

**HLO2906I** The mini log dataset dsn could not be renamed for resort purpose.

**Explanation:** An error occurred while attempting to append minilog records to an existing minilog dataset.

**User response:** Ensure proper authority on the minilog data sets.

---

**HLO2907I** The resort of the applicable space level minilog was successful.

**Explanation:** The resort was successful.

**User response:** No action is required.

---

**HLO2908I** An invalid return code was detected from the SORT program (mini log resort).

**Explanation:** Internal error.

**User response:** Contact IBM Software Support.

---

**HLO3000E** The space *database.table\_space* PART partition has an unknown space status.

**Explanation:** The status of the space indicated in the message is not known.

**User response:** When DB2 Analytics Accelerator Loader checks the space to see if it is in recover pending, a status code unknown to DB2 Analytics Accelerator Loader was found. Contact IBM Software Support.

---

**HLO3001E** The stop status check for space *database.table\_space* PART partition timed out.

**Explanation:** The stop status check for the space indicated in the message timed out.

**User response:** After the repair operation is started, DB2 Analytics Accelerator Loader checks the space and waits for the recover pending flag to be removed by DB2. This message was generated because after checking 5 times in 15 seconds, the space was still in recover pending status. You must remove the recover pending status manually.

---

**HLO3002E** An attempt to Repair the Recover Pending status failed.

**Explanation:** The JCL attempted to repair the recover pending status but the repair failed.

**User response:** When DB2 Analytics Accelerator Loader called DB2 to repair the recover pending status for the space, the operation finished with an error condition. Contact IBM Software Support.

---

**HLO3003E** An error occurred on an attempt to open the DSNUTILB Steplib.

**Explanation:** DB2 Analytics Accelerator Loader was unable to open the DSNUTILB Steplib.

**User response:** The DB2 loadlib concatenation specified on the Update DB2 Subsystem Parameters panel is incomplete. When DSNUTILB attempted to use this concatenation, some of the required load modules were not found. Verify that you have specified the correct load modules on the Update DB2 Subsystem Parameters panel. If the problem persists, contact IBM Software Support.

---

**HLO3004E** The Repair operation's SYSPRINT output dataset could not be opened.

**Explanation:** DB2 Analytics Accelerator Loader was unable to open the repair operation's SYSPRINT output data set.

**User response:** Verify that the data set exists and is available for use.

---

**HLO3005E** The Repair operation's SYSIN dataset allocation failed.

**Explanation:** DB2 Analytics Accelerator Loader was unable to allocate the repair operation's SYSIN data set.

**User response:** To call DB2 to repair the recover pending status, a SYSIN data set must be allocated to hold the DB2 command stream. DB2 Analytics Accelerator Loader was unable to allocate a SYSIN data set. Check the settings you specified in the User Settings option and correct any errors.

---

**HLO3006E** Dynamic allocation return code = *return\_code*

**Explanation:** This message reports the return code associated with the failed dynamic allocation attempt.

**User response:** Ensure the data set exists and is available for use.

---

---

**HLO3007E** The SYSIN DD could not be opened for output during Repair processing.

**Explanation:** DB2 Analytics Accelerator Loader was unable to open the SYSIN DD during repair processing.

**User response:** Check the settings you specified in the User Settings option and correct any errors.

---

**HLO3008E** Open error code=*error\_code*

**Explanation:** This message reports the open error code that DB2 Analytics Accelerator Loader encountered when it attempted to open the SYSIN DD.

**User response:** Check the settings you specified in the User Settings option and correct any errors.

---

**HLO3009E** The Repair operation's SYSPRINT dataset allocation failed.

**Explanation:** DB2 Analytics Accelerator Loader was unable to allocate the repair operation's SYSPRINT data set.

**User response:** To call DB2 to repair the recover pending status, a SYSPRINT data set needs to be allocated to hold the DB2 command processor's output stream. DB2 Analytics Accelerator Loader was unable to allocate this data set. Check the settings you specified in the User Settings option and correct any errors.

---

**HLO3100I** Truncation error displaying panel in HLO\$MAIN - *return\_code*

**Explanation:** A truncation error occurred.

**User response:** Diagnose the problem using the return code. Refer to *DB2 UDB for z/OS V8 Messages (GC18-9602-01)* and *DB2 UDB for z/OS V8 Codes (GC18-9603-01)* for more information.

---

**HLO3101I** Severe error displaying panel in HLO\$MAIN - *return\_code*

**Explanation:** An internal error has occurred.

**User response:** Diagnose the problem using the return code. Refer to *DB2 UDB for z/OS V8 Messages (GC18-9602-01)* and *DB2 UDB for z/OS V8 Codes (GC18-9603-01)* for more information.

---

**HLO3102I** Unexpected return code from panel in HLO\$MAIN - *return\_code*

**Explanation:** An unexpected return code was received.

**User response:** Diagnose the problem using the return code. Refer to *DB2 UDB for z/OS V8 Messages (GC18-9602-01)* and *DB2 UDB for z/OS V8 Codes (GC18-9603-01)* for more information.

---



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**HLO3200E** The XLAT\_DSN, DBID, PSID, and at least one OBID must be specified.

**Explanation:** When performing an OBIDXLAT, you must specify the XLAT\_DSN, DBID, PSID and at least one OBID in your Accelerator Loader syntax.

**User response:** Specify the XLAT\_DSN, DBID, PSID and at least one OBID in your Accelerator Loader syntax.

---

**HLO3201E** The CONTINUE\_ON\_ERROR keyword has already been coded.

**Explanation:** You specified the CONTINUE\_ON\_ERROR keyword more than once.

**User response:** Correct the JCL and resubmit the job.

---

**HLO3202E** The XLAT\_IN\_DSN keyword has already been coded.

**Explanation:** You specified the XLAT\_IN\_DSN keyword more than once.

**User response:** Correct the JCL and resubmit the job.

---

**HLO3203E** Invalid XLAT\_IN\_DSN syntax.

**Explanation:** The XLAT\_IN\_DSN syntax you specified is not valid. The correct syntax is XLAT\_IN\_DSN '*dsn*', where *dsn* is the fully qualified DB2 data set name of a full image copy to be used instead of reading SYSCOPY. If you specify an XLAT\_IN\_DSN, you must also specify an XLAT\_IN\_LOGPOINT for the full image copy.

**User response:** Correct the XLAT\_IN\_DSN syntax and resubmit the job.

---

**HLO3204E** The XLAT\_IN\_DSN parameter was specified, but no value was found with it.

**Explanation:** The correct syntax is XLAT\_IN\_DSN '*dsn*', where *dsn* is the fully qualified DB2 data set name of a full image copy to be used instead of reading SYSCOPY.

**User response:** Correct the JCL and resubmit the job.

---

**HLO3205E** OBIDXLAT input override parameters found without output parameters.

**Explanation:** The OBIDXLAT syntax is incomplete.

**User response:** Use the OBIDXLAT keyword to specify object translation information (DBID / PSID / OBID) and enable recovery via WRITE\_TO\_VSAM of tables within an image copy to a different VSAM / table space than the one indicated in the generated logs. The variable *dataset\_name* is the fully qualified DB2 data set name of the target table space (the data

set name that is going to contain the translated image copy), valid values are up to 44 bytes. When specifying the dbid, psid, and obid pairs, you must specify the pairs of source/target IDs in that order (DBID first, PSID second, followed by all applicable OBID pairs). All pairs should be space separated and the source ID is listed first with the target ID listed second. Each pair should be defined on a new line. Define multiple OBID pairs as necessary.

---

**HLO3206E** The XLAT\_IN\_LOGPOINT parameter was specified, but no value was found with it.

**Explanation:** The correct syntax is XLAT\_IN\_LOGPOINT '*logpoint*', where *logpoint* is the RBA/LRSN of the override full image copy data set.

**User response:** Correct the JCL and resubmit the job.

---

**HLO3207E** Syntax error around XLAT\_IN\_LOGPOINT value. Form is X"6-byte-hex-value"

**Explanation:** The correct syntax is XLAT\_IN\_LOGPOINT '*logpoint*', where *logpoint* is the 6-byte hexadecimal value of the RBA/LRSN of the override full image copy data set.

**User response:** Correct the JCL and resubmit the job.

---

**HLO3208E** The XLAT\_IN\_LOGPOINT value contains an invalid hexadecimal value.

**Explanation:** The correct syntax is XLAT\_IN\_LOGPOINT '*logpoint*', where *logpoint* is the 6-byte hexadecimal value of the RBA/LRSN of the override full image copy data set.

**User response:** Correct the JCL and resubmit the job.

---

**HLO3209E** The XLAT\_IN\_LOGPOINT value cannot be 0.

**Explanation:** The correct syntax is XLAT\_IN\_LOGPOINT '*logpoint*', where *logpoint* is the 6-byte hexadecimal value of the RBA/LRSN of the override full image copy data set.

**User response:** Correct the JCL and resubmit the job.

---

**HLO3210E** The XLAT\_IN\_LOGPOINT keyword was already specified.

**Explanation:** You specified the XLAT\_IN\_LOGPOINT keyword more than once.

**User response:** Correct the JCL and resubmit the job.

---

**HLO3211E** The INCR\_IN\_LOGPOINT parameter was specified, but no value was found with it.

**Explanation:** The correct syntax is INCR\_IN\_LOGPOINT '*logpoint*', where *logpoint* is the 6-byte hexadecimal value of the RBA/LRSN of the incremental DSN.

**User response:** Correct the JCL and resubmit the job.

---

**HLO3212E** The INCR\_IN\_DSN keyword has already been coded.

**Explanation:** You specified the INCR\_IN\_DSN keyword more than once.

**User response:** Correct the JCL and resubmit the job.

---

**HLO3213E** Invalid INCR\_IN\_DSN syntax.

**Explanation:** The INCR\_IN\_DSN syntax you specified is not valid. The correct syntax is INCR\_IN\_DSN '*dsn*' where '*dsn*' is the incremental DSN that is to be included in OBIDXLAT processing.

**User response:** Correct the JCL and resubmit the job.

---

**HLO3214E** The INCR\_IN\_DSN parameter was specified, but no value was found with it.

**Explanation:** The INCR\_IN\_DSN syntax you specified is not valid. The correct syntax is INCR\_IN\_DSN '*dsn*' where '*dsn*' is the incremental DSN that is to be included in OBIDXLAT processing.

**User response:** Correct the JCL and resubmit the job.

---

**HLO3215E** The INCR\_IN\_LOGPOINT keyword was already specified.

**Explanation:** You specified the INCR\_IN\_LOGPOINT keyword more than once.

**User response:** Correct the JCL and resubmit the job.

---

**HLO3216E** Syntax error around INCR\_IN\_LOGPOINT value. Form is X"6-byte-hex-value".

**Explanation:** The correct syntax is INCR\_IN\_LOGPOINT '*logpoint*' where '*logpoint*' is 6-byte hexadecimal value of RBA/LRSN for the incremental DSN.

**User response:** Correct the JCL and resubmit the job.

---

**HLO3217E** The INCR\_IN\_LOGPOINT value contains an invalid hexadecimal value.

**Explanation:** The correct syntax is INCR\_IN\_LOGPOINT 'logpoint' where 'logpoint' is 6-byte hexadecimal value of RBA/LRSN for the incremental DSN.

**User response:** Correct the JCL and resubmit the job.

---

**HLO3218E** The INCR\_IN\_LOGPOINT value cannot be 0.

**Explanation:** The correct syntax is INCR\_IN\_LOGPOINT 'logpoint' where 'logpoint' is 6-byte hexadecimal value of RBA/LRSN for the incremental DSN.

**User response:** Correct the JCL and resubmit the job.

---

**HLO3219E** The INCR\_IN\_DSN and INCR\_IN\_LOGPOINT must be specified together.

**Explanation:** You must specify the INCR\_IN\_DSN and INCR\_IN\_LOGPOINT together.

**User response:** Correct the JCL and resubmit the job.

---

**HLO3220E** The XLAT\_IN\_DSN was not found in the MVS catalog.

**Explanation:** The XLAT\_IN\_DSN was not found in the MVS catalog.

**User response:** Verify that the XLAT\_IN\_DSN data set you specified is valid.

---

**HLO3221E** The INCR\_IN\_DSN was not found in the MVS catalog.

**Explanation:** The INCR\_IN\_DSN was not found in the MVS catalog.

**User response:** Verify that the INCR\_IN\_DSN data set you specified is valid.

---

**HLO3223E** Invalid XLAT\_INCREMENTAL(...) keyword syntax.

**Explanation:** The XLAT\_INCREMENTAL syntax you specified is not valid.

**User response:** Correct the JCL and resubmit the job.

---

**HLO3224E** Using OBIDXLAT incremental image copies requires a starting full image copy.

**Explanation:** The OBIDXLAT syntax you specified is not valid.

**User response:** Correct the JCL and resubmit the job.

---



---

**HLO3225E** The IC\_VOLUME\_COUNT parameter was specified, but no value was found with it.

**Explanation:** The IC\_VOLUME\_COUNT syntax you specified is not valid. The correct syntax is IC\_VOLUME\_COUNT 'n' where 'n' is an integer in the range of 1 to 255.

**User response:** Correct the JCL and resubmit the job.

---

**HLO3226E** The IC\_VOLUME\_COUNT keyword has already been coded.

**Explanation:** You specified the IC\_VOLUME\_COUNT keyword more than once.

**User response:** Correct the JCL and resubmit the job.

---

**HLO3227E** The IC\_VOLUME\_COUNT parameter specified is invalid.

**Explanation:** The IC\_VOLUME\_COUNT syntax you specified is not valid. The correct syntax is IC\_VOLUME\_COUNT 'n' where 'n' is an integer in the range of 1 to 255.

**User response:** Correct the JCL and resubmit the job.

---

**HLO3228E** The IC\_LP keyword group has already been coded for this space group.

**Explanation:** You specified the IC\_LP keyword more than once in the space group.

**User response:** Correct the JCL and resubmit the job.

---

**HLO3229E** The IC\_LB keyword group has already been coded for this space group.

**Explanation:** You specified the IC\_LB keyword more than once in the space group.

**User response:** Correct the JCL and resubmit the job.

---

**HLO3230E** The IC\_RP keyword group has already been coded for this space group.

**Explanation:** You specified the IC\_RP keyword more than once in the space group.

**User response:** Correct the JCL and resubmit the job.

---

**HLO3231E** The IC\_RB keyword group has already been coded for this space group.

**Explanation:** You specified the IC\_RB keyword more than once in the space group.

**User response:** Correct the JCL and resubmit the job.

---

---

**HLO3232E** One or both mini log data sets are found in the MVS catalog, but they are not found in the Accelerator Loader mini log control table.

**Explanation:** The mini log data sets are in the MVS catalog but not in the mini log control table.

**User response:** Remove unusable mini log data sets from the MVS catalog.

---

**HLO3233E** Mini log data set *dsn* has mismatched type in the HLO mini log control table.

**Explanation:** You attempted to append the mini log with the wrong type of data.

**User response:** Specify the mini log DSN at the appropriate GROUP or SPACE level.

---

**HLO3234E** Only one of two mini log data set names was found in the mini log control table.

**Explanation:** You specified two mini log data set names but only one of the pair is found in the mini log control table.

**User response:** Verify that you have specified the correct mini log data set pair. Specify only one data set name to append only one existing mini log or new unique data set name pairs.

---

**HLO3235E** Mini log DSN *dsn* is not appended because corresponding dataset not found in the MVS catalog.

**Explanation:** The specified mini log data set cannot be found in the MVS catalog.

**User response:** Remove any rows with incorrect data set names from the DB2 Analytics Accelerator Loader mini log control table.

---

**HLO3236E** Mini log data set *dsn* contains data for the different tablespace and could not be appended.

**Explanation:** The data set indicated in the message text contains data for a different table space and could not be appended.

**User response:** Verify that you have specified the correct mini log data set name.

---

**HLO3237E** The XLAT\_TARGET\_SSID keyword has already been coded.

**Explanation:** You specified the XLAT\_TARGET\_SSID keyword more than once.

**User response:** Correct the JCL and resubmit the job.

---

**HLO3238E** Invalid XLAT\_TARGET\_SSID syntax.

**Explanation:** The XLAT\_TARGET\_SSID syntax is not valid.

**User response:** Correct the JCL and resubmit the job.

---

**HLO3239E** The XLAT\_TARGET\_SSID parameter was specified, but no value was found with it.

**Explanation:** You must specify a valid value with the XLAT\_TARGET\_SSID parameter.

**User response:** Correct the JCL and resubmit the job.

---

**HLO3240E** The XLAT\_TARGET\_DBNAME keyword has already been coded.

**Explanation:** The XLAT\_TARGET\_DBNAME keyword was already been coded.

**User response:** Correct the JCL and resubmit the job.

---

**HLO3241E** Invalid XLAT\_TARGET\_DBNAME syntax.

**Explanation:** The XLAT\_TARGET\_DBNAME syntax you specified is not valid.

**User response:** Correct the JCL and resubmit the job.

---

**HLO3242E** The XLAT\_TARGET\_DBNAME parameter was specified, but no value was found with it.

**Explanation:** You must specify a valid value with the XLAT\_TARGET\_DBNAME parameter.

**User response:** Correct the JCL and resubmit the job.

---

**HLO3243E** The XLAT\_TARGET\_TSNAME keyword has already been coded.

**Explanation:** The XLAT\_TARGET\_TSNAME keyword was already been coded.

**User response:** Correct the JCL and resubmit the job.

---

**HLO3244E** Invalid XLAT\_TARGET\_TSNAME syntax.

**Explanation:** The XLAT\_TARGET\_TSNAME syntax is not valid.

**User response:** Correct the JCL and resubmit the job.

---

**HLO3245E** The XLAT\_TARGET\_TSNAME parameter was specified, but no value was found with it.

**Explanation:** You must specify a valid value with the XLAT\_TARGET\_TSNAME parameter.

## HLO3246E • HLO3260W

**User response:** Correct the JCL and resubmit the job.

---

**HLO3246E** The XLAT\_TARGET\_SSID/DBNAME/TSNAME must be specified together.

**Explanation:** The XLAT\_TARGET\_SSID, DBNAME, and TSNAME parameters must be specified together.

**User response:** Correct the JCL and resubmit the job.

---

**HLO3247E** The XML\_JOBS\_DSN keyword has already been coded.

**Explanation:** The XML\_JOBS\_DSN keyword was coded more than once.

**User response:** Correct the JCL and resubmit the job.

---

**HLO3248E** Invalid XML\_JOBS\_DSN syntax.

**Explanation:** The XML\_JOBS\_DSN syntax is not valid.

**User response:** Correct the JCL and resubmit the job.

---

**HLO3249E** The XML\_JOBS\_DSN parameter was specified, but no value was found with it.

**Explanation:** You must specify a valid value with the XML\_JOBS\_DSN parameter.

**User response:** Correct the JCL and resubmit the job.

---

**HLO3250E** The XML\_JOBS\_MEMBER\_PFX keyword has already been coded.

**Explanation:** The XML\_JOBS\_MEMBER\_PFX keyword was already been coded.

**User response:** Correct the JCL and resubmit the job.

---

**HLO3251E** Invalid XML\_JOBS\_MEMBER\_PFX syntax.

**Explanation:** The XML\_JOBS\_MEMBER\_PFX syntax is not valid.

**User response:** Correct the JCL and resubmit the job.

---

**HLO3252E** The XML\_JOBS\_MEMBER\_PFX parameter was specified, but no value was found with it.

**Explanation:** You must specify a valid value with the XML\_JOBS\_MEMBER\_PFX parameter.

**User response:** Correct the JCL and resubmit the job.

---

**HLO3253E** The XML\_TEMPLATE\_DSN keyword has already been coded.

**Explanation:** The XML\_TEMPLATE\_DSN keyword has already been coded.

**User response:** Correct the JCL and resubmit the job.

---

**HLO3254E** Invalid XML\_TEMPLATE\_DSN syntax.

**Explanation:** The XML\_TEMPLATE\_DSN syntax is not valid.

**User response:** Correct the JCL and resubmit the job.

---

**HLO3255E** The XML\_TEMPLATE\_DSN parameter was specified, but no value was found with it.

**Explanation:** You must specify a valid value with the XML\_TEMPLATE\_DSN parameter.

**User response:** Correct the JCL and resubmit the job.

---

**HLO3256E** The XML\_TEMPLATE\_MEMBER keyword has already been coded.

**Explanation:** The XML\_TEMPLATE\_MEMBER keyword has already been coded.

**User response:** Correct the JCL and resubmit the job.

---

**HLO3257E** Invalid XML\_TEMPLATE\_MEMBER syntax.

**Explanation:** The XML\_TEMPLATE\_MEMBER syntax is not valid.

**User response:** Correct the JCL and resubmit the job.

---

**HLO3258E** The XML\_TEMPLATE\_MEMBER parameter was specified, but no value was found with it.

**Explanation:** A valid value was not specified with the XML\_TEMPLATE\_MEMBER parameter.

**User response:** Correct the JCL and resubmit the job.

---

**HLO3259E** The XML\_JOBS\_\* and XML\_TEMPLATE\_\* parameters must be specified together.

**Explanation:** The XML\_JOBS\_\* and XML\_TEMPLATE\_\* parameters must be specified together.

**User response:** Correct the JCL and resubmit the job.

---

**HLO3260W** Incremental method SORT is obsolete. MERGE mode used instead.

**Explanation:** INCREMENTAL SORT is no longer supported (it is ignored). The internal method used instead is MERGE.

**User response:** No action is required.



---

**HLO3261E** OBIDXLAT processing is not allowed.

**Explanation:** OBIDXLAT is not allowed.

**User response:** Correct the JCL and resubmit the job.

---

**HLO3262E** At least one SPACE() control card set is required.

**Explanation:** At least one SPACE() control card set is required, but no SPACE control card sets have been specified.

**User response:** Correct the JCL and resubmit the job.

---

**HLO3263E** The PARALLEL parameter was specified, but no value was found with it.

**Explanation:** The keyword PARALLEL has been coded with no associated value.

**User response:** Correct the JCL and resubmit the job.

---

**HLO3264E** Invalid PARALLEL value

**Explanation:** The value for keyword PARALLEL is not valid.

**User response:** Correct the JCL and resubmit the job.

---

**HLO3265E** The PARALLEL keyword has already been coded.

**Explanation:** The PARALLEL keyword has already been coded.

**User response:** Correct the JCL and resubmit the job.

---

**HLO3266E** The REBUILD\_INDEXES keyword was specified for the index space but the parent table space was not included.

**Explanation:** You specified the REBUILD\_INDEXES parameter for an index space, but did not include a parent table space.

**User response:** Correct the JCL and resubmit the job.

---

**HLO3267E** Indexes can be rebuilt only when WRITE\_TO\_VSAM or WRITE\_TO\_BOTH is specified.

**Explanation:** You specified the REBUILD\_INDEXES parameter, but not WRITE\_TO\_VSAM or WRITE\_TO\_BOTH.

**User response:** Correct the JCL and resubmit the job.

---



---

**HLO3268E** The OBIDXLAT keyword, present for the index space to rebuild, must be in line with the parent table space.

**Explanation:** You specified the index space and its parent table space with the REBUILD\_INDEXES parameter, but OBIDXLAT has been specified only for one of them.

**User response:** Correct the JCL and resubmit the job.

---

**HLO3269E** The REBUILD\_INDEXES keyword and the end point specification are mutually exclusive for index spaces.

**Explanation:** You specified the REBUILD\_INDEXES parameter and an end point for the recovery process. These are mutually exclusive.

**User response:** Correct the JCL and resubmit the job.

---

**HLO3270E** One of TO\_CURRENT, TO\_QUIESCE, END\_RBA, END\_LRSN, TOLOGPOINT or REBUILD\_INDEXES must be specified.

**Explanation:** You did not specify one of the following required options in your JCL: TO\_CURRENT, TO\_QUIESCE, END\_RBA, END\_LRSN, TOLOGPOINT or REBUILD\_INDEXES.

**User response:** Correct the JCL and resubmit the job.

---

**HLO3271E** The REBUILD\_INDEXES keyword has already been coded.

**Explanation:** You specified the REBUILD\_INDEXES parameter more than once.

**User response:** Correct the JCL and resubmit the job.

---

**HLO3272E** The NO\_REUSE keyword was coded multiple times for the same object.

**Explanation:** The NO\_REUSE keyword was specified more than once for the same object.

**User response:** Correct the JCL and resubmit the job.

---

**HLO3273E** The NO\_REUSE keyword is not valid in the current job environment.

**Explanation:** The NO\_REUSE keyword was specified in a job type other than WRITE\_TO\_VSAM or WRITE\_TO\_BOTH.

**User response:** Correct the JCL and resubmit the job.

---

---

**HLO3274E** The CHECK\_AFTER QUIESCE keyword was coded multiple times for the same object.

**Explanation:** The CHECK\_AFTER QUIESCE keyword was coded more than once for the same object.

**User response:** Correct the JCL and resubmit the job.

---

**HLO3275E** The CHECK\_AFTER QUIESCE keyword specified without TO QUIESCE.

**Explanation:** The CHECK\_AFTER QUIESCE was specified but TO QUIESCE was not specified for space.

**User response:** Correct the JCL and resubmit the job.

---

**HLO3276E** The CHECK\_AFTER QUIESCE keyword conflicts with UNIFIED check specified.

**Explanation:** The CHECK\_AFTER QUIESCE keyword conflicts with the UNIFIED keyword.

**User response:** Correct the JCL and resubmit the job.

---

**HLO3277E** The CHECK\_AFTER QUIESCE keyword conflicts with NO\_SYSLGRNX keyword.

**Explanation:** The CHECK\_AFTER QUIESCE keyword was specified with the NO\_SYSLGRNX keyword. This is not valid.

**User response:** Correct the JCL and resubmit the job.

---

**HLO3278E** The TO CONSISTENT\_IC has already been coded for this space group.

**Explanation:** The TO CONSISTENT\_IC has already been coded for the space group.

**User response:** Correct the JCL and resubmit the job.

---

**HLO3279E** Only WRITE\_TO\_COPIES is supported when TO CONSISTENT\_IC is specified.

**Explanation:** Only WRITE\_TO\_COPIES is supported when TO CONSISTENT\_IC is specified.

**User response:** Correct the JCL and resubmit the job.

---

**HLO3280E** Error token: *token* has an empty value. Space# *number*

**Explanation:** The indicated token has an empty value.

**User response:** Correct the JCL and resubmit the job.

---



---

**HLO3281E** Error token: *token* appears more than once. Space# *number*.

**Explanation:** The indicated token could not be specified more than once on current level.

**User response:** Correct the JCL and resubmit the job.

---

**HLO3282E** Error token: *token* has an invalid value: *value*. Space# *number*.

**Explanation:** An invalid *value* was detected for *token*.

**User response:** Correct the JCL and resubmit the job.

---

**HLO3283E** Error token: *token1* is unexpected with token: *token2*. Space# *number*.

**Explanation:** *token1* could not be used when *token2* is used.

**User response:** Correct the JCL and resubmit the job.

---

**HLO3284E** Error token: *token1* using require token: *token2*.

**Explanation:** *token1* could not be used without *token2* specified.

**User response:** Correct the JCL and resubmit the job.

---

**HLO3289E** The FCCOPYDDN parameter was specified, but no value was found with it.

**Explanation:** The FCCOPYDDN parameter was specified, but no value was found with it.

**User response:** Correct the JCL and resubmit the job.

---

**HLO3290E** The FCCOPYDDN parameter specified is invalid.

**Explanation:** The FCCOPYDDN parameter specified is invalid.

**User response:** Correct the JCL and resubmit the job.

---

**HLO3291E** The FCCOPYDDN keyword has already been coded for this group.

**Explanation:** The FCCOPYDDN keyword has already been coded for this group.

**User response:** Correct the JCL and resubmit the job.

---

**HLO3292E** The FCCOPYDDN keyword can be used with NEW\_COPY.

**Explanation:** The FCCOPYDDN keyword can be used with NEW\_COPY.

**User response:** Correct the JCL and resubmit the job.

---

---

**HLO3293E** The NEW\_COPY keyword has already been coded for this group.

**Explanation:** The NEW\_COPY keyword has already been coded for this group.

**User response:** Correct the JCL and resubmit the job.

---

**HLO3295E** The Name parameter was specified, but no value was found with it.

**Explanation:** The Name parameter was specified, but no value was found with it.

**User response:** Correct the JCL and resubmit the job.

---

**HLO3296E** The NAME parameter is invalid.

**Explanation:** The NAME parameter is invalid.

**User response:** Correct the JCL and resubmit the job.

---

**HLO3297E** The NAME keyword has already been coded for this space group.

**Explanation:** The NAME keyword has already been coded for this space group.

**User response:** Correct the JCL and resubmit the job.

---

**HLO3298E** The Creator/Name specified did not match a DBNAME.TSNAME in SYSTABLES.

**Explanation:** The Creator/Name specified did not match a DBNAME.TSNAME in SYSTABLES.

**User response:** Correct the JCL and resubmit the job.

---

**HLO3300E** Could not obtain SSID, user indicator from input parameters.

**Explanation:** DB2 Analytics Accelerator Loader could not obtain the SSID and user indicator from the input parameters.

**User response:** Verify that the correct SSID and user indicator values have been specified.

---

**HLO3301E** Invalid parameter format

**Explanation:** The parameter format you specified is not valid.

**User response:** Correct the JCL and resubmit the job.

---

**HLO3302E** No SYSOUT DD was found.

**Explanation:** DB2 Analytics Accelerator Loader could not find the SYSOUT DD.

**User response:** Verify that the SYSOUT DD is available.

---



---

**HLO3303E** Could not open SYSOUT DD.

**Explanation:** DB2 Analytics Accelerator Loader could not open the SYSOUT DD.

**User response:** Verify that the SYSOUT DD is available.

---

**HLO3304E** Invalid SYSOUT DD LRECL value.

**Explanation:** The SYSOUT DD LRECL is invalid.

**User response:** Specify a valid SYSOUT DD LRECL value.

---

**HLO3305E** No SYSIN DD was found.

**Explanation:** DB2 Analytics Accelerator Loader could not find the SYSIN DD.

**User response:** Verify that the SYSIN DD is available.

---

**HLO3306E** Could not open SYSIN DD.

**Explanation:** DB2 Analytics Accelerator Loader could not open the SYSIN DD.

**User response:** Verify that the SYSIN DD is available.

---

**HLO3307E** Control file values could not be read. Check for a user indicator mismatch.

**Explanation:** The control file values could not be read.

**User response:** Check for a user indicator mismatch.

---

**HLO3308E** Error in SYSIN line format.

**Explanation:** There was an error in the SYSIN line format.

**User response:** Correct the SYSIN line format.

---

**HLO3400E** The HLO#DATA instream DD could not be opened.

**Explanation:** The DD could not be found in the job generated by DB2 Analytics Accelerator Loader.

**User response:** Ensure that the job generated by DB2 Analytics Accelerator Loader to run on this LPAR was not altered and the HLO#DATA DD exists in the generated job.

---

**HLO3401E** The following XML SSID/DBname/TSname control card is invalid:

**Explanation:** The control cards do not conform to expected syntax.

**User response:** Correct the JCL and resubmit the job.

---

## HLO3402I • HLO3604E

---

**HLO3402I** *message\_text*

**Explanation:** This message is generated with HLO3401E.

**User response:** No action is required.

---

**HLO3403E** **An internal error occurred in program HLO#XMLD**

**Explanation:** Internal error.

**User response:** Contact IBM Software Support.

---

**HLO3405E** **Could not obtain SSID and User Indicator from input parameters.**

**Explanation:** The log apply job was unsuccessful in trying to connect to the specified subsystem when processing spaces with XML data.

**User response:** Verify that the subsystem SSID specified in the job is accurate. Correct the JCL and resubmit the job. If the problem persists, contact IBM Software Support.

---

**HLO3406E** **Could not open the SYSOUT DD.**

**Explanation:** The log apply job could not open the SYSOUT DD.

**User response:** Verify that the SYSOUT DD is specified in the job. Correct the JCL and resubmit the job. If the problem persists, contact IBM Software Support.

---

**HLO3407E** **Invalid SYSOUT DD LRECL.**

**Explanation:** The LRECL specified on the SYSOUT DD is incorrect.

**User response:** Verify that the LRECL specified in the SYSOUT DD is accurate. Correct the JCL and resubmit the job. If the problem persists, contact IBM Software Support.

---

**HLO3450I** **Object *object* required no action.**

**Explanation:** The object was determined to require no action to make the object usable.

**User response:** No action is required.

---

**HLO3451I** **Object *object* had its sequence nbr increased by *rowcount*.**

**Explanation:** DB2 Analytics Accelerator Loader updated the catalog to make the XML object usable.

**User response:** No action is required.

---

---

**HLO3452I** **With a source count=*count***

**Explanation:** DB2 Analytics Accelerator Loader updated the catalog to make the XML object usable.

**User response:** No action is required.

---

**HLO3500E** **The XML target SSID/DBname/TSname control cards are invalid.**

**Explanation:** The subsystem, database name or table space name are invalid in the log apply control cards.

**User response:** Correct the subsystem, database name or table space name and resubmit the job. If the problem persists, contact IBM Software Support.

---

**HLO3501I** **The SPACE(...) set involved that the error was detected in was *spacesetnumber***

**Explanation:** Indicates the SPACE set involved in the error.

**User response:** No action is required.

---

**HLO3600E** **A log apply task could not be started.**

**Explanation:** A log apply task could not be started.

**User response:** Contact IBM Software Support.

---

**HLO3601E** **Log apply task returned an error, RC=*return\_code*.**

**Explanation:** The log apply component could not finish normally. An abnormal condition was detected.

**User response:** Check the job output for other error messages that further explain the error in the output. Make note of the return codes provided in the messages, and then contact IBM Software Support.

---

**HLO3602E** **The CELL64 service could not be initialized.**

**Explanation:** The CELL64 service could not be initialized.

**User response:** Contact IBM Software Support.

---

**HLO3603E** **A get cell function call failed.**

**Explanation:** A get cell function call failed.

**User response:** Contact IBM Software Support.

---

**HLO3604E** **The SPACE(...) set involved that the error was detected in was # XXXXX**

**Explanation:** This message shows the SPACE(...) set where the error was detected.

**User response:** Correct the JCL and resubmit the job.

---

**HLO3605E** The end point for *database.table\_space* did not match the UNIFIED value.

**Explanation:** The end point for the table space indicated in the message did not match the value specified for the UNIFIED value.

**User response:** No action is required.

---

**HLO3606E** Consistency value = *X'consistency\_token'*

**Explanation:** A problem occurred with the UNIFIED or UNIFIED\_WARNING control cards. The message displays the consistency value taken from the first object in the group.

**User response:** The values shown in HLO3606E and HLO3607E can be compared for diagnostic purposes. The value shown in HLO3606E is that for the first object in the group, while the value shown in HLO3607E is the value for any object that does not match it. For example, if there are 10 objects in the group and three do not match the first, then one HLO3606E message will display with three HLO3607E messages (for each group).

---

**HLO3607E** Object's derived value = *X'consistency\_token'*

**Explanation:** A problem occurred with the UNIFIED or UNIFIED\_WARNING control cards. The message displays the object's derived value for the first object in the group. This message displays any object that does not match the first object in the group (identified in HLO3606E).

**User response:** The values shown in HLO3606E and HLO3607E can be compared for diagnostic purposes. The value shown in HLO3606E is that for the first object in the group, while the value shown in HLO3607E is the value for any object that does not match it. For example, if there are 10 objects in the group and three do not match the first, then one HLO3606E message will display with three HLO3607E messages (for each group).

---

**HLO3608E** The initialization phase of DB2 Sort failed.

**Explanation:** The initialization phase of DB2 Sort failed.

**User response:** Contact IBM Software Support.

---

**HLO3609E** The resource optimization phase [1|2] of DB2 sort failed. RC=*'return\_code'*

**Explanation:** DB2 Sort failed in the initialization step necessary for optimization.

**User response:** Contact IBM Software Support.

---

**HLO3610E** The terminate phase of DB2 Sort failed.

**Explanation:** The terminate phase of DB2 Sort failed.

**User response:** Contact IBM Software Support.

---

**HLO3611E** There is not enough storage to perform the desired number of parallel sorts.

**Explanation:** There is not enough virtual storage space to perform the number of parallel sorts specified.

**User response:** Lower the number of parallel tasks specified or increase the amount of virtual memory specified available for the job, then resubmit the job.

---

**HLO3612E** Insufficient total storage to perform the desired number of parallel sorts.

**Explanation:** The amount of storage available for a sort was insufficient.

**User response:** Increase your region size or reduce the number of parallel tasks, then resubmit the job.

---

**HLO3613E** The log apply tasks ended abnormally. Check messages.

**Explanation:** One or more of the log apply tasks failed to process.

**User response:** Check the accompanying error messages.

---

**HLO3614E** Rebuild indexes task manager could not be started.

**Explanation:** The rebuild indexes task manager could not be started.

**User response:** Check the accompanying error messages.

---

**HLO3615I** Log apply task manager returned an error, RC=*return\_code*.

**Explanation:** The specified error occurred during parallel log apply processing.

**User response:** No action is required.

---

**HLO3619E** The pipe mechanism initialization function returned an error.

**Explanation:** An error occurred during pipe initialization.

**User response:** Check the log for related errors.

---

---

**HLO3620E** The pipe mechanism cleanup function returned an error.

**Explanation:** An error occurred during pipe cleanup.

**User response:** Check the log for related errors.

---

**HLO3621E** The common storage name/token pair could not be found.

**Explanation:** The common storage that was created at program startup could not be located, which indicates a possible error during initialization.

**User response:** Contact IBM Software Support.

---

**HLO3622E** An error occurred while calling IEANTRT to get the name/token pair.

**Explanation:** An error occurred while accessing common storage via IEANTRT.

**User response:** Contact IBM Software Support.

---

**HLO3623E** A table was specified that was already being loaded.

**Explanation:** A table that was included in the job was already being loaded by another job.

**User response:** Wait for the first job to complete, and then rerun the second job.

---

**HLO3624E** A table did not have a matching entry in common storage.

**Explanation:** Required table information was not found in common storage. A problem might have occurred during initialization, or the common storage might have been cleared.

**User response:** Verify that common storage was not cleared. If necessary, contact IBM Software Support.

---

**HLO3625E** An error occurred attempting to open a pipe.

**Explanation:** An error occurred while the product was opening a pipe.

**User response:** Check the log for related errors. Also check the started task for any error messages.

---

**HLO3626E** An error occurred attempting an open on a pipe.

**Explanation:** An error occurred while the product was attempting to open a pipe for writing data to the accelerator.

**User response:** Verify that the started task is still running and check for related error messages. If necessary, contact IBM Software Support.

---

---

**HLO3627E** An error occurred attempting to create a name/token pair.

**Explanation:** An error occurred while the product was attempting to save the address of common storage via IEANTCR.

**User response:** Contact IBM Software Support.

---

**HLO3628E** An error occurred attempting to call the system post function.

**Explanation:** An error occurred while the product was posting to the started task.

**User response:** Check the started task for error messages. If necessary, contact IBM Software Support.

---

**HLO3629E** An error occurred while attempting to attach ACCEL\_LOAD\_TABLES.

**Explanation:** An error occurred while the product was attaching a new task.

**User response:** Contact IBM Software Support.

---

**HLO3630E** The ACCEL\_LOAD\_TABLES stored procedure ended prematurely.

**Explanation:** The ACCEL\_LOAD\_TABLES stored procedure ended before the product opened all data pipes.

**User response:** Check the log for related errors.

---

**HLO3631E** The call to connect to DB2 returned an error.

**Explanation:** Connecting to DB2 in order to call a stored procedure failed.

**User response:** Ensure that the subsystem is running.

---

**HLO3632E** The call to open the connection to DB2 returned an error.

**Explanation:** Opening a DB2 connection in order to call a stored procedure failed.

**User response:** Ensure that the subsystem is running.

---

**HLO3633E** The ACCEL\_LOAD\_TABLES stored procedure returned an error.

**Explanation:** An error occurred during the call to ACCEL\_LOAD\_TABLES.

**User response:** Check the log for the ACCEL\_LOAD\_TABLES error message.

---

---

**HLO3634E** The ACCEL\_LOAD\_TABLES stored procedure returned an SQLCODE other than +466.

**Explanation:** The call to the ACCEL\_LOAD\_TABLES stored procedure resulted in an SQL error.

**User response:** Check the log for the ACCEL\_LOAD\_TABLES SQL error message.

---

**HLO3635E** The ACCEL\_LOAD\_TABLES stored procedure returned an unexpected SQLCODE.

**Explanation:** The call to the ACCEL\_LOAD\_TABLES stored procedure resulted in an SQL error.

**User response:** Check the log for the ACCEL\_LOAD\_TABLES SQL error message.

---

**HLO3636E** The ACCEL\_LOAD\_TABLES stored procedure abended.

**Explanation:** The call to the ACCEL\_LOAD\_TABLES stored procedure resulted in an abend.

**User response:** Contact IBM Software Support.

---

**HLO3637E** The pipe interface program returned an unknown error.

**Explanation:** The call to the ACCEL\_LOAD\_TABLES stored procedure resulted in an abend.

**User response:** Contact IBM Software Support.

---

**HLO3638E** *message\_text*

**Explanation:** This message provides the following information:

SVC99 details = *svcc99\_details*  
 SVC99\_CODE\_1  
 SVC99\_CODE\_2  
 SVC99\_DDNAME *ddname*  
 SVC99\_PIPE

**User response:** No action is required.

---

**HLO3639I** DDNAME = *ddname*.

**Explanation:** This message provides the DD name.

**User response:** No action is required.

---

**HLO3640I** This message provides SSID information.

**Explanation:** SSID = *ssid*.

**User response:** No action is required.

---

**HLO3641I** This message provides DB2 connection error information.

**Explanation:** SSID = *ssid* Plan name = *plan\_name*.

**User response:** No action is required.

---

**HLO3642I** This message provides a return code.

**Explanation:** Return code = *return\_code*.

**User response:** No action is required.

---

**HLO3643E** This message provides the message identifier and the table ID.

**Explanation:** Table information is as follows:

BAD\_TABLE\_ID = *table\_ID*  
 BAD\_TABLE\_TEXT = *table\_text*

**User response:** No action is required.

---

**HLO3644E** This message provides table partition information.

**Explanation:** Partition information is as follows:

BAD\_TABLE\_PART\_1 = *partition\_number*.

**User response:** No action is required.

---

**HLO3701E** Error token: *token* unexpected end of input stream.

**Explanation:** A syntax error was detected near *token*.

**User response:** Verify the syntax structure of the control cards. If no syntax errors can be identified, contact IBM Software Support.

---

**HLO3702E** Error token: *token*, open or close parenthesis expected.

**Explanation:** A syntax error was detected near *token*.

**User response:** Verify the syntax structure of the control cards. If no syntax errors can be identified, contact IBM Software Support.

---

**HLO3703E** Error token: *token*, have no value.

**Explanation:** A syntax error was detected near *token*.

**User response:** Verify the syntax structure of the control cards. If no syntax errors can be identified, contact IBM Software Support.

---

**HLO3704E** Error token: *token*, invalid value.

**Explanation:** A syntax error was detected near *token*.

**User response:** Verify the syntax structure of the control cards. If no syntax errors can be identified, contact IBM Software Support.

---

---

**HLO3705E** Error token: *token*, appears more than once.

**Explanation:** A syntax error was detected near *token*.

**User response:** Verify the syntax structure of the control cards. If no syntax errors can be identified, contact IBM Software Support.

---

**HLO3706E** Error token: *token*, value overflow.

**Explanation:** A syntax error was detected near *token*.

**User response:** Verify the syntax structure of the control cards. If no syntax errors can be identified, contact IBM Software Support.

---

**HLO3707E** Error token: *token*, require token.

**Explanation:** The *token* control card is required in the context of the syntax.

**User response:** Verify the syntax structure of the control cards. If no syntax errors can be identified, contact IBM Software Support.

---

**HLO3708E** Error token: *token*, have no parameters.

**Explanation:** A syntax error was detected near *token*.

**User response:** Verify the syntax structure of the control cards. If no syntax errors can be identified, contact IBM Software Support.

---

**HLO3710E** The TO\_TIMESTAMP parameter was specified, but no value was found with it.

**Explanation:** The TO\_TIMESTAMP parameter was specified, but no value was found with it.

**User response:** Correct the JCL and resubmit the job.

---

**HLO3711E** Syntax error around TO\_TIMESTAMP value. Form is "YYYY-MM-DD-HH.MM.SS.XXXXXX"

**Explanation:** There is a syntax error in the value of TO\_TIMESTAMP. The valid format is "YYYY-MM-DD-HH.MM.SS.XXXXXX"

**User response:** Correct the JCL and resubmit the job.

---

**HLO3712E** The TO\_TIMESTAMP value could not be converted. CONVTOD macro return code: *returncode*. Space#*number*

**Explanation:** An internal error occurred during the RBA to timestamp conversion process.

**User response:** Contact IBM Software Support.

---

**HLO3714E** The TO\_TIMESTAMP value was already specified before end LRSN in a control group.

**Explanation:** The TO\_TIMESTAMP value was already specified before end LRSN in a control group.

**User response:** Correct the JCL and resubmit the job.

---

**HLO3715E** The TO\_TIMESTAMP keyword has already been coded for this space group.

**Explanation:** The TO\_TIMESTAMP keyword has already been coded for this space group.

**User response:** Correct the JCL and resubmit the job.

---

**HLO3716E** Double count CREATOR keyword without NAME keyword between.

**Explanation:** The CREATOR syntax is not valid.

**User response:** Correct the JCL and resubmit the job.

---

**HLO3717E** Double count NAME keyword without CREATOR keyword between.

**Explanation:** The NAME and CREATOR syntax is invalid.

**User response:** Correct the JCL and resubmit the job.

---

**HLO3718E** The SPACE() node contains tables from inconsistent database/tablesace.

**Explanation:** The SPACE(...) node contains tables from an inconsistent database and table space combination.

**User response:** Correct the JCL and resubmit the job.

---

**HLO3719E** Error control card stream has no continuation.

**Explanation:** An end of control card stream was detected but the expression is incomplete.

**User response:** Correct the JCL and resubmit the job.

---

**HLO3720E** Error control card stream have unexpected continuation.

**Explanation:** The control card stream process was complete, but a continuation was found.

**User response:** Correct the JCL and resubmit the job.

---

**HLO3721E** Error control card stream ended unexpectedly.

**Explanation:** The control card context expected additional input but found the end of the file instead.

**User response:** Correct the JCL and resubmit the job.



---

**HLO3722E** Error control card stream ended while token *token* value expected.

**Explanation:** The control card context expected a value associated with the token but found the end of the file instead.

**User response:** Correct the JCL and resubmit the job.

---

**HLO3723E** Consistent Load operations require DB2 V10 or later. This DB2=*db2\_version*.

**Explanation:** The attempted operation requires DB2 Version 10 or later.

**User response:** Verify that your system meets the minimum software requirements. For more information, see the topic about preparing to customize in the product documentation.

---

**HLO3732E** The ACCELNAME keyword has already been coded.

**Explanation:** The ACCELNAME keyword has already been coded.

**User response:** Correct the JCL and resubmit the job.

---

**HLO3733E** The ACCELNAME parameter is invalid.

**Explanation:** The ACCELNAME parameter is invalid.

**User response:** Correct the JCL and resubmit the job.

---

**HLO3734E** The ACCELNAME parameter was specified, but no value was found with it.

**Explanation:** The ACCELNAME parameter was specified, but no value was found with it.

**User response:** Correct the JCL and resubmit the job.

---

**HLO3735E** The pipe mechanism initialization function returned an error.

**Explanation:** An error occurred during pipe initialization.

**User response:** Check the log for related errors.

---

**HLO3736E** Error in checking the accelerator name.

**Explanation:** DB2 Analytics Accelerator Loader was unable to check the current accelerator name from the DISPLAY ACCELERATOR command output. The command output is displayed in the messages that follow.

**User response:** Review the command output and correct the problem.

---



---

**HLO3737E** Error accelerator *name* invalid state.

**Explanation:** The accelerator state from DISPLAY ACCELERATOR command output is not "STARTED".

**User response:** Review the command output and correct the problem.

---

**HLO3738E** Error exec -DIS ACCEL command rc = *RC*, rs = *SQLSTATE*

**Explanation:** An error was encountered when executing the DB2 DISPLAY ACCELERATOR command. Any available command output follows this message.

**User response:** Review the return code and correct the problem.

---

**HLO3739E** Error call *sysproc.accel\_get\_tables\_details table owner.name severity severity, reason reason*.

**Explanation:** There was an error in the call to stored procedure *owner.name* table. See also HLO3740I, HLO3741I, HLO3742I.

**User response:** Review the error codes and correct the problem.

---

**HLO3740I** Error text: *text*

**Explanation:** This message displays the error text from the stored procedure and is displayed after message HLO3727I.

**User response:** No action is required.

---

**HLO3741I** Error description: *text*

**Explanation:** This message displays the error description from the stored procedure and is displayed after message HLO3727I.

**User response:** No action is required.

---

**HLO3742I** Error action: *text*

**Explanation:** This message displays the error action text from the stored procedure and is displayed after message HLO3727I.

**User response:** No action is required.

---

**HLO3743E** Error could not parse XML output. XML output follows.

**Explanation:** An error was encountered parsing the XML output from the stored procedure. The XML output will be dumped after this message.

**User response:** Provide the output to IBM Software Support.

---

---

**HLO3744E** Error table *owner.table* state *state* type *type*.

**Explanation:** Invalid state for *owner.table* on accelerator detected.

**User response:** To resolve, delete and re-add the table to the accelerator.

---

**HLO3745E** Error table *owner.table* part *number* state *state* type *type*.

**Explanation:** Invalid state for *owner.table* on accelerator detected.

**User response:** To resolve, delete and re-add the table to the accelerator.

---

**HLO3746W** Warning table *owner.table* part *number* state *state* type *type*.

**Explanation:** Invalid state for *owner.table* partition NUMBER on accelerator detected.

**User response:** Correct problem if needed.

---

**HLO3747S** The global Loader intercept is not active.

**Explanation:** The DB2 Analytics Accelerator Loader started task has not been started since the last IPL.

**User response:** Start the DB2 Analytics Accelerator Loader started task. Issue the z/OS console command S *prefixstc* or the SDSF command /S *prefixstc*. The variable *prefixstc* represents the member name of the DB2 Analytics Accelerator Loader PROC in the system PROCLIB. For more information, see "Starting the started task" in the product documentation.

---

**HLO3748S** The selected DB2 system is not on the Loader started task intercept list.

**Explanation:** The DSNUTILB intercept policy for the DB2 Analytics Accelerator Loader started task must specify the DB2 system.

**User response:** Include the DB2 system in the DSNUTILB intercept policy by using the <DB2SYSTEM> element within the <POLICY> section of the DSNUTILB intercept policy as follows:

```
<DSNUTILB_INTERCEPT>
  <POLICY>
    <DB2SYSTEM SSID="ssid" ACTION="LOAD_ACCELERATOR">
  </DB2SYSTEM>
</POLICY>
</DSNUTILB_INTERCEPT>
```

For more information, see the topic about the DSNUTILB intercept and the DSNUTILB intercept policy in the reference section of the product documentation.

---

**HLO3749S** The selected DB2 system is not configured for intercepts by the Loader.

**Explanation:** DB2 Analytics Accelerator Loader cannot connect to the DB2 system because the DB2 Analytics Accelerator Loader started task is not running.

**User response:** Start the DB2 Analytics Accelerator Loader started task. Issue the z/OS console command S *prefixstc* or the SDSF command /S *prefixstc*. The variable *prefixstc* represents the member name of the DB2 Analytics Accelerator Loader PROC in the system PROCLIB. For more information, see "Starting the started task" in the product documentation.

---

**HLO3750E** Error table *table* removed from processing. Multiple tables per table space unsupported.

**Explanation:** DB2 Analytics Accelerator Loader does not support the processing of multiple tables per table space.

**User response:** Correct the JCL and resubmit the job.

---

**HLO3751E** A mismatch between passed Zparm information and the JES SSCT was found.

**Explanation:** A mismatch between passed Zparm information and the JES SSCT was found.

**User response:** Correct the JCL and resubmit the job.

---

**HLO3752E** An unexpected error occurred while trying to read the bootstrap dataset.

**Explanation:** An unexpected error occurred while trying to read the bootstrap dataset.

**User response:** Contact IBM Software Support.

---

**HLO3753E** Could not determine RBA of TO\_TIMESTAMP point.

**Explanation:** The TO\_TIMESTAMP control card was used, but the RBA cannot be determined.

**User response:** Specify a timestamp that has a valid RBA.

---

**HLO3754E** Could not find log data set to determine RBA of TO\_TIMESTAMP point.

**Explanation:** The TO\_TIMESTAMP control card was used, but the specified timestamp cannot be correlated to any log data set in the boot strap data set (BSDS). If the timestamp is no longer valid, it cannot be used.

**User response:** Specify a timestamp that is within the boundaries of the logs that are recorded in the BSDS.

---

**HLO3755I** Issuing HRECALL for log dataset

**Explanation:** DB2 Analytics Accelerator Loader is issuing an HRECALL for the log dataset.

**User response:** No action is required.

---

**HLO3756E** A desired log range can not be found in any active/archive log.

**Explanation:** The specified log range cannot be found.

**User response:** Verify and correct the specified log range.

---

**HLO3757E** The following log dataset is required for processing, but got an error:

**Explanation:** The specified ERROR\_ARCHIVE\_LOG\_DSN produced an error.

**User response:** See message HLO3758I for more information.

---

**HLO3758I** ERROR\_ARCHIVE\_LOG\_DSN for GGC3757E message

**Explanation:** The specified ERROR\_ARCHIVE\_LOG\_DSN produced an error.

**User response:** Specify a valid ERROR\_ARCHIVE\_LOG\_DSN value.

---

**HLO3759I** Table *table* part *part* state *state* type *type*.

**Explanation:** This message provides information to accompany other error messages.

**User response:** No action is required.

---

**HLO3760E** The TO\_IC keyword has already been coded for this space group.

**Explanation:** The space specification set contains duplicate keywords.

**User response:** Correct the JCL and resubmit the job.

---

**HLO3761E** The TO\_IC value has no contents.

**Explanation:** A syntax error was found in the control card. The data set name is required.

**User response:** Correct the JCL and resubmit the job.

---

**HLO3762E** The TO\_IC parameter specified is invalid.

**Explanation:** A syntax error was found in the control card. The data set name must be enclosed in single quotation marks and can contain up to 44 characters.

**User response:** Correct the JCL and resubmit the job.

---

**HLO3763E** The selected end point is inconsistent with the run type.

**Explanation:** If the run type is a load to a consistent time (CONSISTENT load), the TO\_IC end point control card cannot be used. If the run type is an image copy load, only the TO\_IC end point can be used. End points such as TO\_IC can only be used with the IDAA\_LOAD\_IC option. Other end points, such as TO\_CURRENT, can only be used with the IDAA\_CONSISTENT\_LOAD option.

**User response:** Correct the JCL and resubmit the job.

---

**HLO3764E** The TO\_IC\_INLINE control card has already been specified for this object.

**Explanation:** A duplicate control card was found in the object specification.

**User response:** Correct the JCL and resubmit the job.

---

**HLO3765E** The DBID, PSID, and at least one OBID must be specified.

**Explanation:** On a load operation, translation was called for, but all required fields to perform the function were not specified. All of the required options that are needed to perform the translation operation were not specified.

**User response:** Correct the JCL and resubmit the job.

---

**HLO3766E** When a segmented object is loaded, OBIDXLAT information must be specified.

**Explanation:** The process requires that OBIDXLAT information be specified when the underlying table space is segmented, even if there is only one table currently in the table space.

**User response:** Specify the DBID/PSID/OBID number pairs for the object.

---

**HLO3767E** The OBIDXLAT\_CATALOG control card has already been specified for this object.

**Explanation:** A duplicate control card was found in the object specification.

**User response:** Correct the JCL and resubmit the job.

---

**HLO3768E** Keywords OBIDXLAT and OBIDXLAT\_CATALOG can not be specified at the same time.

**Explanation:** The specified options are mutually exclusive, and only one of the options can be specified in the syntax.

**User response:** Correct the JCL and resubmit the job.

---

---

**HLO3769W** The DEBUG parameter has already been coded for this space group.

**Explanation:** A duplicate control card was found.

**User response:** Correct the syntax.

---

**HLO3770E** The DEBUG keyword has already been coded for this space group.

**Explanation:** The DEBUG parameter has been coded more than once for the SPACE(...) group.

**User response:** Correct the JCL and resubmit the job.

---

**HLO3771E** The DEBUG value has no contents.

**Explanation:** No value was specified for the DEBUG parameter is not valid.

**User response:** Correct the JCL and resubmit the job.

---

**HLO3772E** The DEBUG parameter specified is invalid.

**Explanation:** The value specified for the DEBUG parameter is not valid.

**User response:** Correct the JCL and resubmit the job.

---

**HLO3773E** The ACCEL\_ADD\_TABLES keyword has already been coded for this run.

**Explanation:** The ACCEL\_ADD\_TABLES keyword has already been coded for this run.

**User response:** Correct the JCL and resubmit the job.

---

**HLO3774E** The REMOVE\_AND\_ADD\_TABLES keyword has already been coded for this run.

**Explanation:** The REMOVE\_AND\_ADD\_TABLES keyword has already been coded for this run.

**User response:** Correct the JCL and resubmit the job.

---

**HLO3775E** Both the ACCEL\_ADD\_TABLES and ACCEL\_REMOVE\_AND\_ADD\_TABLES keywords are present.

**Explanation:** The ACCEL\_ADD\_TABLES and ACCEL\_REMOVE\_AND\_ADD\_TABLES keywords are mutually exclusive. Specify only one of these parameters.

**User response:** Correct the JCL and resubmit the job.

---

**HLO3801E** The conversion program returned an error.

**Explanation:** This message is the header line for additional messages that follow.

---

**User response:** No action is required.

---

**HLO3802E** The DB2 Analytics Accelerator Loader row conversion program ended unexpectedly.

**Explanation:** An error occurred in the DB2 Analytics Accelerator Loader row conversion program.

**User response:** This message is accompanied by related messages that provide more information about the issue. If you cannot resolve the issue, note the job return code and contact IBM Software Support.

---

**HLO3803E** The cellpool services get function returned an error.

**Explanation:** An internal error occurred during memory management operations.

**User response:** Contact IBM Software Support.

---

**HLO3804E** The input image copy can only contain one table.

**Explanation:** The input image copy you specified contains more than one table.

**User response:** Correct the JCL and resubmit the job.

---

**HLO3805E** Error start Image Copy reader.

**Explanation:** The image copy reader component was not found in the loadlib concatenation.

**User response:** Contact IBM Software Support.

---

**HLO3901E** Error allocate DD rc=*returncode*  
rs=*reasoncode*

**Explanation:** Data set allocation processing in preparation for flash copy operations failed.

**User response:** Contact IBM Software Support.

---

**HLO3902E** Error deallocate DD rc=*returncode*  
rs=*reasoncode*

**Explanation:** Data set deallocation after flashcopy processing completion failed.

**User response:** Contact IBM Software Support.

---

**HLO3903E** Error set estae DD rc=*returncode*  
rs=*reasoncode*

**Explanation:** Error trap setup failed in z/OS function call.

**User response:** Contact IBM Software Support.

---

---

**HLO3904E** Error open DD *rc=returncode*  
*rs=reasoncode*

**Explanation:** Working data set open failure during flashcopy overall operation.

**User response:** Contact IBM Software Support.

---

**HLO3905E** Error close DD *rc=returncode*  
*rs=reasoncode*

**Explanation:** Working data set close failure during overall flashcopy operation.

**User response:** Contact IBM Software Support.

---

**HLO3906E** Error ATTACH module *rc=returncode*

**Explanation:** The DSNUTILB flashcopy function call failed.

**User response:** Contact IBM Software Support.

---

**HLO3907E** Error open the DSNUTILB STEPLIB

**Explanation:** DSNUTILB could not be found in the STEPLIB concatenation.

**User response:** Verify //STEPLIB validity or contact IBM Software Support.

---

**HLO3908I** flash copy start

**Explanation:** The flashcopy operation requested has begun.

**User response:** No action is required.

---

**HLO3909I** flash copy complete *rc=returncode*

**Explanation:** Normal termination indication from flashcopy function call.

**User response:** No action is required.

---

**HLO3910E** DSNUTILB error *rc=returncode*

**Explanation:** Error indication from DSNUTILB flashcopy function call.

**User response:** Contact IBM Software Support.

---

**HLO3911I** Start flash copy result output.

**Explanation:** Flashcopy function call results follow.

**User response:** No action is required.

---

**HLO3912I** Flash copy result output complete.

**Explanation:** Flashcopy operations complete.

**User response:** No action is required.

---



---

**HLO4001E** Invalid call parameter count.

**Explanation:** A program error occurred.

**User response:** Contact IBM Software Support.

---

**HLO4002E** Invalid call parameter value.

**Explanation:** A program error occurred.

**User response:** Contact IBM Software Support.

---

**HLO4003E** Error to load rebuild indexes module.

**Explanation:** An environment error occurred.

**User response:** Verify that the product was installed correctly and that enough storage is available.

---

**HLO4004I** Log apply thread error detected.  
Cancelling in process.

**Explanation:** A processing error occurred.

**User response:** Review the job output for errors.

---

**HLO4005I** Starting cancel process, reason log apply  
thread RC = *<reason\_code>*.

**Explanation:** A processing error occurred.

**User response:** Review the job output for errors.

---

**HLO4006I** Starting cancel process, reason log apply  
thread RC = *<reason\_code>*.

**Explanation:** A processing error occurred.

**User response:** Review the job output for errors.

---

**HLO4007E** Program error, rebuild indexes thread  
not yet started. Cancelling in process.

**Explanation:** A program error occurred.

**User response:** Contact IBM Software Support.

---

**HLO4008I** Rebuild indexes thread create error RC  
= *<reason\_code>*.

**Explanation:** An environment error occurred.

**User response:** Review the job output for errors.

---

**HLO4009E** Rebuild indexes thread failed to start  
RC = *<reason\_code>*.

**Explanation:** An environment error occurred.

**User response:** Review the job output for errors.

---

---

**HLO4010E** Unable to release rebuild indexes module.

**Explanation:** An environment error occurred.

**User response:** Review the job output for errors.

---

**HLO4011E** Error, could not get temporary file name.

**Explanation:** An environment error occurred.

**User response:** Review the job output for errors.

---

**HLO4012E** Error, could not create external link to key sort module.

**Explanation:** An environment error occurred.

**User response:** Review the job output for errors.

---

**HLO4013E** Program error, unexpected state detected.

**Explanation:** A program error occurred.

**User response:** Contact IBM Software Support.

---

**HLO4100A** Parameters with the DB2 SSID and PLAN name must be passed to Accelerator Loader.

**Explanation:** There was an internal error.

**User response:** Contact IBM Software Support.

---

**HLO4101E** The table space '*db\_name.ts\_name*' does not exist in the DB2 catalog.

**Explanation:** The table space specified in the Accelerator Loader JCL does not exist in the DB2 catalog.

**User response:** Correct the JCL and resubmit the job.

---

**HLO4102E** Partition *part\_num* was specified for '*db\_name.ts\_name*' but the space is non-partitioned or the partition is not defined.

**Explanation:** A partition was specified for a non-partitioned table space or the partition is not defined.

**User response:** Correct the Accelerator Loader JCL and resubmit the job.

---

**HLO4103E** Invalid syntax. Not allowed keyword '*word1*'. Expected '*word2 word3 ...*'.

**Explanation:** The syntax is not valid.

**User response:** Correct the JCL and resubmit the job.

---



---

**HLO4104E** Invalid syntax. Keyword *keyword* not allowed.

**Explanation:** The syntax is not valid.

**User response:** Correct the JCL and resubmit the job.

---

**HLO4105E** The DATA\_BASE parameter is invalid.

**Explanation:** The DATA\_BASE parameter is invalid.

**User response:** Verify that the DATA\_BASE keyword has been properly specified in your JCL.

---

**HLO4106E** The SPACE\_NAME parameter is invalid.

**Explanation:** The SPACE\_NAME parameter is invalid.

**User response:** Verify that the SPACE\_NAME parameter has been properly specified in your JCL.

---

**HLO4107E** The PARTITION parameter is invalid.

**Explanation:** The PARTITION parameter is invalid.

**User response:** Verify that the PARTITION parameter has been properly specified in your JCL.

---

**HLO4108E** The SPACE\_THREAD parameter is invalid.

**Explanation:** The SPACE\_THREAD parameter is invalid.

**User response:** Verify that the SPACE\_THREAD parameter has been properly specified in your JCL.

---

**HLO4109E** The PART\_THREAD parameter is invalid.

**Explanation:** The PART\_THREAD parameter is invalid.

**User response:** Verify that the PART\_THREAD parameter has been properly specified in your JCL.

---

**HLO4110E** Invalid INDEX\_THREAD *parameter*, decimal expected.

**Explanation:** The INDEX\_THREAD parameter is invalid.

**User response:** Verify that the INDEX\_THREAD parameter has been properly specified in your JCL.

---

**HLO4112E** A DB.TS pair is incomplete.

**Explanation:** The DB.TS pair you specified is incomplete.

**User response:** Verify that all DB.TS pairs have been specified correctly. Correct the JCL and resubmit the job.

---

---

**HLO4113E** Operations on the DB2 directory are not allowed.

**Explanation:** Indexes cannot be rebuilt on the DB2 directory table spaces.

**User response:** No action is required.

---

**HLO4114E** Operations on the DB2 Catalog table space DSND06.SYSCOPY are not allowed.

**Explanation:** Indexes cannot be rebuilt on DB2 Catalog table spaces.

**User response:** None.

---

**HLO4130I** Control card stream processed by Consistent Load follows.

**Explanation:** Header message just before the parsed control card input is echoed to the output.

**User response:** No action is required.

---

**HLO4131I** Consistent Load processing messages follow...

**Explanation:** Header before runtime messages.

**User response:** No action is required.

---

**HLO4132I** Consistent Load processing ends.

**Explanation:** All processing has finished.

**User response:** No action is required.

---

**HLO4133I** Consistent Load processing abnormally ends.

**Explanation:** All processing has ended but errors were detected.

**User response:** Verify the errors produced. Contact IBM Software Support.

---

**HLO4134A** Could not allow thread to be canceled.

**Explanation:** An internal error occurred.

**User response:** Contact IBM Software Support.

---

**HLO4140S** The subsystem ID must be a valid DB2 subsystem name.

**Explanation:** You specified an invalid subsystem ID.

**User response:** Verify the subsystem ID.

---



---

**HLO4141S** The plan name must be a valid DB2 plan name.

**Explanation:** You specified an invalid plan name.

**User response:** Verify the plan name.

---

**HLO4142S** Error connecting to DB2 SSID *ssid* RC = *rc*

**Explanation:** The program could not connect to the DB2 subsystem. The return code returned from the Call Attach Facility is listed in the message.

**User response:** Refer to the message returned by the Call Attach Facility listed in message HLO4151I.

---

**HLO4143S** Error opening plan *plan\_name* RC = *rc*

**Explanation:** The program could not open specified plan. The return code returned from the Call Attach Facility is listed in the message.

**User response:** Refer to the message returned by the Call Attach Facility listed in message HLO4151I.

---

**HLO4144S** Error disconnecting from DB2 SSID *ssid* RC = *rc*

**Explanation:** The program could not disconnect from the DB2 subsystem. The return code returned from the Call Attach Facility is listed in the message.

**User response:** Refer to the message returned by the Call Attach Facility listed in message HLO4151I.

---

**HLO4145S** CAF request can not be completed.

**Explanation:** The program could not complete a CAF request.

**User response:** Refer to messages HLO4151I, HLO4152I, HLO4153I, and DSNT300I for additional information and consult with your systems programmer. Refer to DB2 Version 9.1 for z/OS Messages for more information.

---

**HLO4146A** SQL request can not be completed.

**Explanation:** The program could not complete an SQL request.

**User response:** Refer to messages HLO4154I, HLO4155I, and HLO4156I for additional information and consult with your systems programmer.

---

**HLO4147I** The attempt to reset the RBDP flag returned an error

**Explanation:** DB2 Analytics Accelerator Loader was unable to reset the Rebuild pending status for object specified in your job.

**User response:** Check the output for DSNUUTILB error

---

## HLO4148E • HLO4201E

messages and consult with your systems programmer. Contact IBM Software Support.

---

### HLO4148E An error occurred on an attempt to open the DSNUTILB Steplib.

**Explanation:** The DB2 loadlib concatenation in the control file could not be opened.

**User response:** Verify the data set name validity. Contact IBM Software Support.

---

### HLO4150I The version of DB2 subsystem *ssid* is *ver*.

**Explanation:** Displays the SSID and the version of the DB2 subsystem.

**User response:** No action is required.

---

### HLO4151I CAF reason codes = 'rc1,rc2'.

**Explanation:** This diagnostic message indicates a DB2 CAF request failure.

**User response:** Diagnose the problem using the return codes. Refer to DB2 Version 9.1 for z/OS Codes (GC18-9853-05) for more information.

---

### HLO4152I *message\_text*

**Explanation:** This message is used to hold text message information.

**User response:** No action is required.

---

### HLO4154I Pgm: *modulename* Stmt: *stmtnum* Type: '*SQL type name*' Code: *sqlcode*

**Explanation:** This diagnostic message indicates a DB2 SQL request failure.

**User response:** Diagnose the problem using the indicated SQL code. Refer to DB2 Version 9.1 for z/OS Codes (GC18-9853-05) for more information.

---

### HLO4155I *message\_text*

**Explanation:** This message is used to hold text message information.

**User response:** No action is required.

---

### HLO4160E Invalid name specified as job DD card, DDN 'DDN'

**Explanation:** An invalid DDN was specified.

**User response:** Specify a valid DDN.

---

### HLO4161E Invalid string specified as job.

**Explanation:** An invalid string was specified.

**User response:** Specify a valid job string.

---

### HLO4162E The SYSINHLO DD card could not be opened for input.

**Explanation:** The SYSINHLO DD data set specified in the JCL could not be opened for input.

**User response:** Verify that the SYSINHLO DD is not being accessed by other resources and resubmit the job.

---

### HLO4164E The SYSINHLO DD input stream is empty.

**Explanation:** No control cards appear in the instream file or the input data set.

**User response:** Correct the JCL and resubmit the job.

---

### HLO4165E The command set must end with a close parenthesis ')'.)

**Explanation:** There is no close parenthesis following the DB2 Accelerator Loader input cards.

**User response:** Enter a close parenthesis following the Accelerator Loader input cards.

---

### HLO4166E The parsing process gave an invalid return code.

**Explanation:** There is an error in your Accelerator Loader JCL.

**User response:** Correct the JCL and resubmit the job.

---

### HLO4200E A data set allocation failure occurred.

**Explanation:** The program could not allocate specified data set. The data set is listed in the message.

**User response:** The data set name is listed in message HLO4210I. The DD name is listed in message HLO4211I. Refer to messages HLO4213I for any dynamic allocation return codes and consult with your systems programmer. For information about the dynamic allocation return codes received, see the *△MVS Programming Authorized Assembler Service Guide* (SA22-7608).

---

### HLO4201E A data set deallocation error occurred.

**Explanation:** The program could not deallocate specified data set. The data set is listed in the message.

**User response:** The data set name is listed in message HLO4210I. The DD name is listed in message HLO4211I. Refer to messages HLO4213I for any dynamic allocation return codes and contact IBM Software Support.



---

**HLO4202E** A data set open failure occurred.

**Explanation:** The program could not open specified data set. The data set is listed in the message.

**User response:** The data set name is listed in message HLO4210I. The DD name is listed in message HLO4211I. Contact IBM Software Support.

---

**HLO4203E** A data set close failure occurred.

**Explanation:** The program could not close specified data set. The data set is listed in the message.

**User response:** The data set name is listed in message HLO4210I. The DD name is listed in message HLO4211I. Contact IBM Software Support.

---

**HLO4204E** A dataset write failure occurred.

**Explanation:** The program could not write specified data set. The data set is listed in the message.

**User response:** The data set name is listed in message HLO4210I. The DD name is listed in message HLO4211I. Contact IBM Software Support.

---

**HLO4206S** The FULL image copy DD CA(LP/LB/RP/RB) {1} refers to a DSNAME already in SYSCOPY.

**Explanation:** You specified a full image copy data set name that already exists in SYSCOPY.

**User response:** Specify a different image copy data set name.

---

**HLO4207S** The FULL image copy DD CA(LP/LB/RP/RB) {1} is missing from the JCL.

**Explanation:** The full image copy data set is not included in your Accelerator Loader JCL.

**User response:** Verify that the JCL is formatted correctly and contains the necessary information for your Accelerator Loader job.

---

**HLO4210I** *data\_set\_name*

**Explanation:** This message is used to hold data set name information.

**User response:** No action is required.

---

**HLO4211I** *DD\_name*

**Explanation:** This message is used to hold DD name information.

**User response:** No action is required.

---

**HLO4212I** Each CAxxxx DD correlates to each SPACE(...) control card group.

**Explanation:** Each CAxxxx DD statement must be associated with a corresponding SPACE(...) control card group.

**User response:** Verify that the JCL is formatted correctly and that each CAxxxx DD statement is associated with a SPACE(...) control card group.

---

**HLO4213I** Dynamic allocation return codes = 'rc'.

**Explanation:** This diagnostic message indicates data set allocation failure.

**User response:** Diagnose the problem using the return code. For information about the dynamic allocation return codes received, see the  $\Delta$ MVS Programming Authorized Assembler Service Guide $\Delta$  (SA22-7608).

---

**HLO4214I** The following data set information was added to the SYSCOPY DB2 table: *data set information*

**Explanation:** A new SYSCOPY row was added to complete the image copy creation process.

**User response:** No action is required.

---

**HLO4215I** Object: Database *db\_name* Indexspace *is\_name* Partition *part\_num* ICBBackup *'site'*

**Explanation:** This message, in conjunction with messages HLO2101I, HLO2102I, or HLO4216I indicates the database affected by the condition described in the associated message.

**User response:** No action is required.

---

**HLO4216I** DSN:*data\_set\_name* LRSN/RBA: X'xxxxxxxxxxxx'

**Explanation:** This message, in conjunction with messages HLO2101I, HLO2102I, or HLO4215I indicates the data set name affected by the condition described in the associated message.

**User response:** No action is required.

---

**HLO4220E** An VSAM allocate failure occurred.

**Explanation:** The program could not allocate specified data set. The data set is listed in the message.

**User response:** The data set is listed in message HLO4236I. Refer to message HLO4238I for any dynamic allocation return codes and consult with your systems programmer. For information about the dynamic allocation return codes received, see the  $\Delta$ MVS Programming Authorized Assembler Service Guide $\Delta$  (SA22-7608).

---

---

**HLO4221E** An VSAM allocate failure occurred.  
Data set is locked.

**Explanation:** The program could not allocate specified data set because it is locked by other program. The data set is listed in the message.

**User response:** The data set is listed in message HLO4236I.

---

**HLO4222E** An VSAM allocate failure occurred.  
Data set is absent.

**Explanation:** The program could not allocate specified data set because it is absent. The data set is listed in the message.

**User response:** The data set is listed in message HLO4236I.

---

**HLO4223E** A VSAM deallocation error occurred.

**Explanation:** The program could not deallocate specified data set. The data set is listed in the message.

**User response:** The data set is listed in messages HLO4236I and HLO4237I. Contact IBM Software Support.

---

**HLO4224E** A VSAM open failure occurred.

**Explanation:** The program could not open specified data set. The data set is listed in the message.

**User response:** The data set is listed in messages HLO4236I and HLO4237I. Contact IBM Software Support.

---

**HLO4225E** A VSAM close failure occurred.

**Explanation:** Explanation: The program could not close specified data set. The data set is listed in the message.

**User response:** The data set is listed in messages HLO4236I and HLO4237I. Contact IBM Software Support.

---

**HLO4226E** A VSAM read failure occurred.

**Explanation:** The program could not read specified data set. The data set is listed in the message.

**User response:** The data set is listed in message HLO4236I. Contact IBM Software Support.

---

**HLO4227E** A VSAM write failure occurred.

**Explanation:** The program could not write specified data set. The data set is listed in the message.

**User response:** The data set is listed in message HLO4236I. Contact IBM Software Support.

---

---

**HLO4230E** A VSAM random read failure occurred.

**Explanation:** The program could not read specified data set. The data set is listed in the message.

**User response:** The data set is listed in message HLO4236I. Contact IBM Software Support.

---

**HLO4232E** A VSAM fetch failure occurred.

**Explanation:** The program could not fetch specified data set. The data set is listed in the message.

**User response:** The data set is listed in message HLO4236I. Contact IBM Software Support.

---

**HLO4233E** A VSAM update failure occurred.

**Explanation:** The program could not update specified data set. The data set is listed in the message.

**User response:** The data set is listed in message HLO4236I. Contact IBM Software Support.

---

**HLO4236I** *data\_set\_name*

**Explanation:** This message is used to hold data set name information.

**User response:** No action is required.

---

**HLO4237I** *DD\_name*

**Explanation:** This message is used to hold DD name information.

**User response:** No action is required.

---

**HLO4238I** Dynamic allocation return code = 'rc'.

**Explanation:** This diagnostic message indicates data set allocation failure.

**User response:** Diagnose the problem using the return code. For information about the dynamic allocation return codes received, see the  $\Delta$ MVS Programming Authorized Assembler Service Guide $\Delta$  (SA22-7608).

---

**HLO4260E** An allocate failure occurred on the key sort module.

**Explanation:** The program could not allocate temporary data set.

**User response:** Refer to message HLO4271I for any dynamic allocation return codes and consult with your systems programmer. For information about the dynamic allocation return codes received, see the  $\Delta$ MVS Programming Authorized Assembler Service Guide $\Delta$  (SA22-7608).

---

---

**HLO4267E** An invalid return code was detected from the SORT program.

**Explanation:** DB2 Accelerator Loader encountered an invalid return code from the SORT program.

**User response:** Contact IBM Software Support.

---

**HLO4268E** Could not create new address space. Error code *error code*.

**Explanation:** An internal error occurred.

**User response:** Contact IBM Software Support.

---

**HLO4268E** Create external link error %u

**Explanation:** An internal error occurred.

**User response:** Contact IBM Software Support.

---

**HLO4271I** Dynamic allocation return code = 'rc'.

**Explanation:** This diagnostic message indicates a data set allocation failure occurred.

**User response:** Diagnose the problem using the return code. Refer to DB2 UDB for z/OS V8 Messages (GC18-9602-01) and DB2 UDB for z/OS V8 Codes (GC18-9603-01) for more information.

---

**HLO4360E** The table space '*db\_name.ts\_name*' partition *part\_num* has an unknown status.

**Explanation:** Accelerator Loader ensures that the indicated space is stopped before proceeding with the rebuild index process by issuing a call similar to a -DISPLAY DATABASE command. This message displays when the status is not equal to 'RO', 'RW', or 'UT'.

**User response:** Stop the indicated space before attempting to proceed with the rebuild index process.

---

**HLO4361E** The status check for table space *db\_name.ts\_name* partition *part\_num* timed out.

**Explanation:** Before index processing can occur, Accelerator Loader must attempt to stop the spaces involved. However, if an in-flight URID is processing and the object is stopped, the status changes to 'STOP', or Stop Pending until the URID finishes. It may also take DB2 some time to flush the buffers. In either case, Accelerator Loader checks the spaces before beginning any index processing. If any of the spaces are not stopped, Accelerator Loader waits a few seconds and checks again. After several checks, it will abort processing and issue this message.

**User response:** Diagnose why the space will not stop.

---

**HLO4362E** The ENQ for table space *db\_name.ts\_name* partition *part\_num* was not successful.

**Explanation:** Indicates the database and partition for which the ENQs did not complete successfully.

**User response:** Diagnose why the space won't be enqueued.

---

**HLO4363E** The index space '*db\_name.is\_name*' partition *part\_num* has an unsupported type and will be skipped.

**Explanation:** Accelerator Loader ensures that the indicated space is stopped before proceeding with the rebuild indexes process by issuing a call similar to a -DISPLAY DATABASE command. This message displays when the status is not equal to 'RO', 'RW', or 'UT'.

**User response:** No action is required.

---

**HLO4364E** The index space '*db\_name.is\_name*' belongs to a non-partitioned index and will be skipped.

**Explanation:** A partition was specified for a index space, but it is a non-partitioned index.

**User response:** No action is required.

---

**HLO4370I** The table space '*db\_name.ts\_name*' partition *part\_num* beginning offloading keys.

**Explanation:** Accelerator Loader is starting to read the specified table space partition to generate index keys.

**User response:** No action is required.

---

**HLO4371I** The table space '*db\_name.ts\_name*' partition *part\_num* keys are being offloaded.

**Explanation:** Accelerator Loader has finished reading the specified table space partition and generating index keys.

**User response:** No action is required.

---

**HLO4373I** The index space '*db\_name.is\_name*' partition *part\_num* is being rebuilt.

**Explanation:** Accelerator Loader has finished sorting the index keys and generating the specified index space.

**User response:** No action is required.

---

---

**HLO4374I** The table space '*db\_name.ts\_name*' partition *part\_num* is empty and will be skipped.

**Explanation:** The specified table space partition has no one table or index.

**User response:** No action is required.

---

**HLO4375I** The index space *db\_name.ts\_name* partition *part\_num* is ICOPY pending.

**Explanation:** The specified index space partition has the informational copy pending status.

**User response:** No action is required.

---

**HLO4380E** The index space '*db\_name.is\_name*' partition *part\_num* has an unknown status.

**Explanation:** This message ensures that the indicated space is to be stopped before proceeding with the rebuild indexes process. Accelerator Loader checks the space with a call similar to a '-display db(*db\_name*) spacenam(*is\_name*) part(*part\_num*)' to verify that the space is in 'stop' status. This message displays when the database comes back with a status not equal to 'RO', 'RW', or 'UT'.

**User response:** Stop the indicated space before attempting to proceed with the rebuild indexes process.

---

**HLO4381E** The status check for index space '*db\_name.is\_name*' partition *part\_num* timed out.

**Explanation:** This message is output when HLO tries to start and it has to ensure that when doing rebuild indexes processing that the index spaces are indeed stopped. The stop step that is generated (prior to HLO) to do this sends commands to DB2 to stop the data sets, but it does not wait for the index spaces to actually stop. If an in-flight URID is processing against the object and the stop is done, the space changes to 'STOP' or stop pending until the URID finishes. It may also take DB2 some time to flush buffers. In either case, HLO does a check on the spaces before doing any real processing. If any of the spaces don't come back 'STOP', it waits a few seconds and checks again. After a few checks like this, it aborts, producing this message.

**User response:** Diagnose why the space will not stop.

---

**HLO4400E** The attempt to recreate the underlying VSAM data set returned an error.

**Explanation:** DB2 Accelerator Loader was unable to create the VSAM file for object specified in your Accelerator Loader job.

**User response:** Check the output for IDCAMS error messages and consult with your systems programmer.

Contact IBM Software Support.

---

**HLO4401E** An allocate failure occurred.

**Explanation:** The program could not allocate a temporary data set.

**User response:** Refer to message HLO4411I for any dynamic allocation return codes and consult with your systems programmer. For information about the dynamic allocation return codes received, see the  $\Delta$ MVS Programming Authorized Assembler Service Guide (SA22-7608).

---

**HLO4402E** An deallocate failure occurred.

**Explanation:** The program could not deallocate temporary data set. The data set is listed in the message.

**User response:** The data set is listed in messages HLO4410I. Contact IBM Software Support.

---

**HLO4403E** An open failure occurred.

**Explanation:** The program could not open temporary data set. The data set is listed in the message.

**User response:** The data set is listed in messages HLO4410I. Contact IBM Software Support.

---

**HLO4404E** A close failure occurred.

**Explanation:** The program could not close temporary data set. The data set is listed in the message.

**User response:** The data set is listed in messages HLO4410I. Contact IBM Software Support.

---

**HLO4405E** A write failure occurred.

**Explanation:** The program could not write temporary data set. The data set is listed in the message.

**User response:** The data set is listed in message HLO4410I. Contact IBM Software Support.

---

**HLO4406E** An invalid or incompatible data set name was specified.

**Explanation:** The specified data set name can not be used for VSAM access to DB2 data set. The data set name is listed in the message.

**User response:** The data set name is listed in message HLO4412I. Correct the JCL and resubmit the job.

---

**HLO4410I** *DD\_name*

**Explanation:** This message is used to hold DD name information.

**User response:** No action is required.

---

**HLO4411I** Dynamic allocation return code = 'rc'.

**Explanation:** This diagnostic message indicates a data set allocation failure.

**User response:** Diagnose the problem using the return code. For information about the dynamic allocation return codes received, see the *△MVS Programming Authorized Assembler Service Guide△* (SA22-7608).

---

**HLO4412I** *data\_set\_name*

**Explanation:** This message is used to hold data set name information.

**User response:** No action is required.

---

**HLO5200I** Fallback occurred for DSN: *DSN*  
**tablespace:** *tablespace* **PART:** *PART*  
**LRSN/RBA=Xvariable**

**Explanation:** An attempt was made to use *DSN* as a starting point. It could not be allocated. Fallback will not take place to an earlier point in time in SYSCOPY.

**User response:** No action is required.

---

**HLO9001E** Error func OPEN input DD REPLIB rc =  
**returncode**

**Explanation:** An error occurred when opening the report library DD concatenation.

**User response:** Correct the JCL and resubmit the job.

---

**HLO9002E** Error func CLOSE input DD REPLIB rc  
**= returncode**

**Explanation:** An error occurred when closing the report library DD concatenation.

**User response:** Correct the JCL and resubmit the job.

---

**HLO9003E** Error func enumerate members input  
**DD REPLIB rc = returncode, rsn =**  
**reasoncode.**

**Explanation:** An error occurred when enumerating load library members. Error from DESERV service.

**User response:** The load library is unusable. Recover the load library.

---

**HLO9004E** Error func STARTD rc = returncode , rsn  
**= reasoncode**

**Explanation:** An error occurred when starting a dialog. Error from IEWBIND service.

**User response:** Contact IBM Software Support.

---

**HLO9005E** Error func ENDD rc = returncode , rsn =  
**reasoncode**

**Explanation:** An error occurred when ending a dialog. Error from IEWBIND service.

**User response:** Contact IBM Software Support.

---

**HLO9006E** Error func CREATEW rc = returncode ,  
**rsn = reasoncode**

**Explanation:** An error occurred when creating a work module. Error from IEWBIND service.

**User response:** Contact IBM Software Support.

---

**HLO9007E** Error func DELETEW rc = returncode ,  
**rsn = reasoncode**

**Explanation:** An error occurred when deleting a work module. Error from IEWBIND service.

**User response:** Contact IBM Software Support.

---

**HLO9008E** Error func RESETW rc = returncode ,  
**rsn = reasoncode**

**Explanation:** An error occurred when resetting a work module. Error from IEWBIND service.

**User response:** Contact IBM Software Support.

---

**HLO9009E** Error func INCLUDE entry  
**ENTRY\_NAME rc = returncode , rsn =**  
**reasoncode**

**Explanation:** An error occurred when including an entry. Error from IEWBIND service.

**User response:** The load library member might be unusable. Recovery of the load library is required.

---

**HLO9010E** Error func GETBUF rc = returncode

**Explanation:** An error occurred when obtaining storage. Error from IEWBIND service.

**User response:** Contact IBM Software Support.

---

**HLO9011E** Error func FREEBUF rc = returncode

**Explanation:** An error occurred when freeing storage. Error from IEWBIND service.

**User response:** Contact IBM Software Support.

---

**HLO9012E** Error func GETN get sections entry  
**ENTRY\_NAME rc = returncode, rsn =**  
**reasoncode**

**Explanation:** An error occurred when enumerating sections in entry. Error from IEWBIND service.

**User response:** The load library member might be

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unusable. Recovery of the load library is required.

---

**HLO9013E** Warning func GETN no sections entry  
ENTRY\_NAME rc = returncode, rsn =  
reasoncode

**Explanation:** An error occurred when enumerating sections in entry. Error from IEWBIND service. No sections was found.

**User response:** The load library member might be unusable. Recovery of the load library is required.

---

**HLO9014E** Error func GETC get compile units entry  
ENTRY\_NAME rc = returncode, rsn =  
reasoncode

**Explanation:** An error occurred when enumerating compile units in entry. Error from IEWBIND service.

**User response:** The load library member might be unusable. Recovery of the load library is required.

---

**HLO9015W** Warning func GETC no compile units  
entry ENTRY\_NAME rc = returncode ,  
rsn = reasoncode

**Explanation:** An error occurred when enumerating compile units in entry. Error from IEWBIND service. No compile units was found.

**User response:** The load library member might be unusable. Recovery of the load library is required.

---

**HLO9016E** Error invalid buffer size SIZE , expected  
SIZE.

**Explanation:** The buffer size is too small. Too many sections were found.

**User response:** The load library member might be unusable. Recovery of the load library is required.

---

**HLO9017E** Error func GETD get data  
ENTRY\_SECTION\_CALSS rc =  
returncode, rsn = reasoncode

**Explanation:** An error occurred while reading the entry section class. Error from IEWBIND service.

**User response:** The load library member might be unusable. Recovery of the load library is required.

---

**HLO9018W** Warning func GETD no data  
ENTRY\_SECTION\_CALSS rc =  
returncode, rsn = reasoncode

**Explanation:** An error occurred when reading the entry section class. Error from IEWBIND service. Class have no data.

**User response:** The load library member might be unusable. Recovery of the load library is required.

---

**HLO9019E** Error func CSNBOWH calc MD5 hash rc  
= returncode , rsn = reasoncode

**Explanation:** An error occurred when calculating the MD5 hash. Error from CSNBOWH service.

**User response:** Contact IBM Software Support.

---

**HLO9020E** Error func GETD get RLD data  
ENTRY\_SECTION\_CALSS rc =  
returncode, rsn = reasoncode

**Explanation:** An error occurred when reading the entry section class. Error from IEWBIND service.

**User response:** The load library member might be unusable. Recovery of the load library is required.

---

**HLO9021E** Warning func OPEN output DD  
REPORT01 rc = returncode

**Explanation:** An error occurred when opening the REPORT01 DD.

**User response:** Correct the JCL and resubmit the job.

---

**HLO9022W** Warning Module Section Usage report  
skipped

**Explanation:** No REPORT01 DD was specified. No report was produced.

**User response:** Correct the JCL and resubmit the job.

---

**HLO9023I** Module Section Usage report started

**Explanation:** Report generation started.

**User response:** No action is required.

---

**HLO9024I** Module Section Usage report completed

**Explanation:** Report generation completed.

**User response:** No action is required.

---

**HLO9025W** Warning func OPEN output DD  
REPORT02 rc = returncode

**Explanation:** An error occurred when opening the REPORT02 DD.

**User response:** Correct the JCL and resubmit the job.

---

**HLO9026W** Warning Section MD5 Hash Usage  
report skipped

**Explanation:** No REPORT02 DD was specified. No report was produced.

**User response:** Correct the JCL and resubmit the job.

---

**HLO9027I** Section MD5 Hash Usage report started

**Explanation:** Report generation started.

**User response:** No action is required.

---

**HLO9028I** Section MD5 Hash Usage report completed

**Explanation:** Report generation completed.

**User response:** No action is required.

---

**HLO9029W** Warning func OPEN output DD REPORT03 rc = returncode

**Explanation:** An error occurred when opening the REPORT03 DD.

**User response:** Correct your JCL and resubmit the job.

---

**HLO9030W** Warning Section APAR Usage report skipped

**Explanation:** No REPORT03 DD was specified. No report was produced.

**User response:** Correct the JCL and resubmit the job.

---

**HLO9031I** Section APAR Usage report started

**Explanation:** Report generation started.

**User response:** No action is required.

---

**HLO9032I** Section APAR Usage report completed

**Explanation:** Report generation completed.

**User response:** No action is required.

---

**HLO9033W** Warning func OPEN output DD REPORT04 rc = returncode

**Explanation:** An error occurred when opening the REPORT04 DD.

**User response:** Correct the JCL and resubmit the job.

---

**HLO9034W** Warning APAR Section Affected report skipped

**Explanation:** No REPORT04 DD was specified. No report was produced.

**User response:** Correct the JCL and resubmit the job.

---

**HLO9035I** APAR Section Affected report started

**Explanation:** Report generation has started.

**User response:** No action is required.

---



---

**HLO9036I** APAR Section Affected report completed

**Explanation:** Report generation is complete.

**User response:** No action is required.

---

**HLO9037I** (c) Copyright Rocket Software, Inc. 2016. All Rights Reserved.

**Explanation:** Utility starting.

**User response:** No action is required.

---

**HLO9038I** Load Library Report utility started

**Explanation:** Utility started.

**User response:** No action is required.

---

**HLO9039I** Load Library Report utility completed rc = returncode

**Explanation:** Utility completed.

**User response:** Check the return code.

---

**HLO9040I** Warning Entry %.\*s have TEST attribute set

**Explanation:** The TEST attribute could not be set for an entry.

**User response:** The load library member might be unusable. Recovery of the load library is required.

---

**HLOA001E** Error occurred during attempt to offload to zIIP.

**Explanation:** The product encountered an error while trying to send work to the zIIP, and processing halted.

**User response:** Check the log for additional error messages.

---

**HLOA002E** LOB header page encountered.

**Explanation:** The product encountered a LOB image copy while processing rows, and processing halted. The product does not support LOBs.

**User response:** Ensure that the filter set does not include a LOB.

---

**HLOA003E** Edit procedure found during zIIP processing for table *tableName*.

**Explanation:** An edit procedure is defined for the specified table, and processing edit procedures cannot occur on a zIIP processor.

**User response:** Contact IBM Software Support.

---

---

**HLOA004E** Table versioning found for table *tableName*.

**Explanation:** The specified table contains rows that use a previous version of the table. These rows cannot be processed, and processing halted.

**User response:** Specify only tables in which every row is in the format of the newest version.

---

**HLOA005E** A CELL64 free request failed.

**Explanation:** An attempt to free storage failed, and processing halted.

**User response:** Check the log for additional error messages.

---

**HLOA006E** Process halted, memory exhausted for *storageArea*.

**Explanation:** An internal storage area was filled beyond its capacity, and processing halted.

**User response:** Contact IBM Software Support.

---

**HLOA007E** Edit proc error; name: *procedureName*; retcde: *return\_code*; rescde: *reasonCode*

**Explanation:** While attempting to decode the row, the specified edit procedure returned an error with the specified return and reason codes, and processing halted.

**User response:** Determine the meaning of the return and reason codes based on your EDITPROC. If the error is caused by the product, contact IBM Software Support.

---

**HLOA008E** Name/token pair could not be found.

**Explanation:** The common storage name/token pair is missing.

**User response:** Contact IBM Software Support.

---

**HLOA009E** An error occurred while looking up a name/token pair: *IEANTRTreturnCode*

**Explanation:** Accessing the name/token pair resulted in an error. The IEANTRT return code is specified.

**User response:** See the IBM documentation for the IEANTRT error code to determine the problem.

---

**HLOA010E** Table not found in common storage table list: *tableName*

**Explanation:** The specified table was not found in the common storage table list.

**User response:** Contact IBM Software Support.

---



---

**HLOA011E** The LOAD job ended before all tables were written.

**Explanation:** The load to IBM DB2 Analytics Accelerator for z/OS ended before all data was written.

**User response:** Check the job log for other error messages that indicate why the load ended prematurely.

---

**HLOA012E** Blocking named pipe failed. Return code: *return\_code*; reason code: *reasonCode*; path name: *pathName*.

**Explanation:** The attempt to block on the named pipe failed.

**User response:** Contact IBM Software Support.

---

**HLOA013E** An error occurred while posting across address spaces. The ASID is *asidName*.

**Explanation:** An attempt to POST failed.

**User response:** Contact IBM Software Support.

---

**HLOA014E** Opening named pipe failed. Return code: *return\_code*; reason code: *reasonCode*; path name: *pathName*.

**Explanation:** The specified path name could not be opened.

**User response:** Contact IBM Software Support.

---

**HLOA015E** Writing to pipe failed. Return code: *return\_code*; reason code: *reasonCode*.

**Explanation:** Attempting to write data to the pipe failed with the specified return and reason codes.

**User response:** Contact IBM Software Support.

---

**HLOA015E** Writing to pipe failed. Return code: *return\_code*; reason code: *reasonCode*.

**Explanation:** Attempting to write data to the pipe failed with the specified return and reason codes.

**User response:** Contact IBM Software Support.

---

**HLOA100I** Start HLOPRPG (*buildLevel buildDate buildTime*).

**Explanation:** The module HLOPRPG has been started. The modification level, the date, and the time of the module's build are indicated.

**User response:** No action is required.

---



---

**HLOA101I Cleanup HLOPRPG.**

**Explanation:** The module HLOPRPG is ending.

**User response:** No action is required.

---

**HLOA102I Processing page *pageName***

**Explanation:** The specified type of page is being processed.

**User response:** No action is required.

---

**HLOA103I Expanding using dictionary for table:  
*DBID PSID partitionNumber***

**Explanation:** Row data is being expanded using the dictionary from the specified DBID, PSID, and partition.

**User response:** No action is required.

---

**HLOA104I Processing dictionary for table: *DBID  
PSID partitionNumber***

**Explanation:** A dictionary is being created for the specified DBID, PSID, and partition.

**User response:** No action is required.

---

**HLOA105I Start HLOEDIT.**

**Explanation:** Starting module HLOEDIT.

**User response:** No action is required.

---

**HLOA106I HLOEDIT-RC4 attempting alt state.**

**Explanation:** Module HLOEDIT is attempting a new path for the edit procedure.

**User response:** No action is required.

---

**HLOA107I Start HLORERD (*buildLevel buildDate  
buildTime*).**

**Explanation:** The module HLORERD has been started. The modification level, the date, and the time of the module's build are indicated.

**User response:** No action is required.

---

**HLOA108I HLORERD zIIP cleanup error.**

**Explanation:** An error occurred while cleaning up the zIIP.

**User response:** See related error messages.

---

---

**HLOA109I Pages processed=*pageCount*.**

**Explanation:** The specified number of image copy pages were processed for the run.

**User response:** No action is required.

---

**HLOA110I Stack pops=*popsCount*.**

**Explanation:** The specified number of image copy pops were included in the run.

**User response:** No action is required.

---

**HLOA111I Pages per pop=*pageCount*.**

**Explanation:** The specified number of image copy pages were processed per pop for the run.

**User response:** No action is required.

---

**HLOA112I Rows processed=*rowCount*.**

**Explanation:** The specified number of rows were processed for IBM DB2 Analytics Accelerator for z/OS for the run.

**User response:** No action is required.

---

**HLOA113I HLOPRPG page processing error.**

**Explanation:** HLOPRPR returned an error.

**User response:** See related error messages.

---

**HLOA115E Error occurred during error processing  
*errorMessage*.**

**Explanation:** An error occurred while processing the specified error message.

**User response:** Look up the indicated error code to determine the original error condition.

---

**HLOA116I Exiting HLOZSCHD with  
RC=*error\_code*.**

**Explanation:** Module HLOZSCHD returned the specified error code.

**User response:** See related error messages.

---

**HLOA117I Opening a new pipe for *tableName  
partitionNumber*.**

**Explanation:** A connection to the IBM DB2 Analytics Accelerator for z/OS for the specified table and partition was opened.

**User response:** No action is required.

---

## HLOA118I • HLOA212I

---

**HLOA118I** Closing a pipe for *tableName*  
*partitionNumber*.

**Explanation:** A connection to the IBM DB2 Analytics Accelerator for z/OS for the specified table and partition was closed.

**User response:** No action is required.

---

**HLOA119I** Edit procedure found. Turning off zIIP.

**Explanation:** A table was found that has an edit procedure defined for it. The zIIP processor will not be used so that processing can continue.

**User response:** No action is required.

---

**HLOA121I** No zIIP available.

**Explanation:** No zIIP processor is available for zIIP-eligible work.

**User response:** No action is required.

---

**HLOA200E** Could not obtain SSID from input parameters.

**Explanation:** The subsystem ID (SSID) was not specified in the PARM.

**User response:** Check the job and specify the SSID.

---

**HLOA201E** Could not open the TABLE DD.

**Explanation:** The product could not open the TABLE DD.

**User response:** Correct the JCL and submit the job again.

---

**HLOA202E** Table not found in TABLE DD.

**Explanation:** The TABLE DD was used but no table was specified.

**User response:** Correct the JCL and submit the job again.

---

**HLOA203E** Table owner not specified.

**Explanation:** The TABLE DD was used but no table owner was specified.

**User response:** Correct the JCL and submit the job again.

---

**HLOA204E** Table name not specified.

**Explanation:** The TABLE DD was used but no table name was specified.

**User response:** Correct the JCL and submit the job again.

---

**HLOA205E** Table owner too long.

**Explanation:** The specified table owner is too long. The maximum number of characters for the table owner name is 128. The table owner name cannot exceed column 72; continue on the next line in column 1. No special character is needed.

**User response:** Correct the JCL and submit the job again.

---

**HLOA206E** The name/token does not exist for the subsystem.

**Explanation:** The job is trying to clean common storage that does not exist on this subsystem.

**User response:** Make sure that the specified subsystem value is correct.

---

**HLOA207E** Forcing cleanup failed. IEANTDL  
rc=<return\_code>.

**Explanation:** An unexpected error occurred during cleanup.

**User response:** Contact IBM Software Support.

---

**HLOA208E** Could not open the JOB DD.

**Explanation:** The product could not open the JOB DD.

**User response:** Correct the JCL and submit the job again.

---

**HLOA209E** Job ID not found in JOB DD.

**Explanation:** The JOB DD was used but the job ID was not specified.

**User response:** Correct the JCL and submit the job again.

---

**HLOA210E** Job name not found in JOB DD.

**Explanation:** The JOB DD was used but the job name was not specified.

**User response:** Correct the JCL and submit the job again.

---

**HLOA211I** Common storage successfully cleaned.

**Explanation:** All common storage for the subsystem was cleared.

**User response:** No action is required.

---

**HLOA212I** Specified table has been cleaned from storage.

**Explanation:** The specified table has been cleared from the common storage.

**User response:** No action is required.

---

**HLOA213I Specified job has been cleaned from storage.**

**Explanation:** All common storage related to the specified job was cleared.

**User response:** No action is required.

---

**HLOG8000S Internal error in API <api\_context>, RC=<api\_return\_code>, RSN=<api\_reason\_code>.**

**Explanation:** An error occurred in the DB2 Analytics Accelerator Loader internal application programming interface (API).

**User response:** Contact IBM Software Support. Provide Support with the complete text of this message.

---

**HLOG8001S Storage release failed. Module=<module\_name>, storage area=<storage\_area\_name>, RC=<return\_code>.**

**Explanation:** The specified module failed while attempting to free to the specified storage area. The message HLOG8002S, which accompanies this message, contains additional information about the storage area.

**User response:** Contact IBM Software Support. Provide the support representative with the complete text of this message and message HLOG8002S.

---

**HLOG8002S Address=storage\_area\_address, Length=storage\_area\_length, SP=storage\_subpool, KEY=storage\_key**

**Explanation:** This message accompanies message HLOG8001S, which indicates a failure to release storage. This message provides additional details about the storage that could not be released.

**User response:** Contact IBM Software Support. Provide Support with the complete text of this message and message HLOG8001S.

---

**HLOG8003E Storage obtain failed. Module=<module\_name>, storage area=<storage\_area\_name>, RC=<return\_code>.**

**Explanation:** The specified module failed while attempting to obtain the specified storage area. The message HLOG8004E usually accompanies this message and contains additional information about the storage area.

**User response:** Increase the region size available to the DB2 Analytics Accelerator Loader program and run the product again. If the problem persists, contact IBM

Software Support. Provide Support with the complete text of this message and message HLOG8004E.

---

**HLOG8004E Length=storage\_area\_length, SP=storage\_subpool, KEY=storage\_key**

**Explanation:** This message accompanies the message HLOG8003E, which indicates a failure to obtain storage. This message provides additional details about the storage that could not be obtained.

**User response:** Increase the region size available to the DB2 Analytics Accelerator Loader program and run the product again. If the problem persists, contact IBM Software Support. Provide Support with the complete text of this message and message HLOG8003E.

---

**HLOG8005E Unable to open file. DD name=dd\_name**

**Explanation:** The file that was allocated by the specified data definition (DD) could not be opened.

**User response:** Check the JCL to ensure that the correct DD name was provided and that the data set was allocated using the correct file type.

---

**HLOG8006E Unable to dynamically allocate data set. DD name=dd\_name**

**Explanation:** The specified data definition (DD) was not able to dynamically allocate a data set that was needed.

**User response:** Contact IBM Software Support.

---

**HLOG8007E Unable to close file. DD name=dd\_name**

**Explanation:** The file that was allocated by the specified data definition (DD) could not be closed.

**User response:** If this problem persists, contact IBM Software Support.

---

**HLOG8008I System=system\_name, Job=job\_name, Job Id=job\_id, Step=step\_name, Program=program\_name, User=user\_id**

**Explanation:** This message displays information about the current job step.

**User response:** No action is required.

---

**HLOG8009E The operating system or hardware do not meet minimum requirements.**

**Explanation:** See the Product Program Directory for the minimum operating system level and hardware requirements.

**User response:** No action is required.

---

**HLOG8010I** CPU=<*cpu\_type*>>, <*cpu\_model*>>, <*cpu\_manufacturer*>>. OS=<*os\_name*>, <*os\_release*>, <*os\_version*>.

**Explanation:** This message displays information about the CPU and the operating system.

**User response:** No action is required.

---

**HLOM9600E An invalid function was supplied to utility.**

**Explanation:** An invalid function was specified in the HLOMAINT job for the DB2 Analytics Accelerator Loader maintenance utility.

**User response:** In the PARM statement of the HLOMAINT job, specify a valid function (for example, TERM\_UTILITY). See the user's guide for the functions that are valid for the HLOMAINT utility.

---

**HLOM9601E API Initialization failed**

**Explanation:** The HLOMAINT interface program failed to complete initialization. This failure occurred during the initialization of the internal API.

**User response:** Contact IBM Software Support.

---

**HLOM9602E Unable to establish session with HLOID: *identifier***

**Explanation:** The DB2 Analytics Accelerator Loader maintenance utility could not establish a session with the specified started task configuration.

**User response:** Check that the configuration ID parameter value that is specified in the maintenance utility job (HLOMAINT) is a valid configuration ID.

---

**HLOM9603E Unable to connect to DB2 system: *db2\_ssid***

**Explanation:** The DB2 Analytics Accelerator Loader maintenance utility could not connect to the specified DB2 subsystem.

**User response:** Ensure that the DB2 SSID parameter value that is specified in the maintenance utility job (HLOMAINT) specifies a valid DB2 subsystem ID.

---

**HLOM9604I Worklist maintenance successful for utility id: *db2\_utility\_id*, function: *maint\_utility\_function***

**Explanation:** The DB2 Analytics Accelerator Loader maintenance utility successfully performed the specified function for the specified DB2 utility ID in the worklist tables.

**User response:** No action is required.

---



---

**HLOM9605W No worklist data found for UTILID: *db2\_utility\_id*, function: *maint\_utility\_function***

**Explanation:** The DB2 Analytics Accelerator Loader maintenance utility found no worklist data for the specified DB2 utility ID. The specified function could not be performed.

**User response:** No action is required.

---

**HLOM9606E Error while accessing worklist data for utility ID: *db2\_utility\_id*, function: *MAINT\_function***

**Explanation:** The DB2 Analytics Accelerator Loader maintenance utility (HLOMAINT) encountered an error while attempting to access the worklist data that is associated with the specified DB2 utility ID. The specified maintenance utility function could not be performed.

**User response:** In the HLOMAINT job, check that the PARM statement specifies valid values for the DB2 SSID and utility ID parameters. Also check the messages in the started task SYSPRINT log for related SQL errors.

---

**HLOM9607E Session creation failed RC=<*return\_code*>, RSN=<*reason\_code*>, reason=<*description*>.**

**Explanation:** The DB2 Analytics Accelerator Loader maintenance utility (HLOMAINT) failed to complete initialization. The failure occurred during the creation of a session for HLOMAINT.

**User response:** To determine the cause of the failure, review the reason description in this message. Correct the problem and run the job again. If you need assistance, contact IBM Software Support.

---

**HLOM9608E Session has been terminated by the server.**

**Explanation:** The utility did not complete because the session was terminated by the server.

**User response:** Check with the system administrator to determine the reason for the termination of the maintenance utility program.

---

**HLOP9800E <!ATTLIST *attribute\_name*> attribute '*attribute\_value*' has an invalid enumeration value list**

**Explanation:** While the DB2 Analytics Accelerator Loader XML parser was parsing an !ATTLIST declaration, it found an error in the enumeration value list that defines the valid values for an attribute.

**User response:** Correct the enumeration list and rerun.

---

**HLOP9801E** `<!ATTLIST attribute_name> attribute 'attribute_value' missing enumeration value`

**Explanation:** While the DB2 Analytics Accelerator Loader XML parser was parsing an !ATTLIST declaration, it encountered an invalid enumeration token. Enumeration tokens must be valid XML names.

**User response:** Correct the enumeration list and rerun.

---

**HLOP9802E** `<!ATTLIST attribute_name> attribute 'attribute_value' no closing quote for default value`

**Explanation:** While the DB2 Analytics Accelerator Loader XML parser was parsing an !ATTLIST declaration, it found a default value of type *string*, but it did not have a closing quotation mark.

**User response:** Correct the string definition and rerun.

---

**HLOP9803E** `<!ATTLIST attribute_name> attribute 'attribute_value' enumerated type list missing '('`

**Explanation:** While the DB2 Analytics Accelerator Loader XML parser was parsing an !ATTLIST declaration, it encountered an enumeration or NOTATION list, as expected, but that list did not have an opening left parenthesis.

**User response:** Correct the enumeration list and rerun.

---

**HLOP9804E** `<!ATTLIST attribute_name> attribute 'attribute_value' expected quoted default value`

**Explanation:** While the DB2 Analytics Accelerator Loader XML parser was parsing an !ATTLIST declaration, it did not find the default value specification, as expected.

**User response:** Supply a default value for the !ATTLIST declaration and rerun.

---

**HLOP9805E** `getAttribute(missing_attribute_name) error: attribute not defined`

**Explanation:** A request was made to retrieve the value of an attribute for a given XML element, but the attribute was not defined.

**User response:** Verify that the attribute exists before requesting its value, or add the attribute to the XML document.

---

**HLOP9806E** `'<![IGNORE]' not terminated by matching ']]>'`

**Explanation:** When the DB2 Analytics Accelerator Loader XML parser was parsing an <![IGNORE[ ... ]]>

conditional section, it did not find the required closing character sequence.

**User response:** Correct the conditional sequence and rerun.

---

**HLOP9807E** `'<![INCLUDE]' not terminated by matching ']]>'`

**Explanation:** When the DB2 Analytics Accelerator Loader XML parser was parsing an <![INCLUDE[ ... ]]> conditional section, it did not find the required closing character sequence.

**User response:** Correct the conditional sequence and rerun.

---

**HLOP9808E** `Unable to open default input file`

**Explanation:** The XML parser was not able to open the top-level default input file.

**User response:** Make sure that the file exists and the correct name is being passed to the XML parser.

---

**HLOP9809E** `Unable to open DOCTYPE file 'DOCTYPE_file_name'`

**Explanation:** A !DOCTYPE declaration was specified, but the DOCTYPE file name could not be read.

**User response:** Make sure that the DOCTYPE file exists and that the correct file name is specified in the !DOCTYPE declaration.

---

**HLOP9810E** `Unable to open external ENTITY file 'ENTITY_file_name'`

**Explanation:** An external entity file was defined, but it could not be read to resolve the entity reference.

**User response:** Make sure that the external entity file exists and that the correct file name is specified in the !ENTITY declaration.

---

**HLOP9811E** `element <element_name> ended by <element_name_1>`

**Explanation:** An incorrectly nested element definition was found. The tag defining the beginning of an element did not match the closing tag.

**User response:** Correct the nesting structure of the element definition and rerun.

---

**HLOP9812E** `Closing tag <element_name missing '>' character`

**Explanation:** When the XML parser was parsing the end tag for an element, it did not find the required closing '>' character.

**User response:** Correct the end tag and rerun.

---

**HLOP9813E** <!ELEMENT *element\_name*> is already declared

**Explanation:** Only one !ELEMENT declaration can be supplied for a given element tag.

**User response:** Remove the duplicate !ELEMENT declaration and rerun.

---

**HLOP9814E** <!ELEMENT *element\_name*> expecting subelement name.

**Explanation:** When the XML parser was parsing a mixed-content specification of an !ATTLIST declaration, it found an error in the list of allowable subelements.

**User response:** Correct the subelement list and rerun.

---

**HLOP9815E** ENTITY &*entity\_name*; not defined

**Explanation:** An entity reference was found for which no declaration exists.

**User response:** Check the spelling of the entity reference name, or add the entity definition for the name and rerun.

---

**HLOP9816E** End-of-data encountered while parsing attribute value string

**Explanation:** When the XML parser was parsing an attribute value string, it found no closing quotation mark before the end of the file, as required.

**User response:** Correct the attribute value string and rerun.

---

**HLOP9817E** End-of-data encountered in a CDATA section

**Explanation:** When the XML parser was parsing a <![CDATA[ ... ]]> section, it found no ' ]>' characters. These characters are required to close the section before the end of the file.

**User response:** Correct the CDATA section and rerun.

---

**HLOP9818E** End-of-data encountered in a comment

**Explanation:** When the XML parser was parsing an XML comment, it found no '-->' characters. These characters are required to close the comment before the end of the file.

**User response:** Correct the comment and rerun.

---

**HLOP9819E** End-of-data encountered inside a declaration

**Explanation:** When the XML parser was parsing an XML declaration, it found no '>' character. This character is required to close the declaration before the end of the file.

**User response:** Correct the declaration and rerun.

---

**HLOP9820E** End-of-data encountered in DOCTYPE declaration

**Explanation:** When the DB2 Analytics Accelerator Loader XML parser was parsing a !DOCTYPE declaration, it reached the end of the file before the declaration was complete.

**User response:** Correct the !DOCTYPE declaration and rerun.

---

**HLOP9821E** End-of-data encountered while parsing element attributes

**Explanation:** When the DB2 Analytics Accelerator Loader XML parser was parsing the attribute list for an element, it reached the end of the file before the attribute list was complete.

**User response:** Correct the element attribute list and rerun.

---

**HLOP9822E** End-of-data encountered inside an <!ELEMENT ...> declaration

**Explanation:** When the XML parser was parsing an !ELEMENT declaration, it reached the end of the file before the declaration was complete.

**User response:** Correct the !ELEMENT declaration and rerun.

---

**HLOP9823E** End-of-data encountered in ENTITY definition

**Explanation:** When the XML parser was parsing an !ENTITY declaration, it reached the end of the file before the declaration was complete.

**User response:** Correct the !ENTITY declaration and rerun.

---

**HLOP9824E** End-of-data encountered in processing instruction

**Explanation:** When the XML parser was parsing an XML processing instruction, it reached the end of the file before the processing instruction was complete.

**User response:** Correct the processing instruction and rerun.

---

**HLOP9825E** Invalid <!ATTLIST *attribute\_name*> attribute name

**Explanation:** A syntax error was detected while the DB2 Analytics Accelerator Loader XML parser was parsing an XML !ATTLIST declaration.

**User response:** Correct the !ATTLIST declaration and rerun.

---

**HLOP9826E Invalid DOCTYPE name**

**Explanation:** When the XML parser was parsing an XML !DOCTYPE declaration, it found no valid element name.

**User response:** Correct the !DOCTYPE declaration and rerun.

---

**HLOP9827E Invalid !ELEMENT name**

**Explanation:** When the DB2 Analytics Accelerator Loader XML parser was parsing an XML !ELEMENT declaration, it found no valid element name.

**User response:** Correct the !ELEMENT declaration and rerun.

---

**HLOP9828E Invalid element tag**

**Explanation:** When the DB2 Analytics Accelerator Loader XML parser was parsing an XML statement, it did not find an expected element tag.

**User response:** Correct the error and rerun.

---

**HLOP9829E Invalid name in ENTITY definition**

**Explanation:** When the DB2 Analytics Accelerator Loader XML parser was parsing an ENTITY definition, it found no valid entity name.

**User response:** Correct the ENTITY declaration and rerun.

---

**HLOP9830E Invalid ENTITY reference**

**Explanation:** When the DB2 Analytics Accelerator Loader XML parser was parsing an entity reference, it found no semicolon to terminate the entity reference. Check if an ampersand is incorrectly specified in a string as '&'. An ampersand should be specified as &amp;.

**User response:** Correct the entity reference and rerun.

---

**HLOP9831E Invalid value in ENTITY definition:  
*value***

**Explanation:** A syntax error was encountered while the DB2 Analytics Accelerator Loader XML parser was parsing an XML ENTITY definition.

**User response:** Correct the ENTITY definition and rerun.

---

**HLOP9832E typespec for <!ELEMENT *element\_name*>  
not correctly ended**

**Explanation:** A syntax error was detected while DB2 Analytics Accelerator Loader was processing the typespec parameter of an !ELEMENT declaration.

---

**User response:** Correct the !ELEMENT declaration and rerun.

---

**HLOP9833E '<' character not legal in attribute value  
string**

**Explanation:** The replacement text of any entity referred to directly or indirectly in an attribute value must not contain a '<' character.

**User response:** Correct the attribute value and rerun.

---

**HLOP9834E No attributes defined for non-element  
node types**

**Explanation:** An attempt was made to request an attribute for an XML element type that does not have attributes.

**User response:** Make sure that you have an XML element object before you request an attribute value.

---

**HLOP9835E Attribute name not found**

**Explanation:** The XML parser was expecting an attribute name, but no valid attribute name was found.

**User response:** Correct the XML statement and rerun.

---

**HLOP9836E No closing ']' for DOCTYPE internal  
subset definition**

**Explanation:** When the DB2 Analytics Accelerator Loader XML parser was parsing an entity definition list in an XML !DOCTYPE declaration, it found no closing ']' character. The closing character is required.

**User response:** Correct the !DOCTYPE declaration and rerun.

---

**HLOP9837E No closing '>' for ENTITY definition:  
*entity\_name***

**Explanation:** No closing '>' character was found to indicate the end of an ENTITY definition.

**User response:** Correct the ENTITY definition and rerun.

---

**HLOP9838E No closing tag for <*element\_name*>**

**Explanation:** The XML parser was expecting to find a closing tag for the element but did not find it.

**User response:** Correct the XML element declaration and rerun.

---

**HLOP9839E No '=' following attribute name  
*'attribute\_name'***

**Explanation:** While the DB2 Analytics Accelerator Loader XML parser was parsing an attribute definition, it expected an '=' sign but found something else. The

---

## HLOP9840E • HLOP9852E

XML language does not allow spaces before or after the '=' sign in an attribute definition. If these spaces exist, remove them.

**User response:** Correct the attribute definition and rerun.

---

### HLOP9840E Tag does not follow '<'

**Explanation:** An XML element tag must immediately follow the opening '<' character of an element definition. The XML parser found a white space character following the '<' instead.

**User response:** Fix the element definition and rerun.

---

### HLOP9841E Tag does not follow '</'

**Explanation:** An XML element tag must immediately follow the closing '</' character of an element definition. The XML parser found a white space character following the '</' instead.

**User response:** Fix the element definition and rerun.

---

### HLOP9842E No value found for attribute *'attribute\_name'*

**Explanation:** While the DB2 Analytics Accelerator Loader XML parser was parsing an attribute definition, it expected a value to follow the '=' character but found no valid value at that location. The XML language does not allow blanks before or after the '=' character in an attribute definition. If these blanks exist, remove them.

**User response:** Correct the attribute definition and rerun.

---

### HLOP9843E parameter *%parameter\_name*; is not defined

**Explanation:** An undefined parameter reference was found.

**User response:** Check the spelling of the parameter name, or add a definition for the parameter and rerun.

---

### HLOP9844E Unexpected character following DOCTYPE SYSTEM name

**Explanation:** The XML parser expected a '>' character to close a !DOCTYPE declaration but found something else.

**User response:** Correct the !DOCTYPE declaration and rerun.

---

### HLOP9845E Unexpected character in <!ELEMENT *element\_name*> children

**Explanation:** A syntax error was detected while the XML parser was parsing the list of child elements allowed for an !ELEMENT declaration.

**User response:** Correct the !ELEMENT declaration and rerun.

---

### HLOP9846E Unexpected characters following <!ELEMENT *element\_name* (#PCDATA

**Explanation:** The XML parser expected to find a closing ')' character for the #PCDATA token but found something else.

**User response:** Correct the !ELEMENT declaration and rerun.

---

### HLOP9847E Unexpected characters in <!ELEMENT *element\_name*> contentspec

**Explanation:** The XML parser detected an unexpected character following the #PCDATA portion of an !ELEMENT declaration.

**User response:** Correct the !ELEMENT declaration and rerun.

---

### HLOP9848E Unexpected contentspec <!ELEMENT *element\_name*> declaration

**Explanation:** A syntax error was detected in the contentspec portion of an !ELEMENT declaration.

**User response:** Correct the !ELEMENT declaration and rerun.

---

### HLOP9849E Unexpected !DOCTYPE option: *option*

**Explanation:** The XML parser detected an invalid option in a !DOCTYPE declaration.

**User response:** Correct the !DOCTYPE declaration and rerun.

---

### HLOP9850E Unexpected !DOCTYPE SYSTEM value

**Explanation:** The XML parser detected an invalid value in the SYSTEM portion of a !DOCTYPE declaration.

**User response:** Correct the !DOCTYPE declaration and rerun.

---

### HLOP9851E Unexpected !ENTITY SYSTEM value

**Explanation:** The XML parser detected an invalid value in the SYSTEM portion of a !ENTITY declaration.

**User response:** Correct the !ENTITY declaration and rerun.

---

### HLOP9852E Unexpected text in <!ELEMENT *element\_name*>

**Explanation:** While the XML parser was parsing an !ELEMENT declaration, it expected to find a closing '>' character but found something else.



**User response:** Correct the !ELEMENT declaration and rerun.

---

**HLOP9853E Quotation delimiters do not match for attribute value *attribute\_value***

**Explanation:** The delimiter characters around the specified attribute value in the DSNUTILB intercept policy do not match. The delimiter characters must both be either double quotation marks or single quotation marks.

**User response:** Correct the delimiters that enclose the specified attribute value so that they match. Use either double quotation marks or single quotation marks. Then rerun the utility.

---

**HLOP9854W USE\_RULESET element in POLICY references an undefined ruleset. Name: *ruleset\_name*.**

**Explanation:** In the DSNUTILB intercept policy, a <USE\_RULESET> element in the <POLICY> section references a ruleset name that has not been defined by a <RULESET> element.

**User response:** Ensure that the ruleset name that is specified by the <USE\_RULESET> element matches a ruleset name that is defined by a <RULESET> element in the same policy. You can either correct the ruleset name that is specified by the <USE\_RULESET> element or change the ruleset name that is defined by the <RULESET> element (if that ruleset is not referenced by other <USE\_RULESET> elements in the policy).

---

**HLOP9855W VRUPDATE element omitted after ACTION=VRUPDATE for DB2SYSTEM *db2\_ssid*.**

**Explanation:** In the DSNUTILB policy, an ACTION=VRUPDATE attribute on the DB2SYSTEM element requires a VRUPDATE child element to be included under the DB2SYSTEM element.

**User response:** Ensure that the VRUPDATE element is included and that the VRUPDATE element has a DSN attribute that specifies the VR UPDATE job JCL.

---

**HLOP9856W Usage of RULE SYNONYM has been deprecated.**

**Explanation:** In the DSNUTILB policy, a RULE SYNONYM= was encountered. The usage of RULE element SYNONYM has been deprecated.

**User response:** No action is required.

---

**HLOP9857E Invalid characters encountered in PART specification.**

**Explanation:** The XML parser detected an invalid character in the PART specification.

**User response:** Correct the PART specification and rerun.

---

**HLOP9858E USE\_PRACTICE in POLICY references an undefined practice. PRACTICE=*practice\_name*.**

**Explanation:** In the DSNUTILB policy, a USE\_PRACTICE element in the POLICY section references a PRACTICE name that has not been defined by a PRACTICE element.

**User response:** Ensure that the practice name that is specified by the USE\_PRACTICE element matches a practice name that is defined by a practice element in the same policy. You can either correct the practice name that is specified by the USE\_practice element or change the practice name that is defined by the practice element (if that practice is not referenced by other USE\_PRACTICE elements in the policy).

---

**HLOP9859E A duplicate practice name was specified in the policy. PRACTICE=*practice\_name*.**

**Explanation:** The DSNUTILB policy defined two PRACTICE elements with the same value specified for the NAME attribute. When PRACTICE elements with duplicate names are found in the policy, the PRACTICE that is coded first in the policy is used by the utility monitor.

**User response:** Ensure that all practice names are unique.

---

**HLOP9860E A duplicate utility name was specified in a practice. UTILNAME=*utility\_name***

**Explanation:** The DSNUTILB policy defined two UTILITY elements with the same NAME under a practice.

**User response:** Ensure that all utility names are unique within a PRACTICE specification.

---

**HLOP9861E The length of attribute is greater than 1024 characters: ATTRIBUTE=*attribute\_name*.**

**Explanation:** Attributes VALUE and SUBSTITUTE of the SYNTAX policy element are each restricted to 1024 characters.

**User response:** Correct the specified attribute.

---

**HLOP9862E Attribute *attribute\_name\_1* is incompatible with attribute *attribute\_name\_2*.**

**Explanation:** The two specified attributes are mutually exclusive and can not be used together.

**User response:** Correct the attribute specifications.

---

**HLOP9863E** Multiple <USE\_PRACTICE> elements were specified within one <DB2SYSTEM> element, DB2 SSID: <db2\_ssid>.

**Explanation:** In the DSNUTILB policy, multiple <USE\_PRACTICE> elements were specified within one <DB2SYSTEM> element. Each <DB2SYSTEM> element can contain only one <USE\_PRACTICE> element.

**User response:** Make sure that all <DB2SYSTEM> elements contain only one <USE\_PRACTICE> element.

---

**HLOP9864E** <SUBSTITUTE> or <FAIL> attributes must be specified for <VALUE> attribute in <SYNTAX> element.

**Explanation:** In the DSNUTILB intercept policy, the <VALUE> attribute in the <SYNTAX> element was specified without the required <SUBSTITUTE> or <FAIL> attribute.

**User response:** Make sure that the <VALUE> attribute in the <SYNTAX> element was specified with the <SUBSTITUTE> or <FAIL> attribute.

---

**HLOP9865E** Attributes are not specified in <SYNTAX> element.

**Explanation:** In the DSNUTILB intercept policy, the <SYNTAX> element was specified with no attributes; however, at least one attribute is required.

**User response:** Make sure that the <SYNTAX> element contains at least one attribute. For information about the available attributes, see the section about the DSNUTILB intercept policy in the product documentation.

---

**HLOP9866E** <VALUE> attribute must be specified for <SUBSTITUTE> or <FAIL> attributes in <SYNTAX> element.

**Explanation:** In the DSNUTILB policy, the <SUBSTITUTE> or <FAIL> attributes in the <SYNTAX> element were specified without specifying the <VALUE> attribute.

**User response:** Make sure that the <SUBSTITUTE> or <FAIL> attributes are specified in the <SYNTAX> element when you specify the <VALUE> attribute.

---

**HLOP9867E** ACCEL\_CURSOR, ACCEL\_HLV\_SSID and ACCEL\_HLV\_GRPNAME are not valid on IDAA\_ONLY type loads.

**Explanation:** When you are loading data from the server, you must choose to load only the accelerator. Loading to both DB2 and the accelerator is not supported for server data sources.

**User response:** Choose to load only the accelerator and resubmit the job.

---

**HLOP9868E** ACCEL\_CURSOR requires an ACCEL\_HLV\_SSID or ACCEL\_HLV\_GRPNAME.

**Explanation:** The group name or SSID of the server is required when ACCEL\_CURSOR is specified.

**User response:** Add the ACCEL\_HLV\_SSID or ACCEL\_HLV\_GRPNAME keyword to the load control cards and resubmit the job.

---

**HLOP9869E** An ACCEL\_CURSOR name must be provided with ACCEL\_HLV\_SSID or ACCEL\_HLV\_GRPNAME.

**Explanation:** When loading data from the server, you must provide an ACCEL\_CURSOR name. The cursor name must identify a cursor that was previously declared in an EXEC SQL statement.

**User response:** Add the ACCEL\_CURSOR clause to the load statement and resubmit the job.

---

**HLOP9870 E** ACCEL\_HLV\_SSID and ACCEL\_HLV\_GRPNAME are mutually exclusive. Specify only one or the other.

**Explanation:** When loading data from the server, you must identify the server by either subsystem ID (SSID) or group name. You cannot specify both.

**User response:** Remove one of the options and resubmit the job.

---

**HLOP9871E** The WHEN clause is not compatible with the ACCEL\_CURSOR clause.

**Explanation:** The WHEN clause is not supported when loading data from the DB2 Analytics Accelerator Loader Server.

**User response:** Remove the WHEN clause from the load control cards and rerun the job.

---

**HLOP9872E** The INDDN and INCURSOR clauses are not compatible with the ACCEL\_CURSOR clause.

**Explanation:** When loading data from the server, you cannot also specify an INDDN or INCURSOR clause.

**User response:** Correct the load control cards and resubmit the job.

---

**HLOP9873E** Field specifications cannot be provided when ACCEL\_CURSOR is specified.

**Explanation:** When loading data from the server, you cannot provide field specifications.

**User response:** Correct the load control cards and resubmit the job.

---

**HLOP9874E** ACCEL\_SOURCE\_DB2 requires ACCEL\_CURSOR and either ACCEL\_HLV\_SSID or ACCEL\_HLV\_GRPNAME.

**Explanation:** The ACCEL\_SOURCE\_DB2 keyword can only be specified when you are loading data from the server. Specify ACCEL\_SOURCE\_DB2 only when you are loading data from another DB2 subsystem via the server.

**User response:** Correct the load control cards and resubmit the job.

---

**HLOP9875E** IDENTIFIER <identifier\_type> name length error. The maximum valid length is: <maximum\_name\_length>.

**Explanation:** An identifier or name of the specified type has an invalid length. The identifier must be 1 to MAX\_LENGTH characters long.

**User response:** Correct the control cards and submit the job again.

---

**HLOP9876E** KEYWORD1 <keyword> and KEYWORD2 <keyword> are mutually exclusive keywords.

**Explanation:** The specified keywords are mutually exclusive. You can specify one or the other, but not both.

**User response:** Remove one of the keywords and resubmit the job.

---

**HLOP9878E** The keyword <keyword> is not valid as used.

**Explanation:** The specified keyword is not valid in the context in which it is used.

**User response:** Correct the load statement and resubmit the job.

---

**HLOP9879E** Validation error: ID 'enum\_value' not found for IDREF reference

**Explanation:** An attribute was declared to be an IDREF, but the attribute value was not used as an ID within the XML document.

**User response:** Check the spelling of the IDREF value, or add a corresponding ID attribute that uses the IDREF value.

---

**HLOP9880E** Validation error: default 'enum\_value' for attribute 'attribute\_name' not a member of enumerated type

**Explanation:** The default value that is specified for an attribute in an !ATTLIST declaration of the Document Type Definition is not a valid value for the attribute.

**User response:** Correct the !ATTLIST declaration so that the default value is one of the values in the enumerated list of valid attribute values, and then rerun.

---

**HLOP9881E** Validation error: <!ELEMENT ...element\_name> attribute value attribute\_name='enum\_value' is not a member of the enumerated type.

**Explanation:** The value that is specified for an attribute is not one of the valid values that is defined for the attribute in the Document Type Definition. When the specified value is NULL or blanks, the default value is used.

**User response:** Correct the attribute value and rerun the job.

---

**HLOP9882E** Validation error: attributes declared ID must be #REQUIRED or #IMPLIED

**Explanation:** An ID attribute must have a declared default of #IMPLIED or #REQUIRED.

**User response:** Correct the default value for the ID attribute and rerun.

---

**HLOP9883E** Validation error: duplicate ID ID\_name='value'

**Explanation:** A name must not appear more than once in an XML document as an ID value. That is, ID values must uniquely identify elements.

**User response:** Eliminate the duplicate ID and rerun.

---

**HLOP9884E** Validation error: <!ELEMENT element\_name EMPTY> cannot have subelement subelement\_name.

**Explanation:** The Document Type Definition (DTD) does not list the specified subelement as one that is valid for the element.

**User response:** Correct the element definition to eliminate the invalid subelement and rerun.

---

**HLOP9885E** Validation error: <!ELEMENT element\_name EMPTY> cannot contain text

**Explanation:** An element that is declared to be EMPTY in the Document Type Definition cannot contain any content.

**User response:** Correct the element definition to remove the content and rerun.

---

**HLOP9886E** Validation error: <!ELEMENT *element\_name*> **invalid attribute** *attribute\_name='value'*

**Explanation:** The attribute is not valid for the element according to the Document Type Definition.

**User response:** Correct the element definition to remove the invalid attribute and rerun.

---

**HLOP9887E** Validation error: <!ELEMENT *element\_name*> **attribute** *attribute\_name='attribute\_value'* **not #FIXED default value** *'default\_value'*

**Explanation:** The Document Type Definition specifies that the attribute must have a specific #FIXED value, but the attribute definition specifies a different value.

**User response:** Correct the attribute to use the #FIXED value and rerun.

---

**HLOP9888E** Validation error: <!ELEMENT *element\_name*> **unexpected subelement** *subelement\_name*.

**Explanation:** The specified subelement is not valid in the element according to the Document Type Definition (DTD). This error can occur if the subelement is out-of-order with respect to other subelements, or if it is repeated an incorrect number of times.

**User response:** Correct the element definition so that it is consistent with the DTD.

---

**HLOP9889E** Validation error: <!ELEMENT *element\_name*> **missing required attribute** *'required\_attribute'*

**Explanation:** An attribute of the element was declared as #REQUIRED in the Document Type Definition, but the attribute is not defined in the element definition.

**User response:** Correct the element definition to include the required attribute and rerun.

---

**HLOP9890E** Validation error: <!ELEMENT *element\_name*> **missing required choice** *'required\_choice'*

**Explanation:** The Document Type Definition specifies that one of the valid choices defined for the specified element must appear at a specific position within the element. However, the value that was found at that position is not one of the valid choices.

**User response:** Correct the element definition to conform to the Document Type Definition and rerun.

---

**HLOP9891E** Validation error: <!ELEMENT *element\_name*> **missing required subelement** *subelement\_name*.

**Explanation:** The Document Type Definition (DTD) indicates that the specified subelement is required for the element. However, the subelement was not found in the element definition.

**User response:** Correct the element definition to supply the required subelement and rerun.

---

**HLOP9892E** Validation error: **An element can have only one attribute of type ID**

**Explanation:** An element type must not have more than one ID attribute specified.

**User response:** Correct the !ELEMENT definition so that it has only one ID attribute and rerun.

---

**HLOP9893E** Validation error: **Element** *<element\_name>* **has not been declared**

**Explanation:** The element that is being defined is not declared in the Document Type Definition. Therefore, it is not permitted in the document.

**User response:** Eliminate the invalid element definition and rerun.

---

**HLOP9894E** XML Parser Exception: *file\_name* **line=***line\_number*

**Explanation:** The XML parser error that was previously reported caused the parser to stop. The error occurred while the parser was processing data from the specified file at the specified line number.

**User response:** Correct the error and rerun.

---

**HLOP9895E** XML Parser Exception occurred while **processing** *line=**line\_number*

**Explanation:** The XML parser error that was previously reported caused the parser to stop. The error occurred while the parser was processing data from the top-level input file at the specified line number.

**User response:** Correct the error and rerun.

---

**HLOP9896E** XML Parser Exception

**Explanation:** The XML parser error that was previously reported caused the parser to stop. The error could not be attributed to a specific line in an input file.

**User response:** Correct the previously noted error and rerun.

---

---

**HLOP9897E Allocation error for policy control block**  
*: enum\_value*

**Explanation:** An allocation error occurred for one of the policy control blocks.

**User response:** Contact IBM Software Support. Provide Support with the message number and text.

---

**HLOP9898E Value exceeds maximum length for**  
**RULE: rule\_name='rule\_value'**

**Explanation:** In the DSNUTILB policy, the length of the specified rule value exceeds the maximum allowable length for the rule. This message provides the first 32 bytes of the rule value that is in error.

**User response:** Correct the specified rule value in the DSNUTILB policy so that it does not exceed the maximum allowable length for the rule. See the *DB2 Analytics Accelerator Loader for z/OS User's Guide* for information about maximum allowable rule lengths. After you make the correction, resubmit the job.

---

**HLOP9899E Policy parser error.**

**Explanation:** The DSNUTILB policy parser encountered an error that caused it to stop.

**User response:** Look for the messages that follow this one for a more detailed description of the error. If the error is related to a policy syntax error, correct the policy and then resubmit the job.

---

**HLOP9900E Abnormal termination: file\_name**  
*line=line\_number*

**Explanation:** The XML parser terminated because of an internal error.

**User response:** Report the problem to IBM Software Support.

---

**HLOP9901E Error: Input buffer size (size bytes) is too small.**

**Explanation:** The input buffer for the XML parser overflowed.

**User response:** The parser must be rebuilt with a larger input buffer size. Contact IBM Software Support.

---

**HLOP9902E Invalid value specified for**  
**IGNOREFIELDS. Valid values are YES**  
**and NO.**

**Explanation:** An invalid value was specified for the IGNOREFIELDS option of the LOAD utility INTO TABLE statement.

**User response:** Correct the LOAD syntax and resubmit the job.

---

**HLOP9910I** *parsed\_batch\_syntax*

**Explanation:** The DB2 Analytics Accelerator Loader batch interface writes this message to the SPRT0000 output for the thread-cancelation job. This message indicates the parameters or cancel commands that were parsed from the HLOPARMS DD in the job.

**User response:** No action is required.

---

**HLOP9911W** *'parsed\_batch\_syntax'* **can only occur once.**  
**Only the last occurrence is used to**  
**process the request.**

**Explanation:** The specified parameter occurs more than once in the HLOPARMS DD of the batch thread-cancelation job. DB2 Analytics Accelerator Loader will process the last occurrence of the parameter and ignore all previous occurrences.

**User response:** No action is required.

---

**HLOP9912E** *'batch\_parameter\_value'* **is not a recognized**  
**value**

**Explanation:** An invalid value was specified for a parameter in the batch thread-cancelation job. The parameter name and value have been written to the SPRT0000 output for the job.

**User response:** Look up the valid values for this parameter in the product documentation. Correct the parameter value in the HLOPARMS DD of the job and run the job again.

---

**HLOP9913E Value** *'user\_specified\_value'* **must be from**  
*minimum\_valid\_value through*  
*maximum\_valid\_value*

**Explanation:** The specified value is not within the range of valid values for this batch parameter. The parameter name and value have been written to the SPRT0000 output for the thread-cancelation job.

**User response:** Look up the valid values for this parameter in the product documentation. Correct the parameter value in the HLOPARMS DD of the job and run the job again.

---

**HLOP9914E** *parameter\_value* **value can be at most**  
*maximum\_length bytes*

**Explanation:** The specified batch job parameter value is longer than the maximum length that is allowed for this parameter.

**User response:** Correct the parameter value in the HLOPARMS DD of the batch thread-cancelation job. Ensure that it does not exceed the maximum length that is specified in this message text. Then run the job again.

---

**HLOP9915E** Expected value '*expected\_value*' not found

**Explanation:** DB2 Analytics Accelerator Loader expected the specified value to be in the HLOPARMS DD of the batch thread-cancelation job but did not find it there.

**User response:** Add the specified value to the HLOPARMS DD where appropriate. Then run the job again.

---

**HLOP9916E** CANCEL\_THREADS request is invalid because no selection criteria is specified.

**Explanation:** No thread-selection criteria were specified for the CANCEL\_THREADS request. One of the following must be specified: the ALL\_THREADS parameter, the THREAD\_TOKEN parameter, or one or more of the other thread-filtering parameters.

**User response:** Specify a thread-selection parameter in the HLOPARMS DD of the thread-cancelation job. Then run the job again.

---

**HLOP9917E** Initialization parameter value is unknown: *parameter\_name* = *parameter\_value*

**Explanation:** An initialization parameter for the DB2 Analytics Accelerator Loader started task has an invalid value.

**User response:** See the DB2 Analytics Accelerator Loader documentation to determine the valid values for the specified initialization parameter. Then correct the value in your HLOOPTS file.

---

**HLOP9918E** Initialization parameter value beyond range: *parameter\_name* = *parameter\_value*

**Explanation:** An initialization parameter for the DB2 Analytics Accelerator Loader started task has a value that is not within the allowable range for this parameter.

**User response:** See the DB2 Analytics Accelerator Loader documentation to determine the set of valid values for the specified initialization parameter. Then correct the parameter value in the HLOOPTS file.

---

**HLOP9919E** Initialization parameter value is too long: *parameter\_name* can be at most *parameter\_max\_length* characters

**Explanation:** An initialization parameter for the DB2 Analytics Accelerator Loader started task is longer than the maximum length that is allowed for this parameter.

**User response:** Correct the parameter value in your initialization options member. Ensure that the value is not longer than the maximum length that is specified in this message text. Then run the job again.

---

**HLOP9920E** Internal parser error: parser expected the address of the *control\_block\_name*

**Explanation:** An internal error occurred in the DB2 Analytics Accelerator Loader batch syntax parser or in the started task initialization options parser.

**User response:** Contact IBM Software Support.

---

**HLOP9921W** Keyword *syntax\_keyword* is unexpected. It will be ignored.

**Explanation:** A keyword was found in an unexpected location in the command syntax. The keyword will be ignored.

**User response:** Correct the syntax and run the job again.

---

**HLOP9922E** Initialization parameter contains nonnumeric characters: *parameter\_name* = *parameter\_value*.

**Explanation:** An initialization parameter for the DB2 Analytics Accelerator Loader started task contains nonnumeric characters. Only numeric characters are allowed.

**User response:** Correct the value and start the DB2 Analytics Accelerator Loader started task.

---

**HLOP9925E** Storage obtain failed.  
Module=<*module\_name*>, storage  
area=<*storage\_area\_name*>,  
RC=<*return\_code*>.

**Explanation:** The specified module failed while attempting to obtain the specified storage area.

**User response:** Increase the region size that is available to the DB2 Analytics Accelerator Loader program and run the product again. If the problem persists, contact IBM Software Support. Provide the support representative with the complete text of this message.

---

**HLOP9927E** An error was detected while attempting to open the input data set

**Explanation:** DB2 Analytics Accelerator Loader encountered an error while attempting to open the input data set for the DB2 utility job step.

**User response:** Check for other messages that are related to this error in the system log. Then correct the error and resubmit the job.

---

**HLOP9928E** I/O error when reading the input data set.

**Explanation:** DB2 Analytics Accelerator Loader encountered an I/O error when reading the input data set for the DB2 utility job step.

**User response:** Contact IBM Software Support.

---

**HLOP9929E Buffer overflow error.**

**Explanation:** While DB2 Analytics Accelerator Loader was parsing the DB2 utility job step, it detected a buffer overflow condition.

**User response:** Contact IBM Software Support.

---

**HLOP9930E A syntax error was detected in the field specification for the field <field\_name>.**

**Explanation:** The field specification for the specified field in the DB2 LOAD utility job step contains a syntax error.

**User response:** Correct the field specification that is in error in the utility job step. Then run the utility again.

---

**HLOP9931E Unbalanced parentheses detected in an INTO-TABLE specification.**

**Explanation:** DB2 Analytics Accelerator Loader detected an unbalanced parenthesis (without a matching opening or closing parenthesis) in an INTO-TABLE specification of the LOAD utility job step.

**User response:** Correct this syntax error in the INTO-TABLE specification of the LOAD utility job step. Then run the utility again.

---

**HLOP9932E The DELIMITED option is incompatible with the VALUEIF field selection criterion (START:END).**

**Explanation:** While parsing the DB2 LOAD utility syntax, DB2 Analytics Accelerator Loader detected that the utility job step includes the DELIMITED option and a field selection criterion for the VALUEIF option that specifies a start:end byte position. This syntax is invalid. You cannot specify both the DELIMITED option and a VALUEIF field selection criterion that includes a start:end position in the same job step.

**User response:** Edit the LOAD utility job step to either remove the DELIMITED option or specify a field name instead of a start:end position in the field selection criterion for the VALUEIF option. Then run the utility again.

---

**HLOP9933W DATABASE keyword is ignored if database name is specified with tablespace or indexspace.**

**Explanation:** A database name is specified by the DATABASE parameter and also as part of the TABLESPACE or INDEXSPACE parameter value. The DATABASE parameter value is ignored.

**User response:** No action is required.

---

**HLOP9934E An error was detected in the VALUEIF clause for field specification <field\_name>.**

**Explanation:** The field name in the field selection criterion of the VALUEIF clause does not match the field name of any field specification that is defined for the table to be loaded.

**User response:** In the INTO-TABLE portion of the LOAD utility job step, correct the field selection criterion of the VALUEIF clause or any field specification that is in error so that the field name in the field selection criterion of the VALUEIF clause matches the field name in a field specification. Then, run the utility job again.

---

**HLOP9935E An operand of the DISCARDTO keyword is missing and must be specified.**

**Explanation:** The DISCARDTO keyword was specified in the CHECK DATA utility syntax but one of the operands was not provided. Both operands are required for this keyword.

**User response:** Provide both operands for the DISCARDTO keyword and resubmit the job.

---

**HLOP9936E An operand of the DISCARDSPACE keyword is missing and must be specified.**

**Explanation:** The DISCARDSPACE keyword was specified in the CHECK DATA utility syntax but one of the operands was not provided. Both operands are required for this keyword.

**User response:** Provide both operands for the DISCARDSPACE keyword and resubmit the job.

---

**HLOP9937E A zero value for an operand of the DISCARDSPACE keyword was specified.**

**Explanation:** The DISCARDSPACE keyword was specified in the CHECK DATA utility syntax and one of the operands specified is a value of zero. A zero value for either the primary or secondary quantity is not allowed.

**User response:** Provide a valid value for both operands of the DISCARDSPACE keyword and resubmit the job. Valid values are -1 or 1 through 4,194,304.

---

**HLOP9938E A value greater than the allowed maximum was specified in the DISCARDSPACE keyword.**

**Explanation:** The DISCARDSPACE keyword was specified in the CHECK DATA utility syntax and one of the operands specified exceeded the maximum allowed.

## HLOP9939E • HLOP9948E

**User response:** Provide a valid value for both operands of the DISCARDSPACE keyword and resubmit the job. Valid values are -1 or 1 through 4,194,304.

---

**HLOP9939E** Keyword PRESORT is incompatible with &VARIABLE (where &VARIABLE can be one of the following values: FORMAT UNLOAD, FORMAT SQLDS, FORMAT INTERNAL, or NO FIELD SPECS).

**Explanation:** PRESORT is not supported with the specified criteria.

**User response:** Correct the syntax and resubmit the job.

---

**HLOP9940E** Value exceeds maximum length for PRACTICE NAME <practice\_name>.

**Explanation:** In the DSNUTILB policy, the length of the specified practice name exceeds the maximum allowable length of 32 characters. This message provides the first 32 characters of the practice name that is in error.

**User response:** Correct the specified practice name in the DSNUTILB policy so that it does not exceed the maximum allowable length. After making the correction, resubmit the job. For more information about the PRACTICE element, see the product documentation.

---

**HLOP9941E** Attribute <attribute\_name> is duplicated within a single element RULE.

**Explanation:** In the DSNUTILB policy, the attribute displayed in the message text is duplicated within a single element RULE.

**User response:** In the DSNUTILB policy, delete the duplicated attribute in the single element RULE, and then resubmit the job.

---

**HLOP9942E** Invalid specification for keyword <keyword>.

**Explanation:** The specified partition numbers are not valid. The partition numbers must be 1 - 4096. The first value must be lower than the second value.

**User response:** Correct the specified partition numbers. For information about specifying partition numbers, see the product documentation. After you make the correction in the POLICY, restart the started task.

---

**HLOP9943E** Keyword *keyword1* is incompatible with keyword *keyword2*.

**Explanation:** Both of the specified keywords cannot be present in the load utility job input stream.

**User response:** Correct the syntax and resubmit the job.

---

**HLOP9944E** Value length of attribute <attribute\_name> is more than <attribute\_length> characters.

**Explanation:** In the DSNUTILB policy, the length of the specified attribute value exceeds the maximum allowable length.

**User response:** Correct the attribute value. For more information about the attribute, see the product documentation.

---

**HLOP9945W** Invalid operand <operand>.

**Explanation:** The specified operand is only valid for load processing when you are running DB2 Version 9.1 and later.

**User response:** Remove the specified operand and then restart the job. For more information, see the section about load processing enhancements in the product user's guide.

---

**HLOP9946E** Only one table can be specified for load processing when you use the option <keyword\_name>.

**Explanation:** The specified option is not supported for multiple tables in a LOAD statement.

**User response:** Specify only one table and then restart the job. For more information, see the product documentation.

---

**HLOP9947I** PRESORT was forced due to KEYWORD <keyword\_name>.

**Explanation:** With the specified option, if PRESORT is not specified, LOAD processing continues as though it were.

**User response:** No action is required.

---

**HLOP9948E** Keyword <keyword\_name> is incompatible with keyword <keyword\_name>.

**Explanation:** The specified keywords cannot be used together in the syntax.

**User response:** Correct the syntax and resubmit the job.



---

**HLOP9949E Keyword IDAA\_DUAL ON <accelerator\_name> is incompatible with keyword IDAA\_ONLY ON <accelerator\_name>.**

**Explanation:** The specified keywords cannot be used together. You can specify only one of the keywords in a job.

**User response:** Correct the syntax and resubmit the job.

---

**HLOP9950E Invalid length of accelerator name.**

**Explanation:** The accelerator name for keywords IDAA\_DUAL ON <accelerator\_name> and IDAA\_ONLY ON <accelerator\_name> is required and its length cannot exceed eight characters.

**User response:** Correct the syntax and resubmit the job.

---

**HLOP9951E Keyword <keyword\_name> is not supported when loading partition level SYSRECs.**

**Explanation:** When PART *n* INDDN is specified in a LOAD utility statement, the specified keyword is are not supported.

**User response:** Remove the unsupported keyword and rerun the load utility job.

---

**HLOP9952I The ACCEL\_LOAD\_TASKS value is outside the supported range of 1 - <max\_value>.**

**Explanation:** The value that is specified for the ACCEL\_LOAD\_TASKS option in the LOAD utility statement is outside the range of supported values.

**User response:** No action is required.

---

**HLOP9953E IDAA\_ONLY loads do not support discard data sets.**

**Explanation:** When you are loading only the accelerator (option IDAA\_ONLY), you cannot specify a discard data set.

**User response:** Remove the SYSDISC ddname from the JCL or the DISCARDN keyword from the LOAD statement and resubmit the job.

---

**HLOP9954E Field specifications are required for IDAA\_DUAL and IDAA\_ONLY LOADs.**

**Explanation:** When you are loading the accelerator (option IDAA\_ONLY) or the accelerator and DB2 (option IDAA\_DUAL), the LOAD utility INTO TABLE clause must include field specifications.

**User response:** Correct the syntax and resubmit the job.

---

**HLOP9955E The value specified for ACCEL\_LOAD\_TASKS is invalid.**

**Explanation:** Valid values for the ACCEL\_LOAD\_TASKS option are 1 - <max\_tasks\_value>. For best results, match the value to the setting of the IBM DB2 Analytics Accelerator environment variable AQT\_MAX\_UNLOAD\_IN\_PARALLEL.

**User response:** Correct the ACCEL\_LOAD\_TASKS value and resubmit the job.

---

**HLOP9956E ACCEL\_LOAD\_TASKS is only valid with IDAA\_DUAL and IDAA\_ONLY LOADs.**

**Explanation:** The ACCEL\_LOAD\_TASKS option can only be specified with the IDAA\_DUAL or IDAA\_ONLY options.

**User response:** Correct the syntax and resubmit the job.

---

**HLOP9957E The value specified for ACCEL\_ON\_SUCCESS\_ENABLE is invalid. Valid values are: YES | NO.**

**Explanation:** The value that was specified for the LOAD utility option ACCEL\_ON\_SUCCESS\_ENABLE is invalid.

**User response:** Correct the ACCEL\_ON\_SUCCESS\_ENABLE value and resubmit the job.

---

**HLOP9958E ACCEL\_ON\_SUCCESS\_ENABLE is only valid with IDAA\_DUAL and IDAA\_ONLY type LOAD jobs.**

**Explanation:** The ACCEL\_ON\_SUCCESS\_ENABLE option can only be specified when the IDAA\_DUAL option or the IDAA\_ONLY option is also specified.

**User response:** Correct the LOAD utility syntax and resubmit the job.

---

**HLOS0000I DB2 Analytics Accelerator Loader <product\_version>, FMID=<product\_fmId>, COMPONENT ID=<product\_compId>.**

**Explanation:** This message provides the following information for your DB2 Analytics Accelerator Loader configuration: the version and release, FMID (an identifier for the release), and component ID. It is the first message issued to the SYSPRINT data set for the started task after the started task starts.

**User response:** No action is required.

---

**HLOS0001I Started task initialization is in progress**

**Explanation:** The initialization of the DB2 Analytics Accelerator Loader started task has begun.

**User response:** No action is required.

---

**HLOS0002I Started task initialization is complete**

**Explanation:** The initialization processing for the DB2 Analytics Accelerator Loader started task has successfully completed.

**User response:** No action is required.

---

**HLOS0003I Started task termination is in progress**

**Explanation:** Termination processing for the DB2 Analytics Accelerator Loader started task has begun.

**User response:** No action is required.

---

**HLOS0004I Started task termination is complete**

**Explanation:** The DB2 Analytics Accelerator Loader started task successfully completed termination processing.

**User response:** No action is required.

---

**HLOS0007I TCB: <tcba\_address> <component\_name> - Component initialization is complete**

**Explanation:** The initialization of the specified component completed successfully.

**User response:** No action is required.

---

**HLOS0009I TCB: <tcba\_address> <component\_name> - Component termination is complete**

**Explanation:** The termination of the specified component completed successfully.

**User response:** No action is required.

---

**HLOS0010E TCB: <tcba\_address> <component\_name> - Component initialization failed.**

**Explanation:** The initialization of the specified component was not successful.

**User response:** To determine the cause of the initialization failure, see the other messages that were issued for this component.

---

**HLOS0012S TCB: <tcba\_address> <component\_name> received an unexpected post code. Post code=<post\_code>.**

**Explanation:** An internal error occurred.

**User response:** Contact IBM Software Support.

---

Provide Support with the complete text of this message.

---

**HLOS0013S TCB: <tcba\_address> <component\_name> received an unexpected request code. Request code=<request\_code>.**

**Explanation:** An internal error occurred.

**User response:** Contact IBM Software Support. Provide Support with the complete text of this message.

---

**HLOS0014I SVC installation is complete. SVC number = <svc\_number>.**

**Explanation:** The installation of the DB2 Analytics Accelerator Loader supervisor call (SVC) was successful.

**User response:** No action is required.

---

**HLOS0015I Removing SVC. SVC number = <svc\_number>.**

**Explanation:** The DB2 Analytics Accelerator Loader supervisor call (SVC) is in the process of being removed.

**User response:** No action is required.

---

**HLOS0016E SVC installation failed. SVC number = <svc\_number>.**

**Explanation:** The installation of the DB2 Analytics Accelerator Loader supervisor call (SVC) was not successful.

**User response:** For more specific information about the SVC installation failure, see the messages that accompany this one.

---

**HLOS0017S SVC removal failed. SVC number = <svc\_number>, RC = <return\_code>, Reason = <reason\_text>.**

**Explanation:** The removal of the DB2 Analytics Accelerator Loader supervisor call (SVC) was not successful. This message provides the return code and reason for this failure.

**User response:** Contact IBM Software Support. Provide Support with the complete text of this message, including the return code and reason text.

---

**HLOS0018E SVC installation failed. SVC number=<svc\_number>, RC=<return\_code>, reason=<reason\_text>.**

**Explanation:** The installation of the DB2 Analytics Accelerator Loader supervisor call (SVC) was not successful. This message provides the return code and reason for the failure.

---

**User response:** Contact IBM Software Support. Provide Support with the complete text of this message, including the return code and reason text.

---

**HLOS0019I COMX:** *comx\_address*, **COMI:** *comi\_address*, **SVC EPA:** *svc\_entry\_point\_address*, **MNTLEVEL:** *maintenance\_level*

**Explanation:** This message is issued along with another message to provide diagnostic information to Support for resolving a problem.

**User response:** Provide this information to IBM Software Support when a Support representative requests it.

---

**HLOS0020I Logging has been started.**

**Explanation:** The DB2 Analytics Accelerator Loader started task has started writing log information to the HLOLOG table.

**User response:** No action is required.

---

**HLOS0021I Logging has been terminated.**

**Explanation:** The DB2 Analytics Accelerator Loader started task has stopped writing log information to the HLOLOG table.

**User response:** No action is required.

---

**HLOS0022I Auditing has been started.**

**Explanation:** The DB2 Analytics Accelerator Loader started task has started writing audit information to the HLOAUDIT table.

**User response:** No action is required.

---

**HLOS0023I Auditing has been terminated.**

**Explanation:** The DB2 Analytics Accelerator Loader started task has stopped writing audit information to the HLOAUDIT table.

**User response:** No action is required.

---

**HLOS0024I Tracing has been started.**

**Explanation:** The DB2 Analytics Accelerator Loader started task has started writing trace information to the internal trace table.

**User response:** No action is required.

---

**HLOS0025I Tracing has been terminated.**

**Explanation:** The DB2 Analytics Accelerator Loader started task has stopped writing trace information to the internal trace table.

**User response:** No action is required.

---

**HLOS0080I Product initialization parameters:**

**Explanation:** This message introduces a list of the initialization parameters that are defined for the DB2 Analytics Accelerator Loader started task. The list is printed when the started task starts.

**User response:** No action is required.

---

**HLOS0081I** *parm\_name = parm\_value\_dec*

**Explanation:** This message provides the current decimal value for the specified started task initialization option. The message is issued only for options for which a decimal value is a valid value.

**User response:** No action is required.

---

**HLOS0082I** *parm\_name = parm\_value\_char*

**Explanation:** This message provides the current integer value for the specified started task initialization parameter. This message is issued only for parameters for which an integer value is a valid value.

**User response:** No action is required.

---

**HLOS0083S A value for the initialization parameter '*parm\_name*' must be specified**

**Explanation:** The specified started task initialization parameter is not included in the initialization parameters file, or it has a value that is composed of only blanks. This parameter is required and must have a non-blank value.

**User response:** Ensure that this initialization parameter is in the initialization parameters file and is set to a non-blank value.

---

**HLOS0085W** '*parm\_name*' must have a value from *parm\_min* through *parm\_max*. Parameter defaulted to: *parm\_def*.

**Explanation:** The value that is set for the specified DB2 Analytics Accelerator Loader started task initialization parameter is not within the allowable range of values for this parameter. As a result, the value will be changed to the default value for the parameter.

**User response:** Accept the default value, or specify a value that is within the allowable range of values for this parameter in the initialization options member.

---

**HLOS0101I TCB:** *<tcb\_address>* **Session created.**  
**SESS:** *session\_token-session\_number-session\_type-session\_job\_name-session\_job\_ID-session\_asid-session\_user*

**Explanation:** The DB2 Analytics Accelerator Loader session was created. The session is identified by the information that is listed in this message after "SESS":

- *Session\_token* is an internal session identifier.
- *Session\_number* is a unique session identifier that is generated incrementally for each new session that is created.
- *Session\_type* indicates whether the session is for a batch job (B), an ISPF user (I), the DSNUTILB intercept (U), or the HLOMAINT utility (M).
- *Session\_job\_name* is the name of the job that is associated with the session.
- *Session\_job\_ID* is the identifier for the job that is associated with the session
- *Session\_asid* is the hexadecimal address space identifier for the user type (session type).
- *Session\_user* is the user ID.

**User response:** No action is required.

**HLOS0103I** TCB: <*tcb\_address*> **Session terminated.**  
**SESS:***session\_token-session\_number-session\_type-session\_job\_name-session\_job\_ID-session\_asid-session\_user*

**Explanation:** The DB2 Analytics Accelerator Loader session that was using the specified task control block (TCB) address space terminated. The attributes of this session are listed in this message after "SESS":

- *Session\_token* is an internal session identifier.
- *Session\_number* is a unique session identifier that is generated incrementally for each new session that is created.
- *Session\_type* indicates whether the session is for a batch job (B), an ISPF user (I), the DSNUTILB intercept (U), or the HLOMAINT utility (M).
- *Session\_job\_name* is the name of the job that is associated with the session.
- *Session\_job\_ID* is the identifier for the job that is associated with the session.
- *Session\_asid* is the hexadecimal address space identifier for the user type (session type).
- *Session\_user* is the user ID.

**User response:** No action is required.

**HLOS0200E** TCB: <*tcb\_address*> **DB2 Call Attach Facility request <*caf\_request*> failed,**  
**RC=<*return\_code*>, RSN=<*reason\_code*>.**

**Explanation:** The DB2 Call Attach Facility (CAF) returned the return code and reason code that is included in this message for the specified CAF request.

**User response:** Contact IBM Software Support. Provide Support with the return code and reason code that is included in this message.

**HLOS0201S** TCB: <*tcb\_address*> **A Connect-to-DB2 request was received for *db2\_ssid*, but a connection already exists.**

**Explanation:** A request to connect to the specified DB2 subsystem was received. However, a connection to that subsystem is already established.

**User response:** Contact IBM Software Support.

**HLOS0202E** TCB: <*tcb\_address*> *db2\_error\_msg*

**Explanation:** An error was encountered during an SQL or DB2 instrumentation facility interface (IFI) operation. This message contains the text of the message that the DB2 DSNTIAR message formatting routine issued when the error occurred.

A possible cause is that the started task does not have the proper authorization to perform the operation. The started task requires system administration authority (SYSADM) on all active subsystems in the data sharing group.

**User response:** For more information about the error, see the IBM DB2 messages documentation.

**HLOS0203I** TCB: <*tcb\_address*> **Connection to DB2 was successful. SSID=*db2\_ssid***

**Explanation:** DB2 Analytics Accelerator Loader successfully connected to the specified DB2 subsystem.

**User response:** No action is required.

**HLOS0204I** TCB: <*tcb\_address*> **Disconnection from DB2 was successful. SSID=*db2\_ssid***

**Explanation:** DB2 Analytics Accelerator Loader successfully disconnected from the specified DB2 subsystem.

**User response:** No action is required.

**HLOS0205S** TCB: <*tcb\_address*> **STIMER SET failed. RC=<*return\_code*>. Processing continues.**

**Explanation:** DB2 Analytics Accelerator Loader could not set a timing interval by using the STIMER macro. Processing continues.

**User response:** Contact IBM Software Support.

**HLOS0206S** TCB: <*tcb\_address*> **STIMER CANCEL failed. RC=<*return\_code*>. Processing continues.**

**Explanation:** DB2 Analytics Accelerator Loader could not cancel a timing interval by using the STIMER macro. Processing continues.

**User response:** Contact IBM Software Support.

---

**HLOS0207E** TCB: <tcbl\_address> **DB2 Instrumentation Facility request** <ifi\_request> **failed**, RC=<return\_code>, RSN=<reason\_code>, SSID=<db2\_ssid>.

**Explanation:** The specified request for the DB2 instrumentation facility interface (IFI) failed with the specified return code and reason code on the specified SSID.

**User response:** Contact IBM Software Support. Provide Support with the return code and reason code that is included in this message.

---

**HLOS0208I** TCB: <tcbl\_address> **Session:** <session\_token> - **CANCEL THREAD issued for thread token** thread\_token

**Explanation:** DB2 Analytics Accelerator Loader issued the CANCEL THREAD command for the thread that has the specified thread token value.

**User response:** No action is required.

---

**HLOS0209E** TCB: <tcbl\_address> **Connection to DB2 failed**. SSID=db2\_ssid

**Explanation:** DB2 Analytics Accelerator Loader could not connect to the DB2 subsystem that has the specified SSID.

**User response:** To determine the cause of the connection failure, see the message HLOS0202E in the message log. If you need assistance, contact IBM Software Support.

---

**HLOS0210E** TCB: <tcbl\_address> **Fatal error while processing the DB2 trace record:** place\_marker

**Explanation:** A unrecoverable error occurred while DB2 Analytics Accelerator Loader was processing the DB2 trace record.

**User response:** Contact IBM Software Support.

---

**HLOS0211I** db2\_error\_msg

**Explanation:** The DB2 message formatting service DSNTIAR formatted the messages that follow this one in response to an action that was performed by an SQL or IFI operation.

**User response:** No action is required.

---

**HLOS0212I** TCB: <tcbl\_address>. **Lock data returned for ace token** <ace\_token>.

**Explanation:** The DB2 instrumentation facility (IFI) returned lock data for the specified ace token.

**User response:** No action is required.

---

**HLOS0213I** TCB: <tcbl\_address> **Session:** <session\_token> - **CANCEL THREAD NOBACKOUT was issued for thread token** thread\_token

**Explanation:** DB2 Analytics Accelerator Loader issued the CANCEL THREAD command with the NOBACKOUT option for the thread that has the specified thread token value.

**User response:** No action is required.

---

**HLOS0214E** **Escalated Cancel is not supported for threads executing on a remote DB2 system.**

**Explanation:** The escalated cancel command is supported only for threads that are active on the DB2 system to which you connected. Use the normal DB2 cancel command to terminate threads that are active on other DB2 subsystems that are members of the same data-sharing group.

**User response:** No action is required.

---

**HLOS0215I** TCB: <tcbl\_address> **Session:** <session\_token> - **ESCALATED THREAD CANCEL was issued for thread token** thread\_token

**Explanation:** DB2 Analytics Accelerator Loader performed an escalated cancelation of the thread that has the specified thread token value. An escalated cancelation issues a command through the operator console to terminate the process that holds the thread.

**User response:** No action is required.

---

**HLOS0216E** **Escalated Cancel is not supported for connection type** connection\_type

**Explanation:** The Escalated Cancel command is not supported for the specified connection type.

**User response:** No action is required.

---

**HLOS0217I** **ESCALATED THREAD CANCEL was issued for thread token** thread\_token

**Explanation:** DB2 Analytics Accelerator Loader performed an escalated cancelation of the thread that has the specified thread token value. An escalated cancelation issues a command through the operator console to terminate the process that holds the thread.

**User response:** No action is required.

---

**HLOS0218I** **CANCEL THREAD was not issued because a unit of recovery exists for token** thread\_token

**Explanation:** DB2 Analytics Accelerator Loader did not issue a CANCEL THREAD command for the thread

that has the specified thread token value because the NO BACKOUT option was specified as the cancel type. This option prevents the cancelation from occurring when an outstanding unit-of-recovery exists for a thread.

**User response:** No action is required.

**HLOS0219I CANCEL THREAD was not issued because unit of recovery status is unknown for token *thread\_token***

**Explanation:** DB2 Analytics Accelerator Loader did not issue a CANCEL THREAD command for the thread that has the specified thread token value because the NO BACKOUT option was specified as the cancel type. This option prevents a cancelation from occurring when no unit-of-recovery information is available.

**User response:** No action is required.

**HLOS0220I TCB: <*tcb\_address*> Session: <*session\_token*> - CANCEL THREAD requested for thread token *thread\_token***

**Explanation:** DB2 Analytics Accelerator Loader received a CANCEL THREAD request for the thread that has the specified thread token value.

**User response:** No action is required.

**HLOS0221E TCB: <*tcb\_address*> Session: <*session\_token*> - CANCEL THREAD request failed security check for thread token *thread\_token***

**Explanation:** DB2 Analytics Accelerator Loader received a CANCEL THREAD request for the thread that has the specified thread token value. However, the request failed because it did not pass security-exit checking.

**User response:** No action is required.

**HLOS0222E TCB: <*tcb\_address*> Session: <*session\_token*> - pre-cancel exit denied cancel request.**

**Explanation:** DB2 Analytics Accelerator Loader received a CANCEL THREAD request for the thread that has the specified thread token value. However, the request failed because it did not pass pre-cancel exit checking.

**User response:** No action is required.

**HLOS0223E TCB: <*tcb\_address*> Session: <*session\_token*> - ESCALATED CANCEL not allowed by startup parm**

**Explanation:** An escalated cancelation cannot be performed because a started task initialization option is specified that does not allow this type of cancelation.

**User response:** No action is required.

**HLOS0224E TCB: <*tcb\_address*> Session: <*session\_token*> - CANCEL THREAD suppressed for HLO token *thread\_token***

**Explanation:** The DB2 CANCEL THREAD command and the escalated cancel command (z/OS operator Cancel command) is not supported for the current DB2 Analytics Accelerator Loader started task.

**User response:** No action is required.

**HLOS0225E CANCEL THREAD request failed security check for thread token *thread\_token***

**Explanation:** DB2 Analytics Accelerator Loader received a CANCEL THREAD request for the thread that has the specified thread token value. However, the request failed because it did not pass security-exit checking.

**User response:** No action is required.

**HLOS0226E CANCEL THREAD request was denied by the pre-cancel exit for token *thread\_token***

**Explanation:** DB2 Analytics Accelerator Loader received a CANCEL THREAD request for the thread that has the specified thread token value. However, the request failed because it did not pass pre-cancel exit checking.

**User response:** No action is required.

**HLOS0227E TCB: <*tcb\_address*> Session: <*session\_token*> Start trace failed for instrumentation facility call**

**Explanation:** DB2 Analytics Accelerator Loader attempted to start the DB2 monitor trace facility prior to a call to the instrumentation facility interface. However, this attempt failed.

A possible cause is that the started task does not have the proper authorization to perform the operation. The started task requires system administration authority (SYSADM) on all active subsystems in the data sharing group.

**User response:** Contact IBM Software Support.

**HLOS0228E TCB: <*tcb\_address*> Session: <*session\_token*> Start trace failed for get\_threads request**

**Explanation:** DB2 Analytics Accelerator Loader attempted to start the DB2 monitor trace facility for a get\_threads request. However, this attempt failed.

**User response:** Contact IBM Software Support.

---

**HLOS0229E** TCB: <tcbl\_address> Session: <session\_token> **Start trace failed for get\_thread\_detail request**

**Explanation:** DB2 Analytics Accelerator Loader attempted to start the DB2 monitor trace facility for a get\_thread\_detail request, but the attempt failed.

**User response:** Contact IBM Software Support.

---

**HLOS0230E** DB2 CAF request <db2\_ssid>, <return\_code>, <reason\_code>.

**Explanation:** The DB2 Call Attach Facility (CAF) returned the return code and reason code that is included in this message for the specified CAF request.

**User response:** Contact IBM Software Support. Provide Support with the return code and reason code that is included in this message.

---

**HLOS0231E** TCB: <tcbl\_address> Session: <session\_token> **Start trace failed for get\_objects\_referenced request**

**Explanation:** DB2 Analytics Accelerator Loader attempted to start the DB2 monitor trace facility for a get\_objects\_referenced request. However, this attempt failed.

**User response:** Contact IBM Software Support.

---

**HLOS0232E** TCB: <tcbl\_address> Session: <session\_token> **-IP Address conversion error. RC=<return\_code>, RSN=<reason\_code>, \*<message\_continuation\_number>\***.

**Explanation:** An internal error occurred during the conversion of a formatted IP address to a binary representation.

**User response:** Contact IBM Software Support. Provide Support with the full text of this message.

---

**HLOS0233E** TCB: <tcbl\_address> Session: <session\_token> **-IP Address conversion error. RC=<return\_code>, RSN=<reason\_code>, \*<message\_continuation\_number>\***.

**Explanation:** An internal error occurred during the conversion of a formatted IP address to a binary representation.

**User response:** Contact IBM Software Support. Provide Support with the full text of this message.

---

**HLOS0234E** \*<message\_continuation\_number>\* <ip\_address>.

**Explanation:** DB2 Analytics Accelerator Loader failed to convert an IP address from an external text format to an internal binary format. The message HLOS0232E or HLOS0233E, which precedes this message, provides the return code and reason code for this error.

**User response:** Contact IBM Software Support.

---

**HLOS0235W** TCB: tcbl\_address. **Authorization check for DB2 system db2\_ssid failed.**

**Explanation:** The started task authorization id has not been granted the minimum necessary authorization on the specified DB2 system.

**User response:** Grant the required authorization to the started task authorization id. See the user's guide for information about authorization requirements.

---

**HLOS0236E** TCB: tcbl\_address. **Authorization for primary DB2 system db2\_ssid is insufficient.**

**Explanation:** The started task authorization id has not been granted the minimum necessary authorization on the primary DB2 system.

**User response:** Grant the required authorization to the started task authorization id. See the user's guide for information about authorization requirements.

---

**HLOS0237I** TCB: <tcbl\_address>. **Messages from stored procedure <stored\_procedure\_name>.**

**Explanation:** A call to the named stored procedure returned one or more messages. See message HLOS0238I for the returned message text.

**User response:** For more information about the returned messages, see the *DB2 Analytics Accelerator for z/OS Stored Procedures* documentation.

---

**HLOS0238I** TCB: <tcbl\_address> **MSGTEXT: <message\_text>.**

**Explanation:** A stored procedure returned the message text after successful or unsuccessful completion.

**User response:** For more information about the returned messages, see the *DB2 Analytics Accelerator for z/OS Stored Procedures* documentation.

---

**HLOS0300E** TCB: <tcbl\_address> **IEAVRLS Pause Release failed, RC=<return\_code>.**

**Explanation:** The IEAVRLS Pause Release Service failed with the specified return code.

**User response:** Contact IBM Software Support.

---

## HLOS0301E • HLOS0311W

Provide Support with the return code from this message.

---

**HLOS0301E** TCB:<*tcb\_address*>.  
Session=<*session\_token*>. Unable to return result.

**Explanation:** The specified DB2 Analytics Accelerator Loader session could not return the results of an operation to the user.

**User response:** For more information about this error, see the other messages that were issued for the specified task control block (TCB) and session. If you need assistance, contact IBM Software Support.

---

**HLOS0302E** TCB: <*tcb\_address*> HLOSRSLT bad parms, Session: <*session\_token*>, FBUF=*fbuf\_address*, UBUF=*ubuf\_address*

**Explanation:** An internal error occurred. DB2 Analytics Accelerator Loader invoked the HLOSRSLT results processor by using an invalid FBUF or UBUF address pointer.

**User response:** Contact IBM Software Support.

---

**HLOS0303I** TCB: <*tcb\_address*> Failure to obtain ALET, Session:*session\_token*

**Explanation:** An internal error occurred. DB2 Analytics Accelerator Loader could not obtain the ALET token to facilitate cross-memory addressing.

**User response:** Contact IBM Software Support.

---

**HLOS0304I** TCB: <*tcb\_address*> STOKEN release failure

**Explanation:** An internal error occurred. DB2 Analytics Accelerator Loader could not release the STOKEN token, which is involved in cross-memory addressing.

**User response:** Contact IBM Software Support.

---

**HLOS0305S** TCB: <*tcb\_address*> Session failed.  
SESS:*session\_token csect\_name/offset\_value/variable\_value/variable\_name*

**Explanation:** An internal error occurred. DB2 Analytics Accelerator Loader failed to validate a cross-memory address. This failure probably occurred because a client address space terminated abnormally.

**User response:** Contact IBM Software Support.

---

**HLOS0306E** TCB: <*tcb\_address*> SQL Error occurred.  
Module: *module\_name offset\_value*.

**Explanation:** An SQL error occurred.

**User response:** Review the information in the

HLOS0202E messages that follow this one for detailed information about the error. Also see the DB2 messages documentation to determine the reason for the error. If you need assistance, contact IBM Software Support. Provide Support with the TCB address and module name that is included in this message.

---

**HLOS0307E** TCB: <*tcb\_address*> SRB Processing returned, RC=<*return\_code*>, RSN=<*reason\_code*>, RSN1=<*extended\_reason\_code*>.

**Explanation:** SRB processing returned the specified error codes.

**User response:** Contact IBM Software Support. Provide the support representative with the return code from this message.

---

**HLOS0308W** TCB: <*tcb\_address*> Unable to determine the index space name for DBID: *database\_id* OBID: *object\_id*

**Explanation:** DB2 Analytics Accelerator Loader could not determine the index space name for the DBID and OBID that are identified in this message.

**User response:** Contact IBM Software Support.

---

**HLOS0309W** TCB: <*tcb\_address*> Unable to determine the table space name for DBID: *database\_id* OBID: *object\_id*

**Explanation:** DB2 Analytics Accelerator Loader could not determine the table space name for the DBID and OBID that are identified in this message.

**User response:** Contact IBM Software Support.

---

**HLOS0310W** TCB: <*tcb\_address*> Unable to access HLOLOG table

**Explanation:** The HLOLOG table was not found. Therefore, DB2 Analytics Accelerator Loader cannot write messages to this table. The table should have been created on the primary subsystem during customization.

**User response:** Review the DB2 Analytics Accelerator Loader customization procedures. Make sure that you created the HLOLOG table by using the DDL member that Tools Customizer created for your primary subsystem. Also make sure that the DB2\_SSID option in the your *product\_id*OPTS member specifies the DB2 subsystem where the HLOLOG table is located.

---

**HLOS0311W** TCB: <*tcb\_address*> Unable to access HLOAUDIT table

**Explanation:** The HLOAUDIT table was not found. Therefore, the product cannot write audit information to this table. The table should have been created on the



primary subsystem during customization.

**User response:** Review the product customization procedures. Make sure that you created the HLOAUDIT table by using the member that Tools Customizer created for your primary subsystem. Also make sure that the DB2\_SSID option in the HLOOPTS member specifies the DB2 subsystem where the HLOAUDIT table is located.

---

#### HLOS0400S Task Manager initialization failed

**Explanation:** The DB2 Analytics Accelerator Loader task management component failed during started task initialization. Processing will terminate.

**User response:** For more information about this error, see the other messages that were issued just prior to this message. If you need assistance with resolving this problem, contact IBM Software Support.

---

#### HLOS0401S Component ID=*component\_id* Component not found in the MEPL table

**Explanation:** An internal error occurred.

**User response:** Contact IBM Software Support.

---

#### HLOS0402S Attach failed. Program=*program\_name*, RC=*return\_code*, RSN=*reason\_code*.

**Explanation:** An internal error occurred.

**User response:** Contact IBM Software Support. Provide Support with the complete text of this message.

---

#### HLOS0403W TCB: *tcb\_address*, Detach failed. RC=*return\_code*, RSN=*reason\_code*.

**Explanation:** An internal error occurred.

**User response:** Contact IBM Software Support. Provide Support with the complete text of this message.

---

#### HLOS0404S TCB: *tcb\_address* Subtask failed. Termination ECB: *event\_control\_block*.

**Explanation:** An internal error occurred.

**User response:** Contact IBM Software Support. Provide Support with the complete text of this message.

---

#### HLOS0405S TCB: *tcb\_address* Subtask unexpectedly posted init ECB. Initialization ECB: *event\_control\_block*.

**Explanation:** An internal error occurred that is related to the specified event control block (ECB).

**User response:** Contact IBM Software Support.

Provide Support with the complete text of this message.

---

#### HLOS0406S TCB: *tcb\_address* Subtask failed during initialization. Termination ECB: *event\_control\_block*.

**Explanation:** An internal error occurred that is related to the specified event control block (ECB).

**User response:** Contact IBM Software Support. Provide Support with the complete text of this message.

---

#### HLOS0407W Task manager received an unexpected command code. Command code=*command\_code*.

**Explanation:** An internal error occurred.

**User response:** Contact IBM Software Support. Provide Support with the complete text of this message.

---

#### HLOS0408S No DB2 task started. Processing will be terminated.

**Explanation:** An internal error occurred.

**User response:** Contact IBM Software Support.

---

#### HLOS0409E Cannot connect to the DB2 subsystem *db2\_subsystem* as required. Processing will be terminated.

**Explanation:** DB2 Analytics Accelerator Loader could not connect to the DB2 subsystem that is specified in the initialization options member because that subsystem is not active.

**User response:** Ensure that the DB2 subsystem that is specified in the initialization options member is started and available for use by DB2 Analytics Accelerator Loader.

---

#### HLOS0500I TCB: *tcb\_address* Session: *session\_token* SSID: *db2\_ssid* BLOCKER ID: *thread\_blocker\_id* \**message\_continuation\_number*\*

**Explanation:** A thread-blocking operation that has the specified blocker ID has been initiated. The messages that follow this one identify the operations and DB2 object status changes.

**User response:** No action is required.

---

#### HLOS0501I \**message\_continuation\_number*\* (*cancel\_specification\_number*) DB: *database\_name* SP: *space\_name* PART: *partition\_number* OLD: *old\_status* NEW: *new\_status*

**Explanation:** DB2 Analytics Accelerator Loader changed the status of the specified DB2 object while performing a thread-blocking operation. This message provides the old status and the new status for the object. The message HLOS0500I provides the blocker ID for the thread-blocking operation.

**User response:** No action is required.

**HLOS0502I** *\*message\_continuation\_number\**  
(*cancel\_specification\_number*) **DB:**  
*database\_name* **SP:** *space\_name* **PART:**  
*partition\_number*

**Explanation:** DB2 Analytics Accelerator Loader failed to perform a thread-blocking operation on the specified DB2 object because threads were already being blocked on that object. The message HLOS0503I provides the blocker ID for the thread-blocking operation.

**User response:** No action is required.

**HLOS0503W** *\*message\_continuation\_number\** **Object**  
already blocked by blocker ID *blocker\_id*

**Explanation:** DB2 Analytics Accelerator Loader failed to perform the thread-blocking operation that has the blocker ID specified in the message HLOS0500I and that was attempting to block threads on the DB2 object identified in the message HLOS0502I. Threads on that object were already being blocked by a previous thread-blocking operation that has the blocker ID specified in this message. The processing of the current thread-blocking operation continues because the ON\_FAILURE (CONTINUE) parameter is specified for the job step.

**User response:** No action is required.

**HLOS0504E** *\*message\_continuation\_number\** **The**  
blocker ID specified was not found for  
delete.

**Explanation:** An attempt was made to delete information for the specified thread-blocker ID from the DB2 Analytics Accelerator Loader object status table (HLOOBJSTAT). This attempt failed because the table contained no information for that blocker ID.

**User response:** Make sure that the blocker ID that is specified in the PARM in the EXEC statement of the thread-blocker job step is spelled correctly.

**HLOS0505E** *\*message\_continuation\_number\** **Thread**  
blocker ID is already in use.

**Explanation:** DB2 Analytics Accelerator Loader failed to perform a thread-blocking operation on a DB2 object because the blocker ID is already in use. The blocker ID is specified in the message HLOS0500I.

**User response:** Specify a unique blocker ID.

**HLOS0506W** *\*message\_continuation\_number\**  
(*cancel\_specification\_number*) **No objects**  
could be resolved for cancel  
specification.

**Explanation:** An attempt to resolve the database and space objects for a thread-blocking action under this cancel specification failed. The objects were not found in the DB2 catalog.

**User response:** Make sure that the object names that are specified in the cancel specification are spelled correctly. If any wildcard patterns are specified, make sure that they will resolve to the correct DB2 objects.

**HLOS0507I** *\*message\_continuation\_number\** **Blocker ID**  
deleted.

**Explanation:** The specified blocker ID was deleted from the object status table.

**User response:** No action is required.

**HLOS0508I** *\*message\_continuation\_number\** **No objects**  
to reset for this blocker ID.

**Explanation:** DB2 Analytics Accelerator Loader failed to find any rows in the object status table (ABOBJSTAT) that matched the blocker ID.

**User response:** No action is required.

**HLOS0509I** *\*message\_continuation\_number\** **Reset**  
status processing initiated.

**Explanation:** DB2 Analytics Accelerator Loader initiated processing to reset the object status in response to a previous error condition.

**User response:** No action is required.

**HLOS0510I** *\*message\_continuation\_number\** **Thread**  
blocker operation is  
*thread\_blocker\_operation*

**Explanation:** This message identifies the current thread-blocking operation.

**User response:** No action is required.

**HLOS0511E** *\*message\_continuation\_number\**  
(*cancel\_specification\_number*) **No objects**  
could be resolved for cancel  
specification.

**Explanation:** An attempt to resolve the database and space objects for a thread-blocking action under this cancel specification failed. The objects were not found in the DB2 catalog. Processing is terminated because the ON\_FAILURE (TERMINATE) parameter was specified for the job step.

**User response:** Make sure that the object names that

are specified in the cancel specification are spelled correctly. If any wildcard patterns are specified, make sure that they will resolve to the correct DB2 objects.

---

**HLOS0512E** *\*message\_continuation\_number\** **Object already blocked by blocker ID** *blocker\_id*

**Explanation:** DB2 Analytics Accelerator Loader failed to perform the thread-blocking operation that has the blocker ID specified in the HLOS0500I message and that was attempting to block threads on the DB2 object identified in the HLOS0502I message. Threads on that object were already being blocked by a previous thread-blocking operation. This message presents the blocker ID of the previous thread-blocking operation. The processing of the current thread-blocking operation was terminated because the ON\_FAILURE (TERMINATE) parameter is specified for the job step.

**User response:** Determine if the current thread-blocking operation is in conflict with the previous thread-blocking operation. If a conflict exists, wait until an ALLOW\_THREADS or DELETE\_BLOCKERID job step ends the previous thread-blocking operation. If a conflict does not exist, change the ON\_FAILURE parameter value to CONTINUE for the current thread-blocking operation and then resubmit the job.

---

**HLOS0513I** *\*message\_continuation\_number\** (cancel\_specification\_number) **DB:** *database\_name* **SP:** *space\_name* **PART:** *partition\_number* **Object not found**

**Explanation:** DB2 Analytics Accelerator Loader could not change the status of the specified DB2 object because the object no longer exists. The message HLOS0500I provides the blocker ID for the thread-blocking operation.

**User response:** No action is required.

---

**HLOS0514I** *\*message\_continuation\_number\** (cancel\_specification\_number) **DB:** *database\_name* **SP:** *space\_name* **PART:** *partition\_number* **OLD:** *old\_status*

**Explanation:** DB2 Analytics Accelerator Loader did not change the status of the specified DB2 object while performing a thread-blocking operation because the object was already in the desired state. The message HLOS0500I provides the blocker ID for the thread-blocking operation.

**User response:** No action is required.

---

**HLOS0515I** *\*message\_continuation\_number\** **Thread blocker is suppressed for DB2 system object** *database\_name*.

**Explanation:** The thread blocker operation is suppressed for the following DB2 system databases:

DSNDB01, DSNDB06, and DSNDB07.

**User response:** No action is required.

---

**HLOS0516W** *\*message\_continuation\_number\** (cancel\_specification\_number) **DB:** *database\_name* **SP:** *space\_name* **PART:** *partition\_number* **Partition number is invalid.**

**Explanation:** The thread blocker operation detected an invalid partition number specification.

**User response:** No action is required.

---

**HLOS0517E** *\*message\_continuation\_number\** (cancel\_specification\_number) **DB:** *database\_name* **SP:** *space\_name* **PART:** *partition\_number* **Partition number is invalid.**

**Explanation:** The thread blocker operation detected an invalid partition number specification on a DB2 Version 7 system. The thread blocker operation cannot continue.

**User response:** Correct the partition specification and rerun the job.

---

**HLOS0518E** *\*message\_continuation\_number\** (cancel\_specification\_number) **DB:** *database\_name* **SP:** *space\_name* **PART:** *partition\_number* **Partition number is invalid.**

**Explanation:** The thread blocker operation detected a partition number specified for a non-partitioned space. The thread blocker operation cannot continue.

**User response:** Correct the partition specification and rerun the job.

---

**HLOS0519I** **Thread blocker is suppressed for DB2 Analytics Accelerator Loader configuration object** *DB: database\_name* *SP: space\_name*.

**Explanation:** The thread blocker operation is suppressed for the DB2 Analytics Accelerator Loader configuration database.

**User response:** No action is required.

---

**HLOS0520E** *\*message\_continuation\_number\** **Userid** *user\_id* **denied access to blocker operation by security exit.**

**Explanation:** The security exit for the DB2 Analytics Accelerator Loader configuration prevented the specified user from performing a thread-blocker operation.

**User response:** To perform a thread-blocker operation,

the user must be provided with the proper authority under the security exit.

---

**HLOS0521I Thread blocker is suppressed for the DB2 object with type TEMP or WORKFILE: *database\_name***

**Explanation:** Because a database that is defined as WORKFILE or TEMP cannot be started in RO or UT status, thread-blocker operations must not be attempted for such an object. Therefore, the thread-blocker operation is suppressed for objects that are in a database with a value of "W" or "T" in the SYSIBM.SYSDATABASE TYPE column.

**User response:** No action is required.

---

**HLOS0600I DSNUTILB interception for DB2 SSID=*DB2\_ssid* is enabled.**

**Explanation:** DSNUTILB interception services have been enabled for the specified DB2 subsystem.

**User response:** No action is required.

---

**HLOS0601I DSNUTILB interception for DB2 SSID=*DB2\_ssid* is disabled.**

**Explanation:** DSNUTILB interception services have been disabled for the specified DB2 subsystem.

**User response:** No action is required.

---

**HLOS0602W DSNUTILB interception for DB2 SSID=*DB2\_ssid* not enabled. Interception being performed by HLOID=*product\_id*.**

**Explanation:** DSNUTILB interception services were not enabled for the DB2 subsystem that is specified in this message because another DB2 Analytics Accelerator Loader system was already providing interception services for it.

**User response:** Verify that the list of DB2 subsystems in the DSNUTILB interception policy is correct. Only one DB2 Analytics Accelerator Loader system can provide interception services for a specific DB2 subsystem at a time.

---

**HLOS0603W DSNUTILB interception for DB2 SSID=*DB2\_ssid* not enabled, product cannot connect to the subsystem**

**Explanation:** DSNUTILB interception services were not enabled for the DB2 subsystem that is indicated in this message because DB2 Analytics Accelerator Loader cannot connect to that DB2 subsystem.

**User response:** Verify that the list of DB2 subsystems that is specified in the DSNUTILB intercept policy is correct. Only one DB2 Analytics Accelerator Loader system can provide interception services for a specific

DB2 subsystem at one time. DB2 Analytics Accelerator Loader must have a properly bound plan on the DB2 subsystem for which it will provide interception services.

---

**HLOS0604W DSNUTILB interception for DB2 SSID=*DB2\_ssid* not enabled, DB2 subsystem is not active.**

**Explanation:** DSNUTILB interception services were not enabled for the DB2 subsystem that is indicated in this message because the subsystem is inactive.

**User response:** Verify that the list of DB2 subsystems specified in the DSNUTILB interception policy is correct. Only one DB2 Analytics Accelerator Loader system can provide interception services for a specific DB2 subsystem at a time.

---

**HLOS0605W DSNUTILB interception for *db2\_ssid* not enabled, insufficient authority.**

**Explanation:** DSNUTILB interception services were not enabled for the DB2 subsystem that is indicated in this message because DB2 Analytics Accelerator Loader has insufficient authority on that DB2 subsystem.

**User response:** Grant the required authorization to the started task authorization id. See the user's guide for information about authorization requirements.

---

**HLOS0608W TCB: *< tcb\_address >*: Count of DB2 systems exceeds 256. Startup detection disabled for SSID *< db2\_ssid >*.**

**Explanation:** The DB2 Analytics Accelerator Loader started task detected that the number of DB2 subsystems referenced by the policy exceeds the maximum of 256.

**User response:** Refine the policy to reduce the number of referenced DB2 subsystems.

---

**HLOS0700I TCB *tcb\_address* SESSION REPORT *message\_continuation\_number***

**Explanation:** A session report has been initiated. The messages that follow represent details about currently active sessions.

**User response:** No action is required.

---

**HLOS0701I *message\_continuation\_number* SESS: *Session\_token* **Session\_number** *Session\_type* *Session\_job\_name* *Session\_job\_ID* *Session\_asid* *Session\_user***

**Explanation:** Details of a product session. The session is identified by the information that is displayed in this message after SESS:

- *Session\_token* is an internal session identifier.

- *Session\_number* is a unique session identifier that is generated incrementally for each new session that is created.
- *Session\_type* indicates whether the session is for a batch job (B), an ISPF user (I), the DSNUTILB intercept (U), or the HLOMAINT utility (M).
- *Session\_job\_name* is the name of the job that is associated with the session.
- *Session\_job\_ID* is the identifier for the job that is associated with the session.
- *Session\_asid* is the hexadecimal address space identifier for the user type (session type).
- *Session\_user* is the user ID.

**User response:** No action is required.

---

**HLOS0702I** *message\_continuation\_number* STATUS:  
*session\_status*

**Explanation:** Session status.

**User response:** No action is required.

---

**HLOS0703I** *message\_continuation\_number* STARTED:  
*session\_start\_time*

**Explanation:** Date and time when session was started.

**User response:** No action is required.

---

**HLOS0704I** *message\_continuation\_number* No active  
sessions found

**Explanation:** No active sessions were found.

**User response:** No action is required.

---

**HLOS0804W** The trace table is too small. Tracing will  
be disabled. Required minimum size=  
*trace\_table\_minimum\_size*, Requested size=  
*trace\_table\_requested\_size*

**Explanation:** The size of the trace table is too small to perform internal tracing. Tracing will be disabled, but product operations will continue.

**User response:** Increase the size of the trace table to at least the minimum size that is indicated in this message.

---

**HLOS0805W** The trace table entry is larger than the  
trace table. Trace table size=  
*trace\_table\_size*, Trace entry size=  
*trace\_table\_entry\_size*

**Explanation:** The size of the trace information entry is larger than the size of the trace table. The entry cannot be recorded in the trace table.

**User response:** Increase the size of the trace table. If the problem persists, contact IBM Software Support.

---

**HLOS0806I** The *user\_exit\_type* User Exit  
*user\_exit\_name* is now in use.

**Explanation:** The specified user exit is in use.

**User response:** No action is required.

---

**HLOS0807S** A severe error occurred while  
attempting to load the *exit\_type* user exit  
*exit\_name*

**Explanation:** DB2 Analytics Accelerator Loader started task encountered a severe error when attempting to load the specified user exit.

**User response:** Ensure that the following requirements are met: 1) the exit is properly assembled and linked, 2) the exit resides in a STEPLIB-concatenated load library that is accessible to the DB2 Analytics Accelerator Loader started task, and 3) the exit name is correctly specified in the started task initialization options member.

---

**HLOS0808S** A severe error occurred within *exit\_type*  
user exit *exit\_name*, FUNC=*exit\_function*

**Explanation:** The DB2 Analytics Accelerator Loader started task encountered a severe error within the specified user exit.

**User response:** An MVS SVC dump has been produced to help you diagnose the problem with the user exit. After you correct the problem, assemble and link the exit. Then restart DB2 Analytics Accelerator Loader.

---

**HLOS0809S** A severe internal error occurred  
preparing to drive the *exit\_type* user exit  
*exit\_name*, FUNC=*exit\_function*

**Explanation:** The DB2 Analytics Accelerator Loader started task encountered a severe internal error while preparing to run the specified user exit.

**User response:** Contact IBM Software Support.

---

**HLOS0810I** The *user\_exit\_type* User Exit  
*user\_exit\_name* is now inactive.

**Explanation:** The specified user exit is no longer active.

**User response:** No action is required.

---

**HLOS0811S** The <*user\_exit\_type*> user exit  
<*user\_exit\_name*> FUNC=<*user\_exit\_func*>  
RC=12. The started task is terminating.

**Explanation:** The DB2 Analytics Accelerator Loader started task received the return code RC=12 from the specified user exit. As a result, the started task is terminating.

**User response:** Identify and correct the problem that caused the user exit to issue RC=12. Then restart the DB2 Analytics Accelerator Loader started task.

---

**HLOS0812I** MODULE LEVEL DATE TIME EPA  
RREPA CC F1 F2 F3 SEQ

**Explanation:** This message displays the fields in the Module Entry Point List (MEPL) control block.

**User response:** No action is required.

---

**HLOS0813I** <module\_name>, <maintenance\_level>,  
<assembly\_date>, <assembly\_time>,  
<entry\_point\_address>,  
<rr\_entry\_point\_address>,  
<component\_code>, <flag\_byte\_1>,  
<flag\_byte\_2>, <flag\_byte\_3>,  
<sequence\_number>.

**Explanation:** This message displays the data in the fields of the Module Entry Point List (MEPL) control block.

**User response:** No action is required.

---

**HLOS0814I** Command issued: *command\_text*

**Explanation:** This message identifies the DB2 Analytics Accelerator Loader operator command that was issued from the z/OS console.

**User response:** No action is required.

---

**HLOS0815E** Unrecognized command

**Explanation:** An unknown operator command was issued to the DB2 Analytics Accelerator Loader started task.

**User response:** Specify a valid DB2 Analytics Accelerator Loader command.

---

**HLOS0816E** Invalid keyword provided for command:  
*command\_name*

**Explanation:** An invalid keyword was provided for the DB2 Analytics Accelerator Loader command that is specified in this message.

**User response:** Specify a valid keyword for the command. For the correct syntax, see the DB2 Analytics Accelerator Loader documentation.

---

**HLOS0817I** *command\_scope* DSNUTILB intercept  
status is: *dsnutilb\_intercept\_status*

**Explanation:** This message indicates either the local DSNUTILB intercept status for the started task or the global DSNUTILB intercept status for the entire z/OS image.

**User response:** No action is required.

---

**HLOS0818I** *help\_text*

**Explanation:** This message presents the output from the HELP console command that was issued for the DB2 Analytics Accelerator Loader started task. This command lists all console commands that are supported for the started task.

**User response:** No action is required.

---

**HLOS0819E** Trace table size is zero. Trace table display is not possible.

**Explanation:** A SNAP of the DB2 Analytics Accelerator Loader trace table was requested, but no trace table exists. The trace table does not exist because the trace table size option is set to zero. Therefore, the trace data cannot be displayed.

**User response:** If you want to be able to record DB2 Analytics Accelerator Loader internal trace data, set the trace table size to a non-zero value in the started task initialization options member.

---

**HLOS0820W** A display of the trace table is already in progress.

**Explanation:** A SNAP of the DB2 Analytics Accelerator Loader trace table is already in progress. Consequently, this additional request is ignored.

**User response:** If you want to display the DB2 Analytics Accelerator Loader internal trace table again, wait for the current display request to complete.

---

**HLOS0821I** Trace table display is complete.

**Explanation:** The requested display of the DB2 Analytics Accelerator Loader internal trace table has completed.

**User response:** No action is required.

---

**HLOS0822I** DB2SSID=*db2\_ssid* DB2VER=*db2\_version*  
HLOID=*configuration\_id* DSNUTILB  
interception is  
*DSNUTILB\_interception\_status*

**Explanation:** This message presents the DSNUTILB intercept status for the specified DB2 subsystem.

**User response:** No action is required.

---

**HLOS0823E** Address contains invalid hex digits

**Explanation:** An invalid address was specified in the console command. The address contained invalid characters. An address must be an 8-digit hexadecimal number that is composed of only the characters 0 through 9 and A through F.

**User response:** Specify a valid hexadecimal address for the command.

---

**HLOS0824E Address is not for an active session**

**Explanation:** The address that was specified in the TERMINATE SESSION console command does not reference an active session. The session might have already terminated, or the address might have been entered incorrectly.

**User response:** Verify that the session address was entered correctly. If the session address was incorrect, reissue the TERMINATE SESSION command with a valid session address. If the address was correct, the session already terminated and you do not need to take further action.

---

**HLOS0830I DSNUTILB Intercept Policy:**

**Explanation:** This message introduces the DSNUTILB intercept policy. The policy details are presented in the messages that follow this one.

**User response:** No action is required.

---

**HLOS0831I DB2 SSID: *db2\_ssid* ACTION: *action* | ACTION: VRUPDATE - SUBMIT\_FROM\_SERVER**

**Explanation:** This message identifies the section of the DSNUTILB intercept policy that is for the specified DB2 subsystem and defined ACTION to perform.

If SUBMIT\_FROM\_SERVER="NO" or is omitted from the policy, the message HLOS0831I states "HLOS0831I DB2 SSID: *db2\_ssid* ACTION: *action*."

If SUBMIT\_FROM\_SERVER="YES" is specified in the policy, the message HLOS0831I states "HLOS0831I DB2 SSID: *db2\_ssid* ACTION: VRUPDATE - SUBMIT\_FROM\_SERVER."

**User response:** No action is required.

---

**HLOS0832I Rule type: *rule\_type***

**Explanation:** This message identifies an INCLUDE or EXCLUDE rule in the DSNUTILB intercept policy.

**User response:** No action is required.

---

**HLOS0833I *rule\_number delimiter rule\_element\_type delimiter rule\_element\_data***

**Explanation:** This message presents a RULE element that is specified in the DSNUTILB intercept policy.

**User response:** No action is required.

---

**HLOS0834I DSNUTILB intercept is inactive.**

**Explanation:** The command was not processed because the DSNUTILB intercept was turned off in the initialization options.

**User response:** No action is required.

---

**HLOS0835I Active PRACTICE: *practice\_name***

**Explanation:** This message indicates the name of the active PRACTICE of the DSNUTILB intercept policy.

**User response:** No action is required.

---

**HLOS0836I DB2 Analytics Accelerator Loader started task practice report**

**Explanation:** This message presents the output from the LIST PRACTICE or DISPLAY PRACTICE console command that was issued for the DB2 Analytics Accelerator Loader started task.

**User response:** No action is required.

---

**HLOS0840E TCB: *<tcb\_address>*. Error on INSERT to table SYSAUTO.UTILITYRUNS\_HISTORY.**

**Explanation:** ACTION=AUTO\_DIRECTOR was specified in the DB2 Analytics Accelerator Loader policy, but the product encountered an error while attempting to insert a row into the utility execution history table.

**User response:** See additional formatted SQL error messages in the DB2 Analytics Accelerator Loader SYSPRINT.

---

**HLOS0841W TCB: *<tcb\_address>*. DB2 Autonomics Director collection disabled. BBY\$NMIC bad offset to data.**

**Explanation:** The module BBY\$NMIC that was found in the DB2 Analytics Accelerator Loader started task contains an offset to the data structure that does not point to a valid version. DB2 Autonomics Director utility history collection is disabled.

**User response:** Contact IBM Software Support.

---

**HLOS0898D DEBUG: Field: *field\_name* Value: *field\_value***

**Explanation:** DB2 Analytics Accelerator Loader could not connect to the DB2 subsystem that is specified in the initialization options member because that subsystem is not active.

**User response:** Ensure that the DB2 subsystem that is specified in the initialization options member is started and available for use by DB2 Analytics Accelerator Loader.

---

**HLOS0899D DEBUG: P Len: *plan\_length* P Name: *plan\_name* Q Len: *qual\_length* N Len: *name\_length* IN1: *type\_1* IN2: *type\_2* Flag: *flag***

**Explanation:** DB2 Analytics Accelerator Loader could not connect to the DB2 subsystem that is specified in

the initialization options member because that subsystem is not active.

**User response:** Ensure that the DB2 subsystem that is specified in the initialization options member is started and available for use by DB2 Analytics Accelerator Loader.

---

**HLOS0900E The product is not APF-authorized and is terminating.**

**Explanation:** The load library for the product started task is not APF-authorized, as required. Consequently, the product is terminating.

**User response:** APF-authorize the load library for the started task, and then start the product again.

---

**HLOS0901S RVT locate or allocate operation failed.**

**Explanation:** The product could not locate or allocate its RVT control block.

**User response:** Contact IBM Software Support.

---

**HLOS0902S DB2 Analytics Accelerator Loader started task ESTAE entered, S<system\_completion\_code>, U<user\_completion\_code>.**

**Explanation:** The main task of the DB2 Analytics Accelerator Loader started task encountered an error. A dump has been generated.

**User response:** Review the dump data to diagnose and resolve the problem. If you need assistance, contact IBM Software Support.

---

**HLOS0903S ESTAE processing completed**

**Explanation:** DB2 Analytics Accelerator Loader finished generating a dump for the error that was encountered by the main task of the started task.

**User response:** Review the dump data to diagnose the problem. If you need assistance, contact IBM Software Support.

---

**HLOS0904S Started task subtask ESTAE entered, S<system\_completion\_code>, U<user\_completion\_code>.**

**Explanation:** A subtask of the DB2 Analytics Accelerator Loader started task encountered an error. A dump has been generated.

**User response:** Review the dump data to diagnose and resolve the problem. If you need assistance, contact IBM Software Support.

---

**HLOS0905S User exit for the started task encountered an error. A dump was created. System RC=<system\_completion\_code>, user RC=<user\_completion\_code>.**

**Explanation:** A security exit, pre-cancel exit, or post-cancel exit that you specified for the DB2 Analytics Accelerator Loader started task encountered an error when it ran. A dump has been generated for diagnostic use.

**User response:** Review the dump data to resolve the problem with the user exit. The names of all user exits are specified in the started task initialization options member. If you need assistance, contact IBM Software Support.

---

**HLOS0906S SVC removal failed**

**Explanation:** DB2 Analytics Accelerator Loader could not remove its supervisor call (SVC) when the started task stopped.

**User response:** Contact IBM Software Support.

---

**HLOS0907S HLOGMODL Load Failed for MEPL=*mepl\_name*.**

**Explanation:** An internal error occurred during the initialization of the product started task.

**User response:** Make sure that the JCL for the started task points to the proper STEPLIB. If the problem persists, contact IBM Software Support.

---

**HLOS0908S HLOGMODL Load Failed for MEPL entry=*mepe\_name*.**

**Explanation:** An internal error occurred during the initialization of the product started task.

**User response:** Make sure that the JCL for the started task points to the proper STEPLIB. If the problem persists, contact IBM Software Support.

---

**HLOS0909S Started task subtask ESTAE entered, system RC=<system\_completion\_code>, user RC=<user\_completion\_code>.**

**Explanation:** A subtask of the DB2 Analytics Accelerator Loader started task encountered an error. A dump will be created to help you diagnose the problem.

**User response:** Review the dump data to diagnose the problem. If you need assistance, contact IBM Software Support.



---

**HLOS0910E** A job name conflict with a started task has been identified. The product is terminating.

**Explanation:** The job name for the DB2 Analytics Accelerator Loader started task conflicts with the job name for another started task on the z/OS system. Consequently, the product is terminating.

**User response:** Either change the name of the DB2 Analytics Accelerator Loader started task or the name of the started task that is in conflict, and then start DB2 Analytics Accelerator Loader again.

---

**HLOS0911E** A job name conflict with a batch job has been identified. The product is terminating.

**Explanation:** The job name for the DB2 Analytics Accelerator Loader started task conflicts with the name of a batch job on this z/OS system. Consequently, the product is terminating.

**User response:** Either change the name of the DB2 Analytics Accelerator Loader started task or the name of the batch job that is in conflict, and then start DB2 Analytics Accelerator Loader again.

---

**HLOS0912E** HLOID already in use. Terminating.

**Explanation:** Another DB2 Analytics Accelerator Loader started task that is running on the z/OS system has the same identifier. Each product started task must have a unique identifier. Therefore, the started task for which this message was issued is terminating.

**User response:** Make sure that every product started task that runs concurrently on your system has a unique identifier.

---

**HLOS0913I** ESTAE SDUMPX call  
 RC=<short\_system\_return\_code>,  
 RS=<short\_system\_reason\_code>.

**Explanation:** During ESTAE processing, a call to the z/OS SDUMPX facility returned the displayed return code and reason code.

**User response:** If RC=08, review the reason code in the appropriate SDUMPX documentation. Then make any changes to Dump Services that are needed to obtain proper diagnostic dumps. If you need assistance, contact IBM Software Support.

---

**HLOS5100I** TCB: <tcb\_address> Session:  
 <session\_token> SSID: db2\_ssid  
 DSNUTILB utility id : utility\_id  
 \*message\_continuation\*

**Explanation:** A DSNUTILB intercept operation was initiated for the specified DSNUTILB utility ID. The messages that follow this one identify the intercept operation and present data associated with it.

**User response:** No action is required.

---

**HLOS5101I** \*message\_continuation\_number\*  
 DSNUTILB intercept operation is  
 DSNUTILB\_intercept\_operation

**Explanation:** This message identifies the current DSNUTILB intercept worklist-management operation that is being performed by the started task.

**User response:** No action is required.

---

**HLOS5102I** \*message\_continuation\_number\*  
 (DSNUTILB\_statement\_sequence\_no.)  
 Event: DSNUTILB\_event Status:  
 DSNUTILB\_event\_status

**Explanation:** The DSNUTILB worklist has been updated with the information that is presented in this message.

**User response:** No action is required.

---

**HLOS5103I** \*<message\_continuation\_number>\*  
 (<DSNUTILB\_statement\_sequence\_no.>)  
 event=<DSNUTILB\_event>,  
 status=<DSNUTILB\_event\_status>, return  
 code=<DSNUTILB\_event\_rc>.

**Explanation:** The DSNUTILB worklist has been updated with the information that is presented in this message.

**User response:** No action is required.

---

**HLOS5104E** \*message\_continuation\_number\* Unable to  
 save worklist due to duplicate utility  
 ID.

**Explanation:** The DSNUTILB worklist could not be saved because a worklist that has the same DSNUTILB utility ID has already been saved. Worklists cannot have duplicate utility IDs.

**User response:** No action is required.

---

**HLOS5110I** DSNUTILB intercept operation was  
 successful.

**Explanation:** The current DSNUTILB intercept operation completed successfully.

**User response:** No action is required.

---

**HLOS5111E** \*message\_continuation\_number\*  
 DSNUTILB intercept operation failed

**Explanation:** The current DSNUTILB intercept operation failed.

**User response:** To determine the cause of this failure, check any SQL errors that were reported in the log prior to this error.

---

**HLOS5112W** TCB: <tcb\_address> **No worklist data found to delete for UTILID:**  
db2\_utility\_id

**Explanation:** The DB2 Analytics Accelerator Loader maintenance utility found no worklist data for the specified DB2 utility ID.

**User response:** No action is required.

---

**HLOS5113I** \*message\_continuation\_number\* **Worklist is in use by another utility. Owing**  
Session: <session\_token>

**Explanation:** The worklist is in use by another utility at this time. DB2 Analytics Accelerator Loader will not intercept the DB2 utility execution because a worklist for that utility ID already exists and is currently in use by another utility job. This message provides the session token value of the owning utility session. See the preceding HLOS0101I message that contains a matching session token value to determine the job name and job ID of the utility job that is currently using the worklist.

**User response:** You can perform any of the following actions, as appropriate: change the utility ID in the DSNUTILB utility job that you want to intercept, wait until the job that is currently using the worklist completes, or (if the other utility terminated abnormally without ending its owning session) use the TERMINATE SESSION console command to terminate the owning session.

---

**HLOS5550E** LE preinitialization service failed.  
Operation=<operation\_name>,  
RC=<return\_code>.

**Explanation:** The specified Language Environment® (LE) preinitialization service operation failed with the specified return code.

**User response:** Contact IBM Software Support. Have available the listing that contains this message and any applicable related messages.

---

**HLOS9999S** Message formatter failed.  
Message=<message\_id>,  
RC=<return\_code>, Reason=<reason\_text>.

**Explanation:** An error occurred while formatting the specified message. If this error is related to obtaining or releasing storage, the message HLOS0802E or HLOS0803E is also issued to provide storage details.

**User response:** To determine the cause of the error, review the return code and reason text in this message. If you need assistance, contact IBM Software Support.

---

**HLOU5001I** **DB2 Analytics Accelerator Loader**  
product\_version, FMID=product\_fmids,  
COMP\_ID=product\_compid

**Explanation:** This message provides the following information for your DB2 Analytics Accelerator Loader configuration: product version and release, FMID, and component ID.

**User response:** No action is required.

---

**HLOU5002I** Initialization is complete.

**Explanation:** The initialization processing for the DSNUTILB intercept component of the DB2 Analytics Accelerator Loader completed successfully.

**User response:** No action is required.

---

**HLOU5003I** Intercept completed.

**Explanation:** The DB2 Analytics Accelerator Loader DSNUTILB intercept has completed intercept processing for this DB2 utility execution.

**User response:** No action is required.

---

**HLOU5004I** Analysis started. Step=step\_number

**Explanation:** The DB2 Analytics Accelerator Loader DSNUTILB intercept has started the analysis phase for this DB2 utility command.

**User response:** No action is required.

---

**HLOU5005I** Analysis completed. RC=<return\_code>.

**Explanation:** The DB2 Analytics Accelerator Loader DSNUTILB intercept has completed the analysis phase for this DB2 utility command.

**User response:** No action is required.

---

**HLOU5006I** Thread cancel started. Step=step\_number

**Explanation:** The DB2 Analytics Accelerator Loader DSNUTILB intercept has started the thread-cancel processing phase for this DB2 utility command.

**User response:** No action is required.

---

**HLOU5007I** Thread cancel completed.  
RC=<return\_code>.

**Explanation:** The DB2 Analytics Accelerator Loader DSNUTILB intercept has completed the thread-cancel processing phase for this DB2 utility command.

**User response:** No action is required.

---

**HLOU5008I Utility execution started.**  
**Step=step\_number**

**Explanation:** The DB2 Analytics Accelerator Loader DSNUTILB intercept has started the DB2 utility execution phase for this utility command.

**User response:** No action is required.

---

**HLOU5009I Utility execution completed.**  
**SYS=<system\_abend\_code>,**  
**USR=<dsnutilb\_return\_code>.**

**Explanation:** The DB2 Analytics Accelerator Loader DSNUTILB intercept has completed the utility execution phase for the DB2 utility command. This message provides the return code from the DSNUTILB program (the USR value). If the DSNUTILB program terminated abnormally with a system abend, the message also provides the system abend code (the SYS value).

**User response:** No action is required.

---

**HLOU5010I Allow threads started. Step=step\_number**

**Explanation:** The DB2 Analytics Accelerator Loader DSNUTILB intercept has started the allow-threads processing phase for this DB2 utility command.

**User response:** No action is required.

---

**HLOU5011I Allow threads completed.**  
**RC=return\_code**

**Explanation:** The DB2 Analytics Accelerator Loader DSNUTILB intercept has completed the allow-threads processing phase for this DB2 utility command.

**User response:** No action is required.

---

**HLOU5012I Connected to started task**  
**HLOID=product\_identifier.**

**Explanation:** The DB2 DSNUTILB job has connected to the specified DB2 Analytics Accelerator Loader started task.

**User response:** No action is required.

---

**HLOU5013E Unable to connect to DB2**  
**subsystem=db2\_ssid**

**Explanation:** The DB2 DSNUTILB job could not connect to the specified DB2 subsystem through the DB2 Analytics Accelerator Loader started task.

**User response:** Make sure that the required DB2 subsystem is operational.

---



---

**HLOU5014I Delete blocker ID processing started.**  
**Step=step\_number**

**Explanation:** The DSNUTILB intercept component of the DB2 Analytics Accelerator Loader has started the delete-blocker-ID phase of thread blocker processing for the DB2 utility command. This message provides the step number of the DELETE\_BLOCKER\_ID step.

**User response:** No action is required.

---

**HLOU5015I Delete blocker ID processing completed.**  
**RC=return\_code**

**Explanation:** The DSNUTILB intercept component of the DB2 Analytics Accelerator Loader has completed the DELETE\_BLOCKER\_ID step of thread blocker processing for the DB2 utility command. This step completed with the specified return code.

**User response:** No action is required.

---

**HLOU5016E Utility abended. SYS=system\_abend\_code,**  
**USR=dsnutilb\_return\_code**

**Explanation:** The DB2 Analytics Accelerator Loader DSNUTILB intercept was not able to complete the execution phase for the DB2 utility command because the DSNUTILB program terminated abnormally with a system abend. This message provides the system abend code (the SYS value) and the DSNUTILB return code (the USR value). The message is issued as a WTO message.

**User response:** To determine the cause of the error, look up the system abend code and the DSNUTILB return code in the appropriate IBM documentation.

---

**HLOU5017E SORT EXIT ERROR: error\_reason**

**Explanation:** The DB2 Analytics Accelerator Loader detected an error in a sort exit that it uses for implementing the additional options for the DB2 LOAD utility. See the error reason that is specified in this message for an explanation of the error.

**User response:** If the error is related to a data conversion failure, correct the data and run the LOAD utility again. If the error is related to a product internal error, contact IBM Software Support.

---

**HLOU5018I SORT execution completed.**  
**SYS=system\_abend\_code,**  
**USR=dsnutilb\_return\_code**

**Explanation:** SORT has completed. This message provides the return code from the SORT program (the USR value). If the SORT program terminated abnormally with a system abend, the message also provides the system abend code (the SYS value).

**User response:** No action is required.

---

---

**HLOU5019E SORT ended abnormally. DSNUTILB will be canceled with an S222 abend.**

**Explanation:** SORT processing during DSNUTILB interception ended abnormally. The DSNUTILB program will be canceled with an S222 abend.

**User response:** Review the messages that were produced by the SORT program to determine the cause of the SORT failure. Then correct this problem and rerun the job. You can safely ignore the S222 abend in the DSNUTILB program.

---

**HLOU5020E Cancel syntax member *cancel\_syntax\_member* was not found.**

**Explanation:** The HLOBMAIN cancel syntax member specified in the HLOBMAIN\_CANCEL\_MEMBER of the OPTIONS was not found in the parameters library.

**User response:** Make sure that the required member exists in the parameters library and is correctly specified in the options member.

---

**HLOU5021E Global syntax member *global\_syntax\_member* was not found.**

**Explanation:** HLOBMAIN global syntax member specified in the HLOBMAIN\_GLOBAL\_MEMBER of the OPTIONS was not found in the parameters library.

**User response:** Make sure that the required member exists in the parameters library and is correctly specified in the options member.

---

**HLOU5022E Subtask *module\_name* terminated unexpectedly. SYS=*system\_abend\_code*, USR=*return\_code*.**

**Explanation:** A task that is attached by DSNUTILB interception services ended unexpectedly. If the program terminated abnormally with a system abend, the message provides the system abend code (the SYS value). The message provides the return code from the program (the USR value).

**User response:** Run the job again. If the problem persists, contact IBM Software Support.

---

**HLOU5023E Unsupported SYSREC data set type RECFM=*record\_format*, DS SEQNO=*data\_set\_sequence\_number*.**

**Explanation:** The product encountered a SYSREC data set with an unsupported record format. The SYSREC data set must have a RECFM of F or V. Spanned record formats and RECFM=U and D are not supported.

**User response:** Run the job again with an appropriate SYSREC data set.

---

**HLOU5024W Unable to load the accelerator due to IDENTITY column *column\_name*. Loading only DB2.**

**Explanation:** The table contains an IDENTITY column for which no values were provided. The product cannot generate IDENTITY column values, and therefore cannot perform a dual load (load data to both the accelerator and DB2). The ACCEL\_ON\_UNSUPPORTED\_LOAD option is set to LOAD\_DB2; therefore, the dual load will be converted to a DB2-only load.

**User response:** After the DB2-only load completes, run the ACCEL\_LOAD\_TABLES stored procedure to load the data from DB2 to the accelerator and sync the accelerator table with the DB2 table.

---

**HLOU5025E Generation of identity column values is not supported. Col: *column\_name*.**

**Explanation:** The table contains an identity column that is defined as GENERATE ALWAYS, or for which no field specification was provided. The product cannot generate values for identity columns.

**User response:** If the identity column is defined as GENERATE BY DEFAULT, consider providing a field specification for the column. If the identity column is defined as GENERATE ALWAYS, the product cannot be used to load the table.

---

| **HLOU5026E Unable to load the client API module**  
| *<module\_name>*.

| **Explanation:** The specified client API module could  
| not be loaded into memory. Possible causes are the  
| product is not installed correctly, or the load library is  
| not concatenated to the batch job STEPLIB.

| **User response:** Make sure that the product load  
| library is included in the batch job's STEPLIB or  
| JOBLIB.

---

| **HLOU5027E No EXEC SQL DECLARE CURSOR**  
| **statement was found for**  
| **ACCEL\_CURSOR *<cursor\_name>*.**

| **Explanation:** A DECLARE CURSOR statement must  
| be provided for the cursor that is specified on the  
| ACCEL\_CURSOR clause.

| **User response:** Add the EXEC SQL DECLARE  
| CURSOR statement to the DB2 Analytics Accelerator  
| Loader control cards and rerun the job.

---

| **HLOU5028 E Invalid partitioning key definition for a**  
| **table with data loader managed**  
| **partitioning.**

| **Explanation:** The table's partitioning key includes the  
| ACCEL\_PARTITION\_KEYCOL column, which indicates  
| that product should manage partitioning in order to

| enable load parallelism. Data loader managed  
| partitioning requires a partitioning key that consists of  
| a single INTEGER type column named  
| ACCEL\_PARTITION\_KEYCOL. The table's partitioning  
| key does not satisfy this requirement.

| **User response:** Correct the definition of the target  
| table and rerun the job.

---

**HLOU5029E CALLTYPE** *<call\_type>* **API call failed  
with RC** *<return\_code>* **Server**  
*<server\_name>*.

**Explanation:** A client API called failed. The job will  
terminate.

**User response:** Verify that the server is running. If  
you need assistance, contact IBM Software Support.

---

**HLOU5030E RECV call failed. RC** *<return\_code>*  
**SQLCODE** *<sql\_code>*.

**Explanation:** An error occurred while the product  
attempted to fetch data from the DB2 Analytics  
Accelerator Loader Server.

**User response:** Check the job log for additional error  
messages that might provide more information. Check  
the SQL statement to verify that it is coded correctly. If  
you need assistance, contact IBM Software Support.

---

**HLOU5031 E The client did not return an SQLDA.**

**Explanation:** DB2 Analytics Accelerator Loader  
requires an SQLDA to load data from the DB2  
Analytics Accelerator Loader Server. The client failed to  
return an SQLDA.

**User response:** Contact IBM Software Support.

---

**HLOU5032E The source and target tables must have  
the same number of columns.**

**Explanation:** When loading data from the DB2  
Analytics Accelerator Loader Server, the source table  
must have the same number of columns as the target  
table on the accelerator, with the following exception: If  
the target table is range partitioned, then the source  
table cannot include the special  
ACCEL\_PARTITION\_KEYCOL column that must be  
part of the target DB2 and accelerator table.

**User response:** Correct the definition of the target  
table or modify the DB2 Analytics Accelerator Loader  
Server SQL statement, and then rerun the job.

---

**HLOU5033 E Column** *<column\_name>* **is not nullable,  
but DB2 Analytics Accelerator Loader  
Server column** *<column\_number>* **is.**

**Explanation:** When a DB2 Analytics Accelerator  
Loader Server table column is defined as NULL, the  
target DB2 column must also be nullable.

**User response:** Correct the definition of the target DB2  
table and rerun the job.

---

**HLOU5034E DATA TYPE** *<data\_type>* **COLUMN**  
*<column\_name>* **not compatible with**  
**SQLTYPE** *<sql\_type>*, **COLNO**  
*<column\_number>*.

| **Explanation:** The data type of the specified target  
| column is not compatible with the data type of the  
| source table column.

| **User response:** Correct the definition of the target DB2  
| table and rerun the job.

---

**HLOU5035E The scale of COLUMN** *<column\_name>*  
**does not match that of DB2 Analytics  
Accelerator Loader Server column**  
*<column\_number>*.

| **Explanation:** The decimal scale of the target DB2  
| column must match the scale of the DB2 Analytics  
| Accelerator Loader Server table column.

| **User response:** Correct the definition of the target DB2  
| table and rerun the job.

---

**HLOU5036E COLUMN** *<column\_name>* **data type**  
*<column\_type>* **is not supported with**  
**ACCEL\_CURSOR.**

| **Explanation:** The data type of the specified target DB2  
| column is not supported when you are loading data  
| from the DB2 Analytics Accelerator Loader Server.

| **User response:** Correct the definition of the target DB2  
| table and rerun the job.

---

| **HLOU5037E MSGTEXT** *<message\_text>*.

| **Explanation:** The client returned the error messages  
| after a failed RECV call.

| **User response:** See the product job log for additional  
| information about the error.

---

| **HLOU5046E The version of the IBM DB2 Analytics  
| Accelerator does not support LOAD  
| RESUME.**

| **Explanation:** Using LOAD RESUME requires IBM DB2  
| Analytics Accelerator version 4.1.5 or later.

| **User response:** Either upgrade IBM DB2 Analytics  
| Accelerator to a supported version or change the  
| syntax of the job to replace the data in the table.

---

| **HLOU5047I No data was loaded to the accelerator.**

| **Explanation:** No data was loaded to the accelerator.  
| Errors were encountered during utility execution.

| **User response:** Correct any problems described in the

| SYSPRINT error messages and rerun the job.

---

| **HLOU5048E HLOPIPE error: Function='x'10'**  
| **LOOKUP\_RC=<return\_code>.**

| **Explanation:** The product intercepted an UNLOAD  
| that was running in the Workload Manager (WLM).  
| The batch job that triggered the UNLOAD requested  
| that the UNLOAD terminate with errors. This event  
| indicates that the batch job encountered errors during  
| the load process. This message is only issued in the  
| DSNUTILU WLM address space.

| **User response:** See the batch job output for more  
| information.

---

| **HLOU5049E DB2 was successfully loaded but not the**  
| **accelerator. Rerun this job with the**  
| **option IDAA\_ONLY.**

| **Explanation:** A load job that specified IDAA\_DUAL  
| and LOAD RESUME successfully loaded the DB2 table,  
| but was unable to load the accelerator.

| **User response:** Correct the conditions that caused the  
| accelerator load to fail and then rerun the job with the  
| IDAA\_ONLY keyword.

---

| **HLOU5050W Accelerator loaded during prior failed**  
| **utility execution. Only DB2 will be**  
| **loaded.**

| **Explanation:** This is a restart of a failed IDAA\_DUAL  
| LOAD RESUME job. The failed utility run successfully  
| loaded all data to the accelerator. As a result, only DB2  
| will be loaded during this restart.

| **User response:** No action is required.

---

**HLOU5051E The target table is not defined in DB2.**

**Explanation:** The table that is the target of the load is  
not defined to DB2.

**User response:** Correct the table name or create the  
table in DB2 and then rerun the job.

---

**HLOU5200E API Initialization failed.**

**Explanation:** The DSNUTILB interface program failed  
to complete initialization. This failure occurred during  
initialization of the internal API.

**User response:** To determine the cause of the failure,  
review the messages in the job output that precede this  
message. Then correct the problem and run the job  
again. If you need assistance, contact IBM Software  
Support.

---

**HLOU5300I Processing will not be performed.**

**Explanation:** No DSNUTILB intercept processing will  
occur for this DB2 utility execution.

**User response:** See the messages that precede this one  
to determine the reason for the interception failure. If  
you still want to perform DSNUTILB interception,  
correct any problems that the prior messages identify  
and then rerun the job.

---

**HLOU5301I Thread cancel prevented by policy.**

**Explanation:** Threads will not be blocked and  
canceled prior to running this DSNUTILB utility based  
on the intercept policy that is in effect.

**User response:** If you want to block and cancel  
threads for the utility, edit the intercept policy to  
provide this function and then restart the DB2  
Analytics Accelerator Loader started task.

---

**HLOU5302E Unable to rename DSNUTILB DD**  
**statements.**

**Explanation:** This DSNUTILB utility execution will  
not be intercepted because DB2 Analytics Accelerator  
Loader could not rename the DSNUTILB DD  
statements. Existing DDNAMEs in the TIOT conflicted  
with all available DDNAME renaming patterns.

**User response:** If possible, remove any DD allocations  
from the DSNUTILB job step that conflict with any of  
the following patterns: HLO\$\_\_\_\_, HLO#\_\_\_\_, HLO@  
\_\_\_\_, \$HLO\_\_\_\_, #HLO\_\_\_\_, and @HLO\_\_\_\_. If the  
conflicting DDNAME allocations cannot be removed,  
contact IBM Software Support for assistance.

---

**HLOU5303E DDNAME rename operation failed for**  
**DDNAME=original DD name, new**  
**DDNAME=new DD name.**

**Explanation:** This DSNUTILB utility execution will  
not be intercepted because DB2 Analytics Accelerator  
Loader could not rename the DSNUTILB DD  
statements.

**User response:** Contact IBM Software Support.  
Provide Support with the full text of this message.

---

**HLOU5304E SWAREQ failed for DDNAME=dd\_name,**  
**RC=return\_code.**

**Explanation:** The SWAREQ service returned a  
non-zero return code when it was called to provide the  
JFCB address for the specified DD name.

**User response:** Contact IBM Software Support.  
Provide Support with the full text of this message.

---

**HLOU5305E DSNUTILB returned an error parsing the SYSIN data set.**

**Explanation:** This DSNUTILB utility execution will not be intercepted because the DSNUTILB parser returned an error while parsing the SYSIN data set.

**User response:** See the error messages that were returned by DSNUTILB. Then correct the errors in the SYSIN data set and rerun the job.

---

**HLOU5306E DSNUTILB syntax parser returned an error while parsing the SYSIN data set.**

**Explanation:** This DSNUTILB utility execution will not be intercepted because the parser for the DB2 Analytics Accelerator Loader DSNUTILB statement returned an error while parsing the SYSIN data set.

**User response:** See the error messages that DSNUTILB returned. Then correct the errors in the SYSIN data set and rerun the job.

---

**HLOU5307E Unable to determine restart status.**

**Explanation:** This DSNUTILB utility execution will not be intercepted because DB2 Analytics Accelerator Loader could not determine the restart status for the utility ID.

**User response:** See the error messages that are related to this error in the log for the DB2 Analytics Accelerator Loader started task.

---

**HLOU5308I UTILID in use by stopped utility but no worklist exists.**

**Explanation:** This DSNUTILB utility execution will not be intercepted because the utility ID is in use by a stopped utility and no worklist exists in the DB2 Analytics Accelerator Loader restart tables.

**User response:** No action is required.

---

**HLOU5309I Move worklist failed for utility ID=*utility\_ID*.**

**Explanation:** This DSNUTILB utility execution will not be intercepted for the following reasons: a worklist for the specified utility ID already exists; no restartable utility was found; and the worklist move operation failed.

**User response:** Manually delete the worklist, as described in the user's guide, then rerun the job.

---

**HLOU5310I Restart was specified but no stopped utility was found for utility ID=*utility\_ID*.**

**Explanation:** This DSNUTILB utility execution will not be intercepted because a restart was requested and no stopped utility was found for this utility ID.

**User response:** Remove the restart parameter from the utility job, and then rerun the job.

---

**HLOU5311E Save worklist failed for utility ID=*utility\_ID*.**

**Explanation:** This DSNUTILB utility execution will not be intercepted because the worklist that is required for interception processing could not be saved.

**User response:** See the error messages that are related to this error in the log for the DB2 Analytics Accelerator Loader started task.

---

**HLOU5312E A running utility was found with utility ID=*utility\_ID*.**

**Explanation:** This DSNUTILB utility job will not be intercepted because another utility is already running with the same utility ID.

**User response:** Wait for the utility that is running to terminate, or specify a different utility ID for this utility job and rerun this job.

---

**HLOU5313E Get next worklist step failed for utility ID=*utility\_ID*.**

**Explanation:** This DSNUTILB utility execution will not be intercepted because the next step in the worklist that is required for interception processing cannot be retrieved.

**User response:** See the error messages that are related to this error in the log for the DB2 Analytics Accelerator Loader started task.

---

**HLOU5314E Update worklist status failed for utility ID=*utility\_ID*.**

**Explanation:** This DSNUTILB utility execution will not be intercepted because the worklist status cannot be updated.

**User response:** See the error messages that are related to this error in the log for the DB2 Analytics Accelerator Loader started task.

---

**HLOU5315E Phase 2 policy processing failed.**

**Explanation:** This DSNUTILB utility execution will not be intercepted because phase two of intercept policy processing failed.

**User response:** See the error messages that are related to this error in the log for the DB2 Analytics Accelerator Loader started task.

---

**HLOU5316E SET worklist step failed for utility**  
**ID=utility\_ID.**

**Explanation:** This DSNUTILB utility execution will not be intercepted because the SET worklist step operation failed.

**User response:** See the error messages that are related to this error in the log for the DB2 Analytics Accelerator Loader started task.

---

**HLOU5317S Unable to locate USTI for current step**  
**UTILID=utility\_ID, STEP=utility\_step.**

**Explanation:** This DSNUTILB utility execution will not be intercepted because an internal error occurred.

**User response:** Contact IBM Software Support.

---

**HLOU5318E LISTDEF expansion failed for utility**  
**ID=utility\_ID.**

**Explanation:** This DSNUTILB utility execution will not be intercepted because the LISTDEF that is specified for the utility ID cannot be expanded to determine the DB2 objects to process.

**User response:** Contact IBM Software Support.

---

**HLOU5319E Save object list failed for utility**  
**ID=utility\_ID.**

**Explanation:** This DSNUTILB utility execution will not be intercepted because the object list cannot be saved.

**User response:** See the error messages that are related to this error in the log for the DB2 Analytics Accelerator Loader started task.

---

**HLOU5320E SAPI processing failed, RC=return\_code,**  
**RSN=reason\_code.**

**Explanation:** The SAPI processing service returned a non-zero return code while attempting to perform a SAPI function.

**User response:** Contact IBM Software Support. Provide Support with the full text of this message.

---

**HLOU5321E SAPI processing failed, RC=return\_code,**  
**RSN=reason\_code.**

**Explanation:** The SAPI processing component returned a non-zero return code while setting up a SAPI function.

**User response:** Contact IBM Software Support. Provide Support with the full text of this message.

---

**HLOU5322E Listdef processing failed,**  
**RC=return\_code, RSN=reason\_code.**

**Explanation:** The processing of the LISTDEF for the intercepted DB2 utility failed with the specified non-zero return code.

**User response:** Contact IBM Software Support. Provide Support with the full text of this message.

---

**HLOU5323S A usable temporary LISTDEF name**  
**could not be generated.**

**Explanation:** A usable, temporary LISTDEF name could not be generated because all of the temporary LISTDEF names known to DB2 Analytics Accelerator Loader occurred in the SYSIN data set for the utility job.

**User response:** Contact IBM Software Support. Provide Support with the full text of this message.

---

**HLOU5324E Merge worklist failed for utility**  
**ID=utility\_ID.**

**Explanation:** This DSNUTILB utility execution cannot continue because the worklist that DB2 Analytics Accelerator Loader generated for utility restart purposes cannot be merged with the original worklist.

**User response:** See the error messages that are related to this error in the log for the DB2 Analytics Accelerator Loader started task.

---

**HLOU5325I Restart in progress for utility**  
**ID=utility\_ID**

**Explanation:** The specified DB2 utility execution has been restarted at the request of the user.

**User response:** No action is required.

---

**HLOU5326E Open failed for DSN=data\_set\_name**

**Explanation:** A failure occurred while DB2 Analytics Accelerator Loader was trying to open the specified data set. Additional messages provide diagnostic information about this problem.

**User response:** See the related messages to diagnose the problem. After you resolve the problem, rerun the utility.

---

**HLOU5327E Open failed. Abend code =**  
**systemCompletionCode, reason = reasonCode**

**Explanation:** A failure occurred while DB2 Analytics Accelerator Loader was trying to open a data set. This message provides the completion code and reason code for this failure.

**User response:** Resolve the problem that is causing the error and then rerun the job.



---

**HLOU5328E Open failed. RC=return\_code**

**Explanation:** A failure occurred while DB2 Analytics Accelerator Loader was trying to open a data set. This message provides the return code from the OPEN macro.

**User response:** Resolve the problem that is causing the error and then rerun the job.

---

**HLOU5329W Member not found in data set**  
DSN=data\_set\_name

**Explanation:** A failure occurred while DB2 Analytics Accelerator Loader was trying to open a member of the specified data set. The member was not found in the data set.

**User response:** Resolve the problem that is causing the error and then rerun the job.

---

**HLOU5330I Original DSNUTILB syntax follows:**

**Explanation:** This message introduces the original, unmodified DSNUTILB syntax that was submitted for the utility. This syntax is presented in the message HLOU5331I, which follows this one. DB2 Analytics Accelerator Loader modifies this syntax before passing it to the DSNUTILB program.

**User response:** No action is required.

---

**HLOU5331I dsnutlib\_syntax**

**Explanation:** This message contains all or part of the original, unmodified DSNUTILB syntax that was submitted for the utility.

**User response:** No action is required.

---

**HLOU5332I End of original DSNUTILB syntax listing.**

**Explanation:** This message indicates the end of the original, unmodified DSNUTILB syntax that was submitted for this utility and that is presented in the preceding message HLOU5331I.

**User response:** No action is required.

---

**HLOU5333E TEMPLATE data set name processing failed, RC=return\_code, RSN=reason\_code.**

**Explanation:** The processing of the TEMPLATE data set name failed with the specified non-zero return code because an error occurred.

**User response:** Contact IBM Software Support. Provide Support with the full text of this message.

---

**HLOU5334E TEMPLATE expansion failed for utility ID=utility\_ID.**

**Explanation:** This DSNUTILB utility execution will not be intercepted because the TEMPLATE referenced in the LOAD utility statement could not be expanded to determine the data set name for the LOAD utility input.

**User response:** Contact IBM Software Support.

---

**HLOU5335E UFSP processing failed, RC=return\_code, RSN=reason\_code.**

**Explanation:** The UFSP processing component issued a return code greater than 4 while setting up a UFSP function. The failure might occur because the table does not exist in DB2, or because the module could not obtain necessary storage space.

**User response:** Contact IBM Software Support. Provide the Support representative with the full text of this message.

---

**HLOU5336E An error was detected during DB2 catalog lookup of column column\_name.**

**Explanation:** The DB2 Analytics Accelerator Loader UFSP processing component returned a non-zero return code while looking up information in the DB2 catalog.

**User response:** Contact IBM Software Support. Provide the Support representative with the full text of this message and the SYSPRINT log of the DB2 Analytics Accelerator Loader started task.

---

**HLOU5337E The UFSP component detected an index column with an unsupported data type.**

**Explanation:** The DB2 Analytics Accelerator Loader UFSP processing component detected an index key column with a data type that is not supported by the PRESORT option for the DB2 LOAD utility. These unsupported data types are: REAL, DOUBLE, FLOAT, DECFLOAT, DISTINCT, BLOB, CLOB, and DBCLOB. The PRESORT option does not sort the data in input records by index key if the index key contains a column with an unsupported data type.

**User response:** If you want to sort the data in the input records for the LOAD utility by index key, you must do so manually.

---

**HLOU5338E Session has been terminated by the server.**

**Explanation:** The DSNUTILB interception did not complete because the session was terminated by the server.

**User response:** Check with the system administrator to determine the reason for the termination of the DSNUTILB interception program.

---

**HLOU5339E** Session creation failed RC=*return\_code*, RSN=*reason\_code*, Reason=*description*

**Explanation:** DSNUTILB interception failed to complete initialization. The failure occurred during the creation of an interception session for the DB2 utility.

**User response:** To determine the cause of the failure, review the reason description in this message. Correct the problem and run the job again. If you need assistance, contact IBM Software Support.

---

**HLOU5340E** Worklist in use by another utility ID=*utility\_ID*

**Explanation:** DB2 Analytics Accelerator Loader will not intercept a DB2 utility execution that is associated with the specified utility ID because a worklist for that utility ID already exists and is currently in use by another utility job. See the corresponding message HLOS5113I in the SYSPRINT data set for the started task to determine the session token of the owning utility session.

**User response:** Either change the utility ID in the utility job that you want to intercept, or wait until the utility job that is currently using the worklist completes. Then rerun the utility job that failed to be intercepted.

---

**HLOU5341E** Unable to determine restart status for utility ID=*utility\_ID*

**Explanation:** DB2 Analytics Accelerator Loader cannot determine whether the DB2 utility should be restarted because the status of the last utility operation within the current worklist step was not recorded in the intercept worklist tables. This situation might be caused by an unexpected system outage.

**User response:** Use the HLOMAINT utility to set the restart status for the utility. Specify one of these options for the utility: MARK\_COMPLETE if the last utility operation completed successfully and the utility needs to be restarted from the next operation in the current worklist step, or FORCE\_RESTART if the last utility operation needs to be restarted to complete its processing.

---

**HLOU5342I** -TERM UTILITY issued by user, cleaning up utility ID=*utility\_ID*

**Explanation:** The -TERM UTILITY command was issued for the specified utility ID after the utility ended in a restartable state. The utility will complete its current worklist step and then terminate. Also, DB2 Analytics Accelerator Loader will automatically delete the data that is associated with this utility ID from the intercept worklist tables. The utility will no longer be restartable.

**User response:** No action is required.

---

**HLOU5343I** -TERM UTILITY issued during utility execution for utility ID=*utility\_ID*.

**Explanation:** The -TERM UTILITY command was issued for the specified utility ID while the utility was running. The utility will complete its current worklist step and then terminate. Also, DB2 Analytics Accelerator Loader will automatically delete the data that is associated with this utility ID from the intercept worklist tables.

**User response:** No action is required.

---

**HLOU5344E** Get discard table ROWID failed for utility ID=*utility\_ID*

**Explanation:** This DSNUTILB utility execution will not be intercepted because the discard table ROWID cannot be retrieved.

**User response:** See the error messages that are related to this error in the log for the product started task.

---

**HLOU5345E** Unable to dynamically allocate data set. DD name=*ddname*, RC=*return\_code*, RSN=*reason\_code*.

**Explanation:** The specified DD was not able to dynamically allocate a data set that was needed.

**User response:** Review messages in the JES job log to determine the cause of the dynamic allocation failure. Resolve the problem that is causing the error and then rerun the job.

---

**HLOU5346E** RDJFCB failed for DDNAME=*ddname*, RC=*return\_code*.

**Explanation:** The RDJFCB service returned a non-zero return code when it was called for the specified DD name.

**User response:** Contact IBM Software Support. Provide Support with the full text of this message.

---

**HLOU5347E** Open failed in ROUTINE=*routine* for DD name=*ddname*, RC=*return\_code*.

**Explanation:** A failure occurred while the product was trying to open the specified DD name. This message provides the return code from the OPEN macro.

**User response:** Resolve the problem that is causing the error and then rerun the job.

---

**HLOU5348E** ATTACH failed for PROGRAM=*program\_name*, RC=*return\_code*.

**Explanation:** The ATTACH service returned a non-zero return code.

**User response:** Contact IBM Software Support.

Provide Support with the full text of this message.

---

**HLOU5349E IDENTIFY failed, RC=return\_code.**

**Explanation:** The IDENTIFY service returned a non-zero return code.

**User response:** Contact IBM Software Support. Provide Support with the full text of this message.

---

**HLOU5350E The GET\_SYSTEM\_INFO call failed, RC=return\_code.**

**Explanation:** This DSNUTILB utility execution will not be intercepted because the system information could not be retrieved from the started task.

**User response:** Contact IBM Software Support. Provide Support with the full text of this message.

---

**HLOU5351S I/O Hook installation failed because no matching DB2I was found.**

**Explanation:** A severe internal error prevents DSNUTILB interception from continuing because the I/O hook cannot be successfully installed.

**User response:** Contact IBM Software Support. Provide Support with the full text of this message.

---

**HLOU5352S I/O Hook installation failed, RC=return\_code.**

**Explanation:** A severe internal error prevents DSNUTILB interception from continuing because the I/O hook cannot be successfully installed.

**User response:** Contact IBM Software Support. Provide Support with the full text of this message.

---

**HLOU5353S I/O Hook removal failed, RC=return\_code.**

**Explanation:** A severe internal error prevents DSNUTILB interception from continuing because the I/O hook cannot be successfully removed.

**User response:** Contact IBM Software Support. Provide Support with the full text of this message.

---

**HLOU5354S Unknown UOBJ type encountered, UOBJ\_OBJECT\_TYPE=uobj\_object\_type.**

**Explanation:** A severe internal error prevents DSNUTILB interception from continuing because the UOBJ object type is unknown.

**User response:** Contact IBM Software Support. Provide Support with the full text of this message.

---

**HLOU5356W DSNUTILB syntax parser detected an empty SYSIN data set.**

**Explanation:** This DSNUTILB utility execution will not be intercepted because the parser for the product detected an empty SYSIN data set.

**User response:** Correct the errors in the SYSIN data set and rerun the utility job.

---

**HLOU5357E Tape data set detected for DDNAME=ddname**

**Explanation:** DSNUTILB utility execution will not be intercepted because DB2 Analytics Accelerator Loader detected that the DDNAME represents a tape data set.

**User response:** No action is required.

---

**HLOU5358E Column type is not supported for conversion to DB2 internal format. TYPE=<columnType>.**

**Explanation:** The process for converting data to DB2 internal format does not support the specified column data type.

**User response:** Use the standard LOAD for the table, or change the data type of the column.

---

**HLOU5359E Unable to dynamically allocate SYSREC dataset. RC= return\_code RSN= reason\_code.**

**Explanation:** A SYSREC data set could not be dynamically allocated. See message HLOU5360E for the data set name.

**User response:** Review messages in the JES job log to determine the cause of the dynamic allocation failure. Resolve the problem that is causing the error and then rerun the job.

---

**HLOU5360E DSN=data\_set\_name.**

**Explanation:** The named data set could not be dynamically allocated. See message HLOU5359E for the dynamic allocation return and reason codes.

**User response:** Review messages in the JES job log to determine the cause of the dynamic allocation failure. Resolve the problem and then rerun the job.

---

**HLOU5361E DEFAULTIF is not supported for partitioning key column column\_name.**

**Explanation:** This DSNUTILB utility execution will not be intercepted because the product detected that the DEFAULTIF keyword is used with a column that participates in the partitioning key of the table. The DEFAULTIF keyword cannot be used with partitioning key columns.

**User response:** Correct the syntax and resubmit the job.

---

**HLOU5362E Loading a DEFINE NO table space whose data sets have not been created is not supported.**

**Explanation:** An attempt to load the accelerator (option IDAA\_ONLY) or the accelerator and DB2 (option IDAA\_DUAL) has failed because the DB2 table space was created with the DEFINE NO clause and its data sets have not yet been created.

**User response:** Either re-create the table space with DEFINE YES, or perform an action that will cause DB2 to create the table space's VSAM data sets. Running the DB2 LOAD utility or performing an INSERT will cause DB2 to create the VSAM data sets.

---

**HLOU5363E Field *column\_name* not found.**

**Explanation:** During processing of the LOAD specifications, the product detected the specified column, which does not exist in the catalog and is not used for NULLIF or DEFAULTIF conditions. Because IGNOREFIELDS NO was specified, processing of the LOAD statement was terminated.

**User response:** Correct the LOAD utility syntax and run the job again.

---

**HLOU5364I Record <*record\_nbr*> discarded due to WHEN clause specification.**

**Explanation:** The record was discarded because it did not satisfy any of the WHEN clause conditions that are specified in the LOAD control cards.

**User response:** No action is required.

---

**HLOU5400E Utility processing failed by policy practice *practice\_name*.**

**Explanation:** The utility job step was terminated because the DB2 Analytics Accelerator Loader policy specified a fail return code.

**User response:** Correct the utility statement and rerun the job.

---

**HLOU5401E Syntax denied: *id=string*.**

**Explanation:** The specified utility syntax is denied by the policy.

**User response:** Correct the utility statement and rerun the job.

---

**HLOU5402E Syntax required: *id=string*.**

**Explanation:** The specified utility syntax is required by the policy.

**User response:** Correct the utility statement and rerun the job.

---

**HLOU5403I Utility statement altered by policy practice *practice\_name*.**

**Explanation:** The utility statement syntax was dynamically changed before utility execution in accordance with the specifications in the DB2 Analytics Accelerator Loader intercept policy.

**User response:** No action is required.

---

**HLOU5404E Utility monitor encountered an error RC= *return\_code* RSN= *reason\_code*.**

**Explanation:** The utility monitor encountered an error while checking for syntax modifications.

**User response:** Contact IBM Software Support.

---

**HLOU5405I Utility return code altered by policy practice *practice\_name*.**

**Explanation:** The utility return code was changed by policy practice *practice\_name*.

**User response:** No action is required.

---

**HLOU5406E SQL function *sql\_function* failed with SQLCODE= *sql\_code***

**Explanation:** The started task encountered an error while executing a SQL function on behalf of the client.

**User response:** IBM Software Support

---

**HLOU5407I SQL CREATE successful for mapping table *mapping\_table\_name***

**Explanation:** The product successfully created a mapping table and mapping table index for use by the REORG TABLESPACE utility.

**User response:** No action is required.

---

**HLOU5408I SQL DROP successful for mapping table *mapping\_table\_name***

**Explanation:** The product successfully dropped a mapping table and mapping table index for use by the REORG TABLESPACE utility.

**User response:** No action is required.

---

**HLOU5409I SQL CREATE successful for discard table** *discard\_table\_name*

**Explanation:** The product successfully created a discard table space and a discard table for use by the CHECK DATA utility.

**User response:** No action is required.

---

**HLOU5410I SQL DROP successful for discard table space** *<discard\_table\_space\_name>*.

**Explanation:** The product successfully dropped a discard table space and, as a result, the associated discard table used by the CHECK DATA utility. Any authorizations granted to the *<authid>* running the utility are also automatically revoked by the table space drop.

**User response:** No action is required.

---

**HLOU5411I GRANT INSERT successful to discard table for authid** *db2\_authid*

**Explanation:** The product successfully granted insert authority to the discard table used by the CHECK DATA utility.

**User response:** No action is required.

---

**HLOU5412W SYSREC records discarded during CONVERT\_INTERNAL processing. Utility return code altered.**

**Explanation:** The utility return code was dynamically changed after utility execution because CONVERT\_INTERNAL processing discarded one or more SYSREC records. SYSREC records may be discarded due to data validation or conversion errors or because records were found that did not belong to any partition that was included in the LOAD job.

**User response:** Correct the problem records in the SYSREC data set and rerun the job.

---

**HLOU5413W The DB2 LOAD utility discarded one or more rows already loaded to the accelerator.**

**Explanation:** The DB2 LOAD utility has discarded rows that were successfully loaded to the DB2 Analytics Accelerator. As a result, the accelerator and the DB2 table are now out of sync. That is, the accelerator contains rows that are not present in the DB2 table. This situation can occur when DB2 detects unique index key violations during the index build phase.

**User response:** Eliminate or fix the SYSREC records that are responsible for the discarded rows. Rerun the job or run ACCEL\_LOAD\_TABLES to reload the accelerator with the DB2 data if the discards are valid.

---

**HLOU5414W Query acceleration has been disabled for the loaded table.**

**Explanation:** Query acceleration has been disabled either because of a failure during the LOAD process or because DB2 discarded rows after all SYSREC records were loaded into the accelerator.

**User response:** Review the job log to diagnose the cause of the error, correct the problem, and then rerun the job.

---

**HLOU5415I Query acceleration has been enabled for the loaded table.**

**Explanation:** At the conclusion of a successful load job, query acceleration was enabled in accordance with the ACCEL\_ON\_SUCCESS\_ENABLE option setting.

**User response:** No action is required.

---

**HLOU5416E ACCEL\_SET\_TABLES\_ACCELERATION stored procedure failed. Reason:** *accelerator\_reason\_code.*

**Explanation:** An attempt to enable or disable query acceleration at the conclusion of the load job failed. The reason is the DB2 Analytics Accelerator message that the stored procedure returned. See the server log for a more information about the failure.

**User response:** Contact IBM Software Support.

---

**HLOU5500I Load pre-processing started.**

**Explanation:** Syntax IFDISCARDS or SHRLEVEL REFERENCE was found in the load job input stream. Shadow objects will be created and loaded.

**User response:** No action is required.

---

**HLOU5501I Load pre-processing finished with RC=return\_code.**

**Explanation:** Preliminary actions for IFDISCARDS or SHRLEVEL REFERENCE finished with the specified return code.

**User response:** No action is required.

---

**HLOU5502I Load post-processing started.**

**Explanation:** The main load processing phase is complete, and additional actions will be performed for IFDISCARDS or SHRLEVEL REFERENCE processing.

**User response:** No action is required.

---

---

**HLOU5503I** Load post-processing finished with  
RC=*return\_code*.

**Explanation:** Additional actions for IFDISCARDS or SHRLEVEL REFERENCE were performed.

**User response:** No action is required.

---

**HLOU5504E** Storage release failed.  
Module=*module\_name*, storage  
area=*storage\_area\_name*, RC=*return\_code*.

**Explanation:** The specified module failed while attempting to free the specified storage area.

**User response:** No action is required.

---

**HLOU5505E** Attempt to obtain storage failed.  
Module=*module\_name*, storage  
area=*storage\_area\_name*, RC=*return\_code*.

**Explanation:** The specified module failed while attempting to obtain the specified storage area.

**User response:** Increase the region size that is available to the DB2 Analytics Accelerator Loader and run the job again. If the problem persists, contact IBM Software Support. Have available the listing that contains this message and any applicable related messages.

---

**HLOU5506E** SQL error.

**Explanation:** An SQL error occurred in the started task during load processing for the IFDISCARDS option or the SHRLEVEL REFERENCE option. Message HLOU5507I contains the error text.

**User response:** See *DB2 for Z/OS Messages* documentation for information about the DB2 messages that are displayed in HLOU5507I. If you are unable to resolve the error, contact IBM Software Support. Have available the listing that contains this message and any applicable related messages.

---

**HLOU5507I** ERRORTXT=*error\_text*.

**Explanation:** SQL error diagnostic information.

**User response:** No action is required.

---

**HLOU5508E** Insufficient authority to load data into  
table space *table\_space\_name*.

**Explanation:** The user ID that submitted the job is not authorized to perform a load into the specified table space.

**User response:** Select another table space to load.

---

**HLOU5509E** Insufficient authority for load with  
STATS into table space *table\_space\_name*.

**Explanation:** When the STATISTICS keyword is specified in a load utility job, you must use a privilege set that includes the STATS privilege.

**User response:** Select another table space or remove the STATISTICS keyword.

---

**HLOU5510E** Operation *operation\_name* on data set  
*data\_set\_name* failed, error number  
=*error\_number\_value*.

**Explanation:** The specified operation on the data set failed.

**User response:** See *z/OS UNIX System Services Messages and Codes* documentation for information about the displayed error. If you are unable to resolve the error, contact IBM Software Support. Have available the listing that contains this message and any applicable related messages.

---

**HLOU5511E** Data set operation failed.  
RC=*return\_code*.

**Explanation:** The data set operation failed with the specified return code. Message HLOU5512I contains the error text.

**User response:** See *MVS System Messages* documentation for information about the messages that are displayed in HLOU5512I. If you are unable to resolve the error, contact IBM Software Support. Have available the listing that contains this message and any applicable related messages.

---

**HLOU5512I** *error\_text*.

**Explanation:** Data set operation error text.

**User response:** No action is required.

---

**HLOU5513E** Compilation of regular expression  
failed. Expression=*expression\_name*.

**Explanation:** The attempt to compile the specified regular expression failed. Message HLOU5515I contains the error text.

**User response:** Contact IBM Software Support. Have available the listing that contains this message and any applicable related messages.

---

**HLOU5514E** Matching of regular expression failed.  
Expression: *expression\_name*.

**Explanation:** The attempt to match the specified regular expression failed. Messages HLOU5515I and HLOU5516I contain the error text.

**User response:** Contact IBM Software Support. Have

available the listing that contains this message and any applicable related messages.

---

**HLOU5515I** ERRORTEXT=*error\_text*.

**Explanation:** An attempt to compile or match a regular expression pattern failed.

**User response:** No action is required.

---

**HLOU5516I** ERRORTEXT=*error\_text*.

**Explanation:** An attempt to match the regular expression input failed.

**User response:** No action is required.

---

**HLOU5517E** **Dynamic allocation error.**  
 DDNAME=*dd\_name*,  
 operation=*operation\_name*,  
 RC=*return\_code*.

**Explanation:** Dynamic allocation of the specified temporary DD for a DB2 utility failed with the specified return code.

**User response:** See *MVS Programming Authorized Assembler Services Guide for z/OS* documentation for information about the reported code. If you are unable to resolve the error, contact IBM Software Support. Have available the listing that contains this message and any applicable related messages.

---

**HLOU5518E** **Invalid partition specified for table space** *table\_space\_name*.

**Explanation:** The specified table space partition does not exist.

**User response:** Select another partition for the load job.

---

**HLOU5519E** **Service function error. Service name**=*service\_name*, RC=*return\_code*.

**Explanation:** The specified service function ended with a nonzero return code. If they are present, messages HLOU5520I and HLOU5521I contain the error text.

**User response:** See *DB2 for Z/OS Messages* documentation for information about the messages that are displayed in HLOU5520I and HLOU5521I. If you are unable to resolve the error, contact IBM Software Support. Have available the listing that contains this message and any applicable related messages.

---

**HLOU5520I** ERRORTEXT=*error\_text*.

**Explanation:** Failed service function input statements.

**User response:** No action is required.

---

**HLOU5521I** ERRORTEXT=*error\_text*.

**Explanation:** Failed service function output statements.

**User response:** No action is required.

---

**HLOU5522E** **IFI error.**

**Explanation:** An IFI error occurred in the started task during load processing for the IFDISCARDS option or the SHRLEVEL REFERENCE option. Message HLOU5523I contains the error text.

**User response:** See *DB2 for Z/OS: Codes* documentation for information about the messages that are displayed in HLOU5523I. If you are unable to resolve the error, contact IBM Software Support. Have available the listing that contains this message and any applicable related messages.

---

**HLOU5523I** ERRORTEXT=*error\_text*.

**Explanation:** An IFI error occurred in the started task during load processing for the IFDISCARDS option or the SHRLEVEL REFERENCE option.

**User response:** No action is required.

---

**HLOU5524I** **Some input records were discarded and IFDISCARDS PAUSE was specified.**

**Explanation:** The load utility job paused with return code 4. The production table space was placed in read-only access mode (RO) and was not changed.

**User response:** Review the discarded records, and then restart or terminate the paused load job.

---

**HLOU5525I** **Some input records were discarded, and IFDISCARDS FAIL was specified.**

**Explanation:** The load utility job terminated with return code 8. The production table space was not changed.

**User response:** Review discarded records and correct the data for the load job.

---

**HLOU5526I** **Utility was restarted after IFDISCARDS PAUSE. All valid records will be committed.**

**Explanation:** The load utility job was restarted after IFDISCARDS PAUSE. All valid records will be committed.

**User response:** No action is required.

---

**HLOU5527E Exception with RC=return\_code.**

**Explanation:** Load processing for the IFDISCARDS option or the SHRLEVEL REFERENCE option failed with the specified return code.

**User response:** Contact IBM Software Support. Have available the listing that contains this message and any applicable related messages.

---

**HLOU5528E Unexpected exception.**

**Explanation:** A severe error occurred during load processing for the IFDISCARDS option or the SHRLEVEL REFERENCE option.

**User response:** Contact IBM Software Support. Have available the listing that contains this message and any applicable related messages.

---

**HLOU5529E Table space *table\_space\_name* has NPSI and was not loaded.**

**Explanation:** The specified table space has a nonpartitioned secondary index (NPSI), which is not compatible with a partial load when the IFDISCARDS option or the SHRLEVEL REFERENCE option is specified.

**User response:** Load the entire table space (rather than partitions), or specify the INDEXDEFER option to instruct the product to ignore the NPSI.

---

**HLOU5530E Table space *table\_space\_name* contains versioned rows and was not loaded.**

**Explanation:** For the specified table space, the value of the OLDEST\_VERSION column is less than the value of the CURRENT\_VERSION column. Versioned objects are not supported when you specify the IFDISCARDS option or the SHRLEVEL REFERENCE option with RESUME YES.

**User response:** Reorganize the table space to ensure that the value of the OLDEST\_VERSION column equals the value of the CURRENT\_VERSION column, or specify RESUME NO.

---

**HLOU5531E Table space *table\_space\_name* has status *space\_status* and cannot be loaded.**

**Explanation:** The specified table space is not in a supported access mode. The table space access mode must be read-write (RW), read-only (RO), or utility (UT).

**User response:** Start the object in RW, RO, or UT mode, and then submit the LOAD utility job again.

---

**HLOU5532E Table space *table\_space\_name* is VCAT-defined. VCAT-defined objects are not supported.**

**Explanation:** When the IFDISCARDS option or the SHRLEVEL REFERENCE option is specified, VCAT-defined table spaces are not supported.

**User response:** Select another table space to load.

---

**HLOU5533E Table space *table\_space\_name* contains an XML column. XML objects are not supported.**

**Explanation:** When the IFDISCARDS option or the SHRLEVEL REFERENCE option is specified, XML objects are not supported.

**User response:** Select another table space to load.

---

**HLOU5534E Table space *table\_space\_name* contains a LOB column. LOB objects are not supported.**

**Explanation:** When the IFDISCARDS option or the SHRLEVEL REFERENCE option is specified, LOB objects are not supported.

**User response:** Select another table space to load.

---

**HLOU5535I DSCOPY\_LIMIT value is *limit\_value*.**

**Explanation:** The DSCOPY\_LIMIT parameter specifies the maximum number of concurrent data set operations for load processing when the IFDISCARDS or SHRLEVEL REFERENCE option is specified. The default value is 0, which indicates that the product is to automatically determine the limit and display it in this message.

**User response:** In most cases, no action is required. However, if the load utility job abnormally ends due to insufficient memory, you can modify the DSCOPY\_LIMIT value. Valid values are 0 - 250.

In member HLODTDOP in data set *hlq.mlq.SHLOSAMP*, specify a smaller value for DSCOPY\_LIMIT than that displayed in this message, and then resubmit the load job.

---

**HLOU5536I Load prevalidation restart handler started.**

**Explanation:** A load utility job that specified the SHRLEVEL REFERENCE option or the IFDISCARDS option was restarted. Additional processing for shadow objects is required.

**User response:** No action is required.

---



---

**HLOU5537I Load prevalidation restart handler finished with RC *return\_code*.**

**Explanation:** A load utility job that specified the SHRLEVEL REFERENCE option or the IFDISCARDS option was restarted. Additional processing for shadow objects completed with the specified return code.

**User response:** No action is required.

---

**HLOU5538I Table space *table\_space\_name* is in check pending status.**

**Explanation:** The specified table space is involved in a referential relationship, and the load utility job contains the SHRLEVEL REFERENCE option or the IFDISCARDS option.

**User response:** No action is required.

---

**HLOU5539I Table space *table\_space\_name* is in check pending status.**

**Explanation:** The specified table space is involved in a referential relationship, and the parent table was loaded with the REPLACE option.

**User response:** No action is required.

---

**HLOU5540I Index space *index\_space\_name* is in rebuild pending status.**

**Explanation:** The specified index space contains a nonpartitioned secondary index (NPSI), and it is deferred with option INDEXDEFER.

**User response:** No action is required.

---

**HLOU5541E Table space *table\_space\_name* was altered with option ROTATE PARTITION.**

**Explanation:** When the IFDISCARDS option or the SHRLEVEL REFERENCE option is specified, table spaces with rotated partitions are not supported.

**User response:** Select another table space to load.

---

**HLOU5542E Feature is not accessible in this version of DB2.**

**Explanation:** The IFDISCARDS option and SHRLEVEL REFERENCE option require DB2 version 10 or later.

**User response:** Remove the unsupported option from the LOAD utility syntax.

---

**HLOU5543E Index space *index\_space\_name* has status *space\_status* and its base table space cannot be loaded.**

**Explanation:** The specified index space is not in a supported access mode. The index space access mode

must be read-write (RW), read-only (RO), or utility (UT).

**User response:** Start the object in RW, RO, or UT mode, and then submit the LOAD utility job again.

---

**HLOU5544E *error\_text*.**

**Explanation:** Keyword RESUME NO cannot be specified with the IFDISCARDS and SHRLEVEL REFERENCE options.

**User response:** Specify RESUME YES or REPLACE instead.

---

**HLOU5545I Template data set was renamed.**

**Explanation:** The product renamed the template data set.

**User response:** No action is required.

---

**HLOU5546I Template name: *template\_name*.**

**Explanation:** The product renamed the template data set as specified in the message text.

**User response:** No action is required.

---

**HLOU5547I Old DSN: *old\_data\_set\_name*.**

**Explanation:** The product renamed the template data set as specified in the message text.

**User response:** No action is required.

---

**HLOU5548I New DSN: *new\_data\_set\_name*.**

**Explanation:** The product renamed the template data set as specified in the message text.

**User response:** No action is required.

---

**HLOU5549E Requested module *module\_name* not found.**

**Explanation:** The requested module was not found.

**User response:** Ensure that module *module\_name* exists in the STEPLIB concatenation or the linklist.

---

**HLOU5551I ERRORTXT *error\_text*.**

**Explanation:** Service function failure explanation.

**User response:** No action is required.

---

**HLOU5700E Error from call to HLOPIPE from MODNAME = *module\_name* Function = *function\_code* RC = *return\_code*.**

**Explanation:** HLOPIPE returned a nonzero return code. Reasons for this error include the following:

- The product library is not in the WLM STEPLIB.

- The pipe requires clean up.
- An HLOPIPE API call (INIT, LOOKUP, OPEN, CLOSE) failed.
- The ACCEL\_LOAD\_TABLES stored procedure failed.

**User response:**

- Function=02 RC=0A:
  - Ensure that the product library is included in the DSNUTILU/DSNUTILS WLM STEPLIB. If necessary, add it to the STEPLIB, refresh the WLM environment, and then resubmit the job. (For more information, see the section in the product documentation about setting up the WLM-managed address space.)
  - Check the job log for message HLOU5720I to see any error messages that were returned by the failed stored procedure.
- Function=01 RC=03: Another batch job might be loading the target table. If this is not the case, you might need to run job HLO#PIPE to clear common storage, and then refresh the WLM environment. (For more information, see the section in the documentation about clearing common storage after a job fails.) If necessary, correct the data in the input data set and resubmit the job.

If you are unable to resolve the issue, contact IBM Software Support.

---

**HLOU5701I Total records bypassed as outside partition selection: *discard\_count*.**

**Explanation:** SYSREC records were bypassed because they were not within the selected partition list.

**User response:** No action is required.

---

**HLOU5710E Accelerator name <accelerator\_name> is not valid for DB2 SSID=<ssid>**

**Explanation:** The IBM DB2 Analytics Accelerator name passed in the utility syntax is not a valid accelerator name for the specified DB2 subsystem.

**User response:** Correct the accelerator name and resubmit the job.

---

**HLOU5711E Target table for LOAD utility not defined on accelerator <accelerator\_name>.**

**Explanation:** The target TABLE that is specified in the LOAD utility syntax is not defined on the IBM DB2 Analytics Accelerator.

**User response:** Correct the TABLE name and resubmit the job.

---

**HLOU5712E LOAD utility partition specification includes archived partitions.**

**Explanation:** The LOAD utility specifies loading partitions that have been archived on the IBM DB2 Analytics Accelerator.

**User response:** Correct the utility statement and resubmit the job.

---

**HLOU5713E IBM DB2 Analytics Accelerator stored procedure ACCEL\_GET\_TABLES\_DETAILS returned an error.**

**Explanation:** The IBM DB2 Analytics Accelerator stored procedure ACCEL\_GET\_TABLES\_DETAILS returned an error during partition validation.

**User response:** See the DB2 Analytics Accelerator Loader started task SYSPRINT log for more information about the error.

---

**HLOU5714E Target table for LOAD utility has status conflict on IBM DB2 Analytics Accelerator.**

**Explanation:** The target TABLE specified in the LOAD utility syntax cannot be loaded on the IBM DB2 Analytics Accelerator because the IBM DB2 Analytics Accelerator table is set to a status that is incompatible with the load process.

**User response:** Check the status of the table on the IBM DB2 Analytics Accelerator for more information about the error.

---

**HLOU5715E Unknown error during IBM DB2 Analytics Accelerator validation.**

**Explanation:** The target table that is specified in the LOAD utility syntax cannot be loaded on the accelerator because an unknown error occurred during validation. This can be the result of an SQL error in the DB2 Analytics Accelerator Loader started task during the validation process.

**User response:** See the DB2 Analytics Accelerator Loader started task SYSPRINT log for more information about the error.

---

**HLOU5716E Partial load conflict with IBM DB2 Analytics Accelerator table status of InitialLoadPending.**

**Explanation:** The target table that is specified in the LOAD utility syntax cannot be loaded on the accelerator. The accelerator status of the table is InitialLoadPending and not all partitions were specified.

**User response:** Correct the LOAD syntax and resubmit the job.

---

**HLOU5717W** The accelerator is unavailable. Only DB2 will be loaded. Accelerator state: *accelerator\_state*.

**Explanation:** The accelerator is in the specified state, which makes it unavailable for loading. As a result, only the DB2 table will be loaded in accordance with the ACCEL\_WHEN\_OFFLINE action that is specified in the product options file.

**User response:** After the accelerator is back online, rerun the job, or run the ACCEL\_LOAD\_TABLES stored procedure to refresh the accelerator table.

---

**HLOU5718E** The accelerator is unavailable. Accelerator state: *<accelerator\_state>*.

**Explanation:** The accelerator is in the specified state, which makes it unavailable for loading. As a result, the accelerator-only load cannot be performed.

**User response:** After the accelerator is back online, rerun the job.

---

**HLOU5720E** MSGTEXT =*<message\_text>*.

**Explanation:** The IBM DB2 Analytics Accelerator stored procedure ACCEL\_LOAD\_TABLES returned the message text after successful or unsuccessful completion.

**User response:** See the DB2 Analytics Accelerator Loader started task SYSPRINT log for more information about the error.

---

**HLOU5725I** MSGTEXT=*<accelerator\_message\_text>*.

**Explanation:** An Accelerator stored procedure has returned the message text after successful or unsuccessful completion. The message that was issued just before this message identifies the Accelerator operation that generated these messages.

**User response:** If any of the messages describe an error condition, see the IBM DB2 Analytics Accelerator stored procedure reference documentation for information about the AQT error message. If you need further assistance, contact IBM Software Support.

---

**HLOU5726I** The table has been successfully added to the accelerator.

**Explanation:** The table was successfully added to the accelerator. If the add operation completed with warnings, the messages returned by the accelerator will be reported immediately following this message. These accelerator messages are reported in message HLOU5725I.

**User response:** No action is required.

---

**HLOU5727E** Unable to add the table to the accelerator. Accelerator error messages follow.

**Explanation:** An attempt to add the table to the accelerator has failed. The error messages returned by the accelerator are reported immediately following this message, in message HLOU5725I.

**User response:** Refer to the IBM DB2 Analytics Accelerator Stored Procedures reference for a description of the AQT messages reported in HLOU5725I. If you need further assistance, contact IBM Software Support.

---

**HLOU5728I** The table has been successfully removed from the accelerator.

**Explanation:** The table was successfully removed from the accelerator. If the operation completed with warnings, the warning messages returned by the accelerator are reported immediately following this message. These accelerator messages are reported in message HLOU5725I.

**User response:** No action is required.

---

**HLOU5729E** Unable to remove the table from the accelerator. Accelerator error messages follow.

**Explanation:** An attempt to remove the table from the accelerator has failed. The error messages returned by the accelerator are reported immediately following this message, in message HLOU5725I.

**User response:** Refer to the IBM DB2 Analytics Accelerator Stored Procedures reference for a description of the AQT messages reported in HLOU5725I. If you need further assistance, contact IBM Software Support.

---

**HLOU5730E** DB2 call attachment facility error.  
RC=*<hex\_return\_code>*  
RSN=*<hex\_reason\_code>*.

**Explanation:** An attempt to connect to DB2 via the call attachment facility has failed. This error message can also indicate that the product was unable to load the call attachment facility into memory.

**User response:** Contact IBM Software Support.

---

**HLOU5731E** Unable to parse the message document returned by SPNAME  
*<stored\_procedure\_name>*.

**Explanation:** The product could not parse the XML message document returned by an accelerator stored procedure call. Therefore, the product cannot determine whether the stored procedure call succeeded. For more information, see message HLOU5725I and message HLOU5733I.

| **User response:** Contact IBM Software Support.

---

| **HLOU5732E Unable to LOAD MODULE**  
 | `<module_name>. RC=<hex_return_code>`  
 | `RSN=<hex_reason_code>`.

| **Explanation:** An attempt to LOAD the named DB2 interface module failed. The system return code and reason code are also reported in the message.

| **User response:** Verify that the DB2 load library is allocated in the STEPLIB or JOBLIB, and then resubmit the job. If you need further assistance, contact IBM Software Support.

---

| **HLOU5733I DOCTEXT** `<xml_document_text>`.

| **Explanation:** An attempt to parse the XML document reported in this message failed. Refer to messages HLOU5731E and HLOU5725I for more information on the stored procedure that returned the malformed document, and the parsing error.

| **User response:** Contact IBM Software Support.

---

| **HLOU5734E HLOADDTB has failed with**  
 | `RC=<hex_return_code>`.

| **Explanation:** An attempt to add the table to the accelerator has failed.

| **User response:** Contact IBM Software Support.

---

**HLOU5800W Partition discovery failed in USE15.**  
**Record =** `record_number`.

**Explanation:** Process USE15 could not determine the partition to which the record belongs. This is probably because the record is outside the range of the LIMITKEYS.

**User response:** Correct the partitioning key value in the identified SYSREC record and rerun the job. If you believe the record was erroneously discarded, contact IBM Software Support.

---

**HLOU5801E Column** `<column_name>` **DEFAULT indicator value** `<column_default_indicator>` **is not supported.**

**Explanation:** The product does not support the default indicator for SYSIBM.SYSCOLUMNS(DEFAULT) for this column.

**User response:** Supply data for this column or use a supported default type for the conversion to DB2 internal format, and then resubmit the job.

---

**HLOU5802E Default value for column**  
`<column_name>` **is missing.**

**Explanation:** When a column is defined as NOT NULL, you must provide a value or use the default value.

**User response:** Provide a valid value for the specified column and then resubmit the job.

---

**HLOU5803E A failure has occurred in a data conversion routine.**

**Explanation:** While trying to convert data, routine HLOUSE15 encountered an unrecoverable error.

**User response:** IBM Software Support Provide Support with all output from this job, including the dump.

---

**HLOU5804E Unsupported column type. COLUMN**  
`<column_name>` **TYPE** `<column_type>`.

**Explanation:** The data type for the specified column is not supported for the conversion to DB2 internal format.

**User response:** For information about the supported data types, see the section about load processing enhancements in the product user's guide. Correct the error and then resubmit the job.

---

**HLOU5805E Unsupported row format. FORMAT**  
`<format_type>`.

**Explanation:** The table space row format is not supported when you are converting data to DB2 internal format, or the format is an unknown type. The supported row formats are basic and reordered. SYSIBM.SYSTABLEPART(FORMAT) shows the format type.

**User response:** Specify a supported format for the row and then resubmit the job.

---

**HLOU5806E Column** `<column_Name>` **input data is too long.**

**Explanation:** The input data that is specified for the column is longer than the length of the target column.

**User response:** Correct the LOAD or the table column definition, and then resubmit the job.

---

**HLOU5806W Column** `column_name` **data is too long.**  
**Record =** `record_number`.

**Explanation:** The input data is longer than the length of the target column.

**User response:** Correct the LOAD or the table column definition and resubmit the job.

---

**HLOU5807W** Column *column\_name* has invalid data in record *record\_number*.

**Explanation:** The data for the specified column is invalid.

**User response:** Correct the data in SYSREC and resubmit the job.

---

**HLOU5809W** DB2 size limit exceeded for column *column\_name* record *record\_number*.

**Explanation:** The value exceeds the DB2 size limits for the data type for the column.

**User response:** Correct the data in SYSREC and resubmit the job.

---

**HLOU5810W** Input numeric invalid column *column\_name* record *record\_number*.

**Explanation:** The input field contains an invalid numeric data type for the column.

**User response:** Correct the data in SYSREC and resubmit the job.

---

**HLOU5811E** Unable to schedule SRB from sort E15 exit. RC=*return\_code*.

**Explanation:** IEAMSCHD returned a nonzero return code.

**User response:** IBM Software Support Provide Support with the output from this job.

---

**HLOU5812E** IEAVPSE pause service failed. RC=*return\_code*.

**Explanation:** The IEAVPSE pause release service failed with the specified return code.

**User response:** IBM Software Support Provide Support with the return code from this message.

---

**HLOU5813E** SE15SRBM initialization failed. Reason=*reason\_text*.

**Explanation:** A scheduled SRB encountered an error during initialization processing.

**User response:** IBM Software Support Provide Support with the output from this job.

---

**HLOU5814E** IEAVXFR transfer pause service failed, RC=*return\_code*.

**Explanation:** The IEAVXFR transfer pause service failed with the specified return code.

**User response:** IBM Software Support Provide Support with the return code from this message.

---

**HLOU5815E** The INTO TABLE clause names a table with an unsupported ENCODING\_SCHEME: *<encoding\_scheme>*.

**Explanation:** The table encoding scheme is not compatible with the requested function. The product supports only the EBCDIC encoding scheme for the requested function.

**User response:** Choose a table with the EBCDIC encoding scheme.

---

| **HLOU5817W** Input packed decimal invalid for  
| COLNAME *<column\_name>*. RECORD  
| *<record\_nbr>*.

| **Explanation:** The input field contains invalid packed  
| decimal data for the column with type DECIMAL.  
| Because no field specifications were provided, packed  
| decimal data is expected.

| **User response:** Correct the data in the SYSREC file  
| and submit the job again.

---

**HLOU5900E** DB2 Analytics Accelerator Loader DSNUTILB exit module is not APF-authorized and is terminating.

**Explanation:** The load library for the DB2 Analytics Accelerator Loader DSNUTILB module is not APF-authorized, as required. Consequently, the DB2 Analytics Accelerator Loader DSNUTILB intercept processing for the DB2 utility is terminating.

**User response:** APF-authorize the load library for the DSNUTILB module, and then run DB2 utility job again.

---

**HLOU5901E** RVT locate operation failed

**Explanation:** DB2 Analytics Accelerator Loader could not locate its RVT control block.

**User response:** Make sure that at least one DB2 Analytics Accelerator Loader system is operational and then resubmit the job.

---

**HLOU5901S** RVT locate operation failed.

**Explanation:** DB2 Analytics Accelerator Loader could not locate its RVT control block.

**User response:** Make sure that at least one DB2 Analytics Accelerator Loader system is operational and then resubmit the job.

---

**HLOU5902S** COM locate operation failed.

**Explanation:** DB2 Analytics Accelerator Loader could not locate its COM control block.

**User response:** Make sure that at least one DB2

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## HLOU5903W • HLOU5912I

Analytics Accelerator Loader system is operational and then resubmit the job.

---

### HLOU5903W DSNUTILF exit is inoperative for SSID: *db2\_ssid*.

**Explanation:** DSNUTILB intercept processing cannot be performed for the DB2 utility because the DB2 Analytics Accelerator Loader started task is not running or is not intercepting DSNUTILB for the specified DB2 subsystem ID (SSID). The DB2 utility job continues running.

**User response:** Make sure that at least one DB2 Analytics Accelerator Loader system is operational and enabled for interception. Also check for any additional messages that are related to the interception failure. After you correct any related errors and confirm that the system is ready for interception, resubmit the utility job.

---

### HLOU5904W DB2 Analytics Accelerator Loader is not active.

**Explanation:** DSNUTILB interception cannot be performed for the DB2 utility because the DB2 Analytics Accelerator Loader started task is not running. The utility continues running.

**User response:** Make sure that at least one DB2 Analytics Accelerator Loader system is operational and enabled for interception. Also, start the started task if necessary. Then resubmit the DB2 utility job.

---

### HLOU5905W Load library open failed.

**Explanation:** DSNUTILB interception is currently unavailable. The utility continues running, but DSNUTILB interception will not occur.

**User response:** Make sure that a DB2 Analytics Accelerator Loader started task is operational. Also, make sure that an intercept policy is defined that allows interception for the DB2 subsystem on which you are running the utility job. If the problem persists, contact IBM Software Support.

---

### HLOU5906W Load failed for HLOUMAIN.

**Explanation:** DSNUTILB interception is currently unavailable. The utility continues running, but DSNUTILB interception will not occur.

**User response:** Make sure that a DB2 Analytics Accelerator Loader started task is operational. Also, make sure that an intercept policy is defined that allows interception for the DB2 subsystem on which you are running the utility job. If the problem persists, contact IBM Software Support.

---

### HLOU5907E SYSPRINT DD is missing or unusable.

**Explanation:** SYSPRINT DD is missing, or is allocated to DUMMY or NULLFILE.

**User response:** Supply a valid SYSPRINT DD statement in the JCL.

---

### HLOU5908I IBM DB2 SORT found and will be used.

**Explanation:** IBM DB2 SORT was found and will be used for PRESORT on LOAD.

**User response:** No action is required.

---

### HLOU5909W IBM DB2 SORT cannot be utilized. Not all modules found.

**Explanation:** Not all modules for IBM DB2 SORT were found.

**User response:** Ensure that IBM DB2 SORT has been installed correctly.

---

### HLOU5910I DB2 Sort Program=*progrname* returned non-zero return code, RC=*rc*

**Explanation:** An internal error has occurred.

**User response:** Contact IBM Software Support. Provide the Support representative with the complete text of this message. Sorts will be performed by the default sort.

---

### HLOU5911I DB2 sort program *program\_name* abended. Default sort program will be used.

**Explanation:** The sort program abended. The default sort program will be used for sort processing.

**User response:** Contact IBM Software Support. Have available the listing that contains this message and any applicable related messages.

---

### HLOU5912I ESTAE SDUMPX call RC=*return code*, RS=*reason code*.

**Explanation:** During ESTAE processing, a call to the z/OS SDUMPX facility returned the displayed return code and reason code.

**User response:** If RC=08, review the reason code in the appropriate SDUMPX documentation. Then make any changes to Dump Services that are needed to obtain proper diagnostic dumps. If you need assistance, contact IBM Software Support.

---

**HLOU5913E LOAD PRESORT of hash table unable to proceed due to error.**

**Explanation:** An error has occurred during **LOAD PRESORT** hash table analysis.

**User response:** Examine the job output and the DB2 Analytics Accelerator Loader Started Task to determine the cause of the error.

---

**HLOU5914E Field length not supported for LOAD PRESORT: Column = *column\_name*.**

**Explanation:** The length of the data item specified for **LOAD** is not supported for **PRESORT**.

**User response:** Correct the length in the **LOAD** specification for the field in error.

---

**HLOU5915E FORMAT DELIMITED is not supported for PRESORT with an ORGANIZE BY HASH table.**

**Explanation:** **PRESORT** does not support **SYSREC** data that is in delimited file format where the target table is defined as **ORGANIZE BY HASH**.

**User response:** Provide a **SYSREC** that is not in delimited file format.

---

**HLOU5916E Started task encountered an SQL error=*sql\_code***

**Explanation:** An SQL error occurred.

**User response:** To determine the reason for the error, review the **HLOS0202E** messages that were issued in the started task address space, and see the **DB2** messages documentation. If you need assistance, contact IBM Software Support.

---

**HLOU5917E OPEN failed for SYSPRINT**

**Explanation:** An **OPEN** macro failed for **SYSPRINT**.

**User response:** Review other messages issued to determine the cause.

---

**HLOU5918E Field specification missing for a PRESORT key.**

**Explanation:** A field specification is required for a field that is part of a **PRESORT** key.

**User response:** Provide a field specification for each field that is part of the **PRESORT** key.

---

**HLOU9700I The output saved in the Autonomics Director history table exceeds 8M and is truncated.**

**Explanation:** The 8-megabyte limit was reached for output in **CLOB** table in

**SYSAUTO.UTILITYRUNS\_HISTORY**. The product stops processing output.

**User response:** No action is required.

---

**HLOU9701I Module BBY\$NMIC not found in started task STEPLIB.**

**Explanation:** Module **BBY\$NMIC** was not found in the **STEPLIB** concatenation of the **DB2 Analytics Accelerator Loader** started task. **DB2 Autonomics Director** utility history collection is disabled.

**User response:** No action is required.

---

**HLOU9702W Module BBY\$NMIC does not conform to version 2, release 1 or later.**

**Explanation:** Module **BBY\$NMIC** found in the **DB2 Analytics Accelerator Loader** started task is not marked version 2 release 1 or later. **DB2 Autonomics Director** utility history collection is disabled.

**User response:** Ensure that you are using **DB2 Utilities Solution pack** version 2.1 or later.

---

**HLOU9703W Module BBY\$NMIC contains invalid offset to data.**

**Explanation:** The module **BBY\$NMIC** that was found in the **DB2 Analytics Accelerator Loader** started task contains an offset to the data structure that does not point to a valid version. **DB2 Autonomics Director** utility history collection is disabled.

**User response:** Contact IBM Software Support.

---

**HLOU9704W BLDL error encountered searching for module BBY\$NMIC. RSN=*reason\_code*.**

**Explanation:** The product encountered an error while searching for module **BBY\$NMIC**. **DB2 Autonomics Director** utility history collection is disabled.

**User response:** Contact IBM Software Support.

---

**HLOU9705W Error encountered attempting to load module BBY\$NMIC.**

**Explanation:** The product encountered an error while attempting to load module **BBY\$NMIC**. **DB2 Autonomics Director** utility history collection is disabled.

**User response:** Contact IBM Software Support.

---

**HLV0001U desc GETMAIN failed - increase memory size**

**Explanation:** Insufficient storage. The product was unable to obtain enough storage to allocate the initial program stack.

**User response:** Check the abend code to determine if

## HLV0002S • HLV0010H

the region size should be increased. Increase the region size if necessary, and restart the product.

The variable fields of the message text are: desc description

---

### HLV0002S parm IS errdesc - desc

**Explanation:** This message indicates a problem with the parameter string that was passed to the main started task entry point. Execution is terminated.

**User response:** Correct the error that is indicated in the error message, and restart the product.

The variable fields of the message text are: parm parameter errdesc error description desc description of correction

---

### HLV0003S CODES BEGINNING WITH 'var1', NOT 'var2' SHOULD NOT BE USED TO SET THE '%2' PARAMETER

**Explanation:** None.

**User response:** Contact IBM Software Support.

---

### HLV0004S parm IS errdesc

**Explanation:** This message indicates a problem with the parameter string that was passed to the main started task entry point. Execution is terminated.

**User response:** Ensure that a parameter string is being passed (using PARM=) in the started task JCL. The parameter string should contain at least "INIT,ssnx" where ssnx is the 4 character subsystem name. Correct the error and restart the product.

The variable fields of the message text are: parm: parameter, errdesc: error description.

---

### HLV0005S parm 'val' IS errdesc

**Explanation:** This message indicates a problem with the parameter string that was passed to the main started task entry point. Execution is terminated.

**User response:** Ensure that the execution option (the first parameter in PARM=) is INIT. This is the only valid value. Correct the error, and restart the product.

The variable fields of the message text are: parm parameter val the value that was passed errdesc error description

---

### HLV0006S Product not APF authorized, execution terminating

**Explanation:** This message is issued if the product detects that it is not APF authorized. The main product address space will terminate immediately.

**User response:** Ensure that all of the STEPLIB data sets are APF authorized. Note that all of the data sets

must be APF authorized, not just the data set containing the product load modules. Fix the STEPLIB data sets, and restart the product.

---

### HLV 0007S ss field IS errdesc

**Explanation:** The product tried to initialize or re-initialize a system control block (the SSCT). The system control contained a field with an invalid value. This error will cause product initialization to terminate.

**User response:** Check for other error messages were generated along with the error message. If the combined error messages are sufficient to explain the error, take whatever corrective action is appropriate. If the problem cannot be resolved, contact Software Support.

The variable fields of the message text are: field SSCT field name errdesc error description

---

### HLV0008S Product cannot execute in batch, execution terminating

**Explanation:** This message is issued if the product detects that it is running in batch. The main product address space will terminate immediately.

**User response:** The product cannot run as a batch job. The product must execute as a started task. Install the product as a started task, and restart the product.

---

### HLV0009S Execution DEQ failed - contact systems programming

**Explanation:** Some type of error occurred while the product was releasing the execution enqueue. The execution enqueue is used to prevent more than one copy of the product from using a single subsystem ID. Multiple copies of the product can execute concurrently so long as each copy uses a different subsystem ID.

**User response:** Check the error messages associated with this problem. If possible, fix the problem identified by the error messages, and restart the product. If the problem cannot be resolved, contact Software Support.

---

### HLV0010H mod/funcc execution text

**Explanation:** This message is used to trace product initialization. A message is issued before and after the execution of each initialization routine.

**User response:** There is no action for this message. This message is only used for trace and debugging purposes.

The variable fields of the message text are: mod module name funcc current function code text text of the message



---

**HLV0011W** STSI instruction failed with %1 - feedback = %2

**Explanation:** None.

**User response:** Contact IBM Software Support.

---

**HLV0012W** CSRSI service returned RC=rc for CPU H/W identification request - product validation may be affected.

**Explanation:** None.

**User response:** Contact IBM Software Support.

---

**HLV0013S** SSCT locate error - contact systems programming

**Explanation:** The product tried to find the current subsystem ID in the subsystem control block chain. A loop was found in the subsystem control block chain.

**User response:** This is a serious error that may cause other components of the system to fail. If the system is having other problems (such as loop errors), try to resolve the other problems before restarting the product. If the product is the only component experiencing any difficulty, contact Software Support.

---

**HLV0014S** var1: var2 var3 var4 var5 var6 var7

**Explanation:** None.

**User response:** Contact IBM Software Support.

---

**HLV0015S** %PX-js subsystem ss waiting for execution ENQ

**Explanation:** Each active copy of the product must use a different subsystem ID. This restriction is enforced using the product execution enqueue. The product execution enqueue contains the current subsystem ID, so that multiple copies of the product can execute if each copy uses a different subsystem ID. A new copy of the ss subsystem has been started and is attempting to get the execution enqueue. The execution enqueue for subsystem ss is already held by a copy of the product.

**User response:** Either cancel the newly started ss subsystem that is waiting on the execution enqueue or stop the currently active copy of the ss subsystem. Stopping the currently active copy of the ss subsystem will allow the new copy of the ss subsystem to complete initialization and start execution. The new copy of the ss subsystem may have to be stopped using the ASID keyword of the CANCEL command.

---

**HLV0016S** Execution ENQ error - contact systems programming

**Explanation:** Each active copy of the product must use a different subsystem ID. This restriction is enforced using the product execution enqueue. The product execution enqueue contains the current subsystem ID, so that multiple copies of the product can execute if each copy uses a different subsystem ID. The product tried to obtain the execution enqueue. The ENQ macro failed.

**User response:** Check the error messages associated with this problem. There may be one or more ENQ/DEQ error messages referring to the current problem. If possible, fix the problem identified by the error messages, and restart the product. If the problem cannot be resolved, contact Software Support.

---

**HLV0017S** var1 PARAMETER INVALID: var2 var3 var4 var5 var6 var7 var8.

**Explanation:** None.

**User response:** Contact IBM Software Support.

---

**HLV0018H** var1 var2

**Explanation:** None.

**User response:** Contact IBM Software Support.

---

**HLV0019I** var1 var2

**Explanation:** None.

**User response:** Contact IBM Software Support.

---

**HLV0020S** First character of subsystem name must be an alphabetic character (A-Z).

**Explanation:** Each copy of the product must use a unique subsystem ID string. The default subsystem ID is specified in the started task procedure or in the START command used to start the product. In either case, the subsystem ID string must always be exactly four characters long, and the first characters must be one of the alphabetic characters A-Z.

**User response:** Fix the subsystem ID string used to start the product by modifying the product started task procedure or by changing the product start command. Restart the product using a valid subsystem ID string.

The variable fields of the message text are: subsysid subsystem identifier

---

**HLV0021S** ABEND ERROR abcd REASON rscd AT mod+off

**Explanation:** A serious abend occurred during product initialization, execution, or termination. The abend was

## HLV0022S • HLV0032S

not recoverable, and the product was forced to terminate.

**User response:** Check the abend code and any related abend messages. If possible, fix the problem identified by the error messages, and restart the product. If the problem cannot be resolved, contact Software Support. Note the exact contents of the above error message and any other error messages associated with the product failure.

The variable fields of the message text are: abcd abend code rscd reason code mod module name off module offset

---

**HLV0022S**    **Second 2 characters of subsystem name must be 'prodid'.**

**Explanation:** Each copy of the product must use a unique subsystem ID string. The default subsystem ID is specified in the started task procedure or in the START command used to start the product. In either case, the subsystem ID string must always be exactly four characters long, and the second two characters must be a valid product ID pair. For example: "DB" is for HLV and "WS" is for HTTP-API.

**User response:** Fix the subsystem ID string used to start the product by modifying the product started task procedure or by changing the product start command. Restart the product using a valid subsystem ID string.

The variable fields of the message text are: prodid two character product identifier

---

**HLV0023S**    **Subsystem name must be four (4) characters long**

**Explanation:** Each copy of the product must use a unique subsystem ID string. The default subsystem ID is specified in the started task procedure or in the START command used to start the product. In either case, the subsystem ID string must always be exactly four characters long.

**User response:** Fix the subsystem ID string used to start the product by modifying the product started task procedure or by changing the product start command. Restart the product using a valid subsystem ID string.

---

**HLV0024S**    **Last character of subsystem name must be alphanumeric**

**Explanation:** Each copy of the product must use a unique subsystem ID string. The default subsystem ID is specified in the started task procedure or in the START command used to start the product. In either case, the subsystem ID string must always be exactly four characters long. The last character can be one of the alphanumeric characters A-Z or 0-9.

**User response:** Fix the subsystem ID string used to start the product by modifying the product started task procedure or by changing the product start command.

Restart the product using a valid subsystem ID string.

---

**HLV0025S**    **%PM not prepared for execution by feature code**

**Explanation:** None.

**User response:** Contact IBM Software Support.

---

**HLV0026S**    **ss not configured for this CPU var1, execution terminating.**

**Explanation:** None.

**User response:** Contact IBM Software Support.

---

**HLV0027S**    **MVS/370 not supported**

**Explanation:** The product checked the host system and found that the host system is some version of MVS/370. The product does not support MVS/370.

**User response:** The product only supports z/OS. z/OS must be installed before the product can be used.

---

**HLV0028S**    **Product code "pdcd" is invalid.**

**Explanation:** None.

**User response:** Contact IBM Software Support.

---

**HLV0029S**    **Configuration issue detected; ss not configured for CPU var1, execution continues**

**Explanation:** None.

**User response:** Contact IBM Software Support.

---

**HLV0030S**    **%PM will require configuration update in <x> days**

**Explanation:** None.

**User response:** Contact IBM Software Support.

---

**HLV0031E**    **%PM will require configuration update in <x> days.**

**Explanation:** None.

**User response:** Contact IBM Software Support.

---

**HLV0032S**    **%PM configuration problem, execution terminating.**

**Explanation:** None.

**User response:** Contact IBM Software Support.

---

**HLV0033S** CONFIGURATION FROM 'var2'  
PARAM. DOES NOT SUPPORT  
EXECUTION OF THIS PRODUCT -  
TERMINATING.

**Explanation:** None.

**User response:** Contact IBM Software Support.

---

**HLV0034S** PM feature code <feature> not  
configured.

**Explanation:** None.

**User response:** Contact IBM Software Support.

---

**HLV0035S** ss requires configuration update,  
execution continues.

**Explanation:** None.

**User response:** Contact IBM Software Support.

---

**HLV0036S** service OF desc FAILED, RC=rc,  
DETECTED AT ad

**Explanation:** This is a generic error message used to describe a wide variety of product initialization, execution, and termination errors. The message text provides the current operation and what the current operation was trying to do.

**User response:** Check the error messages and the return code associated with this problem. There may be one or more error messages referring to the current problem. If possible, fix the problem identified by the error messages, and restart the product. If the problem cannot be resolved, contact Software Support.

The variable fields of the message text are: service current operation, GETMAIN, FREEMAIN, ATTACH etc. desc description rc return code

---

**HLV0037E** servrtn errdesc FAILED, RC=rc,  
DETECTED AT ad, %SK

**Explanation:** Some type of service routine (operating system or product specific) failed. The error message identifies the service routine and the type of error.

**User response:** Check the full text of the error message, and fix the program that calls the application program interface, if necessary.

The variable fields of the message text are: servrtn service routine errdesc error description rc return code

---

**HLV0038S** service OF desc FAILED, RC=rc,  
REASON=rscd, DETECTED AT ad,  
%SK

**Explanation:** This is a generic error message used to describe a wide variety of product initialization, execution, and termination errors. The message text

provides the current operation and what the current operation was trying to do.

**User response:** Check the error messages and the return code associated with this problem. There may be one or more error messages referring to the current problem. If possible, fix the problem identified by the error messages, and restart the product. If the problem cannot be resolved, contact Software Support.

The variable fields of the message text are: service current operation, GETMAIN, FREEMAIN, ATTACH etc. desc description rc return code rscd reason code

---

**HLV0039S** servrtn errdesc FAILED, ABEND=abcd,  
REASON CODE=rscd

**Explanation:** This is a generic error message used to describe a wide variety of product initialization, execution, and termination errors. The message text provides the current operation and what the current operation was trying to do.

**User response:** Check the error messages and the return code associated with this problem. There may be one or more error messages referring to the current problem. If possible, fix the problem identified by the error messages, and restart the product. If the problem cannot be resolved, contact Software Support.

The variable fields of the message text are: servrtn service routine errdesc error description abcd abend code rscd reason code

---

**HLV0040S** cb CONTROL BLOCK AT addr text

**Explanation:** This message is used to describe control block errors. The error may be an invalid tag, invalid length, or some other error. The control block could not be used because of the error.

**User response:** Check the error messages associated with this problem. There may be one or more error messages referring to the current problem. If possible, fix the problem identified by the error messages, and restart the product. If the problem cannot be resolved, contact Software Support.

The variable fields of the message text are: cb control block addr address text text of the message

---

**HLV0042I** %PX Vvar1 initializing on processor  
var2.var3.var4.var5 var6 var7.

**Explanation:** This message is issued during early start-up and displays information about the hardware on which the product is executed. This message provides information helpful to support personnel should some configuration difficulty arise.

**User response:** No action is required. If later messages indicate a configuration problem has been encountered, this message may aid in the swift resolution of the

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problem. If the problem cannot be resolved, contact IBM Software Support.

The variable fields of the message text are:

var1 Server version and revision level  
var2 CPU ID (Serial number)  
var3 CPU Model Type  
var4 CPU Model Number (if known)  
var5 CPU Manufacturer (if known)  
var6 Active PCCA count  
var7 diagnostic flags

---

### HLV0043H text

**Explanation:** This message is used to print out various internal control blocks, the contents of processor registers, and other hexadecimal information.

**User response:** If there are other messages indicating an error, use this message in conjunction with them to determine the cause of the problem. If there is a problem and you are unable to resolve it, contact Software Support.

The variable fields of the message text are: text text of the message

---

### HLV0044S desc FREEMAIN FAILED

**Explanation:** Storage release error. The product was unable to free a section of storage.

**User response:** Check the abend code to determine the cause of the error. Make any needed changes to resolve the problem, and restart the product.

The variable fields of the message text are: desc description

---

### HLV0045S Task or exit mod can not be executed

**Explanation:** A product macro cannot be used because the product control blocks are inconsistent. This macro is used to initialize a task or an exit. The task or exit will not be able to execute.

**User response:** This error should only occur during product termination or if the main product address space is not executing. If this error occurs at any other time, contact Software Support. The main product address space will have to be restarted if this error is reported.

The variable fields of the message text are: mod module name

---

### HLV0046W Initialization procedure procname or IRXJCL ended with condition code rc - processing continues

**Explanation:** IRXJCL was attached to execute the initialization procedure. The reported non-zero condition code was set after execution.

**User response:** Check the initialization exec for REXX-language errors which might cause the return code to be set. It may be impossible to distinguish between IRXJCL's return code and the return code set by the procedure.

The variable fields of the message text are: procname initialization procedure name rc return or condition code value

---

### HLV0047I DATASPACE procname CREATED TIME = t2 BY %PM

**Explanation:** DSPSERV system service routine was invoked at initialization. A dataspace has been created.

**User response:** None required. This is an informational message.

The variable fields of the message text are: procname dataspace name procedure name

---

### HLV0048E DSPSERV ERROR. RETURN CODE = rc. t2 %PM

**Explanation:** DSPSERV system service routine was invoked at initialization to create a dataspace. However, it received a non-zero return. The dataspace was not created.

**User response:** Check the return code displayed in the message in the Auth Assembler Services Reference, and take appropriate action, if possible. If the problem cannot be resolved, contact Software Support.

The variable fields of the message text are: rc DSPSERV return code

---

### HLV0049I Dataspace added to PASN list. t2 %PM

**Explanation:** ALESERV system service routine was invoked at initialization to add this address space to a previously created dataspace.

**User response:** None required. This is an informational message.

---

### HLV0050W var1 configuration requires an update, certain features will need modification, execution continuing.

**Explanation:** None.

**User response:** Contact IBM Software Support.

---

### HLV0053S Configuration issue: processor model number (var1) does not match configured model; execution continues.

**Explanation:** None.

**User response:** Contact IBM Software Support.

---

**HLV0054H** var1 Configuration installed until var2 (var3 parameter).

**Explanation:** None.

**User response:** Contact IBM Software Support.

---

**HLV0055E** cs not found within %PM primary load module

**Explanation:** During subsystem initialization, the indicated control section (CSECT) was missing from the product's primary execution load module.

**User response:** Initialization of the subsystem is terminated immediately with an S0C3 abend. Contact the Software Support group.

The variable fields of the message text are: cs control section name

---

**HLV0056E** Invalid data found in 'cs' loaded at addr ivdata

**Explanation:** During subsystem initialization, invalid data was detected within a control section or table loaded as part of the product's primary execution load module.

**User response:** Initialization of the subsystem is terminated immediately with an S0C3 abend. Contact the Software Support group.

The variable fields of the message text are: cs control section or table name addr load address of the CSECT or table ivdata hex dump of invalid data area

---

**HLV0057W** var1 rejected for use - var2 var3.

**Explanation:** None.

**User response:** Contact IBM Software Support.

---

**HLV0058W** var1 refresh required in var2 days.

**Explanation:** None.

**User response:** Contact IBM Software Support.

---

**HLV0059S** Configuration issue: H/W processor ID var1 mismatched configuration for var2 of past var3 hours.

**Explanation:** None.

**User response:** Contact IBM Software Support.

---

**HLV0060T** LATCH SET CREATED:  
LS-NAME='var1' LATCHES=var2  
LS-TOKEN=var3 var4 var5 var6 var7  
var8 var9

**Explanation:** Information written to trace when a new latch set is created within the address space

**User response:** None.

The variable fields of the message text are: var1 latch set name var2 count of latches in new latch set var3 latch set token var4 variable information var5 variable information var6 variable information var7 variable information var8 variable information var9 variable information

---

**HLV0061E** LATCH ERROR: var1 var2 var3 var4 var5 var6 var7 var8 var9

**Explanation:** An error or unexpected condition was detected in a latch manager internal support routine

**User response:** Look for related messages indicating the cause of the error and correct the underlying problem. If the problem cannot resolved, contact Software Support.

The variable fields of the message text are: var1 request type being processed var2 error detected var3 variable information var4 variable information var5 variable information var6 variable information var7 variable information var8 variable information var9 variable information

---

**HLV0062T** LATCH var1: LSTOKEN=var2  
LATCHNO=var3 LTOKEN=var4  
RQSTR=var5 var6 var7 var8 var9

**Explanation:** Information written to trace when a latch is obtained, released, or purged

**User response:** None.

The variable fields of the message text are: var1 operation var2 latch set token var3 latch number in set var4 latch token var5 requestor identifier var6 variable information var7 variable information var8 variable information var9 variable information

---

**HLV0063S** z/OS Version must be at 1.13 or higher. Execution terminating.

**Explanation:** The product checked the host system and found that the host system is not running at z/OS 1.13 or higher. The product does not support z/OS levels below 1.13.

**User response:** The product only supports z/OS 1.13 and higher. z/OS 1.13 or higher will have to be installed before the product can be fully supported.

---

**HLV0064T** Interval summary var1. SMLH at var2 SMLG at var3. Tag: var4

**Explanation:** Interval recording encountered an internal control block error while creating an interval summary record.

**User response:** The interval record in error is discarded and summarization continues. If the problem cannot be resolved, contact Software Support.

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The variable fields of the message text are: var1 operation var2 address of SMLH var3 address of SMLG var4 variable information

---

### HLV0065T Interval summary %1: %2

**Explanation:** This messages contains the number of interval summary record errors found.

**User response:** Contact Software Support.

---

### HLV0066S Logon of the address space user ID <userid> failed. Detected at <ad>.

**Explanation:** The product failed to create a security environment for a task using the user ID of the address space.

**User response:** There may be one or more additional error messages or abends referring to the problem. If possible, fix the problem identified by the error messages, and restart the product. If the problem cannot be resolved, contact IBM Software Support.

The variable fields of the message text are: userid address space userid

---

### HLV0067S LOGON of the SSLUSERID, userid, failed. Detected at ad.

**Explanation:** The product failed to create a security environment for a task using the userid specified in SSLUSERID.

**User response:** There may be one or more additional error messages or abends referring to the problem. If possible, fix the problem identified by the error messages, and restart the product. If the problem cannot be resolved, contact Software Support.

The variable fields of the message text are: userid address space userid

---

### HLV0068T Logon of user ID <userid> failed.

**Explanation:** Logon failed for user ID specified in Services request.

**User response:** Check whether user ID is valid or if the password was correct.

The variable fields of the message text are: userid http userid, SOAP userid or certificate

---

### HLV0069W The severity level of message cannot be changed.

**Explanation:** None.

**User response:** Contact IBM Software Support.

---

### HLV0080E Control block cb could not be located

**Explanation:** The product tried to find one of several control blocks during product initialization. One of the control blocks could not be found.

**User response:** Ensure that the version of the host (MVS) operating system is supported by the product. If the host operating system version is supported by the product, check for any other error messages referring to the current problem. If possible, fix the problem identified by the error messages, and restart the product. If the problem cannot be resolved, or if the host operating system version is not supported by the product, contact Software Support.

The variable fields of the message text are: cb control block

---

### HLV0081E Unknown host operating system - host

**Explanation:** The product was not able to identify the host operating system by its product name.

**User response:** Ensure that the version of the host (z/OS) operating system is supported by the product. If the operating system is supported by the product, check for any other error messages that refer to the current problem. If possible, fix the problem identified by the error messages, and restart the server. If the problem cannot be resolved or if the operating system is not supported, contact Software Support.

The variable fields of the message text are: host host operating system product name

---

### HLV0082I var1 online CPs and var2 online zIIPs detected

**Explanation:** This informational message identifies the number of online general purpose processors (CPs) and zIIPs detected during product initialization.

**User response:** None. This message is for informational purposes only.

The variable fields of the message text are: var1 Number of online CPs var2 Number of online zIIPs

---

### HLV0083I LPAR var1. CEC MSUs: var2. LPAR MSUs: var3. Current var4. var5

**Explanation:** This informational message identifies the LPAR and the capacity of the processors.

**User response:** None. This message is for informational purposes only.

The variable fields of the message text are: var1 LPAR name var2 CEC MSU capacity var3 LPAR MSU capacity var4 Current long-term average MSU usage var5 Only relevant if z/OS is a VM guest

---

**HLV0084I    Decimal float support var1 available on this processor**

**Explanation:** This informational message identifies whether decimal float support is available or not.

**User response:** None. This message is for informational purposes only.

The variable fields of the message text are: var1 decfloat support, "is" or "is not"

---

**HLV0090I    TSOSRVACTIVE(YES) INVALID IN PROB STATE - SIMULATED USING TMP IN CURRENT A/S**

**Explanation:** This message is issued when TSOSRVACTIVE(YES) has been specified as a start-up parameter, but the product is running in test mode under TSO. The outboard facility cannot be enabled/managed without being authorized to operate in supervisor state and operating as an MVS started task.

**User response:** The outboard TSO server facility is not activated. Outboard TSO server facilities will be simulated using TSO/E (if available) within the current address space. You should re-test applications developed under TSO/E when moving them to an authorized copy of the subsystem, because some operations (such as time limit processing, CPU time monitoring) cannot be simulated properly within a test copy of the product running in problem state.

---

**HLV0091E    service OF desc FAILED, RC=rc**

**Explanation:** This is a generic error message used to describe a wide variety of TSO/SRV initialization, execution, and termination errors. The message text provides the current operation and what the current operation was trying to do.

**User response:** Check the error messages and the return code associated with this problem. There may be one or more additional error messages or abends referring to the current TSO/SRV problem. If possible, fix the problem identified by the error messages, and restart the product.

The variable fields of the message text are: service current operation, allocation, deletion, desc description rc return code

---

**HLV0092E    CANCEL of server jb (ASID=asid) failed**

**Explanation:** Server address spaces which will not shutdown in a normal way (e.g. a long running server task that is still executing) are cancelled. If the cancel is not accepted for any reason, this message is issued.

**User response:** If the server address space survives product termination you may attempt to cancel it manually or possibly even force it. The fact that a

server address space remains in the system when the product is restarted will have no harmful effect on product execution and can be ignored.

The variable fields of the message text are: jb jobname asid address space identifier

---

**HLV0093I    Waiting for TSO server termination to complete**

**Explanation:** Inactive servers have been posted to shutdown. The termination process will wait for a short time to allow the servers to shutdown normally. If, at the end of this period, any servers are still active, they will be cancelled.

**User response:** None required. This is an informational message.

---

**HLV0094S    service OF desc FAILED, RC=rc**

**Explanation:** This is a generic error message used to describe a wide variety of TSO/SRV execute queue initialization and termination errors. The message text provides the current operation and what the current operation was trying to do.

**User response:** Check the error messages and the return code associated with this problem. There may be one or more error messages referring to the current problem. If possible, fix the problem identified by the error messages, and restart the product.

The variable fields of the message text are: service current operation, GETMAIN, FREEMAIN, attach etc. desc description rc return code

---

**HLV0095S    MAIN TASK TIMED OUT WHILE WAITING TO BE POSTED BY THE TSO/SRV SUBTASK**

**Explanation:** The product main task timed out while waiting to be posted by the TSO/SRV subtask. The TSO/SRV subtask has either terminated abnormally or is hung. The product may or may not be able to continue processing.

**User response:** Check for other abends or product messages related to this one. If the problem cannot be resolved, contact Software Support.

---

**HLV0096S    TSO/SRV ABEND abcd OCCURRED AT mod+off DURING desc**

**Explanation:** This error message describes an abend that occurred during TSO/SRV execute queue processing termination processing.

**User response:** There may be one or more error messages related to the current problem. If possible, fix the problem identified by the error messages, and restart the product. If the problem cannot be resolved, contact Software Support.

## HLV0097I • HLV0112S

The variable fields of the message text are: abcd abend  
code mod module name off module offset desc  
description (e.g. CGI SUBTASK TERMINATION)

---

**HLV0097I** service OF desc FAILED, RC=rc

**Explanation:** During server termination, product ow found that a busy TSO server did not respond to an internal shutdown request. An attempt to issue an MVS CANCEL command to terminate the server failed.

**User response:** None. The transaction running in the server will eventually complete. The subsequent attempt to read from an additional TSO/SRV command will fail, and the server will then terminate following a 614 abend.

The variable fields of the message text are: service  
current operation - cancel desc TSO server rc return  
code

---

**HLV0101S** %PM PRODUCT USAGE EXCEEDS  
SPECIAL CONFIGURATION LIMITS:  
var1

**Explanation:** None.

**User response:** Contact IBM Software Support.

---

**HLV0102S** EXCESS USAGE - LOCATIONS: var1,  
DRIVER TYPES: var2, HOST  
BUSINESS SYSTEMS: var3

**Explanation:** None.

**User response:** Contact IBM Software Support.

---

**HLV0103H** Access restricted to TCP/IP - LU 6.2  
support not activated

**Explanation:** None.

**User response:** Contact IBM Software Support.

---

**HLV0104H** No usage parameter specified. Usage  
specific to basic administrative  
functions and SIS.

**Explanation:** None.

**User response:** Contact IBM Software Support.

---

**HLV0105I** TEST DATE "var1" (var2) FOR  
CONFIGURATION, D-O-C(var3 var4),  
'var5'

**Explanation:** None.

**User response:** Contact IBM Software Support.

---

**HLV0106S** Version 7 Configuration required,  
contact Software Support.

**Explanation:** None.

**User response:** Contact IBM Software Support.

---

**HLV0107S** Server parameter required, contact  
Software Support.

**Explanation:** None.

**User response:** Contact IBM Software Support.

---

**HLV0110H** INITIALIZATON OF QUICKREF  
INTERFACE FAILED, VERIFY  
QUICKREF DSN AND INSTALL  
STATUS

**Explanation:** This message shows that the product was unable to initialize the QUICKREF interface.

**User response:** If QUICKREF is installed on this system, verify that the QUICKREF load library is either in the linklist or is allocated via the QWREFLIB DD statement in the started task JCL. If QUICKREF is not installed on the system, remove all references to QUICKREF from the started task JCL.

---

**HLV0111S** Invalid DB2 subsystem ID 'subsys' set  
by LOGDB2SUBSYS parameter

**Explanation:** An invalid DB2 subsystem was specified for logging using the LOGDB2SUBSYS parameter. The specified DB2 subsystem does not exist, or has not been installed and activated on the system since the previous IPL.

**User response:** Specify a valid DB2 subsystem for logging using the LOGDB2SUBSYS parameter. If logging is not desired specify 'NONE' for LOGDB2SUBSYS. You may also leave LOGDB2SUBSYS unset in which case the default DB2 subsystem set for the server automatically or by the DEFAULTDB2SUBSYS parameter will be used, if valid. Product initialization is terminated.

The variable fields of the message text are: subsys  
subsystem name

---

**HLV0112S** Invalid default DB2 subsystem 'subsys'  
set by DEFAULTDB2SUBSYS parameter

**Explanation:** A default DB2 subsystem ID was explicitly specified via the DEFAULTDB2SUBSYS parameter, but does not designate a valid DB2 subsystem ID. When the DEFAULTDB2SUBSYS parameter is explicitly set (to any value except 'NONE'), the target DB2 subsystem ID is verified. The ID will fail validation if the target DB2 subsystem does not exist or has never been successfully activated in the system since the last IPL.



**User response:** The product terminates if an explicitly specified ID is invalid, but will allow startup to continue if it selected the default subsystem ID automatically. (The server uses the default DB2 ID from the DSNHDECP load module or the standard string, 'DSN ', if no explicit setting is provided for the DEFAULTDB2SUBSYS parameter). Product initialization is discontinued and the server terminates. Specify a valid default DB2 subsystem for DEFAULTDB2SUBSYS or leave the parameter unset to allow an automatically assigned default value to be used.

The variable fields of the message text are: subsystem name from DEFAULTDB2SUBSYS

---

**HLV0113W** DEFAULT DB2 SUBSYSTEM ID ('subsys') FROM DSNHDECP IS INVALID, CONTINUING

**Explanation:** The default DB2 subsystem ID selected automatically by the server is not a valid DB2 subsystem ID. The server has selected the DB2 subsystem ID automatically because no value was set for the DEFAULTDB2SUBSYS parameter. The server uses the default DB2 ID from the DSNHDECP load module, or, if DSNHDECP cannot be loaded, uses the standard value 'DSN ' as the default ID. DB2 operations which do not explicitly send a DB2 subsystem ID will fail because the default subsystem ID is invalid. In addition, MSG0114W may be issued following this message if DB2 logging is inhibited because of its dependency upon the default DB2 subsystem ID validity.

**User response:** Specify a valid default DB2 subsystem ID via the startup DEFAULTDB2SUBSYS parameter, or specify 'NONE' for this parameter if DB2 should not be used. Product initialization continues. Note that the DB2 subsystem need not be active (up) when the Server is started, however, it must have been successfully installed and started on the system at least once prior to server startup.

The variable fields of the message text are: subsystem name from DSNHDECP (usually 'DSN

---

**HLV0114W** DB2 logging will not be activated - requires valid default DB2 subsystem ID

**Explanation:** The default DB2 subsystem ID set automatically by the server (from the DSNHDECP load module) is not valid and no explicit value was set for the LOGDB2SUBSYS parameter. Since DB2 logging requires a valid default DB2 ID, the value 'NONE' is forced for LOGDB2SUBSYS and DB2 logging is not activated.

**User response:** Specify a valid DB2 subsystem ID as the default DB2 using the DEFAULTDB2SUBSYS parameter. If you do not wish to set a global default DB2 subsystem ID for all operations, but desire DB2

logging to be activated, specify a valid ID for LOGDB2SUBSYS instead. DB2 logging will not be activated during the current server startup.

---

**HLV0115E** LE/370 INTERFACE MODULE CEEPIPI CANNOT BE LOADED - IT IS REQUIRED FOR SSL SUPPORT

**Explanation:** During initialization, it was determined that the MVS Language Environment interfaces are needed for execution of the subsystem. SSL support requires the use of LE/370 interfaces. The interface module, CEEPIPI, was not found in STEPLIB or the link list.

**User response:** Product initialization is abandoned. To restart the subsystem, ensure that either the LE/370 runtime libraries are available in STEPLIB or the link list, or turn off the SSL support option.

---

**HLV0116W** DB2 logging cannot be activated when DB2 SUBSYS default is 'NONE', logging deactivated

**Explanation:** The DB2 logging feature of the product cannot be used with a default DB2 subsystem setting of 'NONE'. The DEFAULTDB2SUBSYS parameter must be set to an actual DB2 subsystem ID, or left un-specified. Since 'NONE' was set ALL DB2 PROCESSING IS INHIBITED. This message is only issued when the LOGDB2SUBSYS parameter has explicitly been set to a DB2 subsystem ID value other than 'NONE'. The LOGDB2SUBSYS parameter is ignored and reset to 'NONE' so that it matches the DEFAULTDB2SUBSYS parameter. This prevents DB2 logging activation. Product initialization continues without activating DB2 logging.

**User response:** Specify a valid default DB2 subsystem ID for DEFAULTDB2SUBSYS or leave that parameter unset (if unset, the default value is fetched from the DSNHDECP load module). Product initialization continues with NONE set for both DEFAULTDB2SUBSYS and LOGDB2SUBSYS.

---

**HLV0117S** typtcp TCP/IP port number is invalid - %1 TCP/IP processing terminated

**Explanation:** The TCP/IP port number specified for one of the types of TCP/IP supported by the product is invalid. The main product address space cannot complete initialization if an invalid TCP/IP port number has been specified for any type of TCP/IP.

**User response:** Specify a valid port number for the type of TCP/IP that detected the invalid port number. If the type of TCP/IP is not needed, you can also just not set the TCP/IP port number at all for the failing type of TCP/IP.

The variable fields of the message text are: typtcp type of TCP/IP

---

**HLV0118S**    **Load balancing not available - VCF feature code is required.**

**Explanation:** None.

**User response:** Contact IBM Software Support.

---

**HLV0119W**    **Logging not available - DB2 feature code is required.**

**Explanation:** None.

**User response:** Contact IBM Software Support.

---

**HLV0120I**    **SEF msg**

**Explanation:** The product tried to initialize SEF during product initialization. SEF initialization failed.

**User response:** Check the error messages and the return code associated with this problem. There may be one or more additional error messages or abends referring to the current SEF initialization problem. Check for open errors, such as security product related abends. Also, check for storage allocation errors or abends. If possible, fix the problem identified by the error messages, and restart the product. If the problem cannot be resolved, contact Software Support.

The variable fields of the message text are: msg message or message text

---

**HLV0121W**    **SEF - service OF desc FAILED, RC=rc**

**Explanation:** The product tried to initialize or terminate SEF during product initialization or termination. An internal service routine called during SEF initialization or termination exited with a non-zero return code.

**User response:** Check the error messages and the return code associated with this problem. There may be one or more additional error messages or abends referring to the current SEF initialization or termination problem. Check for open errors, such as security product related abends. Also, check for storage allocation errors or abends. If possible, fix the problem identified by the error messages, and restart the product. If the problem cannot be resolved, contact Software Support.

The variable fields of the message text are: service current operation, GETMAIN, FREEMAIN, allocation, deletion etc. desc description rc return code

---

**HLV0122S**    **ABEND abcd REASON abrs OCCURRED AT mod+off DURING SEF desc**

**Explanation:** The product tried to initialize or terminate SEF during product initialization or termination. The SEF initialization/termination routine abended.

**User response:** Check the error messages and the abend code associated with this problem. There may be one or more additional error messages or abends referring to the current SEF initialization or termination problem. Check for open errors, such as security product related abends. Also, check for storage allocation errors or abends. If possible, fix the problem identified by the error messages, and restart the product. If the problem cannot be resolved, contact Software Support.

The variable fields of the message text are: abcd abend code abrs abend reason mod module name off module offset desc Description

---

**HLV0123T**    **SEF initialization complete**

**Explanation:** The product has completed SEF initialization. All triggers and events will now be passed to the SEF for processing.

**User response:** No action is required in response to this message. However, this message can be used to activate one or more event handling procedures.

---

**HLV0126S**    **service OF desc FAILED, RC=rc**

**Explanation:** This is a generic error message used to describe a wide variety of SEF execute queue initialization and termination errors. The message text provides the current operation and what the current operation was trying to do.

**User response:** Check the error messages and the return code associated with this problem. There may be one or more error messages referring to the current problem. If possible, fix the problem identified by the error messages, and restart the product. If the problem cannot be resolved, contact Software Support.

The variable fields of the message text are: service current operation, GETMAIN, FREEMAIN, attach etc. desc description rc return code

---

**HLV0127S**    **MAIN TASK TIMED OUT WHILE WAITING TO BE POSTED BY THE process SUBTASK**

**Explanation:** The product main task timed out while waiting to be posted by an SEF subtask. The SEF subtask has either terminated abnormally or is hung. The product may or may not be able to continue processing.

**User response:** Check for other abends or product messages related to this one. If the problem cannot be resolved, contact Software Support.

The variable fields of the message text are: process process subtask name

---

**HLV0128S Dynamic definition of ddn library failed**

**Explanation:** The mapping data set could not be defined properly to allow for caching of map data members.

**User response:** Check for other abends or product messages related to this one, and contact Software Support.

The variable fields of the message text are: ddn map library ddname

---

**HLV0130H Initializing pkg release rel security environment**

**Explanation:** This message shows that the product was able to successfully initialize the security environment for the interface between the product and ACF2 or RACF. The message shows the security product and release level to which the interface was established.

**User response:** No action is required unless the customer is not running any security package and one was identified or the release level is incorrect. Contact Software Support if such an error is detected.

The variable fields of the message text are: pkg security package rel release number or string

---

**HLV0131S subsysid SSCT chain scanning error**

**Explanation:** The SSCT chain was scanned by the security interface routines looking for ACF2 or RACF. Some error exists in the SSCT chain and the search could not be continued.

**User response:** Examine the SSCT chain for an invalid chain or SSCT control blocks. If the problem cannot be resolved, contact Software Support.

The variable fields of the message text are: subsysid subsystem ID of security product

---

**HLV0132W No security package found**

**Explanation:** The SSCT chain was scanned by the security interface routine looking for one of the known security packages: RACF, CA ACF2 or CA Top Secret. No known security product was found and the security package field was set to NONE.

**User response:** If no security package exists on your system, this is not an error, and no further action is needed. If RACF, CA ACF2 or CA Top Secret is active and this message was received, contact Software Support.

---

---

**HLV0133E erel release unknown, release code is rel**

**Explanation:** The product attempted to recognize the release level of ACF2 and did not find a release level that it recognized or that is supported. As of this date, all CA-supported releases of ACF2 are supported by the product.

**User response:** If your release of ACF2 is supported by CA, contact Software Support to request that support be added for that release of ACF2. If the release number appears to be in error, contact Software Support for assistance.

The variable fields of the message text are: erel the error release number rel release number or string

---

**HLV0134W RUNAUTH USERID cache initialization failed - sharing of RUNAUTH USERIDs now disabled**

**Explanation:** During start-up, the SHARERUNAUTHACEES option was set to ON, but an error occurred while initializing the cached RUNAUTH userid table. This is likely due to a GETMAIN failure.

**User response:** Product initialization continues with the SHARERUNAUTHACEES option set to OFF. Examine the wraparound trace and console messages for an explanation of the error. If you are unable to locate the reason for the failure, contact Software Support.

---

**HLV0135W Security routine failed attempting to validate the LOGUSERID usid. RC=rc1.**

**Explanation:** The internal security service routine failed while attempting to verify a new USERID for the logging task.

**User response:** Check the error messages and the return code associated with this problem. There may be additional error messages in the system log. If possible, fix the problem identified by the error messages, and restart the product. If the problem cannot be resolved, contact Software Support.

The variable fields of the message text are: usid the LOGUSERID parameter value rc1 the security module return code

---

**HLV0136W LOGUSERID (usid) LOGON FAILED rc1 rc2 rscd - msg**

**Explanation:** An error occurred while attempting to verify a new USERID for the logging task. This is a security environment error.

**User response:** Product logging continues with the previous USERID used for logging. Correct the value in the LOGUSERID parameter.

The variable fields of the message text are: usid the

LOGUSERID parameter value rc1 the security module return code rc2 the RACF (SAF) return code rscd the RACF (SAF) reason code msg error message text from RACF (SAF)

**HLV0137S ABEND abcd REASON abrs OCCURRED AT mod+off DURING SOM desc.**

**Explanation:** An ABEND occurred during initialization or termination of the Security Optimization Management feature.

**User response:** Check the error messages and the abend code associated with this problem. There may be one or more additional error messages or abends referring to the current initialization or termination problem. Check for security product related abends and storage allocation errors or abends. If possible, fix the problem identified by the error messages, and restart the product. If the problem cannot be resolved, contact Software Support.

The variable fields of the message text are: abcd abend code abrs abend reason mod module name off module offset desc Description

**HLV0138W SOM facility is not available for var1. Processing continues.**

**Explanation:** Security Optimization Management (SOM) was requested, but the security package is not RACF. SOM can only be enabled for RACF.

**User response:** None. This message is for informational purposes only.

The variable fields of the message text are: var1 Security package.

**HLV0139W Dynamic var1 services are not available**

**Explanation:** An MVS dynamic LPA service is not available.

**User response:** None. This message is for informational purposes only.

The variable fields of the message text are: var1 Name of the service

**HLV0140I The following catch-up rules require a final catch-up disposition**

**Explanation:** This message is issued when there are catch-up manual rules which did not fire during the previous execution of the product. It is followed by message 0141I, which documents the unfired rules.

**User response:** No action is required in response to this message. However, this message can be used to activate one or more event handling procedures.

**HLV0141I rule1 rule2 rule3 rule4 rule5 rule6 rule7**

**Explanation:** This message is issued when there are catch-up manual rules which did not fire during the previous execution of the product. It lists up to seven rules that did not fire, using the format rule.set.rule. Multiple messages may be issued so that all catch-up manual rules may be listed.

**User response:** No action is required in response to this message. However, this message can be used to activate one or more event handling procedures.

The variable fields of the message text are: rule1 (format rule.rule.set for uniqueness) rule2 (format rule.rule.set for uniqueness) rule3 (format rule.rule.set for uniqueness) rule4 (format rule.rule.set for uniqueness) rule5 (format rule.rule.set for uniqueness) rule6 (format rule.rule.set for uniqueness) rule7 (format rule.rule.set for uniqueness)

**HLV0142R Reply 'YES' to catch-up all rules, 'NO' to bypass catch-up, or 'MANUAL' for rule by rule prompting**

**Explanation:** This message is issued when there are catch-up manual rules which did not fire during the previous execution of the product. It allows you to fire all catch-up manual rules, prevent all catch-up manual rules from firing, or specify the type of catch-up processing for each individual rule. It follows messages 0140I and 0141I. If more than two minutes expire while waiting for your reply or three invalid replies are made, the default action of NO will be taken.

**User response:** Reply YES to cause all catch-up manual rules to fire. Reply NO to prevent all catch-up manual rules from firing. Reply MANUAL and you will be prompted to specify the type of catch-up processing for each individual rule.

**HLV0143R Reply 'YES' to catch-up rule rule or 'NO' to bypass catch-up**

**Explanation:** This message is issued when there are catch-up manual rules which did not fire during the previous execution of the product and you selected MANUAL in your reply to message 0142R. The name of the rule you are being prompted for is in the format rule.set.rule name. If more than two minutes expire while waiting for your reply or three invalid replies are made, the default action of NO will be taken.

**User response:** Reply YES to cause the rule to fire. Reply NO to prevent catch-up firing for the rule.

The variable fields of the message text are: rule format rule.rule.set for uniqueness

---

**HLV0144E Invalid catch-up manual reply: 'reply'**

**Explanation:** An invalid reply was specified to one of the catch-up manual console messages. The message causing the error will be reissued so that you can correctly reply. After three invalid replies for the same message, default action will be taken. For a description of the default action, see the explanation of the original message.

**User response:** Determine the proper reply from the text of the message, and reply correctly.

The variable fields of the message text are: reply reply text

---

**HLV0145E Catch-up reply wait exceeded 2 minutes. Default used**

**Explanation:** The product waited over two minutes for a reply to one of the catch-up manual messages. Since no response was made during that time, default action was taken.

**User response:** None. If a reply was desired, you will need to speed your response to the message.

---

**HLV0146E 3 Invalid catch-up replies. Default taken**

**Explanation:** Three invalid replies were made to a catchup manual message. Since no correct response was received, default action was taken.

**User response:** None. Reply as required next time.

---

**HLV0147E Catch-up service <service> for variable <varname> failed, RC=<rc>.**

**Explanation:** An internal error was encountered during catch-up processing performing an HLVVALUE or SWSVALUE function.

**User response:** Contact IBM Software Support.

The variable fields of the message text are: service current operation varname name of variable or variable stem rc function return code

---

**HLV0148W Catch-up rule <rule> has changed. Catch-up bypassed.**

**Explanation:** This message is issued when a catch-up rule has been modified since the last time the rule was enabled. The rule would otherwise have fired for catch-up because either the product or z/OS was down during the last time the rule should have fired. Because the rule has changed, it will not fire for catch-up.

**User response:** None.

The variable fields of the message text are: rule ruleset and rule name

---

**HLV0149E Catch-up rule rule global variable write failed, RC=rc**

**Explanation:** This message is issued when a catch-up rule attempts but fails to write a global variable describing the next time to fire. As a result, catch-up processing for the rule will fail the next time the product is restarted. This normally occurs when the GLOBALMAX startup parameter has been exceeded and it is no longer possible to create new global variables. Return code 93 indicates that GLOBALMAX has been exceeded. Additionally, every time the TOD rule fires, the internal global variable is updated, and return code 4 will be displayed in this message.

**User response:** Shut down the product, and allocate a larger SYSCHK1 data set. This may not be necessary if you already have a large data set but are only using a part of it due to a small GLOBALMAX value. Use the IDCAMS REPRO command to copy the existing database to the new larger one, if necessary. Increase the value assigned to the GLOBALMAX parameter in your initial parameter settings, and restart the product.

The variable fields of the message text are: rule TOD catch-up rule name rc global variable write return code

---

**HLV0150S service OF desc FAILED, RC=rc**

**Explanation:** This is a generic error message used to describe a wide variety of trace initialization and termination errors. The message text provides the current operation and what the current operation was trying to do.

**User response:** Check the error messages and the return code associated with this problem. There may be one or more error messages referring to the current problem. If possible, fix the problem identified by the error messages, and restart the product. If the problem cannot be resolved, contact Software Support.

The variable fields of the message text are: service current operation, GETMAIN, FREEMAIN, ATTACH etc. desc description rc return code

---

**HLV0151S service OF dsn FAILED, RC=rc, REASON CODE=rscd**

**Explanation:** This error message describes errors that occurred during trace initialization, execution, or termination while using the DIV (Data In Virtual) system service. For a list of the return codes and reason codes from the DIV macro see the appropriate IBM documentation.

**User response:** Check the DIV return and reason codes associated with this problem. There may be one or more error messages referring to the current problem. If possible, fix the problem identified by the error messages, and restart the product. If the problem cannot be resolved, contact Software Support.

The variable fields of the message text are: service DIV

## HLV0152S • HLV0162S

service (e.g. DIV IDENTIFY etc.) dsn data set (e.g. trace data set) rc return code rscd reason code

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**HLV0152S**    **service OF dsn FAILED, ABEND=abcd, REASON CODE=rscd**

**Explanation:** This error message describes an abend that occurred during trace initialization, execution, or termination while using the DIV (Data In Virtual) system service. The abend codes and reason codes from the DIV macro are documented in the IBM manual z/OS Programming: Assembler Services Reference.

**User response:** Check the DIV abend and reason codes associated with this problem. There may be one or more error messages referring to the current problem. If possible, fix the problem identified by the error messages, and restart the product. If the problem cannot be resolved, contact Software Support.

The variable fields of the message text are: service DIV service (e.g. DIV IDENTIFY etc.) dsn data set (e.g. trace data set) abcd abend code rscd reason code

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**HLV0153H**    **ddn data set not allocated**

**Explanation:** Product has detected that a TRACE DD card is not present in the JCL used to start the main product address space.

**User response:** Modify the JCL and specify the TRACE DD card after validating that the necessary DIV data set is allocated.

The variable fields of the message text are: ddn ddname (TRACE)

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**HLV0154S**    **Any existing Trace Browse data discarded**

**Explanation:** Product detected this error.

**User response:** Contact Software Support.

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**HLV0155S**    **Please standby - upgrading Trace Browse - all data retained**

**Explanation:** The product is upgrading the Trace Browse data area. The Trace Browse data area must be upgraded whenever messages from an earlier version of the product are detected in the Trace Browse data area. The upgraded Trace Browse data area is compatible with earlier releases of the product, as required.

**User response:** There is no action required in response to this message. This message should only be displayed once when you install the first release of the product that supports the upgraded data area format. You may also see this message again if a prior version of the product is used after the Trace Browse data area has been upgraded. The message will be deleted as soon as the Trace Browse data area upgrade is completed. The

upgrade requires about 3 minutes for every 100,000 messages. If this message recurs, contact Software Support for additional assistance.

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**HLV0156S**    **service PASSED desc - code**

**Explanation:** This is a generic error message used to describe a wide variety of trace initialization and termination errors. The message text provides the current operation and what data (valid or invalid) was passed to the current operation.

**User response:** Check the error messages and the return code associated with this problem. There may be one or more error messages referring to the current problem. If possible, fix the problem identified by the error messages, and restart the product. If the problem cannot be resolved, contact Software Support.

The variable fields of the message text are: service current operation, INIT/TERM etc. desc description code code

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**HLV0160S**    **Possible shortage of storage, stg bytes required for Trace Browse**

**Explanation:** This is a follow-up message to message 0150S when a GETMAIN has failed. This message indicates the size, in bytes, of the area requested by the GETMAIN.

**User response:** If the GETMAIN return code indicates insufficient storage to complete the GETMAIN request, please increase your available storage (above the 16MB line) by the indicated amount.

The variable fields of the message text are: stg size of storage requested

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**HLV0161S**    **Main task timed out while waiting to be posted by the TRACE subtask**

**Explanation:** The product main task timed out while waiting to be posted by the trace subtask. The trace subtask has either terminated abnormally or is hung. The product may or may not be able to continue processing.

**User response:** Check for other abends or messages related to the product prior to this one, and contact Software Support for additional assistance.

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**HLV0162S**    **service OF dsn FAILED, ABEND=abcd AT mod+off, REASON CODE=rscd**

**Explanation:** This error message describes an abend that occurred during trace initialization, execution, or termination while using the DIV (Data In Virtual) system service. The abend codes and reason codes from the DIV macro are documented in the IBM manual z/OS Programming: Assembler Services Reference.

**User response:** Check the DIV abend and reason

codes associated with this problem. There may be one or more error messages referring to the current problem. If possible, fix the problem identified by the error messages, and restart the product. If the problem cannot be resolved, contact Software Support.

The variable fields of the message text are: service DIV service (e.g. DIV IDENTIFY etc.) dsn data set (e.g. trace data set) abcd abend code mod module name off module offset rscd reason code

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#### HLV0165I SEF msg

**Explanation:** SEF subtask mapping information messages.

**User response:** None at this time.

The variable fields of the message text are: msg message or message text

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#### HLV0166E Unable to build process block for SEF interface, RC=rc

**Explanation:** Services startup was unable to build the environment to interface to the SEF task. The return code is given.

**User response:** Check the return code and look for other error messages which may explain the error.

The variable fields of the message text are: rc return code

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#### HLV0167E Ruleset rule specifies DSN dsn, should be dsn for VirtualDirectory virt.

**Explanation:** Services startup found a Virtual Directory with a Ruleset whose dataset name did not match the existing Ruleset dataset name. This Virtual Directory is not initialized.

**User response:** Correct the inconsistency between rulesets and dataset names in all related virtual directories.

The variable fields of the message text are: rule ruleset name dsn dataset name dsn dataset name virt. dir. virtual directory name

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#### HLV0171S service OF dsn FAILED, RC=rc, REASON CODE=rscd

**Explanation:** This error message describes errors that occurred during global variable initialization, execution, or termination while using the DIV (Data In Virtual) system service. For a list of the return codes and reason codes from the DIV macro see the appropriate IBM documentation.

**User response:** Check the DIV return and reason codes associated with this problem. There may be one or more error messages referring to the current problem. If possible, fix the problem identified by the

error messages, and restart the product. If the problem cannot be resolved, contact Software Support.

The variable fields of the message text are: service DIV service (e.g. DIV identify etc.) dsn data set (e.g. SYSCHK1 data set) rc return code rscd reason code

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#### HLV0172S service OF dsn FAILED, ABEND=abcd, REASON CODE=rscd

**Explanation:** This error message describes an abend that occurred during global variable initialization, execution, or termination while using the DIV (Data In Virtual) system service. For a list of the return codes and reason codes from the DIV macro see the appropriate IBM documentation.

**User response:** Check the DIV abend and reason codes associated with this problem. There may be one or more error messages referring to the current problem. If possible, fix the problem identified by the error messages, and restart the product. If the problem cannot be resolved, contact Software Support.

The variable fields of the message text are: service DIV service (e.g. DIV identify etc.) dsn data set (e.g. SYSCHK1 data set) abcd abend code rscd reason code

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#### HLV0173W ddn data set not allocated

**Explanation:** The product has detected that either a SYSCHK1 or a SYSCHK2 DD card is not present in the JCL used to start the main product address space.

**User response:** Modify the JCL, and specify an appropriate DD card after validating that the necessary DIV data set is allocated.

The variable fields of the message text are: ddn ddname (e.g. SYSCHK1)

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#### HLV0174S Any existing global variables data discarded

**Explanation:** The product detected this error.

**User response:** Contact Software Support.

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#### HLV0175I Global variable upgrade text

**Explanation:** Prior to version 02.01.01 of the product, global variables were maintained in a linked list. As of version 02.01.01, they are kept in an AVL tree structure for improved performance. This message indicates that the global variable pool is being upgraded to the new format. This message may also be issued as a result of setting the GLOBALREBUILD parameter to YES or when the global variable database has been corrupted.

**User response:** None. This message is for informational purposes only.

The variable fields of the message text are: text global variable text string

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**HLV0176S Duplicate global variable found, name=varname**

**Explanation:** While building/rebuilding the global variable AVL tree, an attempt was made to add a node to the tree, and the node already existed in the tree. The second value is ignored, and the tree build/rebuild continues.

**User response:** Report this message to Software Support. This situation has occurred due to a prior logic error.

The variable fields of the message text are: varname name of the global variable

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**HLV0177S Main task timed out while waiting to be posted by the global variable checkpoint subtask**

**Explanation:** The product main task timed out while waiting to be posted by the global variable checkpoint subtask. The global variable checkpoint subtask has either terminated abnormally or is hung. The product may or may not be able to continue processing.

**User response:** Check for other abends or messages related to the product prior to this one, and contact Software Support.

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**HLV0178S errdesc DETECTED IN GLOBAL VARIABLE LIST**

**Explanation:** While building/rebuilding the global variable AVL tree, one of the following occurred: (1) an infinite loop was detected in the sequential list, (2) an invalid entry was detected in the sequential list, or (3) an invalid offset was detected in the sequential list. The tree rebuild is terminated at this point. The product will attempt to reconstruct the entire global variable data set. Some global variables may be discarded.

**User response:** Report this message to Software Support. This situation has occurred due to a prior logic error or storage overlay. The product should continue to function normally after the global variable data set has been successfully reconstructed.

The variable fields of the message text are: errdesc error description (e.g. infinite loop)

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**HLV0179I Global variable conversion from version text ver**

**Explanation:** Prior to version 02.02.00 of the product, global variables were limited to 256 bytes in size. As of version 02.02.00, this restriction is removed. Prior to version 03.02.00 of the product, the key size was limited to 50 bytes. As of version 03.02.00, the key size limit is increased to 84 bytes. This message indicates that the global variables are being converted to a new format.

**User response:** None. This message is for

informational purposes only.

The variable fields of the message text are: text global variable text string ver old database version string (e.g. 03.01.01)

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**HLV0180I GLOBAL VARIABLE CHAIN REBUILD text, num GLOBALS**

**Explanation:** While doing a global variable tree rebuild, it was found that the chained list was incomplete and needed to be rebuilt. This message indicates the status of the chain rebuild process.

**User response:** None. This message is for informational purposes only.

The variable fields of the message text are: text global variable text string num number of global variables in database

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**HLV0181I varname BEING ADDED TO CHAIN**

**Explanation:** While doing a global variable tree rebuild, it was found that the chained list was incomplete and needed to be rebuilt. This message indicates which variables were reinserted back into the global variable chain.

**User response:** None. This message is for informational purposes only.

The variable fields of the message text are: varname name of the global variable

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**HLV0182I GLOBAL VARIABLE DATABASE BEING CONVERTED**

**Explanation:** This is the first time version 02.02.00 of the product has processed this global variable DIV data set. The product is converting the global variable database to the new format. The converted global variable database will not be usable with older versions of the product unless the backward conversion utility is subsequently executed.

**User response:** Information only. No action required.

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**HLV0183S ABEND abcd OCCURRED AT mod+off DURING desc**

**Explanation:** This error message describes an abend that occurred during global variable subtask termination processing. This may also occur during an AVL tree rebuild during startup or when the GLOBALREBUILD parameter is set to YES.

**User response:** There may be one or more error messages related to the current problem. In the case of the AVL tree rebuild routine, the product will attempt to recover the global variable checkpoint data set by automatically rebuilding it. In all other cases, attempt to fix the problem identified by the error messages, and



restart the product. If the problem cannot be resolved, contact Software Support.

The variable fields of the message text are: abcd abend code mod module name off module offset desc description

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**HLV0184S desc addr1 addr2 addr3**

**Explanation:** A logical error was encountered while validating data prior to a global variable checkpoint. The checkpoint will be aborted, and the product will be terminated to prevent incorrect data being saved. Changes to the global variable database since the previous checkpoint will be discarded.

**User response:** Attempt to restart the product. If the same error occurs, contact Software Support, giving them the information in this message. It may be possible to reconstruct the database by setting the GLOBALREBUILD parameter to YES prior to restarting the product. If not, the global variable data set can be recovered from a prior backup.

The variable fields of the message text are: desc description addr1 storage address addr2 storage address addr3 storage address

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**HLV0185W GLOBALMAX VALUE OF value1 IS TOO LOW. RESET TO value2.**

**Explanation:** The GLOBALMAX parameter value is too low and would cause the global variable database to be destroyed. The value has been ignored and reset to its prior value. This scenario may have been caused by a failure in the product initialization REXX program or CLIST, which resulted in an attempt to use the default GLOBALMAX value.

**User response:** If this error was caused by a failure in the initialization REXX program or CLIST, attempt to determine the cause of failure as soon as possible. You may wish to shut down the product to prevent other problems from occurring. The GLOBALMAX value may have been defaulted due to such a failure. If you are really attempting to reduce the size of the global variable data set, you must stop the product, delete and reallocate a new DIV data set, and then restart the product.

The variable fields of the message text are: value1 GLOBALMAX value in error value2 existing GLOBALMAX value

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**HLV0186S CONVERSION FAILED. INCREASE GLOBALMAX BY AT LEAST value.**

**Explanation:** The conversion of the SYSCHK1 database to the version 03.02.00 format failed because the GLOBALMAX value is not large enough to contain the converted data. The new database requires more space than the old one due to the increased key size.

The database may require up to twice as much space in the worst possible case.

**User response:** Shut down the product, and allocate a larger SYSCHK1 data set. This may not be necessary if you already have a large data set but are only using a part of it due to a small GLOBALMAX value. Use the IDCAMS REPRO command to copy the existing database to the new larger one, if necessary. Increase the value assigned to the GLOBALMAX parameter in your initial parameter settings, and restart the product. Adding this value will not leave any free space in the SYSCHK1 data set. You should leave enough free space to account for growth in your system.

The variable fields of the message text are: value minimum value to add to GLOBALMAX

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**HLV0187I OLD IN-USE BLOCK COUNT - value. NEW IN-USE BLOCK COUNT - %2.**

**Explanation:** This informational message indicates how many blocks of storage were being used in the SYSCHK1 database prior to the conversion to the 03.02.00 format and how many blocks of storage will now be used following the conversion.

**User response:** Compare the new in-use block count to your GLOBALMAX value. If this value is close to the GLOBALMAX value, you may not have sufficient free space for normal operation, and you should increase the size of your SYSCHK1 database as soon as possible.

The variable fields of the message text are: value minimum value to add to GLOBALMAX

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**HLV0188S INCOMPATIBLE SYSCHK1 DATABASE LEVEL level, CANNOT BE USED.**

**Explanation:** The SYSCHK1 database is in a format that is incompatible with the current version of the product. This database has probably been converted to a format supported by a newer version of the product.

**User response:** Use a version of the database that is compatible with the current version of the product.

The variable fields of the message text are: level level number of the SYSCHK1 database

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**HLV0190E SEF STARTUP ERROR: var1 var2 var3 var4 var5 var6 var7 var8 var9**

**Explanation:** A configuration parameter or environmental error was found during SEF service task initialization. The problem is related in some way to the enhanced implementation of the System Web Interface (SWI) facility. Either parameters used to configure the SWI facility conflict, or new restrictions that this version of the Server imposes have not been met.

**User response:** SEF service task initialization ends

with an error causing the server to begin shutdown processing. Determine the cause of the error and correct the problem or conflict. If the problem cannot be understood and resolved from the messages produced, contact Software Support.

The variable fields of the message text are: var1 variable var2 variable var3 variable var4 variable var5 variable var6 variable var7 variable var8 variable var9 variable

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**HLV0191W SWI FACILITY WARNING: var1 var2 var3 var4 var5 var6 var7 var8 var9**

**Explanation:** A configuration parameter or environmental error was detected during activation, termination, or processing by the System Web Interface (SWI) facility. The SWI facility continues operation adjusting to the reported condition.

**User response:** Determine if the warning is anticipated or unexpected. If the warning reports an unexpected condition, correct the configuration or other problem before restarting the server.

The variable fields of the message text are: var1 variable var2 variable var3 variable var4 variable var5 variable var6 variable var7 variable var8 variable var9 variable

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**HLV0192I SWI FACILITY: var1 var2 var3 var4 var5 var6 var7 var8 var9**

**Explanation:** The System Web Interface (SWI) Facility has detected a condition that might be of interest and reports it using this message number. The message MIGHT indicate a configuration problem, or runtime problem, depending upon the nature of the reported information.

**User response:** If a recoverable condition is reported, check the SWI configuration that may contribute to the condition and correct prior to the next server restart.

The variable fields of the message text are: var1 variable var2 variable var3 variable var4 variable var5 variable var6 variable var7 variable var8 variable var9 variable

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**HLV0193W SEFACTIVE = "NO" set - SEF rules will not be enabled during start-up .**

**Explanation:** The SEFACTIVE parameter is set to "NO", so rule enablement will not be performed during server startup. You can enable rules later by manually issuing ENABLE SEF commands against defined rulesets.

**User response:** Determine if the warning is anticipated. If not, correct the SEFACTIVE start-up parameter and restart the server.

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**HLV0194W SEF start-up procedure ended with special RC (8) - auto-enable of SEF rules bypassed - no SEF rules are enabled.**

**Explanation:** The SxxxxINEF start-up procedure ended with RC=8, indicating rule enablement should be bypassed. The server will bypass rule enablement. You can enable rules later, manually, but until you do so, no event related processing is performed by the SEF facility.

**User response:** Determine if the warning is anticipated. If not, correct the SxxxxINEF start-up procedure and restart the server.

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**HLV0195E XO DATASET ERROR: var1 var2 var3 var4 var5 var6 var7 var8 var9**

**Explanation:** A configuration or runtime error was found while SEF was processing an executable object (XO) dataset. XO dataset libraries contains pre-compiled SEF rules and HTX generation skeleton text files. They are used primarily to support the System Web Interface (SWI) facility distributed with the server.

**User response:** SEF terminates processing of the current operation, sometimes by generating an S0C3 ABEND if the condition is severe. If error is severe SEF may be termination of the server. Check for related messages which may aid in problem determination. For SWI, be sure the SWICNTLDSN start-up parameter is set correctly. Contact Software Support, if the problem cannot be determined or corrected.

The variable fields of the message text are: var1 variable var2 variable var3 variable var4 variable var5 variable var6 variable var7 variable var8 variable var9 variable

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**HLV0196W SEF CONFIGURATION UPDATE var1 var2 var3 var4 var5 var6 var7 var8 var9**

**Explanation:** SEF is processing a configuration update, such as validating a ruleset definitions and placing the ruleset online. A problem or warning is reported in this message if the configuration update is not completed normally.

**User response:** SEF continues processing of the next configuration update unless the error is severe. Correct the original resource definition (e.g. "DEFINE RULESET" or "DEFINE FILE" in the SxxxxIN00 procedure) and resubmit the request.

The variable fields of the message text are: var1 variable var2 variable var3 variable var4 variable var5 variable var6 variable var7 variable var8 variable var9 variable

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**HLV0197S Critical SEF resource definition error found - server startup aborting**

**Explanation:** An error was detected in a critical SEF configuration resource definition. The server will begin termination processing to avoid later problems when the SEF task begins execution.

**User response:** Check the console log for DEFINE RULESET definitions entered via the SxxxxIN00 startup procedure. Those definitions which are flagged with the keyword "INITERROR(ABORT)" and the definitions for ATH, WWW-Master, and TYP rulesets are considered critical. The server will not be allowed to start if these definitions are in error. Correct the definitions and restart the server.

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**HLV0200S MODE SWITCH ROUTINE service FAILED RC=rc**

**Explanation:** The product attempted to either acquire storage for a below the line AMODE switch routine or free the storage used by a below the line AMODE switch routine. The storage management operation failed.

**User response:** Check if the return code or any other messages provide additional information about the storage management error. Also, check if the operating system is short on storage in CSA. Start or restart the product if the storage management problem can be resolved. Contact Software Support if the problem cannot be resolved.

The variable fields of the message text are: service current operation, GETMAIN or FREEMAIN rc return code

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**HLV0201S SSVT service FAILED RC=rc**

**Explanation:** The product tried to either acquire storage for a SSVT control block or free the storage used by the SSVT control block. The storage management operation failed.

**User response:** Check if the return code or any other messages provide additional information about the storage management error. Also, check if the operating system is short on storage in CSA or ECSA. Start or restart the product if the storage management problem can be resolved. Contact Software Support if the problem cannot be resolved.

The variable fields of the message text are: service current operation, GETMAIN or FREEMAIN rc return code

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**HLV0202S SAST UDPATE FAILED RC=rc**

**Explanation:** The product tried to update one of the subsystem interface control blocks used by the system. The update operation failed.

**User response:** Check the error messages associated

with this problem. There may be one or more subsystem interface error messages referring to the current problem. If possible, fix the problem identified by the error messages, and restart the product. If the problem cannot be resolved, contact Software Support.

The variable fields of the message text are: rc return code

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**HLV0203S SAST PLIST STORAGE service FAILED RC=rc**

**Explanation:** The product tried to either acquire storage for the SAST update PLIST or free the storage used by the SAST update PLIST. The storage management operation failed.

**User response:** Check if the return code or any other messages provide additional information about the storage management error. Also, check if the product region should be increased. Start or restart the product if the storage management problem can be resolved. Contact Software Support if the problem cannot be resolved.

The variable fields of the message text are: service current operation, GETMAIN or FREEMAIN rc return code

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**HLV0204W Total subsystem count was cnt, reset to nwcn**

**Explanation:** Many products (such as IMS) create new subsystem control blocks and add them to the subsystem control block chain. Unfortunately, these same products do not update the subsystem control block count field. The product found that the actual count of subsystem control blocks did not match the count value in the main operating system control block. The product updated the overall count value.

**User response:** This is not an error message, and no action is required.

The variable fields of the message text are: cnt count nwcn new count

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**HLV0206E servrtn errdesc FAILED, RC=rc, DETECTED AT ad**

**Explanation:** Some type of service routine (operating system or product specific) failed. The error message identifies the service routine and the type of error.

**User response:** Check the full text of the error message, and fix the program that calls the application program interface, if necessary.

The variable fields of the message text are: servrtn service routine errdesc error description rc return code

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**HLV0207I JSAST TABLE ENTRY FOR ss WAS ind FOUND - FORCEJSASTUPDATE OPTION ACTIVE**

**Explanation:** The FORCEJSASTUPDATE option is on. The subsystem's ID was or was not found in the JSAST table. Updates to JESNRSS and the JSAST table will be unconditional due to the setting of FORCEJSASTUPDATE.

**User response:** Initialization routines force execution of the JESNRSS Update and IEFJSBLD calls.

The variable fields of the message text are: ind indicator text (null string or NOT)

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**HLV0230W SERVER'S DFHSM PENDING HRECALL TABLE IS FULL - DFHSM DRAIN(YES) FORCED**

**Explanation:** More than 125 outstanding asynchronous HRECALL requests remain to be posted as complete by DFHSM. The server is suspending DFHSM request processing. It automatically set the DFHSM DRAIN product option to YES, so that no new HRECALL requests are scheduled until either (1) the number of pending HRECALL requests drops below 100 or (2) the DFHSM DRAIN or DFHSM STATUS options are changed manually.

**User response:** Check for reasons why DFHSM HRECALL processing may be delayed or disabled. Correct the DFHSM problem, and then either wait for the server to automatically set the DFHSM DRAIN(NO) option (once 25 requests have been completed and cleared from the pending table) or manually change the DFHSM DRAIN parameter to NO. Before manually changing DFHSM DRAIN to NO, ensure that fewer than 125 HRECALL requests remain outstanding.

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**HLV0231E DFHSM INIT/TERM ROUTINE, OPINHS, ENTERED WITH INVALID FUNCTION CODE: code**

**Explanation:** During start-up or shutdown, the DFHSM service routine was entered with an invalid request code.

**User response:** This is a logic error. Contact Software Support for problem resolution.

The variable fields of the message text are: code code value passed to OPINHS

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**HLV0233E IBM-SUPPLIED DFHSM LOAD MODULE, ARCGIVER, NOT INSTALLED/LOCATED - DFHSM SUPPORT DISABLED**

**Explanation:** During start-up, DFHSM(YES) was selected to initialize DFHSM support. However, the server cannot locate a copy of the IBM-supplied DFHSM interface module, ARCGIVER. This module

must be available within the link list, LPA, or the server's STEPLIB load library.

**User response:** Server start-up continues, but the server resets the DFHSM option to NO, which prevents further interactions with DFSMSHsm from being undertaken. Determine why the ARCGIVER module cannot be located, and make it available during server start-up. If DFSMSHsm is not installed, do not attempt to set the DFHSM(YES) start-up option.

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**HLV0234E DFHSM INTERFACE DISABLED DUE TO STORAGE ALLOCATION ERROR**

**Explanation:** During start-up, DFHSM(YES) was selected to initialize DFHSM support. However, a storage acquisition error has occurred which will prevent the DFHSM interface from operating.

**User response:** Server start-up continues, but the DFHSM option is reset to NO, which prevents further DFHSM operations from occurring. See preceding messages to determine the actual cause of the problem.

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**HLV0235I DFHSM support interface successfully initialized**

**Explanation:** During start-up, the DFHSM(YES) was selected to enable DFHSM support. The server has pre-initialized its DFHSM support interface successfully.

**User response:** Server start-up continues. If DFHSM is not operational, the server may generate HRECALL requests throughout its operation which will immediately fail. If DFHSM is not actually installed, change the DFHSM start-up parameter to NO to prevent enablement of DFHSM Support within the server. You may set DFHSM STATUS(OFFLINE) at any time to prevent the server from invoking DFHSM services until reset to DFHSM STATUS(ONLINE).

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**HLV0236E ABEND DURING DFHSM service PROCESSING - CMP=cmpr,RS=rscd,AT=mod+off**

**Explanation:** An abend was trapped during DFHSM processing. Information about the abend is written to the console log.

**User response:** The DFHSM interface retries, if possible, to prevent subsystem termination or failure. Check for other messages which might indicate the cause of the problem. If the problem cannot be resolved, contact Software Support.

The variable fields of the message text are: service description of function being handled cmpr abend completion code rscd abend reason code mod abending module off abending module offset

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**HLV0237W HRECALL PENDING FOR dsn - MWE  
ECB AT addr UNPOSTED -  
ORPHANED**

**Explanation:** During shutdown, an incomplete asynchronous DFHSM HRECALL request was detected. The outstanding request will cause 352 bytes of below-the-line CSA storage to be orphaned. This occurs because an outstanding HRECALL request causes an MWE ECB to be allocated by DFHSM. The server is allowed to free the ECB only after DFHSM has posted this ECB, which it has not yet done; DFHSM does not automatically free this storage when the requesting address space terminates. Note that the orphaned CSA storage area actually begins some number of bytes prior to the ECB address given in this message (consult IBM to determine the exact offset).

**User response:** Processing continues and the DFHSM MWE ECB is orphaned. The server does not attempt to remember these ECB addresses across a restart of the product. To prevent this condition, consider setting the server's DFHSM SHUTDOWNWAIT parameter to allow a longer wait time limit for DFHSM hrecall completions during shutdown. Also, ensure that the DFHSM STATUS parameter has not been manually set to OFFLINE, which inhibits waiting and cleanup of pending HRECALL requests.

The variable fields of the message text are: dsn data set for which HRECALL issued addr address of DFHSM MWE ECB

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**HLV0238I SERVER'S PENDING RECALL TABLE  
NO LONGER FULL -  
DFHSM DRAIN(NO) RESET TO NO**

**Explanation:** Earlier, the server had put DFHSM DRAIN(YES) into effect because its pending HRECALL table was full. The table now has 25 free entries, and the server is restoring normal HRECALL processing.

**User response:** None. Normal HRECALL processing resumes.

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**HLV0239I SHUTDOWN SUSPENDING FOR UP  
TO sss SECONDS TO AWAIT cnt1  
PENDING HRECALL COMPLETIONS -  
cnt2**

**Explanation:** During shutdown processing, one or more pending HRECALL requests is still pending. The server will pause to wait upon DFHSM to post these pending requests complete. Shutdown processing will re-commence after pausing for DFHSM completion.

**User response:** None. The server waits the length of time specified by the DFHSM SHUTDOWNWAIT parameter for pending completions.

The variable fields of the message text are: sss seconds server will pause for DFHSM cnt1 count of pending

unposted MWE ECBs cnt2 count of suspended task HRECALL requests

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**HLV0240E cnt PENDING DFHSM REQUESTS  
(AND MWE's) ORPHANED BECAUSE  
reason**

**Explanation:** During shutdown processing, one or more pending HRECALL requests MAY remain pending. However, the server is bypassing product termination-time final recovery, checking for these requests.

**User response:** None. The server continues termination processing without attempting recovery/cleanup for pending HRECALL requests. Bypassing DFHSM final recovery is normally due to the parameter DFHSM STATUS(OFFLINE) having been explicitly set and left in effect during product termination. Be sure to restore DFHSM STATUS(ONLINE) before product shutdown if DFHSM is actually online.

The variable fields of the message text are: cnt count of potentially pending HRECALLS reason reason for bypass of shutdown MWE recovery

---

**HLV0250S service OF desc FAILED, RC=rc**

**Explanation:** This is a generic error message used to describe a wide variety of IMS initialization and termination errors. The message text provides the current operation and what the current operation was trying to do.

**User response:** Check the error messages and the return code associated with this problem. There may be one or more error messages referring to the current problem. If possible, fix the problem identified by the error messages, and restart the product. If the problem cannot be resolved, contact Software Support.

The variable fields of the message text are: service current operation, GETMAIN, FREEMAIN, ATTACH etc. desc description rc return code

---

**HLV0251S service PASSED desc - code**

**Explanation:** This is a generic error message used to describe a wide variety of IMS initialization and termination errors. The message text provides the current operation and what data (valid or invalid) was passed to the current operation.

**User response:** Check the error messages and the return code associated with this problem. There may be one or more error messages referring to the current problem. If possible, fix the problem identified by the error messages, and restart the product. If the problem cannot be resolved, contact Software Support.

The variable fields of the message text are: service current operation, INIT/TERM etc. desc description code code

---

**HLV0253S** service TO desc FAILED, RC=rc

**Explanation:** This is a generic error message used to describe a wide variety of IMS initialization and termination errors. The message text provides the current operation and what the current operation was trying to do.

**User response:** Check the error messages and the return code associated with this problem. There may be one or more error messages referring to the current problem. If possible, fix the problem identified by the error messages, and restart the product. If the problem cannot be resolved, contact Software Support.

The variable fields of the message text are: service current operation, GETMAIN, FREEMAIN, ATTACH etc. desc description rc return code

---

**HLV0254S** IMS rsrc name missing

**Explanation:** A resource name needed by the IMS product feature is missing. The current operation will be terminated. The message text contains the name of the missing resource.

**User response:** Check the resource name in the error message. Set the resource name using a product parameter.

The variable fields of the message text are: rsrc resource name value

---

**HLV0255H** Build in-storage profile failed for class class rc1 rc2 rscd - text

**Explanation:** The product received a non-zero return code from a build in-storage profiles request for a specific class.

**User response:** Check the security error for the class. Correct the problem, or contact your security administrator for further assistance.

The variable fields of the message text are: class the security class rc1 the security module return code rc2 the RACF (SAF) return code rscd the RACF (SAF) reason code text error message text from RACF (SAF)

---

**HLV0261I** Server will use default filetype definitions for MIME CONTENT-TYPE mapping

**Explanation:** FILETYPE table definitions were not provided explicitly by the initialization procedure. In the absence of ANY explicitly defined entries, the server generates a default set of definitions.

**User response:** Normally, no action is required, and you may prefer to use the built-in defaults provided by the server.

---

**HLV0270T** Access to ACI feature is not configured.

**Explanation:** None.

**User response:** Contact IBM Software Support.

---

**HLV0271W** ACI internal service had to GETMAIN buffers

**Explanation:** ACI internal services are supposed to use above the bar buffer pools for storage. Some ACI services were unable to obtain storage from the buffer pool configured. As a result, it had to resort to GETMAIN services for buffers.

**User response:** Examine the buffer pool statistics to determine which buffer pools need to be made larger. Also, be sure the internal services are configured to appropriate buffer pools.

---

**HLV0272I** service errdesc, RC=rc, RSN=rscd, DETECTED AT ad

**Explanation:** ACI internal services initialization was unable to get large page storage for the ACI buffer pools as requested.

**User response:** Allocate more storage for large pages to satisfy the buffer pool requests. Standard page storage is obtained instead.

The variable fields of the message text are: service function performed errdesc description rc return code rscd reason code

---

**HLV0273T** var1 var2 var3 var4 var5 var6 var7 var8 var9

**Explanation:** ACI tracing message. These messages will be produced when ACITRACE is set to YES.

**User response:** None.

The variable fields of the message text are: var1 variable information var2 variable information var3 variable information var4 variable information var5 variable information var6 variable information var7 variable information var8 variable information var9 variable information

---

**HLV0280S** SSL msg

**Explanation:** The product tried to initialize SSL during product initialization. SSL initialization failed.

**User response:** Check the error messages and the return code associated with this problem. There may be one or more additional error messages or abends referring to the current SSL initialization problem. Check for open errors, such as security product related abends. Also, check for storage allocation errors or abends. If possible, fix the problem identified by the error messages, and restart the product. If the problem cannot be resolved, contact Software Support.

The variable fields of the message text are: msg message or message text

---

**HLV0281S    SSL KEY/CERTIFICATE FILE func  
ERROR, DD=ddn, RC=rc**

**Explanation:** The product tried to initialize SSL during product initialization. SSL initialization failed because an error occurred while accessing the server's private key or certificate file.

**User response:** Check the error messages and the return code associated with this problem. There may be one or more additional error messages or abends referring to the current SSL initialization problem. Check for open errors, such as security product related abends. Also, check for storage allocation errors or abends. If possible, fix the problem identified by the error messages, and restart the product. If the problem cannot be resolved, contact Software Support to obtain additional assistance.

The variable fields of the message text are: func I/O function ddn file dname rc I/O service return code

---

**HLV0282S    ABEND abcd OCCURRED AT mod+off  
DURING SSL desc**

**Explanation:** The product tried to initialize or terminate SSL during product initialization or termination. The SSL initialization/termination routine abended.

**User response:** Check the error messages and the abend code associated with this problem. There may be one or more additional error messages or abends referring to the current SSL initialization or termination problem. Check for open errors, such as security product related abends. Also, check for storage allocation errors or abends. If possible, fix the problem identified by the error messages, and restart the product. If the problem cannot be resolved, contact Software Support.

The variable fields of the message text are: abcd abend code mod module name off module offset desc description

---

**HLV0283T    SSL initialization complete**

**Explanation:** The product has completed SSL initialization. All triggers and events will now be passed to the SSL for processing.

**User response:** No action is required in response to this message. However, this message can be used to activate one or more event handling procedures.

---

**HLV0284S    SSL user ID <userid> logon failed.**

**Explanation:** The SSL manager userid specified by the SSLUSERID system parameter, or the default server address space userid failed logon processing during start-up.

**User response:** The HTTP-API initialization process is aborted. Ensure that the userid specified by the SSLUSERID start-up parameter is correct. Refer to message HLV2107 for more information about the failure.

---

**HLV0285I    SSL manager user ID <userid> logged on  
to server.**

**Explanation:** The SSL manager userid specified by SSLUSERID system parameter has been logged on to the system.

**User response:** HTTP-API initialization processing continues.

The variable fields of the message text are: userid the SSLUSERID value

---

**HLV0286S    service OF desc FAILED, RC=rc**

**Explanation:** This is a generic error message used to describe a wide variety of SEF execute queue initialization and termination errors. The message text provides the current operation and what the current operation was trying to do.

**User response:** Check the error messages and the return code associated with this problem. There may be one or more error messages referring to the current problem. If possible, fix the problem identified by the error messages, and restart the product. If the problem cannot be resolved, contact Software Support.

The variable fields of the message text are: service current operation, GETMAIN, FREEMAIN, attach etc. desc description rc return code

---

**HLV0287S    MAIN TASK TIMED OUT WHILE  
WAITING TO BE POSTED BY THE  
process SUBTASK**

**Explanation:** The product main task timed out while waiting to be posted by an SSL subtask. The SSL subtask has either terminated abnormally or is hung. The product may or may not be able to continue processing.

**User response:** Check for other abends or product messages related to this one. If the problem cannot be resolved, contact Software Support.

The variable fields of the message text are: process process subtask name

---

**HLV0288S SSL SERVER PRIVATE KEY/CERTIFICATE FORMAT INVALID FOR ddn**

**Explanation:** The SSL resource manager could not initialize because the server's private key or certificate file contains an invalid key or certificate.

**User response:** Check for other abends or product messages related to this one. If the problem cannot be resolved, contact Software Support.

The variable fields of the message text are: ddn  
ddname of file in error

---

**HLV0289S SSL SUPPORT CANNOT BE ENABLED - DDNAME ddn IS NOT ALLOCATED**

**Explanation:** The SSL resource manager could not initialize because the server's certificate or private key file ddname is not allocated.

**User response:** The server will terminate. Check the start-up JCL to ensure that the certificate file and/or private key files are allocated to the correct ddnames.

The variable fields of the message text are: ddn  
ddname of file in error

---

**HLV0290S SSL ERROR: msg**

**Explanation:** The SSL routines logged a severe error message.

**User response:** The SSL routines logged a severe error to trace. The message is duplicated to the operator console.

The variable fields of the message text are: msg SSL  
error message text

---

**HLV0291S SSL LDAP srvr NOT SPECIFIED**

**Explanation:** SSL client authentication by an LDAP server was requested, but the name of the server and/or its port number were not specified.

**User response:** The server initialization process is aborted. Ensure that the correct server name and port number are specified with the SLLDAPSERVER and SLLDAPPORT parameters.

The variable fields of the message text are: srvr  
SERVER or PORT

---

**HLV0292I GSK SSL SUPPORT CANNOT BE ENABLED - SSLKEYPATH PARAMETER NOT SPECIFIED, CHANGING TO SSLEAY SUPPORT**

**Explanation:** The SSL resource manager could not initialize GSK SSL because the SSLKEYPATH parameter was not specified. GSK SSL requires this parameter. The product will attempt to use SSLEAY SSL support.

**User response:** The GSK SSL support will not be enabled. If possible, SSLEAY SSL support will be used. If GSK SSL is desired, code the SSLKEYPATH parameter and restart the product.

---

**HLV0293I A CALL TO THE SET\_DUB\_DEFAULT UNIX SYSTEM SERVICE FAILED. RC=rc RS=rscd**

**Explanation:** Product initialization received an error return code from a call to the set\_dbu\_default service.

**User response:** Product initialization is terminated. Refer to the IBM UNIX System Services Messages and Codes manual for an explanation of the return and reason codes. It is possible that an OMVS segment was not created for the product USERID. Refer to the the product Server Installation Guide for more information on creating the product USERID and the security that the USERID requires. If the problem cannot be resolved, then contact Software Support to obtain additional assistance.

The variable fields of the message text are: rc return  
code rscd reason code

---

**HLV0320S Subroutine sroutine was found in module but belongs in module at offset off**

**Explanation:** The subroutine definition is in the wrong module.

**User response:** Contact Software Support to obtain assistance.

The variable fields of the message text are: sroutine  
subroutine name module module name where  
subroutine was found module module name where  
subroutine belongs off offset in module in correct  
module

---

**HLV0321S Subroutine sroutine at offset off in module module is out of sequence and should be offset off**

**Explanation:** The subroutine is not defined in the correct position.

**User response:** Contact Software Support to obtain assistance.

The variable fields of the message text are: sroutine  
subroutine name off offset in module module module  
name where subroutine was found off offset in module  
in correct module

---

**HLV0322S Vector and list table offsets for subroutine sroutine in module module do not match**

**Explanation:** The offset into the vector table for the



subroutine does not match the offset defined in the list table.

**User response:** Contact Software Support to obtain assistance.

The variable fields of the message text are: sroutine subroutine name module module name where subroutine was found

---

**HLV0323S**    **Vector at offset offset in module module points to sroutine but should point to sroutine**

**Explanation:** The subroutine pointed to by the list table is not the one that was defined. The OPCOS% module vector table entries do not agree with OPSBCL.

**User response:** Contact Software Support to obtain assistance.

The variable fields of the message text are: offset module vector table entry offset module module name where subroutine was found sroutine subroutine name or invalid data sroutine subroutine name

---

**HLV0324I**    **service OF desc FAILED, RC=rc, REASON=rscd, DETECTED AT ad**

**Explanation:** An attempt was made to use zEDC services for compression. If no zEDC engine was available or zEDC is not configured, this message may appear.

**User response:** If zEDC compression is not required, this message may be ignored. Otherwise, the return code and reason code will indicate the problem using zEDC.

The variable fields of the message text are: service current operation desc description rc return code rscd reason code

---

**HLV0325I**    **service OF desc SUCCEDED, DETECTED AT ad**

**Explanation:** A succeeded for zEDC services for compression. zEDC services are now available for use.

**User response:** None.

The variable fields of the message text are: service current operation desc description

---

**HLV0326T**    **var3 var3 var3 var4 var5 var6 var7 var8 var9, PGM=%SK**

**Explanation:** A zEDC function call was made. The results are traced.

**User response:** None.

The variable fields of the message text are: var3 variable information var3 variable information var3 variable information var4 variable information var5

variable information var6 variable information var7 variable information var8 variable information var9 variable information

---

**HLV0334I**    **STOP command detected during initialization**

**Explanation:** A STOP command has been detected by the product during early product initialization. The initialization exec (SxxxxIN00) may or may not have completed successfully. STOP commands issued after the completion of the initialization exec will not be honored until initialization has completed.

**User response:** None. This message is for informational purposes only.

---

**HLV0335S**    **ESTAE service ERROR RC=rc**

**Explanation:** The product tried to create an ESTAE recovery environment. The ESTAE macro failed.

**User response:** Check the error messages and the return code associated with this problem. There may be one or more ESTAE error messages referring to the current problem. If possible, fix the problem identified by the error messages, and restart the product. If the problem cannot be resolved, contact Software Support.

The variable fields of the message text are: service current operation, create or delete ESTAE rc return code

---

**HLV0336S**    **Service of <desc> failed, RC=<rc>. Detected at ad. stack: %SK.**

**Explanation:** This is a generic error message used to describe a wide variety of product initialization, execution, and termination errors. The message text provides the current operation and what the current operation was trying to do.

**User response:** Check the error messages and the return code associated with this problem. There may be one or more error messages referring to the current problem. If possible, fix the problem identified by the error messages, and restart the product. If the problem cannot be resolved, contact IBM Software Support.

The variable fields of the message text are: service current operation, GETMAIN, FREEMAIN, ATTACH etc. desc description rc return code

---

**HLV0337E**    **desc service ERROR RC=rc**

**Explanation:** Some type of process block pool error occurred during product initialization or product termination. The message text provides the current operation and what the current operation was trying to do.

**User response:** Check the error messages and the return code associated with this problem. There may be one or more error messages referring to the current

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problem. If possible, fix the problem identified by the error messages, and restart the product. If the problem cannot be resolved, contact Software Support.

The variable fields of the message text are: desc description service process pool operation, create, delete, get, release etc. rc return code

---

### HLV0338S INVALID desc LOCATED AT addr TAG IS tag

**Explanation:** The product found an invalid control block during product termination. The control block tag contained an invalid character string.

**User response:** Check the error messages associated with this problem. There may be one or more error messages referring to the current problem. If possible, fix the problem identified by the error messages, and restart the product. If the problem cannot be resolved, contact Software Support to obtain additional assistance.

The variable fields of the message text are: desc description addr address tag control block tag

---

### HLV0339E cnt process block(s) still in use

**Explanation:** The product uses a pool of stack control blocks to process messages and other events. The stack blocks are obtained and released as required by a variety of product routines. In some cases, a product routine may fail to release a process block.

**User response:** No action is required to resolve this problem. The product will release all of the space used by the stack control blocks even if they appear to still be in use. If the problem cannot be resolved, contact Software Support.

The variable fields of the message text are: cnt number of process blocks

---

### HLV0340I msg

**Explanation:** This message is not an error message. The current message is used to display the output from the product initialization exec (SxxxxIN00) on the system consoles.

**User response:** Although the current message is not an error message, the output from the product initialization exec is only sent to the product consoles if the initialization exec terminates with a non-zero return code. The exec messages should be carefully checked for any error messages. Restart the product, if necessary. Contact Software Support if the problem (non-zero exec termination code) recurs.

The variable fields of the message text are: msg message or message text

---

### HLV0341T %PM feature codes are not set - contact Software Support for assistance

**Explanation:** None.

**User response:** Contact IBM Software Support.

---

### HLV0342T %PM is running on an unconfigured CPU.

**Explanation:** None.

**User response:** Contact IBM Software Support.

---

### HLV0343T %PM configuration will need refresh in <x> days.

**Explanation:** None.

**User response:** Contact IBM Software Support.

---

### HLV0344T %PM configuration needs refresh on this system.

**Explanation:** None.

**User response:** Contact IBM Software Support.

---

### HLV0345S DD allocation required in start-up JCL for proper execution of TSO/E REXX procedures.

**Explanation:** The server is attempting to intercept output from a TSO/E REXX procedure but could not open the output data set to which TSO/E REXX routes SAY statement and other output messages are directed. The most likely cause is that a site modification has been made to IRXPparms that specifies that TSO/E REXX should use a non-standard ddname for output. SYSTSPRT, the IBM default, is assumed if the server is unable to load and check the IBM-supplied load module, IRXPparms.

**User response:** Ensure that the ddname indicated in the message is pre-allocated by the server's start-up JCL. (The product-supplied sample JCL contains a SYSTSPRT DD statement which can be used as a model for pre-allocating this data set.) If a DD statement is already present in the start-up JCL, ensure that this ddname has not been released through the use of an MVS DYNALLOC dynamic allocation request. This condition, if encountered while processing the SWSxIN00 parameterization procedure, will not result in server termination. However, any errors encountered while executing this procedure cannot be successfully reported.

The variable fields of the message text are:

ddn ddname required for TSO/E REXX executions  
value hexadecimal read-out of ddname value

---

**HLV0346I NETWORKBUFFERSIZE value inadequate for SQLMAXCOLUMNS value, raised to var1**

**Explanation:** The NETWORKBUFFERSIZE must be adequate to hold an SQLDA with the maximum number of columns allowed, as specified by SQLMaxColumns. The exact formula is:  
 NETWORKBUFFERSIZE >= SQLMaxColumns \* 44 + 16

**User response:** The NETWORKBUFFERSIZE is raised to the size computed by the above formula and then rounded to a 1K (1024) byte boundary.

The variable fields of the message text are: var1 New NETWORKBUFFERSIZE value

---

**HLV0347I DSNREXX DB2 REXX INTERFACE NOT FOUND, ADDRESS DSNREXX SUPPORT NOT ACTIVATED**

**Explanation:** The load module DSNREXX for REXX interface to DB2 was not found. Support for this API is not activated. Initialization continues normally.

**User response:** Support for ADDRESS DSNREXX is not enabled. This is not necessarily an error, unless DSNREXX support is needed.

---

**HLV0348S Invalid registry block ivdata found in logstream log**

**Explanation:** The Registry Logstream contained a block which did not pass validation. The record is dropped, and will be deleted at the next update.

**User response:** Make a copy of the next Offload dataset for this logstream and send it to Software Support.

The variable fields of the message text are: ivdata invalid data found log logstream name

---

**HLV0349I var1 REGISTRY LOGSTREAM log var2**

**Explanation:** The Registry Logstream was created or deleted or connected to as part of initialization.

**User response:** None, this is normal processing.

The variable fields of the message text are: var1 The registry type, Global or Local log logstream name var2 The action, created or deleted or connected

---

**HLV0350S service OF desc FAILED, RC=rc**

**Explanation:** This is a generic error message used to describe a wide variety of CICS initialization and termination errors. The message text provides the current operation and what the current operation was trying to do.

**User response:** Check the error messages and the return code associated with this problem. There may be

one or more error messages referring to the current problem. If possible, fix the problem identified by the error messages, and restart the product. If the problem cannot be resolved, contact Software Support.

The variable fields of the message text are: service current operation, GETMAIN, FREEMAIN, ATTACH etc. desc description rc return code

---

**HLV0351S service PASSED desc - code**

**Explanation:** This is a generic error message used to describe a wide variety of CICS initialization and termination errors. The message text provides the current operation and what data (valid or invalid) was passed to the current operation.

**User response:** Check the error messages and the return code associated with this problem. There may be one or more error messages referring to the current problem. If possible, fix the problem identified by the error messages, and restart the product. If the problem cannot be resolved, contact Software Support.

The variable fields of the message text are: service current operation, INIT/TERM etc. desc description code code

---

**HLV0352W mod is not REENTRANT**

**Explanation:** The product found that the EXCI options module DFHXCOPT or its alias DFHXCOPE is not REENTRANT. This will cause some EXCI related product parameters to be ignored - for example the TIMEOUT parameter.

**User response:** Relink the module with the RENT option.

The variable fields of the message text are: mod Moduel name

---

**HLV0353S service TO desc FAILED, RC=rc**

**Explanation:** This is a generic error message used to describe a wide variety of CICS initialization and termination errors. The message text provides the current operation and what the current operation was trying to do.

**User response:** Check the error messages and the return code associated with this problem. There may be one or more error messages referring to the current problem. If possible, fix the problem identified by the error messages, and restart the product. If the problem cannot be resolved, contact Software Support.

The variable fields of the message text are: service current operation, GETMAIN, FREEMAIN, ATTACH etc. desc description rc return code

---

**HLV0354S CICS rsrcce NAME MISSING**

**Explanation:** A resource name needed by the CICS product feature is missing. The current operation will be terminated. The message text contains the name of the missing resource.

**User response:** Check the resource name in the error message. Set the resource name using a product parameter.

The variable fields of the message text are: rsrcce resource name value

---

**HLV0355I CICS support terminating**

**Explanation:** This is an informational message that is issued when the product terminates its CICS support. If the CICS support is being terminated due to a fatal error condition, this message will have been preceded by error messages which depict the exact error condition encountered.

**User response:** Follow the course of action recommended for the error messages which preceded this error message, and if the product CICS support continues to terminate due to a fatal error condition, contact Software Support for further assistance.

---

**HLV0356I CICS support activated**

**Explanation:** This message is issued when the product CICS server has received a notification that the connection(s) to the CICS region(s) have been established successfully.

**User response:** No action required. This is an informational message only.

---

**HLV0357I EXCI support terminating**

**Explanation:** This is an informational message that is issued when the product terminates its EXCI support. If the EXCI support is being terminated due to a fatal error condition, this message will have been preceded by error messages which depict the exact error condition encountered.

**User response:** Follow the course of action recommended for the error messages which preceded this error message, and if the product EXCI support continues to terminate due to a fatal error condition, contact Software Support for further assistance.

---

**HLV0358I EXCI support activated**

**Explanation:** This message is issued when the product EXCI server has received a notification that the connection(s) to the EXCI region(s) have been established successfully.

**User response:** No action required. This is an informational message only.

---



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**HLV0359T text**

**Explanation:** This is a general purpose message that may or may not indicate some type of EXCI error.

**User response:** Read the message text carefully. Some messages produced under this message ID are actually error messages. If the message indicates an error, check for any associated EXCI-produced error messages. If the problem cannot be resolved, contact Software Support.

The variable fields of the message text are: text the text of the message

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**HLV0360S No matching CONNECTION name rsrcce for DEFINE SESSION**

**Explanation:** A DEFINE SESSION statement in the initialization exec specified a CONNECTION name for which there is no corresponding DEFINE CONNECTION statement. The message text contains the name of the erroneous DEFINE SESSION name.

**User response:** Check the session name in the error message. Correct the DEFINE SESSION statement.

The variable fields of the message text are: rsrcce resource name value

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**HLV0361I %1 of %2 sessions connected to %3**

**Explanation:** This message specifies the number of active sessions to the specified CICS.

**User response:** None. This message is for informational purposes only.

---



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**HLV0362I No active session to %1**

**Explanation:** This message specifies that there is currently no active session to the specified CICS.

**User response:** None. This message is for informational purposes only.

---



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**HLV0363T Acquisition of session to %1 failed**

**Explanation:** Acquisition of a session failed. This may not be an error.

**User response:** None. This message is for informational purposes only.

---



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**HLV0364I SDCITRU IS STARTED AND ENABLED**

**Explanation:** The CICS Task Related User Exit For Broker is started and enabled in the CICS region.

**User response:** None. This message is for informational purposes only.

---

---

**HLV0371E** var1 ROUTINE ERROR - var2 var3 var4  
var5 var6 var7 var8 var9

**Explanation:** An error or unexpected condition was detected in an Actional support facility routine.

**User response:** For initialization error, the server will terminate. For termination time errors, server shutdown continues. Look for related messages indicating the cause of the error and correct the underlying problem. Contact Software Support if the problem cannot be found or corrected.

The variable fields of the message text are: var1 initialization or termination function var2 error detected var3 variable information var4 variable information var5 variable information var6 variable information var7 variable information var8 variable information var9 variable information

---

**HLV0372E** CSQCAPX %1

**Explanation:** An error occurred in the CSQCAPX CICS MQSERIES API Crossing Exit for Actional Agent connector.

**User response:** The exit should have disabled itself. Contact Software Support.

---

**HLV0373E** SDAITRUE %1

**Explanation:** An error occurred in module SDAITRUE, the CICS TRUE for Actional Agent connector.

**User response:** The exit should have disabled itself. Contact Software Support.

---

**HLV0380T** ABEND IN REXXTOOLS DYNALLOC  
INTERCEPT CMP=cmpr, RS=rscd,  
SVC-99-PLIST=addr

**Explanation:** An unexpected abend has occurred within the REXXtools dynamic allocation interception/screening routine.

**User response:** The abend is percolated for handling by REXXtools.

The variable fields of the message text are: cmpr abend completion code rscd abend reason code addr DYNALLOC Request Block Pointer word address

---

**HLV0381T** ADD REXX VARIABLE NAME FAILED  
WITH RETURN CODE rc, REASON  
CODE rscd FOR NAME name

**Explanation:** An error occurred when attempting to create a variable name for a REXX procedure. This will be followed by an S0C3 abend.

**User response:** Check the variable name to be sure it is valid, or increase the workspace for this REXX procedure.

The variable fields of the message text are: rc return code rscd reason code name REXX variable name

---

**HLV0388I** It contains additional diagnostic  
information about the failure.

**Explanation:** This message provides information to help you diagnose the problem.

**User response:** Check the error messages and the return code associated with this problem. There may be one or more error messages referring to the current problem. If possible, fix the problem identified by the error messages, and restart the product. If the problem cannot be resolved, contact Software Support.

The variable fields of the message text are: request request type func function that failed rc function return code rscd function reason code

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**HLV0388E** DYNAMIC LPA request SERVICE  
FAILED FOR mod. RETURN CODE=rc.  
REASON CODE=rscd.

**Explanation:** An error occurred when attempting to use MVS dynamic LPA services, CSVDYLPA. The request type, return code and reason code associated with this failure are listed in this message.

**User response:** Check the error messages and the return code associated with this problem. There may be one or more error messages referring to the current problem. If possible, fix the problem identified by the error messages, and restart the product. If the problem cannot be resolved, contact Software Support.

The variable fields of the message text are: request request type mod module name rc return code rscd reason code

---

**HLV0389E** DYNAMIC LPA request  
FUNCTION=func RC=rc RS=rscd

**Explanation:** This message is a continuation of message

**User response:** No action is required.

---

**HLV0390E** NAMED-TOKEN var1 SERVICE  
ERROR: RC=var2 FOR LVL=var3,  
NAME='var4', DATA='var5', POPT=var6

**Explanation:** An unexpected return code was set after a system-managed named token service request. The service type, return code token level and token name are displayed in the message.

**User response:** The named-token return code is sent to the routine which requested the service, and processing continues as dictated by the routine which requested the server.

The variable fields of the message text are: var1 named-token service being requested var2 service

## HLV0391E • HLV0396T

return code var3 token level on request var4 token name on request var5 token data on request var6 token persistence option

---

**HLV0391E** var1 ROUTINE ERROR: var2 var3 var4 var5 var6 var7 var8 var9

**Explanation:** An error or unexpected condition was detected in a Services support facility routine.

**User response:** For initialization error, the server will terminate. For termination time errors, server shutdown continues. Look for related messages indicating the cause of the error and correct the underlying problem. Contact Software Support if the problem cannot be found or corrected.

The variable fields of the message text are: var1 initialization or termination function var2 error detected var3 variable information var4 variable information var5 variable information var6 variable information var7 variable information var8 variable information var9 variable information

---

**HLV0392W** var1 ROUTINE WARNING: var2 var3 var4 var5 var6 var7 var8 var9

**Explanation:** An unexpected condition was detected in a Services support facility routine.

**User response:** For initialization error, the server attempts to correct the condition and continue. Errors detected during termination are bypassed.

The variable fields of the message text are: var1 initialization or termination function var2 unexpected condition found var3 variable information var4 variable information var5 variable information var6 variable information var7 variable information var8 variable information var9 variable information

---

**HLV0393S** Services PARM var1 var2 var3 var4 var5 var6 var7 var8

**Explanation:** A Services configuration startup parameter is missing or incorrectly set. Services will substitute a corrected value, if possible, and activate with the updated value. If no default value can be substituted, Services activation will terminate server start after issuing MSG0391E.

**User response:** Check to ensure the z/Server-related parameter identified in the message is being set to a valid value during SxxxxIN00 processing. Restart the server.

The variable fields of the message text are: var1 parameter name var2 variable information var3 variable information var4 variable information var5 variable information var6 variable information var7 variable information var8 variable information var9 variable information

---

**HLV0394S** SERVICES MAILBOX CONTROL routine FAILED: HASN=asid1, PASN=asid2, SASN=asid3, MODE=var2, RC=rc, CALLER=csect, LT=ltype

**Explanation:** During an attempt to execute a Services mailbox request, a failure in the lock or unlock serialization routine was encountered. The current mailbox execution request will be abandoned and failed. In the message, the return code field will contain a non-zero value in byte 3 if the SETLOCK or ENQ service failed. It will contain a non-zero value in bytes 1 or 2 for environmental errors.

**User response:** The current Services mailbox request is failed. Check for other messages which might indicate the cause of the error, and contact Software Support for further assistance.

The variable fields of the message text are: routine lock or unlock asid1 home asid asid2 primary asid asid3 secondary asid var2 PROB or SUP rc return code value csect caller's CSECT name ltype type of lock in use

---

**HLV0395E** SERVICES MAILBOX REQUEST var1 ABEND var2 (var3) AT var4+var5 var6 var7 var8 var9

**Explanation:** During an attempt to execute a Services mailbox request, an ABEND failure was detected. The request is rejected with a return code indicating that an abend occurred.

**User response:** The failure is reflected to the requesting task, which then takes whatever action is appropriate to the situation. Check for other messages which might indicate the cause of the error, and contact Software Support for further assistance.

The variable fields of the message text are: var1 SYSTEM or USER var2 abend completion code var3 abend reason code var4 module name var5 offset var6 variable information var7 variable information var8 variable information var9 variable information

---

**HLV0396T** SERVICES MAILBOX INVALID POINTER (var1/var2/var2) DURING PKM AUTH CHECK - ABEND var2 (var3)

**Explanation:** While validating a mailbox request, Services routines detected an invalid address passed as part of the request. The ABEND was detected while attempting to examine the protect key of the storage area.

**User response:** The pointer is rejected as invalid, and the mailbox request will either fail the overall request, or complete its operation without using the rejected pointer. Check for other messages which might indicate the cause of the error, and contact Software Support for further assistance.

The variable fields of the message text are: var1 pointer

address var2 pointer ALET var2 pointer storage length  
var2 abend completion code var3 abend reason code

---

**HLV0397T** var1 ROUTINE ERROR: var2 var3 var4  
var5 var6 var7 var8 var9

**Explanation:** An error or unexpected condition was detected in a Services support facility routine. This message is written to Trace Browse to record the same condition also written to the console by MSG0391E.

**User response:** For initialization error, the server will terminate. For termination time errors, server shutdown continues. Look for related messages indicating the cause of the error and correct the underlying problem. Contact Software Support if the problem cannot be found or corrected.

The variable fields of the message text are: var1 initialization or termination function var2 error detected var3 variable information var4 variable information var5 variable information var6 variable information var7 variable information var8 variable information var9 variable information

---

**HLV0398T** var1 ROUTINE WARNING: var2 var3  
var4 var5 var6 var7 var8 var9

**Explanation:** An unexpected condition was detected in a Services support facility routine. This message is written to Trace Browse to record the same condition also written to the console by MSG0392W.

**User response:** For initialization error, the server attempts to correct the condition and continue. Errors detected during termination are bypassed.

The variable fields of the message text are: var1 initialization or termination function var2 unexpected condition found var3 variable information var4 variable information var5 variable information var6 variable information var7 variable information var8 variable information var9 variable information

---

**HLV0399T** Services E-O-T cleanup for TCB var1  
RC=var2 RS/CC=var3/var4 FDBK=var5  
var6 var7 var8 var9

**Explanation:** Services End of Task cleanup has been processed for the ending task. The message is traced if a non-zero return code is set by the cleanup function, or when the ZSRMBOXTRACCECMTC option is on.

**User response:** If the message reports a non-zero return code, look for other conditions which may be inhibiting E-O-T cleanup and correct. Or contact Software Support.

The variable fields of the message text are: var1 TCB address var2 Return code var3 Return code locator info var4 Return code locator info var5 Feedback info var6 Feedback info var7 Feedback info var8 Feedback info var9 Feedback info

---

**HLV0400S** service OF desc FAILED, RC=rc

**Explanation:** This is a generic error message used to describe a wide variety of RRS initialization and termination errors. The message text provides the current operation and what the current operation was trying to do.

**User response:** Check the error messages and the return code associated with this problem. There may be one or more error messages referring to the current problem. If possible, fix the problem identified by the error messages, and restart the product. If the problem cannot be resolved, contact Software Support.

The variable fields of the message text are: service current operation, GETMAIN, FREEMAIN, ATTACH etc. desc description rc return code

---

**HLV0401S** service PASSED desc - code

**Explanation:** This is a generic error message used to describe a wide variety of RRS initialization and termination errors. The message text provides the current operation and what data (valid or invalid) was passed to the current operation.

**User response:** Check the error messages and the return code associated with this problem. There may be one or more error messages referring to the current problem. If possible, fix the problem identified by the error messages, and restart the product. If the problem cannot be resolved, contact Software Support.

The variable fields of the message text are: service current operation, INIT/TERM etc. desc description code code

---

**HLV0402S** service TO desc FAILED, RC=rc

**Explanation:** This is a generic error message used to describe a wide variety of RRS initialization and termination errors. The message text provides the current operation and what the current operation was trying to do.

**User response:** Check the error messages and the return code associated with this problem. There may be one or more error messages referring to the current problem. If possible, fix the problem identified by the error messages, and restart the product. If the problem cannot be resolved, contact Software Support.

The variable fields of the message text are: service current operation, GETMAIN, FREEMAIN, ATTACH etc. desc description rc return code

---

**HLV0403S** RRS rsrc NAME MISSING

**Explanation:** A resource name needed by the RRS product feature is missing. The current operation will be terminated. The message text contains the name of the missing resource.

## HLV0404I • HLV0411E

**User response:** Check the resource name in the error message. Set the resource name using a product parameter.

The variable fields of the message text are: rsrc resource name value

---

### HLV0404I RRS support terminating

**Explanation:** This is an informational message that is issued when the product terminates its RRS support. If the RRS support is being terminated due to a fatal error condition, this message will have been preceded by error messages which depict the exact error condition encountered.

**User response:** Follow the course of action recommended for the error messages which preceded this error message, and if the product RRS support continues to terminate due to a fatal error condition, contact Software Support for further assistance.

---

### HLV0405I RRS support activated

**Explanation:** This message is issued when the product RRS server has received a notification that the connection(s) to the RRS region(s) have been established successfully.

**User response:** None. This message is for informational purposes only.

---

### HLV0406H text

**Explanation:** This is a general purpose message that may or may not indicate some type of RRS error.

**User response:** Read the message text carefully. Some messages produced under this message ID are actually error messages. If the message indicates an error, check for any associated RRS produced error messages. If the problem cannot be resolved, contact Software Support.

The variable fields of the message text are: text the text of the message

---

### HLV0407E Failure trying to register with RRS

**Explanation:** This message is issued when the RRS Register Resource Manager call is unsuccessful. The product is unable to use RRS services, and two-phase commit support is disabled.

**User response:** Ensure that RRS is functioning correctly.

---

### HLV0408E ERROR SETTING RRS EXITS, CHECK RRS STATUS

**Explanation:** This message is issued when the RRS Set Exit Information call is unsuccessful. This usually indicates that the RRS subsystem is not up and running. The product will attempt to establish its RRS

exits when it hears from RRS that it is up and running. RRS support and two-phase commit support will not be available until the product can successfully connect to RRS.

**User response:** Ensure that the RRS subsystem is up and running. If the RRS subsystem is not up and running, start it.

---

### HLV0409E RRS %1 EXIT MANAGER UNAVAILABLE

**Explanation:** This message is issued when RRS alerts the product that an IBM exit manager for RRS has become unavailable. This causes the product to lose its connection to RRS immediately. The product will try to reconnect again when it hears RRS is up and running. RRS support and two-phase commit support will not be available until the product can successfully reconnect to RRS.

**User response:** Ensure that the RRS subsystem is up and running. If the RRS subsystem is not up and running, start it.

---

### HLV0410E Product RRS exits have been unset

**Explanation:** This message is issued when RRS alerts the product that the the product RRS exits have become unset due to some error condition. This causes the product to lose its connection to RRS. RRS support and two-phase commit support will not be available.

**User response:** This indicates an error that should not occur. Contact Software Support.

---

### HLV0411E TRANS: token FROM host - REQUESTED trans1 BUT WAS HEURISTICALLY trans2

**Explanation:** The portion of a distributed transaction that ran under the product on z/OS was committed or rolled back heuristically manually or by a program - but not by the client-side transaction manager. The transaction manager has just informed the product that it wanted the transaction rolled back or committed. The data involved in the transaction may now be in an inconsistent state (partially committed and/or partially rolled back).

**User response:** This situation may need to be corrected manually. The data that was committed on MVS may need to be backed out, and the data sources may need to be restored to their state before the transaction. Note that the committed data may have already been accessed by later programs and transactions.

The variable fields of the message text are: token the XID token provided by the client side transaction manager host host name trans1 COMMIT or BACKOUT trans2 BACKED OUT or COMMITTED



---

**HLV0413E THE DB2ATTACHFACILITY  
PARAMETER IS NOT SET TO RRS AF,  
RRS SUPPORT TERMINATED'**

**Explanation:** The product DB2ATTACHFACILITY must be set to use the Recoverable Resources Attach Facility (RRSAF) for RRS support to work properly.

**User response:** Modify the product parameter data set member.

---

**HLV0414E RRS RECOVERY TABLE SIZE  
EXCEEDED - TRANSACTION  
ABORTED'**

**Explanation:** The RRS Recovery Table size was exceeded. A transaction was aborted, which will be indicated in another message.

**User response:** Increase the number of entries in the RRS Recovery Table, specified by the product parameter RECTABLEENTRIES. If this parameter is not specified, the value defaults to 400 entries.

---

**HLV0415E Incompatible supplied driver on client  
system - transaction aborted**

**Explanation:** An incompatible product-supplied driver was encountered on the client system.

**User response:** Contact Software Support.

---

**HLV0416E ZERO COLUMNS RETURNED FROM  
PREPARE - ERROR IN SYSTEM**

**Explanation:** Zero columns were returned from PREPARE. This is most likely due to an error in z/OS, RRS, and/or DB2.

**User response:** Contact Software Support for the latest information regarding how to bypass this problem.

---

**HLV0417E RRS IS NOT ACTIVATED FOR THIS  
SERVER - XA TRANSACTION  
ABORTED.'**

**Explanation:** When this server was initialized, either it was not instructed to activate an RRS connection or the initialization for connection failed.

**User response:** If the initialization parameters specify that RRS is to be activated, review the messages created when this server was initialized and correct any associated problems.

---

**HLV0420E TWO-PHASE COMMIT SUPPORT WAS  
REQUESTED, BUT RRS IS NOT  
ACTIVE**

**Explanation:** The RRS parameter was set to NO, or RRS initialization failed. Two-phase commit cannot be supported unless RRS is active.

**User response:** Check the joblog for RRS initialization error messages and correct any problems. Then, restart this server with the RRS parameter set to YES.

---

**HLV0421E ERROR IN TWO-PHASE trans  
PROCESS. RRS RETURN CODE = rc**

**Explanation:** Two-phase commit was requested for all transactions from this task. RRS returned an error code indicating that the commit was not successful.

**User response:** Check the return code from the RRS ATRCMIT function in the IBM manual titled z/OS Programming: Resource Recovery.

The variable fields of the message text are: trans COMMIT or BACKOUT rc RRS return code

---

**HLV0422E RRS RECOVERY TABLE COUNT  
NEGATIVE, RESET TO ZERO**

**Explanation:** The RRS Recovery Table entry count was found to be negative during XA-RECOVER processing. The entry count was reset to zero.

**User response:** There may be some XA transactions that were left in an incomplete state, leftover from a communication line disconnect or host system crash.

---

**HLV0423T Access to data sources through  
Enterprise Transactions is not  
configured.**

**Explanation:** None.

**User response:** Contact IBM Software Support.

---

**HLV0424E TWO-PHASE COMMIT SUPPORT WAS  
REQUESTED, BUT THE RRS  
MANAGER WAS NOT ACTIVE**

**Explanation:** RRS was requested, but RRS was not active.

**User response:** Check the joblog for messages related to RRS initialization. Correct the initialization errors and restart this server.

---

**HLV0425E IBM/MQSERIES/RRS SUPPORT ENTRY  
entry IN MODULE mod MISSING**

**Explanation:** An IBM/MQSeries support entry was missing from the module specified. There is an incompatibility between the MQSeries® library provided and product MQSeries/RRS support.

**User response:** Ensure that the library provided is the standard IBM library. If the problem cannot be resolved, contact Software Support.

The variable fields of the message text are: entry missing support entry point mod IBM/MQSeries module name

---

**HLV0426S IBM/MQSERIES/RRS SUPPORT  
MODULE mod MISSING - NO  
TWO-PHASE COMMIT SUPPORT  
PROVIDED**

**Explanation:** The specified IBM/MQSeries support module is necessary for two-phase commit support for MQSeries. Processing will continue without MQSeries two-phase commit support.

**User response:** Check the IBM/MQSeries library, defined in the product JCL procedure. It may be an old version.

The variable fields of the message text are: mod  
IBM/MQSeries module name

---

**HLV0428T CREATION OF RRS PRIVATE  
CONTEXT FAILED - CONNECTION  
TERMINATED. CALL: type - R15:  
return - R0: reason**

**Explanation:** With the product RRS support active and Private Contexts selected, the product creates an RRS Private Context immediately when the session connects. The RRS calls to do this failed.

**User response:** Check to be sure that the IBM RRS facility is active and not generating errors.

The variable fields of the message text are: type RRS  
Call Type return RRS Return Code reason RRS Reason  
Code

---

**HLV0480S MQSERIES support deactivated - access  
routines cannot be loaded.**

**Explanation:** During initialization MQSERIES access modules could not be loaded from either HLVMQSLB or STEPLIB.

**User response:** The server deactivates MQSERIES support and continues start-up processing. Check to ensure you have an HLVMQSLB DD JCL statement in the server start-up JCL.

---

**HLV0500E IBM-assigned CSR table entry setup  
error, contains var1, not product OPVN  
pointer**

**Explanation:** During initialization, the product Vendor Vector Table entry contained an invalid value. The assigned fullword contains a value which does not address the product OPVN control block. The IBM-assigned, entry in the table is located at decimal offset 184, hexadecimal offset B8 of the vector table addressed by ECVTCTBL. The fullword value at that location contained a non-zero value that did NOT point to an already established product OPVN control block. The product cannot initialize without establishing the OPVN block pointer. The existing value in the vector table fullword is saved and overlaid with the product OPVN block address.

**User response:** Determine who/what is responsible for creating the invalid entry in the table, clear the word to x'00's, and restart the product. Caution should be used when deciding to clear the entry. Most likely, another ISV has inadvertently used this entry; clearing it to 0's could cause problems for some other product.

The variable fields of the message text are: var1  
erroneous value found in vendor vector table

---

**HLV0501E service OF desc FAILED, RC=rc**

**Explanation:** This is a generic error message used to describe a variety of Server initialization and termination errors. The message text provides the information about the current operation.

**User response:** Check the error messages and the return code associated with this problem. There may be one or more error messages referring to the current problem. If possible, fix the problem identified by the error messages, and restart the product. If the problem cannot be resolved, contact Software Support.

The variable fields of the message text are: service  
current operation, GETMAIN, FREEMAIN, ATTACH  
etc. desc description rc return code

---

**HLV0502E <ss> directory table entry exists.**

**Explanation:** During initialization, the server directory table was found to contain an entry with the same subsystem ID as the one being started. Most likely, a server address space is active on this MVS image with this subsystem name.

**User response:** Determine if a server address space is currently active with this subsystem name. If so, change the subsystem name and restart (if it is necessary to start another server address space). If the problem cannot be resolved, contact IBM Software Support..

---

**HLV0503E No ERLY exists for DB2 %1**

**Explanation:** None.

**User response:** Contact IBM Software Support.

---

**HLV0504E %1 DB2 owned by another server.**

**Explanation:** None.

**User response:** Contact IBM Software Support.

---

**HLV0505E %1 DB2 search error.**

**Explanation:** None.

**User response:** Contact IBM Software Support.

---

---

**HLV0506E** %1 server software PC reset failed.

**Explanation:** None.

**User response:** Contact IBM Software Support.

---

**HLV0507E** %1 product PC reset failed.

**Explanation:** None.

**User response:** Contact IBM Software Support.

---

**HLV0508E** %1 server software PC entry unknown.

**Explanation:** None.

**User response:** Contact IBM Software Support.

---

**HLV0509E** %1 DB2 server init error.

**Explanation:** None.

**User response:** Contact IBM Software Support.

---

**HLV0510E** %1 DB2 server %2 error.

**Explanation:** The server main task for the named DB2 system encountered an error from the common subroutine. Either ECB WAIT or STIMER.

**User response:** Contact IBM Software Support.

---

**HLV0511E** %1 DB2 SSCTSUSE ERROR,

**Explanation:** None.

**User response:** Contact IBM Software Support.

---

**HLV0512I** %1 DB2 main task PC reset error.

**Explanation:** None.

**User response:** Contact IBM Software Support.

---

**HLV0513I** %1 product main task TERM PC error

**Explanation:** None.

**User response:** Contact IBM Software Support.

---

**HLV0515E** MAXIMUM NUMBER OF DB2 SUBSYSTEMS PREVIOUSLY DEFINED. MAX = %1. DEFINE FOR DB2 SSID %2 IGNORED.

**Explanation:** During initialization, the input parameter data set contains more DB2 subsystem statements than the maximum allowable set by default or by QSMAXDB2.

**User response:** All parameter statements pertaining to this DB2 subsystem are ignored.

---

**HLV0516E** DUPLICATE DB2 SUBSYSTEM DEFINITION FOR DB2 SSID %1

**Explanation:** During initialization, the input parameter data set contains more than one DEFINE for the same DB2 subsystem ID.

**User response:** All parameter statements within the subsequent DEFINE for this DB2 are ignored.

---

**HLV0517E** RETURN CODE %1 FROM ALESERV ADD OF DB2 DBM1 FOR %2

**Explanation:** None.

**User response:** Contact IBM Software Support.

---

**HLV0518E** TERMINATION WAITING ON DB2 STATUS TASK FOR %1

**Explanation:** None.

**User response:** Contact IBM Software Support.

---

**HLV0519E** maximum number of server address spaces are already active. max possible %1. currently active %2.

**Explanation:** None.

**User response:** Contact IBM Software Support.

---

**HLV0520E** Maximum number of DB2 systems are all ready active. max possible %1. DB2 %3.

**Explanation:** None.

**User response:** Contact IBM Software Support.

---

**HLV0521S** DB2 subsysid STATUS TASK ABEND abcd AT +off DURING desc.

**Explanation:** None.

**User response:** Contact IBM Software Support.

---

**HLV0522W** Proprietary R&D utilities are activated for this start-up

**Explanation:** This warning indicates that private R-and-D utility functions are activated within the system. Customer copies of the product should never produce this message during start-up processing.

**User response:** If this message appears during start-up, terminate the server and contact Software Support. The execution of internal developer utilities off-site may produce damaging side effects.

---

---

**HLV0523W E/SQA ROUTINE AT vars WILL BE REBUILT DUE TO INVALID PTR OR DATA**

**Explanation:** This warning indicates that the special E/SQA-resident SRASTC routine will be rebuilt. The existing pointer to the routine, or the routine itself, appears to have been damaged.

**User response:** Start-up processing clears the existing pointer and builds a new copy of the needed routine into E/SQA storage. The storage, if any, previously anchored by the OPVN vendor CSR table control block is orphaned. Contact Software Support.

The variable fields of the message text are: vars value/address of OPVNSRAT

---

**HLV0600S IMS/OTMA XCF request FAILED, RC=rc RS=rscd IMS=imsid**

**Explanation:** This is a generic error message used to describe a wide variety of IMS/OTMA initialization and termination errors. The message text provides the current operation and what the current operation was trying to do.

**User response:** Check the error messages and the return code associated with this problem. There may be one or more error messages referring to the current problem. If possible, fix the problem identified by the error messages, and restart the product. If the problem cannot be resolved, contact Software Support.

The variable fields of the message text are: request XCF request type rc XCF return code rscd XCF reason code imsid OTMA IMS ssid

---

**HLV0601S service OF desc FAILED, RC=rc**

**Explanation:** This is a generic error message used to describe a wide variety of IMS/OTMA initialization and termination errors. The message text provides the current operation and what the current operation was trying to do.

**User response:** Check the error messages and the return code associated with this problem. There may be one or more error messages referring to the current problem. If possible, fix the problem identified by the error messages, and restart the product. If the problem cannot be resolved, contact Software Support.

The variable fields of the message text are: service current operation, GETMAIN, FREEMAIN, ATTACH etc. desc description rc return code

---

**HLV0602I IMS/OTMA server waiting OTMA INIT for IMS SSID=%1**

**Explanation:** This message indicates that the IMS/OTMA Transaction Server is waiting for initialization of the selected IMS subsystem. This message is informational and issued periodically when

OTMA support is waiting for IMS subsystem startup to occur.

**User response:** Determine why the IMS subsystem is unavailable. Start the IMS subsystem to allow OTMA support to be enabled. If this message is issued in error, contact Software Support.

---

**HLV0603I IMS/OTMA server INIT in progress for IMS SSID=%1**

**Explanation:** This message indicates that the IMS/OTMA Transaction Server initialization is in progress for the selected IMS subsystem.

**User response:** None. This message is for informational purposes only.

---

**HLV0604I IMS/OTMA server INIT complete for IMS SSID=imsid using XCF member xcfid**

**Explanation:** This message indicates that the IMS/OTMA Transaction Server initialization has been successfully completed for the selected IMS subsystem.

**User response:** None. This message is for informational purposes only.

The variable fields of the message text are: imsid the IMS identifier defined xcfid the XCF member defined

---

**HLV0605I IMS/OTMA server has detected OTMA TERM for IMS SSID=%1**

**Explanation:** This message indicates that the IMS/OTMA Transaction Server has detected IMS terminating OTMA support. This message is issued when it has been determined that IMS is leaving the XCF OTMA group. This may be due to IMS termination, a /STOP OTMA command, or OTMA abnormal termination. The product IMS/OTMA server will wait for IMS to restart OTMA support and continue processing OTMA request activity.

**User response:** None. This message is for informational purposes only.

---

**HLV0606I IMS/OTMA server TERM in progress for IMS SSID=%1**

**Explanation:** This message indicates that the IMS/OTMA Transaction Server is terminating for the selected IMS subsystem. This message is issued during product termination.

**User response:** None. This message is for informational purposes only.

---

**HLV0607I** IMS/OTMA server TERM complete for  
IMS SSID=%1

**Explanation:** This message indicates that the IMS/OTMA Transaction Server has completed termination for the selected IMS subsystem. This message is issued during product termination.

**User response:** None. This message is for informational purposes only.

---

**HLV0608S** IMS/OTMA TPIPE TASK name FOR  
CONNECTION name ABENDED CODE  
abcd

**Explanation:** This message indicates that the IMS/OTMA Transaction Pipe has ABENDED.

**User response:** Examine the Trace Browse and JES JOBLOG to determine why the ABEND occurred. If the problem cannot be resolved, contact Software Support.

The variable fields of the message text are: name TPIPE task name name IMS/OTMA connection name abcd abend code

---

**HLV0620S** SIS/XCF XCF request FAILED, RC=rc  
RS=rscd SIS=sisid

**Explanation:** This is a generic error message used to describe a wide variety of SIS/XCF initialization and termination errors. The message text provides the current operation and what the current operation was trying to do.

**User response:** Check the error messages and the return code associated with this problem. There may be one or more error messages referring to the current problem. If possible, fix the problem identified by the error messages, and restart the product. If the problem cannot be resolved, contact Software Support.

The variable fields of the message text are: request XCF request type rc XCF return code rscd XCF reason code sisid SIS/XCF ssid

---

**HLV0621S** service OF desc FAILED, RC=rc

**Explanation:** This is a generic error message used to describe a wide variety of SIS/XCF initialization and termination errors. The message text provides the current operation and what the current operation was trying to do.

**User response:** Check the error messages and the return code associated with this problem. There may be one or more error messages referring to the current problem. If possible, fix the problem identified by the error messages, and restart the product. If the problem cannot be resolved, contact Software Support.

The variable fields of the message text are: service current operation, GETMAIN, FREEMAIN, ATTACH etc. desc description rc return code

---

**HLV0622T** SIS/XCF member waiting SIS/XCF %1  
INIT for mbr=%2

**Explanation:** This message indicates that the SIS/XCF Server is waiting for initialization of the selected SIS subsystem. This message is informational and issued periodically when an SIS/XCF standard member is waiting for the SIS/XCF manager to initialize.

**User response:** Determine why the SIS/XCF manager is unavailable. Start the SIS/XCF manager to allow SIS/XCF support to be enabled. If this message is issued in error, contact Software Support.

---

**HLV0623I** SIS/XCF %1 INIT in progress for  
member=%2

**Explanation:** This message indicates that the SIS/XCF Server initialization is in progress for the selected SIS subsystem.

**User response:** None. This message is for informational purposes only.

---

**HLV0624I** SIS/XCF server INIT complete for SIS  
SSID=sisid using XCF member xcfd

**Explanation:** This message indicates that the SIS/XCF Server initialization has been successfully completed for the selected SIS subsystem.

**User response:** None. This message is for informational purposes only.

The variable fields of the message text are: sisid the SIS identifier defined xcfd the XCF member defined

---

**HLV0625I** SIS/XCF %1 instance has detected  
termination of %2 instance member %3

**Explanation:** This message indicates that the SIS/XCF Transaction Server has detected SIS terminating SIS/XCF support. This message is issued when it has been determined that SIS is leaving the XCF OTMA group. This may be due to SIS termination, or OTMA abnormal termination. The SIS/XCF server will wait for SIS to restart SIS/XCF support and continue processing SIS request activity.

**User response:** None. This message is for informational purposes only.

---

**HLV0626I** SIS/XCF %1 TERM in progress for  
member=%2

**Explanation:** This message indicates that the SIS/XCF Server is terminating for the selected SIS subsystem. This message is issued during product termination.

**User response:** None. This message is for informational purposes only.

---

---

**HLV0627I** SIS/XCF %1 TERM complete for member=%2

**Explanation:** This message indicates that the SIS/XCF Transaction Server has completed termination for the selected SIS subsystem. This message is issued during product termination.

**User response:** None. This message is for informational purposes only.

---

**HLV0701W** ZIIPCLASS=class HAS TOO MANY PERIODS SPECIFIED

**Explanation:** This message indicates that WLM initialization found too many matching report classes. Only six periods are allowed, and more than that matched the naming convention.

**User response:** Delete the extra report classes.

The variable fields of the message text are: class the WLM Class found

---

**HLV0702W** CLASS class SPECIFIES A ZIPCLASS NAME THAT DOES NOT EXIST, class

**Explanation:** This message indicates that WLM initialization found a class that referenced a ZIIPCLASS that could not be found.

**User response:** Correct the indicated WLM Class to reference an existing WLM pseudo-class.

The variable fields of the message text are: class the WLM Class being processed. class the name of the WLM pseudo-class that could not be found.

---

**HLV0703W** ZIIPCLASS=class CONTAINS INVALID PARMS

**Explanation:** This message indicates that WLM initialization found a ZIIPCLASS report class definition with invalid parms. The description must contain a Pnnn percentage definition and all but the last one must contain a Dnnnnnnn duration.

**User response:** Correct the definition field of the ZIIPCLASS report class definition.

The variable fields of the message text are: class the WLM Class found

---

**HLV0704H** WLM refresh command completed

**Explanation:** The WLM command has successfully completed, refreshing WLM data within the product.

**User response:** None.

---

**HLV0706I** pname subsys requires the following elements missing from WLM Service type policy

**Explanation:** Product initialization detected that the current WLM service policy does not have the all of the required definitions for Version 7.1 of the product. Messages listing the required service definition elements will follow this message.

**User response:** Respond to the WTOR prompts that follow these messages.

The variable fields of the message text are: pname product name subsys subsystem name type policy or definition policy current WLM policy/definition name

---

**HLV0707I** Type: WLM, Server Parameter: WLM, Value: Server

**Explanation:** Generic message used by product WLM initialization to list elements missing from the WLM service definition.

**User response:** Respond to the WTOR prompts that follow this message.

The variable fields of the message text are: WLM policy element type WLM policy element name Server IN00 parameter name

---

**HLV0708R** Reply 'GO' to update the WLM Service Definition, or 'CANCEL' to terminate server initialization

**Explanation:** This message is issued when product WLM initialization is about to update the current WLM service definition with the policy elements required for product server execution.

**User response:** Reply GO to allow the server to update the WLM service definition. Reply CANCEL to terminate server initialization

---

**HLV0709I** WLM Service Definition WLM has been updated with required product elements

**Explanation:** This message is issued when product WLM initialization has updated the WLM service definition with the required product elements.

**User response:** Respond to the WTOR prompts that follow this message.

The variable fields of the message text are: WLM Service definition name

---

**HLV0710E** Invalid reply: 'reply'. Reply 'GO' or 'CANCEL'

**Explanation:** An invalid reply was specified to the server WLM initialization console message.

**User response:** Reply GO to cause the message to be

reissued. Reply CANCEL to terminate server initialization.

The variable fields of the message text are: reply reply text

---

**HLV0711E REPLY WAIT EXCEEDED 2 MINUTES. CANCEL ASSUMED**

**Explanation:** The product waited over two minutes for a reply to the WLM initialization message. Since no response was received during that time, CANCEL was assumed and server initialization terminated.

**User response:** None. If a reply was desired, you will need to speed your response to the message.

---

**HLV0712E 3 INVALID REPLIES. CANCEL ASSUMED**

**Explanation:** Three invalid replies were made to the product WLM initialization message. Since no correct response was received, CANCEL was assumed and server initialization terminated.

**User response:** None. Reply as required next time.

---

**HLV0713S WLM administration user ID <usid> logon failed.**

**Explanation:** The WLM admin user ID specified by the WLMUSERID system parameter failed logon processing during start-up.

**User response:** The server initialization process is aborted. Ensure that the user ID specified by the WLMUSERID start-up parameter is correct. If possible, fix the problem identified by the error messages and restart the product. If the problem cannot be resolved, contact IBM Software Support.

The variable fields of the message text are: usid the WLMUSERID parameter value

---

**HLV0714I WLM administration userid usid logged on to system**

**Explanation:** The WLM admin userid specified by the WLMUSERID system parameter has been logged on to the system.

**User response:** Server initialization processing continues.

The variable fields of the message text are: usid the WLMUSERID value

---

**HLV0715I WLM Service Definition WLM does not contain current Service Policy WLM**

**Explanation:** This message is issued when product WLM initialization is has updated the WLM service definition and has determined that it does not contain the currently active service Policy.

**User response:** Respond to the WTOR prompts that follow this message.

The variable fields of the message text are: WLM Service definition name WLM Service policy name

---

**HLV0716R Enter name of Service Policy to activate, 'LIST', or 'CANCEL' to terminate server initialization**

**Explanation:** This message is issued when product WLM initialization has updated the Service Definition and needs to know which Service Policy should be activated.

**User response:** Enter a name to activate Service Policy with that name. Reply LIST to get a list of available Policies. Reply CANCEL to terminate server initialization

The variable fields of the message text are: WLM Service definition name WLM Service policy name

---

**HLV0717I The following Service Policies are available for activation**

**Explanation:** This message is issued when product WLM initialization is about to list the Service Policies defined in the current Service Definition.

**User response:** Respond to the WTOR prompts that follow this message.

---

**HLV0718I Policy: WLM - WLM**

**Explanation:** Generic message used by product WLM initialization to list Service Policies available for activation.

**User response:** Respond to the WTOR prompts that follow this message.

The variable fields of the message text are: WLM policy element name WLM policy element description

---

**HLV0719R Reply 'GO' to activate Policy %1, or 'CANCEL' to terminate server initialization**

**Explanation:** This message is issued when product WLM initialization has updated the WLM service definition with the named service policy.

**User response:** Reply GO to allow the server to activate the service policy. Reply CANCEL to terminate server initialization 1 = policy name of WLM policy to be created

---

**HLV0720S WLM reset to service class srcls failed for job jobname subsystem subsystem ASID asid**

**Explanation:** The server WLM initialization failed to reset the service class for the server.

**User response:** Look for preceding error messages in the system log.

The variable fields of the message text are: srvcls the desired service class jobname the server jobname subsystem the server SSID asid the server ASID

**HLV0721I WLM classify successful for tran - Service Class srvcls**

**Explanation:** The server WLM enclave classification was successful.

**User response:** None.

The variable fields of the message text are: tran the transaction name used srvcls the service class assigned

**HLV0722I Unable to classify transaction tran for subsystem subsystem**

**Explanation:** The server was unable to classify the named transaction.

**User response:** Look for preceding error messages in the system log.

The variable fields of the message text are: tran the transaction name used subsystem the WLM subsystem type

**HLV0723I WLM enclave create successful for Service Class srvcls**

**Explanation:** The server WLM enclave classification was successful.

**User response:** None.

The variable fields of the message text are: srvcls the service class assigned

**HLV0724I ss WLM health changed from subsystem%% to oper1%% oper2**

**Explanation:** The WLM health value for the specified product subsystem was changed from the first value to the second.

**User response:** If the health value decreases, look for abends or timeouts in the Server. Currently only ACI abends and timeouts are measured. If the health value increases, this is an indication that no further failures have been detected, and the product is returning to full health.

The variable fields of the message text are: subsystem the WLM subsystem type oper1 the old health value oper2 the new health value reason reason description

**HLV0725I RACF administration USERID usid logged on to system**

**Explanation:** The RACF admin USERID specified by the SERVERID system parameter has been logged on to the system.

**Response:** Server initialization processing continues.

The variable fields of the message text are: usid the SERVERID value

**HLV0726S RACF administration USERID (usid) logon failed**

**Explanation:** The RACF admin USERID specified by the SERVERID system parameter failed logon processing during start-up.

**Response:** The server initialization process is aborted. Ensure that the USERID specified by the SERVERID start-up parameter is correct. If possible, fix the problem identified by the error messages and restart the product. If the problem cannot be resolved, contact IBM Software Support.

The variable fields of the message text are: usid the SERVERID parameter value

**HLV0800I IDMS SERVER INIT IN PROGRESS FOR CONNECTION=%1**

**Explanation:** This message indicates that the IDMS initialization is in progress for the selected IDMS connection name.

**User response:** None. This message is for informational purposes only.

**HLV0801I IDMS SERVER INIT COMPLETE FOR CONNECTION=target USING MAILBOX=cnid**

**Explanation:** This message indicates that the IDMS initialization has been successfully completed for the selected IDMS target using the defined connection.

**User response:** None. This message is for informational purposes only.

The variable fields of the message text are: target the IDMS target defined cnid the connection ID

**HLV0802I CONNECTION BROKEN WITH IDMS CONNECTION=cnid USING MAILBOX=jobname**

**Explanation:** This message indicates that the IDMS connection has been broken for the selected IDMS connection

**User response:** None. This message is for informational purposes only.

The variable fields of the message text are: cnid the



IDMS connection name jobname the IDMS jobname

---

**HLV0900E Service of ddncb failed, RC=rc.**

**Explanation:** During compilation or execution of a REXX program, an MVS service returned a non-zero error code. One of the following occurred: (1) a file failed to open or close, (2) a failure in writing a record (WRITE or ENDREQ), (3) storage for a control block could not be obtained or freed, or (4) parsing of the command failed.

**User response:** Depending on which of the above cases pertains, take one of the following actions: (1) check for a message indicating why the file failed to open or close (most likely, the SYSEXEC file name was not allocated properly - e.g. allocated to a sequential file instead of a partitioned data set); (2) if a WRITE or ENDREQ failed message was issued, check the status of the PDS allocated in the HLVCOMP or SWSCOMP DD (it may not be allocated properly - e.g. ran out of space); (3) if the error reported a GETMAIN, allocate or allocation failure, you may have to increase the TSO region size for your TSO session; or (4) check the command you issued for incorrect syntax.

The variable fields of the message text are: service open, close, GETMAIN, FREEMAIN, allocate/allocation, delete/deletion, IKJPARS ddncb ddname (for open/close), control block name (all other cases) rc return code

---

**HLV0901E CANNOT OPEN mem (ABEND abcd AT mod+off)**

**Explanation:** During the open processing of the REXX program to be run, an abend occurred. The PDS member containing the REXX source program could not be opened because of the abend.

**User response:** Ensure that the given library is a PDS similar by definition to the other REXX libraries. Check the IBM message and codes manuals for the abend code. Most likely, either the member does not exist or the data set attributes are in error (sequential DSORG or the LRECL and BLKSIZE are not compatible). If a system 913 abend code is reported, data set access has been disallowed by your security subsystem.

The variable fields of the message text are: mem member name abcd abend code mod module name off module offset

---

**HLV0902E Cannot find program pgmname ddn var1.**

**Explanation:** The REXX interpreter (HLVI, HLVX, SWSI, or SWSX TSO command processor) could not locate the specified REXX program in the data set allocated to the SYSEXEC ddname (for SDBI or SWSI) or in the data set specified on the HLVX or SWSX commands.

**User response:** Ensure the program name being executed exists in one of the SYSEXEC concatenated data sets (for HLVI or SWSI) or in the data set specified on the HLVX or SWSX command. Check the spelling of the program name.

The variable fields of the message text are: pgmname program name ddn ddname var1 none

---

**HLV0903E ERROR 43 request caller, LINE lineno: ROUTINE routine NOT FOUND**

**Explanation:** While compiling a REXX program, the REXX interpreter could not locate a routine called by the main program or called by one of its subroutines.

**User response:** Check the calling program (described in this message) to make sure that the subroutine name is spelled correctly. If spelling is correct, the missing routine must be added to a library allocated to the SYSEXEC ddname or to the same library in which the calling program resides.

The variable fields of the message text are: request type of compiler request caller name of calling program lineno calling program line number routine name of the missing routine

---

**HLV0906I No syntax errors found during scan.**

**Explanation:** The compiler found no syntax errors during a HLVX scan. This is an informational message.

**User response:** No action is required.

---

**HLV0907S ABEND abcd OCCURRED AT csect+off OF PROGRAM pgm**

**Explanation:** An abend occurred during the execution of a REXX program by the REXX interpreter (HLVI or HLVX TSO command). The name of the REXX program being executed at the time of the abend is shown in this message.

**User response:** Check the line being executed at the time of the abend. Check the abend code in the IBM messages and codes manual, and follow action stipulated there.

The variable fields of the message text are: abcd abend code csect CSECT name off module offset pgm program name

---

**HLV0908E PROGRAM pgm IS TOO LARGE - INPUT BUFFER OVERFLOW**

**Explanation:** The REXX interpreter (HLVI or HLVX TSO command) could not successfully compile a REXX program because it is too large.

**User response:** Split the program into smaller subroutines. This error is directly related to the number and length of source input lines in a single REXX program.

The variable fields of the message text are: pgm  
program name

---

**HLV0909E PROGRAM pgm - ARG LENGTH  
(length1) EXCEEDS MAXIMUM  
LENGTH (length2)**

**Explanation:** The length of the argument string for the REXX program exceeds the implementation limit.

**User response:** Check if there are an excessive number of blanks in the argument string. If so, remove the blanks from the argument string. If you need to pass long values to a REXX program, use global variables to pass the values.

The variable fields of the message text are: pgm  
program name length1 length of argument string  
length2 argument string implementation limit

---

**HLV0911E Missing REXX program name**

**Explanation:** The HLVI command was invoked using the TSO CALL command without a parameter field (containing the REXX program name to execute), or the @#\$I command was invoked from within ISPF edit and the ISPF environment could not be established.

**User response:** If the HLVI command was invoked via the TSO CALL command, you must add the parameter field with a REXX program name (and optional arguments). Otherwise, contact Software Support for assistance.

---

**HLV0912E Missing REXX program name detected  
at - ad**

**Explanation:** The HLVI or HLVX TSO command was invoked without a program name.

**User response:** You must specify a program name on the HLVI or HLVX TSO command. Contact Software Support.

---

**HLV0913E Invalid REXX program name detected -  
text**

**Explanation:** The REXX program name specified is invalid. It must be a valid PDS member name and cannot exceed eight (8) characters in length.

**User response:** Specify a valid REXX program name. If the problem cannot be resolved, contact Software Support.

The variable fields of the message text are: text  
command text data

---

**HLV0914E UNKNOWN RETURN CODE FROM  
PARSE ROUTINE, RC=rc**

**Explanation:** An unexpected return code was received from the internal parse routine.

**User response:** Contact Software Support for assistance.

The variable fields of the message text are: rc return  
code

---

**HLV0915E BATCH OR TSO CALL PARAMETER  
STRING TOO LONG**

**Explanation:** The parameter field passed to a batch program, or a program invoked by TSO CALL cannot exceed 100 characters.

**User response:** Reduce the length of the parameter string. Contact Software Support to obtain additional assistance.

---

**HLV0916E <routine> built-in function not found -  
called by <caller>.**

**Explanation:** A compatibility problem exists between the product subsystem in use and the pre-compiled REXX program being re-loaded. A product built-in function that was to be used by the pre-compiled REXX program no longer exists.

**User response:** Check the subsystem release levels used when the REXX program was compiled. It may be necessary to recompile the REXX program again under the current product subsystem (HLVICOMP).

The variable fields of the message text are: routine the  
name of the missing routine caller calling program

---

**HLV0917E ERROR SAVING THE COMPILED  
OUTPUT IN %1**

**Explanation:** An error occurred while attempting to save a pre-compiled program. This message is accompanied by an earlier message detailing the cause of the error.

**User response:** Check the previous error message for possible actions.

---

**HLV0918E CANNOT WRITE EXECUTABLE  
OBJECT var1.var2 TO DS(var1) var4  
var5 var6 var7 var8**

**Explanation:** SEF is unable to save an executable object binary image or data area because of a runtime problem. The source rule or data file are named, along with the target dataset.

**User response:** Check for other messages indicating the source of the problem and retry the request.

The variable fields of the message text are: var1 ruleset

or datafile var2 rule or data member var1 object output PDS DS name var4 variable var5 variable var6 variable var7 variable var8 variable

---

**HLV0919I    Successful compile and save of <pgm> in <ddn>.**

**Explanation:** THE REXX interpreter (HLVICOMP, HLVXCOMP, SWSICOMP or SWSXCOMP commands) was successful in compiling and saving the REXX program.

**User response:** No action is required.

The variable fields of the message text are: pgm program name ddn dname

---

**HLV0920E    REBUILD FAILED FOR COMPILED REXX PROGRAM - pgm**

**Explanation:** The REXX interpreter command processor was attempting to rebuild a REXX program from a previously compiled PDS member when the failure occurred.

**User response:** Check for other accompanying error messages. You may have to delete the compiled version of the program and recompile it again, or execute the REXX source program.

The variable fields of the message text are: pgm program name

---

**HLV0921W    ALLOCATION OF COMPILED LIBRARY (dsn) FAILED**

**Explanation:** The product attempted to allocate the library with the compiled versions of REXX programs. The dynamic allocation failed.

**User response:** Make sure that the data set name specified in the first panel of this application is valid. Contact the person at your installation who is responsible for the product to get the proper data set name.

The variable fields of the message text are: dsn data set name specified in main panel

---

**HLV0922W    ITRACE KEYWORD NOT ALLOWED DURING COMPILE ONLY REQUEST**

**Explanation:** Setting the initial trace value for a COMPILE ONLY request is not allowed.

**User response:** Do not specify the ITRACE keyword in a COMPILE ONLY request. The ITRACE value only has meaning during the execution phase of REXX.

---

**HLV0923S    COMPILE ALL FAILED - ERROR READING THE DIRECTORY OF dsn**

**Explanation:** A COMPILE ONLY request was received for an entire PDS, but an error was detected while reading the directory.

**User response:** Try to browse the data set using ISPF and see if the member list directory is accessible for the PDS. If not, contact your local DASD administrator for possible data set recovery. If you are able to browse the data set and list its members properly, contact Software Support.

The variable fields of the message text are: dsn data set name

---

**HLV0990E    RUNNING pgmname: INCOMPATIBLE CONTROL BLOCKS**

**Explanation:** The REXX program was compiled with an older version of the Product REXX interface module. The REXX control blocks in the compiled module are incompatible with the current version.

**User response:** This error should only occur when executing a pre-compiled, saved version of a program or rule. In that case, the program or rule should be recompiled and then re-executed. If the error occurred in any other case, contact Software Support for assistance.

The variable fields of the message text are: pgmname REXX program name

---

**HLV0991E    RUNNING pgmname: INTERNAL ERROR DETECTED AT ad**

**Explanation:** The REXX interface module detected an internal error.

**User response:** There may be other error messages related to this condition. This error may be caused by a REXX workspace overflow condition. If this is the case, refer to message 0998E for additional information. If the problem cannot be resolved, contact Software Support.

The variable fields of the message text are: pgmname REXX program name

---

**HLV0997T    lno' TRACE MESSAG**

**Explanation:** Informational message only. This message gives the output from the REXX TRACE command when used in a rule.

**User response:** None. This message is for informational purposes only.

The variable fields of the message text are: lno REXX program line number

---

**HLV0998E**    **RUNNING pgmname LINE lno:  
COMPILER WORK SPACE  
OVERFLOW (value1 value2)**

**Explanation:** The rule or program used up all of the available REXX variable work space.

**User response:** In either case, check if the program is incorrectly creating too many variables. If so, correct the program, and retry the operation. If the program is operating correctly, the work space size may be too small. In the rule environment, the SEFSIZE parameter needs to be increased, and the product must be restarted. In the case of a Product REXX program (SWSI command), use the WORKSPACE keyword parameter to override the default size. For WWW rules, override the default workspace specification by coding the WORKSPACE() operand on the /\*WWW header statement for the rule.

---

**HLV0999E**    **STAX ind MACRO FAILED - RC=rc**

**Explanation:** The STAX macro failed with the indicated return code while the Product REXX compiler was trying to initialize or terminate execution of a REXX program.

**User response:** Record the error message and return code. Contact Software Support.

The variable fields of the message text are: The STAX macro failed with the indicated return code while the Product REXX compiler was trying to initialize or terminate execution of a REXX program.: ind indicator to show type of STAX macro call (ON or OFF) rc return code from STAX macro (from reg 15)

---

**HLV1000I**    **text**

**Explanation:** The product message used for REXX SAY statements.

**User response:** None. This message is for informational purposes only.

The variable fields of the message text are: text the text of the REXX SAY statement.

---

**HLV1004I**    **ERROR 4 process pgmname, LINE lno:  
PROGRAM INTERRUPTED**

**Explanation:** The system halted the execution of a REXX program because of some error or by user request. Unless trapped by SIGNAL ON HALT, this message will force the language processor to immediately cease execution.

**User response:** None. This message is for informational purposes only.

The variable fields of the message text are: process compiling or running pgmname REXX program name lno REXX program line number

---

**HLV1005I**    **ERROR 5 process pgmname, LINE lno:  
MACHINE RESOURCES EXHAUSTED**

**Explanation:** While attempting to execute a REXX program, the language processor was unable to obtain the resources it needed to continue execution. The following items may be the cause of this message: (1) the external data queue is full or (2) all available storage has been used.

**User response:** Try increasing the size of the external data queue or the amount of storage available to the program.

The variable fields of the message text are: process compiling or running pgmname REXX program name lno REXX program line number

---

**HLV1006I**    **ERROR 6 var1 var2, LINE lno:  
UNMATCHED "/" OR QUOTE**

**Explanation:** A comment string or a literal string was started but never finished. For comments, this may be detected at the end of the program or at the end of an INTERPRET instruction. For literal strings, this may be detected at the end of a line.

**User response:** Examine the rule or REXX program, and correct the string.

The variable fields of the message text are: var1 none var2 none lno REXX program line number

---

**HLV1007I**    **ERROR 7 process pgmname, LINE lno:  
WHEN OR OTHERWISE EXPECTED**

**Explanation:** Within a SELECT construct, at least one WHEN construct (and possibly an OTHERWISE clause) is expected. If any other instruction is found (or no WHEN construct is found before OTHERWISE), then this message results. This is commonly caused by forgetting the DO and END around the list of instructions following a WHEN.

**User response:** Examine the REXX program, and correct the error.

The variable fields of the message text are: process compiling or running pgmname REXX program name lno REXX program line number

---

**HLV1008I**    **ERROR 8 process pgmname, LINE lno:  
UNEXPECTED THEN OR ELSE**

**Explanation:** A THEN or an ELSE has been found that does not match a corresponding IF or WHEN clause. This error often occurs because of a missing END or DO...END in part of a complex IF...THEN...ELSE construct.

**User response:** Examine the program, and correct the error.

The variable fields of the message text are: process

compiling or running pgmname REXX program name  
lno REXX program line number

---

**HLV1009I ERROR 9 process pgmname, LINE lno:  
UNEXPECTED WHEN OR  
OTHERWISE**

**Explanation:** A WHEN or OTHERWISE has been found outside of a SELECT construct. It may have been enclosed unintentionally in a DO...END construct by leaving off an END instruction, or an attempt may have been made to branch to it with a SIGNAL instruction (which cannot work because a SELECT is terminated by a SIGNAL).

**User response:** Examine your program, and fix the part in error.

The variable fields of the message text are: process  
compiling or running pgmname REXX program name  
lno REXX program line number

---

**HLV1010I ERROR 10 process pgmname, LINE lno:  
UNEXPECTED OR UNMATCHED END**

**Explanation:** Either there are more ENDS in the program than DOs and SELECTs or the ENDS are wrongly placed so they do not match the DOs and SELECTs. It may be useful to use trace scan to show the structure of the program; hence, making it more obvious where the error is. A common mistake that causes this error is attempting to jump into the middle loop using the SIGNAL instruction. This error will also be generated if an END immediately follows a THEN or an ELSE.

**User response:** Examine the line in error, and correct the REXX program.

The variable fields of the message text are: process  
compiling or running pgmname REXX program name  
lno REXX program line number

---

**HLV1011I ERROR 11 process pgmname, LINE lno:  
CONTROL STACK FULL**

**Explanation:** An implementation limit of levels of nesting of control structures (DO...END, IF...THEN...ELSE, etc.) has been exceeded. The message should state the actual restriction. This error could be due to a looping INTERPRET instruction or due to infinite recursive calls.

**User response:** Examine the line in error, and fix the program.

The variable fields of the message text are: process  
compiling or running pgmname REXX program name  
lno REXX program line number

---

**HLV1012I ERROR 12 process pgmname, LINE lno:  
CLAUSE TOO LONG**

**Explanation:** There may be an implementation restriction that limits the length of the internal representation of a clause. This message is generated if this limit is exceeded.

**User response:** Reduce the length of the literal and hexadecimal strings that exceed the documented limits. If the problem cannot be resolved, contact Software Support.

The variable fields of the message text are: process  
compiling or running pgmname REXX program name  
lno REXX program line number

---

**HLV1013I ERROR 13 process pgmname, LINE lno:  
INVALID CHARACTER IN PROGRAM**

**Explanation:** The program includes a character outside the literal quoted string that neither alphanumeric nor one of the acceptable special characters.

**User response:** Examine the line in error, and correct the invalid character.

The variable fields of the message text are: process  
compiling or running pgmname REXX program name  
lno REXX program line number

---

**HLV1014I ERROR 14 process pgmname, LINE lno:  
INCOMPLETE DO/SELECT/IF**

**Explanation:** On reaching the end of the program (or the end of the string in an INTERPRET instruction), it has been detected that there is a DO or SELECT without a matching END or an IF that is not followed by a THEN clause to execute.

**User response:** Find the unbalanced DO or SELECT, and correct it.

The variable fields of the message text are: process  
compiling or running pgmname REXX program name  
lno REXX program line number

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**HLV1015I ERROR 15 process pgmname, LINE lno:  
INVALID HEXADEDECIMAL OR BINARY  
CONSTANT**

**Explanation:** Hexadecimal constants may not have leading or trailing blanks and may only have embedded blanks at byte boundaries. Only the digits 0 - 9 and the letters a-f are allowed. Binary strings may only have blanks added at the boundaries of groups of four binary digits. Only the digits 0 and 1 are allowed. The error may also be caused by following a literal string either by the one character symbol "x" when the string is not intended to be taken as a hexadecimal specification or by the symbol "b" when the string is not intended to be taken as a binary specification. Use the explicit concatenation operator, " | |", in this

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situation to concatenate the string to the value of the symbol.

**User response:** Locate the error on the line, and correct it.

The variable fields of the message text are: process compiling or running pgmname REXX program name lno REXX program line number

---

### HLV1016I ERROR 16 process pgmname, LINE lno: LABEL NOT FOUND

**Explanation:** A SIGNAL instruction has been executed, or an event occurred for which a trap was set, and the label specified cannot be found in the program.

**User response:** Correct the error, and rerun the program.

The variable fields of the message text are: process compiling or running pgmname REXX program name lno REXX program line number

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### HLV1017I ERROR 17 process pgmname, LINE lno: UNEXPECTED PROCEDURE

**Explanation:** A PROCEDURE instruction was encountered which was not the first instruction executed after a call or function invocation. A possible cause of this is dropping through into an internal routine rather than invoking it properly.

**User response:** Examine the line, correct the problem, and rerun the program.

The variable fields of the message text are: process compiling or running pgmname REXX program name lno REXX program line number

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### HLV1018I ERROR 18 process pgmname, LINE lno: THEN EXPECTED

**Explanation:** All IF and WHEN clauses in REXX must be followed by a THEN clause. Some other clause was found when a THEN was expected.

**User response:** Examine the line, and correct the error.

The variable fields of the message text are: process compiling or running pgmname REXX program name lno REXX program line number

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### HLV1019I ERROR 19 process pgmname, LINE lno: STRING OR SYMBOL EXPECTED

**Explanation:** Following either the keyword call or the sequence SIGNAL ON or SIGNAL OFF, a literal string or a symbol was expected but neither was found.

**User response:** Add the literal string or symbol that is needed.

The variable fields of the message text are: process

compiling or running pgmname REXX program name lno REXX program line number

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### HLV1020I ERROR 20 process pgmname, LINE lno: SYMBOL EXPECTED

**Explanation:** In the clauses END, ITERATE, LEAVE, NUMERIC, PARSE, and PROCEDURE, a symbol can be expected. Either it was not present when required or some other token was found. Alternately, DROP and the EXPOSE option of PROCEDURE expect a list of symbols. Some other token was found.

**User response:** Correct the REXX program, and rerun.

The variable fields of the message text are: process compiling or running pgmname REXX program name lno REXX program line number

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### HLV1021I ERROR 21 process pgmname, LINE lno: INVALID DATA ON END OF CLAUSE

**Explanation:** A clause such as SELECT or NOP is followed by some token other than a comment.

**User response:** Correct the line, and rerun the REXX program.

The variable fields of the message text are: process compiling or running pgmname REXX program name lno REXX program line number

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### HLV1022I ERROR 22 process pgmname, LINE lno: INVALID CHARACTER STRING

**Explanation:** This error results if a literal string contains character codes that are not valid in a particular implementation. This might be because some characters are impossible or because the character set is extended in some way and certain character combinations are not allowed.

**User response:** Examine the line, and correct the error.

The variable fields of the message text are: process compiling or running pgmname REXX program name lno REXX program line number

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### HLV1024I ERROR 24 process pgmname, LINE lno: INVALID TRACE REQUEST

**Explanation:** The setting specified on a trace instruction or as the argument to the trace built-in function starts with a character that does not match one of the valid trace settings. This error is also raised if an attempt is made to request trace scan when inside any kind of control construct.

**User response:** Contact Software Support to obtain additional assistance.

The variable fields of the message text are: process compiling or running pgmname REXX program name lno REXX program line number

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**HLV1025I    ERROR 25 process pgmname, LINE lno:  
INVALID SUB-KEYWORD FOUND**

**Explanation:** An unexpected token has been found in the position in an expression where a particular sub-keyword was expected.

**User response:** Correct the line, and resubmit.

The variable fields of the message text are: process compiling or running pgmname REXX program name lno REXX program line number

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**HLV1026I    ERROR 26 process pgmname, LINE lno:  
INVALID WHOLE NUMBER**

**Explanation:** One of the following either did not evaluate to a whole number or is greater than the implementation limit for these uses: (1) the expression for digits or fuzz in the numeric instruction, (2) a parsing positional parameter, (3) a repetition phrase of a DO clause, or (4) the right-hand of the POWER("\*\*") operator. This error is also raised if a negative repetition count is found in a DO clause.

**User response:** Fix it, mix it, and rerun it.

The variable fields of the message text are: process compiling or running pgmname REXX program name lno REXX program line number

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**HLV1027I    ERROR 27 process pgmname, LINE lno:  
INVALID DO SYNTAX**

**Explanation:** Some syntax error has been found in the DO instruction. This might be using the TO, BY, or FOR sub-keywords twice or when there is no control variable specified.

**User response:** Fix the error, and rerun the job.

The variable fields of the message text are: process compiling or running pgmname REXX program name lno REXX program line number

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**HLV1028I    ERROR 28 process pgmname, LINE lno:  
INVALID LEAVE OR ITERATE**

**Explanation:** A LEAVE or ITERATE instruction was encountered in an invalid position. Either no loop is active or the name specified on the instruction does not match the control variable of an active loop. Note that since internal routine calls and the INTERPRET instruction protect DO loops, they become inactive. A common cause of this error is attempting to use the SIGNAL instruction to transfer control within or into the loop.

**User response:** Fix the problem on the line, and rerun the job.

The variable fields of the message text are: process compiling or running pgmname REXX program name lno REXX program line number

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**HLV1029I    ERROR 29 process pgmname, LINE lno:  
ENVIRONMENT NAME IS TOO  
LONG**

**Explanation:** The environment name specified by the ADDRESS instruction is longer than permitted for the system under which REXX is running. This message should state the maximum length permitted.

**User response:** Correct the problem, and rerun the REXX program.

The variable fields of the message text are: process compiling or running pgmname REXX program name lno REXX program line number

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**HLV1030I    ERROR 30 process pgmname, LINE lno:  
NAME OR STRING TOO LONG**

**Explanation:** This error results if there is an implementation limit that is exceeded for the length of a variable name, a label name, or a literal string.

**User response:** Fix the error, and rerun the REXX program.

The variable fields of the message text are: process compiling or running pgmname REXX program name lno REXX program line number

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**HLV1031I    ERROR 31 process pgmname, LINE lno:  
NAME STARTS WITH NUMBER OR "."**

**Explanation:** A value may not be assigned to a variable whose name starts with a numeric digit or a period (if it were allowed, one could redefine numeric constants).

**User response:** Correct the error, and rerun the REXX program.

The variable fields of the message text are: process compiling or running pgmname REXX program name lno REXX program line number

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**HLV1033I    ERROR 33 process pgmname, LINE lno:  
INVALID EXPRESSION RESULT**

**Explanation:** The result of an expression in an instruction was found to be invalid in the particular context it was used. This may be due to an illegal fuzz or digits value in a numeric instruction (fuzz may not become larger than digits).

**User response:** Contact Software Support.

The variable fields of the message text are: process compiling or running pgmname REXX program name lno REXX program line number

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**HLV1034I    ERROR 34 process pgmname, LINE lno:  
LOGICAL VALUE NOT 0 OR 1**

**Explanation:** The expression in an IF, WHEN, DO WHILE, or DO UNTIL phrase must result in a 0 or a 1, as must any term operated on by a logical operator.

**User response:** Fix the bug, and rerun the program.

The variable fields of the message text are: process compiling or running pgmname REXX program name lno REXX program line number

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**HLV1035I    ERROR 35 process pgmname, LINE lno:  
INVALID EXPRESSION**

**Explanation:** This is due to a grammatical error in an expression, such as ending it with an operator or having two operators adjacent with nothing in between. It may also be due to an expression that is missing when one is required. A common error is to include special characters in an intended character expression without enclosing them in quotes.

**User response:** Examine the line, fix the problem, and then rerun.

The variable fields of the message text are: process compiling or running pgmname REXX program name lno REXX program line number

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**HLV1036I    ERROR 36 process pgmname, LINE lno:  
UNMATCHED "(" IN EXPRESSION**

**Explanation:** This is due to not pairing parentheses correctly within an expression. There are more left parentheses than right parentheses.

**User response:** Examine the line, fix the problem, and then rerun.

The variable fields of the message text are: process compiling or running pgmname REXX program name lno REXX program line number

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**HLV1037I    ERROR 37 process pgmname, LINE lno:  
UNEXPECTED "," OR ")"**

**Explanation:** Either a comma has been found outside a function invocation or there are too many right parentheses in an expression.

**User response:** Examine the line, fix the problem, and then rerun.

The variable fields of the message text are: process compiling or running pgmname REXX program name lno REXX program line number

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**HLV1038I    ERROR 38 process pgmname, LINE lno:  
INVALID TEMPLATE OR PATTERN**

**Explanation:** Within a parsing template, either a special character that is not allowed has been found or the syntax of a variable pattern is incorrect. This error may also be raised if the WITH sub-keyword is omitted in a parse value instruction.

**User response:** Examine the program, fix the problem, and then rerun.

The variable fields of the message text are: process compiling or running pgmname REXX program name lno REXX program line number

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**HLV1039I    ERROR 39 process pgmname, LINE lno:  
EVALUATION STACK OVERFLOW**

**Explanation:** The expression is too complex to be evaluated by the language processor. There are too many nested parentheses, functions, etc. The message should state the actual restriction.

**User response:** Examine the program, simplify the expression, and then rerun.

The variable fields of the message text are: process compiling or running pgmname REXX program name lno REXX program line number

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**HLV1040I    ERROR 40 process pgmname, LINE lno:  
INCORRECT CALL TO ROUTINE**

**Explanation:** The specified built-in or external routine does exist but has been used incorrectly. Either invalid arguments were passed to the routine, the program invoked was not compatible with the REXX language processor, or more than an implementation-limited number of arguments were passed to the routine.

**User response:** Examine the statement calling the routine, and correct it.

The variable fields of the message text are: process compiling or running pgmname REXX program name lno REXX program line number

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**HLV1041I    ERROR 41 process pgmname, LINE lno:  
BAD ARITHMETIC CONVERSION**

**Explanation:** Either one of the terms involved in an arithmetic operation is not a valid number or its exponent exceeds the implementation limit.

**User response:** Examine the program, and correct the problem.

The variable fields of the message text are: process compiling or running pgmname REXX program name lno REXX program line number

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**HLV1042I    ERROR 42 process pgmname, LINE lno:  
ARITHMETIC OVERFLOW/  
UNDERFLOW**

**Explanation:** The result of an arithmetic operation requires an exponent that is outside the range supported by the implementation. This can happen during evaluation of an expression (commonly an attempt to divide a number by 0) or possibly during the stepping of a DO loop control variable.

**User response:** Examine the program, and correct the error.

The variable fields of the message text are: process compiling or running pgmname REXX program name lno REXX program line number

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**HLV1043I    ERROR 43 process pgmname, LINE lno:  
ROUTINE NOT FOUND**

**Explanation:** A function that has been invoked within an expression cannot be found, or a subroutine that has been invoked by call cannot be found. No label with the specified name exists in the program. It is not the name of a built-in function, and the language processor has been unable to locate it externally. The name has probably been typed incorrectly, or a symbol or literal string is adjacent to a "(" when it was meant to be separated by a blank or some other operator. Functions referenced in an INTERPRET statement that are not product built-in functions and have not been previously referenced will also result in this error.

**User response:** Examine the program, and correct the error.

The variable fields of the message text are: process compiling or running pgmname REXX program name lno REXX program line number

---

**HLV1044I    ERROR 44 process pgmname, LINE lno:  
FUNCTION DID NOT RETURN DATA**

**Explanation:** An external function has been invoked within an expression, but even though it appeared to end without error, it did not return data for use within the expression.

**User response:** Examine the program, and correct the error.

The variable fields of the message text are: process compiling or running pgmname REXX program name lno REXX program line number

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**HLV1045I    ERROR 45 process pgmname, LINE lno:  
NO DATA SPECIFIED IN FUNCTION  
RETURN**

**Explanation:** The program has been called as a function, but an attempt is being made (by RETURN) to return without passing back any data.

**User response:** Examine the program, and correct the error.

The variable fields of the message text are: process compiling or running pgmname REXX program name lno REXX program line number

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**HLV1046I    ERROR 46 process pgmname, LINE lno:  
INVALID VARIABLE REFERENCE**

**Explanation:** An attempt to indirectly reference a variable is invalid. This would most likely occur on an EXPOSE or INTERPRET instruction. For example: EXPOSE (Y) where Y is a number.

**User response:** Examine the program, and correct the error.

The variable fields of the message text are: process compiling or running pgmname REXX program name lno REXX program line number

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**HLV1048I    ERROR 48 process pgmname, LINE lno:  
FAILURE IN SYSTEM SERVICE**

**Explanation:** Some system service used by the REXX language processor (such as stream input or output) has failed to work correctly; hence, normal execution cannot continue.

**User response:** Examine the program, and correct the error.

The variable fields of the message text are: process compiling or running pgmname REXX program name lno REXX program line number

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**HLV1049I    ERROR 49 process pgmname, LINE lno:  
INTERPRETATION ERROR**

**Explanation:** Implementations of the REXX language will normally carry out internal self-consistency checks during execution. This message indicates that some kind of severe error has been detected within the language processor or execution process.

**User response:** Contact Software Support for further assistance.

The variable fields of the message text are: process compiling or running pgmname REXX program name lno REXX program line number

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**HLV1064I    ERROR 64 process pgmname, LINE lno:  
UNIMPLEMENTED FEATURE**

**Explanation:** The program has used a REXX language feature which is not supported by this version of the REXX interpreter. Code 64 is an extended error code used only by REXX.

**User response:** Check documentation for support of the feature. Change the REXX program to bypass use of the feature.

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The variable fields of the message text are: process  
compiling or running pgmname REXX program name  
lno REXX program line number

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**HLV1066I    ERROR 66 process pgmname, LINE lno:  
AMPERSAND VARIABLES  
UNSUPPORTED**

**Explanation:** The program has used the ampersand as a prefix to a symbol. The REXX interpreter does not allow this.

**User response:** Contact Software Support.

The variable fields of the message text are: process  
compiling or running pgmname REXX program name  
lno REXX program line number

---

**HLV1067I    ERROR 67 process pgmname, LINE lno:  
DUPLICATE LABEL**

**Explanation:** The program has defined the same label name twice.

**User response:** Change the label on one of the two statements.

The variable fields of the message text are: process  
compiling or running pgmname REXX program name  
lno REXX program line number

---

**HLV1068I    ERROR 68 process pgmname, LINE lno:  
FUNCTION NAME > 32 CHARACTERS**

**Explanation:** The program has defined or referenced a function whose name exceeds the maximum function name length of 32 characters.

**User response:** Change the function name to a shorter name.

The variable fields of the message text are: process  
compiling or running pgmname REXX program name  
lno REXX program line number

---

**HLV1069I    ERROR 69 process pgmname, LINE lno:  
FUNCTION HAS TOO FEW  
ARGUMENTS**

**Explanation:** The program has called a function that requires more arguments than specified on the function call.

**User response:** Add the necessary arguments to the function call. Check the documentation for the specified function.

The variable fields of the message text are: process  
compiling or running pgmname REXX program name  
lno REXX program line number

---

**HLV1070I    ERROR 70 process pgmname, LINE lno:  
FUNCTION HAS TOO MANY  
ARGUMENTS**

**Explanation:** The REXX program has called a function that requires fewer arguments than specified on the function call.

**User response:** Remove the superfluous arguments to the function call. Check the documentation for the specified function.

The variable fields of the message text are: process  
compiling or running pgmname REXX program name  
lno REXX program line number

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**HLV1071I    ERROR 71 process pgmname, LINE lno:  
CODE VERSION IS DOWN LEVEL**

**Explanation:** The REXX program was compiled with a version of the REXX interpreter which is lower than the version used to execute the program.

**User response:** This error should only occur when executing a pre-compiled, saved version of a program or rule. In this case, the program or rule should be recompiled and then re-executed. In all other cases, contact Software Support for further assistance.

The variable fields of the message text are: process  
compiling or running pgmname REXX program name  
lno REXX program line number

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**HLV1072I    ERROR 72 process pgmname, LINE lno:  
FUNCTION RETURNED  
UNASSIGNED STEM DATA**

**Explanation:** A REXX function written in assembler has returned incorrect data.

**User response:** Contact Software Support for further assistance.

The variable fields of the message text are: process  
compiling or running pgmname REXX program name  
lno REXX program line number

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**HLV1073I    ERROR 73 process pgmname, LINE lno:  
RECORD REFERENCE EXCEEDS  
VARIABLE VALUE**

**Explanation:** This error should not occur.

**User response:** Contact Software Support for further assistance.

The variable fields of the message text are: process  
compiling or running pgmname REXX program name  
lno REXX program line number

---

**HLV1074I    ERROR 74 process pgmname, LINE lno:  
MAX STATEMENT COUNT**

**Explanation:** This error should not occur.

**User response:** Contact Software Support for further assistance.

The variable fields of the message text are: process compiling or running pgmname REXX program name lno REXX program line number

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**HLV1075I    ERROR 75 process pgmname, LINE lno:  
ELSE NEEDS SEMICOLON**

**Explanation:** This error should not occur.

**User response:** Contact Software Support for further assistance.

The variable fields of the message text are: process compiling or running pgmname REXX program name lno REXX program line number

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**HLV1076I    ERROR 76 process pgmname, LINE lno:  
VARIABLE VALUE TOO LONG**

**Explanation:** The REXX program attempted to assign a value to a variable. The string value exceeded the maximum allowed length.

**User response:** Shorten the string value.

The variable fields of the message text are: process compiling or running pgmname REXX program name lno REXX program line number

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**HLV1077I    ERROR 77 process pgmname, LINE lno:  
CODE AREA FULL**

**Explanation:** The REXX program could not be compiled. The target code area is not large enough to hold the result of the compiled program.

**User response:** Shorten the REXX program by dividing it into subroutines, and store these subroutines as separate members.

The variable fields of the message text are: process compiling or running pgmname REXX program name lno REXX program line number

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**HLV1080I    ERROR 80 process pgmname, LINE lno:  
PULL FOUND EMPTY QUEUE**

**Explanation:** This error should not occur. A null string is returned instead for compatibility with older releases of Product REXX. Contact Software Support for further assistance.

The variable fields of the message text are: process compiling or running pgmname REXX program name lno REXX program line number

**User response:** No action is required.

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**HLV1081I    ERROR 80 process pgmname, LINE lno:  
NOT SUPPORTED WITHIN  
INTERPRET**

**Explanation:** The REXX program executed an INTERPRET instruction that contained a REXX structure not supported in INTERPRET.

**User response:** Modify the interpreted code. If the problem cannot be resolved, contact Software Support.

The variable fields of the message text are: process compiling or running pgmname REXX program name lno REXX program line number

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**HLV1082I    ERROR 82 process pgmname, LINE lno:  
ARRAY BOUNDARY EXCEEDED**

**Explanation:** The REXX program was attempting to store an element of an array. The element number was larger than the declared dimension of the array.

**User response:** Contact Software Support.

The variable fields of the message text are: process compiling or running pgmname REXX program name lno REXX program line number

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**HLV1083I    ERROR 83 process pgmname, LINE lno:  
CODE BLOCK TOO LARGE, EVAL  
STACK FULL**

**Explanation:** If this occurs during the compile phase, the program is using a structure too complex for the compiler to handle. This could occur if a SELECT statement has too many WHEN clauses or if there are too many nested control structures.

**User response:** Reduce the complexity of the structure flagged, and retry the compile. If the problem cannot be resolved, contact Software Support.

The variable fields of the message text are: process compiling or running pgmname REXX program name lno REXX program line number

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**HLV1084I    ERROR 84 process pgmname, LINE lno:  
TOO MANY SYMBOLS, SYMBOL  
TABLE FULL**

**Explanation:** If this occurs during the compile phase, the program is using too many symbols and the symbol table has overflowed.

**User response:** Reduce the number of symbols used by the program, and retry the compile. If this does not solve the problem, contact Software Support.

The variable fields of the message text are: process compiling or running pgmname REXX program name lno REXX program line number

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**HLV1085I    ERROR 85 process pgmname, LINE Ino:  
INVALID USE OF EXTENDED  
VARIABLE TYPE**

**Explanation:** The REXX program has attempted to use a variable in a manner that is not supported. This could occur if a product global variable is used as the control variable in a controlled repetitive loop (e.g. DO GLOBAL.I = 1 TO 10).

**User response:** Modify the REXX program so that it does not use a global variable as the loop control variable.

The variable fields of the message text are: process compiling or running pgmname REXX program name lno REXX program line number

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**HLV1086I    ERROR 86 process pgmname, LINE Ino:  
INVALID GLOBAL SYMBOL**

**Explanation:** A Product REXX global symbol whose derived name exceeds the Product REXX global variable symbol length limit of 50 characters has been used.

**User response:** Check the statement in error, and determine which symbol substitution caused the derived name of a global variable to exceed the specified limit. Modify the program to use a shorter derived name.

The variable fields of the message text are: process compiling or running pgmname REXX program name lno REXX program line number

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**HLV1087I    ERROR 87 process pgmname, LINE Ino:  
INVALID INTERNAL OBJECT**

**Explanation:** This is an internal Product REXX error.

**User response:** Please contact Software Support to obtain additional assistance.

The variable fields of the message text are: process compiling or running pgmname REXX program name lno REXX program line number

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**HLV1088I    ERROR 88 process pgmname, LINE Ino:  
INTERPRETER STACK ERROR**

**Explanation:** This is an internal Product REXX error.

**User response:** Please contact Software Support to obtain additional assistance.

The variable fields of the message text are: process compiling or running pgmname REXX program name lno REXX program line number

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**HLV1090I    var1 var2 var3 var4 var5 var6 var7 var8  
var9 var10 var11**

**Explanation:** Message : SWS1090I REXX abend in OPRXCMRU+x'offset'. This message is normally accompanied by a 1049I message which relates to an error 49 in a given rule type.

**User response:** Check the given rule. In the case of a variable passed to the given error line, make sure the variable is valid. Display fields such as RULE and others in Trace Browse. For a test situation of the given rule or REXX program, include a SAY statement to print the value of the given variable at the of the error. If the error is not related to variables, validate the given line, and take appropriate action. Parameters like BROWSEGLV could be used if this is a global variable rule error. See other browse parameters and use as applicable.

The variable fields of the message text are: var1 none var2 none var3 none var4 none var5 none var6 none var7 none var8 none var9 none var10 none var11 none

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**HLV1091I    ERROR 91 process pgmname, LINE Ino:  
INVALID OR MISPLACED OPTIONS  
STATEMENT**

**Explanation:** The OPTIONS statement contains options which are not valid. Note that unknown OPTIONS keywords are ignored and are not flagged as errors. Only partially incorrect OPTIONS keywords are flagged.

**User response:** Correct the OPTIONS statement, and retry the operation.

The variable fields of the message text are: process compiling or running pgmname REXX program name lno REXX program line number

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**HLV1092I    ERROR 92 process pgmname, LINE Ino:  
OVER num CLAUSES EXECUTED IN  
RECOVERY EXIT**

**Explanation:** A REXX program or a rule exceeded the maximum number of clauses allowed for a SIGNAL ON syntax or SIGNAL ON HALT recovery routine following a product limit exceeded condition. The maximum number of clauses allowed when recovering from a product limit type error is indicated in the error text.

**User response:** Reduce the number of clauses that are executed in the limit failure recovery routine.

The variable fields of the message text are: process compiling or running pgmname REXX program name lno REXX program line number num maximum number of clauses allowed in recovery

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**HLV1093E ERROR 93 process pgmname, LINE lno:  
GLOBAL VARIABLE WORKSPACE  
OVERFLOW (parmval - wrkspc)**

**Explanation:** A shared/permanent global variable or temporary global variable value cannot be stored successfully. This message may be issued under a number of circumstances if a global or global-temporary variable update/addition fails. The conditions causing this message to be issued are: 1) The number of global variables now allocated and in-use (GLOBALUSED or RXWSGVCN for temporary workspace) exceeds the maximum count limit configured by the GLOBALMAX (shared/permanent variables) or GLOBALTEMPMAX (temporary variables) parameters. You must use the ISPF C.3 display Note that you must use the ISPF C.3 panel display, selecting "RXWS GLVEVENT. WORK SPACE", in order to view RXWSGVCN and obtain the temporary workspace variable count. 2) There is insufficient free space anywhere within the global workspace to update or add a variable's value. The value requires multiple workspace segments (RXGV's) for storage and enough free RXGV's could not be found on the free element chain (RXWSFCCN / GLOBALFREEAREAS), or there was insufficient un-allocated space at the end of the workspace (RXWSLN / GLOBALSIZE minus RXWSNXFR / GLOBALNEXT). Contiguous RXGV freespace blocks are required for allocation of the value storage area. Note that the parameters GLOBALFREEAREAS, GLOBALSIZE, and GLOBALNEXT apply ONLY to the shared/permanent workspace. For the temporary workspace, you must examine the RXWS field value using the ISPF C.3 "RXWS GLVEVENT. WORK SPACE" block display. No product parameters map these values for the temporary workspace. The word "TEMP" is inserted into the message as the last word (within final parentheses) if the TEMPORARY global workspace has overflowed. GLVEVENT. stem and internal-use global stem variables are allocated within the temporary global workspace. Otherwise, the word "TEMP" is not present in the message and it is the shared/permanent global workspace that has overflowed. GLOBAL., and GLOBAL0. through GLOBAL9. stem variables are in the shared/permanent workspace area.

**User response:** You may need to analyze the contents of the global variable database using the global variables application, product parameters, or the ISPF C.3 RXWS displays. Use the ISPF E.1 panel to remove unneeded permanent GLOBAL. stem variables. Otherwise, increase the GLOBALMAX or GLOBALTEMPMAX start-up parameters. If the workspace is too small, you may also need to (re) allocate a larger global variable checkpoint DIV dataset and copy the original DIV into the new one using Access Method Services REPRO. To prevent future out-of-space hard failures, set the warning threshold percentage (GLOBALWARNTHRESH or GLOBALTEMPWARNTH) and interval (GLOBALWARNINTERVAL or

GLOBALTEMPWARNIV) so that a threshold is established and reported periodically via MSG 4290. Automate this message so that sufficient notification is given to prevent the out-of-space hard failure limit from being reached before the workspaces can be expanded.

The variable fields of the message text are: process compiling or running pgmname REXX program name lno REXX program line number parmval GLOBALMAX or GLOBALTEMPMAX parameter value wrkspc 'TEMP' or ' ' to indicate type of workspace

---

**HLV1094E ERROR 94 process pgmname, LINE lno:  
OVER sss SECONDS USED FOR  
EXECUTION**

**Explanation:** A rule or REXX program exceeded its wall clock time limits as set by SEFMAXSECONDS (rule) or REXXMAXSECONDS (REXX program) product parameters. These limits may be overridden using NOMAXSECONDS or MAXSECONDS=nnnn on the REXX OPTIONS statement.

**User response:** Determine whether this problem was caused by a looping program or whether the limits are too low. The limits that affect all rules/programs can be modified by changing the xxxPARM limits (SEFMAXSECONDS and/or REXXMAXSECONDS). The limits for the individual program can be overridden by using the REXX OPTIONS statement as described in the product Reference Manual.

The variable fields of the message text are: process compiling or running pgmname REXX program name lno REXX program line number sss time limit in seconds

---

**HLV1095E ERROR 95 process pgmname, LINE lno:  
OVER num HOST COMMANDS  
ISSUED**

**Explanation:** A rule or REXX program exceeded its host command limits as set by SEFMAXCOMMANDS (rule) or REXXMAXCOMMANDS (REXX program) product parameters. These limits may be overridden using NOMAXCOMMANDS or MAXCOMMANDS=nnnn on the REXX OPTIONS statement.

**User response:** Determine whether this problem was caused by a looping program or whether the limits are too low. The limits that affect all rules/programs can be modified by changing the xxxPARM limits (SEFMAXCOMMANDS and/or REXXMAXCOMMANDS). The limits for the individual program can be overridden by using the REXX OPTIONS statement as described in the product Reference Manual.

The variable fields of the message text are: process compiling or running pgmname REXX program name lno REXX program line number num maximum

number of host commands allowed

---

**HLV1096E ERROR 96 process pgmname, LINE lno:  
OVER num "SAY" CLAUSES  
EXECUTED**

**Explanation:** A rule or REXX program exceeded its SAY/TRACE limits as set by SEFMAXSAYS (rule) or REXXMAXSAYS (REXX program) product parameters. These limits may be overridden using NOMAXSAYS or MAXSAYS=nnnn on the REXX OPTIONS statement.

**User response:** Determine whether this problem was caused by a looping program or whether the limits are too low. The limits that affect all rules/programs can be modified by changing the xxxPARM limits (SEFMAXSAYS and/or REXXMAXSAYS). The limits for the individual program can be overridden by using the REXX OPTIONS statement as described in the product Reference Manual.

The variable fields of the message text are: process compiling or running pgmname REXX program name lno REXX program line number num maximum number of SAY statements allowed

---

**HLV1097E ERROR 97 process pgmname, LINE lno:  
OVER num CLAUSES EXECUTED**

**Explanation:** A rule or REXX program exceeded its clause limits as set by SEFMAXCLAUSES (rule) or REXXMAXCLAUSES (REXX program) product parameters. These limits may be overridden using NOMAXCLAUSES or MAXCLAUSES=nnnn on the REXX OPTIONS statement.

**User response:** Determine whether this problem was caused by a looping program or whether the limits are too low. The limits that affect all rules/programs can be modified by changing the xxxPARM limits (SEFMAXCLAUSES and/or REXXMAXCLAUSES). The limits for the individual program can be overridden by using the REXX OPTIONS statement as described in the product Reference Manual.

The variable fields of the message text are: process compiling or running pgmname REXX program name lno REXX program line number num maximum number of clauses allowed

---

**HLV1098I lno' TRACE MESSAG**

**Explanation:** Informational message only. This message gives the output from the REXX TRACE command.

**User response:** None. This message is for informational purposes only.

The variable fields of the message text are: lno REXX program line number

---

**HLV1099I stmt**

**Explanation:** This message is issued when the REXX compiler detects a an error during compilation. The first line of the message lists the statement in error and the second line indicates where in the first line the error was detected.

**User response:** Review the REXX statement, and correct the error.

The variable fields of the message text are: stmt REXX program statement/pointer

---

**HLV1100S RETRY LIMIT CONVERSION ERROR -  
VALUE SPECIFIED = value**

**Explanation:** An error was detected while trying to convert the character representation of the specified retry limit to its integer counterpart.

**User response:** Review the retry limit specification contained in the error message. If the specified retry limit contains an invalid value, correct the error, and re-invoke the DSN command. If all attempts at correcting the specified retry limit fail, contact Software Support for further assistance.

The variable fields of the message text are: value character retry limit value

---

**HLV1101S TEST LEVEL CONVERSION ERROR -  
VALUE SPECIFIED = value**

**Explanation:** An error was detected while trying to convert the character representation of the specified test level, to its integer counterpart.

**User response:** Review the test level specification contained in the error message. If the specified test level contains an invalid value, correct the error, and re-invoke the DSN command. If all attempts at correcting the specified test level fail, contact Software Support for further assistance.

The variable fields of the message text are: value character test level value

---

**HLV1102S subsys NOT VALID SUBSYSTEM ID,  
COMMAND TERMINATED**

**Explanation:** A subsystem control table that corresponded to the subsystem name contained in the error message could not be located by the SSCT chain scan logic.

**User response:** If the subsystem name was specified on the SYSTEM() command argument, review the name, and revise the SYSTEM() specification, if necessary. If a SYSTEM() command line argument was not specified, the product-provided default value may not be appropriate for your installation. This value was obtained from the local copy of the DSNHDECP DB2 parameters module, if one could be found. If a local

copy of the DSNHDECP parameters module contains an invalid value, run the JCL jobstream contained in the HLV CNTL data set member ZAPDECP after updating the REP control card. If a local copy of the DSNHDECP parameters module was not found, the product will attempt to use the standard IBM default subsystem, DSN. For further assistance in providing the product with the correct subsystem name value, contact Software Support.

The variable fields of the message text are: subsys extracted subsystem name value

---

**HLV1104S Subsystem subsys is not a valid DB2 subsystem**

**Explanation:** The SSCT located for the subsystem name that was extracted is neither a valid product SSCT nor a valid DB2 SSCT.

**User response:** If the subsystem name was specified on the SYSTEM() command argument, review the name, and revise the SYSTEM() specification, if necessary. If a SYSTEM() command line argument was not specified, the product provided default value may not be appropriate for your installation. This value was obtained from the local copy of the DSNHDECP DB2 parameters module, if one could be found. If a local copy of the DSNHDECP parameters module contains an invalid value, run the JCL jobstream contained in the S\_\_ CNTL data set member ZAPDECP after updating the REP control card. If a local copy of the DSNHDECP parameters module was not found, the product will attempt to use the standard IBM default subsystem, DSN. If the problem cannot be resolved, contact Software Support.

The variable fields of the message text are: subsys subsystem name

---

**HLV1105S LOAD FOR DSNECP00 FAILURE**

**Explanation:** The attempt to load the renamed version of DSNECP00 has failed.

**User response:** Ensure that the product installation process was completed successfully. Ensure that the load library containing the renamed version of DSNECP00 is accessible by the product. If all attempts to correct the problem situation fail, contact Software Support for further assistance.

---

**HLV1106S subsys NOT OPERATIONAL, RETRY COUNT ZERO**

**Explanation:** The SSCT for the product indicated that the product is not currently active.

**User response:** Determine if the product may have started and terminated abnormally. If so, review the accompanying messages in the SYSLOG. If the product did not terminate abnormally, issue the appropriate

start command. If necessary, contact Software Support for further assistance.

The variable fields of the message text are: subsys subsystem name

---

**HLV1110S CONNECTION FAILURE RC = rc REASON = rscd**

**Explanation:** The attempt to connect to the remote DB2 subsystem failed.

**User response:** Review the return code and the reason code values contained in the error message. Compare the return code and reason code with those listed in the IBM SQL Application Programming Manual, and take the appropriate action. If all attempts to correct the problem fail, contact Software Support for further assistance.

The variable fields of the message text are: rc call attach return code rscd call attach reason code

---

**HLV1112S DISCONNECT FAILURE RC = rc REASON = rscd**

**Explanation:** The attempt to disconnect from the remote DB2 subsystem has failed.

**User response:** Review the return code and the reason code values contained in the error message. Compare the return code and reason code with those listed in the IBM SQL Application Programming Manual, and take the appropriate action. If all attempts to correct the problem fail, contact Software Support for further assistance.

The variable fields of the message text are: rc call attach return code rscd call attach reason code

---

**HLV1113S COMMAND REJECTED - cmd CMD NOT SUPPORTED UNDER DSN**

**Explanation:** The subcommand specified is not supported under the DSN command.

**User response:** Review the command string entered. Revise the command string, if appropriate. Re-enter the revised command string. If the problem cannot be resolved, contact Software Support.

The variable fields of the message text are: cmd subcommand specified

---

**HLV1114R text**

**Explanation:** Module OPDSN10 issued the current message as a prompt for valid subcommand input.

**User response:** Respond with an appropriate subcommand name, or enter the END subcommand if processing is complete.

The variable fields of the message text are: text subcommand prompt text string

---

**HLV1115S ERROR ISSUING SUBCOMMAND PROMPT - RC = rc**

**Explanation:** An error occurred either issuing the subcommand prompt or while waiting for valid subcommand input.

**User response:** Contact Software Support for further assistance.

The variable fields of the message text are: rc return code

---

**HLV1117S COMMAND BUFFER SCAN ERROR - RC = rc**

**Explanation:** An attempt to scan the command buffer utilizing the services of IKJSCAN failed.

**User response:** Review the command string entered. Revise the command string, if appropriate. Re-enter the revised command string. If the problem cannot be resolved, contact Software Support.

The variable fields of the message text are: rc return code

---

**HLV1118S RUN SUBCOMMANDS CAN NOT HAVE A PROGRAM PARAMETER AND A CP PARAMETER**

**Explanation:** The PROGRAM and CP parameters of the RUN subcommand are mutually exclusive.

**User response:** Revise the subcommand string entered. If the program to be executed is not a TSO command processor, specify only the PROGRAM() parameter. If the program to be executed is a TSO command processor, specify only the CP parameter.

---

**HLV1119S RUN SUBCOMMAND REQUIRES (1)PROGRAM PARAMETER OR (2)PLAN AND CP PARAMETER**

**Explanation:** The RUN subcommand requires that either the PROGRAM parameter be specified or the PLAN and CP parameters be specified.

**User response:** Revise the subcommand string entered. If the program to be executed is not a TSO command processor, specify only the PROGRAM() parameter. If the program to be executed is a TSO command processor, specify the PLAN and CP parameters.

---

**HLV1120S DSNRLI func FUNCTION FAILED. RC = rc REASON = rscd**

**Explanation:** The RRSAF function failed.

**User response:** Review the return code and the reason code values contained in the error message. Compare the return code and reason code with those listed in the IBM SQL Application Programming Manual, and take

the appropriate action. If all attempts to correct the problem fail, contact Software Support for further assistance

The variable fields of the message text are: func RRSAF function rc RRSAF return code rscd RRSAF reason code

---

**HLV1121I PLEASE WAIT...CONNECTION RETRY IN PROGRESS**

**Explanation:** The remote DB2 subsystem is currently not active and a RETRY() value greater than one (1) was specified. The connection request will be retried.

**User response:** No action required.

---

**HLV1122I COMMAND SPUFI IGNORED, VALID ISPF ENVIRONMENT MUST EXIST**

**Explanation:** The SPUFI subcommand requires that a valid ISPF environment exist.

**User response:** Re-invoke the DSN command from within ISPF. If the error persists, contact Software Support to obtain additional assistance.

---

**HLV1123S COMMAND REJECTED, CMD NOT SUPPORTED UNDER DSN**

**Explanation:** The subcommand specified is not supported under the DSN command.

**User response:** Review the command string entered. Revise the command string, if appropriate. Re-enter the revised command string. If the error condition persists despite correcting errors in the command string that was entered, contact Software Support.

---

**HLV1126S PLAN OPEN FAILURE RC = rc REASON = rscd**

**Explanation:** The attempt to open the application plan failed.

**User response:** Review the return code and the reason code values contained in the error message. Compare the return code and reason code with those listed in the IBM SQL Application Programming Manual, and take the appropriate action. If all attempts to correct the problem fail, contact Software Support for further assistance.

The variable fields of the message text are: rc call attach return code rscd call attach reason code

---

**HLV1127S PLAN CLOSE FAILURE RC = rc REASON = rscd**

**Explanation:** The attempt to close the application plan failed.

**User response:** Review the return code and the reason code values contained in the error message. Compare the return code and reason code with those listed in the



IBM SQL Application Programming Manual, and take the appropriate action. If all attempts to correct the problem fail, contact Software Support for further assistance.

The variable fields of the message text are: rc call attach return code rscd call attach reason code

---

#### HLV1129R ENTER TSO COMMAND

**Explanation:** Module OPDSN10 issued the current message as a prompt for a valid TSO command.

**User response:** Respond with a valid TSO command name.

---

#### HLV1130S ERROR ISSUING TSO COMMAND PROMPT - RC = rc

**Explanation:** An error occurred either while issuing the TSO command prompt or while waiting for valid TSO command input.

**User response:** Contact Software Support for further assistance.

The variable fields of the message text are: rc return code

---

#### HLV1131S cmd NOT VALID COMMAND

**Explanation:** The TSO command entered is not a valid command.

**User response:** Correct the value specified and re-enter the RUN subcommand. If the error persists, contact Software Support for further assistance.

The variable fields of the message text are: cmd command entered

---

#### HLV1132S cmd ENDED DUE TO ERROR

**Explanation:** The DSN command has ended due to an abend detected in a user task.

**User response:** Correct the error condition in the program or TSO command that was specified, and re-enter the DSN command. If the error condition persists, contact Software Support for further assistance.

The variable fields of the message text are: cmd the command entered to invoke the dsn cmd

---

#### HLV1133S MODULE pgm NOT FOUND

**Explanation:** The module name specified on the PROGRAM() parameter of the RUN subcommand could not be found.

**User response:** Correct the value specified, and re-enter the RUN subcommand. If the error persists, contact Software Support for further assistance.

The variable fields of the message text are: pgm program name

---

#### HLV1134S UNABLE TO ESTABLISH THE STAX EXIT

**Explanation:** OPDSN01 - the STAX manager was unable to establish the STAX exit.

**User response:** Attempt to invoke the DSN command again. If the error persists, contact Software Support for further assistance.

---

#### HLV1135S UNABLE TO TERMINATE THE STAX EXIT

**Explanation:** OPDSN01 - the STAX manager was unable to terminate the STAX exit.

**User response:** Attempt to invoke the DSN command again. If the error persists, contact Software Support for further assistance.

---

#### HLV1136S STAX EXIT INTERNAL LOGIC ERROR

**Explanation:** OPDSN01 - the STAX manager determined that an attempt was made either to remove the STAX exit environment when one did not exist or to establish the STAX exit environment when one already existed.

**User response:** Contact Software Support for further assistance.

---

#### HLV1137S ERROR EXECUTING TSO COMMAND RC = rc REASON = rscd

**Explanation:** OPDSN10 detected that the command entered was a TSO command; however, an error was detected while attempting to invoke the TSO command. The above message depicts the return code and reason code values received from the product TSOEXEC service routine.

**User response:** Examine the TSO command entered, and correct the command string if an error was detected. If the error condition persists despite correcting any command string errors, contact Software Support for further assistance.

The variable fields of the message text are: rc return code rscd reason code

---

#### HLV1138I SET\_CLIENT\_ID CALL FAILED - DB2 NOT AT PROPER MAINTENANCE LEVEL OR RELEASE. SUBSYSTEM: DB2

**Explanation:** A client requested a SET\_CLIENT\_ID command be issued to DB2. This is usually invoked via the SQLESETI client function. However, DB2 rejected the request. This probably is due to APAR PQ67691 (or its equivalent) being applied.

## HLV1154S • HLV1255E

**User response:** This is not a serious problem. The DB2 DISPLAY THREAD display just will not contain additional information that was supplied by the client.

The variable fields of the message text are: DB2 subsystem name

---

### HLV1154S COMMAND BUFFER INTERNAL FORMAT ERROR

**Explanation:** During an attempt by the DSN command processor to analyze the contents of the command buffer, it was determined that the command buffer had the wrong length, invalid operands, or the wrong format.

**User response:** Review the command string entered. Revise the command string, if appropriate. Re-enter the revised command string. If the error condition persists despite correcting errors in the command string that was entered, contact Software Support for further assistance.

---

### HLV1163S COMMAND BUFFER PARSE ERROR - RC = rc

**Explanation:** The IBM TSO parse routine, IKJPARS, returned a non-zero return code after attempting to parse the DSN command string.

**User response:** Review the accompanying TSO error messages in the SYSLOG. Review the command string entered. Revise the command string, if appropriate. Take action recommended in the TSO messages manual. If all attempts at revised command string entry fail, contact Software Support for further assistance.

The variable fields of the message text are: rc return code value

---

### HLV1250I var1 var2

**Explanation:** The message ID used to display parameter value requested with an xxxPARM command.

**User response:** None. This message is for informational purposes only.

The variable fields of the message text are: var1 none var2 none

---

### HLV1251T THE VALUE OF THE var1 PARAMETER WAS ROUNDED UP TO var1 BYTES

**Explanation:** The parameter was rounded to a 1K (1024) byte boundary.

**User response:** None. This message is for informational purposes only.

The variable fields of the message text are: var1 Parameter name var1 New parameter value

---

### HLV1252T THE VALUE SPECIFIED FOR THE var1 PARAMETER WAS CHANGED FROM var1 TO var1

**Explanation:** The value of the parameter was changed.

**User response:** None. This message is for informational purposes only.

The variable fields of the message text are: var1 Parameter name var1 Old parameter value var1 New parameter value

---

### HLV1253T THE VALUE OF ROLLBACKPOSITIVERC WAS CHANGED TO 'NO' BECAUSE IGNOREPOSITIVESC WAS SET TO 'YES'

**Explanation:** The value of the ROLLBACKPOSITIVERC parameter was changed to 'NO' because the IGNOREPOSITIVESC parameter was set to YES. ROLLBACKS for positive SQL codes cannot be performed if they are being ignored.

**User response:** None. This message is informational only. If ROLLBACKS are required for positive SQL codes, then set IGNOREPOSITIVESC to 'YES', then set ROLLBACKPOSITIVERC to 'YES'.

---

### HLV1254T THE VALUE OF ROLLBACKPOSITIVERC CANNOT BE CHANGED TO 'YES' BECAUSE IGNOREPOSITIVESC IS 'YES'

**Explanation:** The value of the ROLLBACKPOSITIVERC parameter cannot be set to 'YES' because IGNOREPOSITIVESC parameter is set to YES. ROLLBACKS for positive SQL codes cannot be performed if they are being ignored.

**User response:** None. This message is informational only. If ROLLBACKS are required for positive SQL codes, then set IGNOREPOSITIVESC to 'YES', then set ROLLBACKPOSITIVERC to 'YES'.

---

### HLV1255E parm - cannot be changed after initialization

**Explanation:** Many of product parameters may be changed at any time, but some of them can only be set once during initialization. The parameter you attempted to change must be set during product initialization.

**User response:** Update the initialization REXX exec xxxxIN00. These changes will take effect the next time the product is started.

The variable fields of the message text are: parm parameter name

---

**HLV1256E parm - cannot be changed**

**Explanation:** Many of the S\_\_ parameters may be changed at any time; some of them can only be reset during initialization, while others are used merely for display purposes and cannot be reset at all. The parameter you entered may not be changed.

**User response:** Update the initialization REXX exec xxxxIN00. These changes will take effect the next time the product is started.

The variable fields of the message text are: parm  
parameter name

---

**HLV1257E parm - cannot be displayed**

**Explanation:** The parameter you selected cannot be displayed.

**User response:** Check the manual to see if the parameter you requested is spelled correctly.

The variable fields of the message text are: parm  
parameter name

---

**HLV1258E desc - errmsg suffix**

**Explanation:** The ADDRESS HLV processing routine found an error in the parameter text string passed with the MODIFY PARM command. The parameter text string is invalid. MODIFY PARM command processing is aborted.

**User response:** Validate the VALUE keyword value, correct it for errors, and re-initiate the command. For more details on the MODIFY PARM command, refer to your Product User's Guide.

The variable fields of the message text are: desc  
parameter field description errmsg error message string  
suffix error message suffix string

---

**HLV1259E PARAMETER parm POINTS TO UNINITIALIZED ENUMERATED VALUE IN cb AT addr**

**Explanation:** During a parameter display operation, a product parameter table entry pointed to an un-initialized field within a product control block. The field should be initialized with one of the valid values enumerated for the parameter.

**User response:** The product parameter's value is displayed as "\*INTERNAL-ERROR\*", and processing continues.

The variable fields of the message text are: parm  
parameter field name cb target control block name addr  
address of parameter data field

---



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**HLV1262I text1 text2**

**Explanation:** The parameter group being listed by this xxxPARM command could not be found. The command is terminated.

**User response:** Review the xxxPARM command being executed, checking the group operand and whether or not there is a group listing for it. Refer to the product Server Started Task Parameters Guide for the details on using the xxxPARM command and its group operand.

The variable fields of the message text are: text1 group  
description string text2 group name string

---

**HLV1263E prefixparmvalsuffix**

**Explanation:** This message is never meant to be seen. It is used by OPPAFU to convert product parameters to printable character strings.

**User response:** If you see this message, an internal error has occurred. Contact Software Support.

The variable fields of the message text are: prefix prefix  
string parmval parameter value suffix suffix string

---

**HLV1264W No parameter value information is available**

**Explanation:** The xxxPARM parameter you are using is not available. The SHLVPARM command is terminated.

**User response:** The parameter you are trying to set using SHLVPARM is not supported or not valid in this release of the product. Check the parameter in the product documentation.

---

**HLV1265W WARNING: parm PARAMETER (value) CONTAINS TOO FEW QUALIFIERS TO ENSURE PROPER HTTP COOKIE OPERATION**

**Explanation:** The host domain name parameter contains too few qualifiers (name segments separated by periods) to ensure that Web browsers will properly store and transmit HTTP cookies. At least three levels of qualification (two levels if the name ends with .com, .edu, .net, .org, .gov, .mil, or .int) are usually required to ensure that HTTP cookies are stored and later retransmitted properly.

**User response:** The parameter is accepted but is always folded to a lowercase string. The server's built-in browser-based administration utilities require HTTP cookies for proper operation. These administration utilities may not function correctly using the host domain name string now set.

The variable fields of the message text are: parm name  
of HOSTDOMAIN parameter value lowercase value  
being set for host domain

---

---

**HLV1266W**    **WARNING: parm PARAMETER (value) MAY CAUSE INCONSISTENT OPERATION USING HTTP COOKIES**

**Explanation:** The host domain name parameter contains a dot-notation format IP address. Browser anomalies may arise that cause HTTP cookies to be stored improperly or retransmitted incorrectly when using a dot-notation host domain name value.

**User response:** The parameter is accepted. The server's built-in browser-based administration utilities require HTTP cookies for proper operation. These administration utilities may not function correctly using the host domain name string now set.

The variable fields of the message text are: parm name of HOSTDOMAIN parameter value value set for the host domain name

---

**HLV1275S**    **ABEND abcd IN AUTHORIZATION ROUTINE mod+off**

**Explanation:** An abend occurred in the authorization checking routine.

**User response:** Contact Software Support for assistance.

The variable fields of the message text are: abcd abend code mod module name off module offset

---

**HLV1277S**    **cb Control block not found**

**Explanation:** The MODIFY PARM functional routine has been passed an invalid product control block name.

**User response:** First, check the MODIFY PARM command, correct any errors, and rerun. If the problem persists, verify that all of the product modules are at the same release level. Also, check that the last product installation was successful. If all of the above are checked and the problem remains, gather all related problem data (error data, SVFX level, install information), and contact Software Support for further assistance.

The variable fields of the message text are: cb control block

---

**HLV1281E**    **service desc FAILED, RC=rc, DETECTED AT ad**

**Explanation:** This is a generic error message used to describe a wide variety of errors. The message text gives a description of the current operation and what the current operation was trying to do.

**User response:** Check the error messages and the return code associated with this problem. There may be one or more error messages referring to the current problem. If possible, fix the problem identified by the error messages, and retry the operation. If the problem

cannot be resolved, contact Software Support for further assistance.

The variable fields of the message text are: service current operation, GETMAIN, FREEMAIN, SYSEVENT etc. desc description rc return code

---

**HLV1290H**    **jb parm parmval**

**Explanation:** This message logs a change to the product parameters via the ADDRESS HLV MODIFY command. The message contains the name of the product parameter and its new value.

**User response:** No action is required. This message is written to the log for informational and tracking purposes only.

The variable fields of the message text are: parm parameter field name parmval parameter field value

---

**HLV1291W**    **Warning: parm is an obsolete parameter**

**Explanation:** This message is issued when an obsolete parameter value is modified.

**User response:** Refer to the product Server documentation for information on this parameter. Modifying an obsolete parameter may not have the desired effect. In many cases, obsolete parameters have no effect on the server and are ignored. Obsolete parameters are normally removed from the product in the next release. You should check the product initialization exec (xxxxIN00) and remove all references to this obsolete parameter from it.

The variable fields of the message text are: parm parameter field name

---

**HLV1292E**    **Exit code exc is invalid for parm**

**Explanation:** An invalid exit code has been defined in an internal product control block that defines a product parameter table entry.

**User response:** This is an internal error. Please report this problem to Software Support.

The variable fields of the message text are: exc exit code specified in oppy entry parm parameter field name

---

**HLV1293E**    **errdesc**

**Explanation:** An attempt to set a product parameter has failed. The error message describes the reason for the failure.

**User response:** Review the error message, and attempt to correct the problem.

The variable fields of the message text are: errdesc error description

---

**HLV1294E desc OF process FOR PARAMETER CHANGE EVENT NOTIFICATION FAILED WITH RC=rc**

**Explanation:** A product parameter update attempt was made, but the system was unable to properly notify an asynchronous process of the change. The update to the parameter may or may not have been made, but in either case, the asynchronous process is now in an unknown state.

**User response:** Review the error message and any others related to the problem, and notify Software Support. Timing errors during shutdown normally do not represent a serious condition unless they occur consistently.

The variable fields of the message text are: desc service description process asynchronous process rc return or condition code

---

**HLV1295W PARM parm AND ANY DEFINE ISPFCONCAT ARE MUTUALLY EXCLUSIVE. parm WILL BE IGNORED.**

**Explanation:** The xxxxIN00 EXEC specifies at least one DEFINE ISPFCONCAT statement and the mutually exclusive ISPF PARM statement. All ISPF PARM statements are ignored when at least one DEFINE ISPFCONCAT statement is specified. The following is a complete list of the ISPF parameters that will be ignored: EXECDSNAME, COMPEXECDSNAME, ISPLLIBDSNAME, ISPMLIBDSNAME, ISPSLIBDSNAME and ISPTLIBDSNAME.

**User response:** Change the xxxxIN00 EXEC to specify the DEFINE ISPFCONCAT statements for all of the required libraries and remove the obsolete PARM NAME(ISP%LIBDSNAME) parameters.

The variable fields of the message text are: parm name of parameter parm name of parameter

---

**HLV1296T Security optimization processing terminated**

**Explanation:** The TERMINATESECOPT parameter was set to 'YES' causing all security optimization processing to halt. The product continues to operate normally.

**User response:** If you want to execute with security optimization active, you must stop and restart the product.

---

**HLV1297T Logging processing terminated**

**Explanation:** The TERMINATELOGGING parameter was set to 'YES' causing all logging functions to halt. The product continues to operate normally.

**User response:** If you want to execute with logging active, you must stop and restart the product.

---

**HLV1298T Interval recording %1**

**Explanation:** Interval recording was enabled or disabled. The product continues to operate normally.

**User response:** You can reenable interval recording if the TERMINATEINTERVAL parameter is set to 'NO'.

---

**HLV1299T Interval recording terminated**

**Explanation:** The TERMINATEINTERVAL parameter was set to 'YES' causing all interval recording to halt. The product continues to operate normally.

**User response:** If you want to execute with interval recording active, you must stop and restart the product.

---

**HLV1340I text**

**Explanation:** This message is simply an echo of a reply to a WTOR issued.

**User response:** None.

The variable fields of the message text are: text echo information text string

---

**HLV1346E MESSAGE ID AND TEXT ARE TOO LONG**

**Explanation:** While building a WTO or WTOR parameter list, the product detected that the combined message ID and message text exceeds the system limits. The limit for a WTO is 125 characters, and the limit for a WTOR is 122 characters.

**User response:** This could indicate an internal logic error within the product. Contact Software Support for further assistance.

---

**HLV1348E NO WTOR REPLY RECEIVED - TIMER EXPIRED**

**Explanation:** A timeout has occurred prior to receiving the response to a WTO/WTOR.

**User response:** This could indicate an internal logic error within the product. Contact Software Support for further assistance.

---

**HLV1349I THE MESSAGE IDENTIFICATION NUMBER IS wtoid**

**Explanation:** This message is simply an echo of the message identification number returned by the WTO/WTOR to identify the message.

**User response:** None. The WTOID can be used to DOM a highlighted message.

The variable fields of the message text are: wtoid WTO identification number

---

**HLV1364S** ss RETURN CODE = rc

**Explanation:** Some type of error occurred either in the system management routines of the product or by invoking a system service directly. See the actual text of the message for an explanation. The error was probably caused by a failure in an operating system service.

**User response:** Check if any other error messages were generated along with the error message above. If the combined error messages are sufficient to explain the problem, take whatever corrective action is appropriate. If the problem cannot be resolved, contact Software Support.

The variable fields of the message text are: ss system service (e.g. STIMERM, STAX, etc.) rc return code

---

**HLV1370H** jb code1 code2 mcsfgcnno time mgid text

**Explanation:** This message is used to document an internally generated WTO. It is written to the hardcopy log to identify the source of the message issued.

**User response:** None.

The variable fields of the message text are: code1 route codes code2 descriptor codes mcsfg MCS flags cnno console number time time to wait if REPLY keyword coded mgid message ID (defaults to xxx1371I if MSGID keyword not coded) text message text

---

**HLV1400S** TSO/E is not installed

**Explanation:** TSO/E (IBM's program product number 5665-293) is required to support the use of ISPF/HLV.

**User response:** Verify that this product is available at your installation.

---

**HLV1401S** service CMD(mod) FAILED, RC=rc

**Explanation:** HLV called TSO to execute ISPSTART and received a non-zero return code. The ISPF initiation attempt is aborted.

**User response:** Review the message text, and check why the request did not complete successfully. Review your ISPF/HLV environment, and take corrective action. If the problem cannot be resolved, contact Software Support.

The variable fields of the message text are: service service name string mod module name string rc return code value

---

**HLV1402S** Dialog Manager service 'service' error, RC=rc

**Explanation:** A product internal routine called TSO to execute ISPSTART and got a dialog manager service error.

**User response:** Review the ISPF error, checking the service name string for what service was invoked, and take corrective action. For additional assistance, contact your local S\_\_ systems programming support group

The variable fields of the message text are: service service name string rc return code

---

**HLV1404S** ABEND OCCURRED PROCESSING SUBROUTINE sroutine IN MODULE module

**Explanation:** The product ISPF application ABENDED while extracting information from constants in the subroutine's prolog.

**User response:** Contact Software Support for further assistance.

The variable fields of the message text are: sroutine subroutine name in vector table module subroutine vector table module name

---

**HLV1405T** ABEND OCCURRED PROCESSING SUBROUTINE sroutine IN MODULE module

**Explanation:** The product ISPF application ABENDED while extracting information from constants in the subroutine's prolog.

**User response:** Contact Software Support for further assistance.

The variable fields of the message text are: sroutine subroutine name in vector table module subroutine vector table module name

---

**HLV1406S** THE ENTRY FOR SUBROUTINE sroutine IN MODULE module POINTS TO SUBROUTINE sroutine

**Explanation:** The ISPF application detected an error in a subroutine vector table.

**User response:** Contact Software Support for further assistance.

The variable fields of the message text are: sroutine subroutine name in vector table module subroutine vector table module name sroutine subroutine pointed to by vector table

---

**HLV1407T** THE ENTRY FOR SUBROUTINE sroutine IN MODULE module POINTS TO SUBROUTINE sroutine

**Explanation:** The ISPF application detected an error in a subroutine vector table.

**User response:** Contact Software Support for further assistance.

The variable fields of the message text are: sroutine subroutine name in vector table module subroutine

vector table module name sroutine subroutine pointed to by vector table

---

**HLV1420S** service OF DIRECTED LOAD LIBRARY (ddn) FAILED RC=rc

**Explanation:** The S\_\_ ISPF application attempted to do a directed load based upon a parameter setting in the OPMS(ISPLLIBDSNAME).

**User response:** Check the data set name specified in the aforementioned parameter. After correcting the name, restart the Server address space.

The variable fields of the message text are: service allocation or deallocation ddn failed directed load library ddname rc failed allocation return code

---

**HLV1421E** text1 COMMAND text2

**Explanation:** The next message is not actually used by any code in the product. The message is used to reserve a return code. No action required.

**User response:** None.

The variable fields of the message text are: text1 informational text string text2 informational text string

---

**HLV1423E** errmsg

**Explanation:** Product security has denied the current user access to Trace Browse.

**User response:** If this an undesirable situation, contact the product systems support group to grant you the required access.

The variable fields of the message text are: errmsg error text string

---

**HLV1424E** CURRENT cmd COMMAND NOT AUTHORIZED - errmsg

**Explanation:** Authorization check failed. The use of HLV/SWS is restricted by your installation security product.

**User response:** Contact the person at your installation who installs and maintains the product to obtain access authority.

The variable fields of the message text are: cmd command name errmsg error message string

---

**HLV1440W** ISPF LOADLIB at level level, but Server LOADLIB at level level. Processing continues.

**Explanation:** The version of the load library allocated to ISPF is at a different release than that of the server.

**User response:** The product ISPF application continues. The inconsistency between the Server and the ISPF load libraries should be resolved.

The variable fields of the message text are: level product level level product level

---

**HLV1441S** ABEND abcd IN AUTHORIZATION ROUTINE mod+off

**Explanation:** An abend occurred in the authorization checking routine.

**User response:** Contact the person at your installation who installs and maintains your installation security product.

The variable fields of the message text are: abcd abend code mod module name off module offset

---

**HLV1442S** COMMAND BUFFER PARSE RC=rc

**Explanation:** The IBM TSO parse routine, IKJPARS, returned a non-zero return code after attempting to parse a command string. The parse process for the command is terminated.

**User response:** Gather the relevant problem data, and contact your local product systems programming group for assistance.

The variable fields of the message text are: rc return code

---

**HLV1443S** COMMAND BUFFER INTERNAL FORMAT ERROR

**Explanation:** During an attempt to analyze the contents of the command buffer, it was determined that the command buffer had the wrong length, invalid operands, or the wrong format.

**User response:** Review the command string entered. Revise the command string, if appropriate. Re-enter the revised command string. If the error condition persists despite correcting errors in the command string that was entered, contact Software Support for further assistance.

---

**HLV1444S** parm PARAMETER req SPECIFIED WITH ARCHTYPE(parmval)

**Explanation:** The Trace Browse/view program was invoked with invalid parameters.

**User response:** Review the command string entered. Revise the command string, if appropriate. Re-enter the revised command string. If the error condition persists despite correcting errors in the command string that was entered, contact Software Support for further assistance.

The variable fields of the message text are: parm parameter in error req requirement for parameter value parmval value of ARCHTYPE parameter

---

**HLV1445S** SYSTEM MANAGER SERVICE 'service'  
ERROR, RC=rc

**Explanation:** The product browse subroutine requested authorization in order to validate your request and did not find the necessary control blocks for this validation. The request is aborted.

**User response:** This message indicates a possible product ISPF interface error. Gather the data, and contact your local systems programming support group.

The variable fields of the message text are: service  
service name string rc return code

---

**HLV1446S** ISPF service service error, return code =  
rc

**Explanation:** HLV invoked an ISPF service routine to accomplish the ISPF-related task indicated in the error message and received a non-zero return code.

**User response:** Review the message text, and check why the request did not complete successfully. Review your ISPF/HLV environment, and take corrective action. If the error persists, contact Software Support.

The variable fields of the message text are: service  
service name string rc return code value

---

**HLV1447E** Member mem not found

**Explanation:** A BLDL failed to find the specified member.

**User response:** Examine the data set concatenation to ensure that the proper libraries are allocated. If the error persists, contact Software Support for further assistance.

The variable fields of the message text are: mem  
member

---

**HLV1448E** func failed for member=mem RC=rc

**Explanation:** An I/O operation failed while attempting to do a BLDL.

**User response:** Use this message in conjunction with any other messages that may accompany it to resolve the problem. You may also want to examine the data set for problems. Once the problem is corrected, restart the product.

The variable fields of the message text are: func current  
I/O operation mem member rc current I/O operation  
return code

---

**HLV1449E** ISPF LOADLIB at version %1, Server  
LOADLIB at %2, please correct  
inconsistency

**Explanation:** The version of the load library allocated to ISPF is at a different release than that of the server.

**User response:** The Diagnostic facility will terminate. The library inconsistency should be resolved prior to invoking the ISPF application.

---

**HLV1450H** jb subsysid

**Explanation:** This message is used to provide an audit trail in Trace Browse when using the Trace Browse option of the product.

**User response:** No action is required. This message is for audit trail purposes only.

The variable fields of the message text are: subsysid the  
product subsystem ID

---

**HLV1451H** jb subsysid ARCHIVE REVIEW dsn

**Explanation:** This message is used to provide an audit trail in Trace Browse when using the Trace Archive View function.

**User response:** None. This message is for audit trail purposes only.

The variable fields of the message text are: subsysid the  
product subsystem ID dsn the archive data set name

---

**HLV1452S** ABEND abcd REASON reason  
OCCURRED IN mod+off

**Explanation:** An abend occurred in the browse program.

**User response:** Check for other errors, and correct the problem. If unable to correct the problem, contact Software Support for further assistance.

The variable fields of the message text are: abcd abend  
code reason abend reason mod module name off  
module offset

---

**HLV1453S** service OF desc FAILED, RC=rc,  
DETECTED AT ad

**Explanation:** This is a generic error message used to describe a wide variety of product ISPF initialization, execution, and termination errors. The message text provides the current operation and what the current operation was trying to do.

**User response:** Check the error messages and the return code associated with this problem. There may be one or more error messages referring to the current problem. If possible, fix the problem identified by the error messages, and restart the product. If the problem cannot be resolved, contact Software Support.



The variable fields of the message text are: service current operation, GETMAIN, FREEMAIN, ATTACH etc. desc description rc return code

---

**HLV1454S**    **servrtn errdesc FAILED, ABEND=abcd, REASON CODE=rscd**

**Explanation:** This is a generic error message used to describe a wide variety of product ISPF initialization, execution, and termination errors. The message text provides the current operation and what the current operation was trying to do.

**User response:** Check the error messages and the return code associated with this problem. There may be one or more error messages referring to the current problem. If possible, fix the problem identified by the error messages, and restart the product. If the problem cannot be resolved, contact Software Support.

The variable fields of the message text are: servrtn service routine errdesc error description abcd abend code rscd reason code

---

**HLV1455S**    **Subsystem opmssid not active**

**Explanation:** The specified subsystem is not active

**User response:** Start the specified subsystem and then restart the ISPF application or choose another subsystem ID to start the ISPF application with

The variable fields of the message text are: opmssid subsystem

---

**HLV1456S**    **ISPF service service error, return code = rc. Unable to start ISPF dialog.**

**Explanation:** HLV invoked an ISPF service routine to start the ISPF dialog and received a terminating return code.

**User response:** Review the message text, and check why the request did not complete successfully. Review your ISPF/HLV environment, specifically the DEFINE ISPFCONCAT statements in the xxxxIN00 EXEC, and take corrective action. If the error persists, contact Software Support.

The variable fields of the message text are: service service name string rc return code value

---

**HLV1457W**    **Subsystem opmssid not active**

**Explanation:** The specified subsystem is not active

**User response:** The ISPF dialog could not find the specified subsystem.

The variable fields of the message text are: opmssid subsystem

---

**HLV1600E**    **Module DSNACAF not properly linked**

**Explanation:** The product-related DB2 interface module tried to load the address of a module needed to connect to the actual DB2 system. The address field was zero. The module could not be invoked, and the connection to the actual DB2 system failed.

**User response:** Ensure that the product is properly installed. The load module referred to in the error message must be properly linked with the product module having the same name. Relink the DSNACAF module, and rerun the DB2 application program.

---

**HLV1601E**    **Product is not active at this time**

**Explanation:** The product-related DB2 interface module tried to communicate with the main product (not DB2) address space. The main product address space was not active. This error normally occurs at the start of SQL application program execution.

**User response:** Ensure that the main product address space is active. Start or restart the main product address space, if necessary. Rerun the SQL application program from the beginning.

---

**HLV1602E**    **Product failed while SQL application program executing**

**Explanation:** The product-related DB2 interface module tried to communicate with the main product (not DB2) address space. The main product address space was not active. This error normally occurs at the start of SQL application program execution.

**User response:** Ensure that the main product address space is active. Start or restart the main product address space, if necessary. Rerun the SQL application program from the beginning.

---

**HLV1603E**    **Module DSNTIAR not properly linked**

**Explanation:** The product-related DB2 interface module tried to load the address of a module needed to connect to the actual DB2 system. The address field was zero. The module could not be invoked, and the connection to the actual DB2 system failed.

**User response:** Ensure that the product is properly installed. The load module referred to in the error message must be properly linked with the product module having the same name. Relink the DSNTIAR module, and rerun the DB2 application program.

---

**HLV1700E**    **service desc FAILED, RC=rc, DETECTED AT ad**

**Explanation:** This is a generic error message used to describe a wide variety of errors. The message text gives a description of the current operation and what the current operation was trying to do.

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**User response:** Check the error messages and the return code associated with this problem. There may be one or more error messages referring to the current problem. If possible, fix the problem identified by the error messages, and retry the operation. If the problem cannot be resolved, contact Software Support.

The variable fields of the message text are: service current operation, GETMAIN, FREEMAIN, SYSEVENT etc. desc description rc return code

---

### HLV1701E ERROR CODE name SENDING MESSAGE TO %2 QUEUE

**Explanation:** An error has occurred while attempting to send a record to a product queue. The most likely cause for this message is that the queue is full - which is indicated by an error code of 4. In the case of either product load balancing queue, a queue full condition results in no further sessions being sent to this server by the Group Director until the pending work on the queue has been significantly reduced. For any other error code, no additional work will be sent to this server and the server must be terminated and restarted.

**User response:** Contact your local product systems programming group for assistance.

The variable fields of the message text are: name queue name

---

### HLV1720E desc func FAILED, RC=rc, DETECTED AT ad

**Explanation:** This is a generic error message used to describe errors that occurred while attempting to allocate or free a product control block. Allocation failures are typically an indication of insufficient virtual storage.

**User response:** Check the error messages and the return code associated with this problem. There may be one or more error messages referring to the current problem. If possible, fix the problem identified by the error messages, and retry the operation. If the problem cannot be resolved, contact Software Support.

The variable fields of the message text are: desc description func current function (allocate or delete) rc return code

---

### HLV1740T Invoking IEFSSREQ for SSI function func - desc

**Explanation:** The ADDRESS SPOOL S/REXX Host Command Environment or another routine using Sysout Application Programming Interface (SAPI) common routines is invoking a SubSystem (SSI) service. This message is traced, prior to each invocation of the IEFSSREQ SSI gateway macro.

**User response:** None. The indicated SSI function is invoked immediately after this message is traced.

The variable fields of the message text are: func SSI function code (SSOBFUNC) desc SSI function code description

---

### HLV1741T IEFSSREQ SSI return code is RC

**Explanation:** An invocation of the SubSystem Interface (SSI) macro IEFSSREQ has completed, and the resulting return code is displayed in the message. This message is traced, following each SSI service request invocation when the SSITRACE command option is in effect.

**User response:** None. The SSI gateway interface has returned with the IEFSSREQ return code shown in the message in R15.

The variable fields of the message text are: RC IEFSSREQ return code from R15

---

### HLV1742T SSOBRETN FUNCTION-SPECIFIC RETURN CODE IS RC

**Explanation:** An invocation of the SubSystem Interface (SSI) macro IEFSSREQ has completed with return code zero. The function- specific return code is traced by this message following each SSI service request invocation made while the SSITRACE command option is in effect.

**User response:** None. The indicated SSI function has completed with the SSOBRETN return code shown in the message

The variable fields of the message text are: RC SSOBRETN return code from service function

---

### HLV1743T WAITING FOR NEW SYSOUT FILES FOR Secs SECONDS

**Explanation:** The Sysout Application Programming Interface SSI service has been invoked with a PUTGET request that has returned an END-OF-DATA signal. The system will await new SYSOUT output to become available for the indicated time period. This message is traced prior to entered a WAIT for more SYSOUT output data to become available.

**User response:** None. A WAIT is entered for more SYSOUT output which will expire after the indicated number of seconds

The variable fields of the message text are: Secs Time until the WAIT will expire

---

### HLV1744T WAIT TIMELIMIT EXPIRED - END-OF-DATA FOR SYSOUT

**Explanation:** A Sysout Application Programming Interface SSI service request routine had entered a WAIT until additional SYSOUT output became available, following receipt of an END-OF-DATA signal. The timelimit for waiting on additional SYSOUT output to become available has expired and the request routine will now process the END-OF-DATA signal. This

message is traced when the SSITRACE command option is in effect.

**User response:** None. The WAIT for new SYSOUT output is terminated and the procedure continues by recognizing the END-OF-DATA signal.

---

#### HLV1745T NEW SYSOUT FILE NOW AVAILABLE

**Explanation:** A Sysout Application Programming Interface SSI service request routine had entered a WAIT until additional SYSOUT output became available. The primary subsystem has posted the requestor ready and indicated the additional SYSOUT output is now available. This message is traced when the SSITRACE command option is in effect. Because another process or writer may select the same SYSOUT file for processing, there is no guarantee that the file will be available when selection is requested.

**User response:** None. The WAIT for new SYSOUT output has completed and the procedure continues by attempting to select the new SYSOUT file for processing.

---

#### HLV1746T IRXEXCOM action REQUEST FOR varname FAILED WITH RC/SHVRET=RCSHV

**Explanation:** The ADDRESS SPOOL Host Command Interface encountered an error while attempting to set, change, or drop a variable in the S/REXX variable pool. The Host Command being processed will be failed with a severe error signal.

**User response:** Make additional workspace available for execution of the product REXX procedure. If the problem persists and cannot be resolved by increasing the allocated workspace, contact Software Support for assistance.

The variable fields of the message text are: action Variable action being requested varname Name of variable for which processing failed RCSHV The IRXEXCOM return code and SHVRET value

---

#### HLV1747T ADDRESS SPOOL ENCOUNTERED ABEND CC=abcc, RS=reason AT module+offset, PSW=psw, RETRY BY ad

**Explanation:** The ADDRESS SPOOL Host Command Interface encountered an ABEND while processing the current request. The ADDRESS SPOOL host command will be terminated with a failure signal.

**User response:** Check for other messages which may provide insight into the cause of the ABEND. Correct the Host Command, or other conditional as applicable. If unresolved, contact Software Support for assistance.

The variable fields of the message text are: abcc Abend completion code reason Abend reason code module Abending module name, if known offset abending

module offset psw abend PSW AD Address where failure occurred

---

#### HLV1748T ABEND CC=abcc, RS=reason AT module+offset, PSW=psw, ACCESSING dsect STRCT AT addr, RETRY BY ad

**Explanation:** The ADDRESS SPOOL JOBSTATUS command encountered an ABEND while processing the indicated extended status information DSECT. The command abandons further processing of the extended status information returned by the SSI service.

**User response:** Check for other messages which may provide insight into the cause of the ABEND. Correct the Host Command, or other condition as applicable. If unresolved, contact Software Support.

The variable fields of the message text are: abcc Abend completion code reason Abend reason code module Abending module name, if known offset abending module offset psw abend PSW dsect extended status dsect being processed addr address of dsect being processed AD Address where failure detected/retried

---

#### HLV1749T SSI ABEND CC=abcc, RS=reason AT module+offset, PSW=psw, RETRY BY ad

**Explanation:** An SSI service request call to the IEFSSREQ interface ABENDED. The ABEND completion code and reason are displayed in this message. The ABEND may be due to some error in parameters passed on the service request, or due to some permanent or transient operating system failure.

**User response:** Check for other messages which may provide insight into the cause of the ABEND. Correct the Host Command, or other condition as applicable. If unresolved, contact Software Support.

The variable fields of the message text are: abcc Abend completion code reason Abend reason code module Abending module name, if known offset abending module offset psw abend PSW AD Address where failure detected/retried

---

#### HLV1750T DDNAME ddname ALLOCATED TO SYSOUT FILE 'dsname'

**Explanation:** A SYSOUT dataset has been allocated to the indicated DDNAME. The caller may now process the SYSOUT file using the DDNAME allocation. This message is traced when the SSITRACE command option is in effect. If the DDNAME is "<SKIPPED>", no allocation has been made for the indicate SYSOUT dataset, and processing continues without an outstanding DDNAME allocation.

**User response:** None. The SYSOUT allocation remains until the next SAPI request is processed, or until the environment is ended.

The variable fields of the message text are: ddname

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DDNAME for allocation dsname DSNAMES for allocation

---

### HLV1751T DDNAME ddname DEALLOCATED

**Explanation:** A SYSOUT dataset has been deallocated from the DDNAME provided in the trace message. This message traced when the SSITRACE command option is in effect.

**User response:** None. The SYSOUT file has been deallocated and processing continues.

The variable fields of the message text are: ddname DDNAME for allocation

---

### HLV1752T SPOOL HCE ERRORrcrs: msg

**Explanation:** An error has been encountered while processing a SPOOL Host Command Environment request. This message may be traced after an error, depending on tracing options in effect while processing the command. The request is being rejected with the return code and reason code (in parentheses), having the description given.

**User response:** Check for other messages which may provide insight into the cause of the problem. Correct the Host Command, or other condition as applicable. If unresolved, contact Software Support for assistance.

The variable fields of the message text are: rcrs (return-code,reason-code) in decimal msg reason description

---

### HLV1753T SPOOL HCE SECONDARY ERRORrcrs: msg

**Explanation:** An error has been encountered while processing a SPOOL Host Command Environment request. A previous error has already been logged and this error occurred during Host Command Environment cleanup. This message may be traced after an error, depending on tracing options in effect while processing the command. The request is being rejected with the original return and reason codes. This message describes the secondary error.

**User response:** Check for other messages which may provide insight into the cause of the problem. Correct the Host Command, or other condition as applicable. If unresolved, contact Software Support for assistance.

The variable fields of the message text are: rcrs (return-code,reason-code) in decimal msg reason description

---

### HLV1754T SPOOL CLEANUP ABEND CC=abcc, RS=reason AT module+offset, PSW=psw, action, RETRY RTNE AT ad

**Explanation:** An ADDRESS SPOOL environment cleanup routine encountered an ABEND during

resource recovery processing. Processing to recovery resources continues. One or more resources may not be recovered correctly.

**User response:** Check for other messages which may provide insight into the cause of the ABEND. Correct the Host Command, or other condition as applicable. If unresolved, contact Software Support.

The variable fields of the message text are: abcc Abend completion code reason Abend reason code module Abending module name, if known offset abending module offset psw abend PSW action processing being undertaken AD Address where failure detected/retried

---

### HLV1755T SPOOL HCE MSGrcrs: msg

**Explanation:** An informational message traced while processing a SPOOL Host Command Environment request. This message may be traced after an error, depending on tracing options in effect while processing the command.

**User response:** None. Processing continues.

The variable fields of the message text are: rcrs (return-code,reason-code) in decimal msg reason description

---

### HLV1840E errdesc

**Explanation:** A syntax error has been detected while analyzing the EXECIO command.

**User response:** Correct the EXECIO command syntax errors, and attempt to execute the REXX program again.

The variable fields of the message text are: errdesc description of syntax error

---

### HLV1841E errdesc, RC=rc

**Explanation:** Some type of service routine (operating system or product specific) failed. The error message identifies the type of error.

**User response:** Check the full text of the error message, and attempt to correct the error.

The variable fields of the message text are: errdesc error description rc return code

---

### HLV1842E errdesc1 ddn errdesc2

**Explanation:** The ddname specified on the EXECIO command is not allocated to the current job.

**User response:** Allocate the appropriate data set to the ddname, or change the ddname. Then, rerun the REXX program.

The variable fields of the message text are: errdesc1 first part of error description ddn ddname specified on

EXECIO command errdesc2 final part of error description

---

**HLV1843E** **ddn io FAILED, RC=rc, DETECTED AT ad**

**Explanation:** Some type of error occurred during invocation of a product I/O routine associated with the EXECIO command.

**User response:** Check if any other error messages were generated along with the error message above. If the combined error messages are sufficient to explain the problem, take whatever corrective action is appropriate. If the problem cannot be resolved, contact Software Support.

The variable fields of the message text are: ddn ddname io I/O service rc return code

---

**HLV2020S** **desc FAILURE RC=rc**

**Explanation:** An attempt to obtain or release storage on behalf of a product subsystem data set failed.

**User response:** Ensure that the address space requesting product subsystem data set services has a large enough region.

The variable fields of the message text are: desc description (e.g. subsystem data set rc return code)

---

**HLV2021S** **desc CANNOT USE SUBSYS FILE ALLOCATIONS**

**Explanation:** The product has detected that a system address space (e.g. \*master\*) or a TSO user has requested that a product subsystem data set be opened. This is not allowed.

**User response:** The subsystem data set interface may only be used by normal (non-system) started tasks and batch jobs.

The variable fields of the message text are: desc description (e.g. system tasks)

---

**HLV2022S** **UNKNOWN SUBSYS OPEN ENVIRONMENT ASID asid**

**Explanation:** The product received an OPEN request for a subsystem data set and is unable to determine what environment the requesting address space is running in.

**User response:** The subsystem data set interface may only be used by TSO server started tasks.

The variable fields of the message text are: asid address space identifier

---

**HLV2023S** **No server block found for USERID=jb**

**Explanation:** The product received an OPEN request for a subsystem data set and found that the request was not from a TSO server address space initiated as an outboard server by the product.

**User response:** This is most likely an internal problem. Contact Software Support for further assistance.

The variable fields of the message text are: jb jobname

---

**HLV2026S** **Invalid subsystem file count cnt found for server jb**

**Explanation:** The product has detected an internal error during close processing for a subsystem data set. The count of open subsystem data sets for this address space has gone negative.

**User response:** Gather the available problem data, and contact your local product systems programming group for support in this area.

The variable fields of the message text are: cnt count of open subsystem data sets

---

**HLV2027S** **SUBSYS request cb VALIDATION ERROR - ADDRESS addr**

**Explanation:** The product has detected an error validating system control blocks while processing an OPEN request for a product subsystem data set control block.

**User response:** Gather the available problem data, and contact your local product systems programming group for assistance.

The variable fields of the message text are: request OPEN cb control block name (e.g. ACB) addr address of the control block

---

**HLV2030S** **ABEND abcd IN USER EXIT mod+off**

**Explanation:** An abend occurred in the authorization checking routine.

**User response:** Contact the person at your installation who installs and maintains the product security exit routine.

The variable fields of the message text are: abcd abend code mod module name off module offset

---

**HLV2031W** **TSO SERVER (procname) - SYSTSIN BLKSIZE = blksize1, USE blksize2**

**Explanation:** The BLKSIZE specified on the SYSTSIN DD card in the TSO server started task JCL is one of the factors that limits the length of commands that can be sent to servers.

**User response:** It is recommended that you modify

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the BLKSIZE on the SYSTSIN DD card in the proc specified by PROCNAME to the BLKSIZE specified.

The variable fields of the message text are: procname TSO server started task procedure name blksize1 current SYSTSIN BLKSIZE blksize2 maximum SYSTSIN BLKSIZE

---

**HLV2032T**    **SUBSYSTEM DATA request (rqc)  
PROCESSED FOR DDNAME ddn -  
RC=rc**

**Explanation:** The product's subsystem data set SSI intercept routine has processed a request. This message traces the interception request.

**User response:** None. This is a diagnostic message.

The variable fields of the message text are: request request name rqc request code ddn ddname of data set, if known rc return code set by SSI intercept routine

---

**HLV2040T**    **SRP RABND: SRVR NOT  
RESPONDING - ASID=asid ASCB=ascb  
TCB=tcb**

**Explanation:** A request for service has been made to server subtask either inside or outside the main product address space. The requesting task has attempted to revoke the request due to timeout or shutdown, but the server has not acknowledged. The request for service has been forcibly revoked.

**User response:** Depending on the nature of the request, either the requesting task or the server task TCB will be cancelled.

The variable fields of the message text are: asid server task ASID ascb server task ASCB tcb server task TCB

---

**HLV2041T**    **SRP SFREE: RQSTR CANNOT BE  
POSTED - CODE=pc - ASID=asid  
TCB=tcb CNID=cnid TOKEN=token  
SMAF=addr**

**Explanation:** A request for service has been made to a server subtask either inside or outside the main product address space. The server task is unable to post the requestor task because the task has ended.

**User response:** The server task continues without posting the requestor.

The variable fields of the message text are: pc post code asid requestor's ASID tcb requestor's TCB cnid requestor's CNID token requestor's token addr requestor's SMAF control block address

---

**HLV2042T**    **SRP RBIND: RC=rc CMTC=addr  
BEFORE=word1 AFTER=word2 TB=tb**

**Explanation:** This is a diagnostic message issued by the service requestor/provider interface.

**User response:** None. This message is for diagnostic use only.

The variable fields of the message text are: rc server return code addr requestor's CMTC address word1 control word before image word2 control word after image tb trace back point

---

**HLV2043T**    **SRP RWAIT process: CMTC=addr  
BEFORE=word**

**Explanation:** This is a diagnostic message issued by the service requestor/provider interface.

**User response:** None. This message is for diagnostic use only.

The variable fields of the message text are: process processing being performed addr requestor's CMTC address word control word before image

---

**HLV2044T**    **SRP RWAIT: RC=rc CMTC=addr  
BEFORE=word1 AFTER=word2 TB=tb**

**Explanation:** This is a diagnostic message issued by the service requestor/provider interface.

**User response:** None. This message is for diagnostic use only.

The variable fields of the message text are: rc server return code addr requestor's CMTC address word1 control word before image word2 control word after image tb trace back point

---

**HLV2045T**    **SRP RVOKE process: CMTC=addr  
BEFORE=word**

**Explanation:** This is a diagnostic message issued by the service requestor/provider interface.

**User response:** None. This message is for diagnostic use only.

The variable fields of the message text are: process processing being performed addr requestor's CMTC address word control word before image

---

**HLV2046T**    **SRP RVOKE: RC=rc CMTC=addr  
BEFORE=word1 AFTER=word2 TB=tb**

**Explanation:** This is a diagnostic message issued by the service requestor/provider interface.

**User response:** None. This message is for diagnostic use only.

The variable fields of the message text are: rc server return code addr requestor's CMTC address word1 control word before image word2 control word after image tb trace back point

---

**HLV2047T SRP RABND: RC=rc CMTC=addr  
BEFORE=word1 AFTER=word2 TB=tb**

**Explanation:** This is a diagnostic message issued by the service requestor/provider interface.

**User response:** None. This message is for diagnostic use only.

The variable fields of the message text are: rc server return code addr requestor's CMTC address word1 control word before image word2 control word after image tb trace back point

---

**HLV2048T SRP SBIND: RC=rc SERVER=addr1  
RQSTR=addr2 TB=tb**

**Explanation:** This is a diagnostic message issued by the service requestor/provider interface.

**User response:** None. This message is for diagnostic use only.

The variable fields of the message text are: rc server return code addr1 server's CMTC address addr2 requestor's CMTC address tb trace back point

---

**HLV2049T SRP SFREE: RC=rc SERVER=addr1  
RQSTR=addr2 TB=tb**

**Explanation:** This is a diagnostic message issued by the service requestor/provider interface.

**User response:** None. This message is for diagnostic use only.

The variable fields of the message text are: rc server return code addr1 server's CMTC address addr2 requestor's CMTC address tb trace back point

---

**HLV2050T SRP SPOST: RC=rc CODE=addr1  
SERVER=%3 RQSTR=addr2 TB=tb**

**Explanation:** This is a diagnostic message issued by the service requestor/provider interface.

**User response:** None. This message is for diagnostic use only.

The variable fields of the message text are: rc server return code pc post code addr1 server's CMTC address addr2 requestor's CMTC address tb trace back point

---

**HLV2082S ss PRODUCT FAILURE DETECTED**

**Explanation:** While processing this request, product main command processing function detected an abnormal shutdown of the product.

**User response:** Check the abend, what caused it, and how to best restart the product. Resolve the current problem and continue.

---

**HLV2083W ss OUTBOARD TSO SERVER  
jb,ASID=asid FAILED**

**Explanation:** The product End-Of-Memory (EOM) processing detected the unexpected termination of an outboard TSO server address space. The server should be restarted automatically by the product, providing that the server control limits have not been modified.

**User response:** You may want to determine why the server failed.

The variable fields of the message text are: jb jobname asid ASID

---

**HLV2084E service oper1 FAILED, RC=rc,  
DETECTED AT ad**

**Explanation:** A CALLRTM invocation within the product End-Of-Memory (EOM) failed. The EOM routine was attempting to cancel an outboard TSO server.

**User response:** Check the service and return codes, and attempt to resolve the problem. If the problem cannot be resolved, contact Software Support.

The variable fields of the message text are: service service name oper1 service operand rc service return code

---

**HLV2101S usid init FAILED - service RC=rc**

**Explanation:** The product security function processing routine GETMAIN for some private storage failed. This storage is required for the processing of security control blocks.

**User response:** Review the above storage GETMAIN error. Determine why storage is unavailable. Check for any exit that limits usage of below-the-line private storage. Resolve the above problems, and restart.

The variable fields of the message text are: usid userid string init initialization type string service macro name string rc return code

---

**HLV2102E service REQUEST FOR usid FAILED -  
reason**

**Explanation:** The product security function routine received a non-zero return code for the listed userid.

**User response:** Check the security error for the userid. Correct the access problem, or contact your security administrator for further assistance.

The variable fields of the message text are: service Security function service request type usid USERID string or description reason failure reason text

---

**HLV2103S**    **userid rc FAILED - RACF CODES rscd text**

**Explanation:** The product received an unknown return code from RACF.

**User response:** Check the related RACF errors, and validate the return code in the RACF Messages and Codes Manual. Contact your local systems programming group for assistance.

The variable fields of the message text are: userid userid string rc RACF return code rscd RACF reason code text RACF text string

---

**HLV2104E**    **userid init FAILED - reason**

**Explanation:** During LOGON command security checking, the product security function routine received a non-zero return code from the security package for the current userid.

**User response:** Check the security error for the userid. Correct the access problem, or contact your security administrator for further assistance.

The variable fields of the message text are: userid USERID string or description init initialization type string or description reason failure reason text

---

**HLV2106H**    **userid init FOR cnno AT t2 ON d2**

**Explanation:** Product security function routine issued this informational message for the TSO address spaces.

**User response:** None. This message is for informational purposes only.

The variable fields of the message text are: userid userid string init initialization type string cnno console ID string

---

**HLV2107H**    **LOGON FAILED FOR userid. rc1 rc2 rscd - text.**

**Explanation:** Product received a non-zero return code from a LOGON request for an internal task.

**User response:** Check the security error for the userid. Correct the access problem, or contact your security administrator for further assistance.

The variable fields of the message text are: userid the subject userid rc1 the security module return code rc2 the RACF (SAF) return code rscd the RACF (SAF) reason code text error message text from RACF (SAF)

---

**HLV2108E**    **text1 text2 FAILED - RC=rc**

**Explanation:** The product failed to extract the security product userid.

**User response:** Validate the current system situation. Ensure that the security package initialization is complete before the product is started.

The variable fields of the message text are: text1 error message text text2 error message text rc return code value

---

**HLV2120I**    **MEMBER mem - text**

**Explanation:** The product copy utility has started copying members between PDSs.

**User response:** None. This message is for informational purposes only.

The variable fields of the message text are: mem current member name text informational text string

---

**HLV2121S**    **io FAILED, RC=rc, MEMBER=mem, DDNAME=ddn, DSNNAME=dsn**

**Explanation:** The product copy utility was copying members from one PDS to another, and the copy failed.

**User response:** Check the return codes and related MVS error messages. Ensure that the data sets have enough space. Take action as recommended for the return codes.

The variable fields of the message text are: io current I/O operation string rc current I/O operation return code mem current member name ddn ddname string dsn data set name string

---

**HLV2122I**    **MEMBER mem RECORD num LENGTH %3 IS INVALID**

**Explanation:** The product VB to FB conversion program found a record with an invalid length.

**User response:** Fix the invalid record, and rerun the VB to FB conversion program.

The variable fields of the message text are: mem current member name num record number starting from one (1)

---

**HLV2200E**    **service desc FAILED RC=rc, DETECTED AT ad**

**Explanation:** This is a generic error message used to describe a wide variety of errors. The message text gives a description of the current operation and what the current operation was trying to do.

**User response:** Check the error messages and the return code associated with this problem. There may be one or more error messages referring to the current problem. If possible, fix the problem identified by the error messages, and retry the operation. If the problem cannot be resolved, contact Software Support.

The variable fields of the message text are: service current operation, GETMAIN, FREEMAIN, SYSEVENT, etc. desc description rc return code

---



---

**HLV2300E NLS SERVICE ROUTINE (OPTRTB)  
ABEND abcd, RS=rscd AT mod+off**

**Explanation:** The NLS service routine detected an abend while processing a request.

**User response:** Check if any other error messages were generated along with the error message above. If the combined error messages are sufficient to explain the problem, take whatever corrective action is appropriate. Otherwise, contact Software Support for assistance.

The variable fields of the message text are: abcd abend code rscd abend reason code mod module name off module offset

---

**HLV2301I NLS INVOKED WITH INVALID  
FUNCTION CODE func**

**Explanation:** The NLS service routine was invoked with an invalid function code.

**User response:** Check if any other error messages were generated along with the error message above. If the combined error messages are sufficient to explain the problem, take whatever corrective action is appropriate. Otherwise, contact Software Support for assistance.

The variable fields of the message text are: func function code in hex

---

**HLV2302I NO VALID MAPPING FOR code1  
CODEPOINT code2 TO code3 -  
SUBSTITUTING code4**

**Explanation:** The NLS service routine was invoked for conversion of a DBCS character stream to/from ASCII/EBCDIC. No valid DBCS codepoint is defined for the input DBCS code point.

**User response:** The DBCS codepoint is converted to a standard substitution character and the operation continues. Ensure that the character stream passed to the conversion routine contains only DBCS characters that have defined translation codepoint assignments. You may need to define an ASCII/EBCDIC codepoint entry during start-up for GAIJI codepoints or for codepoints not built in to the system.

The variable fields of the message text are: code1 source encoding code2 source codepoint in hex code3 output encoding code4 substitution (sub) codepoint used

---

**HLV2303I UNEVEN BYTES IN PURE DBCS  
STRING - byte FOUND IN TRAILING  
POSITION - DISCARDED**

**Explanation:** The NLS service routine was invoked for conversion of EBCDIC pure DBCS data. An uneven number of bytes were present in the input stream.

**User response:** Handling of the current DBCS conversion is completed by skipping the trailing, unmatched single byte.

The variable fields of the message text are: byte trailing byte

---

**HLV2304I NO TRAILING SHIFT-IN DELIMITER  
BEFORE END OF DBCS STRING -  
ASSUME SHIFT-IN WAS PRESENT**

**Explanation:** The NLS service routine was invoked for conversion of EBCDIC mixed SBCS/DBCS string. While processing DBCS characters, the input stream was exhausted before a shift-in character was found. DBCS sequences should always be terminated by a trailing shift-in byte.

**User response:** Handling of the current DBCS conversion is completed by assuming that a shift-in character was present.

---

**HLV2305I INVALID ENCODING PARAMETER  
(parm) DETECTED IN NLS E-TO-A  
ENCODING ROUTINE**

**Explanation:** The NLS service routine was invoked for conversion of EBCDIC to ASCII. The encoding parameter is invalid.

**User response:** The server assumes ISO-8859-1 SBCS EBCDIC to ASCII conversion.

The variable fields of the message text are: parm encoding parameter

---

**HLV2306I DESTRUCTIVE OVERLAP DETECTED  
IN SBCS E-TO-A OR  
A-TO-EENCODING ROUTINE**

**Explanation:** The NLS service routine was invoked for EBCDIC to ASCII or ASCII to EBCDIC encoding of SBCS data. Overlap of the input and output areas was detected. The encoding request is aborted by deliberate generation of an S0C3 abend.

**User response:** This is probably a logic error. Contact Software Support.

---

**HLV2307I NO NLS TABLE FOUND FOR  
ASCII/EBCDIC MAPPING CODE table**

**Explanation:** The NLS service routine was invoked to look up an NLS EBCDIC to ASCII or ASCII TO EBCDIC translation table. The requested table was not found.

**User response:** Ensure that valid values are set for the server ASCIIEBCDICMAPPING and CHARACTERENCODING parameters. Check for other messages which indicate whether a non-default setting was selected during processing of the current transaction. Also, check the ISPF 5.19 display for a list

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of coded character sets that are defined to the system. The server will continue the operation using the built-in ENU ASCII EBCDIC MAPPING table for SBCS operations and will set the CHARACTERENCODING to ISO-8859-1.

The variable fields of the message text are: table NLS table name

---

### HLV2308I NO BUILT-IN NLS TABLE FOUND FOR code1 (table)

**Explanation:** The NLS service routine was invoked to encode or decode data which contains a multi-byte character set algorithm. A built-in NLS character set conversion table was not present.

**User response:** The encode/decode operation is aborted by deliberate generation of an S0C3 abend. Check for reasons why the built-in table described in the message is undefined to the system.

The variable fields of the message text are: code1 character encoding scheme table built-in table name

---

### HLV2309I UNPAIRED code DBCS LEAD-BYTE value SKIPPED BY DECODER

**Explanation:** The NLS service routine was invoked to decode data which contains a multi-byte character set algorithm. A single byte was found which should be the first byte of a two-byte DBCS character sequence; however, no more input bytes were present.

**User response:** The decode routine skips the invalid DBCS lead-byte and omits it from the EBCDIC result.

The variable fields of the message text are: code character encoding scheme value invalid byte value

---

### HLV2310I UNSUPPORTED ESCAPE SEQUENCE sq FOR code

**Explanation:** The NLS service routine was invoked to decode data which contains multi-byte character sets including escape sequences. The escape sequence reported in the message is not supported by the server.

**User response:** The decode routine copies the escape sequence and converts it to SBCS EBCDIC.

The variable fields of the message text are: sq escape sequence located in input code character encoding method

---

### HLV2311I UTF-8 var1 NOT SUPPORTED FOR NLS var2 - ASSUMING HOST CODE PAGE IS "ENU"

**Explanation:** The NLS service routine was invoked to decode or encode a UTF-8 data stream. The server does not support UTF-8 data streams for the selected EBCDIC host code page.

**User response:** The routine assumes the EBCDIC host code page is set to ENU (IBM-1047). This may lead to incorrect results when the input or output stream has been processed.

The variable fields of the message text are: var1 "decoding" or "encoding" var2 current host code page designation

---

### HLV2312I BYTE var1 IS AN INVALID UTF-8 BYTE - SKIPPING TO NEXT BYTE OF STREAM

**Explanation:** The NLS service routine was invoked to decode a UTF-8 data stream. An invalid lead-byte value has been found in the UTF-8 stream (x80-xBF, or xF8-xFF). The decoder will skip over the offending byte and ATTEMPT to re-orient at the next input byte position.

**User response:** The decode operation continues at the next input stream position. This may lead to additional errors or incorrect decoding of the stream.

The variable fields of the message text are: var1 invalid lead byte value

---

### HLV2320T DBCS conversion bypassed for parameter var1: var2

**Explanation:** The DBCS Dynamic Conversion Service bypassed conversion of the specified parameter to graphic for the reason listed. The operation will be passed on to DB2 which will most likely issue an SQLCODE = -301 error.

**User response:** This is a programming error in the client application.

The variable fields of the message text are: var1 Parameter Number var2 Reason

---

### HLV2401E db2id connect function ERROR, RC=rc REASON=reason

**Explanation:** DB2 Streams Collector received an unexpected failure return code from a CAF or RRS AF function

**User response:** Refer to the DB2 Messages and Codes for further details on the error. Message 2402 may be issued as well.

The variable fields of the message text are: db2id db2 name of Streams source connect connection type function CAF/RRSAF function rc return code reason reason code

---

### HLV2402E db2id : message

**Explanation:** DB2 Streams Collector received an unexpected failure return code from a CAF or RRS AF function

**User response:** Refer to the DB2 Messages and codes for further details on the messages.

The variable fields of the message text are: db2id db2 name of Streams source message db2 message

---

**HLV2403E connect module mismatch for DB2 subsystem db2id**

**Explanation:** DB2 Streams Collector received a return code 4 and reason code 00C10823 attempting to create a CAF or RRSAF connection to the specified DB2.

**User response:** Change the STEPLIB used by the product to point to the highest level version of DB2

The variable fields of the message text are: connect connection type db2id db2 name of Streams source

---

**HLV2404E User ID <userid> does not have authority to access DB2 %1**

**Explanation:** DB2 Streams Collector received a return code 8 and reason code 00F30013 attempting to create a CAF or RRSAF connection to the specified DB2.

**User response:** Correct the DEFINE PUBLISH statement to specify a userid authorized to access the particular DB2.

The variable fields of the message text are: userid specified userid db2id db2 name of Streams source

---

**HLV2405E DB2 system db2id not defined**

**Explanation:** DB2 Streams Collector received a return code 8 and reason code 00F30006 attempting to create a CAF or RRSAF connection to the specified DB2.

**User response:** Correct the DEFINE PUBLISH statement

The variable fields of the message text are: db2id db2 name of Streams source

---

**HLV2406T db2id connect ISSUED, RC=rc REASON=reason**

**Explanation:** Trace Streams DB2 CAF and RRSAF return codes

**User response:** None

The variable fields of the message text are: db2id db2 name of Streams source connect connection type rc return code reason reason code

---

**HLV2407T PUBLISH SOURCE db2id USERID userid LOGON FAILED rc1 rc2 rscd**

**Explanation:** The PUBLISH USERID specified could not be logged on. This message should be followed by another message with the SAF error message.

**User response:** The Streams routine is aborted. Ensure

that the userid specified is correct.

The variable fields of the message text are: db2id the publish source db2 system name userid the USERID parameter value rc1 the security module return code rc2 the RACF (SAF) return code rscd the RACF (SAF) reason code

---

**HLV2408E Streams plan plan not defined TO db2id**

**Explanation:** Return code 8 Reason code 00F30040 received attempting to open the specified plan,

**User response:** The Streams source task is aborted. Ensure that the specified plan is bound.

The variable fields of the message text are: plan The plan to be used by Streams db2id the publish source db2 system name

---

**HLV2409I srctype %2 Streams source task now starting**

**Explanation:** DEFINE PUBLISH TYPE(DB2) task starting

**User response:** None

The variable fields of the message text are: srctype the publish source type

---

**HLV2410I Streams destination task for destid starting**

**Explanation:** DEFINE PUBLISH DESTINATION task starting

**User response:** None

The variable fields of the message text are: destid the publish destination name

---

**HLV2411W PUBLISH - service OF desc FAILED, RC=rc**

**Explanation:** The product tried to initialize or a Publish task during product initialization or termination. An internal service routine called during Publish task initialization or termination exited with a non-zero return code.

**User response:** Check the error messages and the return code associated with this problem. There may be one or more additional error messages or abends referring to the current Publish task initialization or termination problem. Also, check for storage allocation errors or abends. If possible, fix the problem identified by the error messages, and restart the product. If the problem cannot be resolved, contact Software Support to obtain additional assistance.

The variable fields of the message text are: service current operation, GETMAIN, FREEMAIN, allocation, deletion etc. desc description rc return code

---

**HLV2412I Streams taskid task for destid terminating**

**Explanation:** DEFINE PUBLISH task terminating

**User response:** None

The variable fields of the message text are: taskid the task type destid the publish destination name

---

**HLV2413T data1 data2 data3 data4 data5 data6 data7 data8 data9 %SK**

**Explanation:** Trace Streams DB2 routines

**User response:** None

The variable fields of the message text are: data1 trace data data2 trace data data3 trace data data4 trace data data5 trace data data6 trace data data7 trace data data8 trace data data9 trace data stack stack trace information

---

**HLV2414W UNABLE TO FIND DATASET NAME FOR DDNAME ddname**

**Explanation:** Streams destination is unable to access the Dataset name for the listed DD name, which contains XML formatting information.

**User response:** None

The variable fields of the message text are: ddname the ddname that failed

---

**HLV2415E CANNOT SERIALIZE ON db2id QUALIFIER qualifier**

**Explanation:** It appears that another copy of the product is using the same Event Publisher DB2 tables that this copy of the product is attempting to use.

**User response:** No action is required.

The variable fields of the message text are: db2id DB2 system qualifier table qualifier in the DB2 system

---

**HLV2416S Streams support not configured - it cannot be initialized**

**Explanation:** None.

**User response:** Contact IBM Software Support.

---

**HLV2417E Invalid return from Streams rule ruleid 'retval'**

**Explanation:** An SEF rule for a Streams event provided a syntactically invalid return value. The event was not Published.

**User response:** Correct the SEF rule and retry.

The variable fields of the message text are: ruleid SEF rule name retval invalid RETURN value from the rule

---

**HLV2418T PUBLISH ITEM rowid FOR SOURCE srcid - error - STATUS=status RC=rc REASON=reason DIAG=diag %8 - FAILED**

**Explanation:** Error attempting to Publish an update for the particular item.

**User response:** Attempt to correct the error

The variable fields of the message text are: rowid keyfield of the update srcid ID of the source error error text status status code rc return code reason reason code diag further diagnostic information

---

**HLV2419T PUBLISH DESTINATION dest FAILURE error - STATUS=status RC=rc REASON=reason DIAG=diag %7 - WILL RETRY**

**Explanation:** Error attempting to Publish an update for the particular item.

**User response:** Attempt to correct the error

The variable fields of the message text are: dest name of the destination error error text status status code rc return code reason reason code diag further diagnostic information

---

**HLV2420E DB2 db2id CONTENTION ON table CODE -sqlcode - WILL RETRY LATER**

**Explanation:** Timeout detected trying to access one of the Streams tables.

**User response:** None - the Streams will retry the request

The variable fields of the message text are: db2id db2 system ID table table name sqlcode sql return code

---

**HLV2421E DUPLICATE PUBLISH OF keyfield (HTX) TO destination IGNORED**

**Explanation:** An Streams rule tried to ship the same update more than once to a particular destination. Only the first instance was published.

**User response:** Correct the SEF rule.

The variable fields of the message text are: keyfield HTX package destination

---

**HLV2422E MACHINE machine (machine) IS USING UNKNOWN PROTOCOL 'requested'**

**Explanation:** A saved ODBC generated destination is requesting an unsupported protocol. The destination is ignored.

**User response:** Contact Software Support.

The variable fields of the message text are: machine ID

machine index requested protocol

---

**HLV2423E MACHIN machine (machine) DOES NOT HAVE A SAVED URL**

**Explanation:** A saved ODBC generated TCPIP destination does not have a saved URL.

**User response:** Have the client process reissue the ENABLETRANSMISSIONS ODBC call. If the problem cannot be resolved, contact Software Support.

The variable fields of the message text are: machine ID machine index

---

**HLV2424E MACHIN machine (machine) INVALID URL 'URL' - detailed**

**Explanation:** A saved ODBC generated TCPIP destination have an invalid saved URL.

**User response:** Have the client process reissue the ENABLETRANSMISSIONS ODBC call. If problem persists contact Software Support.

The variable fields of the message text are: machine ID machine index URL detailed error code

---

**HLV2425E WORKTABLE UPDATE FOR keyfield destination FAILED - ROW NO LONGER EXISTS**

**Explanation:** A deferred status for the publication of a particular item could not be reflected into the worktable because the row describing the item no longer exists.

**User response:** Ignore if the row was deleted while the status was outstanding. If problem persists contact Software Support to obtain additional assistance.

The variable fields of the message text are: keyfield destination machine

---

**HLV2426E MACHIN machine (machine) DOES NOT HAVE A SAVED MQ NAME**

**Explanation:** A saved ODBC generated MQSeries destination does not have a saved target MQ name.

**User response:** Have the client process reissue the ENABLETRANSMISSIONS ODBC call. If problem persists contact Software Support to obtain additional assistance.

The variable fields of the message text are: machine ID machine index

---

**HLV2427E Task <task> not started - not licensed for feature.**

**Explanation:** None.

**User response:** Contact IBM Software Support.

---

**HLV2428E <task> SOURCE TASK PARAMETER MQREPLYQNAME mqreplyqname IGNORED - NOT LICENSED FOR USE**

**Explanation:** None.

**User response:** Contact IBM Software Support.

---

**HLV2429E NON-REPORT MQ MESSAGE RECEIVED ON mqreplyqname (start) - IGNORED**

**Explanation:** An MQSeries message other than a status report was received on the MQREPLYQNAME.

**User response:** Ensure that the MQREPLYQNAME MQSeries Q is not used for anything other than Streams as an MQREPLYQNAME.

The variable fields of the message text are: mqreplyqname start of the text

---

**HLV2430E source MQSERIES MQ FAILURE ON mqreplyqname RC=return REASON=reason - error**

**Explanation:** An unexpected MQSeries failure occurred when attempting to record report messages to the WorkFile.

**User response:** Ensure that the MQREPLYQNAME was properly defined in the MQSeries catalog.

The variable fields of the message text are: source name MQ function mqreplyqname return code reason code error description

---

**HLV2431I CICS Streams exitname exit enabled**

**Explanation:** The Streams CICS Global User Exit has been enabled during CICS PLTPI phase three initialization.

**User response:** None. This message is for informational purposes only.

The variable fields of the message text are: CICS jobname exitname

---

**HLV2432E UNRECOGNIZED MQ REPORT MESSAGE RECEIVED ON mqreplyqname (correlation)**

**Explanation:** An MQSeries report message had an unrecognized correlation ID value.

**User response:** Ensure that the MQREPLYQNAME MQSeries Q is not used for anything other than Streams as an MQREPLYQNAME.

The variable fields of the message text are: mqreplyqname correlation ID

---

**HLV2433E**    **EVENT DEFINITION BUILD FAILED FOR source event data**

**Explanation:** Streams source task initialization failed while attempting to build an event definition from the a data map.

**User response:** Ensure that the data map used in the event definition is correct and matches the layout of the data to be captured. in the case of an IMS/DB map, make sure that a COBOL map that defines the data fields has been successfully merged.

The variable fields of the message text are: source name event name data map name

---

**HLV2434W**    **task task DB2 EVENT TABLE ROWNUM percentage %% FULL**

**Explanation:** The specified publish task EVENT table, No action is required.DTRIGGERTABLE, column name ROWNUM has a value that is nearing the end of its available range. It must be reset before it runs out of available numbers in its range. The range is 1 to 2147483647. The percentage specified in the message shows how much of that range has been used.

**User response:** Quiesce the source task or stop the product and DROP and CREATE the proper No action is required.TRIGGERTABLE.

The variable fields of the message text are: task name task type percentage

---

**HLV2436S**    **CICS error inquiring CICS system information for Streams - EIBRESP: CICS**

**Explanation:** The Streams PLTPI program encountered an error inquiring CICS system information.

**User response:** Probable CICS error. Check the system log for errors.

The variable fields of the message text are: CICS jobname CICS EIB response code

---

**HLV2437S**    **CICS error enabling Streams exit program program for exit exit - EIBRESP: CICS**

**Explanation:** The Streams PLTPI program encountered an error enabling a Streams exit program.

**User response:** Check that the exit program has been correctly defined to CICS.

The variable fields of the message text are: CICS jobname program name exit name CICS EIB response code

---

**HLV2438S**    **CICS error extracting GWA address for Streams program program - EIBRESP: CICS**

**Explanation:** The Streams PLTPI program encountered an error extracting the Global Work Area address for the exit program.

**User response:** Probable CICS error. Check the system log for errors.

The variable fields of the message text are: CICS jobname program name CICS EIB response code

---

**HLV2439I**    **VSAM capture not enabled, already being processed by subsystem Owning**

**Explanation:** VSAM capture is already being processed by another product subsystem. Only one product subsystem is allowed to capture VSAM events.

**User response:** Informational.

The variable fields of the message text are: Owning subsystem name

---

**HLV2440I**    **VSAM event capture enabled**

**Explanation:** VSAM event capture has been enabled by this product subsystem.

**User response:** Informational.

---

**HLV2441E**    **Error in enabling VSAM event capture, RC=Return**

**Explanation:** An error was encountered while enabling VSAM event capture.

**User response:** Contact Software Support.

The variable fields of the message text are: Return code

---

**HLV2443T**    **VSAM caller is in key callers and only key 8 callers are supported, VSAM capture terminated.**

**Explanation:** Only key 8 programs are supported for VSAM capture.

**User response:** Contact Software Support.

The variable fields of the message text are: callers execution key

---

**HLV2444E**    **VSAM capture prefix not set, VSAM capture not enabled**

**Explanation:** A capture prefix (PUBLISHVSAMPREFIX) must be specified to capture VSAM events.

**User response:** Contact Software Support.

---

**HLV2445S CICS error operation Streams exit program program - EIBRESP: CICS**

**Explanation:** The Streams PLT program encountered an error starting or stopping the user exit program.

**User response:** Check that the exit program has been correctly defined to CICS.

The variable fields of the message text are: CICS jobname operation - STARTING|STOPPING program name CICS EIB response code

---

**HLV2446I CICS enabling Streams exit program program for exit exit**

**Explanation:** The Streams PLTPI program is about to enable the exit program.

**User response:** None. This message is for informational purposes only.

The variable fields of the message text are: CICS jobname program NAME exit name

---

**HLV2447I CICS operation Streams exit program program**

**Explanation:** The Streams PLT program is about to start or stop the exit program.

**User response:** None. This message is for informational purposes only.

The variable fields of the message text are: CICS jobname operation - STARTING|STOPPING program NAME

---

**HLV2448I CICS Streams exit program program operation**

**Explanation:** The Streams global user exit program has been started or stopped.

**User response:** None. This message is for informational purposes only.

The variable fields of the message text are: CICS jobname program NAME operation - STARTED|STOPPED

---

**HLV2449I Unable to create capture file name, RC = return, REC = reason, SSIRC = return**

**Explanation:** An error occurred trying to create the VSAM capture file.

**User response:** return and reason codes can be found in msg IDC3009I

The variable fields of the message text are: name of capture file return code from catalog management reason code from catalog management return code from SMS SSI call

---

**HLV2450I Unable to allocate capture file name, RC = error, REC = info**

**Explanation:** An error occurred trying to allocate the VSAM capture file.

**User response:** return and reason codes can found in "Authorized Assembler Services Guide"

The variable fields of the message text are: name of capture file error code from dynamic allocation info code from dynamic allocation

---

**HLV2451I Unable to open capture file name, RC = return**

**Explanation:** An error occurred trying to open the VSAM capture file.

**User response:** return code documented in "Macro Instr for Data Sets"

The variable fields of the message text are: name of capture file return code from open

---

**HLV2452I Capture file name is not SMS managed, but SMS is required for the capture file**

**Explanation:** The capture file is non-sms, but SMS management is required for the capture file.

**User response:** Alter SMS ACS rules as required to SMS manage the data set.

The variable fields of the message text are: name of capture file

---

**HLV2453S Streams work file not allocated - Streams source task terminated**

**Explanation:** The Streams global user exit is about to write an event record to the event file.

**User response:** Check that the file has been correctly allocated and defined to CICS.

The variable fields of the message text are: Streams CICS Source name

---

**HLV2454E task task TASK NOT STARTED - MQSERIES NOT ACTIVE**

**Explanation:** The specified publish task could not be started because MQSeries is not active.

**User response:** Ensure that MQSeries is active on the system and that the Streams initialization exec sets the MQACTIVE parameter to YES.

The variable fields of the message text are: task name task type

---

---

**HLV2455E** task task type FILE, NAME name  
VERSION MISMATCH, EXPECTED  
expected, FOUND found

**Explanation:** The specified publish task could not be started because the file contained data with a version number that is not supported by this release.

**User response:** Ensure that the proper EVENT or WORK or DB2 file is used with Streams. Most likely, a different version was used to create the indicated file.

The variable fields of the message text are: task name  
task type type of file name of file expected version  
number found version number

---

**HLV2456W** task task WORK FILE, DDNAME dd  
percentage %% FULL

**Explanation:** The specified publish task WORK file has records that use the specified percentage of available space. It is possible that remaining space is lower than indicated by this message.

**User response:** Ensure that the WORK file has sufficient free space to continue normal operation.

The variable fields of the message text are: task name  
task type dd name of WORK file percentage

---

**HLV2457E** task task WORK FILE, DSNAME  
dataset COMPLETELY FULL

**Explanation:** The specified publish task WORK file has been completely filled up with records, and VSAM has refused to write additional records. The Publish Source task has stopped.

**User response:** Make more space available to the WORK file. If additional extents may be allocated to the WORK file, make more space available on the volume(s) the WORK file is on.

The variable fields of the message text are: task name  
task type dataset name of file

---

**HLV2458E** SOURCE NAME task NOT ACTIVE OR  
NOT FOUND

**Explanation:** No active publish source task with the specified name has been found. The requested action was not completed.

**User response:** Enter an active source task name in the request.

The variable fields of the message text are: task name

---

**HLV2459E** UNICODE CONVERSION for table  
FROM source TO target NOT  
SUPPORTED

**Explanation:** Unicode conversion services on this system are not configured to support the data

conversion required by a Streams definition.

**User response:** Reconfigure z/OS Unicode conversions services to support codepage conversions between the listed CCSIDs.

The variable fields of the message text are: table name  
source CCSID target CCSID

---

**HLV2460E** THE ZEVRAW SPECIFICATION ON  
EVENT DEFINITION source event  
REQUIRES THE RAW DATA OPTION

**Explanation:** The event definition requested ZEVRAW formatting. This require that either the raw data option be selected, or a rule is specified on the source or event definition.

**User response:** Edit the source or the event definition to specify a rule for event routing, or select the raw data option on the event definition.

The variable fields of the message text are: source name  
event definition name

---

**HLV2461S** Error loading Streams program -  
program

**Explanation:** The Streams PLT program encountered an error trying to load the named program.

**User response:** Check that the program has been correctly defined to CICS. Sample CICS definitions are distributed in the CNTL library CICSUSD member.

The variable fields of the message text are: program  
name

---

**HLV2462E** EVENT DATA TOO LONG FOR source  
event data

**Explanation:** Streams source task initialization failed while attempting to build an event definition from the a data map.

**User response:** Ensure that the data map used in the event definition is correct and matches the layout of the data to be captured. in the case of an IMS/DB map, make sure that a COBOL map that defines the data fields has been successfully merged.

The variable fields of the message text are: source name  
event name data map name

---

**HLV2463E** DATA CAPTURE CHANGES NOT  
DEFINED FOR event table table

**Explanation:** Streams source task initialization failed while attempting to build an event definition for a DB2 table.

**User response:** Ensure that the table referred by the event definition has the DATACAPTURE attribute on.



The variable fields of the message text are: event name  
table qualifier table name

---

**HLV2464E    MONITOR2 and TRACE Authority are required for user ID <userid>.**

**Explanation:** Streams DB2 IFI source task user ID requires DB2 SYSOPR authority to issue a START MONITOR TRACE command.

**User response:** Ensure that the user ID specified in the DB2 IFI source definition has been granted SYSOPR authority.

The variable fields of the message text are: usid

---

**HLV2465I    Streams native VSAM capture not enabled**

**Explanation:** VSAM event capture has not been enabled by this product subsystem.

**User response:** Informational.

---

**HLV2466W    task task WORK FILE, DDNAME dd EXTENDED, NOW percentage %% FULL**

**Explanation:** The specified publish task WORK file has records that use the specified percentage of available space. The percentage used has decreased, indicating that the dataset has been extended.

**User response:** Ensure that the volume containing the WORK file has sufficient free space to allow any additional extension of the WORK file needed to continue normal operation.

The variable fields of the message text are: task name  
task type dd name of WORK file percentage

---

**HLV2467E    MORE THAN ONE EVENT TABLE CANNOT BE ACTIVE FOR SOURCEtask. ALL ACTIVE EVENT TABLES FOLLOW.**

**Explanation:** A Streams source task has more than one Event Table marked active. Only one Event Table may be marked active at any time. A list of active Event Tables follows.

**User response:** Ensure that only one Event Table is marked active.

The variable fields of the message text are: task name

---

**HLV2468E    Streams source task, event table Event in map Map marked active.**

**Explanation:** The specified publish source task has this Event Table marked active. Only one Event Table may be marked active at any one time.

**User response:** Ensure that only one Event Table is marked active.

The variable fields of the message text are: task name  
Event Table name Map name containing the table

---

**HLV2469E    Streams source task, event table Event in map Map, cannot find map Map.**

**Explanation:** The specified Event Table for this source references a map that cannot be found, or is not active, or not enabled for event publishing.

**User response:** Ensure that the Event Table references active maps, and that each is enabled for event publishing.

The variable fields of the message text are: task name  
Event Table name Map name containing the table Map name which could not be found

---

**HLV2470S    Streams IMS source task Streams not activated - RRS not enabled**

**Explanation:** The Streams global IMS source task could not be activated because RRS was not enabled for this Streams server.

**User response:** Change the server initialization parameters to specify RRS(YES) and restart the server.

The variable fields of the message text are: Streams IMS  
Source name

---

**HLV2471S    Streams IMS source task Streams not activated - EVENTQ not defined**

**Explanation:** The Streams IMS source task could not be activated because the required MQSeries event repository was not correctly defined.

**User response:** Correct the DEFINE SEM\_ENDPOINT specification for ZEV.EVENTQ in the server initialization parameters and restart the server.

The variable fields of the message text are: Streams IMS  
Source name

---

**HLV2472I    Streams Capture successful/failed return reason**

**Explanation:** Generic debugging message issued by Streams capture processes. The presence of the SDPHDEBUG load module in the capture process load library will cause these debug messages to be issued. To create SDPHDEBUG, edit member ZEVDEBUG from the product sample library to set desired debug trace options and assemble and link as SDPHDEBUG.

**User response:** Remove member SDPHDEBUG to prevent these messages.

The variable fields of the message text are: Streams  
capture routine name Capture operation

## HLV2473I • HLV2480I

successful/failed return code if failed reason code if failed

---

### HLV2473I Streams text1 text2 text3 text4

**Explanation:** Generic debugging message issued by Streams capture process initialization. The presence of the SDPHDBUG load module in the capture process load library will cause these debug messages to be issued. To create SDPHDBUG, edit member ZEVDBUG from the product sample library to set desired debug trace options and assemble and link as SDPHDBUG.

**User response:** Remove member SDPHDBUG to prevent these messages.

The variable fields of the message text are: Streams capture routine name text1 text2 text3 text4

---

### HLV2474I Streams text1 text2 text3 text4

**Explanation:** Generic debugging message issued by Streams event capture. The presence of the SDPHDBUG load module in the capture process load library will cause these debug messages to be issued. To create SDPHDBUG, edit member ZEVDBUG from the product sample library to set desired debug trace options and assemble and link as SDPHDBUG.

**User response:** Remove member SDPHDBUG to prevent these messages.

The variable fields of the message text are: Streams capture routine name text1 text2 text3 text4

---

### HLV2475I Streams Blocksize:maximum Blocklen:length Blockid:blockid

**Explanation:** Logstream debugging message issued by Streams event capture. The presence of the SDPHDBUG load module in the capture process load library will cause these debug messages to be issued. To create SDPHDBUG, edit member ZEVDBUG from the product sample library to set desired debug trace options and assemble and link as SDPHDBUG.

**User response:** Remove member SDPHDBUG to prevent these messages.

The variable fields of the message text are: Streams capture routine name maximum blocksize of capture logstream length of current block blockid of current block

---

### HLV2476I Streams Streamtoken:%1

**Explanation:** Logstream debugging message issued by Streams event capture. The presence of the SDPHDBUG load module in the capture process load library will cause these debug messages to be issued. To create SDPHDBUG, edit member ZEVDBUG from the product sample library to set desired debug trace options and assemble and link as SDPHDBUG.

**User response:** Remove member SDPHDBUG to prevent these messages.

The variable fields of the message text are: Streams capture routine name Logstream token

---

### HLV2477I Streams text1 text2 text3 text4

**Explanation:** Generic debugging message issued by Streams event capture. The presence of the SDPHDBUG load module in the capture process load library will cause these debug messages to be issued. To create SDPHDBUG, edit member ZEVDBUG from the product sample library to set desired debug trace options and assemble and link as SDPHDBUG.

**User response:** Remove member SDPHDBUG to prevent these messages.

The variable fields of the message text are: Streams capture routine name text1 text2 text3 text4

---

### HLV2478E task task TASK NOT STARTED - STRNO STRNO TOO SMALL

**Explanation:** The specified publish task could not be started because there were not enough VSAM strings allocated at startup.

**User response:** Ensure that the PUBLISHSTRNO value is one larger than the number of Streams SOURCE tasks.

The variable fields of the message text are: task name task type STRNO value

---

### HLV2479S CICS ERROR OBTAINING CONTAINER DATA FOR CICS - EIBRESP: CICS

**Explanation:** The Streams CICS event processing adapter encountered an error getting data from a channel container.

**User response:** Probable CICS error. Check the system log for errors.

The variable fields of the message text are: CICS jobname CICS container name CICS EIB response code

---

### HLV2480I Streams server version Server does not match DB2 function version Function

**Explanation:** The Streams server that has been configured to publish DB2 events does not match the version of the Streams DB2 wake\_publish function.

**User response:** Check that the correct version of the wake publish function load module (SDD2PCRUI) is in the DB2 RUNLIB, and check that the Streams server is at the same level.

The variable fields of the message text are: Server version Function version

---

**HLV2481I CICS Streams version V.R.L High High High**

**Explanation:** Streams CICS load library maintenance level information.

**User response:** None.

The variable fields of the message text are: CICS jobname V.R.L (e.g. 05.01.00) High SVFX number High Date High Time

---

**HLV2482T RENDEZVOUS CALL FAILED - RC=rc1 REAS=rscd - ENCLAVE RC=rc2 FEEDBACK=(fc1 fc2 fc3)**

**Explanation:** An attempt to send a message to a Tibco Rendezvous destination failed.

**User response:** Check for other messages indicating the cause of the failure, and resolve the problem, if possible.

The variable fields of the message text are: rc1 Rendezvous interface return code rscd Rendezvous interface reason code rc2 LE/370 enclave manager return code fc1 LE/370 enclave termination feedback codes fc2 LE/370 enclave termination feedback codes fc3 LE/370 enclave termination feedback codes

---

**HLV2483T Streams Streams parameter not specified**

**Explanation:** The file dataset name prefix was not specified. The file cannot be allocated.

**User response:** Check that the parameter is correctly specified in the server initialization exec (xxxxIN00)

The variable fields of the message text are: Streams parameter

---

**HLV2484T Capture Streams Name/Token Operation Result for Token**

**Explanation:** The Streams capture process has attempted a name/token operation.

**User response:** None

The variable fields of the message text are: Capture process jobname Operation (CREATE/RETRIEVE/DELETE) Result (SUCCEEDED/FAILED) Token name

---

**HLV2485I Streams DB2 FUNCTION VERSION Exit Exit Exit**

**Explanation:** Streams DB2 exit maintenance level information

**User response:** None.

The variable fields of the message text are: Exit version Exit assemble date Exit assemble time

---

**HLV2486I Streams Streams improper version Version found Version**

**Explanation:** Streams found a record with an improper version in it.

**User response:** The improper record will be deleted.

The variable fields of the message text are: Streams source name Version of Streams Version of record found

---

**HLV2487T PUBLISH LOGON FAILED - msg**

**Explanation:** The PUBLISH LOGON failed for the following reason.

**User response:** The Streams routine is aborted. Ensure that the userid specified is correct.

The variable fields of the message text are: msg error message text from RACF (SAF)

---

**HLV2488R REPLY 'GO' TO CONTINUE, OR 'CANCEL' TO TERMINATE Streams Initialization**

**Explanation:** This message is issued when there was a failed attempt to load the IMS data capture user exit specified with the PUBLISHIMSUEX1 parameter. Check that the correct exit program name has been specified and that the program has been copied to the Streams server load library. If more than two minutes expire while waiting for your reply or three invalid replies are made, the default action of CANCEL will be taken.

**User response:** Reply GO to continue Streams server initialization Reply CANCEL to terminate Streams server initialization

---

**HLV2489E Invalid Streams initialization reply: 'reply'**

**Explanation:** An invalid reply was specified to the Streams initialization console message. The message causing the error will be reissued so that you can correctly reply. After three invalid replies for the same message, default action will be taken. For a description of the default action, see the explanation of the original message.

**User response:** Determine the proper reply from the text of the message, and reply correctly.

The variable fields of the message text are: reply reply text

---

**HLV2490E Streams reply wait exceeded 2 minutes. Default used**

**Explanation:** The product waited over two minutes for a reply to the Streams initialization message. Since no response was during that time, default action was taken.

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**User response:** None. If a reply was desired, you will need to speed your response to the message.

---

### HLV2491E 3 Invalid Streams replies. Default taken

**Explanation:** Three invalid replies were made to a Streams initialization message. Since no correct response was received, default action was taken.

**User response:** None. Reply as required next time.

---

### HLV2492I Streams not active on this server

**Explanation:** An attempt was made to access the Streams control task and it was not active.

**User response:** If the server is intended as a Streams server, check the IN00 initialization parameters for the server.

---

### HLV2493E Streams TASK name UNABLE TO oper LOGSTREAM name, RC=rc, RSN=rsn

**Explanation:** A Streams task attempted an operation on an MVS logstream and it was not successful.

**User response:** Determine the problem from the logstream function return code and reason code, and correct the error. These codes are documented in SYS1.MACLIB(IXGCON) and in z/OS MVS Assembler Services Reference in IXGxxx macros return codes.

The variable fields of the message text are: name The task name oper The operation performed name The logstream name rc The logstream function return code rsn The logstream function reason code

---

### HLV2494W INVALID RECORD FOUND IN name LOGSTREAM name, FOUND STATUS status, TO dest. KEY key

**Explanation:** A Streams task found a record in its MVS logstream with an invalid status and destination name. The record is discarded.

**User response:** Check other Logstream activity to be sure data has not been corrupted with data from some other program.

The variable fields of the message text are: name The task name name The logstream name status The status code found in the record dest. The destination name found in the record key The timestamp found in the record

---

### HLV2495W TASK name LOG name MISSING REPLY, STATUS status, DEST. dest., KEY key

**Explanation:** A Streams task received an MQSeries confirmation that did not match the next record in the task Logstream. The record is discarded.

**User response:** Check other MQSeries activity to be

sure messages or responses have not been inadvertently discarded.

The variable fields of the message text are: name The task name name The logstream name status The status code found in the record dest. The destination name found in the record key The timestamp found in the record

---

### HLV2496W TASK name LOG name RECORD WITH STATUS status, DEST. dest., KEY key, CONFIRMATION ARRIVED, RECORD MISSING

**Explanation:** A Streams task received an MQSeries confirmation that did not match the next record in the task Logstream. The confirmation is discarded.

**User response:** Check other Logstream activity to be sure messages have not been inadvertently discarded.

The variable fields of the message text are: name The task name name The logstream name status The status code that should have been found dest. The destination name that should have been found key The timestamp that should have been found

---

### HLV2497W Logstream operation text

**Explanation:** A Logstream operation received a return code. This message tries to explain the return code and reason codes.

**User response:** Check other Logstream messages to determine the problem.

The variable fields of the message text are: text The explanation of the return/reason codes

---

### HLV2498T Streams does not support Tibco Rendezvous destinations

**Explanation:** Tibco Rendezvous destinations are not supported.

**User response:** Delete Tibco Rendezvous destinations.

---

### HLV2499T Streams does not support Oracle destinations

**Explanation:** Oracle destinations are not supported.

**User response:** Delete Oracle destinations.

---

### HLV2500T source COPYWORK time time

**Explanation:** Streams trace record. An Event has been copied from the trigger table to the Work file.

**User response:** None

The variable fields of the message text are: source The Source name COPYWORK time The time of the update time The time the record was copied

---

**HLV2501T source RUNRULES**

**Explanation:** Streams trace record. The Event processor is running SEF rules for records in the Work file.

**User response:** None

The variable fields of the message text are: source The Source name RUNRULES

---

**HLV2502T source DYNDEST time id idx**

**Explanation:** Streams trace record. An Event is being processed for a dynamic JCA 1.5 destination. The identifiers for the JCS 1.5 Adapter requestor are traced.

**User response:** None

The variable fields of the message text are: source The Source name DYNDEST time The KEYFIELD of the update id The Machine ID idx The Machine index number

---

**HLV2503T dest SENDPLUP-RESTART**

**Explanation:** Streams trace record. Processing for an Event source is being restarted to a destination.

**User response:** None

The variable fields of the message text are: dest The Destination name SENDPLUP-RESTART

---

**HLV2504T source MQMARK**

**Explanation:** Streams trace record. MQSeries processing for an Event source is marking the current status of update records.

**User response:** None

The variable fields of the message text are: source The Source name MQMARK

---

**HLV2505T source SENDITEM dest time**

**Explanation:** Streams trace record. An Event is being queued for sending to a destination.

**User response:** None

The variable fields of the message text are: source The Source name SENDITEM dest The Destination name time The KEYFIELD of the update

---

**HLV2506T source DOPRUNE time count**

**Explanation:** Streams trace record. Old Publish records are being pruned from the Workfile.

**User response:** None

The variable fields of the message text are: source The Source name DOPRUNE time The time of the pruning operation count The number of records pruned

---

---

**HLV2507T source WAITABIT caller time SECONDS**

**Explanation:** Streams trace record. The Streams task is waiting for more work.

**User response:** None

The variable fields of the message text are: source The Source name WAITABIT caller The subroutine that called the wait routine time The number of seconds to wait SECONDS

---

**HLV2508T source PREPROC dest time urid**

**Explanation:** Streams trace record. The Streams task is preprocessing an update for transmission to a destination.

**User response:** None

The variable fields of the message text are: source The Source name PREPROC dest The Destination name time The KEYFIELD of the update urid The URID of the update, if present

---

**HLV2509T source PREPROC \*\*SKIP\*\* time**

**Explanation:** Streams trace record. The Streams task preprocessor has determined that an update should NOT be sent to any destination.

**User response:** None

The variable fields of the message text are: source The Source name PREPROC \*\*SKIP\*\* No Destination selected time The KEYFIELD of the update

---

**HLV2510T source POSTPROC dest time rc urid**

**Explanation:** Streams trace record. The Streams task is doing postprocessing for an update.

**User response:** None

The variable fields of the message text are: source The Source name POSTPROC dest The Destination name time The KEYFIELD of the update rc The status code of the update urid The URID of the update, if present

---

**HLV2520T ENABLETRANSMISSIONS dest name**

**Explanation:** Streams trace record. The Streams is enabling transmissions to a dynamic destination for the JCA 1.5 interface.

**User response:** None

The variable fields of the message text are: ENABLETRANSMISSIONS dest The Destination name name The Machine name

---

---

**HLV2521T    DISABLETRANSMISSIONS dest name**

**Explanation:** Streams trace record. The Streams is disabling transmissions to a dynamic destination for the JCA 1.5 interface.

**User response:** None

The variable fields of the message text are: DISABLETRANSMISSIONS dest The Destination name name The Machine name

---

**HLV2530T    ADDCOLUMN name value**

**Explanation:** Streams trace record. The Streams JCA 1.5 Adapter interface is adding a column of Publish data.

**User response:** None

The variable fields of the message text are: ADDCOLUMN name The Column name value The Column value

---

**HLV2531T    ADDTOPIC name**

**Explanation:** Streams trace record. The Streams JCA 1.5 Adapter interface is adding a topic for MQ Broker processing.

**User response:** None

The variable fields of the message text are: ADDTOPIC name The Topic name

---

**HLV2540T    source capture EVENT CAPTURE type operation mapname**

**Explanation:** Streams trace record. The Streams capture process has captured an event. Data associated with the event has been saved in a dataspace owned by the Streams server.

**User response:** None

The variable fields of the message text are: source The source task name capture The Capture process name type The The data type operation The The change type mapname The event map name

---

**HLV2541T    source capture EVENT BUILD type operation mapname**

**Explanation:** Streams trace record. The Streams capture process has built an event record in a dataspace owned by the Streams server.

**User response:** None

The variable fields of the message text are: source The source task name capture The Capture process name type The data type operation The change type mapname The event map name

---

**HLV2542T    source capture EVENT POST type operation mapname**

**Explanation:** Streams trace record. The Streams capture process has posted the source task in the Streams server.

**User response:** None

The variable fields of the message text are: source The source task name capture The Capture process name type The data type operation The change type mapname The event map name

---

**HLV2543T    source capture EVENT BACKOUT type operation mapname**

**Explanation:** Streams trace record. The Streams capture process has backed out the data saved for an event. The event is discarded.

**User response:** None

The variable fields of the message text are: source The source task name capture The Capture process name type The data type operation The change type mapname The event map name

---

**HLV2544W    source CATALOG SEARCH ERROR, RC=rc REASON=reason ID=mod TYPE=var1, ENTRY=var2**

**Explanation:** Streams is searching the catalog for Archive data sets using the CSI Catalog Search Interface, and encountered an error. The entry is skipped.

**User response:** Examine the VSAM catalog for errors using the diagnostic information provided.

The variable fields of the message text are: source The source task name rc The return code reason The reason code mod The IBM Module ID var1 The entry type code var2 The entry name

---

**HLV2545E    Invalid Streams service request received**

**Explanation:** Streams main task received an invalid service request.

**User response:** Contact Software Support.

---

**HLV2600T    ABEND abcd RS=rscd OCCURRED AT var1+var1. FUNCTION CODE=var1.**

**Explanation:** An ABEND occurred while processing a Security Optimization Manager request.

**User response:** The routine signals an error to the caller and processing continues, when possible.

The variable fields of the message text are: abcd abend completion code rscd abend reason code var1 abending module name var1 abending module offset var1 function code

---

**HLV2606E Security optimization processing is terminated**

**Explanation:** Security Optimization processing was terminated due to an internal processing error. The product continues to operate without the Security Optimizer.

**User response:** If you want to execute with the Security Optimizer, you must stop and restart the product.

---

**HLV2607I Security server ENF signal 71 not available**

**Explanation:** A request by Security Optimization to listen for event notification facility signal 71 (RACF user profile changes) failed. The product continues to operate without notifications.

**User response:** Examine any other messages accompanying this one. If the security server you are using does not support ENF signal 71, check with the security server product vendor for more information. Otherwise, contact Software Support for assistance with this problem.

---

**HLV2608W SOM RACF new password exit is not installed**

**Explanation:** Security Optimization Management (SOM) initialization was unable to verify that the product's RACF new password exit, S\_ICHPWX, is installed as part of the ICHPWX01 load module.

**User response:** The product continues to run. This exit detects password changes that are made during logon to applications other than the product. Users will still be able to use the old password in the product until the SOM cache entry expires. Password changes made during the product logon are recognized without this exit, and SOM signals all other product servers that this user's password has changed.

---

**HLV2620I Security optimizer entry for user ID <userid> was expired.**

**Explanation:** The request to expire the entry for a user ID in the security optimization cache was successful.

**User response:** None. This message is for informational purposes only.

The variable fields of the message text are: userid userid

---

**HLV2621I Security optimization is not active**

**Explanation:** A request to expire a Security Optimization entry could not be processed because Security Optimization is not active.

**User response:** None. This message is for informational purposes only.

---

---

**HLV2622I User ID <userid> was not located by the security optimizer.**

**Explanation:** A request to expire a security optimizer entry could not be processed because the user ID was not located.

**User response:** No action is required.

The variable fields of the message text are: userid userid

---

**HLV2623I Security optimizer processing abended**

**Explanation:** The Security Optimizer Manager ABENDED while processing the expire request.

**User response:** Check if any other error messages were generated along with the error message above. If the combined error messages are sufficient to explain the problem, take whatever corrective action is appropriate. Otherwise, contact Software Support with this problem.

---

**HLV3000T recovery LEVEL level errdesc=abcd REASON CODE=reason TIME=t2 SEQ=sqno CPU=cpu ASID=asid**

**Explanation:** The product detected an abend error. The current message provides some information about the abend. This message, along with other messages, should provide a detailed description of the current abend error.

**User response:** Check if any other error messages were generated along with the error message above. If the combined error messages are sufficient to explain the problem, take whatever corrective action is appropriate. Otherwise, contact Software Support for assistance with this problem.

The variable fields of the message text are: recovery 'ESTAE' or 'FRR' or 'ARR' level level number errdesc error description abcd abend code reason reason code or 'UNKNOWN' sqno sequence number cpu CPUID number asid address space identifier

---

**HLV3001S func errdesc, ABEND abcd AT mod+off**

**Explanation:** The product ESTAE routine detected an abend in a routine called by it. The message describes the abend error. The product ESTAE routine will continue to attempt recovery from the original error.

**User response:** Check if any other error messages were generated along with the error message above. If the combined error messages are sufficient to explain the problem, take whatever corrective action is appropriate. Otherwise, contact Software Support with this problem.

The variable fields of the message text are: func current function errdesc error description abcd abend code mod module name off module offset

---

---

**HLV3002T Data at PSW PSWData**

**Explanation:** The product detected an abend error. The current message provides some information about the abend. This message, along with other messages, should provide a detailed description of the current abend error.

**User response:** Check if any other error messages were generated along with the error message above. If the combined error messages are sufficient to explain the problem, take whatever corrective action is appropriate. If the problem cannot be resolved, contact Software Support.

The variable fields of the message text are: PSWData PSW address and data

---

**HLV3005S ESTAE level level ESTAE func error RC=rc**

**Explanation:** The product ESTAE routine tried to protect itself by issuing an ESTAE macro. The ESTAE failed with a non-zero return code.

**User response:** The ESTAE routine will continue execution without its own ESTAE. Check if any other error messages were generated along with the error message above. If the combined error messages are sufficient to explain the problem, take whatever corrective action is appropriate. Otherwise, contact Software Support with this problem.

The variable fields of the message text are: level level number func current function rc return code

---

**HLV3006T PSW at time of error fpsw ILC ilc INTC intc**

**Explanation:** The product ESTAE routine detected an abend error. There is no product specific recovery for this error. The ESTAE routine tries to document the abend error by displaying the failing PSW. This message is part of the mini-dump used to describe the current abend error.

**User response:** Check if any other error messages (other than the mini-dump) were generated along with the error message above. If the combined error messages are sufficient to explain the problem, take whatever corrective action is appropriate. Otherwise, contact Software Support with this problem.

The variable fields of the message text are: fpsw formatted z/Architecture® PSW ilc instruction length code intc interrupt code

---

**HLV3007T Current routine name=mod address=addr offset=off**

**Explanation:** The product ESTAE routine detected an abend error. There is no product specific recovery for this error. The ESTAE routine tries to document the abend error by displaying the failing PSW and

registers. This message is part of the mini-dump used to describe the current abend error.

**User response:** Check if any other error messages (other than the mini-dump) were generated along with the error message above. If the combined error messages are sufficient to explain the problem, take whatever corrective action is appropriate. Otherwise, contact Software Support for assistance with this problem.

The variable fields of the message text are: mod module name addr address off module offset

---

**HLV3008T var1 regs**

**Explanation:** The product ESTAE routine detected an abend error. There is no product specific recovery for this error. The ESTAE routine tries to document the abend error by displaying the failing PSW and registers. This message is part of the mini-dump used to describe the current abend error.

**User response:** Check if any other error messages (other than the mini-dump) were generated along with the error message above. If the combined error messages are sufficient to explain the problem, take whatever corrective action is appropriate. If the problem cannot be resolved, contact Software Support.

The variable fields of the message text are: var1 'AR/GR' or 'GR' regs register contents

---

**HLV3009T mod ctype mod+off**

**Explanation:** The product ESTAE routine detected an abend error. There is no product specific recovery for this error. The ESTAE routine tries to document the abend error by displaying the calling module sequence of the current routine. This message is part of the mini-dump used to describe the current abend error.

**User response:** Check if any other error messages (other than the mini-dump) were generated along with the error message above. If the combined error messages are sufficient to explain the problem, take whatever corrective action is appropriate. Otherwise, contact Software Support for assistance with this problem.

The variable fields of the message text are: mod module name ctype call type mod module name off module offset

---

**HLV3010T Too many entries**

**Explanation:** The product ESTAE routine detected an abend error. While producing the module call trace (message 3009T), the loop limit was reached. The product ceases to issue calling module trace messages and proceeds to other processing.

**User response:** Check if any other error messages (other than the mini-dump) were generated along with



the error message above. If the combined error messages are sufficient to explain the problem, take whatever corrective action is appropriate. If the problem cannot be resolved, contact Software Support.

---

**HLV3020S    INVALID STRING ADDRESS straddr,  
DETECTED ad**

**Explanation:** A request to the tokenization routine passed an invalid string address. The address in the parameter list was less than or equal to zero.

**User response:** Check if any other error messages were generated along with the error message above. If the combined error messages are sufficient to explain the problem, take whatever corrective action is appropriate. Otherwise, contact your local Software Support group for assistance with this problem.

The variable fields of the message text are: straddr invalid string address passed to routine

---

**HLV3021S    INVALID STRING LENGTH num,  
DETECTED ad**

**Explanation:** A request to the tokenization routine passed a string length that exceeds the maximum string length allowed.

**User response:** Check if any other error messages were generated along with the error message above. If the combined error messages are sufficient to explain the problem, take whatever corrective action is appropriate. Otherwise, contact your local product systems programming group for help with this problem.

The variable fields of the message text are: num string length maximum value

---

**HLV3022S    TOKENIZATION LOGIC ERROR,  
DETECTED ad**

**Explanation:** The tokenization routine detected a logic error during processing of the current request.

**User response:** Check if any other error messages were generated along with the error message above. If the combined error messages are sufficient to explain the problem, take whatever corrective action is appropriate. Otherwise, contact your local product systems programming group for help with this problem.

---

**HLV3030E    servrtn errdesc FAILED, RC=rc,  
DETECTED AT ad**

**Explanation:** Some type of error occurred in one of the product common subroutines. See the actual text of the message for an explanation. The error was probably caused by a failure in an operating system service requested by the subroutine.

**User response:** Check if any other error messages were generated along with the error message above. If the combined error messages are sufficient to explain the problem, take whatever corrective action is appropriate. Otherwise, contact Software Support with this problem.

The variable fields of the message text are: servrtn service routine errdesc error description rc return code

---

**HLV3031E    ABEND abcd IN servrtn, REASON  
CODE=rscd, CALLED BY cs**

**Explanation:** An abend was detected in one of the product common subroutines. The abend code and service routine are described in the message text. The error was probably caused by a failure in an operating system service requested by the subroutine.

**User response:** Check if any other error messages were generated along with the error message above. If the combined error messages are sufficient to explain the problem, take whatever corrective action is appropriate. Otherwise, contact Software Support with this problem.

The variable fields of the message text are: abcd abend code servrtn service routine rscd reason code

---

**HLV3032T    INVALID INPUT COMMUNICATION  
BUFFER PREFIX READ - blksize**

**Explanation:** An invalid buffer prefix was read in from a client application. The buffer prefix was either negative or exceeded the maximum input buffer size.

**User response:** The connection to the client system is terminated. The client application will probably report an error. Check for any client system error messages. If the failure continues, contact Software Support.

The variable fields of the message text are: blksize block size

---

**HLV3033T    DATASPACE CREATED, NAME=dspc,  
CALLED BY cs**

**Explanation:** An MVS dataspace was created for temporary storage of data. The space name is displayed.

**User response:** None. This message is for informational purposes only.

The variable fields of the message text are: dspc dataspace name

---

**HLV3034T    DATASPACE DELETED, NAME=dspc,  
CALLED BY cs**

**Explanation:** An MVS dataspace was deleted. The space token is displayed.

**User response:** None. This message is for

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informational purposes only.

The variable fields of the message text are: dspc  
dataspace name

---

**HLV3035T DATASPACE EXTENDED, NAME=dspc,  
CALLED BY cs**

**Explanation:** An MVS dataspace was extended. The storage in the dataspace was used up and more was allocated to it. The space token is displayed.

**User response:** None. This message is for informational purposes only.

The variable fields of the message text are: dspc  
dataspace name

---

**HLV3036T DATASPACE RELEASED, NAME=dspc,  
CALLED BY cs**

**Explanation:** Storage in an MVS dataspace was released. The storage is no longer required. The space token is displayed.

**User response:** None. This message is for informational purposes only.

The variable fields of the message text are: dspc  
dataspace name

---

**HLV3037T DATASPACE func FAILED,  
NAME=dspc, RETURN CODE=rc,  
REASON CODE = rscd,CALLED BY cs**

**Explanation:** A dataspace function failed. The return code and reason code are displayed. The space token is displayed.

**User response:** Installation limits may have caused the failure. Examine the limits set by the installation's IEFUSI exit to determine if they caused the failure. If the problem cannot be resolved, contact Software Support.

The variable fields of the message text are: func  
dataspace function name dspc dataspace name rc  
return code rscd reason code

---

**HLV3038T ALET CREATED, NAME=dspc,  
ALET=alet, CALLED BY cs**

**Explanation:** An ALET was created for accessing a dataspace. The space token is displayed. The resulting ALET is displayed.

**User response:** None. This message is for informational purposes only.

The variable fields of the message text are: dspc  
dataspace name alet ALET

---

**HLV3039T ALET DELETED, NAME=dspc,  
ALET=alet, CALLED BY cs**

**Explanation:** An ALET for accessing a dataspace was deleted. The space token is displayed. The deleted ALET is displayed.

**User response:** None. This message is for informational purposes only.

The variable fields of the message text are: dspc  
dataspace name alet ALET

---

**HLV3040T ALESERV func FAILED, NAME=dspc,  
RETURN CODE=rc, REASON CODE =  
rscd,CALLED BY cs**

**Explanation:** An ALESERV function failed. The return code and reason code are displayed. The space token is displayed.

**User response:** Installation limits may have caused the failure. Examine the limits set by the installation's IEFUSI exit to determine if they caused the failure. If the problem cannot be resolved, contact Software Support.

The variable fields of the message text are: func  
ALESERV function name dspc dataspace name rc  
return code rscd reason code

---

**HLV3041T ABEND abcd IN servrtn, REASON  
CODE=rscd, NAME=dspc, ALET=alet,  
CALLED BY cs**

**Explanation:** An abend was detected while manipulating a dataspace. The abend code and service routine are described in the message text. The error was probably caused by a failure in an operating system service requested by the subroutine. The space token is displayed. The ALET, if any, is displayed.

**User response:** Check if any other error messages were generated along with the error message above. If the combined error messages are sufficient to explain the problem, take whatever corrective action is appropriate. If the problem cannot be resolved, contact Software Support. In certain recovery situations, this message may be ignored.

The variable fields of the message text are: abcd abend  
code servrtn service routine rscd reason code dspc  
dataspace name alet ALET

---

**HLV3042S Module 'mod' is not AMODE(31)**

**Explanation:** A module that had to load in AMODE(31) loaded with AMODE(24) or AMODE(64) instead. This is a serious error. Many modules, including RPCs and user record exits, are only allowed to be AMODE(31).

**User response:** Relink the module (other changes may

be needed) using AMODE(31). Run the application again.

The variable fields of the message text are: mod module name

---

**HLV3043S**    **MODULE 'mod' LOAD FAILED,**  
**ABEND=abcd, REASON CODE=rscd**

**Explanation:** A module could not be loaded. The load failed with an abend error.

**User response:** Check the error messages and the reason code associated with this problem. There may be one or more error messages referring to the current problem. If possible, fix the problem identified by the error messages, and restart the product. If the problem cannot be resolved, contact Software Support.

The variable fields of the message text are: mod module name abcd abend code rscd reason code

---

**HLV3044S**    **MODULE 'mod' DELETE FAILED,**  
**RETURN CODE=rc**

**Explanation:** A module could not be deleted. The delete failed with a non-zero return code.

**User response:** Check the error messages and the reason code associated with this problem. There may be one or more error messages referring to the current problem. If possible, fix the problem identified by the error messages, and restart the product. If the problem cannot be resolved, contact Software Support.

The variable fields of the message text are: mod module name rc return code

---

**HLV3060S**    **INVALID PC FUNCTION CODE func,**  
**DETECTED AT ad**

**Explanation:** The product space switch PC routine has been invoked with an invalid function code. This may be caused by specifying an incorrect product subsystem ID on a request when there are multiple copies of the product in the system at different release levels.

**User response:** Verify that the request that resulted in the product space switch PC routine being invoked is being issued to the correct product subsystem. If the problem cannot be resolved, contact Software Support.

The variable fields of the message text are: func function code

---

**HLV3061E**    **service ABEND abcd AT mod+off**

**Explanation:** An abend failure occurred in the product space switch PC routine. The error message provides the abend code and abend location. This failure was probably caused by a programming error in the calling routine or in the space switch PC routine. This failure can also be caused by product installation and maintenance errors.

**User response:** Check if any other error messages were generated along with the error message above. If the combined error messages are sufficient to explain the problem, take whatever corrective action is appropriate. Otherwise, contact Software Support to obtain additional assistance.

The variable fields of the message text are: service current operation (e.g. READ/WRITE etc.) abcd abend code mod module name off module offset

---

**HLV3062E**    **service desc FAILED RC=rc, DETECTED**  
**AT ad**

**Explanation:** This is a generic error message used to describe a wide variety of errors. The message text gives a description of the current operation and what the current operation was trying to do.

**User response:** Check the error messages and the return code associated with this problem. There may be one or more error messages referring to the current problem. If possible, fix the problem identified by the error messages, and retry the operation. If the problem cannot be resolved, contact Software Support.

The variable fields of the message text are: service current operation (e.g. SYSEVENT etc.) desc description rc return code

---

**HLV3063E**    **obj action FAILED, DETECTED AT ad**

**Explanation:** The space switch PC routine is attempting to copy a parameter list passed by its caller into storage that can be accessed in space switch mode and has found that the target storage area is not large enough.

**User response:** This is an internal product error condition. Contact Software Support. Software Support.

The variable fields of the message text are: obj plist action copy

---

**HLV3070S**    **func (code) SERVICE errdesc cmprc rscd**  
**loc mod+off creg15**

**Explanation:** The product stacking PC function has been invoked in an invalid manner, has been invoked in an invalid environmental state, or has abended during execution.

**User response:** Verify that the request that resulted in the stacking space switch PC routine being invoked is being issued to the correct product subsystem. If the problem cannot be resolved, contact Software Support.

The variable fields of the message text are: func PC sub-function description code PC routine sub-function code errdesc error description cmprc completion or return code rscd reason code loc location of error or failure mod failing module off failing offset creg15 control register 15, if avail, or zeroes

---

**HLV3071T** func (code) SERVICE errdesc cmprc rscd  
loc mod+off creg15

**Explanation:** The product stacking PC function has been invoked in an invalid manner, has been invoked in an invalid environmental state, or has abended during execution. This is a duplicate of message 3070S but is written to the trace.

**User response:** Verify that the request that resulted in the stacking space switch PC routine being invoked is being issued to the correct product subsystem. If the problem cannot be resolved, contact Software Support.

The variable fields of the message text are: func PC sub-function description code PC routine sub-function code errdesc error description cmprc completion or return code rscd reason code loc location of error or failure mod failing module off failing offset creg15 control register 15, if avail, or zeroes

---

**HLV3080E** text FAILED FOR usid RC=rc AT ad

**Explanation:** A logoff to the current server address space was attempted by a user other than the one currently logged on. The current server address space is terminated, and a new one will be started.

**User response:** If problems are encountered with servers, the product cancels them and restarts them. This is normal product operation. Check if the current ABEND was an independent one or if it was caused by the product, and resolve the problem accordingly.

The variable fields of the message text are: text current operation text string usid userid rc return code

---

**HLV3081T** TSO SERVER IN ASID asid var1 var2  
var3 var4

**Explanation:** This is a trace message issued by the subsystem data set read/write routine.

**User response:** None. This message is for informational purposes only.

The variable fields of the message text are: asid TSO server's address space ID var1 variable trace information var2 variable trace information var3 variable trace information var4 variable trace information

---

**HLV3082W** OUTPUT LIMIT EXCEEDED (value LINES) - CANCEL SELF WITH S722

**Explanation:** A TSO command running in a product TSO server address space has exceeded the output line limit for server commands as specified in the TSOSRVMAXLINES parameter.

**User response:** Modify the command to reduce the number of lines output, or increase the TSOSRVMAXOUTPUTLINES value. The TSO server will cancel itself with an S722 completion code to abort

processing of the current command.

The variable fields of the message text are: value TSO command output line limit

---

**HLV3083S** Command requested more input -  
command aborted

**Explanation:** The product Servers do not support commands that request additional input in subcommand mode.

**User response:** Modify the command processor so that subcommand input is not required.

---

**HLV3084W** service OF desc FAILED, RC=rc

**Explanation:** This is a generic error message used to describe a wide variety of errors detected by the product TSOSRV subsystem interface read/write interface routine. The message text provides the current operation and what the current operation was trying to do.

**User response:** Check the error messages and the return code associated with this problem. There may be one or more error messages referring to the current problem. If possible, fix the problem identified by the error messages, and restart the product.

The variable fields of the message text are: service post desc description (e.g. TSO execute processor) rc return code

---

**HLV3085H** jb A=asid1 (asid2) TSO server  
terminated by request

**Explanation:** A product Server address space has received a request to terminate. This may occur at shutdown or when one of the parameters governing the TSO servers (MIN or MAX values) has been modified.

**User response:** None. This message is for informational purposes only.

The variable fields of the message text are: jb jobname asid1 address space identifier in decimal asid2 address space identifier in hexadecimal

---

**HLV3086H** LOGON of usid to TSO server failed -  
RC=rc1 (rc2) Reason=rscd

**Explanation:** A product TSO server address space was not able to LOGON the indicated client userid. The current command is bypassed.

**User response:** Determine why the client userid logon failed, and resubmit the command.

The variable fields of the message text are: usid client userid rc1 SAF interface return code rc2 RACF return code rscd RACF reason code

---

**HLV3087H Requestor has revoked command request - cancel self with S622**

**Explanation:** A product TSO server address space was not able to bind to the requesting task while attempting to return the results of a TSO command. The server abandons the request and terminates additional processing of the request by cancelling itself with a 622 completion code.

**User response:** Determine why the requesting task abandoned the request, and resubmit. The requesting task may have timed out while waiting for a response to the request.

---

**HLV3100S Invalid text insertion address - msg addr mncff**

**Explanation:** The product message formatting routine detected an error in a data address passed to it. Because of the invalid data address, a product message cannot be sent. This means that some other error may have occurred, but the error message was not sent because of the current error. The invalid address is actually an scon. The offset is the location of the calling routine that passed the invalid data.

**User response:** Check if any other error messages were generated along with the error message above. If the combined error messages are sufficient to explain the problem, take whatever corrective action is appropriate. Otherwise, contact Software Support for assistance with this problem.

The variable fields of the message text are: msg message number addr address mncff module name and offset

---

**HLV3101S Message number num not found - mncff**

**Explanation:** The product message formatting routine could not find a message number passed to it in the product message table. Because the message number could not be found, a product message cannot be sent. This means that some other error may have occurred, but the error message was not sent because of the current error. The error is caused by either a calling routine passing an invalid message number or an error in the message table. The offset is the location of the calling routine that passed the message number that could not be found.

**User response:** Ensure that the product is properly installed. Check the message table assembly time, date, and version number. Check if any other error messages were generated along with the error message above. If the combined error messages are sufficient to explain the problem, take whatever corrective action is appropriate. If the problem cannot be resolved, contact Software Support.

The variable fields of the message text are: num

number mncff module name and offset

---

**HLV3102S Invalid message text variable - msg "varname" mncff**

**Explanation:** The product message formatting routine could not process a substitution variable ("%") found in a message skeleton. Because the substitution variable could not be processed, a product message cannot be sent. This means that some other error may have occurred, but the error message was not sent because of the current error. The error is caused by a programming error in the message table. The offset is the location of the calling routine that invoked the message formatting routine.

**User response:** Ensure that the product is properly installed. Check the message table assembly time, date, and version number. Check if any other error messages were generated along with the error message above. If the combined error messages are sufficient to explain the problem, take whatever corrective action is appropriate. If the problem cannot be resolved, contact Software Support.

The variable fields of the message text are: msg message number varname variable mncff module name and offset

---

**HLV3103S Invalid text insertion data length - msg mncff**

**Explanation:** The product message formatting routine could not process the length part of a substitution variable ("%()") found in a message skeleton. Because the substitution variable could not be processed, a product message cannot be sent. This means that some other error may have occurred, but the error message was not sent because of the current error. The error is caused by a programming error in the message table. The offset is the location of the calling routine that invoked the message formatting routine.

**User response:** Ensure that the product is properly installed. Check the message table assembly time, date, and version number. Check if any other error messages were generated along with the error message above. If the combined error messages are sufficient to explain the problem, take whatever corrective action is appropriate. Otherwise, contact Software Support for assistance with this problem.

The variable fields of the message text are: msg message number mncff module name and offset

---

**HLV3104S Invalid text insertion data type - msg mncff**

**Explanation:** The product message formatting routine detected an invalid data type value passed to it by a calling routine. Because of the invalid data type value, a product message cannot be sent. This means that some other error may have occurred, but the error

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message was not sent because of the current error. The error is caused by a programming error in the calling routine. The offset is the location of the calling routine that passed the invalid data type value.

**User response:** Ensure that the product is properly installed. Check the message table assembly time, date, and version number. Check if any other error messages were generated along with the error message above. If the combined error messages are sufficient to explain the problem, take whatever corrective action is appropriate. If the problem cannot be resolved, contact Software Support.

The variable fields of the message text are: msg message number mnof module name and offset

---

### HLV3105S Output message buffer overflow - msg mnof

**Explanation:** The product message formatting routine found that the current message will not fit in the output buffer. Because of the buffer overflow condition, a product message cannot be sent. This means that some other error may have occurred, but the error message was not sent because of the current error. The error is caused by either a programming error in the calling routine or a message table error. The offset is the location of the calling routine that invoked the message formatting routine.

**User response:** Ensure that the product is properly installed. Check the calling module assembly time, date, and version number. Also check the message table assembly time, date, and version number. Check if any other error messages were generated with the error message above. If the combined error messages are sufficient to explain the problem, take whatever corrective action is appropriate. If the problem cannot be resolved, contact Software Support.

The variable fields of the message text are: msg message number mnof module name and offset

---

### HLV3106S Invalid packed decimal for text insertion - ivdata mnof

**Explanation:** The product message formatting routine detected that an invalid decimal data value had been passed to it by a calling routine. Because of the invalid decimal data value, a product message cannot be sent. This means that some other error may have occurred, but the error message was not sent because of the current error. The error is caused by a programming error in the calling routine. The offset is the location of the calling routine that invoked the message formatting routine.

**User response:** Ensure that the product is properly installed. Check the calling module assembly time, date, and version number. Check if any other error messages were generated with the error message above. If the combined error messages are sufficient to explain

the problem, take whatever corrective action is appropriate. If the problem cannot be resolved, contact Software Support.

The variable fields of the message text are: ivdata invalid data value mnof module name and offset

---

### HLV3107S INVALID REPLY PARAMETER - mnof

**Explanation:** The product message formatting routine detected that a reply area had been passed to it for a message that is not marked as a WTOR in the message table. Because of this logical inconsistency, a product message cannot be sent. This means that some other error may have occurred, but the error message was not sent because of the current error. The error is caused by either a programming error in the calling routine or a message table error. The offset is the location of the calling routine that invoked the message formatting routine.

**User response:** Ensure that the product is properly installed. Check the calling module assembly time, date, and version number. Also check the message table assembly time, date, and version number. Check if any other error messages were generated with the error message above. If the combined error messages are sufficient to explain the problem, take whatever corrective action is appropriate. If the problem cannot be resolved, contact Software Support.

The variable fields of the message text are: mnof module name and offset

---

### HLV3108S INVALID REPLY AREA LENGTH - rplen mnof

**Explanation:** The data value entered by a user was too long for the reply area passed by the calling routine. This error was detected by the message formatting routine. The error is caused by a programming error in the calling routine. The offset is the location of the calling routine that invoked the message formatting routine.

**User response:** Ensure that the product is properly installed. Check the calling module assembly time, date, and version number. Check if any other error messages were generated with the error message above. If the combined error messages are sufficient to explain the problem, take whatever corrective action is appropriate. If the problem cannot be resolved, contact Software Support.

The variable fields of the message text are: rplen reply area length mnof module name and offset

---

### HLV3109E INTERNAL ERROR DETECTED AT OPSNMG + X'off', RC = X'rc'

**Explanation:** The message formatting routine detected a serious internal error. For example, a system service may have failed with a non-zero return code, or an

abend may have occurred. This means that some other error may have occurred, but the error message was not sent because of the current error. The error is caused by either a programming error in the calling routine or a message table error.

**User response:** Ensure that the product is properly installed. Check the calling module assembly time, date, and version number. Also check the message table assembly time, date, and version number. Check if any other error messages were generated with the error message above. If the combined error messages are sufficient to explain the problem, take whatever corrective action is appropriate. If the problem cannot be resolved, contact Software Support.

The variable fields of the message text are: off module offset rc return code

---

**HLV3110I** data1 data2 data3 data4 data5 data6  
data7 data8 data9 data10

**Explanation:** List Enable/Close/Force results.

**User response:** No action is required.

The variable fields of the message text are:

data1	trace	data
data2	trace	data
data3	trace	data
data4	trace	data
data5	trace	data
data6	trace	data
data7	trace	data
data8	trace	data
data9	trace	data
data10	trace	data

---

**HLV3111I** data1 for data2 not found for data3  
command.

**Explanation:** An error was encountered in processing a VSAM file command.

**User response:** Correct the command and reenter it.

The variable fields of the message text are:

data1	Error description
data2	Data Set name
data3	Command entered

---

**HLV3119T** data1 data2 data3 data4 data5 data6  
data7 data8 data9 %SK

**Explanation:** Trace Open/Close functions

**User response:** None

The variable fields of the message text are: data1 trace data data2 trace data data3 trace data data4 trace data data5 trace data data6 trace data data7 trace data data8 trace data data9 trace data stack stack trace information

---

**HLV3120S** am service FAILED FOR  
DDNAME=ddn, DSNNAME=dsn

**Explanation:** An attempt to open the specified data set failed.

**User response:** Try to determine why the attempt failed. If you are unable to determine the reason for the failure, contact Software Support.

The variable fields of the message text are: am access method (QSAM, BSAM or BPAM) service open ddn ddname dsn data set name

---

**HLV3121S** RECORD SIZE size INVALID,  
LRECL=lrecl, BLKSIZE=blksize,  
DDNAME=ddn, DSNNAME=dsn

**Explanation:** During a WRITE/PUT operation, the product I/O routines have been passed a record with an invalid record size. The record size is either 0 or greater than the maximum logical record size (LRECL) allowed for the indicated data set.

**User response:** Attempt to determine the reason for the failure. If you are unable to determine the reason for the failure, contact Software Support for assistance.

The variable fields of the message text are: size size of current record lrecl LRECL from the DCB blksize BLKSIZE from the DCB ddn ddname dsn data set name

---

**HLV3122S** VSAM service FAILED, RC=rc, field1  
FIELD=field2, DDNAME=ddn,  
DSNNAME=dsn

**Explanation:** A product generalized input/output processing routine tried to open a VSAM data set. The VSAM OPEN failed.

**User response:** Review the error message text. Determine what caused the OPEN to fail, based on the return code. Review the current data set for any obvious errors. Correct the above problems, and restart.

The variable fields of the message text are: service type of operation (OPEN) rc return code field1 the ACB or RPL field name field2 the ACB or RPL field value ddn ddname dsn data set name

---

**HLV3123S** UNSUPPORTED obj TYPE,  
DDNAME=ddn, DSNNAME=dsn

**Explanation:** The product generalized I/O routine has been passed a DSORG or RECFM that is not supported.

**User response:** Validate that the data set specified has a supported data set organization (DSORG) or record format (RECFM). If you are unable to determine the reason for the failure, contact Software Support.

The variable fields of the message text are: obj object (DSORG or RECFM) ddn ddname dsn data set name

---

**HLV3124S** SHOWCAT FAILED, RC=rc,  
DDNAME=ddn, DSNNAME=dsn

**Explanation:** A product generalized input/output processing routine tried to list the required message data from a data set, but the SHOWCAT operation failed with the above return code.

**User response:** Review the error message text. Determine what caused the SHOWCAT operation to fail, based on the return code. Correct the above problems, and restart. For further assistance, contact your local product systems programming group.

The variable fields of the message text are: rc return code ddn ddname dsn data set name

---

**HLV3125S** INVALID VSAM OBJECT ("obj"),  
DDNAME=ddn, DSNNAME=dsn

**Explanation:** While processing a VSAM data set, a product generalized input/output processing routine found the object to be invalid.

**User response:** Review the error message text. Validate the VSAM object and analyze it for integrity. Review errors in the definition of the current data set. Ensure that the data set was properly defined and that no other errors exist with it.

The variable fields of the message text are: obj VSAM data object ddn ddname dsn data set name

---

**HLV3126E** DYNAMIC ALLOCATION FAILED,  
RC=rc, ERROR CODE=ec, INFO  
CODE=rscd, DDNAME=ddn,  
DSNNAME=dsn

**Explanation:** An attempt to dynamically allocate a data set failed. The error message contains the information associated with the failed request.

**User response:** Review the information contained in the message, and attempt to correct the problem. Information on the codes may be obtained from the IBM documentation. If, after reviewing this information, you are still unable to correct the problem, contact Software Support.

The variable fields of the message text are: rc return code ec error code rscd information reason code ddn ddname dsn data set name

---

**HLV3127S** VSAM service FAILED, RC=rc,  
DDNAME=ddn, DSNNAME=dsn

**Explanation:** A product generalized input/output processing routine could not display the check error message for the current VSAM data set. The operation failed.

**User response:** Review the error message text. Validate the VSAM data set, and analyze it for integrity. Review errors with the definition of the current data

set. Ensure that it was properly defined and that no other errors exist with it.

The variable fields of the message text are: service type of operation (CHECK) rc return code ddn ddname dsn dsname

---

**HLV3128E** service desc FAILED RC=rc, DETECTED  
AT ad

**Explanation:** This is a generic error message used to describe a wide variety of I/O related errors. The message text gives a description of the current operation and what the current operation was trying to do.

**User response:** Check the error messages and the return code associated with this problem. There may be one or more error messages referring to the current problem. If possible, fix the problem identified by the error messages, and restart the product. If the problem cannot be resolved, contact Software Support.

The variable fields of the message text are: service current operation, GETMAIN, FREEMAIN, ATTACH etc. desc description rc return code

---

**HLV3129E** service desc

**Explanation:** This is a generic error message used to describe a wide variety of I/O related errors. The message text gives a description of the current operation and what the current operation was trying to do.

**User response:** Check the error messages and the return code associated with this problem. There may be one or more error messages referring to the current problem. If possible, fix the problem identified by the error messages, and restart the product. If the problem cannot be resolved, contact Software Support.

The variable fields of the message text are: service current operation, GETMAIN, FREEMAIN, ATTACH etc. desc error description

---

**HLV3130E** DYNAMIC ALLOCATION COMMAND  
ERROR. desc cmd

**Explanation:** The format of a dynamic allocation/de-allocation command is invalid. The message contains information associated with the parameter(s) in error.

**User response:** Review the information contained in the message, and correct the command format.

The variable fields of the message text are: desc command parser error message cmd dynamic allocation/de-allocation command



---

**HLV3131E DESERV GET\_ALL FAILED: RC=rc  
RSN=rscd - ddname-index:dsname**

**Explanation:** While issuing the DESERV macro to obtain directory entry information, the system returned an unexpected return code and reason code.

**User response:** Contact Software Support.

The variable fields of the message text are: rc return code from the DESERV macro rscd reason code from the FUNC=GET\_ALL service ddname ddname from the product file block index concatenation index when error occurred dsname dsname from the product file block

---

**HLV3132E HFS service FAILED FOR 'path' - RC=rc  
(name1), RSN=rscd (name2) - desc1 /  
desc2**

**Explanation:** While invoking an Open Edition HFS Service for the entity identified by path, the system returned an unexpected return code and reason code.

**User response:** Review the appropriate Open Edition manual for the meaning of the return and reason codes. If the cause of the error cannot be readily determined, contact Software Support.

The variable fields of the message text are: service name path path name rc return code from the Open Edition Service name1 ERRNO name string from the Open Edition Service rscd reason code from the Open Edition Service name2 JERRNO name string from the Open Edition Service desc1 ERRNO description desc2 JERRNO description

---

**HLV3133E HFS service FAILED FOR 'path' - desc1  
var1**

**Explanation:** While invoking an Open Edition HFS Service for the entity identified by path, the server interface detected an error.

**User response:** If the cause of the error cannot be readily determined from this and other messages, contact Software Support.

The variable fields of the message text are: service name path path name desc1 description of the error var1 variable information

---

**HLV3134I DSNAME Library directory empty  
(DDN=DDNAME)**

**Explanation:** While attempting to read a PDS(E) dataset directory, the I/O services routines discovered that the PDS(E) directory is empty.

**User response:** An empty PDS(E) directory may be normal or may represent a problem, depending on the library being accessed. If a problem results because the empty directory is an abnormality, this informational message may aid in resolution.

The variable fields of the message text are: DSNAME dataset name DDNAME DD name for the library allocation

---

**HLV3135E DYNAMIC DEALLOCATION FAILED,  
RC=rc, ERROR CODE=ec, INFO  
CODE=rscd, DDNAME=ddn,  
DSNAME=dsn**

**Explanation:** An attempt to dynamically free a data set failed. The error message contains the information associated with the failed request.

**User response:** Review the information contained in the message, and attempt to correct the problem. Information on the codes may be obtained from the IBM documentation. If, after reviewing this information, you are still unable to correct the problem, contact Software Support.

The variable fields of the message text are: rc return code ec error code rscd information reason code ddn ddname dsn data set name

---

**HLV3136T User record exits cannot be loaded  
because DDNAME name is not  
allocated. Exits: pgm and pgm**

**Explanation:** An attempt to load a user record post-read and/or pre-write exit routine failed because the HLVRPCLB DD statement is not allocated. User record exit routines must reside in the in the S\_\_RPCLB library.

**User response:** Modify the product server started task JCL to include the HLVRPCLB DD statement.

The variable fields of the message text are: name RPC library DDNAME pgm post-read exit program name pgm pre-write exit program name

---

**HLV3137S Load for user record exit program pgm  
failed**

**Explanation:** An attempt to load a user record post-read and/or pre-write exit program failed.

**User response:** The user record post-read and pre-write programs must reside in a library allocated to the product HLVRPCLB DD statement. Check the JOBLLOG for related error messages. If the combined error messages are sufficient to explain the problem, take whatever corrective action is appropriate. If the problem cannot be resolved, contact Software Support.

The variable fields of the message text are: pgm user record exit program name

---

**HLV3138T User record exits cannot be used  
because the SQL feature is not  
configured**

**Explanation:** None.

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**User response:** Contact IBM Software Support.

---

**HLV3139T** Non-zero return code from user exit  
pgm. RC=rc

**Explanation:** A user record exit program returned a non-zero return code.

**User response:** The task is terminated.

The variable fields of the message text are: pgm user record exit program name rc return code

---

**HLV3140W** INVALID desc CODE func FOR service,  
DETECTED AT ad

**Explanation:** A product routine called the system management module with an invalid function code. This failure was probably caused by a programming error in the calling routine. This failure can also be caused by product installation and maintenance errors.

**User response:** Check if any other error messages were generated along with the error message above. If the combined error messages are sufficient to explain the problem, take whatever corrective action is appropriate. Otherwise, contact Software Support with this problem.

The variable fields of the message text are: desc description func current function service current operation

---

**HLV3141E** rsrce ss FAILED, RC=rc, DETECTED AT  
ad

**Explanation:** Some type of error occurred in the system management routines of the product. See the actual text of the message for an explanation. The error was probably caused by a failure in an operating system service requested by a product system management routine.

**User response:** Check if any other error messages were generated along with the error message above. If the combined error messages are sufficient to explain the problem, take whatever corrective action is appropriate. Otherwise, contact Software Support for assistance with this problem.

The variable fields of the message text are: rsrce resource name ss system service rc return code

---

**HLV3142W** Invalid ivdata FOR func, Detected at ad.  
Stack: %SK

**Explanation:** Some type of error occurred in the system management routines of the product. See the actual text of the message for an explanation. This failure was probably caused by a programming error in the calling routine or in the system management module. This failure can also be caused by product installation and maintenance errors.

**User response:** Check if any other error messages were generated along with the error message above. If the combined error messages are sufficient to explain the problem, take whatever corrective action is appropriate. Otherwise, contact Software Support with this problem.

The variable fields of the message text are: ivdata invalid data func current function

---

**HLV3143U** DISPATCHER FAILURE DETECTED AT  
ad

**Explanation:** The internal product dispatcher detected a serious error. This failure was probably caused by a programming error in the system management module. This failure can also be caused by product installation and maintenance errors.

**User response:** Check if any other error messages were generated along with the error message above. If the combined error messages are sufficient to explain the problem, take whatever corrective action is appropriate. Otherwise, contact Software Support with this problem.

---

**HLV3144E** rsrce ss FAILED, RC=rc, DETECTED AT  
rtn+off

**Explanation:** Some type of error occurred in the system management routines of the product. See the actual text of the message for an explanation. The error was probably caused by a failure in an operating system service requested by a product system management routine.

**User response:** Check if any other error messages were generated along with the error message above. If the combined error messages are sufficient to explain the problem, take whatever corrective action is appropriate. Otherwise, contact Software Support with this problem.

The variable fields of the message text are: rsrce resource name ss system service rc return code rtn routine name off routine offset

---

**HLV3145S** cb ERROR SUBSYS =subsys

**Explanation:** The product detected a serious operating system control block error. The operating system control block error prevented the system management routine from performing some request on behalf of a caller. This control block error may cause other system errors and may cause the operating system to fail.

**User response:** Check if any other error messages were generated along with the error message above. If the combined error messages are sufficient to explain the problem, take whatever corrective action is appropriate. You may need to IPL the system to resolve this problem. If the problem cannot be resolved, contact Software Support.

The variable fields of the message text are: cb control block subsys subsystem name

---

**HLV3146S EMERGENCY PRODUCT SHUTDOWN STARTED - errdesc**

**Explanation:** The product is shutting down because of a serious error. The message text describes the error. The error may be caused by an abend failure inside the product or by a product rate limit that has been exceeded. Also, the error may have been caused by a product programming error or by a system failure of some kind. The product will turn itself off and disconnect itself from the operating system.

**User response:** Check if any other error messages were generated along with the error message above. If the combined error messages are sufficient to explain the problem, take whatever corrective action is appropriate. If the problem cannot be resolved, contact Software Support.

The variable fields of the message text are: errdesc error description

---

**HLV3147T rsrce ss FAILED, RC=rc, DETECTED AT rtn+off**

**Explanation:** Some type of error occurred in the system management routines of the product. See the actual text of the message for an explanation. The error was probably caused by a failure in an operating system service requested by a product system management routine.

**User response:** Check if any other error messages were generated along with the error message above. If the combined error messages are sufficient to explain the problem, take whatever corrective action is appropriate. Otherwise, contact Software Support with this problem.

The variable fields of the message text are: rsrce resource name ss system service rc return code rtn routine name off routine offset

---

**HLV3148E Main product address space not active**

**Explanation:** Some routine tried to use a product facility that requires the main product address space to be active. The product facility could not be used because the main product address space is not active.

**User response:** This may or may not be an error condition. Start or restart the main product address space, if necessary. Check if any other error messages were generated along with the error message above. If the combined error messages are sufficient to explain the problem, take whatever corrective action is appropriate. If the problem cannot be resolved, contact Software Support.

---

**HLV3149E ENFREQ type CODE code FAILED, RC=rc. STACK: %SK**

**Explanation:** A z/OS event notification facility request, ENFREQ, failed. The meaning of the return code can be found in the IBM Authorized Assembler Services manual.

**User response:** If the security server you are using does not support ENF signal 71, check with the security server product vendor for more information. Otherwise, contact Software Support. for assistance with this problem.

The variable fields of the message text are: type ENFREQ request type code ENFREQ event code rc return code stack stack trace information

---

**HLV3150E INVALID desc, VALUE ivdata, DETECTED AT ad**

**Explanation:** A system management routine detected invalid data. The error message describes the invalid data. This failure was probably caused by a programming error in the calling routine or in the system management module. This failure can also be caused by product installation and maintenance errors.

**User response:** Check if any other error messages were generated along with the error message above. If the combined error messages are sufficient to explain the problem, take whatever corrective action is appropriate. Otherwise, contact Software Support with this problem.

The variable fields of the message text are: desc description ivdata invalid data

---

**HLV3151H ABEND abcd IN func mod+off**

**Explanation:** A system management routine detected an abend while processing a message queue. The message text provides the abend code, current operation, and abend location. This failure may have been caused by a programming error in the calling routine or in the system management module. This failure can also be caused by product installation and maintenance errors. This failure will also occur when an address space containing a message queue terminates unexpectedly.

**User response:** Check if any other error messages were generated along with the error message above. If the combined error messages are sufficient to explain the problem, take whatever corrective action is appropriate. If the problem cannot be resolved, contact Software Support.

The variable fields of the message text are: abcd abend code func current function mod module name off module offset

---

**HLV3152W** errdesc1 errdesc2 errdesc3, DETECTED AT ad

**Explanation:** A system management routine detected an error while processing a request on behalf of a caller. The message text describes the failure. This failure may have been caused by a programming error in the calling routine or in the system management module. This failure can also be caused by product installation and maintenance errors.

**User response:** Check if any other error messages were generated along with the error message above. If the combined error messages are sufficient to explain the problem, take whatever corrective action is appropriate. Otherwise, contact Software Support with this problem.

The variable fields of the message text are: errdesc1 error description errdesc2 error description errdesc3 error description

---

**HLV3153E** ABEND abcd IN func mod+off

**Explanation:** A system management routine detected an abend while performing a service on behalf of a caller. The message text provides the abend code, current operation, and abend location. This failure may have been caused by a programming error in the calling routine or in the system management module. This failure can also be caused by product installation and maintenance errors.

**User response:** Check if any other error messages were generated along with the error message above. If the combined error messages are sufficient to explain the problem, take whatever corrective action is appropriate. If the problem cannot be resolved, contact Software Support.

The variable fields of the message text are: abcd abend code func current function mod module name off module offset

---

**HLV3156E** rsrc MISSING AND REQUIRED FOR ss, DETECTED AT ad

**Explanation:** A system management routine detected that a resource needed to perform a service on behalf of a user is not available. The service cannot be provided because of the error. The message text identifies the service requested by the user and the missing resource.

**User response:** Check if any other error messages were generated along with the error message above. If the combined error messages are sufficient to explain the problem, take whatever corrective action is appropriate. Otherwise, contact Software Support with this problem.

The variable fields of the message text are: rsrc resource name ss system service

---

**HLV3157E** func ABEND abcd AT addr

**Explanation:** An abend failure occurred when a system management routine called an MVS service routine. The abend occurred in the MVS service routine. The error message provides the abend code and abend location. This failure was probably caused by a programming error in the calling routine, in the system management module, or possibly in the IBM service routine. This failure can also be caused by product installation and maintenance errors.

**User response:** Check if any other error messages were generated along with the error message above. If the combined error messages are sufficient to explain the problem, take whatever corrective action is appropriate. Otherwise, contact Software Support with this problem.

The variable fields of the message text are: func current function abcd abend code addr address at which the abend occurred

---

**HLV3200W** INVALID SUBPOOL NUMBER=subp REQUESTED BY mod+off

**Explanation:** The storage management routine detected an invalid subpool number in a parameter list passed by a caller. The subpool number is not supported by the storage management routine. The storage management module cannot perform the service requested by the caller. The error message gives the invalid subpool number and the location of the calling routine. This failure may have been caused by a programming error in the calling routine or in the storage management routine. This failure can also be caused by product installation and maintenance errors.

**User response:** Check if any other error messages were generated along with the error message above. If the combined error messages are sufficient to explain the problem, take whatever corrective action is appropriate. Otherwise, contact Software Support with this problem.

The variable fields of the message text are: subp storage subpool number mod module name off module offset

---

**HLV3202W** func ERROR RC=rc REQUESTED BY mod+off, SP=subp, LEN=length, A=stg

**Explanation:** A GETMAIN or FREEMAIN request failed with a non-zero return code. The error message gives the storage request type (GET or FREE), the return code, and the location of the calling routine. This failure may have been caused by a programming error in the calling routine or in the storage management routine. This failure can also be caused by product installation and maintenance errors.

**User response:** Check if some type of operating system problem (such as storage shortage) may have

caused the problem. Check if any other error messages were generated along with the error message above. If the combined error messages are sufficient to explain the problem, take whatever corrective action is appropriate. Otherwise, contact Software Support with this problem.

The variable fields of the message text are: func current function rc return code mod module name off module offset subp subpool requested length length requested stg address specified, or zero

---

**HLV3204T    mod+off func stype subp stg1 stg2  
token**

**Explanation:** This is a storage trace message generated by the product storage management routine. Storage traces are used to analyze product storage utilization and to find storage management bugs. This is not an error message. The message gives the calling module name, calling module offset, current function (GET or FREE), storage type, subpool number, storage area size, old storage total, and new storage total.

**User response:** Check if storage trace was activated for some reason. If storage trace is active, ignore this message. Otherwise, storage trace has been inadvertently activated by a memory overlay. Contact Software Support with this problem.

The variable fields of the message text are: mod module name off module offset func current function stype storage type (E/CSA or E/Private) subp storage subpool number stg1 storage area size or amount stg2 storage area size or amount token storage token if any

---

**HLV3205E    STORAGE ROUTINE ABEND CODE  
abcd AT mod+off**

**Explanation:** The storage management routine detected an abend while performing a service on behalf of a caller. The message text provides the abend code and abend location. This failure may have been caused by a programming error in the calling routine or in the storage management module. This failure can also be caused by product installation and maintenance errors.

**User response:** Check if some type of operating system problem (such as storage shortage) may have caused the problem. Check if any other error messages were generated along with the error message above. If the combined error messages are sufficient to explain the problem, take whatever corrective action is appropriate. Otherwise, contact Software Support for assistance with this problem.

The variable fields of the message text are: abcd abend code mod module name off module offset

---

**HLV3206S    SUBPOOL subp REQUIRES GLOBAL  
MASTER AT mod+off**

**Explanation:** The storage management routine detected a request for a subpool that can only be executed using the control blocks of the main product address space. However, the caller did not provide the main product address space control blocks. The current storage request will be rejected. This message indicates an internal error in the product. This failure may have been caused by a programming error in the calling routine or in the storage management module. This failure can also be caused by product installation and maintenance errors.

**User response:** Check if any other error messages were generated along with the error message above. If the combined error messages are sufficient to explain the problem, take whatever corrective action is appropriate. Otherwise, contact Software Support with this problem.

The variable fields of the message text are: subp subpool number mod module name off module offset

---

**HLV3207S    CROSS MEMORY REQUIRES GLOBAL  
MASTER AT mod+off**

**Explanation:** The storage management routine detected a request for a cross memory GETMAIN or FREEMAIN that can only be executed using the control blocks of the main product address space. However, the caller did not provide the main product address space control blocks. The current storage request will be rejected. This message indicates an internal error in the product. This failure may have been caused by a programming error in the calling routine or in the storage management module. This failure can also be caused by product installation and maintenance errors.

**User response:** Check if any other error messages were generated along with the error message above. If the combined error messages are sufficient to explain the problem, take whatever corrective action is appropriate. Otherwise, contact Software Support with this problem.

The variable fields of the message text are: mod module name off module offset

---

**HLV3208S    stype1 RETURNED FOR stype2  
REQUESTED BY mod+off, SP=subp,  
LEN=length**

**Explanation:** The storage management routine detected that a request for extended storage (above the 16MB line) was satisfied with non-extended storage (below the 16MB line). This will only happen when the extended storage area has been depleted and MVS is returning non-extended storage to satisfy storage requests. For example, the product is requesting ECSA storage but MVS is returning CSA storage because ECSA has been completely allocated. This problem can

also occur for private area storage as well.

**User response:** This is a very serious error and requires immediate action. If the message shows that CSA is being returned for ECSA requests, then ECSA has been depleted. One or more products may have to be terminated to release ECSA. At some point, the amount of ECSA allocated may have to be increased. Note that the product can continue to execute in this case. However, CSA is likely to be depleted, leading to complete MVS system failure. If the message indicates that the problem is occurring for private area storage, contact Software Support with this problem.

The variable fields of the message text are: stype1 storage type (E/CSA or E/Private) stype2 storage type (E/CSA or E/Private) mod module name off module offset subp subpool requested length length requested

---

**HLV3209S NO ASCB SPECIFIED FOR TCB-LEVEL STORAGE REQUEST AT mod+offset**

**Explanation:** The storage management routine detected that a cross memory GETMAIN or FREEMAIN with an explicitly specified TCB association did not specify the address space designation along with the request.

**User response:** Check if any other error messages were generated along with the error message above. If the combined error messages are sufficient to explain the problem, take whatever corrective action is appropriate. Otherwise, contact Software Support with this problem.

The variable fields of the message text are: mod module name off module offset

---

**HLV3210S req XFORM SP=sp LEN=len A=addr FROM module+offset,reason**

**Explanation:** The storage management routine determined that an SRB-mode memory GETMAIN or FREEMAIN request could not be internally converted to an appropriate branch-entry request. Without transformation, the request cannot execute in SRB-mode.

**User response:** The request to get or free storage is rejected. Check if any other error messages were generated along with the error message above. If the combined error messages are sufficient to explain the problem, take whatever corrective action is appropriate. Otherwise, contact Software Support for assistance with this problem.

The variable fields of the message text are: req request type sp subpool of original request len length of original request addr address of original request module calling module name offset calling module offset reason reason why transformation failed

---

**HLV3211S STG OBTAINED AT stg NOT 2\*\*al BOUNDARY ALIGNED REQUESTED BY module+offset**

**Explanation:** The storage management routine determined that obtained storage was not aligned on the requested boundary.

**User response:** The storage management routine generates an SOC3 to abnormally end the calling procedure. This is done to prevent errors which are likely to occur subsequently if the incorrectly aligned storage is used. Contact Software Support with this problem.

The variable fields of the message text are: stg address of obtained storage al power of 2 representing requested alignment module calling module name offset calling module offset

---

**HLV3212S INVALID REQUEST TO FREE ALL SUBPOOL sp STORAGE REQUESTED BY module+offset**

**Explanation:** The storage management routine determined that a product storage FREEMAIN request has been made with a zero address. Such a request results in freeing all storage within the specified subpool. The requestor has either inadvertently specified the FREEMAIN storage address as zero, or a legitimate FREEPOOL request was coded incorrectly.

**User response:** The storage management routine generates an SOC3 to abnormally end the calling procedure. This is done to prevent errors which are likely to occur subsequently after an entire subpool is freed inadvertently. If the problem cannot be resolved, contact Software Support.

The variable fields of the message text are: sp subpool of storage to be freed module calling module name offset calling module offset

---

**HLV3250S service ERROR RC=rc**

**Explanation:** This message describes a variety of errors encountered while using the QEDIT supervisor service.

**User response:** This problem may be caused by a failure either in the product or in the operating system. If possible, fix the problem identified by the error messages, and restart the product. If the problem cannot be resolved, contact Software Support.

The variable fields of the message text are: service current operation rc return code

---

**HLV3251I cmd text**

**Explanation:** This message is only issued when the product is in debugging mode. It echoes commands sent to the product.

**User response:** None. This message is for informational purposes only.

The variable fields of the message text are: cmd  
command verb text message text

**HLV3252S** <comp> initialization timeout detected

**Explanation:** This message is issued when the product attempted to initialize full SEF support, but SEF initialization did not complete in the allowed time period. This is a serious error, and product initialization is terminated.

**User response:** Check if any other error messages were generated along with the error message above. If the combined error messages are sufficient to explain the problem, take whatever corrective action is appropriate. If the problem cannot be resolved, contact Software Support.

The variable fields of the message text are: comp  
product component (SEF, Services)

**HLV3253I** name version ver build num subsystem  
subsys initialization complete

**Explanation:** This is the standard message indicating that product initialization is complete.

**User response:** No action required.

The variable fields of the message text are: name  
product name ver product version num build number  
(SVFX level) subsys subsystem name

**HLV3254I** comp map build beginning d2 at t2 for  
ss

**Explanation:** This message is issued when SQL map build is complete.

**Response:** No action required.

The variable fields of the message text are: comp  
product component (SQL)

**HLV3255I** comp map build complete on d2 at t2  
for ss

**Explanation:** This message is issued when SQL map build is complete.

**Response:** No action required.

The variable fields of the message text are: comp  
product component (SQL)

**HLV3256S** SQL map build failed due to comp

**Explanation:** This message is issued when the SQL engine map build process does not complete in the allowed time period (five minutes). This is a serious error, and major parts of the product may not function correctly.

**Response:** Check if any other error messages were generated along with the error message above. If the combined error messages are sufficient to explain the problem, take whatever corrective action is appropriate. If the problem cannot be resolved, contact IBM Software Support.

The variable fields of the message text are: comp  
product component (SQL)

**HLV3259E** (cmd) invalid command

**Explanation:** The product tried to match an operator command to an existing command rule and was unsuccessful.

**User response:** Verify that the specified command is spelled correctly. Also, verify that it exists and is enabled in the current command rule data set.

The variable fields of the message text are: cmd cmd  
rule name

**HLV3260I** Server subsystem ss is an ERLY  
subsystem

**Explanation:** The product has been started as an ERLY subsystem for use by other (non-product) subsystems that normally start before ordinary product subsystems. An ERLY product subsystem can be started SUB=MSTR if desired. It does not perform normal product work and uses very few system resources.

**User response:** None. This message is for informational purposes only.

**HLV3300W** INVALID desc CODE func FOR service,  
DETECTED AT ad

**Explanation:** A product routine called the SQL management module with an invalid function code. This failure was probably caused by a programming error in the calling routine. This failure can also be caused by product installation and maintenance errors.

**User response:** Check if any other error messages were generated along with the error message above. If the combined error messages are sufficient to explain the problem, take whatever corrective action is appropriate. Otherwise, contact Software Support with this problem.

The variable fields of the message text are: desc  
description func current function service current  
operation

**HLV3301E** PLAN pln DBRM dbrm TIMESTAMPS  
MISMATCH time1 time2

**Explanation:** The timestamp associated with the SQL statement plist does not match the timestamp in the DBRM. The exact SQL statement cannot be displayed.

**User response:** Verify that the DBRM library specified

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in the JCL of the main product library is synchronized with the application program load library (i.e. both the load and the DBRM were produced from the same version of the source). Correct any mismatch, and restart the product.

The variable fields of the message text are: pln plan name string dbrm DBRM name string time1 plist timestamp time2 DBRM timestamp

---

**HLV3302E    ddn DDNAME not allocated - SQL source not available**

**Explanation:** The DBRM DD statement is not present in the JCL used to start the main product address space.

**User response:** Add the DBRM DD statement to the JCL of the main product address space

The variable fields of the message text are: ddn ddname (DBRM)

---

**HLV3303E    DBRM OPEN failed for DDNAME=ddn DSNAME=dsn RC=rc**

**Explanation:** HLV tried to open the DBRM library for input and the open operation failed. Actual SQL statement texts must have the DBRM(s).

**User response:** Examine the data set and any other messages that may accompany this one. If you are able to resolve the problem, restart the product.

The variable fields of the message text are: ddn ddname dsn data set name rc I/O return code

---

**HLV3304E    Member dbrm not found in DBRM library**

**Explanation:** A BLDL for the DBRM member failed.

**User response:** Determine why the DBRM is missing from the DBRM library. If necessary, change the library specified in the JCL for the main address space, and restart the product.

The variable fields of the message text are: dbrm DBRM name

---

**HLV3305E    func failed for MEMBER=mem DDNAME=ddn DSNAME=dsn RC=rc**

**Explanation:** An I/O operation failed while attempting to access the DBRM library.

**User response:** Use this message in conjunction with any other messages that may accompany it to resolve the problem. You may also want to examine the data set for problems. Once the problem is corrected, restart the product.

The variable fields of the message text are: func current I/O operation mem DBRM member name ddn ddname

text string dsn data set name rc current I/O operation return code

---

**HLV3306E    DBRM MEMBER mem TOO LARGE, MAXIMUM SIZE IS num RECORDS**

**Explanation:** The current DBRM is too large for HLV to handle.

**User response:** Ensure that the DBRM actually does contain more than the maximum number of records. If it does, contact Software Support.

The variable fields of the message text are: mem DBRM name num maximum number of DBRM records

---

**HLV3307E    DBRM member mem is empty**

**Explanation:** The DBRM member specified by the message does not contain any records.

**User response:** Verify that the data set does not contain any records. If it does not contain records, replace it with a corrected DBRM member. If the member does contain records, contact Software Support for assistance with this problem.

The variable fields of the message text are: mem DBRM member name

---

**HLV3308E    DBRM MEMBER NAME mem DOES NOT MATCH PROGRAM NAME pgm**

**Explanation:** The DBRM member name does not match the program name that is contained within the DBRM.

**User response:** It is possible that the DBRM member has been renamed. Verify that this is the problem, and correct it. The DBRM member name and the program name contained within the DBRM must be identical.

The variable fields of the message text are: mem DBRM member name pgm program name contained within the DBRM

---

**HLV3309E    SQL statement num missing from DBRM dbrm**

**Explanation:** The SQL statement identified by the application program's plist could not be found in the corresponding DBRM member.

**User response:** The plist's statement number should match one of statements in the DBRM. Verify that the application program load module and the DBRM are synchronized (i.e. they were produced at same time from the same version of the source). Correct any mismatches, and restart the product.

The variable fields of the message text are: num SQL statement number from plist dbrm DBRM name



---

**HLV3310E DBRM close FAILED FOR  
DDNAME=ddn DSNNAME=dsn RC=rc**

**Explanation:** HLV tried to close the DBRM library and the close operation failed. Resources may not have been completely released.

**User response:** Examine the data set and any other messages that may accompany this one. If you are able to resolve the problem, restart the product.

The variable fields of the message text are: ddn ddname dsn data set name rc I/O return code

---

**HLV3311T ASSIGN AND CONCATENATE LOB  
REQUESTS ARE SUSPENDED**

**Explanation:** The ability to use the assign and concatenate functions for sending lob data from the client to the server is suspended. This message is issued when the CLIENTMAXLOBSIZE parameter value is set to zero (0).

**User response:** None. This message is for informational purposes only.

---

**HLV3312T NETWORKBUFFERSIZE or MXBU  
value(s) are inadequate for the number  
of columns in the SQL statement.**

**Explanation:** There is insufficient space in the communications buffer to hold the SQLDA (metadata) for the SQL statement. The NETWORKBUFFERSIZE and MXBU parameter values must be large enough to hold the metadata for the SQL statement that references the most columns.

**User response:** Change NETWORKBUFFERSIZE and/or MXBU to an appropriate value.

---

**HLV3313T DB2 subsystem with ASID subsys was  
not found**

**Explanation:** The ERLY control block for the DB2 subsystem was not found.

**User response:** The product was not able to find the ERLY control block for the DB2 subsystem using the ASID. The routine cannot proceed because of this error. This can occur when the DB2 subsystem ends with a system 04F ABEND.

The variable fields of the message text are: subsys DB2 subsystem name

---

**HLV3314S DB2 subsystem with ASID subsys was  
not found**

**Explanation:** The ERLY control block for the DB2 subsystem was not found.

**User response:** The product was not able to find the ERLY control block for the DB2 subsystem using the ASID. The routine cannot proceed because of this error.

This can occur when the DB2 subsystem ends with a system 04F ABEND.

The variable fields of the message text are: subsys DB2 subsystem name

---

**HLV3315W Operational mode for DB2 subsystem  
subsys could not be determined**

**Explanation:** The product is not aware of the version of DB2 executing in the DB2 subsystem and cannot determine the operational mode.

**User response:** Processing continues. Contact Software Support to report this message.

The variable fields of the message text are: subsys DB2 subsystem name

---

**HLV3316T Operational mode for DB2 subsystem  
subsys could not be determined**

**Explanation:** The product is not aware of the version of DB2 executing in the DB2 subsystem and cannot determine the operational mode.

**User response:** Processing continues. Contact Software Support to report this message.

The variable fields of the message text are: subsys DB2 subsystem name

---

**HLV3700H TSO/SRV now using num servers -  
MIN=parmval1 MAX=parmval2**

**Explanation:** The product has allocated a new server descriptor control block and will start a new TSO/SRV server address space.

**User response:** None. This message is for informational purposes only.

The variable fields of the message text are: num current number of active servers parmval1 current setting of the CGIMIN parameter parmval2 current setting of the CGIMAX parameter

---

**HLV3701I service OF desc FAILED, RC=rc**

**Explanation:** This is a generic error message used to describe a wide variety of errors detected by the product Server routine manager. The message text provides the current operation and what the current operation was trying to do.

**User response:** Check the error messages and the return code associated with this problem. There may be one or more error messages referring to the current problem. If possible, fix the problem identified by the error messages, and restart the product.

The variable fields of the message text are: service current operation, GETMAIN, FREEMAIN, timer set, timer cancel, ECB post, etc. desc description rc return code

---

**HLV3702H TSO/SRV started server jb,ASID=asid**

**Explanation:** The product has issued a START command to create a new TSO/SRV server address space, and the address space has been created.

**User response:** None. This message is for informational purposes only.

The variable fields of the message text are: jb jobname asid ASID of the TSO/SRV server address space

---

**HLV3703W TSO/SRV SUBTASK UNABLE TO SCHEDULE EXTERNAL TSO SERVER - ABEND/POST CODES=(abcd/pc)**

**Explanation:** The product TSO/SRV execute queue processing function detected an abend or error while attempting to schedule a command into an external TSO server address space. This message is returned to the original requester.

**User response:** Gather all abend error data, and contact your local product systems programming group for support.

The variable fields of the message text are: abcd abend code or zero pc post return code or zero

---

**HLV3704H TSO/SRV cancelled server jb,ASID=asid**

**Explanation:** The product has issued a CANCEL command to eliminate a TSO/SRV server address space. This may occur either because of a change (reduction) in the value of the TSOMINSERVERS parameter or because of a server command exceeding its execution limits.

**User response:** When a server command exceeds the server execution limits, this message is accompanied by a message describing which limit is exceeded. Either modify the limit or correct the server command/program.

The variable fields of the message text are: jb jobname asid ASID of the TSO/SRV server address space

---

**HLV3705I Idle TSO server terminated due to TSOMAXSERVERS**

**Explanation:** The product detected that there were currently more servers active than specified in the TSOMAXSERVERS parameter and terminated the server in question because it was currently idle.

**User response:** None. This message is for informational purposes only.

---

**HLV3706W Transaction aborted**

**Explanation:** This message is sent to the issuer of a TSO/SRV server command when the server has terminated while executing the transaction.

**User response:** Check for other messages associated with this condition, and attempt to resolve the problem.

---

**HLV3707S TSO/SRV server failed during initialization**

**Explanation:** The product attempted to start a TSO/SRV server address space. However, the address space failed during initialization.

**User response:** Verify that the TSO/SRV server started task JCL is correct. JCL errors of one kind or another (e.g. data set does not exist) are frequently the cause of this condition. If you are unable to resolve the problem, contact Software Support.

---

**HLV3708E Unable to find ASVT entry for TSO/SRV server ASID=asid**

**Explanation:** After issuing an internal START command for a TSO/SRV address space, the product attempted to validate the returned ASID and found it to be invalid. This error indicates one of the following conditions: (1) the ASID is negative, (2) the ASID is greater than the system MAXUSER value, or (3) the associated ASVT entry is currently not in use.

**User response:** This condition is extremely unlikely to occur.

The variable fields of the message text are: asid ASID returned by the system

---

**HLV3709W TSO server canceled - max transaction time exceeded**

**Explanation:** The transaction currently being processed by the server in question has exceeded the maximum amount of time allowed by TSOMAXCMDRUNTIME and has caused the cancellation of the server.

**User response:** Please examine the SYSLOG for the \_3710I companion message, which will detail the command in error and its approximate start time. Either correct the command in error or increase the TSOMAXCMDRUNTIME value.

---

**HLV3710I CMD TEXT = text ,START TIME = time**

**Explanation:** This is the companion message to \_3709W. It details the command which was being processed by the canceled server and its approximate start time.

**User response:** Either correct the command in error or increase the TSOMAXCMDRUNTIME specification.

The variable fields of the message text are: text partial text of command time start time of this command

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---

**HLV3711I Idle server terminated due to TSOMINSERVERS or TSOSRVDORMANT timeout**

**Explanation:** The product detected that the current number of servers is greater than the user specified TSOMINSERVERS parameter but not greater than the user specified TSOMAXSERVERS value and that the server has been idle longer than the user specified TSODORMANTTIMEOUT value. The product terminated the server in question because it was currently idle.

**User response:** None. This message is for informational purposes only.

---

**HLV3712W TSOMAXSERVERS value (parmval1) invalid. Set to TSOMINSERVERS (parmval2).**

**Explanation:** The product Server processing has detected that the TSOMAXSERVERS value has been set to a value that is lower than the TSOMINSERVERS value. This is invalid - the maximum number of servers can never be lower than the minimum number of servers. The maximum value is changed to the minimum value.

**User response:** If the incorrect values are set via the startup exec or any other program, correct the program(s). You may also adjust the TSOMINSERVERS and TSOMAXSERVERS values using the ISPF parameter display.

The variable fields of the message text are: parmval1 current (invalid) value of TSOMAXSERVERS parmval2 current TSOMINSERVERS value

---

**HLV3713I TSO/SRV server added due to excessive queue depth (qd)**

**Explanation:** The number of requests on the TSO/SRV server execute queue currently exceeds the threshold set by the user specified TSOSRVQUEUEADDDDEPTH. The number of servers is being increased by one since the number of servers is still below the maximum number of servers limit as specified by the TSOMAXSERVERS value.

**User response:** None. This message is for informational purposes only.

The variable fields of the message text are: qd current TSO/SRV execute queue depth

---

**HLV3714H TSO/SRV terminated server jb,ASID=asid**

**Explanation:** The product has terminated a TSO server address space. The server has been terminated because either the current number of servers exceeds the TSOMAXSERVERS limit, or the current number of servers exceeds the TSOMINSERVERS value and the

current server has been idle more than TSOSRVDORMANTTIMEOUT seconds. This message may also occur when a control command requested server termination. The server address space may not terminate immediately if it is currently running a transaction. If the server does not terminate voluntarily within a limited time period, the server will be cancelled by the product.

**User response:** None. This message is for informational purposes only.

The variable fields of the message text are: jb jobname asid ASID of the TSI server address space

---

**HLV3715H TSO/SRV SUBTASK ABEND abcd IN func mod+off**

**Explanation:** The product TSO/SRV execute queue processing function detected an abend. The message text contains the abend code, current operation, and abend location.

**User response:** Check if any other error messages were generated along with the error message above. If the combined error messages are sufficient to explain the problem, take whatever corrective action is appropriate.

The variable fields of the message text are: abcd abend code func current function mod module name off module offset

---

**HLV3716O Cancelled TSO server jb stepname (ASID=asid), has not terminated**

**Explanation:** The product has issued a CANCEL command to terminate a TSO server. More than one (1) minute has elapsed since the CANCEL command was issued, but the server address space has not terminated.

**User response:** First, attempt another CANCEL command using the STEP NAME from the message. If this does not cause the server to terminate, use the MVS FORCE command or attempt to kill the server address space using any other means at your disposal.

The variable fields of the message text are: jb jobname stepname step name asid ASID of the TSO server address space

---

**HLV3717H TSO server execute queue reset**

**Explanation:** A control command has caused the TSO/SRV execute queue to be cleared. All pending TSO transactions have been discarded.

**User response:** None. This message is for informational purposes only.

---

**HLV3718E TSO ADDRESS SPACE CREATION FAILED, RC = rc, REASON CODE = rscd**

**Explanation:** A failure occurred in the service routine that schedules an address space CREATE. The TSO address space will not be created. The return and reason codes in the message are from the MVS ASCRE service routine.

**User response:** Check the return code in the message. If the return code is 52 or higher, this error is most likely a system related problem, and you should report this to your system programming staff. If necessary, set the TSOSRVUSEASCRES to NO so that START commands (rather than ASCRE) will be used to create TSO outboard server address spaces.

The variable fields of the message text are: rc return code rscd reason code

---

**HLV3720T TSO EXECUTE QUEUE ADD; QD=qd, CMD=cmd**

**Explanation:** This message is actually issued by the ADDRESS TSO | CGI processor when the DEBUG FLAG is set ON. This message indicates that a command is being sent to the product Server queue. Note that queue depth is displayed prior to the addition of the current command.

**User response:** None. This message is used for debugging and analysis purposes only.

The variable fields of the message text are: qd current TSO execute queue depth cmd partial text of command sent to server

---

**HLV3721T TSO COMMAND DISPATCH; QD=qd, ASID=asid, QTIME=sss, CMD=cmd**

**Explanation:** This message indicates that a command has been removed from the TSO execute queue and has been sent to a product TSO server address space. This message is only issued when DEBUG is set ON.

**User response:** None. This message is used for debugging and analysis purposes only.

The variable fields of the message text are: qd current TSO execute queue depth asid address space identifier of server sss time spent on TSO execute queue (100th sec) cmd partial text of command sent to server

---

**HLV3722T TSO COMMAND RECEIVED; ASID=asid, ETIME=sss, CMD=cmd**

**Explanation:** This message indicates that a server has received a command. The delay between the time the TSO command dispatch message is issued and the time this message is issued is due to operating system scheduling factors. This message is only issued when DEBUG is set ON.

---

**User response:** None. This message is used for debugging and analysis purposes only.

The variable fields of the message text are: asid address space identifier of server sss time since command sent to server (100th cmd partial text of command sent to server

---

**HLV3723T TSO COMMAND COMPLETE; ASID=asid, ETIME=sss, CPU=time, I/O=num, CMD=cmd**

**Explanation:** This message indicates that a server has completed execution of a command. This message is only issued when DEBUG is set ON.

**User response:** None. This message is used for debugging and analysis purposes only.

The variable fields of the message text are: asid address space identifier of server sss time since command sent to server (seconds) time command CPU time in hex (microseconds) num number of I/Os performed by the command cmd partial text of command sent to server

---

**HLV3724H pgm (usid) SENT TSO CMD cmd**

**Explanation:** This message indicates that a server has received a command. The program or ruleset.rulename indicates where the command originated.

**User response:** No action is required.

The variable fields of the message text are:

pgm program name or ruleset.rulename  
usid runtime user ID for command execution  
cmd partial text of command sent to server

---

**HLV3725T TSO execute processor posted by comp**

**Explanation:** This message indicates that the TSO execute processor has received a signal from another component.

**User response:** None. This message is used for debugging and analysis purposes only.

The variable fields of the message text are: comp component description

---

**HLV3729T msg var2 var3**

**Explanation:** This message is for TSO trace purposes only.

**User response:** None. This message is used for debugging and analysis purposes only.

The variable fields of the message text are: msg message or message text var2 none var3 none

---

---

**HLV3750H SEF var1 var2**

**Explanation:** This message indicates that the product execute processor has terminated.

**User response:** This message is for informational purposes only unless it indicates that the SEF command queue has not been allocated. In that case, you should check for any other messages that appeared on the console during product initialization that may assist you in resolving this problem. If you are unable to resolve the problem, contact Software Support for further assistance.

The variable fields of the message text are: var1 none  
var2 none

---

**HLV3751I SEF service OF desc FAILED, RC=rc**

**Explanation:** This is a generic error message used to describe a wide variety of global variable initialization and termination errors. The message text provides the current operation and what the current operation was trying to do.

**User response:** Check the error messages and the return code associated with this problem. There may be one or more error messages referring to the current problem. If possible, fix the problem identified by the error messages, and restart the product. If the problem cannot be resolved, contact Software Support.

The variable fields of the message text are: service  
current operation, GETMAIN, FREEMAIN, attach etc.  
desc description rc return code

---

**HLV3752W SEF API INITIALIZATION FAILED  
DUE TO desc var1 var2**

**Explanation:** During SEF initialization, an error was detected while creating API interface linkages. The message describes the error encountered.

**User response:** Check the error messages and the return code associated with this problem. There may be one or more error messages referring to the current problem. If possible, fix the problem identified by the error messages, and restart the product. If the problem cannot be resolved, contact Software Support.

The variable fields of the message text are: desc  
initialization step description var1 variable information  
var2 variable information

---

**HLV3753W ABEND var1 AT var2+var3, SEF  
COMMAND 'var4' ABORTED**

**Explanation:** The product detected this error.

**User response:** Contact Software Support.

The variable fields of the message text are: var1 none  
var2 none var3 none var4 none

---

**HLV3754I SEF command syntax error: "cmd"**

**Explanation:** The SEF execution processor detected a command with invalid syntax for the ADDRESS SEF environment. Normally, the syntax error should have been detected at rule enabled or program compile time.

**User response:** Modify the rule or program that issued the command to use a valid ADDRESS SEF command.

The variable fields of the message text are: cmd the  
invalid SEF command

---

**HLV3755E service OF PRECOMPILED DATA SET  
(dsn) FAILED RC=rc**

**Explanation:** The SEF execution processor detected a request to allocate/deallocate a compiled rules library, and the request failed. Check error messages preceding this failure for more allocation error data.

**User response:** Check any allocation error messages that preceded this message for more diagnostic information. After fixing the problem, reset the parameters SEFPRECOMPILED and SEFPRECOMPILEDDSN.

The variable fields of the message text are: service  
allocation or deallocation dsn failed data set name rc  
failed allocation return code

---

**HLV3756I SEF precompiled rules active**

**Explanation:** SEF has activated the Compiled Rules Facility. This facility is activated by the setting of the parameter SEFPRECOMPILED to ON and the parameter SEFPRECOMPILEDDSN to a valid compiled rule library.

**User response:** None. This message is for informational purposes only.

---

**HLV3757I SEF var1 var2**

**Explanation:** This message indicates that a command has executed and is returning status information. It indicates the success or failure of the command.

**User response:** This message is for informational purposes only. If it indicates failure of the command, check that the parameters you have given are correct.

The variable fields of the message text are: var1 none  
var2 none

---

**HLV3780I func OF desc FAILED, RC=rc**

**Explanation:** A failure occurred in the service routine that sets the wait timer interval for the next trace checkpoint. This message should be preceded by a message containing the return code from the MVS STIMERM service.

## HLV3781S • HLV3886E

**User response:** Contact Software Support.

The variable fields of the message text are: func current function (set) desc description (browse timer) rc return code (set by product service routine)

---

**HLV3781S** ABEND abcd OCCURRED AT mod+off  
- desc

**Explanation:** An abend occurred during trace checkpoint processing. The location of the abend is shown in the abend error message. All trace checkpoint processing will be suspended until the main product address space is restarted. Note that the main product address space will start to accumulate non-VIO ASM slots as if no DIV data set had ever been allocated. The gradual accumulation of ASM slots by the main product address space could eventually cause an ASM slot shortage.

**User response:** Check the error messages and the abend code associated with this problem. There may be one or more additional error messages or abends referring to the current trace checkpoint processing problem. Check for OPEN errors, such as security product related abends. Also, check for storage allocation errors or abends. If possible, fix the problem identified by the error messages, and restart the product. If the problem cannot be resolved, contact Software Support.

The variable fields of the message text are: abcd abend code mod module name off module offset desc description

---

**HLV3782S** desc1 ddn errmsg FAILED RC=rc desc2

**Explanation:** A problem was encountered while opening or refreshing a product data set. The message indicates the cause of the failure.

**User response:** Check the error messages associated with this problem. There may be one or more additional error messages or abends referring to the current processing problem. If possible, fix the problem identified by the error messages, and restart the product. If the problem cannot be resolved, contact Software Support.

The variable fields of the message text are: desc1 file description ddn file dname errmsg failure encountered rc return code desc2 additional description of error

---

**HLV3783S** desc ddn processing ABENDEd  
code=abcd reason=rscd at mod+off

**Explanation:** A problem was encountered while opening or refreshing a product data set. The message indicates the abend code associated with the processing function.

**User response:** Check the error messages associated with this problem. There may be one or more

additional error messages or abends referring to the current processing problem. If possible, fix the problem identified by the error messages, and restart the product. If the problem cannot be resolved, contact Software Support.

The variable fields of the message text are: desc file description ddn file dname abcd abend code rscd abend reason code mod module name off module offset

---

**HLV3784T** var1 DUPLICATES THE var2 var3 IN  
var4 - SKIPPED

**Explanation:** A problem was encountered while opening or refreshing a product data set. The message indicates that a duplicate entity was detected. The DUPLICATING entity will be ignored.

**User response:** Check the error messages associated with this problem. There may be one or more additional error messages or abends referring to the current processing problem. If possible, fix the problem identified by the error messages, and refresh or restart the product. If the problem cannot be resolved, contact Software Support.

The variable fields of the message text are: var1 duplicating entity source var2 entity type var3 duplicate entity identifier var4 duplicated entity source

---

**HLV3785H** var1 DUPLICATES THE var2 var3 IN  
var4 - SKIPPED

**Explanation:** A problem was encountered while opening or refreshing a product data set. The message indicates that a duplicate entity was detected. The DUPLICATING entity will be ignored.

**User response:** Check the error messages associated with this problem. There may be one or more additional error messages or abends referring to the current processing problem. If possible, fix the problem identified by the error messages, and refresh or restart the product. Normally, this is done by manually removing one or the other source file identified in the message. If the problem cannot be resolved, contact Software Support.

The variable fields of the message text are: var1 duplicating entity source var2 entity type var3 duplicate entity identifier var4 duplicated entity source

---

**HLV3886E** RULESET ruleset var2 var4 var5  
var6 var7 var8 var9

**Explanation:** The SEF request is rejected because the ruleset status prevents execution of the request.

**User response:** Examine previously reported conditions to determine the cause of the problem.

The variable fields of the message text are: ruleset Ruleset name var2 variable information var2 variable information var4 variable information var5 variable

information var6 variable information var7 variable  
information var8 variable information var9 variable  
information

---

**HLV3887I    RULESET ruleset var2 var4 var5  
var6 var7 var8 var9**

**Explanation:** An error occurred while processing an SEF request and the status of a ruleset is effected. This message follows the original error message to warn of additional/on-going ramifications from the error.

**User response:** The server takes the action reported in this message in order to recover from the previously reported error cause.

The variable fields of the message text are: ruleset  
Ruleset name var2 variable information var2 variable  
information var4 variable information var5 variable  
information var6 variable information var7 variable  
information var8 variable information var9 variable  
information

---

**HLV3888E    Required master WWW ruleset not  
defined - HTTP processing impossible**

**Explanation:** SEF Rule manager did not find a Master WWW ruleset definition. The rule manager will not enable ANY WWW rulesets.

**User response:** Check your initialization procedure, SWSxIN00, to be sure it defines ONE master WWW ruleset using the "WWWCLASS(MASTER)" keyword.

---

**HLV3889I    SEF ver OPERATIONAL MODE DOES  
NOT SUPPORT THE func FUNCTION**

**Explanation:** SEF rule manager received a command which it does not support when operating in the indicated operational mode.

**User response:** Correct the command, and re-issue.

The variable fields of the message text are: ver version  
in which SEF is operating func unsupported command  
function

---

**HLV3790I    func OF desc FAILED, RC=rc**

**Explanation:** A failure occurred in the service routine that sets the wait timer interval for the next global variable checkpoint. This message should be preceded by a message containing the return code from the MVS STIMERM service.

**User response:** Contact Software Support for assistance.

The variable fields of the message text are: func current  
function (SET) desc desc (global variables checkpoint  
timer) rc return code (set by product service routine)

---

**HLV3791E    func for creating global variable backup,  
RC = rc, ReaSon code = rscd**

**Explanation:** A failure occurred in the service routine that schedules an address space create. The global variable backup will not execute. The return and reason codes in the message are from the MVS ASCRE service routine.

**User response:** Check the return code in the message. If the return code is 52 or higher, the error is most likely a system related problem, and you should report this to your system programming staff. If the problem cannot be resolved, contact Software Support for assistance.

The variable fields of the message text are: func current  
function (ASCRE) rc return code rscd reason code

---

**HLV3792I    Global Variable Backup address space  
proc has been created**

**Explanation:** This message is informational only. The message indicates that the product created the global variable backup address space.

**User response:** None. This message is for informational purposes only.

The variable fields of the message text are: proc  
procname

---

**HLV3800T    An unknown value was found in field  
<field> by routine.**

**Explanation:** A value was found in a control block field that cannot be validated by the SERVER API.

**User response:** Contact IBM Software Support.

The variable fields of the message text are: field the  
field name that cannot be validated routine the  
SERVER routine name

---

**HLV3847W    Error compiling SEF rule rule, closing \*/  
not found where expected.**

**Explanation:** SEF rule manager attempted to compile a REXX rule with a /\*%include statement that contained invalid syntax. After the member name, only \*/ is allowed. Imbedded comments inside the /\*%include phrase are not supported.

**User response:** Correct the /\*%include statement and try again.

The variable fields of the message text are: rule rule  
name being compiled.

---

**HLV3848W Error compiling SEF rule rule,  
INCLUDE name mem too long.**

**Explanation:** SEF rule manager attempted to compile a REXX rule with a /\*%include statement that specified a member name longer than 8 bytes.

**User response:** Correct the /\*%include statement and try again.

The variable fields of the message text are: rule rule name being compiled. mem member name supplied in the rule.

---

**HLV3849T SEF ver operational mode does not  
support the func function**

**Explanation:** SEF rule manager received a command which it does not support when operating in the indicated operational mode.

**User response:** Correct the command, and re-issue.

The variable fields of the message text are: ver version in which SEF is operating func unsupported command function

---

**HLV3850E INTERNAL routine1 ERROR  
DETECTED BY routine2: CALLER(csect)  
RTADDR(addr) - var1 var2 var3**

**Explanation:** An error occurred while an internal API routine was executing. This message reports some inconsistency or a possible logic error.

**User response:** The API rejects the current request and continues. Check for other messages which may indicate the precipitating cause.

The variable fields of the message text are: routine1 API routine name or description routine2 routine where error detected csect calling CSECT name addr return address to calling routine var1 variable information var2 variable information var3 variable information

---

**HLV3851I NO EXECUTABLE OBJECT (XO)  
DATASETS ARE CURRENTLY  
DEFINED OR IN-USE**

**Explanation:** This response is returned for 'LIST =XOFILES' SEF command if no executable object image (XO) datasets are defined or in use. XO datasets may contain pre-compiled executable object images such as SEF rules or HTX skeletons.

**User response:** None.

---

**HLV3852I %1**

**Explanation:** This response is returned for 'LIST =XOFILES' SEF command for each individual XO dataset allocated in the system. A list of zero or more associations may follow this message.

**User response:** None.

---

**HLV3853I %1**

**Explanation:** This response is returned for 'LIST =XOFILES' SEF command for each association with an XO dataset. This message follows the XO dataset status message MSG3852I.

**User response:** None.

---

**HLV3854I %%INCLUDE processing ignored when  
ISPF EDIT source being compiled, line  
line**

**Explanation:** A %INCLUDE statement was detected in the source of the Product REXX program being compiled. The procedure source is being fetched from the current ISPF Edit session and %INCLUDE is not supported in this environment.

**User response:** The %INCLUDE statement, with its including comment delimiters is not processed. The original text is preserved in the procedure source being fetched from the current edit session.

The variable fields of the message text are: line line number where /\*%INCLUDE ... \*/ found

---

**HLV3855I %%INCLUDE statement syntax invalid,  
line line**

**Explanation:** A %INCLUDE statement was detected in the source of the Product REXX program being compiled, but the statement was incomplete. /\*%INCLUDE, the named member, and \*/ must all be present on a single source line. The member name must be less than or equal to 8 bytes in length.

**User response:** The %INCLUDE statement is rejected

The variable fields of the message text are: line line number where /\*%INCLUDE ... \*/ found

---

**HLV3856I %%INCLUDE member (member) not  
found, line line**

**Explanation:** A %INCLUDE statement was detected in the source of the Product REXX program being compiled, but the member named in the statement cannot be found in either the library dataset where the source member resides or in the SYSEXEC library concatenation.

**User response:** The %INCLUDE statement is rejected

The variable fields of the message text are: member member name from %INCLUDE line line number where /\*%INCLUDE ... \*/ found



---

**HLV3886E**    **RULESET ruleset var2 var2 var4 var5  
var6 var7 var8 var9**

**Explanation:** The SEF request is rejected because the ruleset status prevents execution of the request.

**User response:** Examine previously reported conditions to determine the cause of the problem.

The variable fields of the message text are: ruleset  
Ruleset name var2 variable information var2 variable  
information var4 variable information var5 variable  
information var6 variable information var7 variable  
information var8 variable information var9 variable  
information

---

**HLV3887I**    **RULESET ruleset var2 var2 var4 var5  
var6 var7 var8 var9**

**Explanation:** An error occurred while processing an SEF request and the status of a ruleset is effected. This message follows the original error message to warn of additional/on-going ramifications from the error.

**User response:** The server takes the action reported in this message in order to recover from the previously reported error cause.

The variable fields of the message text are: ruleset  
Ruleset name var2 variable information var2 variable  
information var4 variable information var5 variable  
information var6 variable information var7 variable  
information var8 variable information var9 variable  
information

---

**HLV3888E**    **Required master WWW ruleset not  
defined - HTTP processing impossible**

**Explanation:** SEF Rule manager did not find a Master WWW ruleset definition. The rule manager will not enable ANY WWW rulesets.

**User response:** Check your initialization procedure, SWSxIN00, to be sure it defines ONE master WWW ruleset using the "WWWCLASS(MASTER)" keyword.

---

**HLV3889I**    **SEF ver OPERATIONAL MODE DOES  
NOT SUPPORT THE func FUNCTION**

**Explanation:** SEF rule manager received a command which it does not support when operating in the indicated operational mode.

**User response:** Correct the command, and re-issue.

The variable fields of the message text are: ver version  
in which SEF is operating func unsupported command  
function

---

**HLV3890I**    **data**

**Explanation:** SEF rule manager uses this message to list formatted control block output messages.

**User response:** These messages contain the formatted control block image.

The variable fields of the message text are: data  
formatted control block output line data

---

**HLV3891I**    **data**

**Explanation:** SEF rule manager issued the current message to list ruleset information to the output area.

**User response:** The current message is statistical and lists the rulesets in the output area. No response is required to this message. Check the rule output listing, and make choices accordingly.

The variable fields of the message text are: data  
message output line

---

**HLV3892I**    **INDEX COMMAND OPERAND (oper1)  
IS NOT VALID - NO ACTION TAKEN**

**Explanation:** This message is generated if an invalid INDEX command is passed to the ADDRESS SEF host command environment.

**User response:** No action is taken, and the command is not processed further.

The variable fields of the message text are: oper1  
operand of INDEX command

---

**HLV3893E**    **SEF RULESET ruleset HAVE INVALID  
RULETYPE(ruletype) - RULESET  
STOPPED/OFFLINE**

**Explanation:** While opening a ruleset SEF, SEF detected that the ruleset's definition contains an invalid RULETYPE() specification.

**User response:** The ruleset is considered to be offline and is not opened. Check for causes that might explain the invalid RULETYPE() designation for the ruleset named in the message.

The variable fields of the message text are: ruleset  
ruleset NAME() value ruletype ruletype internal code  
value

---

**HLV3895I**    **data**

**Explanation:** This message is issued in response to an SEF INDEX URL command. It is the first message returned for each active rule. The data items returned, blank delimited, in this message are the ruleset name, the rule member name, master/subord, gateway/target, count of rule process sections, and the URL match criterion.

**User response:** None. This message is for

informational purposes only.

The variable fields of the message text are: data blank-delimited information described above

**HLV3896E RULESET OFFLINE rule dsname ruletype reason**

**Explanation:** An SEF request was made that required that a ruleset be opened for processing, but the ruleset is currently stopped or offline.

**User response:** Take action to place the ruleset online, and re-issue the request. One common problem is that the ruleset dsname no longer exists.

The variable fields of the message text are: rule ruleset name dsname ruleset dsname ruletype rule types in this ruleset reason reason why ruleset is offline

**HLV3897E RULESET rule is not defined**

**Explanation:** An SEF request was made that required that a ruleset be opened for processing. The ruleset is not defined to the system.

**User response:** Check the list of defined rulesets to determine if the ruleset was not properly defined or specify the correct ruleset name.

The variable fields of the message text are: rule ruleset name

**HLV3898W RULESET rule1 AND rule2 ARE BOTH DEFINED AS MASTER WWW RULESETS - RULESET rule3 FLAGGED WITH STATUS(OFFLINE)**

**Explanation:** When the SEF rule manager attempted to process the list of rulesets defined to the system, it found that more than one master WWW ruleset had been defined. Only one ruleset can be defined with RULETYPE(WWW) WWWCLASS(MASTER) attributes.

**User response:** The second ruleset defined as a master WWW ruleset will not be processed. It is flagged with STATUS(OFFLINE) and stopped so that no processing of the data set will occur until the RULESET definition has been changed.

The variable fields of the message text are: rule1 first master WWW ruleset name rule2 second or subsequent master WWW ruleset rule3 ruleset forced to STATUS(OFFLINE) state

**HLV3899W No SEF rulesets have been defined**

**Explanation:** When the SEF rule manager attempted to process the list of rulesets defined to the system, it found that no valid rulesets had been defined.

**User response:** The current message is a rule status report message and may not require any response. If rulesets should be defined, check your start-up

procedure for errors which might have occurred while processing DEFINE RULESET statements.

**HLV3900T RULE rule1.rule2 FOR ruletype crit st**

**Explanation:** SEF rule manager issued the current informational message to report the status of the current rule. The ruleset rulename is now enabled.

**User response:** The current message is a rule status report message and does not require any response.

The variable fields of the message text are: rule1 rule set name rule2 rule name ruletype rule type description string crit primary criterion st status

**HLV3901E service OF oper1 FAILED, RC=rc**

**Explanation:** A configuration, authorization, runtime, or I/O error has been encountered while executing an SEF rule manager request. The request cannot be completed, but may be possible at a later time. The SEF ruleset involved with the request may be placed into STOPPED or OFFLINE state.

**User response:** Examine surrounding messages to determine if the SEF request failed because of insufficient authorization on the part of the requestor to execute the request. If the request is due to a configuration error, you may find it necessary to correct server startup parameters and restart the server.

The variable fields of the message text are: service service name oper1 service operand rc service return code

**HLV3902E var1 var2 SECTION IN RULE var3**

**Explanation:** SEF rule manager did not find a matching section header table entry. The processing of the current rule is terminated.

**User response:** Ensure that the rule sections are properly coded and valid. Review the rule for obvious coding errors. Refer to the product Server Administration Guide for more details on rule coding. Correct the above problem, and restart.

The variable fields of the message text are: var1 none var2 none var3 none

**HLV3903E INVALID CRITERION "crit" IN desc rule rule**

**Explanation:** SEF rule manager detected an invalid criterion when processing the current rule. Only a single wildcard is allowed in the rule criterion. Rule processing is terminated.

**User response:** Check the error message text for the criterion field, and ensure that the criterion is limited to one match criteria or one wildcard. Refer to the product Server Administration Guide for more details on the firing of rules and the valid criteria.

The variable fields of the message text are: crit criterion  
specification desc rule type description rule ruleset  
rulename

---

**HLV3906I data**

**Explanation:** SEF rule manager issued the current message to list the rule data set index (prefix/suffix) to the output area.

**User response:** The current message is statistical and lists the rulesets in the output area. No response is required to this message. Check the rule output listing, and make choices accordingly.

The variable fields of the message text are: data  
message output line

---

**HLV3907I SEF is not active**

**Explanation:** SEF rule manager has detected that SEF is not active.

**User response:** Ensure that the product is started and SEF is active. Contact your local product systems programming group for assistance.

---

**HLV3908I INVALID SEF REQUEST TYPE  
"request" rule1 rule2**

**Explanation:** SEF rule manager detected an invalid SEF rule request type during rule request processing. The current request is terminated.

**User response:** Check the current request for any errors. Check the request type in the error message text against the rule sections in the product Server Administration Guide for any inconsistencies. Review the problem, and take corrective action.

The variable fields of the message text are: request  
request type rule1 ruleset name rule2 rule name

---

**HLV3909I RULE rule1.rule2 IS NOT ENABLED**

**Explanation:** An attempt to disable a rule failed because the rule is not currently enabled.

**User response:** No action required.

The variable fields of the message text are: rule1 ruleset  
name rule2 rule name

---

**HLV3910I No rules enabled in Rule Set rule**

**Explanation:** This is an informational or status report message issued by SEF rule manager. Either no rules exist or no rules are enabled in ruleset.

**User response:** No action required.

The variable fields of the message text are: rule ruleset  
name

---

**HLV3911I RULE rule var1**

**Explanation:** SEF rule manager did not find the member name that contains the current rule. The rule request is aborted.

**User response:** Ensure that the rule listed in the rule name field of the error message exists, or create one before invoking the request.

The variable fields of the message text are: rule  
ruleset.rulename string var1 not found

---

**HLV3912E No ISPF statistics for rule <rule> in  
ruleset.**

**Explanation:** SEF rule manager found no ISPF statistics for the rule member in the indicated ruleset.

**User response:** Ensure that statistics exist for the rule in the PDS directory and that ISPF statistics is turned on.

The variable fields of the message text are: rule rule  
name string ruleset ruleset information

---

**HLV3913E var1 Criterion syntax error "lineno" in  
rule rule**

**Explanation:** A syntax error was detected in a rule while attempting to enable it. The time criteria are syntactically incorrect.

**User response:** Check the product Server Administration Guide for the correct syntax. Correct the rule, and re-enable it.

The variable fields of the message text are: var1 time or  
screen lineno line of rule in error rule name of the  
ruleset.rule in error

---

**HLV3914E INCONSISTENT var1 CRITERION  
"lineno" IN RULE rule**

**Explanation:** A time or screen criterion was syntactically correct but inconsistent. A starting time greater than an ending time or a row range whose first row value is larger than the second may cause this error message.

**User response:** Correct the inconsistent criterion, and re-enable the rule.

The variable fields of the message text are: var1 time or  
screen lineno line of rule in error rule name of the  
ruleset.rule in error

---

**HLV3915E MAXIMUM OF num var2 CRITERIA  
EXCEEDED IN RULE rule**

**Explanation:** Too many screen or time criteria were specified in the header section of a rule.

**User response:** Reduce the number of time or screen criteria in the rule, and re-enable the rule.

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The variable fields of the message text are: num maximum number of criteria allowed var2 time or screen rule name of the ruleset.rule in error

---

**HLV3916I** TOD RULE rule1.rule2 HAS BEEN DISABLED - ALL TIME CRITERIA HAVE EXPIRED

**Explanation:** SEF rule manager disabled the current rule (TOD) after all time criteria expired. This may or may not be an error.

**User response:** The current TOD rule time criterion is not valid beyond the last fire time. If rule was intended to go beyond the last fire time, ensure that the next TOD rule is created with the required start/stop/interval or time criteria desired.

The variable fields of the message text are: rule1 ruleset name rule2 rule name

---

**HLV3918E** Error 43 request caller, line lineno: routine routine not found

**Explanation:** SEF rule manager did not find the current routine.

**User response:** Review the current rule code for the correct invocation and coding of a routine name. Refer to the product Server Administration Guide for calls to routines. Correct the problem, and restart.

The variable fields of the message text are: request type of compiler request caller calling program name lineno calling program line number routine called routine name

---

**HLV3919E** NO VALID RULE HEADER FOUND IN RULE rule - reason

**Explanation:** SEF rule manager did not find a valid rule header in the current rule.

**User response:** Review the current rule code for a valid rule header. Refer to the product Server Administration Guide for rule header coding. Correct the problem, and restart.

The variable fields of the message text are: rule rule name string reason reason error was noted

---

**HLV3920W** Following line(s) ignored in rule rule:

**Explanation:** SEF rule manager found a line that was skipped and will ignore the following lines.

**User response:** Review the current rule code, and eliminate any blank lines. Correct the rule, and restart.

The variable fields of the message text are: rule rule name string

---

**HLV3921W** Rule rule contains no executable sections

**Explanation:** SEF rule manager found no executable sections in the current rule.

**User response:** Review the current rule code to make sure it is executable code (e.g. RETURN SUPPRESS in PROC section if this is a message rule). Without any executable sections, the current rule cannot be processed by the SEF manager.

The variable fields of the message text are: rule rule name string

---

**HLV3922I** MATCH TABLE LIST - d1 t2

**Explanation:** SEF rule manager issued this message to list the match table (message parameter list).

**User response:** None. This message is for informational purposes only.

---

**HLV3923I** MATCH TABLE AT addr PFX=prefix SFX=suffix LEN=length PRI=code ROOT AT loc

**Explanation:** SEF rule manager issued this message to list the match table at the address shown in the message text.

**User response:** None. This message is for informational purposes only.

The variable fields of the message text are: addr match table address prefix match table prefix length suffix match table suffix length length match table length with wildcard code match table internal priority code loc root of match table tree

---

**HLV3924I** Match table list empty

**Explanation:** SEF rule manager issued this message to list a match table entry that is empty.

**User response:** None. This message is for informational purposes only.

---

**HLV3925I** sqno rule crit NODE LVL=level ADR=addr1 LO=addr2 HI=addr3 AORL=addr4 LEN=length

**Explanation:** This message is for debugging purposes only.

**User response:** None.

The variable fields of the message text are: sqno sequential order rule ruleset.rule crit criterion level node nesting level addr1 address current OPTI addr2 low subtree address addr3 high subtree address addr4 address current AORL length AORL length

---

**HLV3926I SECTION sect INVALID reason ON LINE lineno**

**Explanation:** The SEF facility found an invalid section header within the rule, so the rule could not be enabled.

**User response:** Correct the event procedure, and re-enable.

The variable fields of the message text are: sect section name or name fragment reason reason error condition generated lineno line number on which invalid section header appears.

---

**HLV3927I No match for rule**

**Explanation:** The product rule manager did not find a match for this rule.

**User response:** None. This message is for informational purposes only.

The variable fields of the message text are: rule rule name string

---

**HLV3928E RULESET rule 'prefix' IS msg**

**Explanation:** SEF rule manager checked the ruleset prefix string and found it to be blank.

**User response:** Ensure that the ruleset prefix string is not blank. Refer to the product Server Administration Guide for information on specifying rules data sets and related prefixes. Correct the above problem, and restart.

The variable fields of the message text are: rule current ruleset section prefix ruleset prefix string msg error message text

---

**HLV3929E Maximum ruleset count (msg) exceeded**

**Explanation:** SEF rule manager's internal list of SEF rulesets has overflowed. Too many SEF rulesets are defined.

**User response:** If the defined ruleset count exceeds the maximum supported number of rulesets when the server is started, SEF initialization processing will abort. After startup, the excess rulesets are immediately placed into stopped/offline status.

The variable fields of the message text are: msg maximum support SEF ruleset count

---

**HLV3930E RULESET rule 'prefix' msg1 msg2**

**Explanation:** SEF rule manager detected that the current ruleset high-level qualifier is a duplicate of another high-level qualifier.

**User response:** The current ruleset naming convention is incorrect. Ensure that the ruleset definition complies with the standard code for product rulesets. Refer to

the product Server Administration Guide for more details.

The variable fields of the message text are: rule current ruleset section prefix ruleset alternate prefix string msg1 error message string msg2 error message string

---

**HLV3931E pgm dsn is too large - input buffer overflow**

**Explanation:** SEF rule manager detected an input buffer overflow. The program is too large to be loaded in the current buffer.

**User response:** Check the current program for input size, and correct that, if possible. Contact your local product systems programming group for help.

The variable fields of the message text are: pgm current input source (program) dsn program dsname (member)

---

**HLV3932E service OF table FAILED, RC=rc**

**Explanation:** SEF rule manager could not setup the Product REXX external routine table. The GETMAIN failed.

**User response:** Determine why the GETMAIN of the required storage to create the above table failed. Check any MVS messages for their return codes. Ensure that no exits limit the acquiring of the given storage by any ASID. Review the current error text, and correct the problem.

The variable fields of the message text are: service service name table external routine table rc return code

---

**HLV3933E ABEND IN CELL POOL PROCESSING DURING func**

**Explanation:** An abend occurred during cell pool processing initiated by the SEF rule manager.

**User response:** If the error occurred during a GET, check the product region size. If the error did not occur during a GET, contact Software Support.

The variable fields of the message text are: func error function

---

**HLV3934E msg BE STORED IN RULESET rule1 - ERROR FOUND FOR rule2**

**Explanation:** SEF rule manager found the current rule header not applicable for storage in the current ruleset.

**User response:** Security rules can only be stored in the security ruleset (if security rules are found). Also, non-security rules cannot be stored in the security ruleset. Ensure that the current rule is stored in the appropriate ruleset environment.

The variable fields of the message text are: msg error message text rule1 ruleset name string rule2 ruleset.rule being processed

---

**HLV3935E CANNOT OPEN ddn (ABEND abcd AT mod+off)**

**Explanation:** During the open processing of the compiled rule library, an abend occurred.

**User response:** Ensure that the given library is a PDS, similar by definition to the other product supplied pre-compiled libraries. Check IBM message and codes manuals for the abend code. Most likely, the member does not exist or the data set attributes are in error (sequential DSORG or incompatibility in LRECL and BLKSIZE). If a system 913 abend code is reported, data set access has been disallowed by your security subsystem.

The variable fields of the message text are: ddn ddname abcd abend code mod module name off module offset

---

**HLV3936E cmd FAILED FOR rule - service OF ddn FAILED**

**Explanation:** The COMPILE or LISTCOMP SEF command failed.

**User response:** Ensure that the given library is properly allocated. Also, ensure that the given library is a PDS, similar by definition to the other product supplied pre-compiled libraries. Check IBM message and codes manuals for the abend code. Most likely, the member does not exist or the data set attributes are in error (sequential DSORG or incompatibility in LRECL and BLKSIZE). If a system 913 abend code is reported, data set access has been disallowed by your security subsystem.

The variable fields of the message text are: cmd SEF command type rule ruleset.rule name service service that failed ddn ddname of the data set

---

**HLV3937E LISTCOMP FOR RULESET rule FAILED - NO RULES FOUND**

**Explanation:** The LISTCOMP command for an individual ruleset failed. No saved compile rule was found in the compiled rule library.

**User response:** Ensure that the given ruleset for the LISTCOMP command is the valid one, and re-issue the command.

The variable fields of the message text are: rule ruleset name

---

**HLV3938E RULESET- rule UNABLE TO ACCESS COMPILED RULES**

**Explanation:** The COMPILE, LISTCOMP, or DELCOMP SEF command failed.

**User response:** Ensure that a proper PDS was allocated to the XODSN keyword of the ruleset specified. Special restrictions apply to the SWIRULE

ruleset, which cannot be compiled by a customer.

The variable fields of the message text are: rule ruleset name

---

**HLV3939E SEF COMPILE PROCESSING OF rule FAILED**

**Explanation:** The COMPILE, LISTCOMP, or DELCOMP SEF command failed.

**User response:** This message should have been accompanied by other messages.

The variable fields of the message text are: rule rule or ruleset name

---

**HLV3940E AUTOENABLED FAILED - rule IS A REXX EXTERNAL ROUTINE**

**Explanation:** An AUTOENABLE command was issued for a member of a ruleset that is actually a Product REXX external routine.

**User response:** Verify your command. Re-issue the command, if possible.

The variable fields of the message text are: rule rule or ruleset name

---

**HLV3941W SOURCE OF rule MODIFIED SINCE LAST COMPILE - SEF WILL USE SOURCE**

**Explanation:** SEF had detected that a compiled version of the current rule exists. But, it detected that the source version of the rule has been modified since the last time the rule was compiled. SEF will use the source version of the rule for this enablement.

**User response:** You may want to re-compile the rule or auto-enable it, which also automatically saves the compiled version of a rule.

The variable fields of the message text are: rule rule name

---

**HLV3942I NO ruletype RULES ENABLED IN RULESET rule**

**Explanation:** This is a product SEF command LISTINST RULETYPE() informational or status report message. No rules of the type specified are enabled in the ruleset.

**User response:** No action required.

The variable fields of the message text are: ruletype rule type rule ruleset name

---

**HLV3943I** There are no rules currently enabled

**Explanation:** SEF command LISTINST was unable to return rule or ruleset statistics because there are no enabled rules.

**User response:** None. This message is for informational purposes only.

---

**HLV3944I** rule

**Explanation:** SEF command LISTINST ruleset.rulename produces one line for each enabled rule in the ruleset.

**User response:** The current message is for information purposes only and lists information about the enabled rule in the output area. No response is required to this message.

The variable fields of the message text are: rule enabled rule information

---

**HLV3945I** rule

**Explanation:** SEF command LISTINST ruleset (with no rule names) produces one line for each enabled ruleset.

**User response:** The current message is for information purposes only and lists information about the enabled ruleset in the output area. No response is required to this message.

The variable fields of the message text are: rule enabled ruleset information

---

**HLV3946I** TYP PROCEDURE (set mem) SET INVALID parm VALUE OF "value"

**Explanation:** During initialization processing of a TYP event procedure, the REXX routine set an invalid parameter value.

**User response:** The current message is for information purposes only and lists information about the enable attempt. The TYP rule will not be enabled.

The variable fields of the message text are: set event procedure set name mem event procedure member name parm parameter name value value that was invalid

---

**HLV3947I** TYP EXECUTION MODULE mod NOT FOUND FOR varname IN (set mem)

**Explanation:** During initialization processing of a TYP event procedure, an invalid load module name was specified.

**User response:** The current message is for information purposes only and lists information about the enable attempt. The TYP rule will not be enabled.

The variable fields of the message text are: mod load module name that was not found varname REXX

variable which specified the name set event procedure set name mem event procedure member name

---

**HLV3948W** Too many sections found in rule procname

**Explanation:** More than one process section was found in the rule. This restriction may be removed in future releases.

**User response:** At the present time, only a single process section may be coded within a WWW or RPC rule.

The variable fields of the message text are: procname event procedure name where error found

---

**HLV3949I** ruletype WWW RULE rule1.rule2 ALREADY DEFINES THE URL 'crit'

**Explanation:** A duplicate URL criterion value is specified on more than one WWW rule at the same administrative level. Duplicate URL processing rules may only be activated when one of the pair resides within the master WWW ruleset and one resides in a subordinate ruleset. In such a case, the master rule is always processed before the subordinate rule, and the subordinate rule is only processed when the master rule is a header-only, generic rule. If the master rule contains a procedural specification, such as a REXX, FILE, or PROGRAM section, the subordinate rule will never be processed.

**User response:** Disable the duplicate rule before activating the current rule, or change the URL criterion value in the current rule to a unique value.

The variable fields of the message text are: ruletype ruleset type: MASTER or SUBORDINATE rule1 ruleset where duplicate found rule2 rule where duplicate found crit URL criterion value

---

**HLV3950I** data

**Explanation:** SEF rule manager issued the current message to list the data set statistics and status.

**User response:** The current message is statistical and lists the data set information. No response is required to this message. Check the PDS output listing, and make choices accordingly.

The variable fields of the message text are: data message output line

---

**HLV3951E** DDNAME ddn NOT ALLOCATED

**Explanation:** SEF rule manager attempted to open a data set for the processing of /\*FILE sections. The data set could not be opened because the ddname is unassigned.

**User response:** Ensure that the ddname specified in the message is allocated to a data set in the subsystem

## HLV3952E • HLV3960E

started task JCL, or ensure that the correct ddname value has been specified within the /\*FILE section header.

The variable fields of the message text are: ddname of data set

---

### HLV3952E DDNAME ddname COULD NOT BE OPENED (rc) addon

**Explanation:** SEF rule manager attempted to open a data set for the processing of /\*FILE sections. The data set could not be opened.

**User response:** Ensure that the ddname specified in the message is allocated to a data set in the subsystem started task JCL, or ensure that the correct ddname value has been specified within the /\*FILE section header.

The variable fields of the message text are: ddname of data set rc file processor routine return code (for numeric codes) or character reason (for open failure) addon additional diagnostic information

---

### HLV3953T text

**Explanation:** The Web transaction invoked an ADDRESS SEF command for intermediate processing. The ADDRESS SEF command failed. Messages issued by the ADDRESS SEF command are logged to the trace using this message ID.

**User response:** Examine the messages to see why the original /\*FILE request was rejected.

The variable fields of the message text are: text text of ADDRESS SEF message

---

### HLV3954E MEMBER mem NOT FOUND IN DATA SET ddname

**Explanation:** The indicated member was not found within the referenced PDS data set. The file-related process is terminated with a member not found error.

**User response:** Examine the messages to see why the original /\*FILE request was rejected.

The variable fields of the message text are: mem member name ddname

---

### HLV3955E MEMBER mem NOT FOUND IN DATA SET ddname

**Explanation:** The indicated member was not found within referenced PDS data set. The file-related process is terminated with a member not found error.

**User response:** Examine the messages to see why the original /\*FILE request was rejected.

The variable fields of the message text are: mem member name ddname

---

### HLV3956I FILE ddname NOW st

**Explanation:** The indicated file has been placed online or offline, as the message indicates.

**User response:** None. The message is traced to indicate /\*FILE related activation or deactivation of a shared PDS file.

The variable fields of the message text are: ddname ddname st status (OFFLINE or ONLINE)

---

### HLV3957I data

**Explanation:** SEF rule manager issued the current message to list the PDS member statistics.

**User response:** The current message is statistical and lists the PDS data set member information. No response is required to this message.

The variable fields of the message text are: data message output line

---

### HLV3958E ABEND abcd (reason) IN mod+off DURING service PROCESSING, SOME FILES MAY NOT BE st

**Explanation:** An abend occurred during file open or close processing at initialization or termination time. Some files may not have been processed.

**User response:** The initialization or termination process continues.

The variable fields of the message text are: abcd abend code reason abend reason mod module where abend occurred off offset of abend in module service operation being performed st status of files

---

### HLV3959I cnt1 of cnt2 shared data files now st

**Explanation:** During initialization or termination, this message is issued to indicate the results of file processing.

**User response:** No action is required, unless some files remain unopened at open time.

The variable fields of the message text are: cnt1 count of files now open or closed cnt2 total count of shared files st current status of files

---

### HLV3960E DSNNAME dsn could not be allocated (rc)

**Explanation:** SEF rule manager attempted to allocate a data set for processing of /\*FILE sections. The data set could not be opened.

**User response:** Ensure that the dsname specified in the message exists, or ensure that the correct dsname value has been specified within the /\*FILE section header.



The variable fields of the message text are: dsn dsname of the data set rc file processor routine return code (for numeric codes) or character reason (for open failure)

---

**HLV3961I    DSNNAME dsn DDNAME ddn  
ALLOCATED**

**Explanation:** The indicated dsname has been allocated to the indicated ddname.

**User response:** None. The message is traced to indicate /\*FILE related allocation.

The variable fields of the message text are: dsn dsname ddn ddname

---

**HLV3962I    DDNAME ddn DEALLOCATED**

**Explanation:** The indicated ddname has been deallocated.

**User response:** None. The message is traced to indicate ddname deallocation.

The variable fields of the message text are: ddn ddname

---

**HLV3963I    Generated DDNAME counter field  
rollover occurred**

**Explanation:** The 8 byte counter field used to generate ddnames rolled over.

**User response:** None. The message is traced to indicate a rollover of the 8 byte counter field used to generate ddnames occurred.

---

**HLV3964E    Member list not valid for sequential  
data sets DDNAME ddn, DSNNAME dsn**

**Explanation:** The member list function was issued for a sequential data set. The member list function is available only for partitioned data sets (PDS or PDSE).

**User response:** Issue the member list function only for PDS or PDSE data sets.

The variable fields of the message text are: ddn ddname of data set dsn dsname of data set

---

**HLV3965T    WARNING: OUTBOUND RESP DATA  
PRECEDES THIS FILE REQUEST -  
HTTP RESP PROTOCOL ELEMENTS  
WILL BE UNUSABLE BY CLIENT**

**Explanation:** When SWSFILE(SEND) or /\*FILE was invoked to transmit a file to the HTTP client, the server found that output data had previously been flushed for transmission to the client. The server proceeds with the file request after issuing this warning message. Because the server's file routines generate HTTP response protocol headers (such as Content-Type, Content-Length, Expires, etc.), any data preceding these headers will LIKELY cause some unpredictable result at

the client. For example, the data sent by the file routines may not be visible or interpreted incorrectly (i.e. the client may attempt to process HTML text as a GIF image), or the client may close the communications session.

**User response:** If the output which precedes the file request was generated by a customer-written transaction procedure, you can correct this condition by eliminating the preceding output, foregoing the use of /\*FILE or SWSFILE(SEND) within the same transaction, or ensuring that no SWSSEND(FLUSH) operation occurs.

---

**HLV3966T    External data queue full**

**Explanation:** When an SWSFILE operation outputs its results to the external data queue (QUEUE and MBRLIST functions) and the external data queue fills before all of the information can be written, this message is traced.

**User response:** The current SWSFILE operation ends with return code 28. Increase the size of the external data queue by specifying the QUEUE SIZE() override on the /\*WWW header statement.

---

**HLV3967I    DSN var1**

**Explanation:** SEF rule manager issued the current message to list the next concatenated dataset for a single shared-file DD name or next concatenated dataset for an SEF ruleset.

**User response:** The current message is statistical and lists the data set information. No response is required to this message. Check the PDS output listing, and make choices accordingly.

The variable fields of the message text are: DSN Dataset name var1 Concatenation index, relative to 1

---

**HLV3968I    service FAILED. RETURN CODE: rc**

**Explanation:** SEF rule manager issued the message due to a failure in a system service.

**User response:** This problem is generated due to a file processing error. Correct the file, and re-process your request.

The variable fields of the message text are: service system service that failed rc return code from system service

---

**HLV3969I    FORMAT OF SHARED FILE BLOCK  
FAILED - INVALID IDENTIFIER 'vluue'**

**Explanation:** An invalid or unmatched identifier value was specified for an internal FMTSFILE command. Either the identifier was invalid or the corresponding shared file block no longer exists.

## HLV3970E • HLV3978T

**User response:** The shared file block is not formatted and processing continues.

The variable fields of the message text are: vluue value of shared file block unique identifier

---

**HLV3970E MATCH CRITERION MUST BEGIN WITH /set - %2.%3**

**Explanation:** During event procedure enablement, a WWW rule was found to be invalid because its match criterion does not begin with the specified string. All WWW event procedure match criteria must begin with the event procedure set name unless they are defined in the master procedure set.

**User response:** Correct the error, and re-enable the event procedure.

The variable fields of the message text are: set name of event procedure set

---

**HLV3971E /\*WWW STMT - text - %2.%3**

**Explanation:** During event procedure enablement, a WWW procedure header statement was found to be coded incorrectly. The procedure is not enabled.

**User response:** Correct the error, and re-enable the event procedure.

The variable fields of the message text are: text error text

---

**HLV3972E /\*WWW STMT - key MAY ONLY BE CODED WITHIN THE rule RULESET - %3.%4**

**Explanation:** During event procedure enablement, a WWW procedure header statement was found to be coded incorrectly. The indicated keyword may only be coded on header statements in the master WWW ruleset. The master WWW ruleset must be designated as such by coding WWWCLASS(MASTER) on the DEFINE RULESET statement that defines the ruleset.

**User response:** Correct the error, and re-enable the event procedure.

The variable fields of the message text are: key keyword that is not valid rule name or description of master WWW ruleset

---

**HLV3973E /\*REXX STMT - text - %2**

**Explanation:** During event procedure enablement, a REXX section header statement was coded incorrectly. The procedure is not enabled.

**User response:** Correct the error, and re-enable the event procedure.

The variable fields of the message text are: text error text

---

**HLV3974T RUNAUTH USERID 'usid' - SETUP SUCCEEDED**

**Explanation:** The RUNAUTH userid has been logged on to the system.

**User response:** No action is required. Processing continues.

The variable fields of the message text are: usid the RUNAUTH userid

---

**HLV3975T RUNAUTH USERID 'usid' - USERID INVALID**

**Explanation:** The RUNAUTH userid could not be logged on to the system because the userid was invalid.

**User response:** The session is not permitted to proceed. The Web transaction is rejected by rescanning to the SYSTERM/ERROR/500 URL, indicating a server error (with reason code 27). Correct the WWW rule that specified the invalid RUNAUTH USERID.

The variable fields of the message text are: usid the RUNAUTH USERID

---

**HLV3976E DPRTY OPERAND 'oper1' - reason**

**Explanation:** The DPRTY operand value was invalid for the reason specified in the message.

**User response:** The WWW rule is not enabled. Correct the WWW rule which specified the invalid DPRTY operand, and re-enable it.

The variable fields of the message text are: oper1 operand of the DPRTY keyword reason reason why operand is invalid

---

**HLV3977T WWW task dispatch priority changed from value1 by value2**

**Explanation:** The dispatching priority of the WWW transaction subtask has been changed because a match to a /\*WWW rule that specified the DPRTY() keyword has been made.

**User response:** The WWW subtask continues using the new priority value.

The variable fields of the message text are: value1 previous priority value value2 change made to priority value

---

**HLV3978T ovrd OVERRIDE FAILED IN loc - RC=rc AT ad**

**Explanation:** A failure occurred while trying to override the REXX work space or external data queue size. The WORKSPACE or QUEUESIZE operand may be too large.

**User response:** The WWW subtask is re-routed to the

system error recovery procedure, and the transaction aborted.

The variable fields of the message text are: ovrd override being processed loc failure location rc service return code

---

**HLV3979E ATH LOGON rule must exit with 'ACCEPT' if ACEE is created for subtask**

**Explanation:** An ATH logon procedure has caused the TCBSENV pointer for the current subtask to be set to a non-zero value. If an ATH logon rule creates an ACEE block, it must also return with a code indicating that logon processing is complete. This prevents ACEE blocks from being inadvertently orphaned or destroyed by intrinsic server security processing.

**User response:** The entire logon request is rejected, and the logon request process is aborted with an S0C3 abend.

---

**HLV3980E RUNAUTH USERID (userid) LOGON FAILED**

**Explanation:** The RUNAUTH userid specified by the WWWDEFAULTRUNAUTH system parameter failed logon processing during start-up.

**User response:** The HTTP-API initialization process is aborted. Check to ensure that the userid specified by the WWWDEFAULTRUNAUTH start-up parameter is correct. Check the JOBL0G for related messages about the userid.

The variable fields of the message text are: usid the WWWDEFAULTRUNAUTH userid

---

**HLV3981I Default RUNAUTH USERID usid logged onto system**

**Explanation:** The RUNAUTH userid specified by the WWWDEFAULTRUNAUTH system parameter has been logged on to the system.

**User response:** HTTP-API initialization processing continues.

The variable fields of the message text are: usid the WWWDEFAULTRUNAUTH userid

---

**HLV3982E INDEXED DELETE OF rule1.rule2 (crit) FAILED (TRACE=tb) - RULE NOT DELETED**

**Explanation:** The indicated rule could not be deleted from the indexes of the internal rule search tree. The rule is not deleted, but it will be disabled.

**User response:** If the error recurs, contact Software Support.

The variable fields of the message text are: rule1 ruleset

name rule2 rule name crit rule criterion tb an internal trace back value

---

**HLV3983E RULESET rule1 action REJECTED BY SEF - var var var var var var var var**

**Explanation:** The indicated ruleset definition or modification could not be processed into the SEF configuration.

**User response:** Correct the original request and resubmit.

The variable fields of the message text are: rule1 ruleset name action definition or modification var variable information var variable information var variable information var variable information var variable information

---

**HLV3984H SEF ruleset rule1 SEF configuration action accepted**

**Explanation:** The indicated ruleset definition or modification was processed by SEF and placed into the active configuration.

**User response:** None

The variable fields of the message text are: rule1 ruleset name action definition or modification

---

**HLV3985E XO DATASET dsname ERROR - var2 var3 var4 var5 var6 var7 var8**

**Explanation:** An error was encountered while processing the indicated executable object (XO) dataset

**User response:** None

The variable fields of the message text are: dsname name of XO dataset var2 various var3 various var4 various var5 various var6 various var7 various var8 various

---

**HLV3986E FILE DDN action REJECTED BY SEF - var var var var var var var var**

**Explanation:** The indicated shared file definition or modification could not be processed into the SEF configuration.

**User response:** Correct the original request and resubmit.

The variable fields of the message text are: DDN shared file DD name action definition or modification var variable information var variable information var variable information var variable information var variable information var variable information

---

**HLV3987H** Shared file DDN SEF configuration action accepted

**Explanation:** The indicated shared file definition or modification was completed successfully

**User response:** None

The variable fields of the message text are: DDN shared file DD name action definition or modification

---

**HLV3988E** SEF task is terminating due to severe configuration or environmental error with critical resource

**Explanation:** The SEF subtask will self-terminate, causing the server to shut down. A critical resource is not configured properly or an environmental error prevents access to the critical resource. Generally, this means that a definition, OPEN error, or rule auto-enablement error has occurred for a critical shared file or an ATH, TYP, or WWW ruleset with WWWCLASS(MASTER).

**User response:** Examine preceding message to determine the resource or definition which is missing, was undefined, or which cannot be accessed. Correct the start-up definitions pertaining to the resource and restart the server.

---

**HLV3989W** SEF RULE MGR ABEND ABCD REASON ABRS AT MOD+OFF WHILE PROCESSING REQUEST var1

**Explanation:** The SEF rule manager trapped and recovered from an ABEND at the location shown. The rule manager returns the ABEND completion code to the service requestor, which must determine whether the error is of critical importance. The invoker may ignore, compensate for, or escalate the error, as appropriate to the request.

**User response:** Examine preceding and following messages to determine the resource or definition which is missing, incorrectly configured or which cannot be accessed. Correct the SEF start-up definitions pertaining to the resource and restart the server.

The variable fields of the message text are: ABCD ABEND completion code ABRS ABEND reason code MOD ABENDING module name OFF ABENDING module offset var1 rule manager plist

---

**HLV3990E** /\*FILE STMT - text

**Explanation:** During event procedure enablement, a /\*FILE section was not enabled due to the error given.

**User response:** Correct the error, and re-enable the event procedure.

The variable fields of the message text are: text error text

---

**HLV3991H** SEF RULESET rule1 DATASET dsn IS status

**Explanation:** The indicated ruleset dataset status has changed.

**User response:** None. This message is for informational purposes only.

The variable fields of the message text are: rule1 ruleset name dsn dataset name status new ruleset status

---

**HLV3992T** SEF RULESET rule1 DATASET dsn IS status

**Explanation:** The indicated ruleset dataset status has changed.

**User response:** None. This message is for informational purposes only.

The variable fields of the message text are: rule1 ruleset name dsn dataset name status new ruleset status

---

**HLV3993H** SEF RULESET rule1 DATASET dsn WAS STOPPED. RSN: rsn

**Explanation:** The indicated ruleset was stopped.

**User response:** This is an informational message. If the ruleset should not be stopped, then review the Trace Browse and SYSLOG to determine what caused the ruleset to stop.

The variable fields of the message text are: rule1 ruleset name dsn dataset name rsn reason ruleset was stopped

---

**HLV3994T** SEF RULESET rule1 DATASET dsn WAS STOPPED. RSN: rsn

**Explanation:** The indicated ruleset was stopped.

**User response:** This is an informational message. If the ruleset should not be stopped, then review the Trace Browse and SYSLOG to determine what caused the ruleset to stop.

The variable fields of the message text are: rule1 ruleset name dsn dataset name rsn reason ruleset was stopped

---

**HLV3998I** data

**Explanation:** SEF rule manager uses this message to list formatted control block output messages for shared files.

**User response:** These messages contain the formatted control block image.

The variable fields of the message text are: data formatted control block output line data

---

---

**HLV4000H text**

**Explanation:** This is a general purpose message for certain VTAM errors.

**User response:** Not every condition reported by this message is really an error. Read the text of the message carefully to determine whether an error has occurred or not. If an error has occurred and you cannot resolve it, contact Software Support for assistance.

The variable fields of the message text are: text the text of the VTAM error message

---

**HLV4001H UNKNOWN service CODES - R0=r0 R15=r15**

**Explanation:** This message reports VTAM return and reason codes (R0 and R15) that are unknown to SHLV.

**User response:** This may indicate some type of internal error. It is also possible that you are running a version of VTAM that is not yet supported by SHLV. If the version of VTAM that you are running DOES appear to be supported, contact Software Support.

The variable fields of the message text are: service current operation r0 register zero contents r15 register fifteen contents

---

**HLV4002H UNKNOWN service CODES - RCPR=code1 RCSC=code2**

**Explanation:** This message appears in conjunction with the 4001H message.

**User response:** This may indicate some type of internal error. It is also possible that you are running a version of VTAM that is not yet supported by the product. If the version of VTAM that you are running DOES appear to be supported, contact Software Support..

The variable fields of the message text are: service current operation code1 primary rpl extension codes code2 secondary rpl extension codes

---

**HLV4003H service**

**Explanation:** This message is used for tracing certain VTAM-related events within the product.

**User response:** No action is required unless the trace messages are appearing without your requesting tracing.

The variable fields of the message text are: service current operation

---

**HLV4004H service - lu**

**Explanation:** This message is used for tracing certain VTAM-related events within the product.

**User response:** No action is required unless the trace messages are appearing without your requesting tracing.

The variable fields of the message text are: service current operation lu LU name

---

**HLV4005H service - lu/mode**

**Explanation:** This message is used for tracing certain VTAM-related events within the product.

**User response:** No action is required, unless the trace messages are appearing without your requesting tracing.

The variable fields of the message text are: service current operation lu LU name string mode mode name string

---

**HLV4006H VTAM APPLID NOT SET - LU 6.2 SUPPORT NOT ACTIVATED**

**Explanation:** The local VTAM applid has not been set. VTAM processing on this copy of HLV is impossible.

**User response:** The VTAM task of the main address space shuts down. This is not an error unless you actually did specify the VTAM applid in the xxxxxIN00 EXEC. Note that other communication protocols may be activated even though VTAM LU6.2 is not being used.

---

**HLV4007H INVALID FMH-5 CONTROL BLOCK RECEIVED FROM lu**

**Explanation:** An invalid FMH-5 control block was received from a peer LU. The invalid FMH-5 block will be ignored, and the conversation will be terminated immediately.

**User response:** This error will only occur if another product tries to establish a conversation with the main product address. This error should be reported to whoever is responsible for the other product.

The variable fields of the message text are: lu VTAM LU name string

---

**HLV4010T TCB MODE SWITCH ERROR: errdesc var %3 %4 %5 %6 %7**

**Explanation:** An error was detected while switching from SRB to TCB dispatchable unit execution mode.

**User response:** The request to switch from SRB to TCB fails. The SRB mode routine generates an S0C3 ABEND if it cannot continue or continues processing in SRB mode, as indicated in the message.

## HLV4012T • HLV4019T

The variable fields of the message text are: errdesc error description var other pertinent information

---

**HLV4012T SRB MODE SWITCH ERROR: errdesc**  
**var %3 %4 %5 %6 %7**

**Explanation:** An error was detected while switching from TCB to SRB dispatchable unit execution mode.

**User response:** The request to switch from TCB mode fails. The TCB mode routine generates an S0C3 ABEND if it cannot continue, or continues processing in TCB mode, as indicated in the message.

The variable fields of the message text are: errdesc error description var other pertinent information

---

**HLV4014T Shunting to mode execution mode prior to ABEND retry, retry GPR14 in ABEND traces contains retry target address**

**Explanation:** A retry is being attempted following an intercepted ABEND. The dispatchable unit of work is currently executing in a different mode (SRB or TCB) than the retry routine expects. The server is transferring execution into the correct dispatch mode, before retrying.

**User response:** This message is traced for ABEND retries only when a shunt to a different execution mode is required, and only when tracing pause element dispatch activity. The preceding ABEND event trace records GPR14 retry register contains the true target retry address, given control after shunting.

The variable fields of the message text are: mode mode in which retry will execute

---

**HLV4015I cnt new SRBs scheduled with PRIORITY=CURRENT because no WLM enclave is joined**

**Explanation:** This message is issued when a change is noted in the number of SRBs that have been scheduled with PRIORITY=CURRENT instead of the preferred PRIORITY=ENCLAVE option. This occurs when a task is not joined to a WLM enclave at the time it schedules an SRB. The SRB is scheduled with the same priority as the scheduling task. This precludes execution of the SRB on the zIIP co-processor.

**User response:** No action is normally required. Some sites may receive these notifications with regular frequency; other sites may rarely or never receive these notifications. If you note an increase in the number of these message, contact Software Support for further analysis.

The variable fields of the message text are: cnt new PRIORITY=CURRENT SRB SCHEDULES

---

**HLV4016S FRR PARAMETER UNSTACK ERROR - var1**

**Explanation:** This message is issued when a PC routine attempts to unstack and restore nested FRR parameters during SRB-mode execution. The unstack operation has failed because the state of the current FRR stack has changed unexpectedly.

**User response:** The PC routine generates an S0C3 ABEND following issuance of this message. Existing FRRs may receive control and attempt to recover. The PC-call stack areas will not be recovered until check limits processing re-activates them during periodic processing. Contact Software Support.

The variable fields of the message text are: var1 reason for unstack failure

---

**HLV4017T TYPE-1 LDU TERMINATION CALL ERROR - var1 var2 var3 var4**

**Explanation:** An error was detected while terminating a Type-1 Logical Dispatchable Unit construct used for TCB/SRB mode switches. The request for LDU termination is bypassed.

**User response:** The termination routine returns to the calling routine. This message serves as notification of a potential logic error in End-of-Task cleanup processing since the routine was entered to process LDU termination for a subtask that cannot support this kind of Logical Dispatchable Unit processing.

The variable fields of the message text are: var1 reason for request rejection var2 other information var3 other information var4 other information

---

**HLV4018I cnt New SRB schedule (IEAMSCHD) failures encountered**

**Explanation:** This message is issued when a change is noted in the number of SRBs that were not scheduled, due to failures returned by the IEAMSCHD service. The cause of these failures MAY be that the WLM enclave, into which the SRB is being scheduled, is no longer valid.

**User response:** Contact Software Support for further analysis.

The variable fields of the message text are: cnt new SRB scheduling failures

---

**HLV4019T Session lost (hung) due to type-4 LDU schedule failure**

**Explanation:** This message is traced if a TYPE-4 LDU cannot be constructed or scheduled to close the communication session. The session is orphaned and remains hung until the server is recycled.

**User response:** Contact Software Support for further analysis.

---

**HLV4020T DRDA processing bypassed for connection to var1, var2**

**Explanation:** This message is traced if DRDA processing is being skipped for the connection.

**User response:** The connection will be processing using standard RRSAF interfaces to the target DB2 subsystem. Contact Software Support for further analysis.

The variable fields of the message text are: var1 Target DB2 subsystem var2 Reason DRDA processing skipped

---

**HLV4021T Generic (TLS) USERID var1 ignored for DRDA connection**

**Explanation:** This message is traced if a generic (TLS) userid has been sent with the current SQL request message.

**User response:** Generic Userid (TLS) support is disabled when a DRDA backend connection is in use. The generic userid sent by the client is ignored for DB2 processing. It will still be used when creating SMF log records, etc..

The variable fields of the message text are: var1 Generic (TLS) userid sent for the request

---

**HLV4022T CONNECT TO DDF HOST=var1, PORT=var2, CMIDADR=var3 CMID=var4**

**Explanation:** This message is traced when a DRDA connection has been successfully opened.

**User response:** None

The variable fields of the message text are: var1 DDF Server Host domain or IP address var2 DDF Server port number var3 CMID address var4 CMID image

---

**HLV4023T var1 CALL TRACE: %SK**

**Explanation:** This message produces a calling routine trace

**User response:** None

The variable fields of the message text are: var1 Call call type sk List of calling routines

---

**HLV4024T Passticket generation failed for USERID=var1, APPL=var2, with RC = var3**

**Explanation:** A passticket could not be generated for the indicated userid and APPL name combination.

**User response:** Ensure RACF PTKTDATA class is activated and that a resource matching the APPL name is defined in the class. The possible return codes are as follows: RC = x'04' - Invalid passticket parameter list RC = x'08' - No PTKTDATA profile found for the APPL

---

name RC = x'0C' - No task or address space ACEE found RC = x'10' - Caller is not authorized RC = x'14' - The PTKTDATA class is not active

The variable fields of the message text are: var1 userid var2 target APPL name / PTKTDATA resource name var3 Return code from service

---

**HLV4025S Metal-C function var1 in module var2 not found, var3**

**Explanation:** During initialization a Metal-c function requiring external visibility was not found.

**User response:** Initialization is aborted. DRDA processing in the server may ABEND unexpectedly when the missing function is invoked. Contact Software Support for assistance.

The variable fields of the message text are: var1 function name var2 module in which function should reside var3 reason why function entry not found

---

**HLV4026I DRDA modules not loaded, Machine below architecture-9 level, Found(var1)**

**Explanation:** During initialization the installed machine instruction set is examined to determine the corresponding XL C/C++ compiler architecture level. DRDA modules are only provided to support machines at ARCH(9) level and above.

**User response:** The DRDA processing modules are not loaded and DRDA support is disabled. MSG4020T with explanation "Z196 (2817-xxx) INSTRUCTION SET REQUIRED" is traced if an attempt to open a DRDA connection is made.

The variable fields of the message text are: var1 architecture level found to be installed

---

**HLV4027T var being issued to avoid DRDA idle thread time limit**

**Explanation:** A ROLLBACK is being issued automatically because the client ODBC/JDBC session has been idle for an extended period. A ROLLBACK is issued to release PREPARED statements so that the DRDA connection can be put into INACTIVE state before DRDA terminates the idle connection at the end of the IDTHOIN time limit. OR, a SNDPKT (ping) request is being issued automatically because transmission of the current response to the client is taking longer than the DDF idle time limit. Exchanging a SNDPKT (ping) request/response reset the idle connection time limit DRDA imposes on active but idle connections.

**User response:** A ROLLBACK is issued once before awaiting additional client input. A SNDPKT request is issued periodically while transmission of a large response to the client is underway.

The variable fields of the message text are: var

---

"ROLLBACK" or "SNDPKT"

---

**HLV4030T    errdesc**

**Explanation:** Setup of a new session failed for the reason reported in the message. Normally, the failure is due to a lost connection or timeout while attempting to receive the first part of the initial transmission. The initial setup determines if the session is being opened for HTTP or ODBC/JDBC connections. The leading portion of the message will indicate if the session was for HTTP or ODBC/JDBC if this is known at the time of failure. It will also indicate if SSL encryption is in use for the session when this can be determined. The client IP address is always included in the message which also contains an explanation of the failure that caused session setup to fail.

**User response:** The connection to the client system is terminated. The client application will probably report an error. Check for any client system error messages and related trace messages reporting communications or SSL problems. Often for a timeout, only a SELECT trace message will precede this message. The SELECT completed with no sockets ready to receive, which is recognized as a timeout failure.

The variable fields of the message text are: errdesc error description ip TCP/IP IP address

---

**HLV4040E    errdesc**

**Explanation:** An error occurred processing a partner ACI session for this connection.

**User response:** The session will be terminated.

The variable fields of the message text are: errdesc error description

---

**HLV4041T    service buffer size length, address addr, length length**

**Explanation:** An error occurred processing a partner ACI session for this connection.

**User response:** The session will be terminated.

The variable fields of the message text are: service GET or FREE length length of buffer requested addr address of buffer length length of buffer returned

---

**HLV4042E    Parallel I/O ACI processing disabled**

**Explanation:** An error occurred during initialization of ACI support for Parallel I/O processing.

**User response:** Parallel I/O processing is disabled.

---

**HLV4043T    errdesc info**

**Explanation:** MAP REDUCE was unable to process this VSAM data set. If the VSAM KSDS is too small, it cannot be subdivided for parallel processing by ACI tasks. At a minimum, the VSAM KSDS must have two sequence set records. The size of such a file will depend upon the CI size of the index, and upon how keys get compressed in the sequence set records.

**User response:** We recommend disabling MapReduce for the data map for this data set to eliminate the overhead of starting and stopping unneeded ACI processing tasks. The VSAM file will be processed by a single task, and MAP REDUCE will not be used for this file.

The variable fields of the message text are: errdesc error description info additional information

---

**HLV4044E    Map Reduce processing disabled**

**Explanation:** An error occurred during initialization of ACI support for MAP REDUCE processing.

**User response:** MAP REDUCE processing is disabled.

---

**HLV4045E    ACI FUNCTION function FAILED, RC=rc errdesc**

**Explanation:** An error occurred processing a MAP REDUCE ACI session.

**User response:** The session will be terminated.

The variable fields of the message text are: function function that failed rc return code errdesc error description

---

**HLV4046T    errdesc info info info info info**

**Explanation:** An error occurred during processing of a MAP REDUCE request.

**User response:** MAP REDUCE processing of this request is terminated.

The variable fields of the message text are: errdesc error description info additional information info additional information (optional) info additional information (optional) info additional information (optional) info additional information (optional)

---

**HLV4047T    info info info info info info**

**Explanation:** MapReduce is tracing information about the session.

**User response:** MAP REDUCE processing of this request continues.

The variable fields of the message text are: info trace description info additional information info additional information (optional) info additional information (optional) info additional information (optional) info



additional information (optional)

---

**HLV4048S BRFRSV unable to decrement OPDM active count. Service ACI,ACI,ACI**

**Explanation:** Service map for ACI service not found by free server routine Monitor ACI service to ensure that it does not reach Maximum Active servers.

**User response:** Schedule a restart of the Server at your earliest convenience.

The variable fields of the message text are: ACI Service name ACI Service class ACI Service service

---

**HLV4050E Invalid HTTP headers - errdesc - received from ip**

**Explanation:** Invalid HTTP headers were received from a remote system. The invalid HTTP headers could not be processed.

**User response:** The connection to the client system is terminated. The client application will probably report an error. Check for any client system error messages. If the failure continues, contact Software Support.

The variable fields of the message text are: errdesc error description ip TCP/IP IP address

---

**HLV4051E SSL CONNECTION FAILED - errdesc - RECEIVED FROM ip**

**Explanation:** A client application attempted to establish a connection to the host using SSL. The connection could not be created for some reason related to SSL processing.

**User response:** The connection to the client system is terminated. The client application will probably report an error. Check for any client system error messages. If the failure continues, contact Software Support.

The variable fields of the message text are: errdesc error description ip TCP/IP IP address

---

**HLV4052T var1 (var2,var3) - RV=var4 RC=var5 RE=var6**

**Explanation:** An Unix System Services callable service request was issued and the results were unexpected.

**User response:** This message is traced to indicate an expected return value or return code from a USS callable service. Subsequent processing depends on the call issued. If the problem continues, contact Software Support.

The variable fields of the message text are: var1 Callable service entry point name var2 Callable service formal name var3 additional service call information var4 The return value from the call var5 The return code from the call (ERRNO) var6 The reason code from the call

---

**HLV4053E OPTPIN timed out waiting for a session to be passed**

**Explanation:** OPTPIN was placed in posted state in anticipation of being passed a new connection, but the new session ECB was never posted. The connection attempt is abandoned.

**User response:** This message is trace to indicate an expected connection was not successfully passed from the listening task to the service task (OPTPIN). If the problem continues, contact Software Support.

---

**HLV4054T No data read from socket - errdesc - received from ip**

**Explanation:** After 10 attempts to receive data(TCP/IP read) we returned with zero bytes read and no indication of any kind of network error

**User response:** The connection to the client system is terminated. The client application will probably report an error. Check for any client system error messages. If the failure continues, contact Software Support.

The variable fields of the message text are: errdesc error description ip TCP/IP IP address

---

**HLV4080T Invalid logon attempt by an unknown client detected, connection rejected.**

**Explanation:** An attempt was made to logon by an unknown client driver. A connection to the server can only be made by a valid client driver. The connection is rejected.

**User response:** Contact IBM Software Support.

---

**HLV4081T Insufficient storage reserve for type (cnt) detected, connection rejected**

**Explanation:** The storage reserve for the specified area (LSQA, Private or EPrivate) has been exceeded. The current attempt to connect to the host has been rejected. The host session will be terminated. The storage reserve values are either calculated or set via product parameters.

**User response:** Contact Software Support for advice on this matter.

The variable fields of the message text are: type storage area cnt remaining storage

---

**HLV4082T Maximum connected session limit is set to zero, server not accepting new connections**

**Explanation:** The maximum connected session limit (CONCURRENTMX parameter) is currently set to ZERO. The server will not accept any new client connections. A limit of zero is normally set during a quiesce period, prior to shutdown, allowing existing

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client connections to complete their operations normally. Depending on the setting of QUIESCESYSTEMTYPE, existing client sessions will be cancelled (IMMEDIATE) or allowed to terminate normally (ATTRITION).

**User response:** Change the CONCURRENTMX parameter to a non-zero value if new client connections should be allowed.

---

**HLV4083T SQL is not activated on the server.**

**Explanation:** None.

**User response:** Contact IBM Software Support.

---

**HLV4084T ODBC driver connections are not activated on the server. Session rejected.**

**Explanation:** None.

**User response:** Contact IBM Software Support.

---

**HLV4085T Transaction Level Security is not activated on the server. Session rejected.**

**Explanation:** None.

**User response:** Contact IBM Software Support.

---

**HLV4086T Network authentication is not enabled on this server. Session rejected**

**Explanation:** A client application has attempted to connect to the host using network authentication (SECU=YES), but the server is not configured to allow network authentication.

**User response:** The server rejects the connection request.

---

**HLV4087T Access to IDMS is not activated.**

**Explanation:** None.

**User response:** Contact IBM Software Support.

---

**HLV4088T Access to IDMS is not enabled, set the desired APPC/IDMS initialization parameters**

**Explanation:** The product is not enabled for use with IDMS from client applications. The current request to use client to connect to IDMS on the host has been rejected. The current host session will be terminated.

**User response:** If access to IDMS from client applications is needed, enable IDMS by setting the appropriate IDMS connectivity parameters. You may use APPC/IDMS as the transport for communication to IDMS from the product server address space.

---

**HLV4089T STORED PROCEDURE CALLS ARE NOT SUPPORTED WHEN USING EXTENDED CURSOR POOLS (EXCU=YES).**

**Explanation:** The product does not support stored procedure calls when the client is connected to the server with extended cursor pool support enabled (EXCU=YES).

**User response:** Reconfigure the client to disable the extended cursor pool support (EXCU=NO).

---

**HLV4090T Access to IMS/TM is not activated.**

**Explanation:** None.

**User response:** Contact IBM Software Support.

---

**HLV4091T Access to IMS/TM is not enabled, set the desired IMS/OTMA and/or IMS/APPC initialization parameters**

**Explanation:** The product is not enabled for use with IMS/TM from client applications. The current request to use client to connect to IMS/TM on the host has been rejected. The current host session will be terminated.

**User response:** If access to IMS/TM from client applications is needed, enable IMS by setting the appropriate IMS connectivity parameters. You may use either IMS/OTMA or IMS/APPC as the transport for communication to IMS from the product Server address space.

---

**HLV4092T Access to CICS is not activated.**

**Explanation:** None.

**User response:** Contact IBM Software Support.

---

**HLV4093T Maximum number of type (cnt) already connected, connection rejected.**

**Explanation:** None.

**User response:** Contact IBM Software Support.

---

**HLV4096T Access to VSAM is not activated.**

**Explanation:** None.

**User response:** Contact IBM Software Support.

---

**HLV4097T Access to IMS/DB is not enabled, enable access by setting the DBCTL parameter value to YES**

**Explanation:** The product is not enabled for use with IMS/DB from client applications. The current request to use client to connect to IMS on the host has been rejected. The current host session will be terminated.

**User response:** If access to IMS/DB from client applications is needed, enable IMS/DB by setting the DBTCL product parameter to YES.

---

**HLV4098T No active started task copy of the product located**

**Explanation:** The userid and password provided by the client application can not be validated because there is no active started task copy of the product. A started task copy of the product is required for userid and password validation if the client application is connecting to a test copy of the product running under TSO. This error can only occur while attempting to connect to a test copy of the host code running under TSO.

**User response:** The session is not permitted to proceed. The installation must activate a started task copy of the product before connections to TSO copies of the product will be allowed to proceed.

---

**HLV4099T CLIENT USERID 'userid' UNEQUAL TO TSO USERID 'userid'**

**Explanation:** The userid provided by the client application is not the same as the TSO userid running the test copy of the product. The connection attempt is rejected, and the connection is severed. This error can only occur while attempting to connect to a test copy of the host code running under TSO.

**User response:** The session is not permitted to proceed. The client must supply a valid userid/password combination (for the host) in order for the session to proceed. Change the client's userid to be the same as the TSO userid.

The variable fields of the message text are: userid the client userid usid the TSO userid

---

**HLV4100E BIND WITH rntype host FAILED - NO MATCHING desc**

**Explanation:** The bind with the remote system failed because the local and remote systems could not agree on certain HLV-to-HLV communication parameters.

**User response:** The bind process has failed. No communication with the remote system is possible. Note that it is NOT a VTAM bind that has failed. The bind referred to by this message is a n HLV-to-HLV bind. Retry the process. If the failure continues, contact Software Support.

The variable fields of the message text are: rntype type of remote node host remote host name desc description of bind problem

---

**HLV4101T Password validated for USERID 'userid' from rntype host**

**Explanation:** The userid/password combination from a remote (and untrusted) client was successfully validated.

**User response:** No action is required. Processing continues.

The variable fields of the message text are: usid the remote userid rntype type of remote node host remote host name

---

**HLV4102T LOGON attempt failed for USERID 'userid' from rntype host**

**Explanation:** A remote client was unable to connect for one of the reasons: (1) the userid/password combination may not have been valid or (2) the System Event Facility (SEF) may have rejected the logon attempt.

**User response:** The session is not permitted to proceed. The client must supply a valid userid/password combination (for the host) in order for a session to proceed. Ensure that the client's classification as untrusted is valid. If it is not, use the ADDRESS HLV MODIFY LINK command to change its status. If the client was rejected by the System Event Facility (SEF), the SEF ATH event logon rule may need to be modified.

The variable fields of the message text are: usid the remote userid rntype type of remote node host remote host name

---

**HLV4103T text**

**Explanation:** This message is used to display any ACF2/RACF message that may have been created as a result of a userid/password validation. This form is used for successful userid/password validations.

**User response:** None. This message is for informational purposes only.

The variable fields of the message text are: text the text of the ACF2/RACF message

---

**HLV4104T text**

**Explanation:** This message is used to display any ACF2/RACF message that may have been created as a result of a userid/password validation. This form is used for unsuccessful userid/password validations.

**User response:** The session is not permitted to proceed. The client must supply a valid userid/password combination (for the host) in order for a session to proceed. Ensure that the client's classification as untrusted is valid. If it is not, use the ADDRESS HLV MODIFY LINK command to change its status.

## HLV4105E • HLV4113T

The variable fields of the message text are: text the text of the ACF2/RACF message

---

### HLV4105E Bind failed - no matching compression type

**Explanation:** The bind with the remote system failed because the local and remote systems could not agree on a compression type.

**User response:** The bind process has failed. No communication with the remote system is possible. Note that it is NOT a VTAM bind that has failed. The bind referred to by this message is an HLV-to-HLV bind. Retry the process. If the failure continues, contact Software Support.

---

### HLV4106E BIND FAILED - NO MATCHING POINTER ENCODING TYPE

**Explanation:** The bind with the remote system failed because the local and remote systems could not agree on a pointer encoding type.

**User response:** The bind process has failed. No communication with the remote system is possible. Note that it is NOT a VTAM bind that has failed. The bind referred to by this message is an HLV-to-HLV bind. Retry the process. If the failure continues, contact Software Support.

---

### HLV4107E BIND FAILED - NO MATCHING DATA ENCODING TYPE

**Explanation:** The bind with the remote system failed because the local and remote systems could not agree on a data encoding type.

**User response:** The bind process has failed. No communication with the remote system is possible. Note that it is NOT a VTAM bind that has failed. The bind referred to by this message is an HLV-to-HLV bind. Retry the process. If the failure continues, contact Software Support.

---

### HLV4108E BIND FAILED - NO MATCHING APPLICATION TYPE

**Explanation:** The bind with the remote system failed because the local and remote systems could not agree on an application.

**User response:** The bind process has failed. No communication with the remote system is possible. Note that it is NOT a VTAM bind that has failed. The bind referred to by this message is an S\_\_-to-S\_\_ bind. Retry the process. If the failure continues, contact Software Support.

---

### HLV4109E BIND FAILED - NO MATCHING PROCESSING FUNCTIONS

**Explanation:** The bind with the remote system failed because the local and remote systems could not agree on processing functions.

**User response:** The bind process has failed. No communication with the remote system is possible. Note that it is NOT a VTAM bind that has failed. The bind referred to by this message is an S\_\_-to-S\_\_ bind. Retry the process. If the failure continues, contact Software Support.

---

### HLV4110S INVALID MODE DETECTED - LU lu ROUTINE routine

**Explanation:** The LU 6.2 processing routine detected an invalid mode string. The mode string cannot be used for further processing.

**User response:** Report the error to Software Support. The complete message will be needed to diagnose the problem. One or more connection attempts may fail and have to be retried.

The variable fields of the message text are: lu vtam lu name string routine routine name string

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### HLV4111S INVALID LU NAME DETECTED - ROUTINE routine

**Explanation:** The LU 6.2 processing routine detected an invalid LU name string. The LU name string cannot be used for further processing.

**User response:** Report the error to Software Support. The complete message will be needed to diagnose the problem. One or more connection attempts may fail and have to be retried.

The variable fields of the message text are: routine routine name string

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### HLV4112T Usage restricted to oem.

**Explanation:** None.

**User response:** Contact IBM Software Support.

---

### HLV4113T %1

**Explanation:** A connection is rejected for one of the following reasons:

1. The maximum number of concurrent users has been reached.
2. Some sort of virtual storage resource shortage has been detected. The current request to connect to the host has been rejected.

3. A compressed buffer has been received on the port designated as the PIO port. PIO does not support compressed buffers. The connection has been closed.

**User response:** Depending on the message, either contact the person responsible for administering the product server to explore the possibility of raising the current maximum user count or the product has detected that the current virtual storage utilization is too high to allow additional connections. Change to use the standard ODBC port, or change the connection to send uncompressed buffers.

---

**HLV4114T    Dynamic SQL is not allowed by this instance of the server**

**Explanation:** This instance of the product server is to be used for static-only DB2 applications. The dynamic SQL request has been rejected.

**User response:** Contact the person responsible for administering the product Server for the product Server(s) available that support dynamic SQL.

---

**HLV4115S    SECONDARY USERID COUNT (%1) EXCEEDS MAXIMUM (%2)**

**Explanation:** The actual number of secondary userids for the current task exceeds the maximum number of supported secondary userids. Because of this problem, the secondary userid list can not be utilized and the current session will be terminated.

**User response:** Verify that the current userid does have an excessive number of secondary userids. Reduce the number of secondary userids, and retry the connection. If the failure continues or if reducing the number of secondary userids is not possible, contact Software Support.

---

**HLV4116T    Access to DB2 is not activated.**

**Explanation:** None.

**User response:** Contact IBM Software Support.

---

**HLV4117T    Connection mode is not activated.**

**Explanation:** None.

**User response:** No action is required.

---

**HLV4118T    Insufficient virtual storage is available to handle this session. Session rejected**

**Explanation:** A client application has attempted to connect to the host. Not enough virtual storage was available to handle the session. The session was rejected and terminated by the host.

**User response:** The server address space does not have enough virtual storage to handle the number of

connections that are being directed to it. You can reduce the minimum storage requirements using product parameters. However, this is not recommended. One of the following solutions is recommended: (1) the amount of virtual storage per connection must be reduced, (2) the number of connections must be reduced, or (3) the load must be spread across multiple copies of the product.

---

**HLV4119T    REXX VARIABLE ERROR rc1-fc rc2 DURING FETCH OF varname FOR SEF rule procname**

**Explanation:** The product REXX processor encountered a failure during termination processing for a product REXX exec. A REXX variable value could not be fetched and returned to the product's internal SEF routines during the termination process. Because a truncated or missing value may cause critical errors within the rule processing facility, the product generates an SOC3 abend. The SOC3 abend forces termination of the product REXX interpreter. It also stops the processing of the current SEF rule in which the procedure was defined. NOTE: For SHVRET code X'01-(New/Dropped Variable), the most likely cause of this error is an EXIT from a subroutine of the main Product REXX procedure. If the subroutine contains a PROCEDURE {EXPOSE} statement, some or all of the server's built-in variables are hidden during EXIT processing and are not available for post-REXX-execution interrogation by the rule facility. Ensure that the product REXX routine does not deliberately specify an EXIT from an internal PROCEDURE. For other SHVRET error codes, the most likely cause of the error is an internal server error.

**User response:** Check the REXX exec procedure and trace log for other messages which may indicate the precipitating cause of the failure, and correct the problem(s). Contact Software Support if this procedure fails to resolve the problem.

The variable fields of the message text are: rc1 SHVRET return code value as defined in IRXSHVB control block for IRXEXCOM fc description of SHVRET feedback code rc2 R15 return code from IRXEXCOM varname REXX variable name procname REXX procedure name

---

**HLV4120T    REXX VARIABLE "varname" TRUNCATED FOR SEF RULE rule - SIZE (size1) LONGER THAN MAX SIZE (size2)**

**Explanation:** The SEF rule processor encountered a failure during termination processing for a REXX procedure. The termination time value assigned by REXX to a built-in server variable is larger than the defined maximum size allowed by the SEF facility. The variable is truncated to the maximum allowable size. Truncation, however, may cause additional, spin-off error conditions to arise.

## HLV4121W • HLV4129E

**User response:** Check the REXX exec procedure to see if a value was assigned which exceeds the implementation maximums for specific built-in variable.

The variable fields of the message text are: varname REXX variable name rule SEF rule where REXX exec is located size1 actual size of the variable data size2 allowed maximum size for this variable

---

### HLV4121W service OF desc FAILED, RC=rc

**Explanation:** SEF message processing encountered a failure in a product service routine. A particular instance of this generic message may relate to a GETMAIN failure that occurs while attempting to allocate a REXX work space. In this case, the return code indicates the return code from the storage management routine.

**User response:** Check the message related to the failure, and attempt to resolve the problem. In the case of a storage allocation failure, check for related MVS and product messages. Also, ensure that your installation has an exit (e.g. IEFUSI) that limits virtual storage allocation. If possible, correct the problem, and retry the operation.

The variable fields of the message text are: service current operation (e.g. allocation, RELEASE, RESET, COPY, etc.) desc description rc return code

---

### HLV4122W ABEND abcd AT mod+off IN LINE num OF rule

**Explanation:** SEF event processing detected an abend. The current rule processing request is terminated.

**User response:** Determine what caused the abend. External interrupts (like a job CANCEL) may cause an abend. Determine if any product parameters limited the processing of the current rule. Refer to the product Server Administration Guide and the product Server Started Task Parameters book. Contact your local product administrator for assistance.

The variable fields of the message text are: abcd abend code mod module name at time of abend off module offset at time of abend num statement number being executed rule ruleset rulename

---

### HLV4123W SEF PROCESSING OF ruletype searchid FOR jb ABORTED

**Explanation:** SEF event processing routine detected an abend. The current rule processing request is aborted.

**User response:** Determine what caused the abend. External interrupts (like a job CANCEL) may cause the current rule to be aborted. If an ABEND occurred in the product, contact your local product systems programming group for assistance. If an abend happened within a job, treat this error as an environmental error. Correct or ignore the current error,

as applicable to your environment.

The variable fields of the message text are: ruletype current rule type searchid search id at time of abend jb jobname at time of abend

---

### HLV4124W CANNOT language PROCEDURE procname - %3 SECTIONS NOT ENABLED

**Explanation:** SEF event processing routine detected that a TYP rule that is referenced by another even procedure has been disabled. The event procedure cannot be run because the TYP rule is currently disabled. Processing of the procedure is bypassed.

**User response:** Determine why the TYP rule is disabled, and re-enable it.

The variable fields of the message text are: language TYP rule language name procname event procedure which cannot be run

---

### HLV4127E text FOR MESSAGE ID=mgid

**Explanation:** SEF event processing found too many compound symbols. The pattern match error is reported. Processing for the current rule is terminated.

**User response:** Check the exceeded compound symbol value, and adjust your rule code to it. Correct the above problem, and restart.

The variable fields of the message text are: text error text mgid message id string

---

### HLV4128E RULE rule SET varname TO AN INVALID cb VALUE

**Explanation:** SEF event processing encountered an error in conversion of a character to an integer. Further processing is terminated.

**User response:** Check the error text for the invalid input character data causing this error. Remove or modify the invalid data, and restart.

The variable fields of the message text are: rule ruleset rulename varname compound variable name cb control block field name

---

### HLV4129E text FOR ruletype RULE rule

**Explanation:** SEF event processing encountered too many internally generated compound symbols (security related), or the length of one of the internally generated compound symbol names exceeds an internal product limit. Further processing of this rule is terminated.

**User response:** This is an internal product error condition. Report this error condition to Software Support immediately.

The variable fields of the message text are: text error

text ruletype rule type string rule ruleset rulename  
string

---

**HLV4130E Rule rule disabled for exceeding firing limit of value**

**Explanation:** SEF event processing detected excessive firing of the rule named in the message. As a result, the rule has been disabled.

**User response:** If appropriate, increase the firing limit, and enable the rule.

The variable fields of the message text are: rule ruleset rulename string value rule firing limit

---

**HLV4131E Rule rule has exceeded the SEF firing limit of value**

**Explanation:** SEF event processing detected excessive firing of the rule named in the message. The associated parameter, SEFLIMITDISABLE, indicates that the rule is not to be disabled.

**User response:** This message is informational. No response is required. You may wish to code a message rule that conditionally disables the rule.

The variable fields of the message text are: rule ruleset rulename string value rule firing limit

---

**HLV4132I User program mod not found in library**

**Explanation:** While enabling a rule specifying execution of a user load module, the system was unable to preload the indicated module. Enablement of the rule is suppressed.

**User response:** Verify that the module named in the rule actually exists within the user program load library or within STEPLIB.

The variable fields of the message text are: mod user load module name

---

**HLV4134E rsrce ss FAILED, RC=rc, DETECTED AT ad**

**Explanation:** Some type of error occurred in a product service routine. See the actual text of the message for an explanation. The error was probably caused by a failure in an operating system service requested by a product service routine.

**User response:** Check if any other error messages were generated along with the error message above. If the combined error messages are sufficient to explain the problem, take whatever corrective action is appropriate. Otherwise, contact Software Support with this problem.

The variable fields of the message text are: rsrce resource name ss system service rc return code

---

**HLV4135E SEF rule processor entered by csect for invalid event type - code**

**Explanation:** The SEF rule processing facility was invoked with an invalid event type. This is probably an internal error.

**User response:** Check for other error messages that were generated along with this error message. Capture a copy of the trace records, showing the TCB address, surrounding the time of this error, and contact Software Support.

The variable fields of the message text are: csect calling csect name code invalid event type code value

---

**HLV4136E ABEND DURING cb CONTROL BLOCK LOCATE - SEF RULE EXECUTION BYPASSED**

**Explanation:** An internal control block could not be located prior to SEF event execution scheduling.

**User response:** Check if any other error messages were generated along with the error message above. If the combined error messages are sufficient to explain the problem, take whatever corrective action is appropriate. Otherwise, contact Software Support with this problem.

The variable fields of the message text are: cb control block name

---

**HLV4137T ENTERPRISE AUDITING GENERIC USERID <userid> NOT DEFINED TO HOST SECURITY SYSTEM OR REJECTED.**

**Explanation:** Enterprise Auditing was activated on the connection and the client attempted to send the specified generic user ID for authorization checking. However, the user ID was not defined to the Host security system (ACF2, RACF or Top Secret) or was invalid for some other reason.

**User response:** The session is not permitted to proceed. The client must supply a valid host user ID. Contact the Installation Security Administrator to define or repair the user ID.

The variable fields of the message text are: usid the generic userid supplied

---

**HLV4138T ENCRYPTION METHOD CANNOT BE NEGOTIATED, HOST STORAGE UNAVAILABLE, BIND REJECTED**

**Explanation:** This message is sent to client's when the requested key exchange and encryption method cannot be successfully negotiated at the host due to lack of host storage.

**User response:** The host rejects the encryption method requested by the client. The client may continue

without encryption or may terminate the session.

---

**HLV4139T BIND ENCRYPTION METHOD REJECTED - code var2 %3 %4 %5**

**Explanation:** This message is traced when a client's requested key exchange and encryption method cannot be successfully negotiated at the host during bind processing.

**User response:** The host rejects the encryption method requested by the client. The client may continue without encryption or may terminate the session. MSG4138T, MSG4142T, MSG4143T, or MSG4144T are sent to the client.

The variable fields of the message text are: code encryption method requested from bind var2 additional information about the failure

---

**HLV4140T LOGON credentials cannot be decrypted**

**Explanation:** This message is sent to the client when logon credentials cannot be decrypted. The client logon is rejected because the userid, password, and new password fields cannot be converted to clear text for processing. The client is operating using Diffie-Hellman key exchange and DES to encrypt the logon authentication information.

**User response:** The host rejects the logon request by the client. The host traces MSG4146T with additional information about the decryption failure.

---

**HLV4141T LOGON credentials rejected for VCF reconnect, new key exchange required**

**Explanation:** This message is transmitted to the client when Diffie- Hellman logon credential encryption is in use for a re-connecting VCF session, and the VCF security artifact for the VCF session has expired or been invalidated.

**User response:** The host rejects the logon request by the client. The VCF client is obliged to repeat the full Diffie-hellman key exchange, and re-transmit encrypted logon credentials. MSG4145T is traced to provide additional information about the problem encountered.

---

**HLV4142T ENCRYPTION METHOD CANNOT BE NEGOTIATED, DIFFIE-HELLMAN MODULE NOT LOADED, BIND REJECTED**

**Explanation:** This message is sent to client's when the requested key exchange and encryption method cannot be successfully negotiated at the host due to absence of the Diffie-Hellman key exchange and decryption routines.

**User response:** The host rejects the encryption method requested by the client. The client may continue without encryption or may terminate the session.

---

**HLV4143T ENCRYPTION METHOD CANNOT BE NEGOTIATED, DIFFIE-HELLMAN KEY EXCHANGE FAILED, BIND REJECTED**

**Explanation:** This message is sent to client's when the requested key exchange and encryption method cannot be successfully negotiated at the host due to failure of the Diffie-Hellman key exchange routine to calculate a valid shared secret.

**User response:** The host rejects the encryption method requested by the client. The client may continue without encryption or may terminate the session.

---

**HLV4144T ENCRYPTION METHOD CANNOT BE NEGOTIATED, UNKNOWN ENCRYPTION METHOD REQUESTED, BIND REJECTED**

**Explanation:** This message is sent to client's when the requested key exchange and encryption method cannot be successfully negotiated at the host. The requested encryption method is unknown to the host.

**User response:** The host rejects the encryption method requested by the client. The client may continue without encryption or may terminate the session.

---

**HLV4145T LOGON CREDENTIALS REJECTED FOR VCID VCID, NEW KEY EXCHANGE REQUIRED, reason %3 %4**

**Explanation:** This message is traced when when client Diffie-Hellman logon credential encryption is in use for a re-connecting VCF session, and the VCF security artifact for the session. has expired or been invalidated.

**User response:** The host rejects the logon request by the client. The VCF client is obliged to re-inaugurate Diffie-hellman key exchange and re-transmit encrypted logon credentials. MSG4141T is sent to the client.

The variable fields of the message text are: VCID session VCID for which logon rejected reason reason credentials were rejected

---

**HLV4146T LOGON CREDENTIALS CANNOT BE DECRYPTED - reason %2 %3 %4**

**Explanation:** This message is traced when a client's logon credentials cannot be decrypted. The client logon is reject because the userid, password, and new password fields cannot be rendered in clear text form.

**User response:** The host rejects the logon request by the client. MSG4140T is sent to the client.

The variable fields of the message text are: reason reason encryption method rejected



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**HLV4148T MISSING OR INVALID PARAMETERS  
IN SQL CALL RULE ruleset.rule,reason**

**Explanation:** This message is traced when an SQL CALL RULE cannot be processed due because not all the parameters were supplied or the parameters were too long to fit in the new buffer.

**User response:** The updates to the SQL CALL statement are discarded. Correct the SQL CALL rule based on the reason given.

The variable fields of the message text are: ruleset ruleset name containing the rule rule name that could not be processed reason the reason that processing failed

---

**HLV4149T Connection from ipaddr ip, host name  
host, is using unsupported driver  
version ver**

**Explanation:** A remote client connection is using a version of the product driver that is not supported by the server. This is an informational message. Transaction processing continues.

**User response:** You should upgrade the application driver to a level that is supported by the server.

The variable fields of the message text are: ip TCP/IP IP address host host name string ver driver version

---

**HLV4150T desc addr size PLAN pln %SK**

**Explanation:** This is a trace message that is produced whenever the TRACECURSOR parameter has been set to YES. This message provides information related to the product's SQL plist and status area.

**User response:** No action required.

The variable fields of the message text are: desc control block description addr address of the control block size size of the control block in hex pln the plan name stack trace information

---

**HLV4151T desc addr1 size DBRM dbrm CURSOR  
num1 DATA addr2 cnt QUERY length  
num2 TYPE stmt FLAGS tf %SK**

**Explanation:** This is a trace message that is produced whenever the TRACECURSOR parameter has been set to YES. This message is used to trace the product's cursor control blocks. There may be multiple cursor control blocks for each product SQL plist.

**User response:** No action required.

The variable fields of the message text are: desc control block description addr1 address of the control block size size of the control block in hex dbrm the DBRM name num1 SQL section number addr2 first data block address cnt number of chained data blocks length total data row length num2 number of query columns stmt

last prepared statement type tf trace flags stack stack trace information

---

**HLV4152T desc addr size value1 value2 %SK**

**Explanation:** This is a trace message that is produced whenever the TRACECURSOR parameter has been set to YES. This message is used to trace the product's data blocks. There may be multiple data blocks for each product cursor block.

**User response:** No action required.

The variable fields of the message text are: desc control block description addr address of the control block size size of the control block in hex value1 next offset value (hex) value2 last offset value (hex) stack stack trace information

---

**HLV4153T desc data length1 length2 col %SK**

**Explanation:** This is a trace message that is produced whenever the TRACECURSOR parameter has been set to YES. This message is used to trace the columns of the SQLDA. There may be multiple columns described by the SQLDA.

**User response:** No action required.

The variable fields of the message text are: desc control block description data type of data for the column (integer) length1 length of the data in the column (hex) length2 length of the column name (integer) col column name (up to 30 characters) stack stack trace information

---

**HLV4154T desc addr1 size DBRM dbrm CURSOR  
num1 DATA addr2 cnt QUERY length  
num2 TYPE stmt FLAGS tf %SK**

**Explanation:** This is a trace message that is produced whenever the TRACECURSOR parameter has been set to YES. This message is used to trace the release of a product cursor control blok.

**User response:** No action required.

The variable fields of the message text are: desc control block description addr1 address of the control block size size of the control block in hex dbrm the DBRM name num1 SQL section number addr2 first data block address cnt number of chained data blocks length total data row length num2 number of query columns stmt last prepared statement type tf trace flags stack stack trace information

---

**HLV4177T SQL tracing for RPC transactions is not  
available**

**Explanation:** SQL tracing for RPC transactions can not be performed because the DB2 DSNACAB module could not be validated.

**User response:** The product sets the TRACERPCSQL

and TRACESQLERRORS parameters to 'NO'. Contact Software Support.

---

**HLV4178W SQL tracing for RPC transactions is not available**

**Explanation:** SQL tracing for RPC transactions can not be performed because the DB2 DSNACAB module could not be validated.

**User response:** The product sets the TRACERPCSQL and TRACESQLERRORS parameters to 'NO'. Contact Software Support.

---

**HLV4179W cnt New RPC tasks timed out before redispach by RPC concurrent execution facility**

**Explanation:** This message is issued when a change is noted in the number of suspended RPC tasks that timed out before they were re-dispatched by the RPC concurrent execution facility. Tasks suspended while awaiting their turn to execute an RPC program will re-awake if not re-dispatched within the time period set by the RPCSLEEPINTERVAL parameter. Tasks which re-awake due to a timeout may execute the RPC program, regardless the RPCMAX limit, or may bypass execution by generating a -438 error return code. The action taken is governed by the RPCSTALLACTION parameter.

**User response:** No action is normally required and some sites may receive these notifications with regular frequency; other sites may rarely or never receive these notifications. If you note an increase in the number of time out failures, check the active tasks display to verify that RPC programs are completing. This message could indicate that one or more in-flight RPC programs are stalled preventing new RPC program executions from being dispatched. Adjust the RPCMAX and/or RPCSLEEPINTERVAL parameter, as necessary, to prevent timeouts.

The variable fields of the message text are: cnt new RPC concurrent facility timeouts

---

**HLV4180S Invalid buffer received from a client system**

**Explanation:** This message is issued if an invalid communication buffer is received from a client system. The buffer should have contained a request for additional RPC data. However, it did not contain such a request.

**User response:** The session fails. Retry the session. If the problem persists, check to see if there are other messages that may indicate another problem. If there are no other messages, contact Software Support.

---

**HLV4181S RPC DATA WILL NOT FIT INTO BUFFER**

**Explanation:** This message is issued if an RPC data item of some kind will not fit into the communication buffer. This error should never occur.

**User response:** The session fails. Retry the session. If the problem persists, check to see if there are other messages that may indicate another problem. If there are no other messages, contact Software Support.

---

**HLV4182I value percent of max concurrent RPC threshold achieved, value, value**

**Explanation:** This message is produced once every 60 seconds when the currently executing number of rpc's is equal to or greater than 80 percent of the max allowable specified by RPCMAX parameter. The first value is the max number observed during the life of the server. The second value is the observed value at the time of the message.

**User response:** None. This message is for informational purposes only.

The variable fields of the message text are: value current percentage of max setting value current max setting value number concurrently executing

---

**HLV4183I Max concurrent RPC execution less than value percent of max setting value, value**

**Explanation:** This message is produced when the number of concurrently executing RPC's drops below the percent threshold and message 4182 was previously issued reporting that RPC executions exceeded this threshold. The percentage of RPCMAX at which reporting occurs is set by RPCMAXMSGPCENT.

**User response:** None. This message is for informational purposes only.

The variable fields of the message text are: value current max setting value number concurrently executing value percent of RPCMAX to report (RPCMAXMSGPCENT)

---

**HLV4184T ABEND CC=var1 RS=var2 DETECTED AT var3+var4 BY RPC CONCURRENCY ROUTINE var5 var6 var7 var8 var9**

**Explanation:** An ABEND was intercepted while one of the Concurrent RPC execution routines was in control. Information about the ABEND is logged in this message.

**User response:** The RPC concurrency routines may produce additional trace messages and/or produce an SDUMP in response to the ABEND. They will recover and continue, if possible. The message may give an indication of the recovery action to be taken or other information identifying the cause of the ABEND.

The variable fields of the message text are: var1 ABEND completion code var2 ABEND reason code var3 ABENDING module var4 offset of abend var5 RPC routine name var6 Recovery action or other information. var7 additional information var8 additional information var9 additional information

---

**HLV4185H**    **RPC CONCURRENCY FACILITY  
SDUMP REQUEST RC=var1, ASSOC  
TRACE MSGNO=var2, STATUS  
AREA=var3**

**Explanation:** This message is produced after an SDUMP request is issued by the concurrent RPC suspend/resume facility. A critical event was traced which has the SDUMP-requested attribute set causing the SDUMP request to be made.

**User response:** None. The message reports the return code received from the SDUMP routine. A zero return code indicates the SDUMP was processed or scheduled. A return code of decimal 300 (hex X'0000012c') indicates routines were not authorized to request the SDUMP. A return codes of decimal 304 (hex x'00000130') indicates that the MAXSDUMPRATE flow rate limit in the server suppressed the SDUMP because the frequency of SDUMP requests exceeded the maximum of 5 per second. Non-zero return codes from SDUMP contain the SDUMP return code in the low-order 2-bytes of the fullword and for return code 8, a reason code in the high-order 2-bytes of the fullword.

The variable fields of the message text are: var1 reason/reason code from SDUMP service var2 recorded trace event message number var3 Address of private area status information

---

**HLV4186I**    **Max concurrent RPC allowed  
(RPCMAX) value exceeded. Suspending  
execution of RPC.**

**Explanation:** This message is produced when the number of RPCs started exceeds the max concurrent RPCs allowed value specified by the RPCMAX parameter. The RPC is added to the RPC execution suspend table and placed into a wait state. When the number of concurrently executing RPCs drops below the max allowed, the oldest RPC in the suspend table is resumed.

**User response:** None. This message is for informational purposes only.

---

**HLV4187I**    **Max concurrent RPC allowed  
(RPCMAX) value within parameter  
setting. Execution resumes.**

**Explanation:** This message is produced when a suspended RPC is resumed.

**User response:** None. This message is for informational purposes only.

---

**HLV4188T**    **RPCMAX TRACE SMTE CONTAINS  
INVALID TYPE var1 - ASSUMING  
ERROR/FFDC FOR CAPTURE**

**Explanation:** The RPCMAX trace routine has been called with a trace SMTE element containing an invalid code.

**User response:** The code is assumed to be for a recoverable or imminent error so that the SMTE is recorded as first-failure-data capture. This is probably due to a logic error. Contact Software Support.

The variable fields of the message text are: var1 hex value of SMTE type code and tracepoint

---

**HLV4189H**    **WARNING: var1 ADDITIONAL var2  
EVENTS DETECTED BY RPC  
CONCURRENCY ROUTINES**

**Explanation:** The RPCMAX routines have traced one or more detected ERROR or ABEND events which have left some resource only partially recovered, indicate an imminent failure of the RPC concurrency controls, or where not detected prior to an ABEND occurrence. The RPC Concurrent execution limit facility may become impaired, or now is, inoperable. The system issues this console message when an ABEND is intercepted in the RPC routines, when heuristic checks indicate that an IMMINENT-FAILURE of the facility is likely occurring, or when an anomaly is detected for which only a PARTIAL-RECOVERY of resources can be predicted. Events of this type are always traced unless RPCMAXTRACE has been set to NONE. This console message is issued, no more frequently than once per minute, as an alert that the facility may be slowly degrading, rapidly failing, or has already become inoperable. ABEND-INTERCEPT messages, unless very infrequent, likely are due to logic errors within the facility; although these may occur infrequently if client transaction threads are killed manually or terminate abnormally for reasons unrelated to RPC program processing. FAILURE-IMMINENT messages, normally are issued just before the facility becomes inoperable in order to log information which may be useful is diagnosing problems. PARTIAL-RECOVERY events MAY indicate future facility failure if too many resources cannot be eventually recovered. However, the system is unable to predictively determine, nor later confirm, whether resources being bypassed NOW will eventually be recovered, or will remain inoperable permanently. A few, intermittent PARTIAL-RECOVERY messages with low event counts CAN represent a more or less normal operating condition for some system work loads. RPC termination, End-Of-Task, or cancelled-task cleanup may be lagging a bit behind mainline RPCMAX limit processing, rendering certain predictive health checks unable to confirm that in-flight recovery actions will be able to complete successfully. However, a large count of PARTIAL-RECOVERY events, issued frequently, probably indicates that resources are not being recovered in all cases. These

event traces can be used to determine the originating cause of a downward spiral in many cases.

**User response:** If these messages appear frequently, or for any message reporting FAILURE-IMMINENT events, check the state of the concurrent RPC execution facility, along with Trace Browse activity. The trace may indicate the cause of a building problem early enough that it can be corrected prior to facility failure. If the facility has become or is rapidly becoming inoperable, set the RPCMAX parameter to zero, which will turn off most processing within the facility for new RPC execution requests. If the cause of degradation or failure cannot be corrected contact Software Support. For certain types of events, the system will generate an SDUMP of the product address space. SDUMPs are generated no more frequently than once per minute. Retain and forward the dumps to Software Support if the immediate cause of a problem cannot be resolved directly.

The variable fields of the message text are: var1 count of events since last console message var2 ABEND, FAILURE, or PARTIAL-RECOVERY

---

**HLV4190E BIND WITH rntype host FAILED - NO MATCHING desc**

**Explanation:** This message is produced when the local system is unable to negotiate a bind with the remote system. Note that this is not a VTAM bind. It is an HLVspecific bind.

**User response:** The session fails. Retry the session. If the problem persists, check to see if there are other messages that may indicate another problem. If there are no other messages, contact Software Support.

The variable fields of the message text are: rntype type of remote node host name of remote node desc specific description of problem

---

**HLV4191E text**

**Explanation:** This message indicates a logon failure. The text of the message is produced by the security package (RACF, ACF2).

**User response:** Check the text of the message to determine the cause of the logon failure. You may need additional authorization.

The variable fields of the message text are: text the text of the message

---

**HLV4192T service1 - service2 - desc**

**Explanation:** An error occurred while processing an ODBC request.

**User response:** This error message is a generalized message to identify user interface errors.

The variable fields of the message text are: service1

ODBC service being called (IMSTM, CICSEXCI) service2 element/operation in error desc error description

---

**HLV4193T Access to DB2 LUW is not activated.**

**Explanation:** None.

**User response:** Contact IBM Software Support.

---

**HLV4200I host: 'cmd'**

**Explanation:** This message is issued as a result of a host command being sent to the product REXX MESSAGE environment.

**User response:** This message is informational. No response required.

The variable fields of the message text are: host host environment name string (message) cmd host command insert

---

**HLV4201E BIND WITH text %2 FAILED - NO MATCHING %3**

**Explanation:** This message indicates a logon failure. The text of the message is produced by the security package (RACF, ACF2).

**User response:** Check the text of the message to determine the cause of the logon failure. You may need additional authorization.

The variable fields of the message text are: text the text of the message

---

**HLV4233I Error sending message to external data queue**

**Explanation:** An error has occurred while attempting to send an informational record to the external data queue. This may be caused by a full external data queue.

**User response:** Contact your local product systems programming group for help.

---

**HLV4240I Load balancing resumed for %1**

**Explanation:** This message is issued when it is detected that the load balancing queue is no longer full and is once again eligible to receive sessions from a Group Director.

**User response:** None.

---

**HLV4250E text**

**Explanation:** This message is used to write out error messages received from remote systems.

**User response:** Check the text of the message to determine the cause of the problem.

The variable fields of the message text are: text the text of the message

---

**HLV4251E** INVALID ADDRESS addr PASSED BY PROGRAM 'pgm'

**Explanation:** This message is issued if an invalid address is detected in the routine that copies data from a user program into the buffer that is sent to the remote system. The data at the specified address could not be accessed.

**User response:** The program passing the invalid address to the product may fail or give incorrect results. Check the DB2 application program, and fix it if possible.

The variable fields of the message text are: addr invalid data address pgm program passing the invalid address

---

**HLV4260E** Client processing disabled

**Explanation:** An error occurred during initialization of ACI support for client program processing. Client program processing is disabled.

**User response:** Contact Software Support.

---

**HLV4261E** ACI FUNCTION *function* FAILED, RC=*rc errdesc*

**Explanation:** An error occurred processing a client ACI session.

**User response:** The session will be terminated.

The variable fields of the message text are: function function that failed rc return code errdesc error description

---

**HLV4262E** Server client is not activated on server ss.

**Explanation:** None.

**User response:** Contact IBM Software Support.

---

**HLV4263I** Client processing is enabled.

**Explanation:** Client processing is enabled. Client initialization completed successfully and the client is ready to accept new connections.

**User response:** No action is required.

---

**HLV4270H** %1 SUBSYSTEM NAME NOT SET - %1 TCP/IP SUPPORT NOT ACTIVATED

**Explanation:** The name of the OEM vendor TCP/IP subsystem has not been set. TCP/IP processing using this copy of the product is not possible using the OEM vendor's TCP/IP stack.

**User response:** The TCP/IP task of the main address

space shuts down. This is not an error unless you actually did specify the TCP/IP subsystem name in the xxxxIN00 exec. Note that other communication protocols (such as OE SOCKETS TCP/IP) may be used even when the OEM Vendor TCP/IP interface is not in use.

---

**HLV4271S** SSL and non-SSL ports match - TCP/IP terminated

**Explanation:** SSL processing has been requested. However, the SSL port number is the same as the non-SSL port number. Interlink TCP/IP was terminated.

**User response:** Change either the SSL port number or the NON-SSL port number, and restart the product. The product parameter for setting the SSL port number is ITCSSLPORTNUMBER. The product parameter for setting the non-SSL port number is ITCPORTNUMBER.

---

**HLV4272H** 'vend' TCP/IP comp FOR SUBSYSTEM 'subsys' st

**Explanation:** This message is used to indicate incomplete INTERLINK TCP/IP initialization.

**User response:** No action is required. When TCP/IP completes initialization, HLV will complete its own TCP/IP-related initialization.

The variable fields of the message text are: vend the TCP/IP vendor comp the TCP/IP component subsys the TCP/IP component subsystem name st the component's status

---

**HLV4273H** vend comp support is being activated

**Explanation:** This message is issued by each of the four available communication protocol tasks when the corresponding protocol support is being activated. Other messages are issued if support for a particular protocol is not being made active during start-up.

**User response:** No action is required.

The variable fields of the message text are: vend the protocol vendor comp the protocol type

---

**HLV4274S** Non-load balancing TCP/IP port matches normal port or SSL port, server terminating.

**Explanation:** A non-load balanced TCP/IP port has been specified. However the port number is the same as the standard TCP/IP Port or the SSL Port.

**User response:** Change the port numbers so they do not match and restart the product. The product parameter for setting the SSL port is OESSLPORNUMBER. The product parameter for the non-load balanced port is OENLPORNUMBER. The

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product parameter for setting the non-SSL port number is OEPORTRNUMBER.

---

### HLV4275I    **parm reached -- at least one process waiting**

**Explanation:** This message is issued when a target thread limit was reached in the prior checking interval. This means that some number of requests will have their processing delayed until a subtask is freed by the completion of another request. This is not a serious error if it happens infrequently. If response time complaints occur accompanied by these messages, the limit should be raised.

**User response:** Raise the value of the indicated parameter.

The variable fields of the message text are: parm parameter name of limit that was reached

---

### HLV4276S    **<cnt> new process block dynamic allocation failures due to unknown reasons.**

**Explanation:** This message is issued when a change is noted in the number of process block dynamic allocation failures. These failures will be noted when process block dynamic allocation fails for reasons other than storage constraints. This is a serious error.

**User response:** The bypass is to pre-allocate a sufficient number of process blocks during product initialization via the PROCESS parameter. This number can be determined via the product ISPF panel (HLV Stats) C.4 and the "High water count" value in the "PC routines process blocks" section. Add 2 or 3 to this number, and use it as the initial PROCESS parameter value. For a permanent solution, contact IBM Software Support.

The variable fields of the message text are: cnt number of dynamic allocation failures

---

### HLV4277S    **<cnt> new process block dynamic allocation failures due to storage restraints.**

**Explanation:** This message is issued when a change is noted in the number of process block dynamic allocation failures. These failures will be noted when process block dynamic allocation is unable to obtain either private storage within the product address space or common storage within the extended common storage area (ECSA). This is a serious error.

**User response:** The bypass is to pre-allocate a sufficient number of process blocks during product initialization via the PROCESS parameter. This number can be determined via the product ISPF panel (HLV Stats) C.4 and the "High water count" value in the "PC routines process blocks" section. Add 2 or 3 to this number, and use it as the initial PROCESS parameter

value. For a permanent solution, contact IBM Software Support.

The variable fields of the message text are: cnt number of dynamic allocation failures

---

### HLV4278I    **cnt1 new process blocks allocated. Total process block count: cnt2**

**Explanation:** This message is issued when a change is noted in the number of new process blocks that have been dynamically allocated. The message also displays the total number of cross memory process blocks in the pool.

**User response:** If the process block pool initialization count is set too low, there may be a few of these messages during the early portion of execution or during the first peak period of operation. This should be considered normal operation. If these messages persist and the size of the process block pool continually rises, it is possible that process blocks are not being freed and placed back into the pool as they should. In this case, contact Software Support for further analysis.

The variable fields of the message text are: cnt1 new process block dynamic allocations cnt2 total number of process blocks in pool

---

### HLV4279I    **cnt new RESMGR E-O-T cleanup failures or stalls detected and corrected**

**Explanation:** This message is issued when a change is noted in the number of MVS Resource Manager end-of-task failures or stalls that have been detected and automatically corrected by the subsystem end-of-task SSI intercept. Missing RESMGR EOT notifications normally occur only for connected TSO userids that (1) are cancelled with S622 abends (because the RESMGR EOT intercept is not scheduled by MVS) or (2) do not exit/reenter a dialog (such as the trace display) between restarts of the main product address space. Undetected EOT events may indicate a more serious problem when they occur for subtasks executing within the main product address space.

**User response:** No action is normally required. Some sites may receive these notifications with regular frequency; other sites may rarely or never receive these notifications. If you note an increase in the number of RESMGR EOT failures, check the trace to locate DET events (TRACEDETACHEVENTS must be YES). Those entries which contain the text EOT or EOM are of interest. Display the jobname and userid columns. If the failing DET events are not being recorded for TSO user address spaces, contact Software Support for further analysis.

The variable fields of the message text are: cnt new RESMGR failures detected

---

**HLV4280T**    **tlimtyp TIME LIMIT EXCEEDED FOR  
usid FROM rntype NODE host PLAN  
pln CNID cnid TP pgm**

**Explanation:** This message is issued when a task has exceeded a warning limit of some kind. The limit may have been either a CPU time limit or a wait time limit.

**User response:** No action is required. However, an automated response to this message may be needed.

The variable fields of the message text are: tlimtyp time limit type (CPU or wait) usid userid string rntype type of remote node host remote host name pln plan name string cnid connection id value pgm program name

---

**HLV4281T**    **tlimtyp TIME LIMIT EXCEEDED FOR  
usid FROM rntype NODE host PLAN  
pln CNID cnid TP pgm**

**Explanation:** This message is issued when a task has exceeded an error limit of some kind. The limit may have been either a CPU time limit or a wait time limit.

**User response:** No action is required. However, an automated response to this message may be needed.

The variable fields of the message text are: tlimtyp time limit type (CPU or wait) usid userid string rntype type of remote node host remote host name pln plan name string cnid connection id value pgm program name

---

**HLV4282T**    **tlimtyp TIME LIMIT EXCEEDED FOR  
usid FROM rntype NODE host PLAN  
pln CNID cnid TP pgm**

**Explanation:** This message is issued when a task has exceeded a failure limit of some kind. The limit may have been either a CPU time limit or a wait time limit. The task is terminated with an abend.

**User response:** No action is required. However, an automated response to this message may be needed.

The variable fields of the message text are: tlimtyp time limit type (CPU or wait) usid userid string rntype type of remote node host remote host name pln plan name string cnid connection id value pgm program name

---

**HLV4283T**    **SMAF update failed for TCB addr1  
CMTC entry addr2 SMAF addr3**

**Explanation:** This message is issued when an attempt to update product limits in a SMAF block has failed for some reason. The update will not be performed. This error will normally only occur if the target task terminated while an attempt to update the SMAF was underway.

**User response:** No action is required.

The variable fields of the message text are: addr1 target TCB address addr2 TCB list entry address addr3 SMAF block address

---

**HLV4284S**    **Process block pool is empty, size is size**

**Explanation:** This message is issued when the process block pool is found to be empty. This can happen if all of the process blocks are in use or if process blocks are being lost (allocated and not freed).

**User response:** This is a very serious error. Terminate the main product address space as soon as possible, and raise the number of process blocks using the PROCESS product parameter in the product initialization exec. The number of process blocks must be at least as large as the number of IMS/DRA threads plus 5. If the error persists, contact Software Support for further assistance.

The variable fields of the message text are: size process block pool size

---

**HLV4285S**    **cnt process block allocation failures  
have been detected**

**Explanation:** This message is issued when process block allocation failures are detected. This can happen if all of the process blocks are in use or if process blocks are being lost (allocated and not freed).

**User response:** This is a very serious error. Terminate the main product address space as soon as possible, and raise the number of process blocks using the PROCESS product parameter in the product initialization exec. The MINIMUM number of process blocks needed is the number of IMS/DRA threads, plus 5. Note that this is the minimum number required, and it does NOT take into account various volume-based request handling. If the error persists after increasing the PROCESS parameter value, or if process block release errors are also being reported by the subsystem, contact Software Support for further assistance.

The variable fields of the message text are: cnt process block allocation failures

---

**HLV4286S**    **OPMS UPDATE FAILED FOR A  
LOGGING EXCEPTION LIMIT**

**Explanation:** This message is issued when an attempt to update product limits in the OPMS block failed for some reason. The update will not be performed. This error will normally occur only if a serious internal error has occurred. This error could occur if the product was attempting to update a limit value at the same time the ISPF interface was also being used to update a limit value.

**User response:** This is a very serious error. If the error persists, contact Software Support for further assistance.

---

**HLV4287S cnt PENDING LOGGING REQUESTS FOUND FOR DATABASE 'subsys'**

**Explanation:** The number of pending logging requests has exceeded the product limit value. This message is issued to notify the operators of the system or an automated operations product that the limit has been exceeded.

**User response:** This is a serious error. The reason for the accumulation of pending requests must be determined and fixed. Some of the possible reasons include the DB2 subsystem being down or errors accessing the DB2 logging tables.

The variable fields of the message text are: cnt count  
subsys database subsystem name

---

**HLV4288S cnt pending logging requests cleared for database 'subsys'**

**Explanation:** All of the pending logging requests for a database subsystem have been cleared and the associated storage has been released. This message is issued to notify the operators of the system or an automated operations product that the pending logging requests have been released.

**User response:** This is a serious error. The reason for the accumulation of pending requests must be determined and fixed. Some of the possible reasons include the DB2 subsystem being down or errors accessing the DB2 logging tables.

The variable fields of the message text are: cnt count  
subsys database subsystem name

---

**HLV4289S cnt SS-PC ENTRY FAILURES DETECTED, LAST: 'reason' AT time**

**Explanation:** One or more new failures were encountered during entry processing for the product's space-switch or stacking PC routine. Each new failure represents a transaction task or user interface request which could not be processed. Usually, these failures are due to the inability of the product to obtain stack storage from its pool of pre-allocated cross-memory process blocks, and this message will be immediately preceded by message 4285S.

**User response:** If this message was preceded by message 4285S, terminate the main product as soon as possible, and raise the number of process blocks using the PROCESS product parameter, as described for message 4285S. If message 4285S does not precede this message or the problem persists, contact Software Support for further assistance.

The variable fields of the message text are: cnt count of PC entry failures reason last text reason set in PC entry routine time timestamp of last PC entry failure

---

**HLV4290E wrkspc GLOBAL VARIABLE WORKSPACE IS var2 FULL (cnt OF num BLOCKS USED). PROGRAM=pgmname.**

**Explanation:** The global (or temporary global) variable workspace, which contains global variables, has met or exceeded the warning threshold of blocks in use as defined by the GLOBALWARNTHRESH (or GLOBALTEMPWARNTH) product parameter. This message will also be issued every time a new high-water mark that is at least 5% higher than the previous high-water mark is met or exceeded. The frequency at which this message is issued is controlled by the GLOBALWARNINTVAL (or GLOBALTEMPWARNIV) product parameter. Note that the check that results in this message is only made when a new global variable is allocated or an existing global variable is expanded. The condition is recorded, and the message will be issued on the next reference to a global variable. If no global variable references occur, you may not be warned of this condition until the database is full.

**User response:** You may need to analyze the contents of the global (or temporary global) variable database using the Global Variables application, and delete unused symbols. If the global variable data set is too small, allocate a larger global variable DIV data set, and copy the old one over to it using the access method services REPRO command. Modify the product GLOBALMAX (or GLOBALTEMPMAX) parameter to indicate the larger maximum number of global variable blocks. The program or rule.ruleset name in the message simply represents the program running at the time the condition was detected or at the time a deferred message was issued. This program may or may not have caused a significant portion of the global workspace to be used.

The variable fields of the message text are: wrkspc TEMP or " " to indicate type of workspace var2 global variable workspace % full cnt current global workspace blocks in use count num total number of blocks (GLOBALMAX) pgmname REXX program name or ruleset.rulesetname

---

**HLV4291T var1 var2 var3 var4 var5**

**Explanation:** This trace message is used for debugging purposes only.

**User response:** None.

The variable fields of the message text are: var1 none  
var2 none var3 none var4 none var5 none

---

**HLV4292E POSSIBLE wrkspc GLOBAL VARIABLE WORKSPACE INTEGRITY PROBLEM DETECTED (var2 - var3). REBUILD SCHEDULED.**

**Explanation:** An abend occurred while updating



critical control blocks in either the global or temporary global variable workspace. The global variable workspace will be rebuilt at the next checkpoint interval. Until the rebuild is complete, attempts to access or update global variables may possibly fail.

**User response:** In most cases, no problem has actually occurred. The rebuild will simply validate and recover all of the data. If the 0180I messages associated with the rebuild indicate any loss of data, perform the following: (1) print any LOGREC software records created by the product, (2) print the relevant sections of the Trace Browse leading up to the issuance of this message, (3) record the exact text of this message, and (4) contact Software Support for further assistance.

The variable fields of the message text are: wrkspc TEMP or " " to indicate type of workspace var2 error detection type (SYNC or DELAYED) var3 integrity flag byte in hexadecimal

---

**HLV4296S GLV subtask has terminated. Zeroing workspace pointers.**

**Explanation:** During an attempt to access a global variable, it was detected that the global variable subtask had already terminated. The workspace pointers will be zeroed to prevent any future attempts to access this data. All future HLVVALUE or SWSVALUE requests will result in REXX error 48 (failure in system service).

**User response:** If the product does not shut itself down automatically, attempt to shut it down manually using the MVS STOP command. If the product still does not terminate, attempt to CANCEL it.

---

**HLV4297S routine OF GLOBAL VARIABLE POOL FAILED: HASN=asid1, PASN=asid2, SASN=asid3, MODE=var2, RC=rc, CALLER=csect**

**Explanation:** During an attempt to access global variable pool storage, a failure in the lock or unlock serialization routine was encountered. The current global variable operation will be abandoned with a failure return code. The return code field will contain a non-zero value in byte 3 if the SETLOCK or ENQ service failed. It will contain a non-zero value in bytes 1 or 2 for environmental errors.

**User response:** The current global variable pool operation is failed. Check for other messages which might indicate the cause of the error, and contact Software Support for further assistance.

The variable fields of the message text are: routine lock or unlock asid1 home asid asid2 primary asid asid3 secondary asid var2 PROB or SUP rc return code value csect caller's CSECT name

---

**HLV4298S GLOBAL VARIABLE routine RECURSION ERROR DETECTED AT ad**

**Explanation:** During an attempt to access global variable pool storage, a failure in the lock or unlock serialization routine was encountered.

**User response:** The current global variable pool operation is failed. Check for other messages which might indicate the cause of the error, and contact Software Support.

The variable fields of the message text are: routine lock or unlock

---

**HLV4300I SEF command rejected - subsystem subsys is not active**

**Explanation:** The current program or routine requires the services of the main product address space. However, the main product address space is not active.

**User response:** Start or restart the main product address space

The variable fields of the message text are: subsys subsystem name

---

**HLV4301S service - desc FAILED, RC=rc**

**Explanation:** This is a generic error message used to describe a wide variety of internal errors that occur as a result of calling a product system management service.

**User response:** Record of all the information in the message text, and contact Software Support.

The variable fields of the message text are: service current operation desc description rc return code

---

**HLV4302S ABEND abcd, RS=abrs IN 'ADDRESS hostenv' AT mod+off, PSW=psw**

**Explanation:** An abend occurred while the current program or routine was using the services of the main product address space. The message provides a detailed explanation of what type of abend occurred and at what location it occurred.

**User response:** Check the full text of the error message, and take whatever corrective action is appropriate. For further assistance with this problem, contact Software Support.

The variable fields of the message text are: abcd abend code abrs abend reason code hostenv REXX host command environment mod module name off module offset psw abend PSW if available

---

**HLV4303E SEF command timed out before all responses received.**

**Explanation:** The SEF command timed out after waiting for a significant period of time without receiving the complete response from the SEF.

**User response:** Ensure that the product is still active. If the product is still active, check the status of the SEF execute queue using HLV/SWS. If there is a backlog of SEF requests, try to determine what caused the backlog, and attempt to resolve the problem. If the problem cannot be resolved, contact IBM Software Support.

---

**HLV4304E SEF COMMAND errdesc: 'cmd'**

**Explanation:** An invalid SEF verb or an invalid SEF command has been detected by the ADDRESS SEF environment syntax checker.

**User response:** Correct the syntax of the SEF command

The variable fields of the message text are: errdesc error description (e.g. invalid verb) cmd SEF verb or command string

---

**HLV4305E HLV/SWS version ver1 is incompatible with version ver2 of subsystem subsys.**

**Explanation:** The version of the product that you are using in your TSO environment is incompatible with the version of the product running in the main Server address space related to the subsystem to which the SEF command has been addressed.

**User response:** Ensure that the correct product load library is allocated to your TSO environment, or address the SEF request to a copy of the product that is running the a compatible version.

The variable fields of the message text are:  
 ver1 HLV/SWS version string  
 ver2 main product version string  
 subsys subsystem name

---

**HLV4307E SUBSYS SEF command cannot be issued in a rule**

**Explanation:** The SUBSYS SEF command cannot be issued from within an SEF rule environment

**User response:** Force this section of code to run in a server using OPSREQ.

---

**HLV4308E errdesc, RC=rc**

**Explanation:** Some type of service routine (operating system or product specific) failed. The error message identifies the type of error.

**User response:** Check the full text of the error message, and attempt to correct the error.

The variable fields of the message text are: errdesc error description rc return code

---

**HLV4319T ABEND IN 'ADDRESS SWSEND' CODE=cmpr, REASON=rc AT ad**

**Explanation:** An abend occurred within the ADDRESS SWSEND host environment.

**User response:** Check for other errors that might explain the condition.

The variable fields of the message text are: cmpr abend completion code rc abend reason code

---

**HLV4320H subsysid SEF CMD FROM(jb,usid): cmd**

**Explanation:** This message logs the use of SEF host commands to the hardcopy console. The FROM keyword contains the job name and user ID used for authorization purposes.

**User response:** No action required. This message is for information tracking only.

The variable fields of the message text are: subsysid: product subsystem to which command addressed; usid: user ID used for authorization; cmd: text of the SEF command.

---

**HLV4321E CURRENT verb COMMAND NOT AUTHORIZED - msg**

**Explanation:** Product REXX SEF command authorization check routine found that the current user is not authorized to execute the SEF command. Access to the EXECUTE command is denied.

**User response:** Check the verb string of the error message text for the command whose access is denied. Ensure that the current user has the required access. Contact your security systems administrator for further help, if necessary.

The variable fields of the message text are: verb verb string msg authorization error check message

---

**HLV4322S ABEND abcd IN AUTHORIZATION ROUTINE mod+off**

**Explanation:** An abend occurred in the authorization checking routine

**User response:** Contact the person at your installation who installs and maintains your installation security product.

The variable fields of the message text are: abcd abend code mod module name off module offset

---

**HLV4336E** var1 var2 var3 var4 var5 var6 var7 var8

**Explanation:** An SEF command was invalid or has failed for the reason indicated in the message

**User response:** Correct and re-submit the SEF command

The variable fields of the message text are: var1 variable information var2 variable information var3 variable information var4 variable information var5 variable information var6 variable information var7 variable information var8 variable information

---

**HLV4337T** THE TSO COMMAND IS INVALID DUE TO errdesc

**Explanation:** A command passed to the ADDRESS TSO or ADDRESS TSOSRV environment is invalid for the reason given. The system rejects the command, with RC=-3 indicating an invalid host command environment command.

**User response:** Determine why the command was rejected, and resubmit the command.

The variable fields of the message text are: errdesc description of validation error

---

**HLV4338I** TSO REMOTE EXECUTION TIMEOUT VALUE SET TO time

**Explanation:** A GETTIMEOUT command was passed to the ADDRESS TSO interface. This message is returned on the external data queue as a response.

**User response:** None. The timeout value is given in 100ths of seconds.

The variable fields of the message text are: time current timeout value in 100ths of a second

---

**HLV4339T** addr COMMAND TIMED OUT

**Explanation:** An ADDRESS TSO or ADDRESS CGI host command did not complete within the allowed time. The requesting routine is redispached.

**User response:** Determine why the host command did not complete within the required time frame. The delay could be due to looping within the TSO/CGI command procedure or heavy usage of the external TSO servers.

The variable fields of the message text are: addr address environment name

---

**HLV4340S** Subsystem subsysid inactive, must be (re)started

**Explanation:** An ADDRESS TSO or ADDRESS TSOSRV host command has been directed to a product subsystem that is not currently active.

**User response:** Start or restart the product subsystem whose subsystem ID appears in the message, or correct

the program to specify the ID of an active product subsystem.

The variable fields of the message text are: subsysid product subsystem ID

---

**HLV4341S** TSO/E is not installed

**Explanation:** TSO/E (IBM's program product number 5665-293) is required to support the use of the product.

**User response:** Verify that this product is available at your installation.

---

**HLV4342E** TSO command length (length1) exceeds maximum length (length2)

**Explanation:** The length of the TSO command exceeds the implementation limits. Note that the length of TSO host commands sent from SEF rules to the OSF execute queue have a lower limit (256 bytes or the BLKSIZE on the server SYSTSIN DD statement, whichever is smaller).

**User response:** Check if there are an excessive number of blanks in the TSO command string. If so, remove the blanks from the command string. If you need to pass long values from a rule to a server REXX program, use global variables to pass the values.

The variable fields of the message text are: length1 length of TSO command string length2 TSO command string implementation limit

---

**HLV4343S** TSO service error - errdesc

**Explanation:** An error occurred in the product service routine that executes TSO commands via the TSO command service routine.

**User response:** Check if any other error messages were generated along with the error message above. If the combined error messages are sufficient to explain the problem, take whatever corrective action is appropriate. If the problem cannot be resolved, contact Software Support.

The variable fields of the message text are: errdesc description of the error

---

**HLV4344S** TSO service error - abcd1 abcd2 - reason code rscd

**Explanation:** An abend occurred in the product service routine that executes TSO commands via the TSO command service routine.

**User response:** Check for other error messages that were generated with is error message. If the combined error messages are sufficient to explain the problem, take whatever corrective action is appropriate. If the problem cannot be resolved, contact Software Support.

The variable fields of the message text are: abcd1 abend

code abcd2 abend code rscd reason code

---

**HLV4345S TSO service error - desc - reason code rscd**

**Explanation:** An error was detected in the parameter list passed to the product service that calls the TSO command service routine.

**User response:** Check if any other error messages were generated along with the error message above. If the combined error messages are sufficient to explain the problem, take whatever corrective action is appropriate. If the problem cannot be resolved, contact Software Support.

The variable fields of the message text are: desc description rscd reason code

---

**HLV4346E Current verb command not authorized - msg**

**Explanation:** The authorization check failed. The use of ADDRESS OSF is restricted by your installation security product.

**User response:** Contact the person at your installation who installs and maintains your installation security product.

The variable fields of the message text are: verb address OSF verb msg error message from authorization processing

---

**HLV4347S ABEND abcd IN AUTHORIZATION ROUTINE mod+off**

**Explanation:** An abend occurred in the authorization checking routine.

**User response:** Contact the person at your installation who installs and maintains your installation security product.

The variable fields of the message text are: abcd abend code mod module name off module offset

---

**HLV4348S rsrce ss FAILED, RC=rc, DETECTED AT ad**

**Explanation:** Some type of error occurred during invocation of a product service routine associated with the ADDRESS TSO or ADDRESS OSF environment. The error occurred while attempting to set up the environment for executing a TSO command via the TSO/E command service routine.

**User response:** Check if any other error messages were generated along with the error message above. If the combined error messages are sufficient to explain the problem, take whatever corrective action is appropriate. Otherwise, contact Software Support with this problem.

The variable fields of the message text are: rsrce resource name ss system service rc return code

---

**HLV4349S MESSAGE SEND TO TSO EXECUTE QUEUE FAILED, RC=rc, DETECTED AT ad**

**Explanation:** The product has attempted to send a command to the TSO server execute queue in a product Server address space, and the attempt has failed. If the return code in the message is 4, then the TSO execute queue is full. Any one or some combination of the following conditions may be true: (1) there is a rule or some combination of rules that is looping, (2) there is a loop in an application that is causing TSO commands to be issued very frequently, (3) there are too few servers or the servers may be tied up running relatively long processes, or (4) the TSO execute queue may be too small for your server workload.

**User response:** Review the contents of the message and any associated messages, and attempt to resolve the problem. If the problem cannot be resolved, contact Software Support to obtain additional assistance.

The variable fields of the message text are: rc return code from the product send message service

---

**HLV4350I Load for module mod failed, CCTL initialization error**

**Explanation:** This message is issued if a module needed to initialize the CCTL interface to IMS could not be loaded. The message contains the module name. The module is either missing or some other error has occurred.

**User response:** Check if any other messages were issued. Check if the named module is in the search sequence. Note that this problem can be resolved without restarting the main product address space.

The variable fields of the message text are: mod module name

---

**HLV4351I DRA control exit invalid PAPL subfunction = sfunc**

**Explanation:** This message is issued when the product DRA control exit receives notification of a DRA failure but is passed an unrecognized subfunction code.

**User response:** No action required. The product will attempt to restore a connection with the IMS control region. Note that this error message may be followed by other, more descriptive error messages as the product attempts to reconnect to the IMS DBCTL.

The variable fields of the message text are: sfunc PAPL subfunction code

---

**HLV4352I DRA control exit invalid PAMPL function = func**

**Explanation:** This message is issued when the product DRA control exit receives an unrecognized function code.

**User response:** No action required. The product will attempt to restore a connection with the IMS control region. Note that this error message may be followed by other, more descriptive error messages as the product attempts to reconnect to the IMS DBCTL.

The variable fields of the message text are: func PAMPL function code

---

**HLV4353I IMS CCTL support activated**

**Explanation:** This message is issued when the product DRA control exit receives a notification that the connection to the IMS control region has been established successfully.

**User response:** No action required. This is an informational message only.

---

**HLV4354I IMS CCTL support terminating**

**Explanation:** This is an informational message that is issued when the product terminates its IMS CCTL support. If the IMS CCTL support is being terminated due to a fatal error condition, this message will have been preceded by error messages which depict the exact error condition encountered.

**User response:** Follow the course of action recommended for the error messages that preceded this error message. If the product CCTL support continues to terminate due to a fatal error condition, contact Software Support for further assistance.

---

**HLV4355I IMS CCTL control exit resync failure**

**Explanation:** The IMS CCTL control exit has been unable to successfully process a resync request during product initialization.

**User response:** Check the MVS system log for any IMS messages occurring around the time of this failure. Correct any IMS problems that may have occurred. Then ABORT the in-doubt UORs for this server. If the problem continues to persist, contact Software Support for further assistance.

---

**HLV4356I IMS DRA terminating due to unknown error condition**

**Explanation:** The IMS Data Resource Adaptor running inside of the main product address space has terminated due to some unknown error condition. Product IMS support will be terminated.

**User response:** Check the MVS system log for any

IMS messages occurring around the time of this failure. Correct any IMS problems that may have occurred, and restart the HLV address space. If the problem continues to persist, contact Software Support for further assistance.

---

**HLV4357I Invalid request, IMS CCTL feature not enabled**

**Explanation:** None.

**User response:** Contact IBM Software Support.

---

**HLV4358I Request failed product not identified to IMS**

**Explanation:** The product has made one or more attempts identify itself to the IMS DBCTL region, but the attempts have failed. There is currently no active connection between the product address space and the IMS DBCTL region.

**User response:** Check Trace Browse for any related product messages. Check the MVS system log for any related IMS messages. Correct any IMS problems discovered. The product will continue to attempt to connect to the IMS region until a successful connection has been established.

---

**HLV4359I PSB schedule request unsuccessful**

**Explanation:** The product was unable to successfully schedule the PSB specified by the client application.

**User response:** Check the PSB name to ensure that it is correct. If the problem continues to persist, contact Software Support for further assistance.

The variable fields of the message text are: psb PSB name

---

**HLV4360I Request failed - PSB not in scheduled state**

**Explanation:** The current request requires that a prior PSB schedule attempt had completed successfully, and no active thread was found for this task.

**User response:** Check the program logic in the client-side application to ensure that the "CC" message was sent prior to issuing DL/I requests or the "TERM" message. If the problem continues to persist, contact Software Support for further assistance.

---

**HLV4362I Invalid buffer function code func**

**Explanation:** The buffer function code passed to this routine was invalid. The host transaction program could not handle the buffer function code passed by the client.

**User response:** Verify that the host application requested by the client matches the current call to the

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host. Contact Software Support for further assistance, if necessary.

The variable fields of the message text are: func buffer function code

---

**HLV4363I Previous CCTL termination failed, initialization will use previous session PAPTCTOK value**

**Explanation:** This is an informational message that is issued during product initialization when the CCTL initialization routine determines that the previous CCTL termination did not complete successfully.

**User response:** No action is required. This message is for informational purposes only.

---

**HLV4370T Access to Services is not activated.**

**Explanation:** None.

**User response:** Contact IBM Software Support.

---

**HLV4371T Services is not active on the server**

**Explanation:** Services is not started on the server and cannot be used by client applications. The current request to use client to execute a web service is rejected. The current host session will be terminated.

**User response:** If access to Services is needed, enable Services by setting the correct parameters on the server.

---

**HLV4372H WEB SERVICE %1 UNDER VIRTUAL DIRECTORY %2 HAS BEEN %3**

**Explanation:** A web service has been enabled or disabled.

**User response:** No action is required. This message is for informational purposes only.

---

**HLV4375W OE sockets WSOEPORT conflict with PIO port - zervices HTTP listener terminating**

**Explanation:** The port number for OE Sockets Services (WSOEPORT) has been set to the same non-zero value as the parallel I/O port.

**User response:** This OE Sockets task of the main address space shuts down. Startup continues without Services support.

---

**HLV4376W MongoDB support services TCP/IP port(s) conflict with other port number assignments - Mongo terminating**

**Explanation:** The port number(s) assigned for MongoDB server support conflicts with other non-zero port number assignments for other product support services.

**User response:** The MongoDB listener task will terminate and Mongo support will be deactivated.

---

**HLV4377W MongoDB listener ports not set - MongoDB support willnot be activated**

**Explanation:** The port numbers for MongoDB client connections have not been set. MongoDB support, requested by the MongoDB start-up parameter cannot be activated.

**User response:** The MongoDB listener task shuts down, and start-up continues without MongoDB support.

---

**HLV4378W OE sockets HTTP port (WSOEPORT) conflicts with main OE port (OEPORNUMBER) - HTTP listener terminating**

**Explanation:** The port number for OE Sockets HTTP and Services access is set to the same non-zero value as the normal (ODBC) port. Services HTTP listener task will terminate and HTTP access to this server will be unavailable.

**User response:** This OE Sockets task of the main address space shuts down. Startup continues without HTTP and Services support.

---

**HLV4379W OE sockets HTTP port (WSOEPORT) unset - HTTP && Services support unavailable**

**Explanation:** The port number for OE Sockets HTTP and Services access is un-set. Services Support, requested by WSACTIVE option, has been reset and will not be available. HTTP access to the server by the Studio will also be unavailable.

**User response:** This OE Sockets task of the main address space shuts down. Startup continues without HTTP and Services support.

---

**HLV4380E MongoDB feature is not configured - Mongo listener on port %1 will not be activated.**

**Explanation:** None.

**User response:** Contact IBM Software Support.

---

**HLV4381H Parallel I/O port OPEN failure**

**Explanation:** An error occurred when trying to open a socket for the Parallel I/O port.

**User response:** Verify that the port number is correct.

---

**HLV4382H Non load-balanced port OPEN failure**

**Explanation:** An error occurred when trying to open a socket for a non load-balanced port.

**User response:** Verify that the port number is correct.

---

**HLV4383H OE sockets TCP/IP DubProcess failed. RC=%1. Reason code=%2.**

**Explanation:** An error occurred when trying to set the DUBPROCESS option for OE Sockets processing.

**User response:** Verify that the userid used to start the server has an OMVS segment defined. If this does not resolve the problem, contact Software Support for additional assistance.

---

**HLV4384S Services load balancing port not unique, server terminating**

**Explanation:** A load balancing Services port has been specified. However the port number is already used by another listener such as the main TCP/IP listener, SSL, or regular Services.

**User response:** Change the port numbers so they do not match and restart the product. The product parameter for setting the SSL port is OESSLPORTNUMBER. The product parameter for the non- load balanced port is OENLPORTNUMBER. The product parameter for setting the non-SSL port number is OEPORTRNUMBER. The product parameter for setting the Services port number is WSOEPORT. The product parameter for setting the Services SSL port number is WSOESSLPORT. The product parameter for setting the Services balanced port number is WSOEBALANCEDPORT

---

**HLV4385H WS load-balanced port OPEN failure**

**Explanation:** An error occurred when trying to open a socket for a ws load-balanced port.

**User response:** Verify that the port number is correct.

---

**HLV4386S SSL port number required - OE sockets TCP/IP processing terminated**

**Explanation:** SSL processing has been requested. However, the SSL port number has not been set or has been set to zero. OE Sockets was terminated.

**User response:** Set the SSL port number in the initialization exec, and restart the product. If this does not resolve the problem, contact Software Support for additional assistance.

---

---

**HLV4387S PIO and ODBC ports match - OE sockets PIO port is reset to zero**

**Explanation:** PIO processing has been requested. However, the PIO port number is the same as the ODBC port number. The OEPIOPORTNUMBER is set to zero. Parallel I/O support will be disabled.

**User response:** Change the OEPIOPORTNUMBER to be different from the OEPORTNUMBER value.

---

**HLV4388S SSL and non-SSL ports match - OE sockets SSL port is reset to zero**

**Explanation:** SSL processing has been requested. However, the SSL port number is the same as the non-SSL port number. The OESSLPORTNUMBER is set to zero. The non-SSL port number will accept both SSL and non-SSL inbound requests.

**User response:** None required. To eliminate the message, remove the OESSLPORTNUMBER parameter from the initialization exec.

---

**HLV4389S OE stack 'oename' can not be used - OE sockets TCP/IP processing terminated**

**Explanation:** The name of a specific OE stack was specified using the TCPNAME product parameter. However, this OE stack cannot be used for some reason. OE Sockets was terminated.

**User response:** Correct the name of the OE stack by modifying the TCPNAME product parameter. Restart the main product address space.

The variable fields of the message text are: oename OE stack name

---

**HLV4390E Invalid dynamic VIPA IP address %1 specified**

**Explanation:** Dynamic VIPA support has been configured, however the IP address specified for Dynamic VIPA support to use is not valid. Dynamic VIPA support will be disabled.

**User response:** Either delete the Dynamic VIPA IP address or properly specify an IP address using dotted-decimal notation.

---

**HLV4391I OE stack binding port svr to IP address ip**

**Explanation:** The Open Edition support is binding the product to the indicated port and the indicated IP address.

**User response:** None. This is an informational message only.

The variable fields of the message text are: svr the port being bound to ip the IP address being bound to

---

---

**HLV4392I OE stack returning invalid results when sockets are ready**

**Explanation:** This message is issued when the OE main task detects that select() returned a zero return value even though there were sockets ready in the returned socket mask. This could lead to a loop occurring in OPMAOT trying to process a listening socket.

**User response:** Cyour sales representative for instructions on gathering documentation for this problem in IBM Open Edition code.

---

**HLV4393I OE stack returning too soon from select when no sockets are ready**

**Explanation:** This message is issued when the OE main task detects that select() returned sooner than expected when a timeout value was specified and there were no sockets ready for processing. This could lead to wasted time in OPMAOT when there is not work to do.

**User response:** Contact Software Support for instructions on gathering documentation for this problem.

---

**HLV4400T text**

**Explanation:** This is a general purpose message that may or may not indicate some type of TCP/IP error.

**User response:** Read the message text carefully. Some messages produced under this message ID are actually error messages. If the message indicates an error, check for any associated TCP/IP produced error messages. If you are unable to diagnose the problem, contact Software Support.

The variable fields of the message text are: text the text of the message

---

**HLV4401W No TCP/IP port number specified.**

**Explanation:** This message indicates that no port number was specified for the product to LISTEN for, and ACCEPT inbound OE Sockets TCP/IP sessions.

**User response:** Change the xxxxIN00 EXEC to specify a port number for the OEPORTRNUMBER parameter which is used to LISTEN for, and ACCEPT all inbound OE Sockets TCP/IP sessions.

---

**HLV4410E service OF desc FAILED RC=rc, DETECTED AT ad**

**Explanation:** This is a generic error message used to describe a wide variety of message processing errors. The message text gives a description of the current operation and what the current operation was trying to do.

**User response:** Keep all the related error details, and contact your local product systems programming group for assistance with this problem.

The variable fields of the message text are: service current operation desc description rc return code

---

**HLV4411E GLOBAL VARIABLE RULE CHAINING DEPTH EXCEEDS MAXIMUM VALUE**

**Explanation:** Global variable rule chaining has exceeded the maximum value. All pending global variable rules will not be fired. The current operation continues.

**User response:** If this situation has been caused by a recursive infinite global variable rule loop, modify the global variable rule to avoid this situation. If this situation is not due to a REXX programming error, increase the global variable rule chaining limit (GLVCHAINMAX).

---

**HLV4413I num MESSAGES SINCE THE LAST ARCHIVE. CURRENT MESSAGE NUMBER IS sqno**

**Explanation:** The number of messages added to Trace Browse since the last Trace Browse message archived has exceeded a user-defined threshold.

**User response:** This message may be used as a trigger for starting the Trace Browse archive program based on the number of messages since the last archive rather than on a time basis using the TODARCH rule.

The variable fields of the message text are: num number of messages since last archive sqno current Trace Browse message sequence number

---

**HLV4420H text**

**Explanation:** This is a general purpose message that may or may not indicate some type of ITC/IP error.

**User response:** Read the message text carefully. Some messages produced under this message ID are actually error messages. If the message indicates an error, check for any associated ITC/IP produced error messages. If you are unable to diagnose the problem, contact Software Support.

The variable fields of the message text are: text the text of the message.

---

**HLV4421H UNKNOWN service CODES - R0=r0 R15=r15**

**Explanation:** This message reports ITC/IP return and reason codes (R15 and R0) that are unknown to HLV.

**User response:** This may indicate some type of internal error. It is also possible that you are running a version of ITC/IP not yet supported by HLV. If the version of ITC/IP that you are running DOES appear



to be supported, contact Software Support.

The variable fields of the message text are: service current operation r0 register zero contents r15 register fifteen contents

---

**HLV4422H UNKNOWN service CODES - ERCD=ec DGCD=dc**

**Explanation:** This message appears in conjunction with the 4421H message.

**User response:** This may indicate some type of internal error. It is also possible that you are running a version of ITC/IP not yet supported by HLV. If the version of ITC/IP that you are running DOES appear to be supported, contact Software Support.

The variable fields of the message text are: service current operation ec primary tpl error code dc secondary tpl diagnostic code

---

**HLV4423H UNKNOWN service CODES - ERCD=ec DGCD=dc**

**Explanation:** This message appears in conjunction with the 4421H message.

**User response:** This may indicate some type of internal error. It is also possible that you are running a version of ITC/IP not yet supported by HLV. If the version of ITC/IP that you are running DOES appear to be supported, contact Software Support.

The variable fields of the message text are: service current operation ec primary apcb error code dc secondary tpl diagnostic code

---

**HLV4450S CICS error inquiring CICS system information for client - EIBRESP: CICS**

**Explanation:** The client PLTPI program encountered an error inquiring CICS system information.

**User response:** Probable CICS error. Check the system log for errors.

The variable fields of the message text are: CICS jobname CICS EIB response code

---

**HLV4451S CICS error enabling client exit program program - EIBRESP: CICS**

**Explanation:** The client PLTPI program encountered an error enabling a client exit program.

**User response:** Check that the exit program has been correctly defined to CICS.

The variable fields of the message text are: CICS jobname program name CICS EIB response code

---

**HLV4452S CICS error extracting GWA address for client program program - EIBRESP: CICS**

**Explanation:** The client PLTPI program encountered an error extracting the Global Work Area address for the exit program.

**User response:** Probable CICS error. Check the system log for errors.

The variable fields of the message text are: CICS jobname program name CICS EIB response code

---

**HLV4453S CICS error starting client exit program program - EIBRESP: CICS**

**Explanation:** The client PLT program encountered an error starting the user exit program.

**User response:** Check that the exit program has been correctly defined to CICS.

The variable fields of the message text are: CICS jobname program name CICS EIB response code

---

**HLV4454I CICS client exit program program started**

**Explanation:** The client task-related user exit program has been started.

**User response:** None. This message is for informational purposes only.

The variable fields of the message text are: CICS jobname program NAME

---

**HLV4455S CICS GWA length not as expected for client exit program program - expected: expected, returned: GWA**

**Explanation:** The GWA length returned by CICS for the client TRUE is not the expected length.

**User response:** Check that the exit program has been correctly defined to CICS.

The variable fields of the message text are: CICS jobname program name expected GWA length GWA length returned by EXEC CICS EXTRACT EXIT

---

**HLV4456I CICS program creation date: program**

**Explanation:** This message provides the creation date of the client TRUE exit program.

**User response:** No action is required.

The variable fields of the message text are: CICS jobname Program name Program creation date

---

**HLV4457S CICS Program load failed - EIBRESP:  
EIBRESP**

**Explanation:** The client API interface routine could not be loaded.

**User response:** Ensure that the load module is available to the CICS region.

The variable fields of the message text are: CICS jobname Program name EIBRESP code

---

**HLV4458W CICS client exit program *program* is  
already enabled**

**Explanation:** The client PLTPI program encountered an error enabling the client exit program. The program is already enabled.

**User response:** Check that the PLTPI program has been correctly defined to CICS.

The variable fields of the message text are: CICS jobname Program name

---

**HLV4459I CICS client exit program *program* is  
enabled**

**Explanation:** The client PLTPI program is enabled.

**User response:** This is an informational message. No action required.

The variable fields of the message text are: CICS jobname Program name

---

**HLV4460I CICS Program GWA address: GWA**

**Explanation:** This message provides the address of the client TRUE exit's Global Work Area (GWA).

**User response:** No action is required.

The variable fields of the message text are: CICS jobname Program name GWA address

---

**HLV4470S IMS CCTL FEATURE MUST BE  
ENABLED TO ISSUE DL/I CALLS**

**Explanation:** None.

**User response:** Contact IBM Software Support.

---

**HLV4471S INVALID PSB SCHEDULE ATTEMPT -  
PSB ALREADY SCHEDULED**

**Explanation:** A user-written RPC program attempted to issue an IMS PCB call in order to schedule the program's PSB. However, the program's PSB is already scheduled.

**User response:** Correct the internal logic error in the user-written RPC program, and invoke the RPC program again.

---

---

**HLV4472S PSB SCHEDULE FAILURE - PSB NAME  
= psb**

**Explanation:** A user-written RPC program attempted to schedule the program's PSB. The PSB schedule attempt has failed.

**User response:** The PSB schedule may have failed for a variety of reasons. Ensure that the PSB load module is available to IMS. Ensure that the databases referenced by the PSB are available. Ensure that the PSB has not been stopped by IMS due to an earlier error. If none of the above conditions caused the error, check the IMS MTO log and the MVS MCS console for any related error messages. If all attempts to schedule the PSB fail, contact Software Support for further assistance.

The variable fields of the message text are: psb name of PSB involved in schedule failure

---

**HLV4473S INVALID DL/I CALL ATTEMPT - PSB  
NOT SCHEDULED**

**Explanation:** A user-written RPC program attempted to issue an IMS term call in order to terminate the program's PSB. However, the program's PSB was not previously scheduled.

**User response:** Correct the internal logic error in the user-written RPC program, and invoke the RPC program again.

---

**HLV4500U desc INITIAL GETMAIN FAILED -  
INCREASE STORAGE SIZE**

**Explanation:** Insufficient storage. The product was unable to obtain enough storage to allocate the initial program stack.

**User response:** Check the abend code to determine if the region size should be increased. If necessary, increase the region size, and restart the product.

The variable fields of the message text are: desc description

---

**HLV4501U desc UNABLE TO LOCATE THE  
MASTER BLOCK**

**Explanation:** A subtask was unable to locate the product control blocks and was forced to terminate. The services provided by the subtask will not be available.

**User response:** Check the error messages and the return code associated with this problem. There may be one or more abend error messages referring to the current problem. If possible, fix the problem identified by the error messages, and restart the product. If the problem cannot be resolved, contact Software Support with this problem.

---

The variable fields of the message text are: desc  
description

---

**HLV4502H process subtask is active**

**Explanation:** This is the standard subtask initialization message.

**User response:** This is not an error message, and no action is required.

The variable fields of the message text are: process  
process name

---

**HLV4503S ESTAE service ERROR RC=rc**

**Explanation:** The subtask driver attempted to create an ESTAE recovery environment. The ESTAE macro failed.

**User response:** Check the error messages and the return code associated with this problem. There may be one or more ESTAE error messages referring to the current problem. If possible, fix the problem identified by the error messages, and restart the product. If the problem cannot be resolved, contact Software Support with this problem.

The variable fields of the message text are: service  
current operation, create or delete ESTAE rc return code

---

**HLV4504E rsrce ss FAILED, RC=rc, DETECTED AT ad**

**Explanation:** Some type of error occurred in the system management routines of the product. See the actual text of the message for an explanation. The error was probably caused by a failure in an operating system service requested by a product system management routine.

**User response:** Check if any other error messages were generated along with the error message above. If the combined error messages are sufficient to explain the problem, take whatever corrective action is appropriate. Otherwise, contact Software Support for assistance with this problem.

The variable fields of the message text are: rsrce  
resource name ss system service rc return code

---

**HLV4505H ABEND abcd IN func mod+off**

**Explanation:** The subtask driver routine detected an abend in the routine called by the driver. The message text provides the abend code, current operation, and abend location. This failure may have been caused by a programming error in the routine that caused the subtask exit to get control or in the subtask exit routine itself. This failure can also be caused by product installation and maintenance errors.

**User response:** Check if any other error messages were generated along with the error message above. If

the combined error messages are sufficient to explain the problem, take whatever corrective action is appropriate. If the problem cannot be resolved, contact Software Support.

The variable fields of the message text are: abcd abend  
code func current function mod module name off  
module offset

---

**HLV4506H process subtask terminating**

**Explanation:** This is the standard message indicating that subtask execution is complete.

**User response:** This is not an error message and no action is required.

The variable fields of the message text are: process  
process name

---

**HLV4507E rc SUBTASK ERROR TERMINATION: RC=%1**

**Explanation:** This message is issued when the subtask driver module terminates due to an error.

**User response:** Check if any other error messages were generated along with the error message above. If the combined error messages are sufficient to explain the problem, take whatever corrective action is appropriate. Otherwise, contact Software Support with this problem.

The variable fields of the message text are: rc return  
code

---

**HLV4508H stsk SUBTASK: obj value**

**Explanation:** This message is only issued when the product service task debugging is requested using the DEBUGATMD option.

**User response:** No action required. This message is informational only.

The variable fields of the message text are: stsk subtask  
name obj object name value object value

---

**HLV4520W LOAD FOR MODULE mod FAILED, ODBA INITIALIZATION ERROR**

**Explanation:** This message is issued if a module needed to initialize the ODBA interface to IMS could not be loaded. The message contains the module name. The module is either missing or some other error has occurred.

**User response:** Check if any other messages were issued. Check if the named module is in the search sequence. Resolve the problem and restart the server.

The variable fields of the message text are: mod  
module name

---

**HLV4521S**    **Unable to implant ODBA interface, return code: rc**

**Explanation:** This message is issued if the product was unable to implant its ODBA interface routine. The return code is provided.

**User response:** Check if any other messages were issued. Call Software Support.

The variable fields of the message text are: rc return code from system service

---

**HLV4522W**    **UNABLE TO CONNECT TO IMS/ODBA FOR STARTUP TABLE ID: stid, RETURN CODE: rc, REASON CODE: rsn, ERROR CODE: errc**

**Explanation:** This message is issued if the product was unable to connect to IMS/ODBA for the Startup Table Identifier in the message.

**User response:** Check if any other messages were issued and IMS/DB is active. If the Startup Table does not exist, generate it. The next ODBA request for this startup table identifier will retry this operation.

The variable fields of the message text are: stid Startup Table Identifier rc Return code from AIBRETRN rsn Reason code from AIBREASN errc Error code from AIBERRXT

---

**HLV4523W**    **ERROR IN DISCONNECTING FROM IMS/ODBA CONNECTIONS. RETURN CODE: rc, REASON CODE: rsn**

**Explanation:** This message is issued if the product was unable to disconnect from IMS/ODBA.

**User response:** Check if any other messages were issued and IMS/DB is active. If the Startup Table does not exist, generate it. The next ODBA request for this startup table identifier will retry this operation.

The variable fields of the message text are: rc Return code from AIBRETRN rsn Reason code from AIBREASN

---

**HLV4524W**    **ERROR IN DISCONNECTING FROM IMS/ODBA CONNECTION stid. RETURN CODE: rc, REASON CODE: rsn, ERROR CODE: errc**

**Explanation:** This message is issued if the product was unable to connect to IMS/ODBA for the Startup Table Identifier in the message.

**User response:** Check if any other messages were issued and IMS/DB is active. If the Startup Table does not exist, generate it. The next ODBA request for this startup table identifier will retry this operation.

The variable fields of the message text are: stid Start Table Identifier rc Return code from AIBRETRN rsn

Reason code from AIBREASN errc Error code from AIBERRXT

---

**HLV4525I**    **MAXIMUM NUMBER OF SIMULTANEOUS ODBA CONNECTIONS (max) REACHED - cnt TIMES - CONNECTION DENIED**

**Explanation:** This message is issued if the product was unable to connect to IMS/ODBA because the maximum number of simultaneous connections was reached.

**User response:** Raise the MAXODBACONNECT parameter. Default is 8 if it was not specified.

The variable fields of the message text are: max Maximum number of ODBA connections cnt Count of the number of times maximum reached

---

**HLV4526I**    **num ODBA CONNECTION ENTRIES FREED**

**Explanation:** This message is issued if the product ODBA Connection Entry table cleanup routine was able to free some previously allocated entries. This message is a warning of a table full condition that will begin denying connections.

**User response:** Raise the MAXODBACONNECT parameter. Default is 8 if it was not specified.

The variable fields of the message text are: num Number of ODBA Connection Table entries

---

**HLV4527T**    **ODBA interface not type**

**Explanation:** This message is issued if the the product ODBA Interface is not either initialized or enabled.

**User response:** If it has not been initialized, contact Software Support. If it is not enabled, check initialization parameters.

The variable fields of the message text are: type Either initialized or enabled.

---

**HLV4528I**    **Load for module mod failed, ODBA interface disabled**

**Explanation:** This message is issued if a module needed to initialize the ODBA interface to IMS could not be loaded. The message contains the module name. The module is either missing or some other error has occurred.

**User response:** If IMS/ODBA support is not desired, then no action is needed. Otherwise check if other messages were issued. Check if the named module is in the search sequence. Resolve the problem and restart the server.

The variable fields of the message text are: mod module name

---

**HLV4529W ERROR IN DEALLOCATING PSB: psb FOR STARTUP TABLE stid DURING ODBA/RPC CLEANUP. RC: retn, RE: resn**

**Explanation:** This message is issued if an RPC that was using the IMS/DB ODBA Interface terminated, left some PSBs allocated, and product cleanup encountered an error deallocating them.

**User response:** Fix the error in the RPC that caused it to terminate without deallocating these PSBs.

The variable fields of the message text are: psb psb name stid ODBA Startup Table ID retn return code from AERTDLI call resn reason code from AERTDLI call

---

**HLV4530I IMS/DB ODBA INTERFACE TERMINATED**

**Explanation:** This message is issued when the product has terminated the IMS/DB ODBA Interface.

**User response:** None.

---

**HLV4531W ERROR TERMINATING IMS/DB ODBA INTERFACE. RC: rc, RE: re**

**Explanation:** This message is issued when the product has terminated the IMS/DB ODBA Interface.

**User response:** None.

The variable fields of the message text are: rc return code returned from ODBA re reason code returned from ODBA

---

**HLV4532S ODBA STARTUP TABLE MODULE - mod - IS NOT RE-ENTRANT. UNABLE TO MODIFY**

**Explanation:** This message is issued when an IMS/ODBA Connection is requested, but the startup table module is not marked re-entrant. the product cannot modify the module with server userid if required nor merge DEFINE IMSODBA parameters.

**User response:** Re-generate the DFSxxxx0 module indicated and link it as re-entrant.

The variable fields of the message text are: mod ODBA Startup Table Module Name

---

**HLV4533S ODBA MODIFY ACTION BYPASSED FOR TABLE mod - %2**

**Explanation:** This message is issued when an IMS/ODBA Modify Action is requested, but there does not seem to be any active ODBA connection under the name requested.

**User response:** Re-enter the Modify command with the proper Startup Table name.

The variable fields of the message text are: mod ODBA Startup Table Module Name

---

**HLV4534I req OF IMS/ODBA CONNECTION FOR STARTUP TABLE mod res**

**Explanation:** This message is issued when an action on an IMS/ODBA connection is requested. The status of the request is displayed. If the status is "failed" look for other messages that will indicate the return and reason codes.

**User response:** Re-enter the Modify command after dealing with the errors indicated by the other messages.

The variable fields of the message text are: req request mod ODBA Startup Table Module Name res resolution -- succeeded or failed

---

**HLV4550T OPRXSQ - USER user CONNECTED WITH UNOPTIMIZED PLAN plan**

**Explanation:** This message is issued when a user connected with an old unoptimized OPRXSQ DB2 Plan.

**User response:** Rebind the specified plan so it includes the optimized packages OPRXSQA-R.

The variable fields of the message text are: user Userid of connected user. plan DB2 Plan Name.

---

**HLV4551T dbrm - UNRECOGNIZED typ PROVIDED - SECTION stmt - STATEMENT sectn**

**Explanation:** This message is issued when an unrecognized statement or section number is provided to the OPRXSQ plan translation routine.

**User response:** Contact Software Support for assistance.

The variable fields of the message text are: dbrm DBRM name if selected yet typ either SECTION or STATEMENT stmt statement number supplied sectn section number supplied

---

**HLV4552T COLLECTION ID coll FOR PLAN plan WILL USE PACKAGE PROCESSING**

**Explanation:** This informational message is issued when the DB2 collection name for the current connection has been determined.

**User response:** None

The variable fields of the message text are: coll Collection name. plan Plan name.

---

**HLV4553T PACKAGE OPRXSQdbrm SECTION  
sect USED FOR SECTION sect  
STATEMENT stmt**

**Explanation:** This informational message is issued when SQL section number translation is done for the product DB2 PLAN, OPRXSQ. This message will only be issued under the direction of Software Support.

**User response:** None

The variable fields of the message text are: dbrm DBRM name selected. sect New OPRXSQ section number. sect Original OPRXSQ section number. stmt Original OPRXSQ statement number.

---

**HLV4554T PLAN plan DOES NOT USE PACKAGE  
PROCESSING**

**Explanation:** This informational message is issued when the DB2 plan does not have a collection name that matches the package list.

**User response:** None

The variable fields of the message text are: plan Plan name.

---

**HLV4555T PACKAGE OPRXSQpack IN  
COLLECTION coll SELECTED**

**Explanation:** This informational message is issued when SQL section number translation is done for the product DB2 PLAN, OPRXSQ.

**User response:** None

The variable fields of the message text are: pack Package name that will be used. coll Collection name.

---

**HLV4556T PLAN plan WILL USE PACKAGE  
PROCESSING**

**Explanation:** This informational message is issued to indicate that the optimized packages will be used to process DB2 requests.

**User response:** None

The variable fields of the message text are: plan Plan name.

---

**HLV4557T PACKAGE OPRXSQpack SELECTED**

**Explanation:** This informational message is issued when SQL section number translation is done for the product DB2 PLAN, OPRXSQ.

**User response:** None

The variable fields of the message text are: pack Package name that will be used.

---

**HLV4558T PLAN plan WILL USE DRDA  
SUBSTITUTE PACKAGES**

**Explanation:** This informational message is issued when the DB2 plan will be internally converted to the use of substitute packages for DRDA connections.

**User response:** None

The variable fields of the message text are: plan Plan name.

---

**HLV4601I st**

**Explanation:** This message contains the first of each two-line response to the TSOSRV\_LIST command. Each two-line response group shows the status of the TSO server and the command being executed.

**User response:** None.

The variable fields of the message text are: st status information for this TSO server

---

**HLV4602I cmd**

**Explanation:** This message contains the second of each two-line response to the TSOSRV\_LIST command. Each two-line response group shows the status of the TSO server and the command being executed.

**User response:** None.

The variable fields of the message text are: cmd command being executed or 'N/A'

---

**HLV4603I SERVER asid POSTED FOR  
TERMINATION**

**Explanation:** The TSOSRV\_STOP command has posted the server for termination.

**User response:** None.

The variable fields of the message text are: asid ASID of server posted for termination

---

**HLV4604I SERVER POSTED TO FREE TSSD AT  
addr**

**Explanation:** The TSOSRV\_FREE command has posted the server for release of the TSSD.

**User response:** None.

The variable fields of the message text are: addr ADDR of TSSD to be freed

---

**HLV4605I st**

**Explanation:** The TSOSRV\_QUEUE command returns information using this message.

**User response:** None.

The variable fields of the message text are: st status of TSO server execute queues

---

**HLV4606E ADDRESS SEF TSOSRV\_STOP asid:  
ASID NOT SERVER ADDRESS SPACE**

**Explanation:** An invalid hex ASID was specified on a TSOSRV\_STOP command.

**User response:** Correct the ASID, and re-issue the TSOSRV\_STOP command.

The variable fields of the message text are: asid ASID specified

---

**HLV4607S funcc OF qn FAILED, RC=rc**

**Explanation:** The specified function failed within the ADDRESS SEF host command environment.

**User response:** Determine from the message text what function failed, and review the return codes for the failed function. Contact your local product systems programming group assistance.

The variable fields of the message text are: funcc function code string qn queue name (or queue type) rc return code

---

**HLV4608E ADDRESS SEF TSOSRV\_FREE addr:  
ADDRESS NOT THAT OF A TSSD**

**Explanation:** An invalid address was specified on the TSOSRV\_FREE command.

**User response:** Correct the address, and re-issue the TSOSRV\_FREE command.

The variable fields of the message text are: addr invalid address

---

**HLV4609I stats**

**Explanation:** The TSOSRV\_EXECSTATS command returns information using this message.

**User response:** None.

The variable fields of the message text are: stats execution stats for TSO servers

---

**HLV4612H jb HAS RESET THE TSO SERVER  
COMMAND EXECUTION QUEUE**

**Explanation:** A TSOSRV\_RESETO command was issued from the specified job.

**User response:** The TSO server command queue is cleared.

---

**HLV4650E UNABLE TO OBTAIN stg BYTES  
BELOW THE LINE**

**Explanation:** ADDRESS LINKMVS is required to obtain storage below the 16MB line to hold both parameters and a register save area to be passed to the requested program. If this storage cannot be obtained, host command processing is terminated.

**User response:** Batch jobs must be rerun with a larger below the line region size. TSO users must log on with a larger region size, and re-issue the command.

The variable fields of the message text are: stg requested storage area size

---

**HLV4680T ENCLAVE SET RC=rc FOR CALL  
CODE code (ctype1) - ctype2**

**Explanation:** While attempting to invoke a High-Level Language (HLL) subroutine via the MVS Language Environment CEEPIPI interface module, an error occurred. This message logs the error. This message may be followed by message 4681 for subroutine invocations.

**User response:** The HLL subroutine is not called, and the product's LE/370 enclave may be terminated as indicated by other messages. If possible, determine the cause of the error using other messages logged, and correct the problem, or contact Software Support group.

The variable fields of the message text are: rc the CEEPIPI return code value code the CEEPIPI invocation calling code value ctype1 the CEEPIPI invocation call type ctype2 failure message specific to call type

---

**HLV4681T ROUTINE INVOKED WAS code -  
sroutine**

**Explanation:** This message follows the 4680T message when a subroutine invocation was underway. The subroutine CEEPIPI table index value and its external name are reported.

**User response:** See message 4680T.

The variable fields of the message text are: code the CEEPIPI subroutine table index code sroutine the external subroutine name

---

**HLV4682T ROUTINE RC=rc REASON=rscd  
ENCLAVE FEEDBACK(fc1 fc2 fc3)**

**Explanation:** This message follows the 4681T message and reports the subroutines return code, reason code, and the LE/370 enclave feedback codes.

**User response:** See message 4680T.

The variable fields of the message text are: rc subroutine return code rscd subroutine reason code fc1

## HLV4683T • HLV4706T

enclave feedback code 1 fc2 enclave feedback code 2 fc3  
enclave feedback code 3

---

### HLV4683T ENCLAVE MGR CANNOT REENTER SUPERVISOR STATE

**Explanation:** Following a call to the LE/370 CEEPIPI routine, normal supervisor state operation of the enclave manager could not be restored.

**User response:** Contact Software Support.

---

### HLV4684T ENCLAVE ABENDED CONDITION CODE=cndc, REASON=rscd FOR CALL CODE code (ctype) - msg

**Explanation:** While attempting to invoke a High-Level Language (HLL) subroutine via the MVS Language Environment CEEPIPI interface module, an abend was intercepted. This message logs the error. This message may be followed by message 4681T for subroutine invocations.

**User response:** The HLL subroutine is not called, and the product's LE/370 enclave may be terminated as indicated by other messages. If possible, determine the cause of the error using other messages logged, and correct the problem, or contact Software Support group.

The variable fields of the message text are: cndc the abend condition code value rscd the abend reason code value code the CEEPIPI invocation calling code value ctype the CEEPIPI invocation call type msg failure message specific to call type

---

### HLV4685T api PLIST ERROR reason - value (data)

**Explanation:** While attempting to invoke a High-Level Language (HLL) callback routine, the callback routine detected a parameter list validation error. This message logs the reason for the plist validation error.

**User response:** An invalid plist return code is set by the API function, and return is made to the HLL program. Contact Software Support with this error.

The variable fields of the message text are: api the internal-use-only API being invoked reason reason for plist validation error value value of plist pointer word data data pointed to by plist pointer

---

### HLV4686S text

**Explanation:** A severe error message was logged to the trace by a High-Level Language (HLL) component of the main product. The message is also logged to the operator console using this message ID.

**User response:** See the contents of the message and the trace surrounding this condition, and correct the problem. Contact Software Support with this error.

The variable fields of the message text are: text message text logged by HLL component

---

### HLV4687T ENCLAVE TERMINATED BY COBOL STOP RUN - CLIENT CONNECTION TERMINATED

**Explanation:** A COBOL RPC program ended with a STOP RUN statement which caused the LE enclave to terminate.

**User response:** Replace the STOP RUN statement with a GOBACK statement and recompile and link the program.

---

### HLV4700T '%1' MODEL QUEUE NAME NOT SET - '%2' USED AS MODEL QUEUE

**Explanation:** The name of the model queue for this qmanager instance has not been set. The default model queue will be used, if possible.

**User response:** The MQ task will attempt to open the queue using the default model queue.

---

### HLV4702T '%1' INPUT QUEUE NAME NOT SET - '%1' PROCESSING TERMINATED

**Explanation:** The name of the input queue for this qmanager instance has not been set. The default input queue will be used, if possible.

**User response:** The MQ task will attempt to open the queue using the default input queue.

---

### HLV4704H UNKNOWN service CODES - RE=rscd RC=rc

**Explanation:** This message reports IBM/MQ return and reason codes that are unknown to HLV.

**User response:** This may indicate some type of internal error. It is also possible that you are running a version of IBM/MQ not yet supported by HLV. If the version of IBM/MQ that you are running DOES appear to be supported, contact Software Support.

The variable fields of the message text are: service current operation rscd reason code contents rc return code contents

---

### HLV4706T text

**Explanation:** This is a general purpose message that may or may not indicate some type of IBM/MQ error.

**User response:** Read the message text carefully. Some messages produced under this message ID are actually error messages. If the message indicates an error, check for any associated IBM/MQ produced error messages. If you are unable to diagnose the problem, contact Software Support.

The variable fields of the message text are: text the text of the message



---

**HLV4750T IDCAMS SYSPRINT: text**

**Explanation:** The IDCAMS utility has generated SYSPRINT output. The output line is given in the message text. IDCAMS has been invoked using the product's S\_HLVXRID interface.

**User response:** None. The message gives the text of a SYSPRINT line generated by the IDCAMS utility.

The variable fields of the message text are: text the text of the message

---

**HLV4751T IDCAMS WARNING: text**

**Explanation:** The IDCAMS utility has generated SYSPRINT output. The output line is given in the message text. IDCAMS has been invoked using the product's HLVRXID interface. The message is issued in response to an IDCxxxx message condition detected by IDCAMS.

**User response:** None. The message gives the text of a SYSPRINT line generated by the IDCAMS utility.

The variable fields of the message text are: text the text of the message

---

**HLV4752T IDCAMS SYSIN: text**

**Explanation:** The IDCAMS utility is about to be invoked by the HLVRXID REXX interface program. This message traces the command text that will be passed to the IDCAMS utility.

**User response:** None. The message gives the command text that will be presented to IDCAMS.

The variable fields of the message text are: text the text of the message

---

**HLV4753T IDCAMS RESULTS: LASTCC=lstcc  
COMPCODE=cmpr REASCODE=rc**

**Explanation:** The IDCAMS utility has completed. This message reports the LASTCC, completion codes, and reason codes.

**User response:** None. The message reports the completion codes at the end of the IDCAMS request.

The variable fields of the message text are: lstcc IDCAMS LASTCC from the command cmpr IDCAMS system completion code rc IDCAMS reason code

---

**HLV4800E DYNALLOC request ddn - ABEND -  
COND=cndc REASON=rc**

**Explanation:** A DYNALLOC request failed due to an abend.

**User response:** The request fails. Check for other messages that might indicate the cause of the failure.

The variable fields of the message text are: request type

of DYNALLOC request ddn ddname or dsname of data set cndc abend condition code rc abend reason code

---

**HLV4801H 'cmd' command (issued internally)  
rejected - another request request is  
already running**

**Explanation:** An internally generated SEF command cannot be scheduled at the present time, because the system allows only one request of this type to be processed at once.

**User response:** The system rejects the request and continues to process the in-flight request. Normally, this message would be issued infrequently (only in certain "race" conditions). If this message is issued frequently, contact Software Support for advice on setting server start-up parameters.

The variable fields of the message text are: cmd command text request general class of like requests

---

**HLV4802H ABEND CC(cndc) REASON(rc) IN  
mod+off WHILE PROCESSING 'cmd'  
COMMAND ISSUED BY usid**

**Explanation:** An SEF command service processing subtask abended while processing the indicated command.

**User response:** Check for other messages which might indicate the cause of this failure.

The variable fields of the message text are: cndc abend condition code rc abend reason code mod module name off module offset cmd SEF command being processed (if known) usid requestor's userid (if known)

---

**HLV4803E 'cmd' COMMAND FROM usid FAILED  
- RC = rc desc cmpr**

**Explanation:** The SEF command service processing routine has ended with an error. The message reports the command being processed, the requesting MVS userid, the service return code, and any abend condition code encountered.

**User response:** Check for other messages which might indicate the cause of this failure.

The variable fields of the message text are: cmd service command processed usid userid of requestor rc service overall return code desc description of abend cmpr abend completion code

---

**HLV4804E Trace Browse archiving disabled because  
BROWSEMAX(value1) value is less than  
the minimum(value2) allowed**

**Explanation:** Trace Browse archive support has been turned off, because the trace must contain at least the minimum given number of messages.

**User response:** When too few messages are supported

in the trace, it can wrap around before archives of the trace can be created. This message indicates that the current trace contains so few messages that this is likely to occur. Increase the BROWSEMAX start-up parameter value to at least the minimum amount. Note that the minimum given is only a rough estimate and may be entirely insufficient to guarantee that wraparound will not occur.

The variable fields of the message text are: value1  
current BROWSEMAX parameter value value2  
minimum BROWSEMAX value allowed

---

**HLV4805H BROWSEARCHIVECOUNT parameter has been set to value1 - was below minimum (value2) allowed**

**Explanation:** Trace Browse archive support has been turned on, but the BROWSEARCHIVECOUNT parameter was not set or was set too low.

**User response:** The system recalculates the BROWSEARCHIVECOUNT value as one-third of the BROWSEMAX value.

The variable fields of the message text are: value1  
current BROWSEARCHIVECOUNT value value2  
minimum value allowed by the system

---

**HLV4806H BROWSEARCHIVECOUNT parameter has been set to value1 - was above maximum (value2) allowed**

**Explanation:** Trace Browse archive support has been turned on, but the BROWSEARCHIVECOUNT parameter was set too high.

**User response:** The system recalculates the BROWSEARCHIVECOUNT value as one-third of the BROWSEMAX value.

The variable fields of the message text are: value1  
current BROWSEARCHIVECOUNT value value2  
maximum value allowed by the system

---

**HLV4807H BROWSEARCHIVECUSHION parameter has been set to value**

**Explanation:** Trace Browse archive support has been turned on, but the BROWSEARCHIVECUSHION parameter was set too high or too low.

**User response:** The system resets the BROWSEARCHIVECUSHION value as indicated which is the minimum allowed value.

The variable fields of the message text are: value  
current BROWSEARCHIVECUSHION value

---

**HLV4808S Archive backup is under stress - value messages can be logged before overlay**

**Explanation:** An archive backup of the trace currently cannot be scheduled because one is already underway. Wraparound trace recording has entered the final range of messages, and a wraparound will occur unless the previous archive completes in time for a new one to be scheduled.

**User response:** The system continues to monitor the status, either deleting this message when the condition is corrected or escalating the severity if a wraparound actually occurs. If some process is inhibiting the completion of archive backup processing in a timely manner, correct the problem. Consider that the trace size (BROWSEMAX) and/or the archive control parameters (BROWSEARCHIVECOUNT and BROWSEARCHIVECUSHION) may need to be enlarged.

The variable fields of the message text are: value  
current BROWSEARCHIVECOUNT value

---

**HLV4809S Trace Browse in overlay mode - unarchived records are being overwritten**

**Explanation:** The trace log has wrapped around, and un-archived messages are now being overwritten. This message replaces the 4808S message if a stress condition is not relieved.

**User response:** The system continues operating and monitoring conditions. This message is deleted if a new archive backup that relieves the overall stress condition can be completed; however, the overlaid records cannot be recovered.

---

**HLV4810H Trace 'BACKUP ARCHIVE' command should be externally scheduled**

**Explanation:** The BROWSEARCHIVE option is set to MESSAGE, and the system has detected that a backup archive of the trace should now be created.

**User response:** The system issues this message and takes no other action. You should immediately schedule an archive backup operation.

---

**HLV4811H Trace 'ARCHIVE BACKUP' is being automatically requested**

**Explanation:** The BROWSEARCHIVE option is set to AUTO, and the trace subtask is requesting a backup-type archive of the selected messages.

**User response:** The BACKUP ARCHIVE request is scheduled by the SEF subtask for asynchronous execution.

The variable fields of the message text are: value  
current BROWSEARCHIVECOUNT value num first  
MSGNO to be incorporated into archive

---

**HLV4812E** SEF INTERFACE SET RC=rc FOR 'cmd' COMMAND REQUEST ISSUED BY usid

**Explanation:** An internally generated SEF command was not scheduled due to an unexpected error in the command processing interface routines.

**User response:** The SEF command is not scheduled. The command requestor continues.

The variable fields of the message text are: rc return code set by SEF command interface cmd command issued usid requestor information

---

**HLV4813I** 'cmd' command cannot be scheduled at this time - a similar request is already running

**Explanation:** An archive request has been made, but processing of the request cannot be scheduled at this time, because a previous request of the same type has not yet completed. The system allows, at most, only one archive backup/cleanup task to run, and, at most, only one user requested archive extract.

**User response:** None. Resubmit the request once the previous request has completed.

The variable fields of the message text are: cmd archive command text

---

**HLV4814I** 'cmd' command cannot be scheduled at this time - all SEF service subtasks are busy

**Explanation:** An archive request has been made, but processing of the request cannot be scheduled at this time, because a subtask is not available to service the request.

**User response:** None. Resubmit the request once a subtask is free,

The variable fields of the message text are: cmd archive command text

---

**HLV4815I** SEF service task, tsk, attached for 'cmd' - requested by usid-loc

**Explanation:** An asynchronous SEF service subtask has been attached for processing of a long-running command.

**User response:** None.

The variable fields of the message text are: tsk service task name cmd SEF command usid command requestor's MVS userid loc origin of command request

---

**HLV4816I** Running: EFTK addr1 Routine:routine TCB addr2 USERID usid UTYPE request ECB ecb CMD cmd

**Explanation:** An ARCHIVE STATUS request has been issued. This message is part of the response.

**User response:** None.

The variable fields of the message text are: addr1 EFTK control block address routine subtask routine name addr2 TCB address usid requestor userid request request origin type ecb task termination ECB contents cmd command being processed

---

**HLV4817I** TRACE: CURRENTMSG num1 LASTARCHIVED num2 LASTTRIGGERED num3 DSNAME word1 CTLS word2 %6

**Explanation:** An ARCHIVE STATUS request has been issued. This message is part of the response.

**User response:** None.

The variable fields of the message text are: num1 high message in trace num2 last message number successfully backed up num3 message which caused last backup word1 internal control word 1 word2 internal control word 2

---

**HLV4818E** Processing of 'cmd' command by stsk subtask terminated by E-O-T - RC=rc

**Explanation:** An asynchronous command procedure subtask has terminated unexpectedly while processing an SEF command. This message is sent to the requestor as notification of the failure.

**User response:** Check for other messages which indicate the cause of the unexpected termination.

The variable fields of the message text are: cmd command being processed stsk subtask name rc return code for the command request

---

**HLV4819T** Service subtask stsk completed processing of 'cmd' command sent by usid - RC=rc

**Explanation:** An asynchronous command procedure subtask has terminated.

**User response:** None.

The variable fields of the message text are: stsk subtask name cmd command usid requesting userid rc end-of-task handler return code

---

---

**HLV4820E** Processing of 'cmd' command by stsk subtask terminated by product shutdown - RC=rc

**Explanation:** An asynchronous command procedure subtask was terminated forcibly by product shutdown. This message is sent to the requestor as notification of the shutdown.

**User response:** None.

The variable fields of the message text are: cmd command being processed stsk subtask name rc return code for the command request

---

**HLV4821T** Service subtask stsk forcibly detached at shutdown - 'cmd' command sent by usid - RC=rc

**Explanation:** An asynchronous command procedure subtask has forcibly detached during shutdown because it did not voluntarily terminate operation quickly enough.

**User response:** None.

The variable fields of the message text are: stsk subtask name cmd command usid requesting userid rc end-of-task handler return code

---

**HLV4822H** 'ARCHIVE BACKUP' processor has been attached as an SEF service subtask

**Explanation:** A backup-type archive of the Trace Browse data has been requested. The processor service routine has now been attached. Additional status and completion messages will be logged to report the results of the backup operation.

**User response:** None.

---

**HLV4823H** Archive file: DSN='dsn', FirstMsg=num1, LastMsg=num2, Count=cnt

**Explanation:** A new archive data set has been successfully created. This message logs the dsname, the first and last message recorded in the archive, and the count of messages.

**User response:** None.

The variable fields of the message text are: dsn output data set name num1 first message number in output num2 last message number in output cnt message allocation count

---

**HLV4824H** cnt messages beginning at number num cannot be backed up due to Trace wraparound

**Explanation:** A backup-type archive of the Trace Browse data has been scheduled. The indicated range of messages cannot be backed up because it has been,

or shortly will be, overlaid by wraparound within the trace.

**User response:** Processing continues. Check and adjust the BROWSEMAX, BROWSEARCHIVECOUNT, and BROWSEARCHIVECUSHION parameters to ensure that the trace does not wrap around without allowing backup operations to complete. This message is normal if you activate automatic archives against an existing trace file that has been in use for some time.

The variable fields of the message text are: cnt messages skipped num first relative message number skipped

---

**HLV4825H** NO WORK TO DO - ARCHIVE STARTING MESSAGE = num1 - ENDING MESSAGE = num2

**Explanation:** A backup-type archive of the Trace Browse data has been scheduled. There are no messages that can currently be backed up within the range allowed by the BROWSEARCHIVECUSHION value.

**User response:** Processing ends. Check and adjust the BROWSEMAX, BROWSEARCHIVECOUNT, and BROWSEARCHIVECUSHION parameters to ensure that the trace does not wrap around without allowing backup operations to complete, or explicitly request an ARCHIVE BACKUP, TOEND operation to bypass processing of the storage cushion value.

The variable fields of the message text are: num1 first message to be backed up num2 last message to be backed up

---

**HLV4826W** ARCHIVE PROCESSING ABORTED DUE TO SUBSYSTEM OR SEF TERMINATION REQUEST

**Explanation:** An archive process is being aborted either because a subsystem shutdown is underway or because SEF has requested early termination of the procedure.

**User response:** Processing ends as quickly as possible. Some resource cleanup may be deferred until subsystem restart.

---

**HLV4827I** data

**Explanation:** The S\_ARCHIV REXX procedure was executed while performing an archive allocation or cleanup service. The REXX routine produced trace or SAY messages.

**User response:** The messages produced by S\_ARCHIV are logged by this message.

The variable fields of the message text are: data data line from SYSTSPRT

---

---

**HLV4828E**    **procname REXX PROCEDURE  
RETURNED INVALID/INCORRECT  
RESULT FOR ARCHIVE DATA SET  
ctype REQUEST**

**Explanation:** The S\_ARCHIV REXX procedure was executed but it either did not return a result or it returned a result that was formatted improperly. The REXX procedure is assumed to have failed.

**User response:** The current archive-related operation is terminated.

The variable fields of the message text are: procname REXX procedure name ctype call type for REXX procedure

---

**HLV4829E**    **procname REXX PROCEDURE FAILED  
FOR ctype REQUEST - ROUTINE SET  
RETURN CODE TO rc**

**Explanation:** The S\_ARCHIV REXX procedure was executed but returned with a failure return code value set.

**User response:** The current archive-related operation is terminated.

The variable fields of the message text are: procname REXX procedure name ctype call type for REXX procedure rc return code set by REXX

---

**HLV4830E**    **procname REXX PROCEDURE FAILED  
TO RETURN DATA SET NAME FOR  
ctype REQUEST**

**Explanation:** The S\_ARCHIV REXX procedure was executed but returned without passing back an MVS data set name, as required for the sub-function request.

**User response:** The current archive-related operation is terminated.

The variable fields of the message text are: procname REXX procedure name ctype call type for REXX procedure

---

**HLV4831E**    **DYNALLOC FAILURE - RC=rc  
ERROR=ec REASON=rscd desc1 desc2  
desc3**

**Explanation:** Dynamic allocation failure occurred while building an archive of the Trace Browse. The archival process terminates.

**User response:** Check other messages indicating the cause of the failure.

The variable fields of the message text are: rc DYNALLOC return code ec DYNALLOC error code rscd DYNALLOC information code desc1 description of DYNALLOC operation desc2 description of DYNALLOC operation desc3 description of DYNALLOC operation

---

**HLV4832H**    **Allocated: DDN=ddn, DSN='dsn' - for  
archive output**

**Explanation:** A ddname allocation was made for an archive output linear data set. Archive processing continues.

**User response:** None.

The variable fields of the message text are: ddn ddname dsn VSAM linear output archive data set name

---

**HLV4833H**    **LDS 'dsn' created for 'cmd' command  
issues by usid**

**Explanation:** An archive backup or extract procedure created a new VSAM linear data set for output. The actual IDCAMS definition was performed by the S\_ARCHIV REXX routine in SYSEXEC. This message logs the new cluster name.

**User response:** None.

The variable fields of the message text are: dsn new DIV data set name cmd archive command being processed usid userid of service requestor

---

**HLV4834S**    **service OF desc FAILED, RC=rc**

**Explanation:** This is a generic error message used to describe a wide variety of archive data set initialization and termination errors. The message text provides the current operation and what the current operation was trying to do.

**User response:** Check the error messages and the return code associated with this problem. There may be one or more error messages referring to the current problem. If possible, fix the problem identified by the error messages, and restart the product. If the problem cannot be resolved, contact Software Support.

The variable fields of the message text are: service current operation, GETMAIN, FREEMAIN, ATTACH etc. desc description rc return code

---

**HLV4835S**    **service OF dsn FAILED, RC=rc,  
REASON CODE=rscd**

**Explanation:** This error message describes errors that occurred while using the DIV (Data In Virtual) system service during archive initialization, execution, or termination. For a list of the return codes and reason codes from the DIV macro see the appropriate IBM documentation.

**User response:** Check the DIV return and reason codes associated with this problem. There may be one or more error messages referring to the current problem. If possible, fix the problem identified by the error messages, and restart the product. If the problem cannot be resolved, contact Software Support.

The variable fields of the message text are: service DIV

---

## HLV4836S • HLV4844H

service (e.g. DIV IDENTIFY etc.) dsn data set (e.g. trace data set) rc return code rscd reason code

---

**HLV4836S** service OF dsn FAILED, ABEND=abcd, REASON CODE=rscd

**Explanation:** This error message describes an abend that occurred while using the DIV (Data In Virtual) system service during archive initialization, execution, or termination. The abend codes and reason codes from the DIV macro are documented in the IBM manual z/OS Programming: Assembler Services Reference.

**User response:** Check the DIV abend and reason codes associated with this problem. There may be one or more error messages referring to the current problem. If possible, fix the problem identified by the error messages, and restart the product. If the problem cannot be resolved, contact Software Support.

The variable fields of the message text are: service DIV service (e.g. DIV IDENTIFY etc.) dsn data set (e.g. trace data set) abcd abend code rscd reason code

---

**HLV4837S** Possible shortage of storage, stg bytes required to build archive output data set

**Explanation:** This is a follow-up message to message 4834S when a GETMAIN has failed. This message indicates the size, in bytes, of the area requested by the GETMAIN.

**User response:** If the GETMAIN return code indicates insufficient storage to complete the GETMAIN request, please increase your available storage (above the 16MB line) by the indicated amount.

The variable fields of the message text are: stg size of storage requested

---

**HLV4838H** Deallocated: DDN=ddn, DSN='dsn' - for archive output

**Explanation:** A ddname deallocation was processed for an archive data set.

**User response:** None.

The variable fields of the message text are: ddn ddname dsn VSAM linear output archive data set name

---

**HLV4839W** Archive file: cnt invalid/overlaid messages detected during execution

**Explanation:** While the archive data set was being created, messages were detected that had been overlaid or were otherwise invalid.

**User response:** None.

The variable fields of the message text are: cnt count of overlaid/invalid messages found

---

**HLV4840H** CLEARARCHIVERECOVERY PARAMETER SET TO YES - IN-FLIGHT ARCHIVE archtyp INFORMATION BEING CLEARED

**Explanation:** During subsystem startup, the CLEARARCHIVERECOVERY parameter was set. In-flight recovery information will be deleted for the indicated archive type.

**User response:** None. Recovery information is cleared unconditionally.

The variable fields of the message text are: archtyp type of archive which was in-flight

---

**HLV4841H** CLEARED BACKUP RECOVERY INFO - OUTDSN=dsn MSGSTART=num1 MSGCOUNT=cnt LASTARCH=num2

**Explanation:** This message follows message 4840H and logs the recovery information that is being cleared.

**User response:** None.

The variable fields of the message text are: dsn archive data set name num1 starting message to be archive cnt message count to be archived num2 highest message number previously archived

---

**HLV4842H** CLEARED EXTRACT RECOVERY INFO - OUTDSN=dsn MSGSTART=num1MSGCOUNT=cnt FORUSER=num2

**Explanation:** This message follows message 4840H and logs the recovery information that is being cleared.

**User response:** None.

The variable fields of the message text are: dsn archive data set name num1 starting message to be archive cnt message count to be archived num2 user who requested the extract archive

---

**HLV4843I** 'cmd' command from usid completed successfully

**Explanation:** The SEF command service processing routine has ended successfully.

**User response:** None.

The variable fields of the message text are: cmd service command processed usid userid of requestor

---

**HLV4844H** Archive backup of trace has successfully completed

**Explanation:** A checkpointing-type backup of the Trace Browse has been completed successfully.

**User response:** None.

---

**HLV4845H** Trace: current message is num - cnt messages since last archive

**Explanation:** Trace Browse archiving is enabled. This message is produced just before an archive request is generated.

**User response:** None.

The variable fields of the message text are: num highest message number now in trace cnt messages added to trace since last archive

---

**HLV4846H** Trace: last message archived was num1 - last requested for message num2

**Explanation:** Trace Browse archiving in enabled. This message is produced just before an archive request is generated.

**User response:** None.

The variable fields of the message text are: num1 last message successfully archived num2 message number when last archive requested

---

**HLV4847I** 'cmd' CMD NOT SCHEDULED - DUPLICATE %2 CMD RECOVERY NOT COMPLETED

**Explanation:** An SEF service request cannot be processed because internal controls indicate another operation is already in-flight. However, no subtask is currently processing the request. This error can occur when certain commands fail and require separate recovery procedures to be scheduled. For brief moments, a "race" condition may occur, where the recovery command has priority.

**User response:** Wait until the previous process is recovered. If the condition persists, manually request recovery.

The variable fields of the message text are: cmd command text

---

**HLV4848H** 'cmd' CMD NOT SCHEDULED - DUPLICATE %2 CMD RECOVERY NOT COMPLETED

**Explanation:** See message 4847I. This message is hard-copied for internally issued requests.

**User response:** See message 4847I.

The variable fields of the message text are: cmd command text

---

**HLV4849I** PARAMETERS: OPTION parval1 COUNT parmal2 CUSHION parval3

**Explanation:** An ARCHIVE STATUS request has been issued. This message is part of the response.

**User response:** None.

The variable fields of the message text are: parval1 BROWSEARCHIVE parameter value parmal2 BROWSEARCHIVECOUNT parameter value parval3 BROWSEARCHIVECUSHION parameter value

---

**HLV4850I** desc TYPE archtyp USER usid STARTMSG num MSGCOUNT cnt DSNAME dsn

**Explanation:** An archive status request has been issued. This message is part of the response.

**User response:** None.

The variable fields of the message text are: desc description of info archtyp archive type usid requestor num start message cnt message count dsn output data set

---

**HLV4854E** THE DIV OBJECT, dsn, CANNOT BE MAPPED - THE VERSION CODE (%1) IS BACKLEVEL AND INCOMPATIBLE

**Explanation:** The archive data set review request cannot be serviced because DIV reports one size for the object but LISTCAT reports another.

**User response:** Contact Software Support.

The variable fields of the message text are: dsn archive data set name code hi-used-rba reported by LISTCAT size object byte size calculated from page count

---

**HLV4855E** THE DIV OBJECT, dsn, CANNOT BE MAPPED - THE HI-USED-RBA code IS LESS THAN THE DIV-ACCESS PAGE COUNT size RETURN VALUE

**Explanation:** The archive data set review request cannot be serviced because DIV reports one size for the object but LISTCAT reports another.

**User response:** Contact Software Support for assistance.

The variable fields of the message text are: dsn archive data set name code hi-used-rba reported by LISTCAT size object byte size calculated from page count

---

**HLV4856E** THE DIV OBJECT, dsn, CANNOT BE MAPPED - THE DATA SET CONTROL AREA (BOST) IS INVALID

**Explanation:** The archive data set review request cannot be serviced because the first page of the linear data set object does not contain required control information.

**User response:** The probable cause of this error is that you are attempting to review an archive data set that is still being created or that was not closed properly.

The variable fields of the message text are: dsn archive data set name

---

**HLV4857E** THE DIV OBJECT, *dsn*, CANNOT BE MAPPED - THE DATA SET CONTROL AREA SIZE INFORMATION (*size1/size2*) DOES NOT MATCH THE DIV OPEN STATS (*size3/size4*)

**Explanation:** The archive data set review request cannot be serviced because the first page of the linear data set object does not contain control information that matches the size information returned by DIV.

**User response:** The probable cause of this error is that you are attempting to review an archive data set that is still being created or that was not closed properly.

The variable fields of the message text are: *dsn* archive data set name *size1* control area size of DIV in bytes *size2* control area size of DIV in pages *size3* DIV open time *size4* DIV open time size in pages

---

**HLV4858E** THE DIV OBJECT, *dsn*, CANNOT BE MAPPED - THE DATA SET CONTROL AREA pointer POINTER (*value*) IS renALID name2/cnt

**Explanation:** The archive data set review request cannot be serviced because the first page of the linear data set object does not contain control information that is structurally correct.

**User response:** The probable cause of this error is that you are attempting to review an archive data set that is still being created or that was not closed properly.

The variable fields of the message text are: *dsn* archive data set name *pointer pointer name value pointer value name2* base pointer *cnt* message count

---

**HLV4859I** Archive reset command issued by *userid* has changed last-archived message from *num1* to *num2*

**Explanation:** An ARCHIVE RESET command has been processed.

**User response:** None.

The variable fields of the message text are: *userid* *userid* who issued the command *num1* previous last-archive message number *num2* new last-archived message number

---

**HLV4860T** ARCHIVE FILE: DSN='*dsn*', FIRSTMSG=*num1*, LASTMSG=*num2*, COUNT=*cnt*

**Explanation:** A new archive data set has been successfully created. This messages logs the *dsname*, the first and last message recorded in the archive, and the count of messages. This message is a duplicate of 4823 (used for tracing).

**User response:** None.

The variable fields of the message text are: *dsn* output data set name *num1* first message number in output *num2* last message number in output *cnt* message allocation count

---

**HLV4861I** stmt

**Explanation:** An ARCHIVE STATUS request has been issued. This message is part of the response. This message is repeated up to eight (8) times. The server constructs a model IDCAMS DEFINE CLUSTER statement using configured parameters. You can review this statement to ensure that the configuration parameters are set correctly. The statement reported in this message is used to define archive backup files.

**User response:** None.

The variable fields of the message text are: *stmt* IDCAMS define cluster statement model

---

**HLV4862I** stmt

**Explanation:** An ARCHIVE STATUS request has been issued. This message is part of the response. This message is repeated up to eight (8) times. The server constructs a model IDCAMS DEFINE CLUSTER statement using configured parameters. You can review this statement to ensure that the configuration parameters are set correctly. The statement reported in this message is used to define archive extract files.

**User response:** None.

The variable fields of the message text are: *stmt* IDCAMS define cluster statement model

---

**HLV4863I** parmval1 parmval2 parmval3 parmval4 parmval5

**Explanation:** An ARCHIVE STATUS request has been issued. This message is part of the response. This message reports the output data set allocation related parameter values set for building archive backup data sets.

**User response:** None.

The variable fields of the message text are: *parmval1* ARCHIVEDSNPREFIX parameter setting *parmval2* ARCHIVEDATACLASS parameter setting *parmval3* ARCHIVEMGMTCLASS parameter setting *parmval4* ARCHIVESTORCLASS parameter setting *parmval5* ARCHIVEDEFCLPARMS parameter setting

---

**HLV4864I** parmval1 parmval2 parmval3 parmval4 parmval5

**Explanation:** An ARCHIVE STATUS request has been issued. This message is part of the response. This message reports the output data set allocation related parameter values set for building archive EXTRACT data sets.



**User response:** None.

The variable fields of the message text are: parmval1  
EXTRACTDSNPREFIX parameter setting parmval2  
EXTRACTDATACLASS parameter setting parmval3  
EXTRACTMGMTCLASS parameter setting parmval4  
EXTRACTSTORCLASS parameter setting parmval5  
EXTRACTDEFCLPARMS parameter setting

---

**HLV4865E** Trace Browse archiving disabled because  
'ARCHIVEDSNPREFIX' parameter is  
not set

**Explanation:** Trace Browse archive support has been turned off because the output data set name prefix parameter ARCHIVEDSNPREFIX is not set. A data set name prefix is required.

**User response:** Note that you can review and possibly set values for the following archive data set allocation related parameters: ARCHIVEDSNPREFIX, ARCHIVEDATACLASS, ARCHIVEMGMTCLASS, ARCHIVESTORCLASS, and ARCHIVEDEFCLPARMS.

---

**HLV4866E** service of archive output data set failed  
due to 'reason'

**Explanation:** One of the following errors occurred: (1) allocation of a new archive backup or extract file failed, or (2) deletion during cleanup for a failed archive failed. For allocation failures, the reason may be that runtime parameters used to generate IDCAMS DEFINE CLUSTER statements are not set properly.

**User response:** The current archive-related operation is terminated.

The variable fields of the message text are: service allocation or deletion reason reason that the operation failed

---

**HLV4867E** IDCAMS UTILITY LASTCC=value ---  
ABEND CONDITION cndc, REASON rc  
- SYSPRINT FOLLOWS

**Explanation:** This message follows message 4866E when an IDCAMS DEFINE CLUSTER or DELETE CLUSTER statement failed to be processed through the IDCAMS utility. The SYSPRINT output of the IDCAMS utility, if any, follows this message.

**User response:** The current archive-related operation is terminated.

The variable fields of the message text are: value  
IDCAM utility LASTCC value cndc abend condition code or zero rc abend reason code or zero

---

**HLV4868E** IDCAMS SYSPRINT: data

**Explanation:** This message follows message 4867E when an IDCAMS DEFINE CLUSTER or DELETE CLUSTER statement failed to be processed through the

IDCAM utility. The SYSPRINT output of the IDCAMS utility follows this message.

**User response:** The current archive-related operation is terminated.

The variable fields of the message text are: data  
IDCAM utility sysprint output line(s)

---

**HLV4869E** TRACE BROWSE EXTRACTS  
DISABLED BECAUSE  
'EXTRACTDSNPREFIX' PARAMETER  
IS NOT SET

**Explanation:** Trace Browse extract support has been turned off because the output data set name prefix parameter EXTRACTDSNPREFIX is not set. A data set name prefix is required.

**User response:** Note that you can review and possibly set values for the following extract data set allocation related parameters: EXTRACTDSNPREFIX, EXTRACTDATACLASS, EXTRACTMGMTCLASS, EXTRACTSTORCLASS, and EXTRACTDEFCLPARMS.

---

**HLV4870E** request func - ABEND - CODE=abcd  
REASON=rc

**Explanation:** An application programming interface request abended.

**User response:** The request fails. Check for other messages that might indicate the cause of the failure.

The variable fields of the message text are: request type  
of request func request function abcd abend code rc  
abend reason code

---

**HLV4871S** Automatic archival of Trace suspended  
due to previous error - correct problem  
and issue "ARCHIVE CLEANUP"

**Explanation:** An archive backup operation has failed with an error requiring intervention. Such a condition exists if, for example, the IDCAMS allocation parameters are not configured properly. Any new attempt to automatically schedule an archive will likely fail until action is taken to correct the problem.

**User response:** Examine the console hardcopy log and the Trace Browse to determine why the previous automatic backup operation has failed. Correct the situation. Once the cause of the failure has been corrected, issue an ARCHIVE CLEANUP command via the SEF interface to reset the in-flight failure indicators. You can issue this command using the ISPF E.3 application.

---

**HLV5000S** MESSAGE NUMBER num IS NOT  
DEFINED

**Explanation:** This message is issued whenever an undefined message number is encountered.

## HLV5001S • HLV5011S

**User response:** This probably indicates an internal product error. Contact Software Support.

The variable fields of the message text are: num message number specified

---

### HLV5001S obj IS AN INVALID %PX OBJECT

**Explanation:** You have tried to DEFINE/MODIFY an unknown HLV object.

**User response:** Correct the DEFINE/MODIFY command, and rerun.

The variable fields of the message text are: obj the name of the unknown HLV object.

---

### HLV5002S cmd is an invalid %PX command.

**Explanation:** The command you have coded is unknown to ADDRESS HLV.

**User response:** Enter the correct HLV command, and rerun.

The variable fields of the message text are: cmd the command that was entered

---

### HLV5003S key is an invalid keyword.

**Explanation:** This keyword is not part of any HLV command.

**User response:** Recode the HLV command, and rerun.

The variable fields of the message text are: key the erroneous keyword.

---

### HLV5004S The key keyword is missing.

**Explanation:** The indicated keyword is required but was not coded.

**User response:** Recode the HLV command using the keyword, and rerun.

The variable fields of the message text are: key the keyword that is missing

---

### HLV5005S value is not a valid value for the keyword.

**Explanation:** The value you have coded is not valid value for the keyword.

**User response:** Recode the value, and rerun the HLV command.

The variable fields of the message text are: value the invalid value key the name of the keyword.

---

### HLV5006S key is only valid for IS ONLY VALID FOR TYPE = ktype

**Explanation:** The keyword indicated is not valid for the given value of the type of keyword.

**User response:** Remove the erroneous keyword (or change the type), and rerun the command.

The variable fields of the message text are: key the name of the erroneous keyword ktype the type for which the keyword is valid.

---

### HLV5007S LINK host already exists.

**Explanation:** The indicated link has already been defined.

**User response:** Determine which definition is correct, and rerun.

The variable fields of the message text are: host the value of the host keyword

---

### HLV5008U OPRXPC TERMINATED WITH SEVERE ERROR RC = rc

**Explanation:** An internal component of ADDRESS HLV has failed.

**User response:** Contact Software Support.

The variable fields of the message text are: rc OPRXPC return code

---

### HLV5009S MODIFY CONTAINS FIELDS NOT SUPPORTED BY LINK TYPE

**Explanation:** You cannot modify fields that are undefined for this type of link.

**User response:** Remove the keywords in error, and rerun the command.

---

### HLV5010E HOST = host DOES NOT EXIST

**Explanation:** The link defined by the host is not yet defined; therefore, it cannot be modified.

**User response:** Either define the link, or remove the MODIFY.

The variable fields of the message text are: host the value of the host keyword

---

### HLV5011S obj DISPLAY FAILED WITH RC = rc

**Explanation:** The display of the object failed severely.

**User response:** There is probably some sort of internal error. Contact Software Support.

The variable fields of the message text are: obj the name of the object being displayed rc the OPRXPC module return code

---

**HLV5012S** key CONTAINS A QUOTE AND QUOTES ARE NOT PERMITTED

---

**Explanation:** HLV keywords do not require or permit quotes.

**User response:** Remove the quote marks, and rerun.

The variable fields of the message text are: key the keyword where quotes were found

---

**HLV5013S** %PX SUBSYSTEM *subsys* IS NOT ACTIVE

---

**Explanation:** The indicated subsystem is not running. The ADDRESS HLV host environment command cannot be processed.

**User response:** Start the subsystem (or use the SUBSYS command to identify another subsystem), and rerun the command.

The variable fields of the message text are: *subsys* the name of the subsystem to be used

---

**HLV5014S** *subsys* IS AN INVALID SUBSYSTEM NAME

---

**Explanation:** The subsystem name coded is not valid.

**User response:** Subsystem names must begin with an alpha (a-z) character, and all other characters can be alphanumeric. Also, the name can only be four (4) characters long.

The variable fields of the message text are: *subsys* the erroneous subsystem name

---

**HLV5015E** DATABASE *subsys* IS ALREADY DEFINED

---

**Explanation:** The indicated database has already been defined.

**User response:** Determine which definition is correct, and rerun.

The variable fields of the message text are: *subsys* database subsystem name

---

**HLV5016E** DATABASE = *subsys* DOES NOT EXIST

---

**Explanation:** The database defined by name is not yet defined; therefore, it cannot be modified.

**User response:** Either define the database, or remove the MODIFY.

The variable fields of the message text are: *subsys* database subsystem name

---

---

**HLV5017S** *parm* IS NOT A VALID PRODUCT PARAMETER NAME

---

**Explanation:** The parameter name is not a valid, recognized product parameter.

**User response:** Correct the parameter name, and rerun.

The variable fields of the message text are: *parm* the parameter name

---

**HLV5018S** *parmval* IS NOT A VALID VALUE FOR *parm*

---

**Explanation:** The parameter value is not valid for this parameter.

**User response:** Correct the value, and rerun.

The variable fields of the message text are: *parmval* the erroneous parameter value *parm* the parameter name

---

**HLV5019E** *subsys* IS A DB2 DATABASE SUBSYSTEM

---

**Explanation:** The database subsystem can not be defined because the subsystem is an actual DB2 subsystem.

**User response:** Change the database subsystem name, and rerun.

The variable fields of the message text are: *subsys* the name of the subsystem to be used

---

**HLV5020E** ANOTHER COPY OF THE PRODUCT USES DATABASE SUBSYSTEM NAME *subsys*

---

**Explanation:** The database subsystem cannot be defined because another copy of the product is using the database subsystem.

**User response:** Change the database subsystem name, and rerun.

The variable fields of the message text are: *subsys* the name of the subsystem to be used

---

**HLV5021E** DATABASE SUBSYSTEM *subsys* COULD NOT BE CREATED

---

**Explanation:** The database subsystem control blocks could not be created.

**User response:** Fix any related errors, and rerun.

The variable fields of the message text are: *subsys* the name of the subsystem to be used

---

---

**HLV5022E ANOTHER PRODUCT USES DATABASE SUBSYSTEM NAME subsys**

**Explanation:** The database subsystem cannot be defined because another product is using the database subsystem.

**User response:** Change the database subsystem name, and rerun.

The variable fields of the message text are: subsys the name of the subsystem to be used

---

**HLV5023E CONNECTION value IS ALREADY DEFINED**

**Explanation:** The indicated connection has already been defined.

**User response:** Determine which definition is correct, and rerun.

The variable fields of the message text are: value the value of the name keyword

---

**HLV5024E SESSION value IS ALREADY DEFINED**

**Explanation:** The indicated session has already been defined.

**User response:** Determine which definition is correct, and rerun.

The variable fields of the message text are: value the value of the name keyword

---

**HLV5025I DDNAME %1 IS NOT ALLOCATED TO PRODUCT ADDRESS SPACE**

**Explanation:** The indicated ddname is not allocated to the product address space.

**User response:** The attempt to define the file fails. Add a DD statement to the product start-up JCL for the indicated file, and restart the product.

---

**HLV5026T MEASURED USAGE request COMPLETED SUCCESSFULLY**

**Explanation:** This message indicates that Measured Usage Request completed successfully.

**User response:** No action required.

The variable fields of the message text are: request request type

---

**HLV5027T MEASURED USAGE request REQUEST MAY HAVE FAILED, RC=rc**

**Explanation:** This message indicates that Measured Usage Request may have failed. Please check return code and request type.

**User response:** No action required.

The variable fields of the message text are: request request type rc return code

---

**HLV6000T ENTER MODULE csect**

**Explanation:** This diagnostic trace message is issued to indicate that control has entered a particular product module.

**User response:** This is an informational message. No action is required. However, if diagnostic tracing has been turned on at the request of Software Support, please call for further instructions.

The variable fields of the message text are: csect CSECT name

---

**HLV6003T MATCHING SSCT LOCATED FOR SUBSYSTEM subsysid**

**Explanation:** This diagnostic trace message is issued in response to being able to locate an SSCT that matches the subsystem name that was extracted.

**User response:** This is an informational message. No action is required. However, if diagnostic tracing has been turned on at the request of Software Support, please contact Software Support for further instructions.

The variable fields of the message text are: subsysid subsystem identifier

---

**HLV6004T TRANSFERRING CONTROL TO MODULE DSNECP00**

**Explanation:** This diagnostic trace message is issued just prior to transferring control to the IBM-supplied DSN command. It has been determined that the current DSN command session is bound for a copy of DB2 whose connection is not being managed by the product.

**User response:** This is an informational message. No action is required. However, if diagnostic tracing has been turned on at the request of Software Support, please contact Software Support for further instructions.

---

**HLV6007T PRIOR TO LINKING TO OPDSN10 SUBCOMMAND HANDLER**

**Explanation:** This diagnostic trace message is issued just prior to linking to OPDSN10, the subcommand handler.

**User response:** This is an informational message. No action is required. However, if diagnostic tracing has been turned on at the request of Software Support, please contact Software Support for further instructions.

---

**HLV6008T RETURN FROM LINKING TO  
OPDSN10 SUBCOMMAND HANDLER**

**Explanation:** This diagnostic trace message is issued on return from linking to OPDSN10, the subcommand handler.

**User response:** This is an informational message. No action is required. However, if diagnostic tracing has been turned on at the request of Software Support, please contact Software Support for further instructions.

---

**HLV6009T PRIOR TO ATTACHING OPDSN10  
SUBCOMMAND HANDLER**

**Explanation:** This diagnostic trace message is issued just prior to attaching OPDSN10, the subcommand handler.

**User response:** This is an informational message. No action is required. However, if diagnostic tracing has been turned on at the request of Software Support, please contact Software Support for further instructions.

---

**HLV6010T RETURN FROM ATTACHING  
OPDSN10 SUBCOMMAND HANDLER**

**Explanation:** This diagnostic trace message is issued on return from attaching OPDSN10, the subcommand handler.

**User response:** This is an informational message. No action is required. However, if diagnostic tracing has been turned on at the request of Software Support, please contact Software Support for further instructions.

---

**HLV6011T OPDSN10 SUBCOMMAND HANDLER  
DETACHED SUCCESSFULLY**

**Explanation:** This diagnostic trace message is issued after successfully detaching OPDSN10, the subcommand handler.

**User response:** This is an informational message. No action is required. However, if diagnostic tracing has been turned on at the request of Software Support, please contact Software Support for further instructions.

---

**HLV6013T EXITING MODULE csect**

**Explanation:** This diagnostic trace message is issued just prior to exiting the module named in the diagnostic trace message.

**User response:** This is an informational message. No action is required. However, if diagnostic tracing has been turned on at the request of Software Support, please contact Software Support for further instructions.

The variable fields of the message text are: csect CSECT name

---

**HLV6014T OPDSN10 STAX EXIT SUCCESSFULLY  
ESTABLISHED**

**Explanation:** This diagnostic trace message is issued after successfully establishing the STAX exit for module OPDSN10.

**User response:** This is an informational message. No action is required. However, if diagnostic tracing has been turned on at the request of Software Support, please contact Software Support for further instructions.

---

**HLV6015T OPDSN10 STAX EXIT SUCCESSFULLY  
REMOVED**

**Explanation:** This diagnostic trace message is issued after successfully removing the STAX exit for module OPDSN10.

**User response:** This is an informational message. No action is required. However, if diagnostic tracing has been turned on at the request of Software Support, please contact Software Support for further instructions.

---

**HLV6016T VALID SUBCOMMAND cmd  
ACCEPTED**

**Explanation:** This diagnostic trace message is issued after determining that the subcommand entered by the user is one of the set of valid subcommands supported by module OPDSN10.

**User response:** This is an informational message. No action is required. However, if diagnostic tracing has been turned on at the request of Software Support, please contact Software Support for further instructions.

The variable fields of the message text are: cmd subcommand entered

---

**HLV6017T UNRECOGNIZED SUBCOMMAND  
ASSUME TSO COMMAND cmd**

**Explanation:** This diagnostic trace message is issued after determining that the subcommand entered by the user is neither one of the set of valid subcommands supported by OPDSN10 nor one of the set of TSO commands not supported by OPDSN10.

**User response:** This is an informational message. No action is required. However, if diagnostic tracing has been turned on at the request of Software Support, please contact Software Support for further instructions.

The variable fields of the message text are: cmd subcommand entered

---

**HLV6018T PRIOR TO LINKING TO TSO  
COMMAND cmd**

**Explanation:** This diagnostic trace message is issued just prior to linking to the TSO command specified as a DSN subcommand.

**User response:** This is an informational message. No action is required. However, if diagnostic tracing has been turned on at the request of Software Support, please contact Software Support for further instructions.

The variable fields of the message text are: cmd subcommand entered

**HLV6019T RETURN FROM LINKING TO TSO COMMAND cmd**

**Explanation:** This diagnostic trace message is issued on return from linking to the TSO command specified as a DSN subcommand.

**User response:** This is an informational message. No action is required. However, if diagnostic tracing has been turned on at the request of Software Support, please contact Software Support for further instructions.

The variable fields of the message text are: cmd subcommand entered

**HLV6020T PRIOR TO ATTACHING TSO COMMAND cmd**

**Explanation:** This diagnostic trace message is issued just prior to attaching the TSO command specified as a DSN subcommand.

**User response:** This is an informational message. No action is required. However, if diagnostic tracing has been turned on at the request of Software Support, please contact Software Support for further instructions.

The variable fields of the message text are: cmd subcommand entered

**HLV6021T RETURN FROM ATTACHING TSO COMMAND cmd**

**Explanation:** This diagnostic trace message is issued on return from attaching the TSO command specified as a DSN subcommand.

**User response:** This is an informational message. No action is required. However, if diagnostic tracing has been turned on at the request of Software Support, please contact Software Support for further instructions.

The variable fields of the message text are: cmd subcommand entered

**HLV6022T SUCCESSFUL DETACH TSO COMMAND cmd**

**Explanation:** This diagnostic trace message is issued after successfully detaching the TSO command specified as a DSN subcommand.

**User response:** This is an informational message. No action is required. However, if diagnostic tracing has been turned on at the request of Software Support, please contact Software Support for further instructions.

The variable fields of the message text are: cmd TSO command name

**HLV6023T SUCCESSFULLY ALLOCATED DATA SET dsn**

**Explanation:** This diagnostic trace message is issued after successfully allocating the data set specified on the LIBRARY() parameter of the RUN subcommand.

**User response:** This is an informational message. No action is required. However, if diagnostic tracing has been turned on at the request of Software Support, please contact Software Support for further instructions.

The variable fields of the message text are: dsn data set name from LIBRARY() parameter

**HLV6024T SUCCESSFULLY DEALLOCATED DATA SET dsn**

**Explanation:** This diagnostic trace message is issued upon successfully deallocating the data set specified on the LIBRARY() parameter of the RUN subcommand.

**User response:** This is an informational message. No action is required. However, if diagnostic tracing has been turned on at the request of Software Support, please contact Software Support for further instructions.

The variable fields of the message text are: dsn data set name from LIBRARY() parameter

**HLV6025T RUN SUBCOMMAND BUFFER PARSED SUCCESSFULLY**

**Explanation:** This diagnostic trace message is issued after successfully parsing the RUN subcommand buffer.

**User response:** This is an informational message. No action is required. However, if diagnostic tracing has been turned on at the request of Software Support, please contact Software Support for further instructions.

**HLV6026T LIBRARY : dsn**

**Explanation:** This diagnostic trace message is issued in order to present the interpreted library specification.

**User response:** This is an informational message. No action is required. However, if diagnostic tracing has been turned on at the request of Software Support, please contact Software Support for further instructions.

The variable fields of the message text are: dsn data set name from LIBRARY() parameter

**HLV6027T PLANID : pln**

**Explanation:** This diagnostic trace message is issued in order to present the interpreted plan specification.

**User response:** This is an informational message. No action is required. However, if diagnostic tracing has

been turned on at the request of Software Support, please contact Software Support for further instructions.

The variable fields of the message text are: pln plan name from PLAN() parameter

---

#### HLV6028T PROGRAM : pgm

**Explanation:** This diagnostic trace message is issued in order to present the interpreted program specification.

**User response:** This is an informational message. No action is required. However, if diagnostic tracing has been turned on at the request of Software Support, please contact Software Support for further instructions.

The variable fields of the message text are: pgm program name from PROGRAM() parameter

---

#### HLV6029T CP : ind

**Explanation:** This diagnostic trace message is issued in order to present a YES/NO value depicting whether the CP parameter was or was not specified.

**User response:** This is an informational message. No action is required. However, if diagnostic tracing has been turned on at the request of Software Support, please contact Software Support for further instructions.

The variable fields of the message text are: ind indicates whether CP parameter was or was not specified (YES or NO)

---

#### HLV6030T PARMS : ind

**Explanation:** This diagnostic trace message is issued in order to present a YES/NO value depicting whether the PARMS() parameter was or was not specified.

**User response:** This is an informational message. No action is required. However, if diagnostic tracing has been turned on at the request of Software Support, please contact Software Support for further instructions.

The variable fields of the message text are: ind indicates whether PARMS() parameter was or was not specified (YES or NO)

---

#### HLV6031T BEFORE IDENTIFY DB2 CALL =====

**Explanation:** This diagnostic trace message is issued prior to processing the DB2 identify request.

**User response:** This is an informational message. No action is required. However, if diagnostic tracing has been turned on at the request of Software Support, please contact Software Support for further instructions.

---

#### HLV6032T AFTER IDENTIFY DB2 CALL =====

**Explanation:** This diagnostic trace message is issued after processing the DB2 identify request.

**User response:** This is an informational message. No action is required. However, if diagnostic tracing has been turned on at the request of Software Support, please contact Software Support for further instructions.

---

#### HLV6033T BEFORE CREATE THREAD DB2 CALL =====

**Explanation:** This diagnostic trace message is issued prior to processing the DB2 create thread request.

**User response:** This is an informational message. No action is required. However, if diagnostic tracing has been turned on at the request of Software Support, please contact Software Support for further instructions.

---

#### HLV6034T AFTER CREATE THREAD DB2 CALL =====

**Explanation:** This diagnostic trace message is issued after processing the DB2 create thread request.

**User response:** This is an informational message. No action is required. However, if diagnostic tracing has been turned on at the request of Software Support, please contact Software Support for further instructions.

---

#### HLV6037T BEFORE TERMINATE DB2 CALL =====

**Explanation:** This diagnostic trace message is issued prior to processing the terminate DB2 request.

**User response:** This is an informational message. No action is required. However, if diagnostic tracing has been turned on at the request of Software Support, please contact Software Support for further instructions.

---

#### HLV6038T AFTER TERMINATE DB2 CALL =====

**Explanation:** This diagnostic trace message is issued after processing the terminate DB2 request.

**User response:** This is an informational message. No action is required. However, if diagnostic tracing has been turned on at the request of Software Support, please contact Software Support for further instructions.

---

#### HLV6039T PRIOR TO LINKING TO PROGRAM pgm

**Explanation:** This diagnostic trace message is issued just prior to linking to the program specified on the PROGRAM() parameter of the RUN subcommand.

**User response:** This is an informational message. No

## HLV6040T • HLV6504I

action is required. However, if diagnostic tracing has been turned on at the request of Software Support, please contact Software Support for further instructions.

The variable fields of the message text are: pgm  
program name

---

### HLV6040T RETURN FROM LINKING TO PROGRAM pgm

**Explanation:** This diagnostic trace message is issued on return from linking to the program specified on the PROGRAM() parameter of the RUN subcommand.

**User response:** This is an informational message. No action is required. However, if diagnostic tracing has been turned on at the request of Software Support, please contact Software Support for further instructions.

The variable fields of the message text are: pgm  
program name

---

### HLV6041T APPLICATION PROGRAM FAILED WITH ABEND CODE abcd

**Explanation:** This diagnostic trace message is issued if the application program fails with any type of abend code. This message is generated both when the application program is attached and when it is linked to.

**User response:** This is an informational message. No action is required. However, if diagnostic tracing has been turned on at the request of Software Support, please contact Software Support for further instructions.

The variable fields of the message text are: abcd abend  
code

---

### HLV6042T RRSF func function RC rc Reason rscd was converted to RC 0 Reason 0.

**Explanation:** This message is issued when the product has ignored certain error reason codes from RRSF function calls.

**User response:** This is an informational message. No action is required. However, if this action contributes to thread errors later in the process, please contact Software Support for further instructions.

The variable fields of the message text are: func RRSF  
function rc RRSF function return code rscd RRSF  
function reason code

---

### HLV6500S ABEND abcd RS=rscd OCCURRED AT var1+var1 DURING DMF var1 var1

**Explanation:** An ABEND occurred while processing a Data Mapping Facility (DMF) request.

**User response:** The routine signals an error to the caller and processing continues, when possible.

The variable fields of the message text are: abcd abend

completion code rscd abend reason code var1 abending  
module name var1 abending module offset var1 DMF  
function being processed var1 entity identifier  
information

---

### HLV6501W DMF var1 WARNING: var2 var3

**Explanation:** A correctable condition was encountered while processing a Data Mapping Facility (DMF) request.

**User response:** The routine issues this warning message and processes the requested function. The warning MAY indicate a condition which requires attention.

The variable fields of the message text are: var1  
operation being processed var2 reason for the warning  
var3 item being processed when warning detected

---

### HLV6502S DMF var1 ERROR: var2 var3

**Explanation:** An un-correctable condition was encountered while processing a Data Mapping Facility (DMF) request.

**User response:** The routine issues this error message and concludes processing of the requested function. Correct the condition and re-run the request. For STOW error's check the dataset space allocation for sufficient space and sufficient directory block allocations. If the dataset is a Services Metadata or Microflow dataset you can use the parameter WSALLOC in PRODZSERV to override the default allocation values.

The variable fields of the message text are: var1  
operation being processed var2 reason for the error  
var3 item being processed when error detected

---

### HLV6503I DMF IMPORT var1 MAP 'var2' FROM 'var3' var4

**Explanation:** A DMF IMPORT request has successfully imported an XML data map definition and has saved the new or changed datamap into the mapping library.

**User response:** This message is issued for each new or changed datamap successfully imported from an XML map definition document.

The variable fields of the message text are: var1  
"SAVED" or "REPLACED" var2 new/changed mapping  
library member saved var3 source of XML document  
imported var4 additional information, if needed

---

### HLV6504I DMF import has refreshed in-storage data maps

**Explanation:** A DMF IMPORT request has refreshed the in-storage data map images following import of new or changed data maps.

**User response:** This message is issued after all new or



changed datamaps have seem saved during XML import processing. .

---

**HLV6505I DMF import parsed map 'var1' from 'var2'**

**Explanation:** A DMF IMPORT request has successfully processed an XML data map definition, but is not requested to save it. The data map will be discarded.

**User response:** This message is issued for each datamap parsed from an XML document, if the new/changed data map is not to be saved or replaced in the map library. This messages indicates that the XML document is valid.

The variable fields of the message text are: var1 name of map from XML document var2 source of XML document imported

---

**HLV6506T Required map var1 for conversion of EXCI to ACI missing**

**Explanation:** The specified map is missing from DMF. This map is required to dynamically create the ACI server definition for the EXCI to ACI conversion

**User response:** Use the product ISPF option "D.I" to initialize the maps required by the product.

The variable fields of the message text are: var1 name of dummy ACI server map

---

**HLV6507T Unable to create server var1var2 for CICS connection var3**

**Explanation:** Unable to create an ACI server for EXCI to ACI conversion for the specified CICS connection.

**User response:** This message is issued for each CICS connection that is to be converted to use ACI. Probable cause is a GETMAIN error. Check Trace Browse and the Joblog for further messages and contact Software Support.

The variable fields of the message text are: var1 name of ACI server (EXCI\_xxxx) xxxx=cics var2 CICS Connection name from CICNID var3 CICS Connection name from CICNID

---

**HLV6509I DMF PROCESSING COMPLETE**

**Explanation:** A DMF request has completed processing. This will be the last message related to the current DMF command.

**User response:** This message is issued when a DMF command has completed processing. It is used to identify the last of a series of related DMF messages.

---

**HLV6520H DMF Data-In-Virtual cache is being initialized for revision level var1 support**

**Explanation:** During initialization the Data Mapping Facility (DMF) determined that it's data-in-virtual cache is empty, contains errors, or is formatted for operation at a different revision level. The DIV object is being initialized or re-initialized for use at the current software support revision level.

**User response:** This DMF DIV data-in-virtual cache will be initialized for use and placed online.

The variable fields of the message text are: var1 DMF current software support revision level

---

**HLV6521H Existing DMF DIV cache at revision level var1 must be re-initialized at current level**

**Explanation:** During initialization the Data Mapping Facility (DMF) found the DIV linear dataset cache dataset (@#\$MAPL) contained information formatted for an older/different revision level than the server software now supports. The cache must be discarded and re-loaded in order to switch to the current software support revision level.

**User response:** DMF cached data maps will be discarded and the DIV dataset re-initialized at the new support level. DMF will reload data maps into the cache, as these are read into storage from the @#\$MAPP PDS library.

The variable fields of the message text are: var1 DMF cache old support level

---

**HLV6522H Existing DMF DIV cache being discarded due to incomplete update at last LDS expansion**

**Explanation:** During initialization the Data Mapping Facility (DMF) found the DIV linear dataset cache dataset (@#\$MAPL) could not be placed online because a DIV expansion operation failed to complete properly during the prior start-up. The cache must be discarded and re-loaded in order to remove any incompletely allocated logical window areas.

**User response:** DMF cached data maps will be discarded and the DIV dataset re-initialized. DMF will reload data maps into the cache as these are read into storage from the @#\$MAPP PDS library.

---

**HLV6523H Existing DMF DIV cache being discarded due to window relocation problem**

**Explanation:** During initialization the Data Mapping Facility (DMF) found the DIV linear dataset cache dataset (@#\$MAPL) could not be placed online because a problem occurred while attempting to relocate maps

and map pointers within the DIV windows. The cache must be discarded and re-loaded in order to remove the erroneous/problematic information.

**User response:** DMF cached data maps will be discarded and the DIV dataset re-initialized. DMF will reload data maps into the cache as these are read into storage from the @\$MAPP PDS library.

**HLV6524H Existing DMF DIV cache being discarded due to unknown object type (%1)**

**Explanation:** During initialization the Data Mapping Facility (DMF) found the DIV linear dataset cache dataset (@\$MAPL) contains a DMF block area in which garbage or an unknown element block resides. The cache must be discarded and re-loaded in order to remove the corrupted data block.

**User response:** DMF cached data maps will be discarded and the DIV dataset re-initialized. DMF will reload data maps into the cache as these are read into storage from the @\$MAPP PDS library.

**HLV6525S DMF DIV cache routine %1 invoked within invalid x-mem environment**

**Explanation:** While processing, a DMF service routine was invoked within a cross-memory environment which it does not support. The DMF service request cannot be completed.

**User response:** For some service requests, the routine aborts by generating an S0C3 ABEND. Other service routines return an error to the caller, which will likely cause the originating procedure to fail or ABEND. Contact Software Support.

**HLV6526S Free of DMF block in DIV cache failed - address of block (%1) is not %2**

**Explanation:** While processing, a request to remove a dmf data area from DIV cache, a validation error was detected. the data area is not considered valid for the reason indicated.

**User response:** The removal routine returns an error to the caller, which may result in failure within the procedure being executed. Contact Software Support.

**HLV6527H Existing dmf div cache being discarded. an invalid %1 OBJect chain was found by %2.**

**Explanation:** During initialization the data mapping facility (dmf) found the DIV linear dataset cache dataset (@\$MAPL) contains an invalid control block chain. the cache must be discarded and re-loaded in order to remove the corrupted data block.

**User response:** DMF cached data maps will be discarded and the div dataset re-initialized. dmf will

reload data maps into the cache as these are read into storage from the @\$MAPP pds library.

**HLV6528H Too many virtual directories - dataset %1 not processed For path %2**

**Explanation:** During a refresh of in-storage maps by the data mapping Facility (dmf), more than 200 individual virtual directory datasets were defined. the system can process no more than 200 individual datasets allocated as virtual directories.

**User response:** The virtual directory definition entry is skipped and the indicated virtual directory dataset is not placed online

**HLV7000I Syntax error: unmatched parenthesis**

**Explanation:** The command used to invoke the system function was coded incorrectly. unbalanced parentheses were found in the input command, which consequently could not be understood and processed.

**User response:** Reenter the corrected command.

**HLV7001I Syntax error: unmatched quotation mark or apostroph**

**Explanation:** The command used to invoke the system function was coded incorrectly. a literal string was not enclosed within matching quotation marks or apostrophes.

**User response:** Reenter the corrected command.

**HLV7002I Syntax error: insufficient storage for parsing the command (rscd)**

**Explanation:** The command used to invoke the system function could not be parsed because insufficient storage exists for the command parser.

**User response:** If the reason code is "1", increase the storage size of the region, and re-submit the command request. If reason code is "2", ensure that the command was correctly entered. If the problem cannot be resolved, contact Software Support.

The variable fields of the message text are: rscd reason code

**HLV7003I Syntax error: invalid hex literal**

**Explanation:** The command used to invoke the system function could not be parsed because it contains an incorrectly formatted hexadecimal literal. the hex literal contains more than eight (8) hex digits or contains an invalid digit.

**User response:** Reenter the corrected command.

---

**HLV7004I Syntax error: extraneous or undefined input at 'token'**

**Explanation:** The command used to invoke the system function could not be parsed because it contains extraneous, undefined operands or duplicate keyword operands.

**User response:** Reenter the corrected command.

The variable fields of the message text are: token token that is extraneous or undefined

---

**HLV7005I Syntax error: positional param. pano of parm - errdesc**

**Explanation:** The command used to invoke the system function could not be parsed because it contains an error in a positional parameter. the full text of the message explains which parameter number and what portion of the command contains the error. the message also contains an explanation as to why the parameter is invalid.

**User response:** Reenter the corrected command.

The variable fields of the message text are: pano parameter number relative to origin parm keyword parameter name or command errdesc reason why parameter is invalid

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**HLV7006I Syntax error: required keyword key - missing**

**Explanation:** The required keyword was not entered on the command line.

**User response:** Reenter the corrected command.

The variable fields of the message text are: key keyword

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**HLV7007I Syntax error: required keyword missing - must be on**

**Explanation:** A required keyword was not entered on the command line.

**User response:** Reenter the corrected command.

---

**HLV7008I key**

**Explanation:** This message lists the keywords from which a choice must be made.

**User response:** Reenter the corrected command.

The variable fields of the message text are: key keyword

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**HLV7009I Syntax error: operand of key is invalid or missing**

**Explanation:** The operand coded for the indicated keyword is not valid or was omitted.

**User response:** Reenter the corrected command.

The variable fields of the message text are: key keyword

---

**HLV7010I Syntax error: reason**

**Explanation:** The input was invalid for the reason indicated in the message.

**User response:** Reenter the corrected command.

The variable fields of the message text are: reason reason that the input is invalid

---

**HLV7050T Variable varname (value) set to "%3"**

**Explanation:** This message is used to trace the variable values that have been parsed from an inbound http transaction header.

**User response:** None.

The variable fields of the message text are: varname rexx or other variable name value value of variable

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**HLV7101T Error 01 @(lineno/loff) - too many nexted html extension deLIMITer pairs on this source line.**

**Explanation:** A syntax error was detected while a text file was scanned for HTML extension statements. the source file line number and offset within the line where the error was found is noted in the message.

**User response:** Examine the source file, and correct the html extension statement syntax error.

The variable fields of the message text are: lineno line number in source file where error found loff offset in source line where error detected

---

**HLV7102T Error 02 @(lineno/loff) - un-matched <%% delimiter in source LIne.**

**Explanation:** A syntax error was detected while a text file was scanned for HTML extension statements. the source file line number and offset within the line where the error was found is noted in the message.

**User response:** Examine the source file, and correct the html extension statement syntax error.

The variable fields of the message text are: lineno line number in source file where error found loff offset in source line where error detected

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**HLV7103T Error 03 @ (lineno/loff) - too many tokens, or tokens invalid IN statement.**

**Explanation:** A syntax error was detected while a text file was scanned for HTML extension statements. the source file line number and offset within the line where the error was found is noted in the message.

**User response:** Examine the source file, and correct the html extension statement syntax error.

The variable fields of the message text are: lineno line number in source file where error found loff offset in source line where error detected

---

**HLV7104T Error 04 @ (lineno/loff) - un-identified or invalid html extENSION statement.**

**Explanation:** A syntax error was detected while a text file was scanned for HTML extension statements. the source file line number and offset within the line where the error was found is noted in the message.

**User response:** Examine the source file, and correct the html extension statement syntax error.

The variable fields of the message text are: lineno line number in source file where error found loff offset in source line where error detected

---

**HLV7105T Error 05 @ (lineno/loff) - this statement type must be on a LINE with no other non-blank text.**

**Explanation:** A syntax error was detected while a text file was scanned for HTML extension statements. the source file line number and offset within the line where the error was found is noted in the message.

**User response:** Examine the source file, and correct the html extension statement syntax error.

The variable fields of the message text are: lineno line number in source file where error found loff offset in source line where error detected

---

**HLV7106T Error 06 @ (lineno/loff) - invalid token or label precedes sTATEment operation keyword.**

**Explanation:** A syntax error was detected while a text file was scanned for HTML extension statements. the source file line number and offset within the line where the error was found is noted in the message.

**User response:** Examine the source file, and correct the html extension statement syntax error.

The variable fields of the message text are: lineno line number in source file where error found loff offset in source line where error detected

---

**HLV7107T Error 07 @ (lineno/loff) - invalid statement label syntax.**

**Explanation:** A syntax error was detected while a text file was scanned for HTML extension statements. the source file line number and offset within the line where the error was found is noted in the message.

**User response:** Examine the source file, and correct the html extension statement syntax error.

The variable fields of the message text are: lineno line number in source file where error found loff offset in source line where error detected

---

**HLV7108T Error 08 @ (lineno/loff) - too many operands for statement tYPE.**

**Explanation:** A syntax error was detected while a text file was scanned for HTML extension statements. the source file line number and offset within the line where the error was found is noted in the message.

**User response:** Examine the source file, and correct the html extension statement syntax error.

The variable fields of the message text are: lineno line number in source file where error found loff offset in source line where error detected

---

**HLV7109T Error 09 @ (lineno/loff) - too few operands for statement tYPE.**

**Explanation:** A syntax error was detected while a text file was scanned for HTML extension statements. the source file line number and offset within the line where the error was found is noted in the message.

**User response:** Examine the source file, and correct the html extension statement syntax error.

The variable fields of the message text are: lineno line number in source file where error found loff offset in source line where error detected

---

**HLV7110T Error 10 @ (lineno/loff) - invalid exit statement operand vaLUE.**

**Explanation:** A syntax error was detected while a text file was scanned for HTML extension statements. the source file line number and offset within the line where the error was found is noted in the message.

**User response:** Examine the source file, and correct the html extension statement syntax error.

The variable fields of the message text are: lineno line number in source file where error found loff offset in source line where error detected

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**HLV7111T Error 11 @(lineno/loff) - invalid keyword specified - not aDVANce or noadvance.**

**Explanation:** A syntax error was detected while a text file was scanned for HTML extension statements. the source file line number and offset within the line where the error was found is noted in the message.

**User response:** Examine the source file, and correct the html extension statement syntax error.

The variable fields of the message text are: lineno line number in source file where error found loff offset in source line where error detected

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**HLV7112T Error 12 @(lineno/loff) - invalid condition name for if staTEMENT operand two.**

**Explanation:** A syntax error was detected while a text file was scanned for HTML extension statements. the source file line number and offset within the line where the error was found is noted in the message.

**User response:** Examine the source file, and correct the html extension statement syntax error.

The variable fields of the message text are: lineno line number in source file where error found loff offset in source line where error detected

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**HLV7113T Error 13 @(lineno/loff) - variable name symbol too long - mAXIMUM name size is 50 characters.**

**Explanation:** A syntax error was detected while a text file was scanned for HTML extension statements. the source file line number and offset within the line where the error was found is noted in the message.

**User response:** Examine the source file, and correct the html extension statement syntax error.

The variable fields of the message text are: lineno line number in source file where error found loff offset in source line where error detected

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**HLV7114T Error 14 @(lineno/loff) - number of nested if/endif staTEMENT Pairs exceeds compiler maximum.**

**Explanation:** A syntax error was detected while a text file was scanned for HTML extension statements. the source file line number and offset within the line where the error was found is noted in the message.

**User response:** Examine the source file, and correct the html extension statement syntax error.

The variable fields of the message text are: lineno line number in source file where error found loff offset in source line where error detected

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**HLV7115T Error 15 @(lineno/loff) - else without preceding if staTEMENT.**

**Explanation:** A syntax error was detected while a text file was scanned for HTML extension statements. the source file line number and offset within the line where the error was found is noted in the message.

**User response:** Examine the source file, and correct the html extension statement syntax error.

The variable fields of the message text are: lineno line number in source file where error found loff offset in source line where error detected

---

**HLV7116T Error 16 @(lineno/loff) - duplicate else statements for curRENT if/endif pair.**

**Explanation:** A syntax error was detected while a text file was scanned for HTML extension statements. the source file line number and offset within the line where the error was found is noted in the message.

**User response:** Examine the source file, and correct the html extension statement syntax error.

The variable fields of the message text are: lineno line number in source file where error found loff offset in source line where error detected

---

**HLV7117T Error 17 @(lineno/loff) - endif not preceded by if staTEMENT.**

**Explanation:** A syntax error was detected while a text file was scanned for HTML extension statements. the source file line number and offset within the line where the error was found is noted in the message.

**User response:** Examine the source file, and correct the html extension statement syntax error.

The variable fields of the message text are: lineno line number in source file where error found loff offset in source line where error detected

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**HLV7118T Error 18 @(lineno/loff) - nested do/enddo groups exceeds coMPILer maximum nesting levels.**

**Explanation:** A syntax error was detected while a text file was scanned for HTML extension statements. the source file line number and offset within the line where the error was found is noted in the message.

**User response:** Examine the source file, and correct the html extension statement syntax error.

The variable fields of the message text are: lineno line number in source file where error found loff offset in source line where error detected

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**HLV7119T Error 19 @(lineno/loff) - statement should only appear withIN Do/endo statement group.**

**Explanation:** A syntax error was detected while a text file was scanned for HTML extension statements. the source file line number and offset within the line where the error was found is noted in the message.

**User response:** Examine the source file, and correct the html extension statement syntax error.

The variable fields of the message text are: lineno line number in source file where error found loff offset in source line where error detected

---

**HLV7120T Error 20 @(lineno/loff) - label name not defined by any preCEDIng do statement.**

**Explanation:** A syntax error was detected while a text file was scanned for HTML extension statements. the source file line number and offset within the line where the error was found is noted in the message.

**User response:** Examine the source file, and correct the html extension statement syntax error.

The variable fields of the message text are: lineno line number in source file where error found loff offset in source line where error detected

---

**HLV7121T Error 21 @(lineno/loff) - number of leave statements exceedS Compiler maximums.**

**Explanation:** A syntax error was detected while a text file was scanned for HTML extension statements. the source file line number and offset within the line where the error was found is noted in the message.

**User response:** Examine the source file, and correct the html extension statement syntax error.

The variable fields of the message text are: lineno line number in source file where error found loff offset in source line where error detected

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**HLV7122T Error 22 @(lineno/loff) - duplicate do statement label name DEFined.**

**Explanation:** A syntax error was detected while a text file was scanned for HTML extension statements. the source file line number and offset within the line where the error was found is noted in the message.

**User response:** Examine the source file, and correct the html extension statement syntax error.

The variable fields of the message text are: lineno line number in source file where error found loff offset in source line where error detected

---

**HLV7123T Error 23 @(lineno/loff) - label not defined in source file**

**Explanation:** A syntax error was detected while a text file was scanned for HTML extension statements. the source file line number and offset within the line where the error was found is noted in the message.

**User response:** Examine the source file, and correct the html extension statement syntax error.

The variable fields of the message text are: lineno line number in source file where error found loff offset in source line where error detected

---

**HLV7124T Error 24 @(lineno/loff) - compiler maximum for label names WITHin a source file exceeded.**

**Explanation:** A syntax error was detected while a text file was scanned for HTML extension statements. the source file line number and offset within the line where the error was found is noted in the message.

**User response:** Examine the source file, and correct the html extension statement syntax error.

The variable fields of the message text are: lineno line number in source file where error found loff offset in source line where error detected

---

**HLV7125T Error 25 @(lineno/loff) - one or more referenced statement LABELs are undefined in source file.**

**Explanation:** A syntax error was detected while a text file was scanned for HTML extension statements. the source file line number and offset within the line where the error was found is noted in the message.

**User response:** Examine the source file, and correct the html extension statement syntax error.

The variable fields of the message text are: lineno line number in source file where error found loff offset in source line where error detected

---

**HLV7126T Error 26 @(lineno/loff) - compiler area overflow - source FILE too complex.**

**Explanation:** A syntax error was detected while a text file was scanned for HTML extension statements. the source file line number and offset within the line where the error was found is noted in the message.

**User response:** Examine the source file, and correct the html extension statement syntax error.

The variable fields of the message text are: lineno line number in source file where error found loff offset in source line where error detected

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**HLV7127T**    **Error 27 @(lineno/loff) - one or more if statements has no MATCHing endif.**

**Explanation:** A syntax error was detected while a text file was scanned for HTML extension statements. the source file line number and offset within the line where the error was found is noted in the message.

**User response:** Examine the source file, and correct the html extension statement syntax error.

The variable fields of the message text are: lineno line number in source file where error found loff offset in source line where error detected

---

**HLV7128T**    **Error 28 @(lineno/loff) - one or more do statements has no MATCHing enddo.**

**Explanation:** A syntax error was detected while a text file was scanned for HTML extension statements. the source file line number and offset within the line where the error was found is noted in the message.

**User response:** Examine the source file, and correct the html extension statement syntax error.

The variable fields of the message text are: lineno line number in source file where error found loff offset in source line where error detected

---

**HLV7129T**    **ERROR 29 @(lineno/loff) - ADDITIONAL ERRORS WERE DETECTED IN SOURCE FILE - FIRST 5 REPORTED.**

**Explanation:** A syntax error was detected while a text file was scanned for HTML extension statements. The source file line number and offset within the line where the error was found is noted in the message.

**User response:** Examine the source file, and correct the HTML extension statement syntax error.

The variable fields of the message text are: lineno line number in source file where error found loff offset in source line where error detected

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**HLV7130T**    **ERROR 30 @(lineno/loff) - INVALID SWSINFO() PSEUDO=FUNCTION OPERAND VALUE.**

**Explanation:** A syntax error was detected while a text file was scanned for HTML extension statements. The source file line number and offset within the line where the error was found is noted in the message.

**User response:** Examine the source file, and correct the HTML extension statement syntax error.

The variable fields of the message text are: lineno line number in source file where error found loff offset in source line where error detected

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**HLV7131T**    **ERROR 31 @(lineno/loff) - HTXINDEX. STEM SYNTAX INVALID.**

**Explanation:** A syntax error was detected while a text file was scanned for HTML extension statements. The source file line number and offset within the line where the error was found is noted in the message.

**User response:** Examine the source file, and correct the HTML extension statement syntax error.

The variable fields of the message text are: lineno line number in source file where error found loff offset in source line where error detected

---

**HLV7132T**    **ERROR 32 @(lineno/loff) - FOR 'HTXINDEX.LABEL' - THE 'LABEL' NAME IS NOT DEFINED.**

**Explanation:** A syntax error was detected while a text file was scanned for HTML extension statements. The source file line number and offset within the line where the error was found is noted in the message.

**User response:** Examine the source file, and correct the HTML extension statement syntax error.

The variable fields of the message text are: lineno line number in source file where error found loff offset in source line where error detected

---

**HLV7133T**    **ERROR 33 @(lineno/loff) - INVALID SWSPARM() PSEUDO-FUNCTIONOPERAND VALUE.**

**Explanation:** A syntax error was detected while a text file was scanned for HTML extension statements. The source file line number and offset within the line where the error was found is noted in the message.

**User response:** Examine the source file, and correct the HTML extension statement syntax error.

The variable fields of the message text are: lineno line number in source file where error found loff offset in source line where error detected

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**HLV7134T**    **ERROR 34 @(lineno/loff) - INVALID TOUPPER() PSEUDO-FUNCTIONOPERAND VALUE.**

**Explanation:** A syntax error was detected while a text file was scanned for HTML extension statements. The source file line number and offset within the line where the error was found is noted in the message.

**User response:** Examine the source file, and correct the HTML extension statement syntax error.

The variable fields of the message text are: lineno line number in source file where error found loff offset in source line where error detected

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**HLV7135T ERROR 35 @(lineno/loff) - NESTED RULE STATEMENTS ARE NOT ALLOWED.**

**Explanation:** A syntax error was detected while a text file was scanned for HTML extension statements. The source file line number and offset within the line where the error was found is noted in the message.

**User response:** Examine the source file, and correct the HTML extension statement syntax error.

The variable fields of the message text are: lineno line number in source file where error found loff offset in source line where error detected

---

**HLV7136T ERROR 36 @(lineno/loff) - AN UNMATCHED /RULE STATEMENT WAS ENCOUNTERED.**

**Explanation:** A syntax error was detected while a text file was scanned for HTML extension statements. The source file line number and offset within the line where the error was found is noted in the message.

**User response:** Examine the source file, and correct the HTML extension statement syntax error.

The variable fields of the message text are: lineno line number in source file where error found loff offset in source line where error detected

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**HLV7137T ERROR 37 @(lineno/loff) - STORAGE ALLOCATION FAILURE DURING RULE PROCESSING.**

**Explanation:** A syntax error was detected while a text file was scanned for HTML extension statements. The source file line number and offset within the line where the error was found is noted in the message.

**User response:** Examine the source file, and correct the HTML extension statement syntax error.

The variable fields of the message text are: lineno line number in source file where error found loff offset in source line where error detected

---

**HLV7138T ERROR 38 @(lineno/loff) - ONE OR MORE RULE STATEMENTS HAS NO MATCHING /RULE.**

**Explanation:** A syntax error was detected while a text file was scanned for HTML extension statements. The source file line number and offset within the line where the error was found is noted in the message.

**User response:** Examine the source file, and correct the HTML extension statement syntax error.

The variable fields of the message text are: lineno line number in source file where error found loff offset in source line where error detected

---

**HLV7139T ERROR 39 @(lineno/loff) - ENABLEMENT FAILED FOR EMBEDDED RULE.**

**Explanation:** A syntax error was detected while a text file was scanned for HTML extension statements. The source file line number and offset within the line where the error was found is noted in the message.

**User response:** Examine the source file, and correct the HTML extension statement syntax error.

The variable fields of the message text are: lineno line number in source file where error found loff offset in source line where error detected

---

**HLV7140T ERROR 40 @(lineno/loff) - /\*FILE SECTIONS ARE NOT ALLOWED WITHIN EMBEDDED RULES.**

**Explanation:** A syntax error was detected while a text file was scanned for HTML extension statements. The source file line number and offset within the line where the error was found is noted in the message.

**User response:** Examine the source file, and correct the HTML extension statement syntax error.

The variable fields of the message text are: lineno line number in source file where error found loff offset in source line where error detected

---

**HLV7141T ERROR 41 @(lineno/loff) - DATE(?) OPERAND INVALID OR NOT SPECIFIED.**

**Explanation:** A syntax error was detected in the DATE(?) HTML extension function. Refer to the documentation for the correct options.

**User response:** Examine the source file, and correct the HTML extension statement syntax error.

The variable fields of the message text are: lineno line number in source file where error found loff offset in source line where error detected

---

**HLV7142T ERROR 42 @(lineno/loff) - TIME(?) OPERAND INVALID OR NOT SPECIFIED.**

**Explanation:** A syntax error was detected in the TIME(?) HTML extension function. Refer to the documentation for the correct options.

**User response:** Examine the source file, and correct the HTML extension statement syntax error.

The variable fields of the message text are: lineno line number in source file where error found loff offset in source line where error detected

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**HLV7143T ERROR 43 @(lineno/loff) - EMBEDDED RULES CANNOT BE EMPTY.**

**Explanation:** A syntax error was detected while a text file was scanned for HTML extension statements. The source file line number and offset within the line where the error was found is noted in the message.

**User response:** Examine the source file, and correct the HTML extension statement syntax error.

The variable fields of the message text are: lineno line number in source file where error found loff offset in source line where error detected

---

**HLV7144T ERROR 44 @(lineno/loff) - TARGET OF ASSIGNMENT MUST BE L-VALUE.**

**Explanation:** A syntax error was detected while a text file was scanned for HTML extension statements. The source file line number and offset within the line where the error was found is noted in the message. The target of an assignment statement must be a valid L-Value (either a variable name or a complex expression that can evaluate at runtime to the name of a variable).

**User response:** Examine the source file, and correct the HTML extension statement syntax error.

The variable fields of the message text are: lineno line number in source file where error found loff offset in source line where error detected

---

**HLV7145T ERROR 45 @(lineno/loff) - IMS AUTO-HTML VARIABLE REFERENCE IS BADLY FORMED**

**Explanation:** A syntax error was detected while a text file was scanned for HTML extension statements. The source file line number and offset within the line where the error was found is noted in the message. A reference to an IMS Auto-HTML facility runtime variable (SWSSETFO, SWSFOCUS, SWSINMAP, or SWSCNVID) contains additional/extraneous characters.

**User response:** Examine the source file, and correct the HTML extension statement syntax error.

The variable fields of the message text are: lineno line number in source file where error found loff offset in source line where error detected

---

**HLV7146T ERROR 46 @(lineno/loff) - !OPTIONS STATEMENT INVALID**

**Explanation:** A syntax error was detected while processing an !OPTIONS statement within the HTX source file. The line number and offset within the line where the error was found is noted in the message. A more complex message indicating the exact error found in the !OPTIONS statement may be present in the trace.

**User response:** Examine the source file, and correct the HTML extension statement syntax error.

The variable fields of the message text are: lineno line number in source file where error found loff offset in source line where error detected

---

**HLV7147T ERROR 47 @(lineno/loff) - !OPTIONS STATEMENT OUT OF ORDER**

**Explanation:** A syntax error was detected while processing an !OPTIONS statement within the HTX source file. Runtime !OPTIONS must appear before any other HTX executable or insert statement within the source file.

**User response:** Examine the source file, and correct the HTML extension statement syntax error.

The variable fields of the message text are: lineno line number in source file where error found loff offset in source line where error detected

---

**HLV7148T ERROR 48 @(lineno/loff) - INVALID ENVIRONMENT FOR STATEMENT**

**Explanation:** A syntax error was detected while processing a statement. Some statements are only valid in either the HTTP Web Server or Accelerator Loader server. This statement was encountered in an incorrect environment.

**User response:** Examine the source file, and correct the HTML extension statement syntax error.

The variable fields of the message text are: lineno line number in source file where error found loff offset in source line where error detected

---

**HLV7149T ERROR 49 @(lineno/loff) - IMSATTR STATEMENTS NO LONGER SUPPORTED**

**Explanation:** A syntax error was detected while processing a statement. The deprecated IMSATTR statement is no longer supported by this version of the server.

**User response:** Examine the source file, and correct the HTML extension statement syntax error. If the HTML extension file was generated by the IMS Auto-HTML facility, re-extract the MFS source map and re-generate the HTML file.

The variable fields of the message text are: lineno line number in source file where error found loff offset in source line where error detected

---

**HLV7150T /\*UTILITY STMT - text (funcc)**

**Explanation:** During event procedure enablement, a /\*UTILITY section was not enabled due to the error given.

**User response:** Correct the error, and re-enable the event procedure.

## HLV7151T • HLV7165T

The variable fields of the message text are: text error  
text func function code

---

### HLV7151T /\*UTILITY STMT - msg - sqlstmt

**Explanation:** During execution of a /\*UTILITY statement, the statement was determined to be invalid or non-executable.

**User response:** If the statement text is invalid, correct the statement text. Otherwise, contact Software Support.

The variable fields of the message text are: msg short error message / (continued) sqlstmt SQL statement text

---

### HLV7152T UTILITY FUNCTION func NOT ENABLED. ASSOCIATED MODULE (mod) NOT FOUND IN THE %3 LIBRARY.

**Explanation:** While attempting to enable a utility function, the module associated with the function was not found in the S\_\_RPCLB library.

**User response:** The associated vendor library must be concatenated with the S\_\_RPCLB library.

The variable fields of the message text are: func function code to be enabled mod module not found in the S\_\_RPCLB library

---

### HLV7153T ACCESS TO UTILITY ROUTINES IS NOT AUTHORIZED.

**Explanation:** Your license code does not authorize you to execute utility routines.

**User response:** Contact IBM Software Support.

---

### HLV7160T LINE lineno - HTML EVALUATION ERROR (errdesc) - info

**Explanation:** While processing file information that contains HTML extensions, evaluation of a statement failed.

**User response:** Examine the source file to determine why the error occurred.

The variable fields of the message text are: lineno line number of source file errdesc error description info additional error information

---

### HLV7161E ABEND abcd, REASON rc DURING HTX PROCESSING

**Explanation:** While processing HTML extension processing, an abend occurred.

**User response:** Examine the source file to determine why the error occurred. Check for other messages that may indicate the cause of the error.

The variable fields of the message text are: abcd abend code rc abend reason code

---

### HLV7162E var1var2var3var4

**Explanation:** This message is used internally by OPHTXPR to build abend error reporting pages (HTML or text form).

**User response:** None. This message is for internal use only.

The variable fields of the message text are: var1 variable 1 var2 variable 2 var3 variable 3 var4 variable 4

---

### HLV7163E ABEND abcd, REASON rc DURING OPHTXPR ABEND RECOVERY

**Explanation:** While attempting to recover from a previous abend, the second-level abend intercept was entered in OPHTXPR.

**User response:** Examine the source file to determine why the abend occurred. Check for other messages that may indicate the cause of the error.

The variable fields of the message text are: abcd abend code rc abend reason code

---

### HLV7164T RUNTIME ERROR (LINE lineno) - EMBEDDED RULES AND RESCAN STMT NOT ALLOWED IN THIS FILE.

**Explanation:** A runtime error was detected while a text file was being processed by the HTML extension processor. The source file line number where the error was detected is noted in the message. Note that an HTX executable RESCAN statement may also generate this error because RESCAN is only allowed where embedded rules are authorized.

**User response:** The server aborts processing of the current file and generates an error message output page (HTML or text form). The HTML expansion request fails, with RC=16. Remove the rule or RESCAN statement that caused this condition to be raised, or authorize execution of embedded rules within this file. You authorize embedded rule execution by (1) requesting the file via the /\*FILE process section or via /\*WWW PATH() (from the HFS) and (2) specifying the RULE(YES) keyword for /\*FILE.

The variable fields of the message text are: lineno line number in source file where error found

---

### HLV7165T RUNTIME ERROR (LINE lineno) - ASSIGNMENT STMT FAILED - errdesc - value

**Explanation:** A runtime error was detected while a text file was being processed by the HTML extension processor. The source file line number where the error

was detected is noted in the message. A variable assignment statement failed for the reason indicated in the message.

**User response:** If the message indicates that the LValue must be a global variable, ensure that the original assignment statement refers only to a global variable. These include GLOBAL., GLVEVENT., or .GLVSTATE. variables. Otherwise, check for other messages that might indicate the cause of failure.

The variable fields of the message text are: lineno line number in source file where error found errdesc explanation for error value runtime value for assignment target LValue

**HLV7166T** <%RULE%> EXECUTION MUST NOT DRIVE RECURSIVE <%RULE%> EXECUTION

**Explanation:** A runtime error was detected while a text file was being processed by the HTML extension processor. The HTML extension processor is about to execute an embedded rule, but an embedded <%RULE%> execution is already underway. This type of recursion is not allowed.

**User response:** The current (nested) <%RULE%> section is bypassed, and HTML extension processing of the file is aborted.

**HLV7167E** ABEND abcd, REASON rc DURING HTX PROCESSING OF EMBEDDEDruletype RULE

**Explanation:** While processing HTML extensions, an abend occurred while executing an embedded rule.

**User response:** Examine the source file to determine why the error occurred. Check for other messages that may indicate the cause of the error.

The variable fields of the message text are: abcd abend code rc abend reason code ruletype embedded rule type

**HLV7168T** LINE lineno - EXIT-FLUSH STATEMENT EXECUTED - RESCAN AND NEW RULE MATCHES DISABLED

**Explanation:** While processing file information that contains HTML extensions, an <%EXIT FLUSH%> statement was executed. This causes immediate exit from HTML extension file tailoring and also sets controls so that additional RESCAN or rule matches are inhibited.

**User response:** The server will flush (complete) the transaction without delay.

The variable fields of the message text are: lineno line number of source file

**HLV7169T** LINE lineno - RESCAN STATEMENT OPERAND INVALID - reason - VALUE='value'

**Explanation:** While processing file information that contains HTML extensions, a <%RESCAN x%> statement was executed. The RESCAN URL operand is invalid for the reason reported. If the RESCAN URL value was partially validated, it appears in the message; if it was not partially validated, the value string will be null.

**User response:** The server uses the value SYSTEM/ERROR/500 as a replacement for the invalid RESCAN URL. It also sets the HTTP response code to 500 (server error) and the error code to 61.

The variable fields of the message text are: lineno line number of source file reason reason why rescan URL is invalid value rescan URL operand value if partially valid

**HLV7170T** LINE lineno - EXIT OPTION, option, IGNORED BECAUSE <%RULE%> PROCESSING NOT ENABLED

**Explanation:** While processing file information that contains HTML extensions, an <%EXIT%> statement with the indicated option was executed. The option is being ignored because HTML extension processing was requested via an interface that does not support the execution of embedded rules.

**User response:** The EXIT option is ignored.

The variable fields of the message text are: lineno line number of source file option EXIT option being ignored

**HLV7171T** LINE lineno - !OPTIONS var1 - var2

**Explanation:** While parsing an !OPTIONS statement a syntax error was found. This message is traced to provide a detailed reason for the failure. HTX processing of the file fails with error code 46.

**User response:** Correct the !OPTIONS statement and retry

The variable fields of the message text are: lineno line number of source file var1 !OPTIONS statement text var2 Syntax error description

**HLV7172T** ERROR 72 @(lineno/loff) - RESULTSET OPERAND INVALID OR NOT SPECIFIED.

**Explanation:** A syntax error was detected in the RESULTSET HTML extension function. Only values of 1 or 2 are supported at this time.

**User response:** Examine the source file, and correct the HTML extension statement syntax error.

The variable fields of the message text are: lineno line

## HLV7178T • HLV7186E

number in source file where error found  
loff offset in source line where error detected

---

**HLV7178T** var1 var2 var3 var4 var5

**Explanation:** This message is used to dump out various internal work areas into the trace. It is triggered by setting a diagnostic parameter or control.

**User response:** If there are other messages indicating an error, use this message in conjunction with them to determine the cause of the problem.

The variable fields of the message text are: var1 diagnostic text var2 diagnostic text var3 diagnostic text var4 diagnostic text var5 diagnostic text

---

**HLV7179E** DATA MAPPING - map FIELD IS TOO LONG

**Explanation:** During processing of a data map, a field was defined that was too long for processing. Fields of 3074 bytes are currently the longest fields allowed.

**User response:** Recreate the map with shorter fields, or disable this field.

The variable fields of the message text are: map map name field field name

---

**HLV7180E** /\*EXECSQL STMT - text

**Explanation:** During event procedure enablement, a /\*SQL section was not enabled due to the error given.

**User response:** Correct the error, and re-enable the event procedure.

The variable fields of the message text are: text error text

---

**HLV7181T** /\*EXECSQL STMT - msg - sqlstmt

**Explanation:** During execution of an /\*EXECSQL statement, the SQL statement was determined to be invalid or non-executable.

**User response:** If the SQL statement text is invalid, correct the SQL statement text. If the problem cannot be resolved, contact Software Support.

The variable fields of the message text are: msg short error message / (continued) sqlstmt SQL statement text

---

**HLV7182T** HTML MEMBER NAME MISSING OR INVALID. DATA MAP: map, HTML MEMBER: mem

**Explanation:** During execution of an output file SEND, the HTML member name was not specified in the data map or the HTML member name was invalid.

**User response:** The error is reported as a system error aux on the Web browser. This problem may be

correctable by refreshing the data map after the HTML generation is complete.

The variable fields of the message text are: map name of data map in error mem missing or invalid HTML member name

---

**HLV7183E** /\*EXECIMS STMT - text

**Explanation:** During event procedure enablement, a /\*EXECIMS section was not enabled due to the error given.

**User response:** Correct the error, and re-enable the event procedure.

The variable fields of the message text are: text error text

---

**HLV7184T** /\*EXECIMS STMT - msg - text

**Explanation:** During execution of an /\*EXECIMS statement, the statement was determined to be invalid or non-executable.

**User response:** If the IMS statement text is invalid, correct the IMS statement text. Otherwise, contact Software Support with this problem.

The variable fields of the message text are: msg short error message / (continued) text IMS statement text

---

**HLV7185E** UNABLE TO OBTAIN INPUT STORAGE WORK AREA. LENGTH %1

**Explanation:** While processing an input request, there was insufficient storage to build the input message based upon the the product Mapping Facility definition of the input map.

**User response:** This may be caused by an error in the map definition. The input map may contain a field with an erroneous offset or length. The total length of the input message cannot exceed 32,702 bytes.

---

**HLV7186E** REQUIRED HTML VARIABLE MISSING. NAME=varname

**Explanation:** While processing an input URL, the /\*EXECIMS expects certain query variables: SWSINMAP, SWSCNVID and PFKIN. One or more of these variables was missing.

**User response:** This may be caused by an error in the coding of the HTML. The SWSINMAP variable contains the input map name required to process this URL. The SWSCNVID variable contains the conversation id required to process conversational IMS transactions. The PFKIN variable contains the interrupt key (ENTER, PF01...PF24).

The variable fields of the message text are: varname missing variable name

---

**HLV7187E** /\*EXECCICS STMT - text

**Explanation:** During event procedure enablement, an /\*EXECCICS section was not enabled due to the error given.

**User response:** Correct the error, and re-enable the event procedure.

The variable fields of the message text are: text error text

---

**HLV7188T** /\*EXECCICS STMT - msg - text

**Explanation:** During execution of an /\*EXECCICS statement, the statement was determined to be invalid or non-executable.

**User response:** If the CICS statement text is invalid, correct the CICS statement text. Otherwise, contact Software Support with this problem.

The variable fields of the message text are: msg short error message / (continued) text CICS statement text

---

**HLV7189T** TEMPORARY MAP map USED FOR HTML FILE SELECTION

**Explanation:** During execution of an output file SEND, the output file name was selected from the temporary map name. Permanent maps will arbitrarily use the file associated with the SWSAHTML ddname.

**User response:** For the /\*EXECIMS and /\*EXECCICS rule sections, an HTML file output from the HTML data set name stored within the specified map name will be selected. This information is provided for auditing and control purposes. No action may be required.

The variable fields of the message text are: map temporary map name

---

**HLV7190E** /\*TSOSRV STMT - text

**Explanation:** During event procedure enablement, a /\*TSOSRV section was not enabled due to the error given.

**User response:** Correct the error, and re-enable the event procedure.

The variable fields of the message text are: text error text

---

**HLV7191T** /\*TSOSRV STMT - msg1 - text

**Explanation:** During execution of an /\*TSOSRV statement, the TSO command statement was determined to be invalid or non-executable.

**User response:** If the TSO command text is invalid, correct the command statement text. If the problem cannot be resolved, contact Software Support.

---

The variable fields of the message text are: msg1 short error message / (continued) text TSO command text

---

**HLV7192T** /\*TSOSRV STMT - msg - text

**Explanation:** During execution of an /\*TSOSRV statement, the TSO command statement was determined to be invalid or non-executable.

**User response:** If the TSO command text is invalid, correct the command statement text. If the problem cannot be resolved, contact Software Support.

The variable fields of the message text are: msg short error message / (continued) text TSO command text

---

**HLV7195E** rule1.rule2, /\*PROGRAM STMT - text

**Explanation:** During event procedure enablement, a /\*PROGRAM section was not enabled due to the error given.

**User response:** Correct the error, and re-enable the event procedure.

The variable fields of the message text are: rule1 ruleset name rule2 rule name text error text

---

**HLV7200T** HTTP-RECV: text

**Explanation:** Issued if TRACEURLREAD option is on, this message indicates that the reception of an inbound HTTP request is being processed and indicates the progress, so far.

**User response:** None. This message indicates processing performed during HTTP request receive operations.

The variable fields of the message text are: text text describing operation

---

**HLV7201T** HTTP-RECV: RECEIVED length1, TOTAL length2

**Explanation:** Issued if TRACEURLREAD option is on, this message indicates that the reception of an inbound HTTP request is being processed and indicates the progress.

**User response:** None. This message indicates processing performed during HTTP request receive operations.

The variable fields of the message text are: length1 length of last read buffer length2 total length of inbound HTTP request so far

---

**HLV7202T** HTTP-RECV: HTTP REQUEST HEADERS - LENGTH length, DELIMITER dlmtr

**Explanation:** Issued if TRACEURLREAD option is on, this message indicates that the reception of an inbound

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HTTP request is being processed and indicates the progress, so far.

**User response:** None. This message indicates processing performed during HTTP request receive operations.

The variable fields of the message text are: length length of HTTP Request Message headers dlmtr delimiters marking end of HTTP header

---

**HLV7203T HTTP-RCV: HTTP  
CONTENT-LENGTH: value**

**Explanation:** Issued if TRACEURLREAD option is on, this message indicates that the reception of an inbound HTTP request is being traced.

**User response:** None. This message indicates processing performed during HTTP request receive operations.

The variable fields of the message text are: value value of Content-Length header

---

**HLV7204T VARIABLE WWW.varname NOT BUILT  
- reason**

**Explanation:** A WWW. event variable was not built during URL parsing for the reason indicated.

**User response:** Correct the HTML input form used to transmit the inbound data, and re-submit.

The variable fields of the message text are: varname variable not built reason reason why variable not built

---

**HLV7205T SSL ACCEPT FAILED - RC=rc1  
REAS=rscd - ENCLAVE RC=rc2  
FEEDBACK=(fc1 fc2 fc3)**

**Explanation:** A pending SSL connection could not be accepted by the server due to a validation failure or a failure within the SSL connection handling engine. This error reports the failure.

**User response:** Check for other messages indicating the cause of the termination, and resolve the problem, if possible.

The variable fields of the message text are: rc1 SSL acceptance code return code rscd SSL acceptance code reason code rc2 LE/370 enclave manager return code fc1 LE/370 enclave termination feedback codes fc2 LE/370 enclave termination feedback codes fc3 LE/370 enclave termination feedback codes

---

**HLV7206T SSL READ FAILED RC=rc1 REAS=rc2 -  
ENCLAVE RC=rc3 FEEDBACK=(fc1 fc2  
fc3)**

**Explanation:** A RECEIVE request on an SSL connection failed due to a validation failure or a failure

within the SSL connection engine. This error reports the failure.

**User response:** Check for other messages indicating the cause of the termination, and resolve the problem, if possible.

The variable fields of the message text are: rc1 SSL read return code rc2 SSL read return code rc3 LE/370 enclave manager return code fc1 LE/370 enclave termination feedback codes fc2 LE/370 enclave termination feedback codes fc3 LE/370 enclave termination feedback codes

---

**HLV7207T SSL WRITE FAILED RC=rc1 REAS=rc2 -  
ENCLAVE RC=rc3 FEEDBACK=(fc1 %4  
fc3)**

**Explanation:** A SEND request on an SSL connection failed due to a validation failure or a failure within the SSL connection engine. This error reports the failure.

**User response:** Check for other messages indicating the cause of the termination, and resolve the problem, if possible.

The variable fields of the message text are: rc1 SSL write return code rc2 SSL write return code rc3 LE/370 enclave manager return code fc1 LE/370 enclave termination feedback codes fc2 LE/370 enclave termination feedback codes fc3 LE/370 enclave termination feedback codes

---

**HLV7208T SSL CLOSE FAILED RC=rc1 REAS=rc2 -  
ENCLAVE RC=rc3 FEEDBACK=(fc1 fc2  
fc3)**

**Explanation:** A CLOSE request on an SSL connection failed due to a validation failure or a failure within the SSL connection engine. This error reports the failure.

**User response:** Check for other messages indicating the cause of the termination, and resolve the problem, if possible.

The variable fields of the message text are: rc1 SSL close return code rc2 SSL close return code rc3 LE/370 enclave manager return code fc1 LE/370 enclave termination feedback codes fc2 LE/370 enclave termination feedback codes fc3 LE/370 enclave termination feedback codes

---

**HLV7209T var1 var2 var3 var4 var5**

**Explanation:** The message is used to issue various warning messages when unusual conditions are detected during the parse of an inbound HTTP request.

**User response:** None.

The variable fields of the message text are: var1 variable information var2 variable information var3 variable information var4 variable information var5 variable information

---

**HLV7210T SERVER VARIABLE varname SKIPPED BY GLVSTATE. PROCESSING**

**Explanation:** The indicated inbound HTML query variable or HTTP cookie variable was not processed as expected to re-create a GLVSTATE. information set.

**User response:** Processing of the inbound HTTP request continues; however, subsequent processing of the transaction may encounter problems in the absence of the GLVSTATE. set.

The variable fields of the message text are: varname query (VAR.) or cookie variable name

---

**HLV7211T SSL CONNECT FAILED - RC=rc1 REAS=rc2 - ENCLAVE RC=rc3 FEEDBACK=(fc1 fc2 fc3)**

**Explanation:** A attempt to establish an SSL connection failed due to a validation failure or a failure within the SSL connection handling engine. This error reports the failure.

**User response:** Check for other messages indicating the cause of the termination, and resolve the problem, if possible.

The variable fields of the message text are: rc1 SSL acceptance code return code rc2 SSL acceptance code reason code rc3 LE/370 enclave manager return code fc1 LE/370 enclave termination feedback codes fc2 LE/370 enclave termination feedback codes fc3 LE/370 enclave termination feedback codes

---

**HLV7212T RELEASE OF SPECIALLY SIZED type AT addr1 FOR OPPr AT addr2 FAILED WITH RC=rc**

**Explanation:** During end-of-transaction cleanup, an oversized SEF work area could not be freed and has been orphaned. The oversized work area had been allocated during execution of the previous transaction through the use of the WORKSIZE() of QUEUESIZE() keywords of a WWW rule. Oversized areas are only freed when thread reuse is in effect, since they are otherwise released by end of task processing.

**User response:** Check for other messages indicating the cause of the termination, and resolve the problem, if possible. Contact Software Support if this error cannot be resolved locally.

The variable fields of the message text are: type type of SEF work area addr1 address of SEF work area addr2 address of owning process block rc return code from release service

---

**HLV7213T SSL READ: text**

**Explanation:** Issued if TRACEURLREAD option is on, this message indicates that the reception of an inbound HTTP request is being traced. This message is generated by the SSL receive routines.

**User response:** None. This message indicates processing performed during HTTP request receive operations.

The variable fields of the message text are: text text describing operation

---

**HLV7214T MAXIMUM NUMBER OF QUERY VARIABLES(cnt) EXCEEDED - INBOUND REQUEST CANNOT BE PARSED**

**Explanation:** This message indicates that the inbound HTTP request contains more query variable name/value pairs than the the server is able to parse. The maximum number of variables that can effectively be handled is given in the message.

**User response:** The server aborts parsing of the current HTTP request and responds with an HTTP 400 status message, indicating that the inbound request message is invalid. In order to correct the problem, you will need to redesign your application so that it transmits fewer query variables with any single inbound request.

The variable fields of the message text are: cnt maximum query variable count

---

**HLV7215T CANNOT DECODE DBCS QUERY DATA 'data'**

**Explanation:** This message indicates that the inbound HTTP request contains an ASCII encoded string that could not be decoded by the server and converted to EBCDIC.

**User response:** The query data is set to include only the portion of the string that could be converted to EBCDIC. Set the DECODETRACE parameter to YES, and rerun the transaction. Contact Software Support if you cannot determine the reason (invalid ISO-2022-JP or Shift-JIS encoding) for the failure.

The variable fields of the message text are: data ASCII query data

---

**HLV7216T SSL ACCEPT LEFT count UNCONSUMED LOOK-AHEAD BYTES - REJECTING SESSION**

**Explanation:** This message indicates that the SSL accept processing completed normally, except that some received bytes were unconsumed from the look-ahead receive buffer during acceptance processing. Since SSL Accept processing involves real-time certificate and key negotiation, no look-ahead bytes should have remained.

**User response:** This is probably due to a logic error in the server. Contact Software Support.

The variable fields of the message text are: count un-consumed look-ahead byte count

---

**HLV7217T HTTP-RECV: HTTP  
TRANSFER-ENCODING: value**

**Explanation:** Issued if TRACEURLREAD option is on, this message indicates that the reception of an inbound HTTP request is being traced.

**User response:** None. This message indicates processing performed during HTTP request receive operations.

The variable fields of the message text are: value value of Content-Length header

---

**HLV7218T HTTP-RECV: HTTP CONTENT  
CHUNK LENGTH: value**

**Explanation:** Issued if TRACEURLREAD option is on, this message indicates that the reception of an inbound HTTP request is being traced.

**User response:** None. This message indicates processing performed during HTTP request receive operations.

The variable fields of the message text are: value value of Content-Length header

---

**HLV7230T WEB BUFFER FLUSH ATTEMPTED IN  
X-MEM MODE BY mod+off**

**Explanation:** A Web transaction program has issued a flush request to transmit outbound response buffers. The caller is operating in cross-memory mode, and the request cannot be serviced. The buffer flush request is ignored.

**User response:** Check for other messages that might indicate the cause of the error.

The variable fields of the message text are: mod calling module name off offset of calling routine

---

**HLV7231T SWSEND REQUESTS EXCEPT PURGE  
OR FLUSH ARE INVALID  
FOLLOWING SWSFILE(SEND)  
REQUEST**

**Explanation:** A Web transaction program has issued a request to buffer additional outbound response data, but this request follows completion of an SWSFILE(SEND) operation. Because SWSFILE(SEND) has generated HTTP response headers specifying total response size, no additional data can be output unless the file-send request is first purged from the output buffers or flushed to the client.

**User response:** Check for other messages that might indicate the cause of the error, and correct the problem.

---

**HLV7232T HTTP RESPONSE BUFFER LIMIT  
(value) EXCEEDED - SWSEND WILL  
ISSUE USER ABEND X'722'**

**Explanation:** The total number of concurrently held output buffers for a single HTTP response has exceeded the MAXHTTPRESPBUFFERS limit. This may be due to a runaway transaction procedure or simply to unexpectedly large output.

**User response:** The SWSEND API routine issues a user abend X'722' to begin cancellation of the Web transaction subtask. If your program is expected to generate excessive output, raise the MAXHTTPRESPBUFFERS limit.

The variable fields of the message text are: value current response byte limit value

---

**HLV7233T HTTP RESPONSE BYTE LIMIT (value)  
EXCEEDED - SWSEND WILL ISSUE  
USER ABEND X'722'(1826)**

**Explanation:** The total number of bytes output as part of a single HTTP response has exceeded the MAXHTTPRESPBYTES limit. This may be due to a runaway transaction procedure or simply to unexpectedly large output.

**User response:** The SWSEND API routine issues an user abend X'722' to begin cancellation of the Web transaction subtask. If your program is expected to generate excessive output, raise the MAXHTTPRESPBYTES limit.

The variable fields of the message text are: value current response byte limit value

---

**HLV7240T USER-SPECIFIED CONTENT-LENGTH  
DIFFERENT THAN CALCULATED  
LENGTH. USER LENGTH = value,  
CALCULATED LENGTH = length**

**Explanation:** A Web transaction program has created a Content-Length HTTP header with a length that is different than the calculated length of the data being transmitted. The product Server will use the content length specified by the user. If persistent session support (KEEPALIVE) is enabled, the server will generate a Connection: Close header to guard against problems that might be associated with sending the incorrect message body length value.

**User response:** Ensure that the user-generated Content-Length HTTP header does not include the length of the user-generated HTTP headers and correctly represents the length of the data being transmitted.

The variable fields of the message text are: value user-generated Content-Length value length Server calculated length



---

**HLV7250E OPISTBRU FUNCTION TERMINATED:  
reason**

**Explanation:** A product display function was invoked improperly

**User response:** Correct the invocation parameter list, and re-run.

The variable fields of the message text are: reason  
reason for termination

---

**HLV7251T UNKNOWN OR INVALID COOKIE  
FOUND. msg : text**

**Explanation:** During execution of OPISTBRU, an unrecognizable or unknown cookie was received.

**User response:** None. This is a warning message. The unknown cookie is ignored, and the product defaults are used.

The variable fields of the message text are: msg short  
description / (continued) text cookie text

---

**HLV7252T ONE OR MORE INVALID COOKIE  
VALUE FOUND. field : value**

**Explanation:** During execution of OPISTBRU, one or more cookie fields were defaulted because the value of the cookie field was invalid.

**User response:** None. This is a warning message. The invalid cookie field is ignored, and the product default for the field is used.

The variable fields of the message text are: field cookie  
field value cookie value

---

**HLV7253T INVALID COOKIE FORMAT num  
INVALID VARIABLES FOUND: value**

**Explanation:** During execution of OPISTBRU, the stated number of cookie fields were defaulted because the cookie field was of invalid format. A 7252T message is issued for each invalid cookie field prior to the issuing of this message.

**User response:** None. This is a warning message. The invalid cookie field(s) are ignored, and the product default(s) for the field(s) are used.

The variable fields of the message text are: num  
number of invalid cookie fields value cookie value

---

**HLV7254T TIMESTAMP UNRECOGNIZABLE IN  
RFC1123, RFC850 OR ANSI C  
ASCTIME() FORMAT 'time'**

**Explanation:** While parsing an HTTP request or response header, the timestamp value could not be parsed to yield a valid timestamp. This may be a browser dependency beyond the server's control.

**User response:** None. The server assumes no value is

specified for the corresponding request or response header.

The variable fields of the message text are: time  
timestamp string which could not be parsed

---

**HLV7255T VALUE OF 'varname' IS IMPROPERLY  
ENCODED: reason**

**Explanation:** While parsing an HTTP request, an SWSECRET\_ query value was detected. The server cannot decrypt the information for the reason indicated. Note that query variables sent out to a browser before a product restart become stale and cannot be decrypted following a restart.

**User response:** None. The server rejects the badly formed or invalid query variable and subsequently rejects the transaction with a 400 (bad request) HTTP status message.

The variable fields of the message text are: varname  
query variable name reason reason for decryption error

---

**HLV7300I Invalid command syntax: msg**

**Explanation:** A host command statement was invalid or could not be parsed for the reason indicated. The error was detected during initial command syntax scanning.

**User response:** Correct the command statement and re-submit.

The variable fields of the message text are: msg  
message describing the syntax error

---

**HLV7301S subsys is an invalid subsystem name**

**Explanation:** The subsystem name coded is not valid.

**User response:** Subsystem names must be four characters long and must begin with the correct product ID. The fourth character can be any character in the range A-Z.

The variable fields of the message text are: subsys the  
erroneous subsystem name

---

**HLV7302I Parser routine (OPSXPR) failed with  
RC=rc**

**Explanation:** A host command statement was invalid because the general text parsing routines failed without returning a reason for the failure.

**User response:** Contact Software Support.

The variable fields of the message text are: rc return  
code issued by parser routine

---

---

**HLV7303S    obj IS AN INVALID OBJECT FOR verb**

**Explanation:** You have entered an invalid command / object combination for the SHLV statement.

**User response:** Correct the command, and rerun.

The variable fields of the message text are: obj the name of the unknown SHLV object verb verb from command statement

---

**HLV7304I    oper1 KEYWORD MUST BE SPECIFIED FOR 'verb name' STATEMENT**

**Explanation:** A host command statement was invalid because an operand that is required for this type of command statement was omitted.

**User response:** Correct the command statement, and re-submit.

The variable fields of the message text are: oper1 operand which must be specified verb verb from command statement name entity name from command statement

---

**HLV7305I    oper1 KEYWORD MUST reason - SHOULD BE type**

**Explanation:** A host command statement was invalid because an operand value was invalid.

**User response:** Correct the command statement, and re-submit.

The variable fields of the message text are: oper1 operand which is invalid as coded reason reason why operand is invalid type required operand value type

---

**HLV7306I    EITHER oper1 OR oper2 KEYWORD MUST BE SPECIFIED FOR 'verb name' STATEMENT**

**Explanation:** A host command statement was invalid because neither of the indicated operands was coded. At least one is required.

**User response:** Correct the command statement, and re-submit.

The variable fields of the message text are: oper1 operand which may be specified oper2 operand which may be specified verb verb from command statement name entity name from command statement

---

**HLV7307I    oper1 KEYWORD INVALID FOR 'verb name' STATEMENT**

**Explanation:** A host command statement was invalid because an operand was coded that is not valid for the command statement type.

**User response:** Correct the command statement, and re-submit.

The variable fields of the message text are: oper1 operand which must be omitted verb verb from command statement name entity name from command statement

---

**HLV7308I    ONLY oper1 KEYWORD ALLOWED FOR 'verb name' STATEMENT**

**Explanation:** A host command statement was invalid because an operand was coded that cannot be used for this type of command. Code only the single keyword operand indicated.

**User response:** Correct the command statement, and re-submit.

The variable fields of the message text are: oper1 allowable, optional operand verb verb from command statement name entity name from command statement

---

**HLV7309I    oper1 KEYWORD MUST BE value info**

**Explanation:** A host command statement was invalid because an operand was not valid. The allowed format for the keyword operand is given.

**User response:** Correct the command statement, and re-submit.

The variable fields of the message text are: oper1 invalid keyword operand value valid values for keyword operand info additional information

---

**HLV7310S    cmd1 IS AN INVALID cmd2 COMMAND**

**Explanation:** The command you have coded is unknown.

**User response:** Enter a correct command, and rerun.

The variable fields of the message text are: cmd1 the command that was entered. cmd2 SHLV command name

---

**HLV7311S    cmd1 subsystem subsystem is not active**

**Explanation:** The indicated subsystem is not running. The address SHLV function cannot continue.

**User response:** Start the subsystem (or use the SUBSYS command to identify another subsystem), and rerun the command.

The variable fields of the message text are: cmd1 SHLV command name subsystem the name of the subsystem to be used

---

**HLV7312S    'verb name' STATEMENT FAILED WITH RC = rc**

**Explanation:** The requested operation failed severely.

**User response:** There is probably some sort of internal error. Contact Software Support.

The variable fields of the message text are: verb verb  
from command statement name entity name from  
command statement rc the product routine return code

---

**HLV7313S Authorization check failed for 'verb  
name' statement**

**Explanation:** A host command statement authorization check routine found that the current user is not authorized to execute the command statement. Access to execute the statement is denied.

**User response:** Check the variables of the error message text for the command statement whose access is denied. Ensure that the current user has the required access. Contact your security systems administrator for further help, if necessary.

The variable fields of the message text are: verb verb  
from command statement name entity name from  
command statement

---

**HLV7314S parm is not a valid product parameter  
name**

**Explanation:** The parameter name is not a valid, recognized product parameter.

**User response:** Correct the parameter name, and rerun.

The variable fields of the message text are: parm the  
parameter name

---

**HLV7315S parmval is not a valid value for parm**

**Explanation:** The parameter value is not valid for this parameter.

**User response:** Correct the value, and rerun.

The variable fields of the message text are: parmval the  
erroneous parameter value parm the parameter name

---

**HLV7316E name value does not exist**

**Explanation:** The entity defined by name is not yet defined; therefore, it cannot be modified.

**User response:** Either define the entity or remove the MODIFY.

The variable fields of the message text are: name entity  
name from command statement value the value of the  
identifying keyword

---

**HLV7317E name value is already defined**

**Explanation:** The indicated entry has already been defined.

**User response:** Determine which definition is correct, and rerun.

The variable fields of the message text are: name entity

name from DEFINE command statement value the  
value of the identifying keyword

---

**HLV7318S INVALID UPDATE ATTEMPT FOR  
name**

**Explanation:** An invalid update attempt has been detected.

**User response:** Remove the keywords in error, and rerun the command.

The variable fields of the message text are: name entity  
name from command statement

---

**HLV7319I DDNAME %1 is not allocated to  
product address space**

**Explanation:** The indicated ddname is not allocated to the product address space.

**User response:** The attempt to define the file fails. Add a DD statement to the product start-up JCL for the indicated file, and restart the product.

---

**HLV7320I DSNAME(dsn) MUST BE A PDS(E)  
DATA SET**

**Explanation:** The indicated data set is not a PDS or PDSE data set.

**User response:** The attempt to define the file or ruleset fails. Change the DSNAME() keyword to correct the error.

The variable fields of the message text are: dsn dsname  
that is not valid

---

**HLV7321I RULESET ind NOT rule**

**Explanation:** The indicated ruleset definition was processed.

**User response:** This message logs definitions of or changes to SEF ruleset definitions.

The variable fields of the message text are: ind  
indicator (indicates whether ruleset was DEFINED or  
MODIFIED) rule ruleset name that was defined or  
modified

---

**HLV7322H jb HAS QUEUED RULESET(ruleset) text  
FOR PROCESSING BY SEF**

**Explanation:** The job or user indicated issued a critical configuration change command that was successfully scheduled for processing by the SEF task. The SEF task will indicate the outcome of the request.

**User response:** Information only. This message is sent to the hardcopy console log.

The variable fields of the message text are: ruleset  
name of ruleset text definitions or modification

---

**HLV7323H SUPERVISOR STATE REQUIRED FOR 'verb1 verb2' COMMAND**

**Explanation:** The indicated command can only be processed by a real started-task copy of the product because supervisor state is required to perform the indicated action.

**User response:** Information only. This message is sent to the hardcopy console log.

The variable fields of the message text are: verb1 command verb verb2 command verb entity

---

**HLV7324I oper1 KEYWORD CONTAINS INVALID CHARACTER(S) AT OFFSET loff OF THE STRING**

**Explanation:** A host command statement was invalid because an operand was not valid. An invalid character or combination of characters was found at the indicated offset within the operand string.

**User response:** Correct the command statement, and re-submit.

The variable fields of the message text are: oper1 invalid keyword operand loff offset where invalid character(s) found

---

**HLV7325E oper1 IS INVALID IN COMBINATION WITH oper2 FOR 'verb name' STATEMENT**

**Explanation:** A host command statement was invalid because the specified parameters conflict.

**User response:** Correct the command statement, and re-submit.

The variable fields of the message text are: oper1 operand which was specified oper2 operand which was specified verb verb from command statement name entity name from command statement

---

**HLV7326E oper1 MUST BE SPECIFIED IN COMBINATION WITH oper2 FOR 'verb name' STATEMENT**

**Explanation:** A host command statement was invalid because a required parameter was not specified

**User response:** Correct the command statement, and re-submit.

The variable fields of the message text are: oper1 operand which was specified oper2 operand which was missing verb verb from command statement name entity name from command statement

---

**HLV7327E oper1 VALUE MUST BE error THAN oper2 FOR 'verb name' STATEMENT**

**Explanation:** A host command statement was invalid because the specified parameters conflict.

**User response:** Correct the command statement, and re-submit.

The variable fields of the message text are: oper1 operand which was specified oper2 operand which was specified error error condition verb verb from command statement name entity name from command statement

---

**HLV7328E oper VALUE 'value' INVALID - error FOR 'verb name' STATEMENT**

**Explanation:** A host command statement was invalid because the specified parameters is invalid

**User response:** Correct the command statement, and re-submit.

The variable fields of the message text are: oper operand name value invalid value error error condition verb verb from command statement name entity name from command statement

---

**HLV7329S Not configured for "verb name" statement.**

**Explanation:** None.

**User response:** Contact IBM Software Support.

---

**HLV7330S name RULESET DEFINITION REJECTED - var2 var3 var4**

**Explanation:** The ruleset definition is invalid because of the indicated condition. The definition is discarded.

**User response:** Correct the ruleset definition and restart the server

The variable fields of the message text are: name ruleset name var2 variable text var3 variable text var4 variable text

---

**HLV7331S name SHARED FILE DEFINITION REJECTED - var2 var3 var4**

**Explanation:** The file definition is invalid because of the indicated condition. The definition is discarded.

**User response:** Correct the shared file definition and restart the server

The variable fields of the message text are: name ruleset name var2 variable text var3 variable text var4 variable text

---

---

**HLV7333T Authorization check failed for 'verb name' statement**

**Explanation:** A host command statement authorization check routine found that the current user is not authorized to execute the command statement. Access to execute the statement is denied.

**User response:** Check the variables of the error message text for the command statement whose access is denied. Ensure that the current user has the required access. Contact your security systems administrator for further help, if necessary.

The variable fields of the message text are: verb verb from command statement name entity name from command statement

---

**HLV7400T 'varname' INVALID GLVSTATE. VARIABLE - reason info**

**Explanation:** The indicated variable is not a valid GLVSTATE. prefix variable. See information on the automated state management facility for information on proper variable name formats.

**User response:** Correct the variable name, and rerun the exec or program.

The variable fields of the message text are: varname variable name reason reason for validity check info additional feedback or error information

---

**HLV7401T 'set' DOES NOT EXIST AND CANNOT BE service**

**Explanation:** An attempt to perform a control operation on a named state information set failed because the set is not known to the system.

**User response:** The current request is ignored.

The variable fields of the message text are: set set name service operation being requested

---

**HLV7402T 'value' IS NOT A VALID VALUE FOR THE 'varname' VARIABLE**

**Explanation:** The value indicated is not a valid value type for the variable identified.

**User response:** Correct the variable value, and rerun the exec or program.

The variable fields of the message text are: value value varname variable

---

**HLV7403T 'set' IS A READ-ONLY VARIABLE AND CANNOT BE UPDATED**

**Explanation:** The update attempt for the named state information set failed because the indicated variable is read-only.

---

**User response:** Remove the update attempt for the variable.

The variable fields of the message text are: set set name

---

**HLV7404T 'GLVSTATE.set' MUST BE ACTIVE BEFORE UPDATE TO 'varname'**

**Explanation:** The indicated variable does not belong to an active named state information set. The GLVSTATE. group has expired or has never been created.

**User response:** Create the set before attempting to set the variable.

The variable fields of the message text are: set set name varname variable which is a part of non-existing set

---

**HLV7405T 'varname' REQUIRES A NUMERIC VALUE - FOUND 'value'**

**Explanation:** The indicated variable requires a numeric value in order to update its value.

**User response:** Correct the variable specification, and rerun the exec or program.

The variable fields of the message text are: varname variable name value value passed on assignment

---

**HLV7406T 'varname' ADJUSTED FROM value1 TO MINIMUM VALUE OF value2 for '%4'**

**Explanation:** The indicated variable was adjusted because the value being set was lower than the minimum. The minimum value is used, instead.

**User response:** Correct the variable specification, and rerun the exec or program.

The variable fields of the message text are: varname variable name value1 value passed on assignment value2 minimum value used as an override

---

**HLV7407T 'varname1' IN 'varname2' MUST BE ALPHAMERIC, BEGIN ALPHA OR AN INTEGER 0-N**

**Explanation:** The indicated variable is not valid for use as a GLVSTATE. user-assigned name. In GLVSTATE.name, name must be less than eight (8) bytes in length, begin alphabetic, and consist of only letters and numbers. The read-only variables, GLVEVENT.0 through GLVEVENT.n, are also valid but do not designate a named state variable set.

**User response:** Correct the variable specification, and rerun the exec or program.

The variable fields of the message text are: varname1 variable name 2nd qualifier varname2 variable name

---

---

**HLV7408T 'qual' ALREADY EXISTS**

**Explanation:** The indicated GLVSTATE.name group already exists. An attempt was made to assign NEW to the control variable. Such an attempt is taken as an unconditional create-set request for a set that must not previously exist.

**User response:** The NEW create-set request is rejected with an error. Interrogate GLVSTATE.name before issuing a request if a previously created set might exist.

The variable fields of the message text are: qual GLVSTATE.name set qualifier

---

**HLV7409T ++++++ request varname Diagnostic WWST Trace ++++++**

**Explanation:** An internal-use diagnostic trace is being produced. Various internal state-related control blocks will be formatted and written to Trace Browse.

**User response:** None. For use by Software Support.

The variable fields of the message text are: request GLVSTATE. operation request type varname GLVSTATE. variable name to be operated on

---

**HLV7410T SERVER TOKEN CREATE/DELETE SERVICE FAILED RC=rc - GLVSTATE.set UPDATE WILL FAIL**

**Explanation:** An internal service failed to create/delete a server token needed to manage a GLVSTATE. variable set. The current GLVSTATE. update request will be failed in one of two ways: (1) as though the update were to an invalid variable field name or (2) as a HALT error. The failure method depends on the type of update.

**User response:** Check for other messages related to this failure, and contact Software Support.

The variable fields of the message text are: rc return code from token create service set GLVSTATE.name is the state set name

---

**HLV7411T REQUEST VARIABLE 'varname' INVALID AUTOMATED STATE TRANSPORT - reason**

**Explanation:** During Web transaction initialization, an HTML query variable or HTTP request header cookie was found with a name beginning with SWSSTATE\_XXXXXXX or SWSTOKEN\_XXXXXXX. All query variables and cookies with names in this form are reserved for automated processing of state information.

**User response:** The server bypasses built-in handling for this variable, which may result in improper sessions state management activities. A variable in this form is also rejected if the XXXXXXX portion is invalid. To be valid, the customer-assigned name must be 1 to 8 bytes

in length; begin with an alphabetic character; and contain only alphabetic characters, the digits 0 through 9, and the underbar character.

The variable fields of the message text are: varname query/cookie variable being bypassed reason reason why query or cookie variable rejected

---

**HLV7412T 'varname' BYPASSED BY ASMF - DUPLICATE GLVSTATE.set SET ALREADY EXISTS**

**Explanation:** During Web transaction initialization, an HTML query variable and/or HTTP request header cookie that contains built-in management information for a GLVSTATE. information set was found. Information for this GLVSTATE. set has already been received from another query variable or cookie within this inbound request.

**User response:** The server bypasses built-in handling for this variable and uses only the first GLVSTATE. restoration information. Note that this can occur if you include the same GLVSTATE.xxxxxxxx information in both an HTML form field and an HTTP cookie or if the browser transmits two HTTP cookies with the same name.

The variable fields of the message text are: varname name of inbound variable being skipped set name of GLVSTATE. set duplicated

---

**HLV7413T VARIABLE 'varname' DOES NOT CONTAIN A VALID SERVER TOKEN ID - reason**

**Explanation:** During Web transaction initialization, an HTML query variable or HTTP request header cookie was found with a name beginning with SWSTOKEN\_XXXXXXX. All query variables and cookies with names of this form are reserved for built-in GLVSTATE. processing. However, the contents of this element did not contain the expected displayable, hexadecimal, 24-byte token id value that was expected.

**User response:** The erroneous information is not used, the inbound query or cookie information is ignored, and no GLVSTATE. information set is created.

The variable fields of the message text are: varname query or cookie variable name reason reason why value data is invalid

---

**HLV7414T varname VARIABLE DOES NOT CONTAIN VALID INFORMATION TO RECONSTRUCT GLVSTATE.set - reason**

**Explanation:** During Web transaction initialization, an HTML cookie variable was found with a name beginning with SWSSTATE\_. The value data, however, does not appear to be formatted as expected for restoration of a GLVSTATE. set. Note that this can

occur for incorrect length information, bad encoding of the data, or some other input anomaly.

**User response:** The erroneous information is not used, the inbound cookie information is ignored, and no GLVSTATE. information set is created for this variable.

The variable fields of the message text are: varname name of inbound query/cookie variable set name of GLVSTATE. set reason reason why value data invalid

**HLV7415T SERVER TOKEN ID (token) REUSED IMPROPERLY FOR GLVSTATE.set1/ GLVSTATE.set2 SETS**

**Explanation:** During Web transaction initialization, an HTML query variable or HTTP request header cookie was found with a name beginning with SWSSTATE\_xxxxxxx. All query variables and cookies with names of this form are reserved for built-in GLVSTATE. processing. However, the contents of this element contained an indication that a token id had been improperly re-used.

**User response:** This is a logic error. The server generates an SOC3 abend. Contact Software Support for assistance.

The variable fields of the message text are: token re-used token id value set1 name of GLVSTATE. set from token set2 name of GLVSTATE. set from query variable

**HLV7416T GLVSTATE.set NOT RECONSTRUCTED FOR TOKENID=token DUE TO ERROR errmsg**

**Explanation:** During Web transaction initialization, an HTML query variable or HTTP request header cookie was found with a name beginning with SWSTOKEN\_xxxxxxx. All query variables and cookies with names of this form are reserved for built-in GLVSTATE. processing. However, a server-side token could not be retrieved due to an internal error, and this GLVSTATE. set is being bypassed.

**User response:** This could be due to a storage shortage or other problem. The state information is handled as though the token has expired.

The variable fields of the message text are: set name of GLVSTATE. set token token id for which retrieval failed errmsg error found while accessing token data

**HLV7417T AUTOMATED STATE MGMT MODULE (OPASMF) - INVALID PLIST plist**

**Explanation:** The automated state management routine, OPASMF, was invoked with an invalid parameter list.

**User response:** The module generates an SOC3 abend

to terminate the request. Contact Software Support.

The variable fields of the message text are: plist image of parameter list in HEX

**HLV7418T 'GLVSTATE.suffix' MUST EXIST BEFORE UPDATE TO 'varname'**

**Explanation:** The indicated GLVSTATE. collection does not exist. It must be created before the update to any collection member can be performed.

**User response:** Create the set before attempting to set the variable.

The variable fields of the message text are: suffix set name or index number varname variable for which update requested

**HLV7419T UPDATE TO 'csym' NOT ALLOWED FOR GLVSTATE.collect COLLECTION WITH STATUS='st'**

**Explanation:** The indicated GLVSTATE. collection is currently flagged as being in a status that does not allow updates. Change the collection to ACTIVE status either by resetting it or by deleting and re-creating it.

**User response:** The current request is rejected.

The variable fields of the message text are: csym collection symbol being updated collect collection name st current set status value

**HLV7420T UPDATE TO 'csym' NOT ALLOWED BECAUSE value EXCEEDS CURRENT SUBKEY COUNT OF num**

**Explanation:** The number of keyed values within the set is lower than the key-index value specified by the symbolic reference. Key-index references may not be used to create new keyed value pairs.

**User response:** The current request is rejected.

The variable fields of the message text are: csym collection symbol being updated value key index value in symbolic reference num current number of keys defined

**HLV7421T UPDATE TO 'csym' IGNORED BECAUSE GLVSTATE.collect IS A value TYPE SET WHICH DOES NOT USE HTTP COOKIES**

**Explanation:** The indicated GLVSTATE. collection does not use HTTP cookies as a transport mechanism. The current update is ignored because it does not apply to non-cookie-based information sets.

**User response:** The current request is ignored.

The variable fields of the message text are: csym collection symbol being updated collect collection name value current set type value

---

**HLV7422T UPDATE TO 'csym' IGNORED BECAUSE GLVSTATE.collect IS A value TYPE SET WHICH DOES NOT USE SERVER-SIDE TOKENS**

**Explanation:** The indicated GLVSTATE. collection does not use tokens as an indirect storage mechanism. The current update is ignored because it does not apply to non-token-based information sets.

**User response:** The current request is ignored.

The variable fields of the message text are: csym collection symbol being updated collect collection name value current set type value

---

**HLV7423T VALUE ASSIGNED TO 'csym' TRUNCATED BECAUSE field MAXIMUM LENGTH IS size**

**Explanation:** The indicated GLVSTATE. variable value that was being assigned was truncated because only lengths up the size given are supported.

**User response:** The current request is ignored.

The variable fields of the message text are: csym collection symbol being updated field field usage size maximum size for this field

---

**HLV7425T UPDATE OF 'csym' IGNORED - TOKEN WITH ID=token HAS ALREADY EXPIRED**

**Explanation:** The indicated GLVSTATE. variable value update failed because the indicated token has already expired.

**User response:** The current request is rejected with an error.

The variable fields of the message text are: csym collection symbol being updated token token id for which update required

---

**HLV7426T 'collect' HAS BEEN RESET**

**Explanation:** The indicated GLVSTATE. information set has been reset.

**User response:** None. The request completes normally.

The variable fields of the message text are: collect set collection being reset

---

**HLV7427T NO "SET-COOKIE:" SENT FOR GLVSTATE.set - COOKIE WOULD EXCEED 4K MAX. SIZE**

**Explanation:** The indicated GLVSTATE. information set has not been used to generate an outbound HTTP Set-cookie: response because the total length of the value data, once encoded, exceeds the maximum 4k allowed by the Netscape cookie specification for the

size of the name/value pair.

**User response:** The indicated state set is bypassed.

The variable fields of the message text are: set state information set name

---

**HLV7428T ERROR WHILE BUILDING SET-COOKIE: RESPONSE FOR GLVSTATE.set - RC=rc**

**Explanation:** An error was encountered while building an outbound Set-cookie: response header for the indicated state information set.

**User response:** Buffer flush processing continues.

The variable fields of the message text are: set state information set name rc return code from response handler

---

**HLV7429T VARIABLE varname CONTAINS INVALID SERVER TOKENID ID WHICH MAY BE SPOOF ATTEMPT (ID=token)**

**Explanation:** An error was encountered while attempting to restore saved state information using a server-side token id. The characteristics of the error encountered MAY indicate an attempt to spoof a server token id value, although this is by no means certain. If the error occurs frequently, you may wish to investigate this possibility further.

**User response:** The server token id is handled as though it designates an expired token from which no application data values can be restored.

The variable fields of the message text are: varname query or cookie variable from request token token id that was in error

---

**HLV7500I msg**

**Explanation:** This is a generic message used for informational level messages from RPC programs using the SWSWTO function.

**User response:** None.

The variable fields of the message text are: msg user supplied message

---

**HLV7501W msg**

**Explanation:** This is a generic message used for warning level messages from RPC programs using the SWSWTO function.

**User response:** None.

The variable fields of the message text are: msg user supplied message

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**HLV7502S** msg

**Explanation:** This is a generic message used for severe level messages from RPC programs using the SWSWTO function.

**User response:** None.

The variable fields of the message text are: msg user supplied message

---

**HLV7503H** msg

**Explanation:** This is a generic message used for hardcopy level messages from RPC programs using the SWSWTO function.

**User response:** none.

The variable fields of the message text are: msg user supplied message

---

**HLV8000E** Java JVM feature is not configured.

**Explanation:** None.

**User response:** Contact IBM Software Support.

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**HLV8002E** Unable to get the JVM Profile List from the Local Registry.

**Explanation:** Unable to get the JVM Profile List from the Local Registry.

**User response:** Make sure the Registry is defined to the product.

---

**HLV8003E** Unable to build JVM Profile List.

**Explanation:** Unable to build JVM Profile List.

**User response:** Contact Software Support.

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**HLV8004E** Unable to allocate latch for JVM profile.

**Explanation:** Unable to build JVM Profile List.

**User response:** Contact Software Support.

---

**HLV8900E** reason var1 var2 var3 var4 var5 var6 var7 var8

**Explanation:** An error was encountered while attempting to initialize a task runtime environment for C-language main product routines.

**User response:** The runtime environment is not initialized. Check for other messages that might indicate the cause of the failure, and contact Software Support.

The variable fields of the message text are: reason reason for failure var1 variable information or text var2 variable information or text var3 variable information or text var4 variable information or text var5 variable

---

information or text var6 variable information or text var7 variable information or text var8 variable information or text

---

**HLV8901T** desc var1 var2 var3 var4 var6 var6 var7 var8

**Explanation:** While initializing the C-language runtime environment, statistical tracing is enabled. This message is used to trace out information about the environment.

**User response:** Initialization processing continues.

The variable fields of the message text are: desc description of traced information var1 variable information or text var2 variable information or text var3 variable information or text var4 variable information or text var6 variable information or text var6 variable information or text var7 variable information or text var8 variable information or text

---

**HLV8902W** errmsg var1 var2 var3 var4 var5 var6 var7 var8

**Explanation:** A correctable error was detected while initializing a task runtime environment for C-language main product routines.

**User response:** The runtime environment is initialized after the error is corrected.

The variable fields of the message text are: errmsg error detected var1 variable information or text var2 variable information or text var3 variable information or text var4 variable information or text var5 variable information or text var6 variable information or text var7 variable information or text var8 variable information or text

---

**HLV8903T** desc var1 var2 var3 var4 var5 var6 var7 var8

**Explanation:** While terminating the C-language runtime environment, statistical tracing is enabled. This message is used to trace out information about the environment.

**User response:** Termination processing continues.

The variable fields of the message text are: desc description of traced information var1 variable information or text var2 variable information or text var3 variable information or text var4 variable information or text var5 variable information or text var6 variable information or text var7 variable information or text var8 variable information or text

---

**HLV8904W** errmsg var1 var2 var3 var4 var5 var6 var7 var8

**Explanation:** A correctable error was detected while

terminating a task runtime environment for C-language main product routines.

**User response:** The runtime environment is terminated if the error is correctable. Otherwise, the termination request will fail with a more severe error.

The variable fields of the message text are: errmsg error detected var1 variable information or text var2 variable information or text var3 variable information or text var4 variable information or text var5 variable information or text var6 variable information or text var7 variable information or text var8 variable information or text

**HLV8905E** desc var1 var2 var3 var4 var5 var6 var7 var8

**Explanation:** While terminating the C-language runtime environment, an error was encountered. Termination processing continues but may leave allocated resources orphaned.

**User response:** Termination processing continues.

The variable fields of the message text are: desc description of traced information var1 variable information or text var2 variable information or text var3 variable information or text var4 variable information or text var5 variable information or text var6 variable information or text var7 variable information or text var8 variable information or text

**HLV9000H** mod/funcc execution text

**Explanation:** This message is used to trace product termination. A message is issued before and after the execution of each termination routine.

**User response:** There is no action for this message. This message is only used for trace and debugging purposes.

The variable fields of the message text are: mod module name funcc current function code text text of the message

**HLV9001I** Subsystem ss termination complete

**Explanation:** This is the standard product termination complete message.

**User response:** No action is required.

The variable fields of the message text are: subsys subsystem name

**HLV9002E** Subsystem ss termination incomplete

**Explanation:** Product execution has terminated. However, one or more errors were detected during product termination. As a consequence, normal product termination was not possible.

**User response:** Check for any error messages issued

during termination. If possible, fix the problem identified by the error messages, and restart the product. If the problem cannot be resolved, contact Software Support. Please note the exact contents of the above error message and any other error messages associated with the product termination error.

The variable fields of the message text are: subsys subsystem name

**HLV9008S** ABEND ERROR abcd-abre AT mod+off

**Explanation:** A serious abend occurred during product initialization, execution, or termination. The abend was not recoverable, and the product was forced to terminate.

**User response:** Check the abend code and any related abend messages. If possible, fix the problem identified by the error messages, and restart the product. If the problem cannot be resolved, contact Software Support. Note the exact contents of the above error message and any other error messages associated with the product failure.

The variable fields of the message text are: abcd abend code abre abend reason code mod module name off module offset

**HLV9100T** INVALID COMBINATION OF ./ or ../ in "path"

**Explanation:** An HFS pathname string was rejected because it contains an invalid combination of ./, ../, or other characters that are not resolvable at runtime.

**User response:** If the PATH() operand of the matched-to WWW rule contains a wildcard(\*), this may indicate an attempt by a client to refer to an HFS sub-directory to which access should not be granted. This message can also result from an incorrect combination of specifications for the server DOCUMENTROOT start-up parameter, the HFSROOT() parameter on a DEFINE RULESET statement, and/or the PATH() parameter on the WWW rule definition. The transaction is rejected with a 404 (file not found) error status.

The variable fields of the message text are: path invalid pathname string

**HLV9504E** service OF desc FAILED, RC=rc, DETECTED AT ad

**Explanation:** This is a generic error message used to describe a wide variety of internal errors. The message text provides a description of the current operation and what the current operation was attempting to do.

**User response:** Check the error messages and the return code associated with this problem. There may be one or more error messages referring to the current problem. If possible, fix the problem identified by the error messages, and retry the operation. If the problem

cannot be resolved, contact Software Support.

The variable fields of the message text are: service current operation (GETMAIN, FREEMAIN, etc.) desc description rc return code

#### HLV9505I message

**Explanation:** This is a generic informational message used to clarify a wide variety of internal errors. The message text provides further info for the current operation and what the current operation was attempting to do.

**User response:** Check the error messages and the return code associated with this problem. There may be one or more error messages referring to the current problem. If possible, fix the problem identified by the error messages, and retry the operation. If the problem cannot be resolved, contact Software Support.

The variable fields of the message text are: message clarification of a previous error

#### HLV9506S service OF desc FAILED, RC=rc, DETECTED AT ad

**Explanation:** This is a generic error message used to describe a wide variety of internal errors. The message text provides a description of the current operation and what the current operation was attempting to do.

**User response:** Check the error messages and the return code associated with this problem. There may be one or more error messages referring to the current problem. If possible, fix the problem identified by the error messages, and retry the operation. If the problem cannot be resolved, contact Software Support.

The variable fields of the message text are: service current operation (GETMAIN, FREEMAIN, etc.) desc description rc return code

#### HLV9507E DATA SET dsn DOES NOT EXIST - LOCATE OF %1 FAILED, RC=rc, REASON=rscd

**Explanation:** A failure occurred during a LOCATE of a data set. The return and reason codes in the message are from the LOCATE routine.

**User response:** Check the error messages and the return code associated with this problem. There may be one or more error messages referring to the current problem. If possible, fix the problem identified by the error messages, and retry the operation. If the problem cannot be resolved, contact Software Support.

The variable fields of the message text are: dsn data set name rc return code rscd reason code

#### HLV9508E OBTAIN OF FORMAT1 DSCB FOR DSNAME dsn VOLUME vid FAILED, RC = rc, REASON CODE = rscd

**Explanation:** A failure occurred during an OBTAIN of a data set. The return and reason codes in the message are from the OBTAIN FORMAT1 DSCB routine.

**User response:** Check the error messages and the return code associated with this problem. There may be one or more error messages referring to the current problem. If possible, fix the problem identified by the error messages, and retry the operation. If the problem cannot be resolved, contact Software Support to obtain additional assistance.

The variable fields of the message text are: dsn data set name vid volume id rc return code rscd reason code

#### HLV9509E OBTAIN OF FORMAT1 DSCB FOR DSNAME dsn VOLUME vid FAILED BECAUSE DATA SET IS MIGRATED

**Explanation:** A failure occurred during an OBTAIN of a data set. The data set volser is set to MIGRAT, indicating the data set has been migrated offline.

**User response:** Check the error messages and the return code associated with this problem. There may be one or more error messages referring to the current problem. If possible, fix the problem identified by the error messages, and retry the operation. For some server functions, you may need to manually recall the data set before retrying the operation. If the problem cannot be resolved, contact Software Support to obtain additional assistance.

The variable fields of the message text are: dsn data set name vid volume id

#### HLV9511E service OF desc FAILED, RC=rc, RS=rs, DETECTED AT ad

**Explanation:** This is a generic error message used to describe a wide variety of internal errors. The message text provides a description of the current operation and what the current operation was attempting to do.

**User response:** Check the error messages and the return code associated with this problem. There may be one or more error messages referring to the current problem. If possible, fix the problem identified by the error messages, and retry the operation. If the problem cannot be resolved, contact Software Support.

The variable fields of the message text are: service current operation (GETMAIN, FREEMAIN, etc.) desc description rc return code rs reason code

---

**HLV9513E Unknown I/O var1, var2 var3 %4**

**Explanation:** An unknown service request code has been detected by the server I/O routines. The request cannot be processed and an internal ABEND will be generated to log a symptom record in LOGREC. A general error return code will be reflected to the caller.

**User response:** Check for other error messages associated with the problem. There may be one or more error messages referring to the current problem or to the component or feature issuing the request. If the problem cannot be resolved, contact Software Support to obtain additional assistance.

The variable fields of the message text are: var1 service request code var2 diagnostic information var3 diagnostic information

---

**HLV9990I var1 var2 var3 var4 var5 var6 var7 var8 var9 var10 var11**

**Explanation:** This is a generic message used to format information relating to abends detected by the product. The abend module, abend offset, abend code, and registers at the time of abend are all formatted for debugging purposes. In the case of internal errors, the reason for the internal abend is also indicated.

**User response:** Record all of the information, and report the problem to Software Support.

The variable fields of the message text are: var1 none var2 none var3 none var4 none var5 none var6 none var7 none var8 none var9 none var10 none var11 none

---

**HLV9998S TEXTMERGE (MSGID=M998) PROCESSING FAILURE REASON=var1**

**Explanation:** Invalid parameters were passed to the message send routine for a special textmerge function call. This is likely due to a logic error on the part of the calling routine.

**User response:** Contact Software Support with this problem

The variable fields of the message text are: var1 reason code specific to textmerge function

---

**HLV9999S var1 var2 var3 var4 var5 var6 var7 var8 var9 %SK**

**Explanation:** This message is for internal product testing.

**User response:** No action is required.

The variable fields of the message text are:

var1 none  
var2 none  
var3 none  
var4 none

var5 none  
var6 none  
var7 none  
var8 none  
var9 none  
stack stack trace information

---

**FECA900E Invalid Column Function value. Valid values: 1, 2, 3, 4**

**Explanation:** An invalid character was entered in the Column Function field.

**User response:** Specify a valid character (1, 2, 3, or 4).

---

**FECA901E Invalid Permanent View value. Valid values: Y, N**

**Explanation:** An invalid value was entered in the Permanent View field.

**User response:** Correct the value or cancel. Valid values are Y and N.

---

**FECA902E Invalid Reset View value. Valid values are Y, N**

**Explanation:** An invalid character was entered in the Reset View field. Valid characters are Y and N.

**User response:** Specify a valid value or cancel. Valid values are:

- Y - resets all customizations.
- N - customizations are not reset.

---

**FECA903E Invalid Stop Sorting value. Valid values: Y, N**

**Explanation:** The specified stop sorting value is not valid. Valid values are:

- Y - Indicates that sorting will be stopped.
- N - Indicates that sorting will continue.

**User response:** Specify a valid value or cancel.

---

**FECA904E Invalid command in FORM display**

**Explanation:** The command you issued when viewing the FORM display was not valid.

**User response:** Valid commands for FORM display include NROW and PROW.

---

**FECA905E FORM command not supported from CSETUP function**

**Explanation:** The FORM command was issued from a CSETUP function. FORM is not supported while in a CSETUP function (CSETUP functions include CFIX, CORDER, CSIZE and CS).

**User response:** No action is required.

---

**FECA906E Invalid parameter for NROW. Must be numeric.**

**Explanation:** The parameter you specified was not numeric and is therefore invalid.

**User response:** Specify a numeric value corresponding to the number of rows to advance. The default value for NROW is 1.

---

**FECA907E Invalid parameter for PROW. Must be numeric.**

**Explanation:** The parameter you specified was not numeric and is therefore invalid.

**User response:** Specify a numeric value corresponding to the number of rows to scroll back. The default value for PROW is 1.

---

**FECA908E Invalid parameter for NROW. Too many digits.**

**Explanation:** An invalid parameter for the NROW keyword was specified. More than eight digits were specified. Parsing stops at eight digits.

**User response:** A parameter of NROW must be between 1 and the number of rows in the current report display. If no parameter is specified, 1 is assumed.

---

**FECA909E Invalid parameter for PROW. Too many digits.**

**Explanation:** Invalid parameter to PROW specified. More than eight digits were specified. Parsing stops at eight digits.

**User response:** A parameter of PROW must be between 1 and the number of rows in the current report display. If no parameter is specified, 1 is assumed.

---

**FECA910E CSETUP command not supported from FORM function**

**Explanation:** CSETUP functions are not supported while in the FORM display. CSETUP functions include CFIX, CORDER, CSIZE, CSORT, and CSETUP (CSET).

**User response:** Exit the current FORM function before issuing a CSETUP function.

---

**FECA911E Invalid ICR command. Use RIGHT command.**

**Explanation:** ICR is only valid with columns that are not their maximum size. You can see the column's current and maximum sizes by issuing CSIZE.

**User response:** RIGHT and LEFT commands can be used to see all parts of this column.

---

**FECA912E Invalid ICL command. Use LEFT command.**

**Explanation:** ICL is only allowed with columns that are not their maximum size. You can see the column's current and maximum sizes by issuing CSIZE.

**User response:** RIGHT and LEFT commands can be used to see all parts of this column.

---

**FECA913E Format mix data element not updated.**

**Explanation:** Format MIX data cannot be updated when only part of the data is displayed.

**User response:** No action is required.

---

**FECA914E FORM command not supported from FORM function**

**Explanation:** FORM was issued from within a FORM display. This is not supported.

**User response:** No action is required.

---

**FECA915E FORM PF keys set; NROW = nrow  
PROW = prow**

**Explanation:** The NROW (next row) and PROW (previous row) commands are used to move the FORM display window to another row. The UP, DOWN, LEFT, and RIGHT commands move the FORM display window within the current row.

Row, as mentioned above, refers to the row from the original report display, not any reformatted FORM display row.

By default, NROW advances the FORM display to the next row. If NROW n is issued, the FORM display will advance n rows.

Similarly, PROW moves the FORM display window to the immediately prior row. PROW n moves the current FORM display window to the nth prior row.

**User response:** No action is required.

---

**FECA916E Invalid CNUM parm. Valid parms are ON, OFF, or blank.**

**Explanation:** CNUM was issued with an invalid parameter. Issuing CNUM with no parameter acts as an ON/OFF toggle. ON and OFF are the only parameters accepted. ON turns the CNUM display on. OFF turns the CNUM display off.

**User response:** Use a valid CNUM parameter (ON, OFF, or blank)

---

---

**FECA917E** Report width for print too large.

**Explanation:** The report width exceeds the maximum print width.

**User response:** The maximum report width that is currently supported is 32,760.

---

**FECA918E** *string* not found. Press PF5 to continue from top.

**Explanation:** The indicated character string was not found.

**User response:** To continue searching for the character string from the top of the dialog, press PF5.

---

**FECA920I** Chars *chars* found *n* times

**Explanation:** Indicates the number of times the specified character was found.

**User response:** No action is required.

---

**FECA921I** Chars *chars* not found on any lines

**Explanation:** Indicates that the specified characters were not found on any of the lines.

**User response:** No action is required.

---

**FECA922I** Search for CHARS *chars* was successful.

**Explanation:** Indicates the search for the indicated characters produced matches.

**User response:** No action is required.

---

**FECA923E** Check for misspelled keywords or embedded blanks in search string.

**Explanation:** Indicates there may be invalid keywords or blanks embedded within the search string.

**User response:** Verify and correct the search string to remove embedded blanks or to correct keywords.

---

**FECA924E** *string* and *string* cannot both be specified for FIND command.

**Explanation:** You specified two strings for the FIND command.

**User response:** You must specify one FIND string at a time.

---

**FECA925E** Put quotes (" ") around the string of characters to be displayed.

**Explanation:** The string of characters is not enclosed in quotes.

**User response:** Place the string of characters in side quotes.

---

**FECA926E** Maximum parameter length is 80

**Explanation:** The parameter you specified is too long.

**User response:** Specify a parameter that is 80 characters or less.

---

**FECA927E** Invalid COLS parm. Valid parms are ON, OFF, or blank

**Explanation:** COLS was issued with an invalid parameter. Issuing COLS with no parameters acts as an ON/OFF toggle. ON and OFF are the only parameters accepted.

**User response:** Enter COLS ON or COLS OFF. COLS ON turns the COLS display on; COLS OFF turns the COLS display off.

---

**FECA930I** No columns eligible for resizing.

**Explanation:** You cannot resize any columns.

**User response:** No action is required.

---

**FECA931I** No columns eligible for sorting

**Explanation:** You cannot sort any columns.

**User response:** No action is required.

---

**FECA932I** TBMOD failed. RC=*rc*

**Explanation:** An unexpected return code occurred during TBMOD.

**User response:** Suggested diagnostics:

- See z/OS ISPF Services Guide under TBMOD.
- Review ISPTLIB allocation.
- Review security-controlled access to ISPTLIB data sets.

---

**FECA933E** Invalid column name: missing quote

**Explanation:** SORT or CSORT was issued with a parameter that had an initial quotation character, but not a second closing quotation character.

**User response:** Either clear the command line and select the desired sort column(s) from the displayed selection list or correct the command on the command line.

---

**FECA934E** More than 9 columns specified

**Explanation:** SORT or CSORT was issued with too many columns specified as sort columns. A maximum of 9 sort columns can be specified.

**User response:** Either clear the command line and select the desired sort column(s) from the displayed selection list or correct the command on the command line.

---

**FECA935E Invalid column name**

**Explanation:** SORT or CSORT was issued with a column parameter that does not match any column name. A list of the correct column names is seen in the SORT selection panel.

**User response:** Either clear the command line and select the desired sort column(s) from the displayed selection list or correct the command on the command line.

---

**FECA936E Invalid row selection character**

**Explanation:** An invalid selection character was entered in the SSID selection list. The only valid selection character is S. Alternatively, place the cursor on the desired line and press ENTER (without a line selection character).

**User response:** Clear the invalid character.

---

**FECA937E Only one row selection allowed**

**Explanation:** More than one SSID was selected from the SSID selection list. A maximum of one SSID can be selected.

**User response:** Clear all, or all but one row selection character.

---

**FECA938E Invalid command**

**Explanation:** An invalid command was entered on the SSID selection list panel.

**User response:** Clear the command.

---

**FECA939E Read of control file failed**

**Explanation:** Reading the control data set failed.

**User response:** Check the product setup (accessed from the main menu) to view the control data set currently in use. Verify that the data set name is correct.

---

**FECA940E Invalid DB2 Control data set**

**Explanation:** Allocation of the control data set failed.

**User response:** Check the product setup (accessed from the main menu) to view the control data set currently in use. Verify that the data set name is correct.

---

**FECA942E IFCARC1=return code IFCARC2=reason code**

**Explanation:** The DB2 command issued failed. The return code and reason code received from DB2 are in the error message. If there is any command output, it is displayed.

**User response:** Check the Messages and Codes documentation for your version of DB2 for information on the return and reason codes. Examine the command for possible mistyping, invalid syntax, or other errors.

---

**FECA943E Invalid command**

**Explanation:** An invalid command was issued. It is not supported on the current panel.

**User response:** Check the command for typographical error. Clear or correct the command.

---

**FECA944I Empty History**

**Explanation:** This is an informational message. The history database is empty. If commands were previously entered, then either HCLEAR was issued or the size of the history database was set to 0. If ISPTABL and ISPTLIB are not allocated, history is not remembered across sessions, and each new session has an empty history database.

**User response:** No action is required. To verify allocation of ISPTLIB and ISPTABL, ISRDDN and ISPLIBD can be useful; refer to the ISPF manuals for information on ISRDDN and ISPLIBD.

---

**FECA945E Invalid history size limit**

**Explanation:** An invalid character was found in the History Size Limit field. Only numeric values from 0-999 are valid.

**User response:** Enter a valid value in the History Size Limit field.

---

**FECA946I No DB2 command history output library allocated**

**Explanation:** This is an informational message. ISPTABL is not allocated. The history database cannot be saved across sessions when ISPTABL is not allocated.

**User response:** No action is required. If saving history across sessions is desired, see product installation instructions for allocating ISPTABL (and ISPTLIB).

---

**FECA947I No DB2 command history input library allocated**

**Explanation:** This is an informational message. ISPTLIB is not allocated. If a history database is saved across sessions (using ISPTABL DD), the ISPTLIB DD is used to initialize a new DB2 Command Processor session. If ISPTLIB is not allocated, this cannot occur and the history starts out empty.

**User response:** No action is required. If saving history across sessions is desired, see product installation instructions for allocating ISPTLIB (and ISPTABL).

---

**FECA948E** TBOPEN failed. RC=*return code*

**Explanation:** TBOPEN for the history table failed. *return code* is the return code from the TBOPEN service.

**User response:** Check ISPTLIB allocation. Verify the data sets in ISPTLIB. Verify it is a valid PDS. See ISPF manuals for ISPTLIB requirements.

---

**FECA949E** Invalid command

**Explanation:** An invalid command was entered.

**User response:** Check for typographical error. Clear or correct the command. Issue **HELP** for the DB2 Command Processor tutorial to see what commands are valid.

**KEYS** might also be a useful command, since some PF keys are set to valid DB2 Command Processor commands.

---

**FECA950E** No SSIDs in control file

**Explanation:** There are no valid SSIDs found in the DB2 control file specified.

**User response:** A control file with no SSIDs is not useful. It is probably not the control file desired. See product installation instructions for information about creating and building a control file.

---

**FECA951I** History cleared

**Explanation:** History was cleared either by issuing the HCLEAR command or by setting the History Size Limit to 0.

**User response:** No action is required.

---

**FECA952E** Unable to list data sharing members. Display failed

**Explanation:** Command failed attempting to get a list of data sharing members. The reason code and return code are listed in the message.

**User response:** Look up the reason code and return code in the DB2 Messages and Codes manual for your version of DB2.

---

**FECA953I** Zero data sharing members found

**Explanation:** Zero data sharing members found. The current SSID is not a member of a data sharing group.

**User response:** The Datasharing Member field should be left blank.

---

**FECA954E** Invalid command

**Explanation:** An invalid command was issued from the datasharing members list/selection panel.

**User response:** Clear the command.

---

**FECA955I** No member selected

**Explanation:** You exited the datasharing member selection panel without selecting a datasharing member.

**User response:** No action is required.

---

**FECA956E** Invalid row selection character

**Explanation:** An invalid selection character was entered in the History output display. A command listed in the History display can be selected for execution either by selecting it with an "S" selection character, or by placing the cursor anywhere on a line within the command and pressing Enter.

When selecting by cursor placement, the cursor can be on the line selection input line, which also has a command number, or on a line with some command text.

**User response:** Clear the invalid character.

---

**FECA957E** Only one row selection allowed

**Explanation:** More than one command was selected from the History display. Only one History command can be selected.

**User response:** Clear all, or all but one row selection character.

---

**FECA958E** Invalid row selection character

**Explanation:** An invalid selection character was entered in the displayed list of datasharing members. A datasharing member in this display can be selected by selecting it with an S selection character, or by placing the cursor anywhere on the desired row and pressing Enter.

**User response:** Clear the invalid character.

---

**FECA959E** Only one row selection allowed

**Explanation:** More than one datasharing member was selected from the list of displayed datasharing members.

**User response:** Clear all, or all but one row selection character.

---

**FECA960E** Cannot list commands without SSID

**Explanation:** A command was issued to select a command syntax diagram, but no SSID has been selected. Syntax diagrams cannot be displayed until an SSID has been selected.

**User response:** Select an SSID. You can generate a list of SSIDs by clearing the SSID field, or entering a ? (question mark).



---

**FECA961E Invalid row selection character**

**Explanation:** An invalid selection character was entered in the displayed list of DB2 commands. A DB2 command in this display can be selected by selecting it with an S selection character, or by placing the cursor anywhere on the desired row and pressing Enter.

**User response:** Clear the invalid character.

---

**FECA962E Only one row selection allowed**

**Explanation:** More than one DB2 command was selected from the list of displayed DB2 commands.

**User response:** Clear all, or all but one row selection character.

---

**FECA963E Invalid command**

**Explanation:** An invalid command was issued from the DB2 command list/selection panel.

**User response:** Clear the command.

---

**FEC801E Pgm: *program name* Stmt: *statement* Type: *type***

**Explanation:** This message is used to convert SQL return code information into a text message. The data from the SQLCA is called using DSNTIAR and formatted into this message.

**User response:** Refer to *DB2 UDB for z/OS: SQL Reference* (SC18-7426-03) to resolve.

---

**FEC802E An invalid return code of *code* was encountered on *function* function. The error message text follows: *text***

**Explanation:** An invalid return code was encountered for the specified function. The supporting diagnostic data are returned in the error message.

**User response:** Refer to the DB2 Messages and Codes documentation for your version of DB2 to resolve.

---

**FEC803E The first character of the command is not a dash. Correct the syntax of the DB2 command and resubmit.**

**Explanation:** The first character of the command is not a dash. Correct syntax for a DB2 command dictates that the command be preceded by a dash.

**User response:** Precede the command with a dash (-) and reenter.

---

**FEC804E *message\_text***

**Explanation:** An error occurred during call attach initialization.

**User response:** Refer to the message text for details. If a reason code accompanies the message, use the reason code help you determine the appropriate corrective action. If you need assistance, contact IBM Software Support.

---

**FEC901E The default load library could not be located.**

**Explanation:** The data set name entered for DB2 Tools Load Library was not found.

**User response:** Enter a valid loadlib data set name and continue.

---

**FEC902E A DB2 subsystem ID has to be entered for processing.**

**Explanation:** There was no valid value entered for DB2 subsystem ID.

**User response:** Enter a valid DB2 subsystem name.

---

**FEC903E The default GDG base data set name could not be located.**

**Explanation:** The data set name entered for GDG Base model was not found.

**User response:** Enter a valid model data set name and continue.

---

**FEC904E The specified data set could not be opened for I/O.**

**Explanation:** A VSAM open error occurred while attempting to open the data set specified for the DB2 Control Data Set.

**User response:** Verify that the VSAM data set is accessible.

---

**FEC905E An unexpected return code from VSAM was encountered while doing a read of the control file. RC1=*rc* RC2=*rc***

**Explanation:** A VSAM READ error occurred while attempting to access the data set specified for the DB2 Control Data Set. The VSAM return code is provided for diagnostic purposes.

**User response:** Refer to *DB2 UDB for z/OS V8 Messages* (GC18-9602-01) and *DB2 UDB for z/OS V8 Codes* (GC18-9603-01) to resolve and then continue.

---

---

**FEC906I**    **The control file record for DB2 subsystem *ssid* has been successfully updated.**

**Explanation:** The control file named in the DB2 Control Data Set field has been successfully updated to include the specified changes and definitions for the specified DB2 Subsystem.

**User response:** No action is required.

---

**FEC907E**    **An unexpected return code from VSAM was encountered while doing an update operation of the control file. RC1=*rc* RC2=*rc***

**Explanation:** A VSAM update error occurred while attempting to update the data set specified for the DB2 Control Data Set. The RC1 and RC2 (VSAM return codes) are provided for diagnostic purposes.

**User response:** Refer to *DB2 UDB for z/OS V8 Messages* (GC18-9602-01) and *DB2 UDB for z/OS V8 Codes* (GC18-9603-01) to resolve and then continue.

---

**FEC908I**    **The control file record for DB2 subsystem *sys* has been successfully added.**

**Explanation:** The control file named in the DB2 Control Data Set field has been successfully updated to include the new record, based on the specified definitions for the specified DB2 subsystem.

**User response:** No action is required.

---

**FEC909E**    **Invalid value. Valid options are 1 and 2.**

**Explanation:** The value you specified is not valid. valid values are 1 and 2.

**User response:** Enter a valid value.

---

**FEC910E**    **An unexpected return code from VSAM was encountered while doing an add operation to the control file. RC1=*rc* RC2=*rc***

**Explanation:** A VSAM error occurred while attempting to perform an add operation to the specified DB2 Control Data Set. The RC1 and RC2 (VSAM return codes) are provided for diagnostic purposes.

**User response:** Refer to *DB2 UDB for z/OS V8 Messages* (GC18-9602-01) and *DB2 UDB for z/OS V8 Codes* (GC18-9603-01) to resolve, and then continue.

---

**FEC911E**    **The (F)IND command was entered but no parameters were specified.**

**Explanation:** No parameters were specified with the (F)IND command. No match can be made unless you specify a string to find.

**User response:** Enter a FIND parameter.

---

**FEC912I**    **The requested find string was not found.**

**Explanation:** No matches were found for the string you specified with the FIND command.

**User response:** No action is required.

---

**FEC913I**    **The control file record has been successfully updated.**

**Explanation:** The control file was updated successfully.

**User response:** No action is required.

---

**FEC914E**    **An unknown column was specified using the SORT command.**

**Explanation:** The column you specified with the SORT command is not known.

**User response:** Verify that you correctly typed the name of the column or select another column.

---

**FEC915E**    **SORT is not supported for the specified column.**

**Explanation:** The column you attempted to SORT is not supported as a column on which to sort.

**User response:** Refer to the sort columns listed on the Define Sort Columns panel for a list of valid columns on which the sort can be based and redefine the sort.

---

**FEC916E**    **Sort column not entered. Column name or number must be specified.**

**Explanation:** A column was not specified with the SORT. A column name or number must be specified for the SORT command.

**User response:** Ensure that if the column name is used, that all spaces in the name are replaced with an underscore.

---

**FEC917E**    **Put an ending quote at the end of the string.**

**Explanation:** You must place a quote at the end of the string.

**User response:** Place a quote at the end of the string.

---

**FEC918**    **CHARS *string* not found. Press PF5 to continue from top.**

**Explanation:** The indicated character string was not found.

**User response:** To continue searching for the character string from the top of the dialog, press PF5.

---

**FEC919**      *chars foundstr* not found. Press PF5 to continue from bottom.

**Explanation:** The indicated character string was not found.

**User response:** To continue searching for the character string from the bottom of the dialog, press PF5.

---

**FEC920E**      **File tailoring open returned a file tailoring already in progress condition**

**Explanation:** An attempt to perform file tailoring for utility customization failed. There was a file tailoring session already in progress. File tailoring sessions cannot be performed concurrently.

**User response:** No action is required.

---

**FEC921E**      **File tailoring open returned the output file already in use condition -- ENQ failed**

**Explanation:** An attempt to open the DB2 Control Data Set failed with an ENQ error. The data set is already open for output.

**User response:** Verify that you are the only user attempting to access this file.

---

**FEC922E**      **File tailoring open returned the skeletal file or output file not allocated condition**

**Explanation:** An attempt to perform file tailoring failed because either the tailoring skeleton file or output file is not allocated.

**User response:** Verify that all required files are allocated prior to performing file tailoring.

---

**FEC923E**      **File tailoring open returned a severe error condition**

**Explanation:** An attempt to perform file tailoring failed because a severe error condition was encountered on open.

**User response:** Verify that all required files are allocated and accessible prior to performing file tailoring.

---

**FEC924E**      **File tailoring open returned an unknown code -- severe error**

**Explanation:** An attempt to perform file tailoring failed because a severe error condition was encountered on open.

**User response:** Verify that all required files are allocated and accessible prior to performing file tailoring.

---

**FEC925E**      **File tailoring close returned a file not open condition -- severe error**

**Explanation:** An attempt to perform file tailoring failed because a File-Not-Open condition was encountered on close.

**User response:** Verify that all required files are allocated and accessible and that there are no other tailoring sessions running concurrently with your session.

---

**FEC926E**      **File tailoring close returned an output file in use condition**

**Explanation:** An attempt to perform file tailoring failed because an Output-File-In-Use condition was encountered on close.

**User response:** Verify that all required files are allocated and accessible and that there are no other tailoring sessions running concurrently with your session.

---

**FEC927E**      **File tailoring close returned a skeletal file or output file not allocated condition**

**Explanation:** An attempt to close file tailoring failed because either a tailoring skeleton file or output file was not allocated.

**User response:** Verify that all required files are allocated and accessible and that there are no other tailoring sessions running concurrently with your session.

---

**FEC928E**      **File tailoring close returned a severe error**

**Explanation:** An attempt to perform file tailoring failed because a severe error condition was encountered on close.

**User response:** Verify that all required files are allocated and accessible prior to performing file tailoring.

---

**FEC929E**      **File tailoring close returned an unknown code -- severe error**

**Explanation:** An attempt to perform file tailoring failed because a severe error condition was encountered on close.

**User response:** Verify that all required files are allocated and accessible prior to performing file tailoring.

---

---

**FEC930E File tailoring close returned an output member exists in the output library and NOREPL was specified**

**Explanation:** An attempt to perform file tailoring failed because the close process could not replace the pre-existing tailored member in the output file.

**User response:** Change the output member name to a new name or ensure that the output library allows for member replacement.

---

**FEC931E File tailoring include returned a skeleton does not exist condition**

**Explanation:** An attempt to perform file tailoring failed because the tailoring process could not locate a required tailoring skeleton.

**User response:** Assure that all required files are allocated to perform file tailoring.

---

**FEC932E File tailoring include returned a skeleton in use -- ENQ failed condition**

**Explanation:** An attempt to access a tailoring skeleton failed with an ENQ error (member-in-use).

**User response:** Verify that all required tailoring files are allocated and that there are no other tailoring sessions running concurrently.

---

**FEC933E File tailoring include returned a data truncation or skeleton library or output file not allocated condition**

**Explanation:** An attempt to perform file tailoring failed because either the tailoring skeleton file or output file is not allocated.

**User response:** Verify that all required files are allocated prior to performing file tailoring.

---

**FEC934E File tailoring include returned a severe error condition**

**Explanation:** An attempt to perform file tailoring failed because a severe error condition was encountered on an include operation.

**User response:** Verify that all required files are allocated and accessible prior to performing file tailoring.

---

**FEC935E File tailoring include returned an unknown condition -- severe error**

**Explanation:** An attempt to perform file tailoring failed because a severe error condition was encountered on an include operation.

**User response:** Verify that all required files are

allocated and accessible prior to performing file tailoring.

---

**FEC936E Allocation error - The ISPF DD is already allocated and cannot be deallocated - Process not completed**

**Explanation:** The ISPF DD allocation failed. The DD is already allocated and cannot be deallocated for this TSO session. The process did not complete successfully.

**User response:** No action is required.

---

**FEC937E Allocation Error - An error was encountered allocating the ISPWRK1 or ISPWRK2 DD - Process not completed**

**Explanation:** The ISPWRK1 or ISPWRK2 DD allocation failed.

**User response:** Verify TSO session parameters are set correctly for your site prior to allocation of these DD statements. The process did not complete successfully.

---

**FEC938E Field Required - The data set entered is a partitioned data set and the member name is required**

**Explanation:** A required field was not specified. The data set entered is a PDS (partitioned data set) and a member in this PDS must be referenced.

**User response:** Enter a valid member name for PDS access.

---

**FEC939E The only valid values are "T" for tracks and "C" for cylinders**

**Explanation:** You specified an invalid value. The only valid values are "T" for tracks and "C" for cylinders

**User response:** Specify a valid value.

---

**FEC940E The specified data set could not be found in the MVS catalog.**

**Explanation:** The specified data set could not be found in the MVS catalog.

**User response:** Ensure that the data set name is correct.

---

**FEC941E The RFINDD key works only after a FIND character string is entered.**

**Explanation:** A repeat FIND (RFINDD) was issued before a FIND command was issued. You must issue FIND before RFINDD will work.

**User response:** Issue FIND prior to attempting to issue RFINDD.

---

**FEC942E Invalid Sort number. Enter a valid digit.**

**Explanation:** An invalid character was entered in the Srt column. Valid characters are the digits 1, 2, 3,... up to 9, or the number of sortable columns, whichever is less.

**User response:** Specify a valid sort number.

---

**FEC943E Same Sort number entered twice**

**Explanation:** The same sort number was entered for more than one column. The screen is positioned to the second instance. Sort sequence numbers must be unique.

**User response:** Specify a valid sort number.

---

**FEC944E Sort sequence skips a number.**

**Explanation:** The selected sorting sequence skips a number. This is not allowed. The screen is positioned to a selection whose number is lacking an immediate predecessor. The sort sequence is completely rebuilt from the Cmd (and Dir) information. Any previously existing sort sequence is entirely replaced. It is not added to or extended by the new entries.

**User response:** Please specify a valid sort sequence that does not skip a number.

---

**FEC945E Invalid Dir entered. Must be A or D (ascending/descending).**

**Explanation:** The selected sorting direction is invalid. Only A (ascending) or D (descending) can be specified. A blank indicates ascending (default).

**User response:** Specify a valid sorting direction.

---

**FEC946E Dir not valid without Ord.**

**Explanation:** A sorting direction was selected for a column that was not selected to be sorted. Sorting direction is only a valid choice for selected columns.

**User response:** Select a sorting direction and order.

---

**FEC947E Max Sort Columns exceeded. Sorting first 10 columns.**

**Explanation:** More columns were selected for sorting than are supported. Nine columns can be selected. Under certain circumstances the limit is less than nine, due to internal constraints. For example, sorting a date field can be implemented by three sorts of partial column fields. In that case, the column would count as three toward the maximum of nine, not one.

**User response:** Specify the appropriate allowable maximum number of sort columns.

---

---

**FEC948E Fix Columns cannot exceed screen size.**

**Explanation:** More columns were selected to be fixed than will fit on the screen.

**User response:** Remove the (F) selection character from one or more columns.

---

**FEC950E Invalid selection character. "F" and "U" are valid.**

**Explanation:** An invalid Cmd character was entered. Valid characters are F (fix) and U (unfix). Fix causes the column to move to the fixed area on the left side of the screen. Fixed columns do not scroll horizontally when LEFT or RIGHT scrolling commands are issued. Unfix moves the column out of the fixed area, and allows it to scroll horizontally when LEFT and RIGHT scroll commands are issued.

**User response:** Either remove the invalid character or enter a valid one.

---

**FEC951E Invalid entry. Must be numeric.**

**Explanation:** An invalid Cmd value was entered. Cmd values must be numeric. If the column is fixed, the number must be in the fixed range. If the column is not fixed, the number must be in the unfixed range.

**User response:** Either remove the invalid number or enter a valid one.

---

**FEC952E Invalid entry for fixed column.**

**Explanation:** An invalid Cmd value was entered for a fixed column. Valid selections for fixed column are up to the number of fixed columns.

**User response:** Either remove the invalid number or enter a valid one.

---

**FEC953E Invalid entry for unfixed column.**

**Explanation:** An invalid Cmd value was entered for an unfixed column. The number must be less than the number of columns, and greater than the number of fixed columns.

**User response:** Either remove the invalid number or enter a valid one.

---

**FEC954E Invalid value entered for column size: non-numeric data.**

**Explanation:** An invalid Cmd value was entered. This must be a number between the values in the MIN and MAX fields.

**User response:** Either remove the invalid number or enter a valid one.

---

---

**FEC955E Invalid value entered for column size: out of range.**

**Explanation:** An invalid Cmd value was entered. This must be a number between the values in the MIN and MAX fields. MIN is the smallest acceptable value. MAX is the largest acceptable value.

**User response:** Either remove the invalid number or enter a valid one.

---

**FEC956E Total fixed column sizes cannot exceed screen size.**

**Explanation:** The Cmd values entered would result in the sum of the fixed column sizes to exceed the screen size. This is not allowed. The fixed columns are those with an or in the Fix column. Fixed columns are always displayed, and so must fit on the screen.

**User response:** Either change the fixed column sizes so that the total is less than the screen size or cancel to return to the previous panel.

---

**FEC957E New configuration makes this column size invalid.**

**Explanation:** The requested column sizes make at least one unfixed column unable to be displayed. The cursor is positioned on the value where the problem was detected. The unfixed area on the screen would be too small to show the column where the cursor is placed.

**User response:** Do one of the following:

- Make the column where the cursor is smaller so that it can fit in the available unfixed area.
- Set it to its maximum size (width).
- Make the fixed area smaller.
- Cancel to return to the previous panel.

---

**FEC958E Column does not fit in unfixed area in new configuration.**

**Explanation:** The requested column sizes would make the unfixed column where the cursor is positioned undisplayable. The unfixed area on the screen would be too small to show this column.

**User response:** Shrink the fixed area by either unfixing columns or making fixed columns smaller. The column where the cursor is cannot be partially displayed (min-max) so its size cannot be changed.

---

**FEC959E New configuration makes this column size invalid.**

**Explanation:** Fixing the requested columns would shrink the available area for unfixed columns unacceptably. One or more unfixed columns would not fit in the remaining unfixed area of the screen. The cursor is placed on a row that represents one such

column. Therefore, the requested configuration is not allowed.

**User response:** To change column sizes, cancel out of the CFIX function and invoke the CSIZE function. Either cancel to exit CFIX with no change or blank out one or more FIX selections until an allowable fixed size is reached.

---

**FEC960E Invalid fixed selections. Would not leave enough space for this column.**

**Explanation:** Fixing the columns requested would make at least one unfixed column undisplayable. The cursor is positioned on the row that represents one such unfixed column, whose minimum displayable size would not fit in the available screen area.

**User response:** Shrink the requested fixed area by either:

- Requesting fewer fixed columns.
- Unfixing one or more fixed columns.
- Cancel out of CFIX and invoke CSIZE in order to shrink one or more fixed columns enough so that all unfixed columns have the space they require.

---

**FEC962E Duplicate Cmd values entered.**

**Explanation:** Duplicate Cmd numbers were entered. The cursor points to the second instance of a Cmd value.

**User response:** Either change this value, clear it, or exit the CORDER function.

---

**FEC963E Cursor not on data element.**

**Explanation:** CEXPAND was issued and the cursor was not located on a valid (expandable) area. CEXPAND requires the cursor to be positioned on a data element (non-heading area) in the dynamic area of the display. Or CEXPAND can be issued specifying the row and column of the data element to expand.

**User response:** Ensure the cursor is located on a valid (expandable) area prior to issuing the CEXPAND command.

---

**FEC964E Invalid scroll amount for CRIGHT. Must be numeric.**

**Explanation:** Invalid (non-numeric) parameter to CRIGHT specified. CRIGHT accepts one numeric parameter: the number of columns to scroll right. If no parameter is entered a value of 1 is assumed.

**User response:** Specify a numeric parameter to the CRIGHT command.

---

---

**FEC965E Invalid scroll amount for CLEFT. Must be numeric.**

**Explanation:** Invalid (non-numeric) parameter to CLEFT specified. CLEFT accepts one numeric parameter: the number of columns to scroll left. If no parameter is entered, a value of 1 is assumed.

**User response:** Specify a numeric parameter to the CLEFT command.

---

**FEC966E Invalid parameter to ICRIGHT; must be numeric.**

**Explanation:** A parameter to ICRIGHT is not numeric. ICRIGHT (inner column scroll right) accepts either zero, one, or two numeric parameters. ICRIGHT can be abbreviated as ICR.

**User response:** Specify a valid, numeric parameter for ICRIGHT.

---

**FEC967E Parameter to ICRIGHT too long. Invalid.**

**Explanation:** A parameter to ICRIGHT is too long. ICRIGHT does not process more than eight digits in a parameter, which is more than double any reasonable value.

**User response:** Specify a valid parameter for ICRIGHT.

---

**FEC968E Parameter to ICRIGHT is zero. Invalid.**

**Explanation:** A parameter to ICRIGHT has the value zero. This is not supported.

**User response:** Specify non-zero parameters to ICRIGHT.

---

**FEC969E ICRIGHT: unspecified column.**

**Explanation:** ICRIGHT was invoked with no parameters and the cursor is not positioned in the dynamic panel area.

**User response:** Either put the cursor in the column that should be scrolled or specify the column by number. Column numbers can refer to visible columns (in the current display window) only. Number starts at 1, on the left side.

---

**FEC971E ICRIGHT: Column number specified is too big.**

**Explanation:** A column number parameter to ICRIGHT must be between 1 and the number of columns currently on the display screen.

**User response:** To refer to a column by number you must first position the display window so that the desired column is visible.

---



---

**FEC972E Invalid parameter to ICLEFT; must be numeric.**

**Explanation:** A parameter to ICLEFT is not numeric. ICLEFT (inner column scroll left) accepts either zero, one, or two numeric parameters. ICLEFT can be abbreviated as ICL.

**User response:** Specify a valid parameter for ICLEFT.

---

**FEC973E Parameter to ICLEFT too long. Invalid.**

**Explanation:** A parameter to ICLEFT is too long. ICLEFT does not process more than eight digits in a parameter which is more than double reasonable value.

**User response:** Specify a parameter less than or equal to eight digits for ICLEFT.

---

**FEC974E Parameter to ICLEFT is zero. Invalid.**

**Explanation:** A parameter to ICLEFT has the value zero. This is not supported.

**User response:** Specify a non-zero number for ICLEFT.

---

**FEC975E ICLEFT: unspecified column.**

**Explanation:** ICLEFT was invoked with no parameters and the cursor is not positioned in the dynamic panel area.

**User response:** Either put the cursor in the column that should be scrolled or specify the column by number. Column numbers can refer to visible columns (in the current display window) only. Numbering starts at 1 on the left side.

---

**FEC976E Column selected not sortable. Sort selection list presented.**

**Explanation:** You cannot perform a SORT on the column you selected. Valid sort columns are displayed in the sort selection list.

**User response:** Sort on one of the valid columns displayed in the selection list.

---

**FEC977E ICLEFT: Column number specified is too big.**

**Explanation:** A column number parameter to ICLEFT must be between 1 and the number of columns currently on the display screen.

**User response:** To refer to a column by number, you must first position the display window so that the desired column is visible.

---

---

**FEC978E Invalid column number specified for SORT (not numeric).**

**Explanation:** Invalid column number parameter to CSORT specified (non-numeric).

**User response:** Specify a column number parameter to CSORT that is between 1 and the number of columns currently on the display screen. This can be followed by a direction value A or D (ascending/descending).

---

**FEC979E Invalid column number specified. Too many digits.**

**Explanation:** Invalid parameter to CSORT specified. More than eight digits were specified. Parsing stops at eight digits.

**User response:** Specify a column number parameter between 1 and the number of columns currently on the display screen. This can be followed by a direction value A or D (ascending/descending).

---

**FEC980E Invalid column number specified: zero.**

**Explanation:** Invalid parameter to CSORT was specified (zero).

**User response:** Specify a column number parameter to CSORT that is between 1 and the number of columns currently on the display screen. This can be followed by a direction value A or D (ascending/descending).

---

**FEC981E Invalid column number specified: out of range.**

**Explanation:** Invalid parameter to CSORT was specified (zero).

**User response:** Specify a column number parameter to CSORT that is between 1 and the number of columns currently on the display screen. This can be followed by a direction value A or D (ascending/descending)

---

**FEC982E Invalid view. View adjusted.**

**Explanation:** The current view was adjusted but not deleted. The saved view did not match the report requirements. This could be caused by the report changing or the view file getting corrupted.

**User response:** The adjusted view will be used. You can issue CSET to modify the view.

---

**FEC983E Invalid view. View deleted.**

**Explanation:** Invalid data was found in a view for this report. The view was deleted and contents ignored. This could be caused by the report changing or the view file getting corrupted.

**User response:** You can issue CSET to create a view that will match current report.

---

**FEC984E Unexpected return code from TBSTATS: rc**

**Explanation:** An unexpected failure issuing TBSTATS was received.

**User response:** Refer to *ISPF Services Guide* (SC34-4819-03) for (hex) return code descriptions. Also, review the ISPTLIB and ISPTABL allocations. For information about ISPTLIB and ISPBABL see ISPF manuals.

---

**FEC985E View Library not allocated.**

**Explanation:** A view input library has not been allocated. In order for a user to save and use report customizations that are created via the CSET command, ISPTABL and ISPTLIB must be allocated.

**User response:** Refer to *ISPF Services Guide* (SC34-4819-03) for information on ISPTLIB and ISPTABL.

---

**FEC986E TBCREATE failed. RC=rc**

**Explanation:** TBCREATE was issued to create a view. It failed with a (hex) return cod as indicated in the message.

**User response:** Review ISPTLIB allocation and data set characteristics. Review security controlled access to ISPTLIB data sets. For information about return codes, refer to *ISPF Services Guide* (SC34-4819-03).

---

**FEC987E TBOPEN failed. RC=rc**

**Explanation:** TBOPEN was issued to open a view. It failed with a (hex) return code as indicated in the message.

**User response:** Review ISPTLIB allocation and data set characteristics. Review security controlled access to ISPTLIB data sets. For information about return codes, refer to *ISPF Services Guide* (SC34-4819-03).

---

**FEC988E TBGET failed. RC=rc**

**Explanation:** A TBGET produced a return code (as indicated in the message).

**User response:** Review ISPTLIB allocation and data set characteristics. Review security controlled access to ISPTLIB data sets. For information about return codes, refer to *ISPF Services Guide* (SC34-4819-03).

---

**FEC989E TBMOD failed. RC=rc**

**Explanation:** A TBMOD produced an error and return code (as indicated in the message).

**User response:** Review ISPTLIB allocation and data set characteristics. Review security controlled access to ISPTLIB data sets. For information about return codes,



refer to *ISPF Services Guide* (SC34-4819-03).

---

**FEC990E TBCLOSE failed. RC=rc**

**Explanation:** TBCLOSE failed with a (hex) return code as indicated in the message.

**User response:** Review ISPTLIB allocation and data set characteristics. Review security controlled access to ISPTLIB data sets. For information about return codes, refer to *ISPF Services Guide* (SC34-4819-03).

---

**FEC991E TBDELETE failed. RC=rc**

**Explanation:** TBDELETE failed with a (hex) return code as indicated in the message.

**User response:** Review ISPTLIB allocation and data set characteristics. Review security controlled access to ISPTLIB data sets. For information about return codes, refer to *ISPF Services Guide* (SC34-4819-03).

---

**FEC992E Invalid selection.**

**Explanation:** A command that is not supported on this panel was selected.

**User response:** Issue a valid command for the panel.

---

**FEC993I Permanent view not supported.**

**Explanation:** DB2 Analytics Accelerator Loader detected something that prevents views from being saved. The permanent view flag cannot be set to Y. The most likely cause of this is that either ISPTLIB or ISPTABL (or both) have not been properly allocated.

**User response:** Review ISPTLIB allocation and data set characteristics. Review security controlled access to ISPTLIB data sets. For information about return codes, refer to *ISPF Services Guide* (SC34-4819-03).

---

**FEC994E Invalid row number.**

**Explanation:** CEXPAND was issued with an invalid parameter of zero. CEXPAND can be issued with no parameters and the cursor on a data field, or with two parameters. The two parameters are the row number, followed by the column number of the data element to be expanded. The row number is counted down from the top, starting with the first scrollable row (heading not counted) The column number is counted from left to right, starting with the left column in the current display window.

**User response:** Specify a valid parameter count for use with CEXPAND.

---

**FEC995E Invalid column number.**

**Explanation:** CEXPAND was issued with an invalid parameter of zero. CEXPAND can be issued with no parameters and the cursor on a data field, or with two parameters. The two parameters are the row number, followed by the column number of the data element to be expanded. The row number is counted down from the top, starting with the first scrollable row (heading not counted) The column number is counted from left to right, starting with the left column in the current display window.

**User response:** Specify a valid parameter count for use with CEXPAND.

---

**FEC996E Invalid digits.**

**Explanation:** CEXPAND was issued with an invalid parameter of zero. CEXPAND can be issued with no parameters and the cursor on a data field, or with two parameters. The two parameters are the row number, followed by the column number of the data element to be expanded. The row number is counted down from the top, starting with the first scrollable row (heading not counted) The column number is counted from left to right, starting with the left column in the current display window.

**User response:** Specify a valid parameter count for use with CEXPAND.

---

**FEC997E Too many digits.**

**Explanation:** CEXPAND was issued with an invalid parameter of zero. CEXPAND can be issued with no parameters and the cursor on a data field, or with two parameters. The two parameters are the row number, followed by the column number of the data element to be expanded. The row number is counted down from the top, starting with the first scrollable row (heading not counted) The column number is counted from left to right, starting with the left column in the current display window.

**User response:** Specify a valid parameter count for use with CEXPAND.

---

**FEC998E Zero parameter invalid.**

**Explanation:** CEXPAND was issued with an invalid parameter of zero. CEXPAND can be issued with no parameters and the cursor on a data field, or with two parameters. The two parameters are the row number, followed by the column number of the data element to be expanded. The row number is counted down from the top, starting with the first scrollable row (heading not counted) The column number is counted from left to right, starting with the left column in the current display window.

**User response:** Specify a non-zero parameter.

---

**FEC999E Invalid parameter count: must be either two or zero parms.**

**Explanation:** CEXPAND was issued with an invalid number of parameters. CEXPAND can be issued with no parameters and the cursor on a data field, or with two parameters. The two parameters are the row number, followed by the column number of the data

element to be expanded. The row number is counted down from the top, starting with the first scrollable row (heading not counted) The column number is counted from left to right, starting with the left column in the current display window.

**User response:** Specify a valid parameter count for use with CEXPAND.

---

## Tools Customizer troubleshooting

Use this information to diagnose and correct problems that you experience with Tools Customizer.

### Gathering diagnostic information

Before you report a problem with Tools Customizer to IBM Software Support, you need to gather the appropriate diagnostic information.

#### Procedure

Provide the following information for all Tools Customizer problems:

- A clear description of the problem and the steps that are required to re-create the problem
- Relevant screen captures
- All messages that were issued as a result of the problem
- Product release number and the number of the last program temporary fix (PTF) that was installed
- The version of DB2 that you are using and the type and version of the operating system that you are using
- The Tools Customizer trace data set
- The Tools Customizer data store data set and the *high\_level\_qualifier*.SCCQTENU data set

### Determining the trace data set name

You will need to identify the name of the trace data set if you cannot allocate the trace data set, the trace data set runs out of space, or IBM Software Support asks for it.

The name of the trace data set depends on the prefix setting in the TSO profile. To identify the name of the trace data set, you must know the prefix setting.

- If PREFIX is set, the name of the trace data set is *prefix*.CCQ.TRACE, where *prefix* is the TSO prefix that you specified in the profile.
- If NOPREFIX is set, the name of the trace data set is *user\_ID*.CCQ.TRACE, where *user\_ID* is your TSO user ID.

---

## Diagnostic information for Support

If you encounter a problem and need to contact IBM Software Support, you must gather certain information about your Accelerator Loader system and the problem before contacting Support. Your Support representative will need this information to correctly diagnose and resolve the problem.

Provide Support with the following types of diagnostic information:

- The Accelerator Loader version.
- The identifier for the latest Accelerator Loader APAR or PTF that has been applied on your system.
- The operating system type, version, and maintenance level.
- Your DB2 version and whether you are using DB2 data sharing.
- All output from the Accelerator Loader started task.
- (*DSNUTILB intercept users only*) All output for the DB2 utility execution for which the problem occurred
- (*Batch interface users only*) All output from your Accelerator Loader batch job.
- (*ISPF interface users only*) A description of the activity that you were performing in the interface when the problem occurred, including a screen capture of the relevant ISPF panel, if possible. Also, provide the contents of the log for the TSO user who was using the interface.
- All output from stored procedures address spaces.
- The complete contents of any dumps that Support requested. See “Producing dumps for diagnostic use.”
- All output from the Accelerator Loader server.
- Server trace data for the problem.
- Any messages in the z/OS System Log that might pertain to the problem.

Your Support representative will provide instructions for transmitting this information.

**Related tasks:**

“Printing entries from the server log” on page 10-78

Use the P, PP, and SS commands to print server log entries to the ISPF list data set.

“Using Server Trace” on page 5-19

Use the **Server Trace** view to record and view server operations for troubleshooting purposes.

**Related information:**

“Viewing Server Trace information” on page 10-70

Accelerator Loader server provides powerful diagnostic tools that can record critical events in the life of individual transactions. This information can be used to diagnose, debug, and correct problems.

---

## Producing dumps for diagnostic use

You might need to provide a dump to help Support diagnose a problem that you report.

### About this task

You should request only one dump at a time on your z/OS system. For detailed information about the DUMP command, including descriptions of the SDATA options, see the IBM publication *MVS System Commands*.

### Procedure

1. The JCL contains a SYSMDUMP DD statement that directs the system to produce a dump.
2. For problems related to the Load from External feature:

- To produce a system dump of the started task address space only, you can issue the following Modify operator command from the z/OS console:

```
F started_task_name,DUMP
```

where *started\_task\_name* is the name of the Accelerator Loader started task configuration.

- To produce a system dump of multiple address spaces (for example, a dump of the address spaces for the started task and the user interface that you are using), issue the MVS DUMP command from the z/OS console:

```
DUMP COMM=(dump_title)
```

```
R id,JOBNAME=(name1,name2,...),SDATA=(CSA,LPA,LSQA,PSA,RGN,SUM,SWA,TRT)
```

Where:

- *dump\_title* is a name that you assign to the dump.
- *id* is the reply identification number, as specified in system message IEE094D.
- *name2,name2, ...* are values that identify the Accelerator Loader address spaces to dump. A name value can be:
  - The started task name (if you are dumping the started task address space)
  - A batch job name (if you are dumping a batch interface job or a DSNUTILB batch job)
  - The TSO user ID of an ISPF interface user (if you are dumping the ISPF interface address space)
- *SDATA* specifies the options that indicate the specific storage areas to dump.

## What to do next

After you produce a dump, send it to Support. Your Support representative will provide transmittal instructions.

---

## Cleaning up common storage after a job fails

The Tools Customizer generates several jobs into the SAMPLIB when you select the step **Create repository maintenance members** on the Product Parameters panel during customization. One of these jobs, HLO#PIPE, runs the pipe cleanup utility program HLOCOMCL.

Generally, running the pipe cleanup utility is not necessary. Accelerator Loader determines whether a table is actually being simultaneously loaded by another Accelerator Loader job. If it is not, Accelerator Loader cleans up the common storage without ending the job and issuing an error.

However, you might occasionally need to run the pipe cleanup utility to clean up the common storage to avoid errors with the data pipe when a Accelerator Loader job fails and the common storage is not cleaned up.

The following messages might indicate conditions that require you to run the pipe cleanup utility:

- Function=01 RC=03 in message HL0U5700E: Error from call to HLOPIPE from HLOUSE35 Function=01 RC=03
- HL03623E: A table was specified that was already being loaded.

**Note:** It is possible that another job is running against the same table. In this case, do not run the pipe cleanup utility. Doing so will corrupt the other job. Because of risks associated with HLO#PIPE, run it only under the guidance of IBM Software Support.

## Cleaning up the common storage for a table

You can use the pipe cleanup utility to clean up the common storage for an individual table within the SSID (that is, remove just the specified table from storage and retain all other common storage). Using the pipe cleanup utility to perform this task might be useful when Accelerator Loader jobs repeatedly result in the error HL03623E: A table was specified that was already being loaded. Unless it references the same specified table, no other Accelerator Loader job will be corrupted.

To clean up the common storage for a table, edit HLO#PIPE to specify a table creator and name as shown in the following example. The maximum number of characters for *creator.tablename* is 128 and it cannot exceed column 72; continue on the next line in column 1. No special character is needed.

```
//TABLE DD *  
creator.tablename  
/*
```

## Cleaning up the common storage for a job

You can use the pipe cleanup utility to clean up the common storage for a specific unsuccessful Accelerator Loader job run. Using the pipe cleanup utility to perform this task might be useful when a job ended abnormally and you know that the ABEND led to the error HL03623E: A table was specified that was already being loaded.. Unless the job that you specify is currently running, no other Accelerator Loader job will be corrupted.

To clean up the common storage for a job, edit HLO#PIPE to specify a job ID and job name in the order that is shown in the following example. In the example, *#jobid#* is the SDSF output job number.

```
//JOB DD *  
#jobid#  
#jobname#  
/*
```

---

## Managing DSNUTILB interception

You can manage DSNUTILB interception by performing some routine and occasional tasks.

On a routine basis, check the messages from utility processing to determine whether DSNUTILB interception occurred and whether the Accelerator Loader batch job was correctly processed. Occasionally, you might do other tasks, for example, check the activation status of the intercept, diagnose interception problems, terminate a utility for which interception has occurred and clean up the associated worklist data, or restart a utility from the appropriate point when a normal DB2 restart fails.

### Related concepts:

“Components and structure” on page 12-49

Accelerator Loader runs as a started task on a z/OS system. The started task communicates with DB2 to perform product functions and to store information

about product activities in DB2 tables.

“Considerations for DB2 data sharing environments” on page 2-11

Before you deploy Accelerator Loader in a DB2 data sharing environment, review information about deployment and configuration issues for the started task *hloid*PROC.

“Loading from an external file” on page 9-22

Accelerator Loader provides options for the DB2 LOAD utility to enhance load processing for Analytics Accelerator. These options are in addition to those that the native DB2 LOAD utility provides. The options manipulate the data in the input records for the LOAD utility before the data is loaded.

**Related tasks:**

“Setting up the WLM application environment (required)” on page 3-42

This customization step is required for the Accelerator Loader started task to perform DSNUTILB interception services.

## Determining whether DSNUTILB intercept processing occurred

You can check whether DSNUTILB intercept processing occurred as you expected for the DB2 LOAD utility by checking the Accelerator Loader messages that are incorporated into the SYSPRINT data set for the utility job and the SYSPRINT data set for the Accelerator Loader started task. Use SDSF or an equivalent tool to view this information.

### Messages in the SYSPRINT data set for a DB2 utility

The following table explains the key Accelerator Loader messages on DSNUTILB interception that can occur in the SYSPRINT data for a DB2 utility. Look for these messages to determine whether interception processing completed as intended. The messages are described in the order in which they appear in the SYSPRINT data set.

Messages that are issued for a worklist step (a utility command) are often paired; the first message provides the step number of the worklist step, and the second message provides the return code for that worklist step. A return code of less than 8 is ignored; DSNUTILB intercept processing continues. A return code of 8 or higher indicates that an error occurred and DSNUTILB intercept processing terminated abnormally. The return codes in messages that pertain to thread-cancellation processing can be from either the DSNUTILB intercept or the batch interface. The intercept calls the batch interface during intercept processing.

Table 11-1. Intercept messages in the utility SYSPRINT data set

Messages	Explanation
HLOU5001I <i>date time</i> Accelerator Loader <i>product_version</i> , FMID= <i>product_fm</i> id, COMP_ID= <i>product_comp</i> id	The specified version of the product is installed and the DSNUTILB module, which is required for intercept processing, is available.
HLOU5012I <i>date time</i> Connected to started task HLOID= <i>configuration_id</i>	The DSNUTILB intercept connected to the specified Accelerator Loader started task configuration and completed initialization.
HLOU5002I <i>date time</i> Initialization is complete.	

Table 11-1. Intercept messages in the utility SYSPRINT data set (continued)

Messages	Explanation
HLOU5340E <i>date time</i> Worklist in use by another utility ID= <i>utility_ID</i>	DSNUTILB interception cannot occur because a worklist for the specified utility ID already exists and is currently in use by another utility job. In this case, refer to the HLOS5113I message in the SYSPRINT data set for the started task for more information.
HLOU5004I <i>date time</i> Analysis started. Step= <i>step_number</i>  HLOU5005I <i>date time</i> Analysis completed. RC= <i>return_code</i>	Accelerator Loader began the analysis phase for the specified worklist step and then completed the analysis phase with the specified return code. This return code is issued from the DSNUTILB intercept.
HLOU5008I <i>date time</i> Utility execution started. Step= <i>step_number</i>  HLOU5009I <i>date time</i> Utility execution completed. RC= <i>return_code</i>	The DB2 utility command that is associated with the specified worklist step began execution. The utility command then completed execution with the specified return code. These messages are issued for each utility command that is in the original DSNUTILB SYSIN stream. The return code in HLOU5009I is from either the DB2 utility or the DSNUTILB intercept. The intercept return code is used if: 1) it is 8 or greater and 2) it is equal to or greater than the utility return code. The highest return code that is provided in any HLOU5009I message for a worklist step will be the return code for the entire utility job.
HLOU5003I <i>date time</i> Accelerator Loader intercept completed.	The DSNUTILB intercept completed intercept processing for the utility.

For utility enhancements that modify the original DSNUTILB SYSIN stream (the additional options for the LOAD utility), messages HLOU5330, HLOU5331, and HLOU5332 are also written to the SYSPRINT data set to present the enhanced DSNUTILB SYSIN stream. To determine whether the SYSIN was correctly processed, compare this SYSIN stream for the utility with the subsequent DSNUTILB messages.

## Messages in the SYSPRINT data set for the started task

The following table explains the key messages on DSNUTILB intercept processing that can occur in the SYSPRINT data set for the started task.

Table 11-2. Intercept messages in the started task SYSPRINT data set

Messages	Explanation
HLOS0101I <i>date time</i> TCB: <i>tcb_address</i> Session created. SESS: <i>session_token-session_number-session_type-session_job_name-session_job_ID-session_asid-session_user</i>	The Accelerator Loader session was created for DSNUTILB intercept processing. Sessions for the DSNUTILB intercept have a session type of "U."

Table 11-2. Intercept messages in the started task SYSPRINT data set (continued)

Messages	Explanation
HLOS5100I <i>date time</i> TCB: <i>tcb_address</i> Session: <i>session_token</i> SSID: <i>ssid</i> DSNUTILB utility id : <i>utility_id</i> * <i>message_continuation_number</i> *	If an error occurred during DSNUTILB processing for a utility ID, the message HLOS5111E is issued along with the messages HLOS5100I and HLOS5101I, which provide more information about the intercept operation.
HLOS5101I <i>date time</i> * <i>message_continuation_number</i> * DSNUTILB intercept operation is <i>operation_name</i>	
HLOS5113I <i>date time</i> * <i>message_continuation_number</i> * Worklist is in use by another utility. Owing Session: <i>session_token</i>	If the failure occurred because the worklist is already in use under the same utility ID, the HLOS5113I message is also issued. In this case, refer to the preceding HLOS0101I message that contains a matching session token value to determine the job name and job ID of the utility job that is currently using the worklist.
HLOS5111E <i>date time</i> * <i>message_continuation_number</i> * DSNUTILB intercept operation failed	

## Displaying the DSNUTILB intercept status

You can write the DSNUTILB intercept status (Enabled or Disabled) to the SYSPRINT data set that is allocated to the started task by specifying a z/OS console command. This feature is useful when you need to quickly check the current intercept status.

### Procedure

To display the current intercept status, specify the following Modify operator command from the z/OS console:

```
F hlostc,DISPLAY INTERCEPT[,GLOBAL|ALL]
```

Where *hlostc* is the member name of the Accelerator Loader PROC in the system PROCLIB.

If you use SDSF, include a forward slash (/) in front of the Modify command, as follows:

```
/F hlostc,DISPLAY INTERCEPT[,GLOBAL|ALL]
```

If you issue the command without the optional GLOBAL or ALL parameter, the command displays the local status that is set for the specified started task only. If you specify the GLOBAL parameter, the command displays the global interception status that is set for the entire z/OS image. If you specify the ALL parameter, the command writes all of the following information to the SYSPRINT data set: the local interception status; the global interception status; and a list of the DB2 SSIDs for which DSNUTILB interception is occurring, including the HLOID (configuration ID) of the started task that is involved in intercept processing.

### Results

After issuing the command, navigate to the SYSPRINT data set for the started task to view the command output.



## Example

The following example displays the messages that resulted from the **DISPLAY INTERCEPT,ALL** command. These messages indicate the local intercept status, the global intercept status, and the SSID of the single subsystem for which DSNUTILB interception is occurring.

```
HLOS0814I date_timestamp Command issued: DISPLAY INTERCEPT,ALL
HLOS0817I date_timestamp LOCAL DSNUTILB intercept status is: ENABLED
HLOS0817I date_timestamp GLOBAL DSNUTILB intercept status is: ENABLED
HLOS0822I date_timestamp DB2 SSID=DBP1 810 HLOID=HL001 DSNUTILB interception is installed
```

## Terminating a DB2 utility for which interception has occurred

If you need to terminate a DB2 utility for which DSNUTILB intercept processing is occurring or has occurred, you should use the HLOMAINT utility that Accelerator Loader provides to do so.

### About this task

The HLOMAINT utility both issues the DB2 -TERM UTILITY command for a specific utility ID and removes the worklist rows that contain that utility ID from all intercept worklist tables in the Accelerator Loader repository.

If you manually issue the DB2 -TERM UTILITY command instead, you should still run the *hloid*MAINT utility to remove the data for the terminated utility (utility ID) from the worklist tables. If the data for the terminated utility remains in the worklist tables and you restart the utility, the DSNUTILB intercept will attempt to resume utility processing from the beginning of the current worklist step, as identified in the worklist tables.

### Procedure

1. Ensure that the Accelerator Loader started task is running and that the DB2 plan for Accelerator Loader is bound on the subsystem against which the DB2 utility is running.
2. Customize the JCL for the HLOMAINT utility, which is located in the *hloid*MNT member (where *hloid* is the Accelerator Loader configuration ID) in the *hlq.mlq.SHLOSAMP* library, as follows:

**Remember:** Tools Customizer creates a separate *hloid*MNT member for each started task configuration that you define.

- a. Add a job card, if necessary. If you specified a job card template when you ran Tools Customizer, that job card information should already be present.
- b. In the EXEC statement, set the following options on the PARM:

```
PARM='hloid,#FUNCTION#,#DB2SSID#,#UTILITY_ID#'
```

where:

- *hloid* is the configuration ID of the Accelerator Loader started task that you are using to perform DSNUTILB interception. You specified this value in Tools Customizer during customization, and Tools Customizer inserts this value for you.
- #FUNCTION# must be the value TERM\_UTILITY (the name of the function for terminating a DB2 utility and cleaning up the worklist tables).
- #DB2SSID# represents the subsystem identifier (SSID) of the DB2 subsystem against which the DB2 utility is running.
- #UTILITY\_ID# represents the DB2 identifier (UTILID) for the DB2 utility.

- c. In the STEPLIB DD statement, specify the high-level qualifier (?HLQ?) and the mid-level qualifier (?MLQ?) for the HLOLOAD library, if necessary. Tools Customizer inserted these values for you.
3. Submit the HLOMAINT job for execution.

## Results

The HLOMAINT utility terminates the DB2 utility and removes all data that is associated with the utility ID from the worklist tables.

## Restarting a DB2 utility in exceptional circumstances

In certain circumstances, you can use the Accelerator Loader HLOMAINT utility to resume utility processing properly.

### About this task

When a DB2 utility for which DSNUTILB interception is occurring terminates abnormally, DB2 can usually resume utility processing from the appropriate point, without any special user intervention, when you restart the utility. However, when Accelerator Loader is intercepting the LOAD utility for loading data onto the accelerator, and the LOAD utility fails for any reason, the utility ID in the worklist tables must also be restarted.

Consider using the HLOMAINT utility for restart purposes when an event such as an abend of the Accelerator Loader started task or of DB2 occurs and causes the DB2 utility to end before Accelerator Loader has recorded the status of the last utility-command operation within a worklist step in the intercept worklist tables. In this situation, you can use the HLOMAINT utility to resume utility processing from the last utility-command operation in the current worklist step, from the next operation within the current worklist step, or from the next worklist step.

### Procedure

1. Ensure that the Accelerator Loader started task is running and that the DB2 plan for Accelerator Loader is bound on the subsystem against which the DB2 utility is running.
2. Customize the JCL for the HLOMAINT utility, which is located in the *hloidMNT* member (where *hloid* is the Accelerator Loader configuration ID) in the *hlq.mlq.SHLOSAMP* library, as follows:

**Remember:** Tools Customizer creates a separate *hloidMNT* member for each started task configuration that you define.

- a. Add a job card, if necessary. If you specified a job card template when you ran Tools Customizer, that job card information should already be present.
- b. In the EXEC statement, set the following options on the PARM:

```
PARM='hloid,#FUNCTION#,#DB2SSID#,#UTILITY_ID#'
```

where:

- *hloid* is the configuration ID of the Accelerator Loader started task that you are using to perform DSNUTILB interception. You specified this value during customization.
- #FUNCTION# must be one of the following literal values, which identifies the restart function you want to use:
  - FORCE\_RESTART - Sets the status of the last utility-command operation within the current worklist step (the operation for which the

status was not recorded when the utility ended) such that the utility will be forced to restart from that operation.

- MARK\_COMPLETE - Sets the status of the last utility-command operation within the current worklist step (the operation that completed but was not recorded as complete when the utility ended) to complete. Accelerator Loader assumes that the utility-command operation completed successfully. When you restart the DB2 utility, it will resume intercept processing from the beginning of the next operation in the current worklist step.
  - STEP\_ADVANCE - Sets the status of the current worklist step to complete. When you restart the DB2 utility, it will resume intercept processing from the beginning of the next worklist step. You should specify this function only if you are prepared to manually perform any required operations that the intercept did not finish for the current worklist step before the status of that worklist step was set to complete. For example, you might need to manually drop the mapping tables and mapping-table indexes that were created for the REORG TABLESPACE utility or to reset the access statuses of DB2 objects for which threads were blocked.
  - TERM\_UTILITY - Terminates the utility instead of restarting it. For more information, see “Terminating a DB2 utility for which interception has occurred” on page 11-445.
    - #DB2SSID# represents the subsystem identifier (SSID) of the DB2 subsystem against which the DB2 utility is running.
    - #UTILITY\_ID# represents the DB2 identifier (UTILID) for the DB2 utility.
- c. In the STEPLIB DD statement, specify the high-level qualifier (?HLQ?) and the mid-level qualifier (?MLQ?) for the HLOLOAD library, if necessary. Tools Customizer inserted these values for you.
3. Submit the HLOMAINT job for execution.
  4. When the HLOMAINT job completes, restart the DB2 utility. The utility will resume processing based on the function that you specified.

**Related concepts:**

“Restrictions and considerations for loading from an external file” on page 7-1  
Review usage restrictions and considerations before loading data from an external file.

---

## Accelerator Loader studio and Accelerator Loader server troubleshooting

Use this information to diagnose and correct problems that you experience when using the Accelerator Loader studio and the Accelerator Loader server.

### Troubleshooting studio issues

To make sure that studio messages are included in the server trace output, verify that you have enabled server trace for the studio. For more information, see “Using Server Trace” on page 5-19.

### Troubleshooting server issues

Accelerator Loader server provides diagnostic tools and information that can be used to diagnose, debug, and correct problems. For more information, see “Viewing Server Trace information” on page 10-70.

## Changing network connections

If an attempt to create a virtual table or a source library fails with error message HTTP 401/403, changing network connections might resolve the issue.

### About this task

**Active Providers** controls the profile that is used when opening connections. Values are as follows:

- **Native** (default): Settings that are discovered in the operating system (OS) are used. If the OS has proxy settings, the URL request might fail to find the server.
- **Direct**: Connections are opened without the use of a proxy server.
- **Manual**: Settings that are defined in Eclipse are used.

### Procedure

1. From the **Window** menu, select **Preferences>General>Network Connections>Active Providers**.
2. Choose **Direct**.

#### Related concepts:

"Preferences" on page 5-25

Preferences allow you to customize several Accelerator Loader settings.

## Verifying that Unicode is installed

The Accelerator Loader server requires Unicode for translation.

### Procedure

1. To show the status of available conversions and whether the conversion services are initialized, issue the following MVS system command:

```
/D UNI, A11
```

You should receive the following output:

```
CUN3000I 11.36.02 UNI DISPLAY 277
ENVIRONMENT:      CREATED      01/13/2006 AT 14.52.07
                  MODIFIED     01/13/2006 AT 14.52.09
                  IMAGE CREATED 02/16/2005 AT 10.13.49
SERVICE: CHARACTER CASE NORMALIZATION COLLATION
STORAGE: ACTIVE      427 PAGES
              LIMIT   1564 PAGES
CASECONV: NORMAL
NORMALIZE: DISABLED
COLLATE:  DISABLED
CONVERSION: 00037-00437-E      00037-00437-R
             00037-00819-R      00037-01041-E
             00037-01041-R      00037-00367-E
             00037-00930-RE     00037-01200(13488)-R
             00037-01208-R      00300-00301-E
             00939-00942-RE     00939-01208-R
             01027-00367-E      01027-01200(13488)-R
             01027-01208-R      01027-01041-E
             01027-01041-R      01027-00930-RE
             01047-00367-E      01047-01200(13488)-R
             01047-01208-R         01047-00437-E
             01047-00437-R      01047-00819-R
             01047-00930-RE     00301-00300-E
             00301-01200(13488)-R 00942-00939-RE
             01047-01208-R         00437-00037-E
             00437-00037-R      00437-01047-E
             00437-01047-R      01041-00037-E
             01041-00037-R      01041-01027-E
```

01041-01027-R	00437-00367-E
00437-00930-RE	00437-01200(13488)-R
00437-01208-R	00819-00037-R
00819-01047-R	00819-00367-E
00819-00930-RE	00819-01200(13488)-R
00819-01208-R	00930-00037-RE
00930-01047-RE	00930-00437-RE
00930-00819-RE	00930-00367-R
00930-01200-R	00930-01208-R
00367-00037-E	01200(13488)-00037-E
01208-00037-E	00367-00930-RE
01200-00930-E	01208-00930-E
00367-01027-E	01200(13488)-01027-E
01208-01027-ER	00367-01047-E
01200(13488)-01047-E	01200(13488)-00300-E△
01200(13488)-00301-E	01208-01047-E
01208-00939-E	01208-00942-E
00367-00437-E	01200(13488)-00437-E
01208-00437-E	00367-00819-E
01200(13488)-00819-E	01208-00819-E
01208-00367-ER	00367-01208-R
01200-01208-ER	01208-01200-ER

2. In the output, locate the following code conversion pages for Unicode, which are the defaults that Accelerator Loader server uses:
- 1208 to 1047
  - 1047 to 1208

## Conversion CCSID table

The Accelerator Loader server provides multicultural support.

Identify the Coded Character Set Identifiers (CCSID) that is used at your site. The following table lists CCSIDs that the server provides by default and the conversion technique.

*Table 11-3. Conversion CCSID*

SOURCE CCSID	TARGET CCSID	TECHNIQUE
00037	00367	E
00037	00367	E
00037	00367	ER
00037	00437	E
00037	00437	ER
00037	00437	R
00037	00819	ER
00037	00819	R
00037	00930	RE
00037	01041	E
00037	01041	R
00037	01200	ER
00037	01200	R
00037	01208	ER
00037	01208	R
00300	00301	E

Table 11-3. Conversion CCSID (continued)

SOURCE CCSID	TARGET CCSID	TECHNIQUE
00301	00300	E
00301	01200	R
00367	00037	E
00367	00037	ER
00367	00437	E
00367	00437	ER
00367	00819	E
00367	00819	ER
00367	00930	RE
00367	01027	E
00367	01047	E
00367	01047	ER
00367	01208	ER
00367	01208	R
00437	00037	E
00437	00037	ER
00437	00037	R
00437	00367	E
00437	00367	ER
00437	00930	RE
00437	01047	E
00437	01047	ER
00437	01047	R
00437	01200	ER
00437	01200	R
00437	01208	ER
00437	01208	R
00819	00037	ER
00819	00037	R
00819	00367	E
00819	00367	ER
00819	00930	RE
00819	01047	ER
00819	01047	R
00819	01200	ER
00819	01200	R
00819	01208	ER
00819	01208	R
00930	00037	RE
00930	00367	R

Table 11-3. Conversion CCSID (continued)

SOURCE CCSID	TARGET CCSID	TECHNIQUE
00930	00437	RE
00930	00819	RE
00930	01047	RE
00930	01200	R
00930	01200	E
00930	01200	RE
00930	01208	R
00930	01208	E
00930	01208	RE
00939	00942	RE
00939	01208	R
00942	00939	RE
00942	01208	R
01027	00367	E
01027	00930	RE
01027	01041	E
01027	01041	R
01027	01200	R
01027	01208	R
01041	00037	E
01041	00037	R
01041	01027	E
01041	01027	R
01047	00367	E
01047	00367	ER
01047	00437	E
01047	00437	ER
01047	00437	R
01047	00819	ER
01047	00819	R
01047	00930	RE
01047	01200	ER
01047	01200	R
01047	01208	ER
01047	01208	R
01200	00037	E
01200	00037	ER
01200	00300	E
01200	00301	E
01200	00437	E

Table 11-3. Conversion CCSID (continued)

SOURCE CCSID	TARGET CCSID	TECHNIQUE
01200	00437	ER
01200	00819	E
01200	00819	ER
01200	00930	R
01200	00930	E
01200	00930	RE
01200	01027	E
01200	01047	E
01200	01047	ER
01200	01208	ER
01208	00037	E
01208	00037	ER
01208	00367	ER
01208	00367	ER
01208	00437	E
01208	00437	ER
01208	00819	E
01208	00819	ER
01208	00930	R
01208	00930	E
01208	00930	RE
01208	00939	E
01208	00942	E
01208	01027	ER
01208	01047	E
01208	01047	ER
01208	01200	ER

## Correcting character display problems (DRDA only)

Depending on the CCSID that you use, you might encounter incorrectly displayed characters in the studio for DRDA sources. To resolve the issue, instruct the server to load the required character translation tables.

### Before you begin

- Verify that Unicode is installed (see “Verifying that Unicode is installed” on page 11-448).
- Verify that your code page is installed (see “Conversion CCSID table” on page 11-449). If your code page is not listed in the table, add it as described in this task.
- Determine whether you have the character display problem:
  1. In the Accelerator Loader studio **Server** view, browse the SQL metadata for DRDA. Choose **SQL > Data > Other Subsystems**.



- |
- | 2. When navigating the tree, if you encounter garbled names, it is possible that
- | the server was unable to perform the required character translation when
- | accessing the catalog data. To confirm this problem and establish the CCSID
- | values that are involved, review the server trace and search for messages
- | similar to the following:

| Assert Warning(UCSconvertCCSIDs): No matching UCS conversion -

| source CCSID *ccsid*, target CCSID *ccsid*

|

### Procedure

- |
1. Locate data set *hlq*.SHLVEXEC member *hlvid*IN00, where *hlvid* represents the name of the Accelerator Loader server started task that was customized by using Tools Customizer.
  2. Locate the section for DRDA data sources and add the following statements:

| "DEFINE CONV SOURCE(*ccsid1*) TARGET(*ccsid2*) TECH(RE)"

| "DEFINE CONV SOURCE(*ccsid2*) TARGET(*ccsid1*) TECH(RE)"

| where

- Source and target *ccsid1* and *ccsid2* are the CCSID values that are shown in the server trace messages.
  - TECH specifies the technique to be used in the conversion. For more information about character conversion, see the IBM Knowledge Center.
- |



---

## Reference

These reference topics provide you with quick access to information about Accelerator Loader customization and functionality.

### Topics:

- “Tools Customizer reference”
- “Accelerator Loader terminology” on page 12-7
- “Navigating product panels” on page 12-8
- “Primary commands” on page 12-9
- “Panel commands and fields reference” on page 12-10
- “Components and structure” on page 12-49
- “Console commands for the Accelerator Loader started task” on page 12-51
- “Column display functions (CSETUP)” on page 12-53

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## Tools Customizer reference

Before you use Tools Customizer, you should understand the Tools Customizer terminology and the data sets that Tools Customizer uses during customization.

### Tools Customizer terminology and data sets

Before you use Tools Customizer, you should understand the Tools Customizer terminology and the data sets that Tools Customizer uses during customization.

#### Tools Customizer terminology

Tools Customizer uses several unique terms that you should be familiar with before you begin to use Tools Customizer.

##### Products and components

How an IBM Tool is packaged determines whether it is referred to as a product or as a component in the Tools Customizer documentation and interface. An IBM Tool that is ordered as a stand-alone entity (that is, not as part of a solution pack) is referred to as a product. An IBM Tool that is part of a solution pack is referred to as a component. Some IBM Tools are available in both formats; therefore, the same IBM Tool can be referred to as a product or as a component depending on how it is packaged.

##### DB2 entry

You can customize DB2 Analytics Accelerator Loader on one or more DB2 entries. A DB2 entry can be any of the following items:

##### DB2 subsystem

A distinct instance of a relational database management system (RDBMS) that is not part of a data sharing group. An example of a DB2 subsystem name is DB01.

##### DB2 group attach name

The name that is used by the TSO/batch attachment, the call attachment facility (CAF), DL/I batch, utilities, and the Resource Recovery Services attachment facility (RRSAF) as a generic attachment name. An example of a group attach name is DSG1.

**DB2 data sharing member**

A DB2 subsystem that is assigned by the cross-system coupling facility (XCF) to a data sharing group. An example of a DB2 data sharing member name is DB02.

Tools Customizer maintains the following lists of DB2 entries:

**Associated list**

The list of DB2 entries that are associated with DB2 Analytics Accelerator Loader. If the product to be customized requires DB2 entries, you can customize DB2 Analytics Accelerator Loader only on DB2 entries that are in the associated list. When you customize DB2 Analytics Accelerator Loader, this list is displayed in the DB2 Entries, Associations, and Parameter Status section of the Customizer Workplace panel.

You can add and copy DB2 entries to the associated list. When you add or copy DB2 entries to the associated list, the entries are associated with DB2 Analytics Accelerator Loader.

**Master list**

The list of all DB2 entries that are defined but are not associated with DB2 Analytics Accelerator Loader. Tools Customizer obtains information about these DB2 entries either from entries that were created manually or from the customizations of other products that were discovered. If you remove a DB2 entry from the associated list, the DB2 entry is added to the master list. When you create a new DB2 entry, it is added to the master list, and when you associate the new entry with DB2 Analytics Accelerator Loader, it is removed from the master list and added to the associated list. The master list is displayed on the Associate a DB2 Entry for Product panel.

If the associated list does not have the DB2 entries on which you want to customize DB2 Analytics Accelerator Loader, you can associate existing entries from the master list to the associated list.

You can create new DB2 entries and copy existing entries to the master list.

**High-level qualifier**

The high-level qualifier is considered to be all of the qualifiers except the lowest level qualifier. A high-level qualifier includes a mid-level qualifier.

**Product parameters**

Parameters that are specific to DB2 Analytics Accelerator Loader. These parameters are defined by DB2 Analytics Accelerator Loader and are stored in a data member that is defined by DB2 Analytics Accelerator Loader.

**LPAR parameters**

Parameters on the local LPAR that are required to customize DB2 Analytics Accelerator Loader. These parameters are defined by Tools Customizer and are stored in an LPAR parameter data member.

**DB2 parameters**

Parameters for a DB2 entry. These parameters are defined by Tools Customizer and are stored in a DB2 parameter data member.

**Configuration**

A set of parameter values and selected tasks and steps that you use to generate the jobs that customize DB2 Analytics Accelerator Loader.

For example, you might want to have a test configuration and a production configuration on the same DB2 entry.

## Status type

### Product, LPAR, and DB2 entry status type

After you specify the product that you want to customize, the product, the LPAR, and the DB2 entries have a status. The status is partly based on whether required parameters are defined. For some products, LPAR parameters or DB2 parameters might not be required. In these cases, the status is Not Required.

To customize DB2 Analytics Accelerator Loader, all of the required parameters must be defined.

If required parameters for the the product parameters, LPAR parameters, or DB2 parameters are not defined, the status of the parameters is Incomplete. Define values for parameters by manually editing them or by generating the customization jobs and specifying values for all of the required parameters that are displayed on the panels.

When values for all of the required parameters are defined, the status is Ready to Customize. Customization jobs can be generated only when all of the required parameters are defined and the status is Ready to Customize or Customized for the product parameters, LPAR parameters, and DB2 parameters for the DB2 entries on which DB2 Analytics Accelerator Loader will be customized.

The following table shows the meaning of the status types. Each status is defined differently for each type of parameter.

*Table 12-1. Status types for the product, the LPAR, and the DB2 entries*

Status	Product	LPAR	DB2 entries
Incomplete	The required product parameters are not defined, or the required product parameters are defined but LPAR parameters, DB2 parameters, or both are not defined.	The required parameters are not defined.	The required parameters are not defined.
Discovered	The product parameter definitions were discovered by using the product Discover EXEC.	N/A	N/A

Table 12-1. Status types for the product, the LPAR, and the DB2 entries (continued)

Status	Product	LPAR	DB2 entries
Ready to Customize	The required product, LPAR, and DB2 parameters are defined, the status is Ready to Customize or Customized for the LPAR and at least one associated DB2 entry. You can generate the customization jobs.	The required LPAR parameters are defined or LPAR parameters are not required.	The required DB2 parameters are defined or DB2 parameters are not required.
Customized	The jobs are customized on the local LPAR.	The jobs are customized for the product or for all of the associated DB2 entries on the local LPAR.	The jobs are customized for the DB2 entry.
Errors in Customization	N/A	N/A	Errors occurred while the customization jobs were being generated.
Not Required	N/A	LPAR parameters are not required.	DB2 parameters are not required.

**Related tasks:**

“Creating and associating DB2 entries” on page 3-18

You can create new DB2 entries and associate them with DB2 Analytics Accelerator Loader.

“Copying DB2 entries” on page 3-36

You can copy associated and not associated DB2 entries to other DB2 entries or to new DB2 entries.

“Removing DB2 entries” on page 3-38

You can remove DB2 entries from the associated list.

**Data sets that Tools Customizer uses during customization**

Tools Customizer uses several unique data sets during the customization process. Familiarize yourself with these data sets before you begin to use Tools Customizer.

Several different data sets are required to customize DB2 Analytics Accelerator Loader with Tools Customizer. These data sets are supplied by DB2 Analytics Accelerator Loader, supplied by Tools Customizer, or allocated by Tools Customizer.

DB2 Analytics Accelerator Loader provides the following data sets:

**Metadata library**

Contains the metadata for the product to be customized. Tools Customizer uses the metadata to determine which tasks, steps, and parameters to display on the Product Parameters panel, the LPAR Parameters panel, and the DB2 Parameters panel. This data set also contains the templates that Tools Customizer uses to generate the customization jobs.

The metadata library naming convention is *high\_level\_qualifier*.SHLODENU, where *high\_level\_qualifier* is all of the segments of the data set name except the lowest-level qualifier.

You specify the metadata library on the Specify the Metadata Library panel. READ access to this data set is required.

#### **Discover EXEC library**

Contains the DB2 Analytics Accelerator Loader Discover EXEC. When you customize DB2 Analytics Accelerator Loader, you can use the Discover EXEC to automatically retrieve and store product information, such as parameter values from an already customized product. Tools Customizer saves the discovered information in the data store.

The default name of the data set is the high-level qualifier for the metadata library plus a lowest-level qualifier. For DB2 Analytics Accelerator Loader, the lowest-level qualifier is SHLODENU. You can change the default value on the Discover Customized Product Information panel. EXECUTE access to this data set is required.

Tools Customizer provides the following data sets:

#### **Tools Customizer metadata library**

Contains the metadata for the DB2 and LPAR parameters that are required to customize DB2 Analytics Accelerator Loader. Tools Customizer uses the metadata to determine which parameters to display on the DB2 Parameters panel and the LPAR Parameters panel. In addition, Tools Customizer uses information in the metadata library to determine whether additional DB2 and LPAR parameters need to be displayed on these panels. As you customize different products, different DB2 and LPAR parameters might need to be defined.

The default name of the data set is DB2TOOL.CCQ110.SCCQDENU. You can change the default value on the Tools Customizer Settings panel. READ access to this data set is required.

#### **Tools Customizer table library**

Stores information about jobs that are customized. Job information that is stored includes a description of the job, its member name and template name, the SSID, group attach name, and when the job was generated.

The default name of the data set is DB2TOOL.CCQ110.SCCQTENU. WRITE access to this data set is required.

Tools Customizer requires that the following data sets exist during the customization process. If the data sets do not exist, Tools Customizer automatically allocates them.

#### **Discover output data set**

Contains the output that is generated when you run the DB2 Analytics Accelerator Loader Discover EXEC. The DB2 Analytics Accelerator Loader Discover EXEC retrieves the metadata and values for the parameters from a previous customization of DB2 Analytics Accelerator Loader.

The default name of the data set is DB2TOOL.CCQ110.DISCOVER. You can change the default value on the Tools Customizer Settings panel or the Discover Customized Product Information panel. WRITE access to this data set is required.

#### **Data store data set**

Contains product, LPAR, and DB2 parameter values, and DB2 entry

associations. Tools Customizer uses this data set to permanently store all information that is acquired about the product, DB2 subsystems or data sharing groups, and LPAR when you customize products on the local LPAR.

The default name of the data set is DB2TOOL.CCQ110.DATASTOR. You can change the default value on the Tools Customizer Settings panel. WRITE access to this data set is required.

### Customization library

Contains the customization jobs that Tools Customizer generates for DB2 Analytics Accelerator Loader.

Tools Customizer checks whether a customization library name was specified for more than one instance of the same version of the same product. If the same customization library name is specified for more than one product of the same version, the CCQD123E message is issued to prevent you from overwriting previously generated customization jobs. Ensure that you specify unique qualifier for the customization library for each instance of the product.

To customize DB2 Analytics Accelerator Loader, submit the members of the data set in the order in which they are displayed on the Finish Product Customization panel.

The data set naming convention is *hlq.\$LPAR\_name\$.xyzvrm*, where:

- *hlq* is the value of the **Customization library qualifier** field on the Tools Customizer Settings panel (CCQPSET)
- *LPAR\_name* is the four-character LPAR name
- *xyzvrm* is the three-letter product identifier with the version, release, and modification level

For example, the data set name might be DB2TOOL.PRODUCT.CUST.\$MVS1\$.XYZ410.

WRITE access to this data set is required.

Tools Customizer allocates the data sets for the discover output, the data store, and the customization library with the attributes that are shown in the following table:

*Table 12-2. Data set attributes for allocating the Discover output, data store, and customization library data sets*

Data set	Organization	Record format	Record length	Block size	Data set name type
Discover output data set	PO	Variable block	16383	32760	LIBRARY
Data store data set	PO	Variable block	16383	32760	LIBRARY
Product customization library	PO	Fixed block	80	32720	LIBRARY

### Restrictions:

- Multiple users cannot simultaneously share the discover output data set, data store data set, Tools Customizer metadata library, and metadata library.



- You cannot share the data store data set across multiple LPARs with shared DASD or copy the data store data set to another LPAR. Tools Customizer creates many cross-references between product and DB2 associations. Therefore, if you share or copy the data store data set, member names that are empty or that do not exist might be generated.

---

## Accelerator Loader terminology

DB2 Analytics Accelerator Loader includes several unique terms. Ensure that you understand them before you begin to use the product.

### Accelerator Loader server

A mainframe-resident data access server that provides access to all data sources.

### Accelerator Loader studio

A graphical user interface that you use to complete tasks to generate JCL to load data to the accelerator.

### Accelerator only load profile

See *profile types*.

### Consistent data load

The process of using Accelerator Loader to process a group of tables in one batch job and load related sets of data to the accelerator to a common checkpoint.

### Consistent load profile

See *profile types*.

### DB2 Analytics Accelerator

See IBM DB2 Analytics Accelerator for z/OS.

### Dual load

The process of using Accelerator Loader to load DB2 data on the accelerator and into DB2 simultaneously.

### Dual load profile

See *profile types*.

### External load

The process of using Accelerator Loader to update the data on the accelerator with data from a source other than DB2.

### Historical data load

The process of using Accelerator Loader to process a group of tables in one batch job and load related sets of data to the accelerator to a time in the past.

### IBM DB2 Analytics Accelerator for z/OS

A workload optimized appliance that combines System z<sup>®</sup> and Netezza<sup>®</sup> technologies to deliver mixed workload performance for complex analytic needs. The accelerator runs complex queries up to 2000 times faster, retains single record lookup speed, and eliminates costly query tuning while offloading query processing.

### Image copy load

The process of loading data for a single table into the accelerator from a user-specified DB2 image copy. Specifying an end time or rolling through the logs is not required; the product uses the image copy as the content of the object to be loaded.

### Image copy load profile

See *profile types*.

### Netezza appliance

The IBM Netezza Data Warehouse Appliance, which is the foundation for the IBM DB2 Analytics Accelerator for z/OS (the accelerator). Accelerator Loader is a tool that updates the data on the accelerator without stopping update activity to the production tables while the data is being loaded into the accelerator.

### Profile types

The types of DB2 Analytics Accelerator Loader profiles are as follows:

- **Dual** specifies options for loading table data into both the accelerator and DB2 from an external data input file.
- **Accelerator only** specifies options for loading table data into only the accelerator from an external data input file.
- **Consistent** specifies options for loading data for multiple tables into the accelerator from a cataloged DB2 image copy.
- **Image copy** specifies options for loading data for a single table into the accelerator from a user-defined DB2 image copy.

### Virtual source library

A partitioned data set (PDS) on z/OS that contains information that is required for mapping the source data to the target DB2 table on the Accelerator Loader server. A virtual source library is a reference to an existing library on z/OS that contains information that DB2 Analytics Accelerator Loader requires to virtualize the source data.

### Subsystem table

Tables that are defined to other DRDA-connected RDBMS.

### Virtual table

A product-created object that is registered within the Accelerator Loader server and visualized in Accelerator Loader studio; it represents the data in a format from which to query. A virtual table can be created on any data source, and it is required that one exist in order to load data to the accelerator.

### Virtual view

The SELECT statement that contains the columns from the source data that are used to read data directly from the data source.

### Related concepts:

“What does Accelerator Loader do?” on page 1-6

Accelerator Loader provides capabilities for loading data into DB2 and IBM DB2 Analytics Accelerator for z/OS.

---

## Navigating product panels

When data exceeds the size of the panel, indicators alert you that additional data exists outside the visible panel.

The text **Row x of y** or **More: +** in the upper right corner of the panels are used to indicate a scrollable page. Pages may be scrollable horizontally, vertically, or both.

A plus sign (+) or minus sign (-) indicates that additional data is available vertically.

- The plus sign (+) indicates more data below; use PF8 to scroll down.

- The minus sign (-) indicates more data above; use the PF7 key to scroll up.

The less than symbol (<) or the greater than symbol (>) indicates that additional data is available horizontally.

- The less than symbol (<) indicates more data to the left; use PF10 to scroll to the left.
- The greater than symbol (>) indicates more data to the right; use PF11 to scroll to the right.

**Related tasks:**

“Starting the ISPF interface” on page 4-1

Use the product's ISPF interface to create the JCL and control cards that are required to build the JCL to load data to DB2 and the IBM DB2 Analytics Accelerator for z/OS from an external file or an image copy.

---

## Primary commands

You use DB2 Analytics Accelerator Loader primary commands to find information, navigate panels, modify the display of data, and print information.

**FIND** *abc*

Finds a unique string within a panel of data where *abc* is the string for which you are searching. If the specified string is found, the cursor moves to the first position of the found string. If the specified string is not found, a message is displayed. You should be as specific as possible when using the **FIND** command to ensure the correct return.

The syntax is:

```
FIND <string>
```

where <string> is the text that you want to find.

For example, to find the word "apple," use the following command:

```
FIND apple
```

To find the next and subsequent occurrences of the string, press PF5.

**SORT** *column\_number direction*

Sorts data (on panels of scrollable or tabular data) by column where *column\_number* is the number of the column by which you want to sort and *direction* can be either **A** (to sort data in ascending order) or **D** (to sort data in descending order).

You can refer to columns only by the column number (not the column name). Column numbers are not displayed on the panel. The CMD column is column 1 and columns to the right are incremented sequentially.

To specify sort order, append the A or D to the end of the SORT command. The default is ascending (A). For example, to sort column 2 in descending order, type:

```
SORT 2 D
```

in the command line and press Enter.

**Related tasks:**

“Starting the ISPF interface” on page 4-1

Use the product's ISPF interface to create the JCL and control cards that are required to build the JCL to load data to DB2 and the IBM DB2 Analytics

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## Panel commands and fields reference

This topic provides a reference to Accelerator Loader ISPF panel commands and fields. For more information about a panel, on that panel, press PF1.

- “Main menu” on page 12-11
- “User Settings panel” on page 12-12
- “DB2 Subsystems panel” on page 12-12
- “New DB2 Subsystem panel” on page 12-13
- “DB2 Subsystem Parameters panel” on page 12-13
- “Accelerator Loader Parameters panel” on page 12-14
- “Confirm Action panel” on page 12-14
- “Set Batch Job Card Information panel” on page 12-16
- “Manage Loader Profiles panel” on page 12-16
- “Create Profile panel” on page 12-18
- “Save Profile panel” on page 12-18
- “Load Accelerator and DB2 from External File panel” on page 12-19
- “Load Accelerator from External File panel” on page 12-23
- “DD Template Specification panel” on page 12-26
- “DD DSN Template panel” on page 12-28
- “DD DSN Template (View) panel” on page 12-30
- “Resulting DSN Using Current panels” on page 12-31
- “Load Accelerator with Consistent Data panel” on page 12-31
- “Load Accelerator from specified Image Copy panel” on page 12-36
- “Enter Table and Creator Like to Display panel” on page 12-38
- “Add DB2 Tables/DB2 Table Selection panel” on page 12-39
- “DB2 Table List panel” on page 12-39
- “Referentially Dependent Table Selection panel” on page 12-40
- “DB2 Analytics Accelerator Selection panel” on page 12-41
- “FlashCopy DSN Template panel” on page 12-41
- “FlashCopy DSN Template (View) panel” on page 12-43
- “Rename Profile panel” on page 12-44
- “Build Load JCL panel” on page 12-44
- “Warning panel” on page 12-45
- “Data set allocation parameters panel” on page 12-45
- “Administer Accelerator Loader server panel” on page 12-46
- “Server Trace panel” on page 12-46
- “ISPF Session Parameters panel” on page 12-47
- “Parameter Groups panel” on page 12-47
- “Event Facility (SEF) Control panel” on page 12-48
- “Display Global Variables panel” on page 12-48
- “Event Facility (SEF) Ruleset Entry Profile panel” on page 12-48
- “SEF - Command Response Display panel” on page 12-49

## Main menu

The main panel for DB2 Analytics Accelerator Loader provides the following options and fields. Type the number or letter that corresponds to the task that you want to perform.

**Setup** Opens the User Settings panel, on which you can choose the DB2 subsystem on which to run the product or specify the job card to use when building JCL.

### **Server administration**

Opens the Administer Accelerator Loader server panel, on which you can work with the Accelerator Loader server.

### **Manage Loader profiles**

Opens the Manage Loader Profiles panel, on which you create, edit, or view an existing profile definition.

### **Load Accelerator and DB2 from external file**

Opens the Load Accelerator and DB2 from External File panel. Use this panel to specify options for a new Dual profile type, or to edit options for an existing profile. A Dual profile specifies options for loading table data into both the accelerator and DB2 from an external data input file.

### **Load Accelerator from external file**

Opens the Load Accelerator from External File panel. Use this panel to specify options for a new External profile type, or to edit options for an existing profile. An External profile specifies options for loading table data into only the accelerator from an external data input file.

### **Load Accelerator with consistent data**

Opens the Load Accelerator with Consistent Data panel. Use this panel to specify options for a new Consistent load profile, or to edit options for an existing profile. A Consistent load profile specifies options for loading data for multiple tables into the accelerator from a cataloged DB2 image copy.

### **Load Accelerator from a specified image copy**

Opens the Load Accelerator from specified Image Copy panel. Use this panel to specify options for an Image Copy profile type. An Image Copy profile specifies options for loading data for a single table into the accelerator from a user-defined DB2 image copy.

**Exit** Closes the main menu.

### **User ID**

Your user ID.

### **System ID**

The z/OS system on which DB2 Analytics Accelerator Loader is running.

### **Appl ID**

The DB2 Analytics Accelerator Loader application ID.

### **Version**

The version of DB2 Analytics Accelerator Loader that you are running.

### **DB2 SSID**

The DB2 subsystem ID of the DB2 subsystem on which to run DB2 Analytics Accelerator Loader. To display a list of the existing DB2 SSIDs, type a question mark (?) in the field and press Enter. The DB2 Subsystems panel opens.

### Accelerator Loader server ID

Enter the name of the z/OS system on which the Accelerator Loader server is running.

### Related tasks:

“Starting the ISPF interface” on page 4-1

Use the product's ISPF interface to create the JCL and control cards that are required to build the JCL to load data to DB2 and the IBM DB2 Analytics Accelerator for z/OS from an external file or an image copy.

## User Settings panel

Select the DB2 subsystem on which to run the product and to specify the job card that you want to use when building JCL.

The following options and fields are available:

### DB2 subsystem

Opens the DB2 Subsystems panel.

**Batch** Opens the Set Batch Job Card Information panel.

### User ID

Your user ID.

### System ID

The z/OS system on which DB2 Analytics Accelerator Loader is running.

### DB2 SSID

The ID of the DB2 subsystem on which DB2 Analytics Accelerator Loader is running.

### Related tasks:

“Configuring a DB2 subsystem” on page 4-3

You must configure at least one DB2 subsystem for use with Accelerator Loader.

“Specifying job card information” on page 4-5

Define a job card to include in batch jobs.

## DB2 Subsystems panel

Select or edit information about the DB2 subsystem on which to run DB2 Analytics Accelerator Loader.

The following commands are available:

- **CREATE:** Type this command on the command line to create a new DB2 subsystem entry.
- Type one of the following commands in the **Cmd** field next to an existing SSID:
  - **S** to select the DB2 subsystem with which you want to work.
  - **D** to delete the selected DB2 subsystem from the control file. This command opens the Confirm Action panel.
  - **E** to edit information about the DB2 subsystem. This command opens the Edit DB2 Subsystem Parameter panel.
  - **V** to view information about the DB2 subsystem. This command opens the View DB2 Subsystem Parameter panel.
  - **C** to copy information from one subsystem to another. This command opens the New DB2 Subsystem panel.

The following fields are available:

**Current DB2 SSID**

The DB2 subsystem being edited, viewed, or created.

**Current user indicator**

The user indicator that is specified in the CLIST that is used to start the product. You cannot change this field; it is set when the product CLIST is started.

**DB2 control data set**

The name of the DB2 control data set. This is the VSAM control file that you have previously created and specified in the CLIST. You cannot change this field.

## New DB2 Subsystem panel

Specify a new DB2 subsystem ID. The following field is available:

**DB2 SSID**

The ID of the DB2 subsystem on which to run DB2 Analytics Accelerator Loader.

## DB2 Subsystem Parameters panel

Change the definition of an existing DB2 subsystem entry.

The following command and fields are available:

**Accelerator Loader parameters**

Opens the Accelerator Loader Parameters panel.

**SSID** The DB2 subsystem being edited, viewed, or created.

**Description**

A meaningful description of the subsystem, up to 44 alphanumeric characters.

**Accelerator Loader plan**

(required) The product plan to be used when connecting to the DB2 catalog; up to 8 alphanumeric characters. No default value.

**DB2 ZPARMs member**

The ZPARM load module member name generated for this DB2 subsystem; up to 8 alphanumeric characters. No default value.

**DB2 Bootstrap DSN #01****DB2 Bootstrap DSN #02**

(required) The full data set names of the two bootstrap data sets that are used by this DB2 subsystem. No default value.

**DB2 Loadlib1**

(required) The name of the data set that comprises the current load library concatenation for DB2, and is used during batch job processing; up to 47 alphanumeric characters. No default value.

The load library usually consists of:

- a subsystem-specific DSNEXIT library
- the base DSNEXIT library for the current DB2 version
- the base DSNLOAD library for the current DB2 version

**DB2 Loadlib2****DB2 Loadlib3****DB2 Loadlib4**

## DB2 Loadlib5

The names of optional additional libraries that are required for the subsystem during batch job processing.

## Confirm Action panel

Confirm or cancel deletions, such as deleting a DB2 SSID or a profile, or changes, such as changing a table. The panels display the name and description of the affected object.

- To confirm the deletion or change, press Enter.
- To cancel the deletion or change, press F12.
- (not available on all panels) To suppress future displays of the panel, type a forward slash (/) in the field next to **Set item delete confirmation off**.

## Accelerator Loader Parameters panel

Specify product options such as sort program, log read and apply preferences, and file allocation parameters.

The following fields are available:

### Use DB2 Sort when possible

Specifies whether the DB2 Sort product is to be used for internal product sorts.

**Y** If **Y** is specified, the DB2 Sort program product is to be used for internal product sorts.

**N** If **N** is specified, the product uses the sort program (DFSORT or SYNCSORT) that is installed on the LPAR (specified in the **Sort Program Installed** field).

### Sort program installed

Specifies the sort program that is installed on the LPAR, DFSORT or SYNCSORT.

Log read and log apply preferences:

### Log reader copy preference

Sets the default value for log reader copy preference. Unless you change it, the default value is R1R2A1A2. You can specify different values for each SSID. The current SSID log reader value is used for JCL generation. For more information, see LOG\_COPY\_PREFERENCE in “Syntax definitions: Consistent load and Image Copy load” on page 9-14.

File allocation parameters:

### Number of buffers

The number of buffers that the product is to use. Valid values are 1 - 99. (Synonymous with the JCL BUFNO= parameter.)

### Channel programs

The number of channel programs that the product is to use. (Synonymous with the JCL NCP= parameter.) If a value of 0 is set, the product will use a predetermined channel program setting to attempt to gain optimal performance. Otherwise, a value of 1 - 99 can be specified to determine a best fit value for the site.



**Note:** The number of channel programs that you specify controls how many outstanding QSAM channel programs can run at the same time before the earliest one is checked for completion.

Data sets parameters:

**Device type**

The device type for data sets created by DB2 Analytics Accelerator Loader. DASD devices and tape devices are valid for work files and SYSPRINT files.

**Data set type**

The type of data set that will be used for data sets created by DB2 Analytics Accelerator Loader.

**Track or cylinder**

The allocation unit for work data sets created by DB2 Analytics Accelerator Loader. Valid values are **TRK** (tracks) and **CYL** (cylinders).

**Primary quantity**

The primary quantity for data sets created by DB2 Analytics Accelerator Loader (in the units specified in the **Track or Cylinder** field).

**Note:** The maximum value that can be specified in the primary or secondary quantity field is 16777215. If you need to specify more space than the maximum, convert to a different space unit (for example, convert bytes to kilobytes by dividing by 1024) and specify the new value.

**Secondary quantity**

The secondary quantity for data sets created by DB2 Analytics Accelerator Loader (in the units specified in the **Track or Cylinder** field).

**Note:** The maximum value that can be specified in the primary or secondary quantity field is 16777215. If you need to specify more space than the maximum, convert to a different space unit (for example, convert bytes to kilobytes by dividing by 1024) and specify the new value.

**Maximum volumes**

The maximum number of volumes that can be used for work data sets.

**Note:** The **Maximum Volumes** field is valid when the device type is set to a DASD or tape device.

**SMS data class**

The SMS data class for data sets created by DB2 Analytics Accelerator Loader.

**SMS storage class**

The SMS storage class for data sets created by DB2 Analytics Accelerator Loader.

**SMS management class**

The SMS management class for data sets created by DB2 Analytics Accelerator Loader.

Sort Work parameters:

**Unit device**

Indicates the sort work file unit device to be used when generating utility JCL. Valid values are SYSALLDA, DISK, and so on. Depending on the unit device that you specify, set the number of DDs as follows:

- For a tape device, specify a **Number of DDs** value from 3 through 99.
- For a DASD device, specify a **Number of DDs** value from 1 through 99.

#### **Number of DDs**

The number of SORTWKnn DD statements used for product sort work data sets. Set the value as follows, depending on the unit device value that you specify:

- For a tape device, specify a value from 3 through 99.
- For a DASD device, specify a value from 1 through 99.

#### **Primary space**

The primary space used (cylinders) for product sort work data sets.

#### **Secondary space**

The secondary space used (cylinders) for product sort work data sets.

#### **Utility REGION Size**

Indicates the REGION size in megabytes that the product is to use when generating utility JCL. Valid values are 0 - 2047.

## **Set Batch Job Card Information panel**

Use this panel to specify how you want the batch job built when generating JCL with Accelerator Loader. The following commands are available:

- **ADD:** Type this command on the command line to add another line to the job card.
- Type a command in the **Cmd** field next to a line to complete a task:
  - D to delete the line.
  - I to insert a new line.
  - M to move a line to a new position.

## **Manage Loader Profiles panel**

Use this panel to create, edit, or view an existing profile definition.

The following commands are available:

- **CREATE:** Type this command on the command line to create a profile. This command opens the Create Profile panel.
- Type one of the following line commands in the **Cmd** field next to an existing profile:
  - B to build the JCL for the selected profile. This command opens the Build Accelerator Loader JCL panel.
  - D to delete the selected profile or table. This command opens the Confirm action panel.
  - E to edit the selected profile. This command opens the options panel for the profile in edit mode.
  - R to rename the selected profile. This command opens the Rename Profile panel.
  - V to view the selected profile. This command opens the options panel for the profile in view mode.
  - C to copy the selected profile to a different profile name with any changes to creator, description, and share option. This command opens a panel to create a new profile of the copied type.

The following fields and columns are available on this panel. Scroll right to see all fields.

**Profile Like**

The profile name or mask. To see different profiles on this screen, change the name or mask and press Enter. Use the asterisk wildcard (\*) alone to display all object profiles. Enter one or more characters and the asterisk wildcard (\*) to limit the list of names displayed to those containing the characters you specified.

**Creator Like**

The creator name or mask. To see different creators on this screen, change the name or mask and press Enter. Use the asterisk wildcard (\*) alone to display all object profiles. Enter one or more characters and the asterisk wildcard (\*) to limit the list of names displayed to those that contain the characters that you specified.

**DB2 SSID**

The DB2 subsystem against which DB2 Analytics Accelerator Loader is running.

**Name/Profile Name**

The name of the profile, up to 30 characters. (Using meaningful names for profiles makes them easier to locate and reuse; for example, "Objects for Employee App.")

**Creator/Profile creator**

The profile creator.

**Type/Profile type**

The types of DB2 Analytics Accelerator Loader profiles are as follows:

- **Dual** specifies options for loading table data into both the accelerator and DB2 from an external data input file.
- **Accelerator only** specifies options for loading table data into only the accelerator from an external data input file.
- **Consistent** specifies options for loading data for multiple tables into the accelerator from a cataloged DB2 image copy.
- **Image copy** specifies options for loading data for a single table into the accelerator from a user-defined DB2 image copy.
- **All** or **\*** (asterisk) specifies all profile types.

**Share option**

Controls how other users can use a profile:

**U (Update)**

Other users can update the profile.

**V (View only)**

Other users can view the profile.

**N (No access)**

Other users cannot view nor update the profile.

**Description**

A description of the profile.

**Created Userid**

The user ID of the profile creator.

**Created Timestamp**

The date and time that the profile was created.

| **Last Updated Userid**

| The user ID of the last user to update the profile.

| **Last Updated Timestamp**

| The date and time that the profile was last updated.

| **Create Profile panel**

| Use this panel to choose the type of Accelerator Loader profile that you want to create.

| **Load Accelerator and DB2 from external file**

| Opens the Load Accelerator and DB2 from External File panel. Use this panel to specify options for a new Dual profile type, or to edit options for an existing profile. A Dual profile specifies options for loading table data into both the accelerator and DB2 from an external data input file.

| **Load Accelerator from external file**

| Opens the Load Accelerator from External File panel. Use this panel to specify options for a new External profile type, or to edit options for an existing profile. An External profile specifies options for loading table data into only the accelerator from an external data input file.

| **Load Accelerator with consistent data**

| Opens the Load Accelerator with Consistent Data panel. Use this panel to specify options for a new Consistent load profile, or to edit options for an existing profile. A Consistent load profile specifies options for loading data for multiple tables into the accelerator from a cataloged DB2 image copy.

| **Load Accelerator from a specified image copy**

| Opens the Load Accelerator from specified Image Copy panel. Use this panel to specify options for an Image Copy profile type. An Image Copy profile specifies options for loading data for a single table into the accelerator from a user-defined DB2 image copy.

| **Related concepts:**

| “Using and managing load profiles” on page 8-1

| You can create reusable groups of load options in a profile. You also associate profiles with an accelerator and a table. You can then reuse the profile to generate JCL for future loads, rather than specifying the options again.

| **Save Profile panel**

| Use this panel to specify information for a new profile.

| **Save Accelerator Loader options as a profile?**

| Choose **Yes** to save a new profile with the options that you specified.

| **Creator/Profile creator**

| The profile creator.

| **Type/Profile type**

| The types of DB2 Analytics Accelerator Loader profiles are as follows:

- **Dual** specifies options for loading table data into both the accelerator and DB2 from an external data input file.
- **Accelerator only** specifies options for loading table data into only the accelerator from an external data input file.
- **Consistent** specifies options for loading data for multiple tables into the accelerator from a cataloged DB2 image copy.

- **Image copy** specifies options for loading data for a single table into the accelerator from a user-defined DB2 image copy.

## Load Accelerator and DB2 from External File panel

Use this panel to specify or view options for a Dual load profile type. A Dual load profile specifies options for loading table data into both the accelerator and DB2 from an external data input file. All of the following commands are available on the editable version of the panel. On the view-only version of the panel, only the BUILD command is available.

- **TABLE:** Type this command on the command line to add a DB2 table to a profile.
- **ACCELERATOR:** Type this command on the command line to select the accelerator into which you want to load data. This command opens the DB2 Analytics Accelerator Selection panel. You must have proper DB2 authority to access the list of accelerators.
- **COLINFO:** Edit column definitions within the data set that is defined in field **Column Info DSN**. This command opens an ISPF edit session that enables you to create or edit the column information for the LOAD control card. This data set must contain only the table column definitions (without the parenthesis), and not the entire LOAD utility syntax.
- **SAVE:** Type this command on the command line to save your specifications in the profile.
- **BUILD:** Type this command on the command line to build JCL for the profile to the specified data set.

The following fields are available on this panel. Scroll forward to see all fields.

### Creator/Profile creator

The profile creator.

### Name/Profile Name

The name of the profile, up to 30 characters. (Using meaningful names for profiles makes them easier to locate and reuse; for example, "Objects for Employee App.")

### Share option

Controls how other users can use a profile:

#### U (Update)

Other users can update the profile.

#### V (View only)

Other users can view the profile.

#### N (No access)

Other users cannot view nor update the profile.

### Description

A description of the profile.

### Schema

#### Table Name

#### Partition

These fields display values for the currently selected DB2 table. To change the table, issue the TABLE command.

Target options:

### Accelerator name

The accelerator on which data will be loaded. To display a list of the existing accelerators, type a question mark ( ? ) in the field and press Enter.

### Add table to Accelerator

Indicates whether to add missing tables to the accelerator before starting the load job.

#### (default) N (No)

Do not add tables.

#### A (Add)

Add missing tables. This value generates the control card ACCEL\_ADD\_TABLES into the JCL.

#### R (Refresh)

Add missing tables; remove and re-add existing tables. This value generates the control card ACCEL\_REMOVE\_AND\_ADD\_TABLES into the JCL.

### Acceleration on success

Controls whether DB2 Analytics Accelerator Loader enables query acceleration for the table after a successful load. Valid values are as follows:

- Y (Yes): Enable a table for acceleration after a successful load. This value generates the control card ACCEL\_ON\_SUCCESS\_ENABLE YES into the JCL.
- (default) N (No): Do not enable a table for acceleration after a successful load. The control card ACCEL\_ON\_SUCCESS\_ENABLE NO is generated into the JCL.

### Parallel load

Indicates that you want to generate load control cards that will enable parallelism. This field is available when you choose to load a partitioned table. For nonpartitioned objects, the field is read-only and the value is **No**. Valid values are **Yes** and **No**.

When the value is **Yes**, you must enter a TEMPLATE data set name pattern in **Input data set**. This data set name pattern is used to generate a template definition.

### Load tasks

Specifies the number of parallel load tasks to use. Valid values are blank or 1 - 20. If no value is specified, then the value from the options module parameter **ACCEL\_LOAD\_TASKS** is used. This value is used to generate the ACCEL\_LOAD\_TASKS *n* clause of the load statement.

This field is available when the value of **Parallel load** is **Yes**.

Required load options:

### Input data set

For the SYSREC data set that contains the data of the table in external format, specify a name or pattern as follows:

- The fully qualified data set name of the SYSREC data set. For a PDS, enclose the member name in parentheses; for example, HLO.LOADCARD(FILE). If you specify an existing data set, the product generates the DD ISYSREC in the output JCL.
- The DSN template for the SYSREC data set. You can specify a DSN template for both parallel and nonparallel loads (**Parallel load** field). For

a parallel load, the DSN template pattern must include the &PART variable to ensure that a unique SYSREC data set name is generated for each partition. The partition number must be included in your partition-level SYSREC data sets.

If you specify a DSN template, the product generates the TEMPLATE(...) statement in the output JCL.

To update the DSN template and its parameters, specify Yes in the **Update** field. You can specify the template pattern and the parameters with which to allocate the data set.

The product does not restore a previous value for the SYSREC data set if you change the value of **Parallel load**. In this case, only the SYSREC field validation changes to require the &PART variable for a parallel load.

#### **Column info DSN**

The product detects whether the table column information data set is from an UNLOAD utility. If so, it automatically includes the correct information in the JCL that it generates. Otherwise, specify the name of the fully qualified data set that contains the column information from the SYSPUNCH data set. Specify a single data set; a template cannot be used in this field.

DB2 load options:

#### **Utility ID**

Specifies a unique identifier for this utility within DB2. This is an input parameter of type VARCHAR(16) in EBCDIC. It is passed as a parameter to the JCL in the PARM field, such as, //DLD0001 EXEC PGM=PGM#DLD, PARM=('QA1A, ,utility ID')

#### **RESUME**

Specify Yes to generate the control card LOAD RESUME YES into the JCL. The product appends data to the accelerator table rather than replacing it. When loading to both DB2 and the accelerator, DB2 will also append the data to the DB2 table. When loading to only the accelerator, no data is added to the DB2 table, but any existing data in DB2 is left intact. Specify No if you want the product to replace existing data rather than appending it.

#### **KEEPDICTIONARY**

Specify Yes to generate the control card KEEPDICTIONARY into the JCL.

Example:

```
LOAD DATA INDDN SYSREC REPLACE KEEPDICTIONARY
INTO TABLE schema.tableName part#
```

#### **ENFORCE**

Specifies whether to enforce check constraints and referential constraints. When you specify Yes for this option, **MAPDDN** is required. Specify No to generate the control card ENFORCE NO into the JCL.

Example:

```
LOAD DATA INDDN SYSREC REPLACE KEEPDICTIONARY LOG NO ENFORCE NO
INTO TABLE schema.tableName part#
```

**LOG** Specifies whether logging occurs. Specify No to generate the control card **LOG NO** into the JCL.

Example:

LOAD DATA INDDN SYSREC REPLACE KEEPDICTIONARY LOG NO  
INTO TABLE *schema.tableName part#*

### NUMRECS

Specifies the number of input records for the specified table or table partition. Valid values are integers between 1 and 1099511627776, or blank.

If the LOAD utility statement does not provide the number of SYSREC records with a NUMRECS or a SORTKEYS clause, the product estimates the record count. Using the estimated record count, it then adds a NUMRECS clause for each INTO TABLE clause. The record count enables DB2 to size index-build sorts, and reduces the possibility of sort failures when loading to both the accelerator and DB2.

When specified for a parallel load, the value is passed into each INTO TABLE clause in the LOAD control card.

When using the ISPF panels to generate LOAD JCL, you cannot specify a separate NUMRECS value for individual partitions. Specify either the average number of rows per partition or the largest number of records to be loaded into any single partition. The NUMRECS option will be generated once per INTO TABLE PART clause when the utility syntax is generated.

### SORTDEVT

Specifies the device type to be used for temporary sort data sets. Valid values are 1 to 8 alphanumeric characters. The product checks the eligible device table (EDT) to ensure that the specified value is valid.

### SORTNUM

Specifies the number of sort data sets that are to be allocated. This value can only be specified when a SORTDEVT value also specified. Valid values are 2 through 255.

### DISCARDS

Specifies the maximum number of source records that are to be written on the discard data set. Valid values are 0 through 2147483647. The default value is 0, which specifies that you do not want to set a maximum value. The entire input data set can be discarded. If the discard maximum is reached, the LOAD job abnormally terminates, the discard data set is empty, and you cannot see which records were discarded. You can either restart the job with a larger limit, or terminate the utility.

To specify a DISCARDS value, you must provide a DISCARD DD template DD name.

### DISCARD DD template DD name

Specifies the template name for a data set to be used for discarding data rows. If DISCARD DD is not necessary, then this field should be blank. This value is optional. The default is ISYSDISC.

If **Parallel load** = YES, then the template DSN must include the &PA or &PART variable. When JCL for a parallel LOAD is generated, a separate INDDN clause is created for each table partition. A parallel load also requires a separate DISCARD DD clause for each partition.

To update the template and its parameters, specify Yes in the **Update** field. You can specify the template pattern and the parameters with which to allocate the data set. If you include the DD, then you must define the template at least once in the profile.



#### **ERRDDN template DD name**

Specifies the template name for an error processing data set. This value is required when you specify Yes for **ENFORCE**. The default is ISYSERR.

To update the template and its parameters, specify Yes in the **Update** field. You can specify the template pattern and the parameters with which to allocate the data set. If you include the DD, then you must define the template at least once in the profile.

#### **MAPDDN template DD name**

Specifies the template name for a map data set to be used for record processing. This value is required when you specify Yes for **ENFORCE**. The default is ISYSMAP.

To update the template and its parameters, specify Yes in the **Update** field. You can specify the template pattern and the parameters with which to allocate the data set. If you include the DD, then you must define the template at least once in the profile.

#### **SYSUT1 template DD name**

Specifies the first of two work data sets. This value is required when you are running the LOAD utility. The default is ISYSUT1.

To update the template and its parameters, specify Yes in the **Update** field. You can specify the template pattern and the parameters with which to allocate the data set. If you include the DD, then you must define the template at least once in the profile.

#### **SORTOUT template DD name**

Specifies the second of two work data sets. This value is required when you are running the LOAD utility. The default is ISORTOUT.

To update the template and its parameters, specify Yes in the **Update** field. You can specify the template pattern and the parameters with which to allocate the data set. If you include the DD, then you must define the template at least once in the profile.

## **Load Accelerator from External File panel**

Use this panel to specify or view options for an External load profile type. An External load specifies options for loading table data into only the accelerator from an external data input file. All of the following commands are available on the editable version of the panel. On the view-only version of the panel, the COLINFO command is available.

- **TABLE**: Type this command on the command line to add a DB2 table to a profile.
- **ACCELERATOR**: Type this command on the command line to select the accelerator into which you want to load data. This command opens the DB2 Analytics Accelerator Selection panel. You must have proper DB2 authority to access the list of accelerators.
- **COLINFO**: Edit column definitions within the data set that is defined in field **Column Info DSN**. This command opens an ISPF edit session that enables you to create or edit the column information for the LOAD control card. This data set must contain only the table column definitions (without the parenthesis), and not the entire LOAD utility syntax.
- **SAVE**: Type this command on the command line to save your specifications in the profile.
- **BUILD**: Type this command on the command line to build JCL for the profile to the specified data set.

The following fields are available on this panel.

**Creator/Profile creator**

The profile creator.

**Name/Profile Name**

The name of the profile, up to 30 characters. (Using meaningful names for profiles makes them easier to locate and reuse; for example, "Objects for Employee App.")

**Share option**

Controls how other users can use a profile:

**U (Update)**

Other users can update the profile.

**V (View only)**

Other users can view the profile.

**N (No access)**

Other users cannot view nor update the profile.

**Description**

A description of the profile.

**Schema**

**Table Name**

**Partition**

These fields display values for the currently selected DB2 table. To change the table, issue the TABLE command.

Target options:

**Accelerator name**

The accelerator on which data will be loaded. To display a list of the existing accelerators, type a question mark ( ? ) in the field and press Enter.

**Add table to Accelerator**

Indicates whether to add missing tables to the accelerator before starting the load job.

**(default) N (No)**

Do not add tables.

**A (Add)**

Add missing tables. This value generates the control card ACCEL\_ADD\_TABLES into the JCL.

**R (Refresh)**

Add missing tables; remove and re-add existing tables. This value generates the control card ACCEL\_REMOVE\_AND\_ADD\_TABLES into the JCL.

**Acceleration on success**

Controls whether DB2 Analytics Accelerator Loader enables query acceleration for the table after a successful load. Valid values are as follows:

- **Y (Yes):** Enable a table for acceleration after a successful load. This value generates the control card ACCEL\_ON\_SUCCESS\_ENABLE YES into the JCL.

- (default) N (No): Do not enable a table for acceleration after a successful load. The control card ACCEL\_ON\_SUCCESS\_ENABLE NO is generated into the JCL.

### **Parallel load**

Indicates that you want to generate load control cards that will enable parallelism. This field is available when you choose to load a partitioned table. For nonpartitioned objects, the field is read-only and the value is **No**. Valid values are **Yes** and **No**.

When the value is **Yes**, you must enter a TEMPLATE data set name pattern in **Input data set**. This data set name pattern is used to generate a template definition.

### **Load tasks**

Specifies the number of parallel load tasks to use. Valid values are blank or 1 - 20. If no value is specified, then the value from the options module parameter **ACCEL\_LOAD\_TASKS** is used. This value is used to generate the ACCEL\_LOAD\_TASKS *n* clause of the load statement.

This field is available when the value of **Parallel load** is **Yes**.

Required load options:

### **Input data set**

For the SYSREC data set that contains the data of the table in external format, specify a name or pattern as follows:

- The fully qualified data set name of the SYSREC data set. For a PDS, enclose the member name in parentheses; for example, HLO.LOADCARD(FILE). If you specify an existing data set, the product generates the DD ISYSREC in the output JCL.
- The DSN template for the SYSREC data set. You can specify a DSN template for both parallel and nonparallel loads (**Parallel load** field). For a parallel load, the DSN template pattern must include the &PART variable to ensure that a unique SYSREC data set name is generated for each partition. The partition number must be included in your partition-level SYSREC data sets.

If you specify a DSN template, the product generates the TEMPLATE(...) statement in the output JCL.

To update the DSN template and its parameters, specify **Yes** in the **Update** field. You can specify the template pattern and the parameters with which to allocate the data set.

The product does not restore a previous value for the SYSREC data set if you change the value of **Parallel load**. In this case, only the SYSREC field validation changes to require the &PART variable for a parallel load.

### **Column info DSN**

The product detects whether the table column information data set is from an UNLOAD utility. If so, it automatically includes the correct information in the JCL that it generates. Otherwise, specify the name of the fully qualified data set that contains the column information from the SYSPUNCH data set. Specify a single data set; a template cannot be used in this field.

DB2 load options:

### **Utility ID**

Specifies a unique identifier for this utility within DB2. This is an input

parameter of type VARCHAR(16) in EBCDIC. It is passed as a parameter to the JCL in the PARM field, such as, //DLD0001 EXEC PGM=PGM#DLD, PARM=('QA1A, ,utility ID')

#### RESUME

Specify Yes to generate the control card LOAD RESUME YES into the JCL. The product appends data to the accelerator table rather than replacing it. When loading to both DB2 and the accelerator, DB2 will also append the data to the DB2 table. When loading to only the accelerator, no data is added to the DB2 table, but any existing data in DB2 is left intact. Specify No if you want the product to replace existing data rather than appending it.

#### SYSUT1 template DD name

Specifies the first of two work data sets. This value is required when you are running the LOAD utility. The default is ISYSUT1.

To update the template and its parameters, specify Yes in the **Update** field. You can specify the template pattern and the parameters with which to allocate the data set. If you include the DD, then you must define the template at least once in the profile.

#### SORTOUT template DD name

Specifies the second of two work data sets. This value is required when you are running the LOAD utility. The default is ISORTOUT.

To update the template and its parameters, specify Yes in the **Update** field. You can specify the template pattern and the parameters with which to allocate the data set. If you include the DD, then you must define the template at least once in the profile.

## DD Template Specification panel

Use this panel to specify allocation options for an ERRDDN, MAPDDN, DISCARDN, SYSUT1, or SORTOUT template.

The following command is available:

TEMPLATE: Type this command on the command line to edit the template DSN mask.

The following fields are available:

#### Data set disposition

Specifies a valid z/OS data set disposition as documented in the *DB2 for z/OS Utility Guide and Reference*. The default is MOD,DELETE,DELETE. When you specify a value, the control card is generated into the TEMPLATE statement as DISP(*specified\_value*).

Example:

```
TEMPLATE SYSERR
      DSN      'syserr.dataset.name'
      DISP     (MOD,DELETE,DELETE)
```

The default disposition for each type of template is as follows:

- ERRDDN: DISP(MOD,CATLG,CATLG)
- MAPDDN: DISP(MOD,CATLG,CATLG)
- DISCARDN: DISP(MOD,CATLG,CATLG)
- SYSUT1: DISP(MOD,DELETE,CATLG)

- SORTOUT: DISP(MOD,DELETE,CATLG)

### Unit type

Specifies a valid DASD allocation unit for your installation. The product checks the eligible device table (EDT) to ensure that the specified value is valid. The default is blank. When you specify a value, the control card is generated into the TEMPLATE statement as UNIT *specified\_unit\_type*.

Example:

```

TEMPLATE SYSERR
      UNIT      SYSALLDA
      DSN       'syserr.dataset.name'
      SPACE     TRK
      MAXPRIME  00006666
      UNCNT     5
      DISP      (MOD,DELETE,DELETE)

```

### Space units

Specifies the unit of measure for space allocations. Valid values are CYL, TRK and MB. The default is CYL. The control card is generated into the JCL as SPACE unit. If you do not specify values for **Space primary** and **Space secondary**, then DB2 calculates the primary and secondary allocated space at runtime. **Space unit** is required when you specify values for **Space primary** and **Space secondary**.

Example (only **Space unit** is defined):

```

TEMPLATE SYSERR
      UNIT      SYSDA
      DSN       'syserr.dataset.name'
      SPACE     CYL
      DISP      (MOD,DELETE,DELETE)

```

Example (**Space primary**, **Space secondary**, and **Space unit** are defined):

```

TEMPLATE SYSERR
      UNIT      SYSALLDA
      DSN       'syserr.dataset.name'
      SPACE     (10,5) CYL
      DISP      (MOD,DELETE,DELETE)

```

### Space primary

### Space secondary

Specify the primary and secondary disk space allocation (1 - 1677215). The default value is blank. If you specify a value for **Space primary**, then you must also specify a value for **Space secondary**, and vice versa. The control card is generated into the JCL as SPACE (*primary,secondary*).

Example:

```

TEMPLATE SYSERR
      UNIT      SYSALLDA
      DSN       'syserr.dataset.name'
      SPACE     (10,5) CYL
      MAXPRIME  00006666
      UNCNT     5
      DISP      (MOD,DELETE,DELETE)

```

### PCTPRIME

Specifies primary space allocation as a percentage. Valid values are 0 through 100. The default value is blank. When you specify a value, the control card is generated into the JCL as PCTPRIME *value*.

Example:

```

TEMPLATE SYSERR
UNIT      SYSALLDA
DSN       'syserr.dataset.name'
SPACE     (10,5) CYL
PCTPRIME 50
DISP      (MOD,DELETE,DELETE)

```

### MAXPRIME

Specifies the maximum allowable primary space allocation. The default is blank. You can specify an integer value of up to eight characters. The control card is generated into the JCL as MAXPRIME *value*.

Example:

```

TEMPLATE SYSERR
UNIT      SYSALLDA
DSN       'syserr.dataset.name'
SPACE     (10,5) CYL
MAXPRIME 000024
PCTPRIME 50
DISP      (MOD,DELETE,DELETE)

```

### NBRSECOND

Specifies the division of secondary space allocations. Primary space is allocated first, and then remaining space is divided into the specified secondary allocations. The default is blank. You can specify a value of 1 - 10. The control card is generated into the JCL as NBRSECOND *value*.

Example:

```

TEMPLATE SYSERR
UNIT      SYSALLDA
DSN       'syserr.dataset.name'
SPACE     (10,5) CYL
MAXPRIME 000024
PCTPRIME 50
NBRSECOND 10
DISP      (MOD,DELETE,DELETE)

```

### Current Template DSN

Displays the default template for the DSN that you are defining.

The default DSN mask for each template is as follows:

- ERRDDN: &US..IDSE.&DB..&TS..&UQ.
- MAPDDN: &US..IDSM.&DB..&TS..&UQ.
- DISCARDN: &US..IDSD.&DB..&TS..&UQ.
- SYSUT1: &US..IDSU.&DB..&TS..&UQ.
- SORTOUT: &US..IDSO.&DB..&TS..&UQ.

## DD DSN Template panel

Use this panel to specify options for the DSN that DB2 Analytics Accelerator Loader generates. The following command and fields are available.

### SHOW

Type this command on the command line to display the DSN mask.

### Template name

Displays the name of the template that you are editing.

### Qualifier code

Specify a data set name specification code from the list of valid codes and press Enter.

**Free form literal**

Specify the qualifier code for **Use freeform literal**, and then in this field, type the literal value that you want to include in the data set name.

**Current data set name qualifier string**

Displays the symbolic string for your selected qualifier codes. You can also type the data set name directly in this field.

**Database**

Includes the database name.

**Space name**

Includes the table space name.

**Partition/DSNUM**

When you select this qualifier, you are prompted to enter a prefix to make the data set name valid. Enter the letter P to select a partition.

**Date (YYYYDDD)**

Includes the current date in the format *YYYYDDD*.

**Year (YYYY)**

Includes the current year in the format *YYYY*.

**Month (MM)**

Includes the current month in the format *MM*.

**Day (DD)**

Includes the current day of the month in the format *DD*.

**Julian Day (DDD)**

Includes the Julian day in the format *DDD*.

**Time (HHMMSS)**

Includes the current time in the format *HHMMSS*.

**Hours (HH)**

Includes the current time in hours in the format *HH*.

**Minutes (MM)**

Includes the current time in minutes in the format *MM*.

**Seconds (SS)**

Includes the current time in seconds in the format *SS*.

**Local/Recovery (L/R)**

When selected, this qualifier includes the backup type. L indicates local site and R indicates recovery site.

**Primary/Backup (P/B)**

Includes the backup type. P indicates primary and B indicates backup.

**Copy type (Full/Incr)**

Includes the type. F indicates full image copy type and I indicates incremental image copy type.

**Listdef**

Includes the name of the list that is defined by using the LISTDEF control statement and that is referenced on the same control statement as this TEMPLATE.

**Sequence**

Includes the sequence number of the item in the list being processed.

**Unique**

Unique eight characters that DB2 derives from the system clock at the time of allocation.

**SSID** Includes the relevant subsystem ID.

**User ID**

Includes the TSO user ID of the job builder.

**Job name**

Includes the job name.

**Step name**

Includes the job step name.

**Utility ID**

Includes the utility ID.

**Utility name**

Includes the utility name.

**Use Freeform Literal**

Includes the eight-character literal that you type in the Free Form literal field.

**Substring qualifier**

Includes the substring qualifier. If you specify this qualifier code, the Substring Parameters popup is displayed, and contains the following fields:

**Enter the Qualifier Code**

Type the number corresponding to the qualifier code that you want to add.

**Enter Starting Position**

Type the starting position of the substring.

**Enter Substring Length**

Type the length of the substring.

## DD DSN Template (View) panel

Use this panel to view information about a DD DSN template. For more detailed information about using a template and the options, see the DB2 Utility Guide for TEMPLATE. The following command and fields are available.

**SHOW**

Type this command on the command line to display the DSN mask.

**Template name**

Displays the name of the template that you are editing.

**Qualifier code**

Specify a data set name specification code from the list of valid codes and press Enter.

**Free form literal**

Specify the qualifier code for **Use freeform literal**, and then in this field, type the literal value that you want to include in the data set name.

**Current data set name qualifier string**

Displays the symbolic string for your selected qualifier codes. You can also type the data set name directly in this field.



## Resulting DSN Using Current panels

Panels enable you to view the DSN mask that results from your specifications.

### Resulting DSN Using Current Symbolic String panel

Use this panel to view the DSN mask that results from your specifications on any of the data set template panels. This panel is informational only.

### Resulting DSN Using Current Prefix

Use this panel to view the DSN mask that results from your prefix specification on the data set template panels. This panel is informational only.

## Load Accelerator with Consistent Data panel

Use this panel to specify or view processing options for a Consistent load profile.

The load job that is generated from the input on this panel loads data for multiple tables into the accelerator from a cataloged DB2 image copy. All of the following commands are available on the editable version of the panel. On the view-only panel, TABLES and BUILD are available.

- **TABLES:** Type this command on the command line to add a DB2 table to a profile.
- **ACCELERATOR:** Type this command on the command line to select the accelerator into which you want to load data. This command opens the DB2 Analytics Accelerator Selection panel. You must have proper DB2 authority to access the list of accelerators.
- **SAVE:** Type this command on the command line to save your specifications in the profile.
- **BUILD:** Type this command on the command line to build JCL for the profile to the specified data set.

The following fields are available on this panel.

#### **Creator/Profile creator**

The profile creator.

#### **Name/Profile Name**

The name of the profile, up to 30 characters. (Using meaningful names for profiles makes them easier to locate and reuse; for example, "Objects for Employee App.")

#### **Share option**

Controls how other users can use a profile:

##### **U (Update)**

Other users can update the profile.

##### **V (View only)**

Other users can view the profile.

##### **N (No access)**

Other users cannot view nor update the profile.

#### **Description**

A description of the profile.

The following fields are available:

Utility processing options:

**Accelerator name**

The accelerator on which data will be loaded. To display a list of the existing accelerators, type a question mark ( ? ) in the field and press Enter.

**Add tables to Accelerator**

Indicates whether to add missing tables to the accelerator before starting the load job.

**(default) N (No)**

Do not add tables.

**A (Add)**

Add missing tables. This value generates the control card ACCEL\_ADD\_TABLES into the JCL.

**R (Refresh)**

Add missing tables; remove and re-add existing tables. This value generates the control card ACCEL\_REMOVE\_AND\_ADD\_TABLES into the JCL.

**Acceleration on success**

Controls whether DB2 Analytics Accelerator Loader enables query acceleration for the table after a successful load. Valid values are as follows:

- Y (Yes): Enable a table for acceleration after a successful load. This value generates the control card ACCEL\_ON\_SUCCESS\_ENABLE YES into the JCL.
- (default) N (No): Do not enable a table for acceleration after a successful load. The control card ACCEL\_ON\_SUCCESS\_ENABLE NO is generated into the JCL.

**Load time**

Specifies the consistent or historical point at which data is loaded. Valid values are:

**CURRENT**

Includes the TO\_CURRENT keyword in DB2 Analytics Accelerator Loader syntax. This option directs DB2 Analytics Accelerator Loader to read the log and load data up to the current point in time, which is the end of the log file. A load time value of **CURRENT** and the option **RBA or LRSN End Point** are mutually exclusive. A load time value of **CURRENT** is required when **Use Flashcopy** is set to Yes.

**SPECIFIED**

Indicates that you will specify an end point in either the **RBA/LRSN** or the **Timestamp End Point** field.

**QUIESCE**

Indicates that you will specify an end point in the **Quiesce end point** field. Includes the TO QUIESCE keyword in DB2 Analytics Accelerator Loader syntax. This option directs DB2 Analytics Accelerator Loader to read the log and load data up to the specified quiesce point.

**Notes:**

- The RBA (relative byte address) chosen is determined by rolling the RBA back to the start point of any in-flight URIDs. If there

are none, the RBA may also be adjusted forward to the next SYSLOGRANGE start point (if there is one) or to the RBA of the last valid log record read from the log (if there are no further SYSLOGRANGE records). This allows DB2 Analytics Accelerator Loader not to have to verify the validity of a specified log point by attempting a read of that log record in the actual log and possibly incurring a tape mount, data set allocation, or extra I/O.

- Only with the TO\_QUIESCE option (option **Q**) will the RBA (retrieved from SYSCOPY) be considered to be validated. User-specified RBAs are not considered validated. This means that DB2 Analytics Accelerator Loader will load that validated RBA into SYSCOPY for a new image copy, but will still advance the RBA to a known valid point for user specified ones to avoid extra tape mounts, data set allocations, and I/O.

#### **RBA or LRSN end point**

With this option, the **Load Time** value must be SPECIFIED. Directs DB2 Analytics Accelerator Loader to read the log and to incorporate data into the image copy up to the specified hexadecimal end point. In a data sharing environment, **END\_LRSN byte\_string** is added to the syntax. In a non-data sharing environment, **END\_RBA byte\_string** is added to the syntax.

#### **Timestamp end point**

With this option, the **Load Time** value must be SPECIFIED. Indicates the end point at which the DB2 Analytics Accelerator Loader process will stop. Specify the time stamp in the format (YYYY-MM-DD-hh.mm.ss.nnnnnn). For convenience, you can copy the end point from SYSCOPY and paste it into this field.

#### **Time zone of timestamp**

The control card **TO\_TIMESTAMP/TO\_TIMESTAMP\_LOCAL** is generated into the JCL. Time stamps are handled internally in GMT/Universal time. If you specify a local time stamp, it is converted to GMT/Universal. **TO\_TIMESTAMP** is a GMT/Universal time stamp, and no conversion necessary. **TO\_TIMESTAMP\_LOCAL** is a local time zone time stamp that must be converted to GMT/Universal. The time zone in which the computer operates is given at IPL time; no action is required for the conversion from local to GMT/Universal.

#### **Quiesce end point**

With this option, the **Load Time** value must be QUIESCE.

#### **Continue on errors**

Causes most errors to be ignored and the processing to continue. With the value Yes, the control card CONTINUE\_ON\_ERROR is generated into the JCL.

**Note:** If the CONTINUE\_ON\_ERROR control card is included in the JCL and errors that are higher than RC=4 are encountered, the errors are overridden. RC=4 is reported, and the job will not fail. I/O errors and other serious issues (such as out-of-memory issues) are not ignored and will still cause the job to fail.

#### **Load partitions individually**

Indicates how the SPACE statement is generated for partitions of a partitioned table. With the default value **Yes**, when all partitions are

| specified, the SPACE statement is generated for each partition. With the  
| value **No**, one SPACE statement is generated for the table.

| FlashCopy options:

| **Use FlashCopy**

| Indicates whether you want to create a new FlashCopy image copy for  
| each table space that is involved in the load process. Specify **Yes** to  
| generate the control card **FLASHCOPY** into the JCL with either a  
| corresponding template name or an image copy data set name. The  
| **NEW\_COPY** keyword is also generated into the JCL. To use FlashCopy, you  
| must specify a value of **CURRENT** for **Load Time**.

| With the value **No**, a legacy image copy will be used.

| **Note:** **Use FlashCopy** must be set to **Yes** if you want to create a new DB2  
| image copy. No other options result in a new image copy.

| **Use FlashCopy DSN template**

| Indicates whether you want to specify a FlashCopy data set template or  
| use the default template the FlashCopy image copy that is specified in  
| DSNZPARMS. If you specify **Yes**, then the control card parameter  
| **FCCOPYDDN** *template\_name* is generated after the **NEW\_COPY** keyword in the  
| JCL. *template\_name* is the name of a template that you created.

| TEMPLATE (template\_name)  
| DSN 'image.copy.dsn.spec'

| NEW\_COPY FCCOPYDDN (template\_name)

| **Update**

| If you specified **Yes** for **Use FlashCopy DSN Template**, and you  
| want to make changes to the template, specify **Yes** to access the  
| FlashCopy DSN Template panel.

| Log read and log apply options:

| **SYSCOPY scan operating mode**

| Specifies which SYSCOPY rows to consider when finding a starting point  
| for processing. Valid values are:

| **ZPARAM**

| Default. DB2 Analytics Accelerator Loader detects the operating  
| mode DB2 is running under and automatically inserts the  
| corresponding control card. This option omits the **LOCAL\_SITE**,  
| **RECOVER\_SITE**, and **IMAGE\_COPY\_PREFERENCE** control cards;  
| uses the value found in the ZPARAMs on the DB2.

| **LOCAL**

| Refers to the LP/LB rows to find a starting point for processing.  
| Includes the **LOCAL\_SITE** keyword in DB2 Analytics Accelerator  
| Loader syntax.

| **RECOVER**

| Uses the RP/RB rows to find a starting point for processing.  
| Includes the **RECOVERY\_SITE** keyword in DB2 Analytics  
| Accelerator Loader syntax.

| **USER**

| Uses the user-specified scan preference defined in the **SYSCOPY**  
| **Selection Preference** field to find a starting point for processing.  
| Includes the **IMAGE\_COPY\_PREFERENCE** keyword in DB2  
| Analytics Accelerator Loader JCL.

### **SYSCOPY selection preference**

Specifies the image copy types to attempt to use when scanning SYSCOPY for a starting point. Results in generation of the control card **IMAGE\_COPY\_PREFERENCE LPLBRPRB** into the JCL. You can specify at least one and up to five image copy types for which to scan. For example:

**LB** Scans for LB type image copies in SYSCOPY.

**LP** Scans for LP type image copies in SYSCOPY.

**LPLB** Scans first for LP type image copies, then for LB type image copies (and always uses LP type image copies on identically time-stamped SYSCOPY rows).

#### **LPLBRB**

Allows the SYSCOPY scan program to pick an RB if it came up first while scanning SYSCOPY backwards for a starting point.

#### **LPLBRPRBFC**

(Default) Causes the SYSCOPY Selection Preference to be ignored.

This selection preference is only applied if the **SYSCOPY scan operating mode** is set to **USER**. One to five codes in total can be entered in a packed 10-character maximum field. Valid codes are:

**LP** Local primary.

**LB** Local backup.

**RP** Recovery primary.

**RB** Recovery backup.

**FC** FlashCopy. Enables DB2 Analytics Accelerator Loader to use DB2 Recovery Expert (ARY)-managed FlashCopy data sets in addition to DB2 V10 and later FlashCopy data sets as image copy starting points in DB2 Analytics Accelerator Loader processing.

### **Log reader copy preference**

Includes the **LOG\_COPY\_PREFERENCE** keyword in the DB2 Analytics Accelerator Loader generated JCL.

Specifies the order in which the archive and active log lists in the BSDS are to be scanned when Accelerator Loader searches for a log to satisfy a need for log records. The value that you specify in this field must use the syntax R1 (archive log copy #1), R2 (archive log copy #2), A1 (active log #1), and A2 (active log #2). All four unique values must be specified, even if copy #2 is not used in DB2. For example:

- A1A2R1R2 - Scans the active logs before scanning the archive logs.

**Note:** Avoid using this setting because DB2 might attempt to open one of the active logs for output that Accelerator Loader is currently reading for input. Such an attempt might result in an open error within DB2.

- R1R2A1A2 - (Default) Scans the archive logs first and uses archive logs when the same range exists in an archive and active log.

You can change the default value in the ISPF interface by using the **Log Reader Copy Preference** field on the Accelerator Loader Parameters panel.

### **Number of PARALLEL log read**

(Default 0)

The number of parallel log read tasks. Valid values are integers, 0 - 16. A value of 0 means that a maximum of 1 task per data sharing group member will run at the same time. If a non-zero value is specified, then that number is the maximum number of parallel tasks that can run at the same time for log read. If there are more logs to read than the number of parallel tasks specified for **Number of PARALLEL log read**, a task to read the remaining logs will be launched as soon as a running task finishes and until all necessary logs have been read.

#### **Number of PARALLEL log apply**

(Default 4)

The number of parallel log apply tasks. Valid values are integers, 1 - 10. If a value greater than 1 is specified, and there is a single GROUP(...) control card structure present, the DB2 Analytics Accelerator Loader batch process clusters and reorders partitioned objects to distribute the objects into the specified number of tasks, and load the partitions in parallel. If there are multiple GROUP(...) control card structures present, the *y* value is ignored, and each GROUP is assigned its own parallel task.

When partition-level image copies are on tape, and the value of *y* is greater than 1, the following conditions apply:

- If each image copy is on a different VOLSER, the specified number of parallel tasks will be used for log apply processing.
- If all image copies are stacked on the same VOLSER, only one log apply task will be performed.

#### **Bypass SYSIBM.SYSLGRNX Proc**

Specifies whether the product skips reading SYSIBM.SYSLGRNX and only reads the DB2 logs.

- |   |   |
|---|---|
| Y | The product skips reading SYSIBM.SYSLGRNX and reads the entire DB2 log from the earliest object starting point to the latest object ending point.                         |
| N | The product reads SYSIBM.SYSLGRNX to limit reading only those portions of the DB2 log that are marked as being actively altered for the objects that are being processed. |

**Note:** Skipping SYSIBM.SYSLGRNX might result in a significant increase in processing time due to the number of log data sets and log records read, and reading the entire DB2 log from the earliest object starting point to the latest object ending point.

## **Load Accelerator from specified Image Copy panel**

Use this panel to specify or view processing options for an Image Copy load profile type.

The load job that is generated from the input on this panel loads data for a single table into the accelerator from a user-defined DB2 image copy. All of the following commands are available on the editable version of the panel. On the view-only panel, BUILD is available.

- TABLE: Type this command on the command line to add a DB2 table to a profile.
- ACCELERATOR: Type this command on the command line to select the accelerator into which you want to load data. This command opens the DB2 Analytics Accelerator Selection panel. You must have proper DB2 authority to access the list of accelerators.

- **SAVE:** Type this command on the command line to save your specifications in the profile.
- **BUILD:** Type this command on the command line to build JCL for the profile to the specified data set.

The following fields are available:

**Creator/Profile creator**

The profile creator.

**Name/Profile Name**

The name of the profile, up to 30 characters. (Using meaningful names for profiles makes them easier to locate and reuse; for example, "Objects for Employee App.")

**Share option**

Controls how other users can use a profile:

**U (Update)**

Other users can update the profile.

**V (View only)**

Other users can view the profile.

**N (No access)**

Other users cannot view nor update the profile.

**Description**

A description of the profile.

**Schema**

**Table Name**

**Partition**

These fields display values for the currently selected DB2 table. To change the table, issue the TABLE command.

Utility processing options:

**Accelerator name**

The accelerator on which data will be loaded. To display a list of the existing accelerators, type a question mark ( ? ) in the field and press Enter.

**Add table to Accelerator**

Indicates whether to add missing tables to the accelerator before starting the load job.

**(default) N (No)**

Do not add tables.

**A (Add)**

Add missing tables. This value generates the control card ACCEL\_ADD\_TABLES into the JCL.

**R (Refresh)**

Add missing tables; remove and re-add existing tables. This value generates the control card ACCEL\_REMOVE\_AND\_ADD\_TABLES into the JCL.

**Acceleration on success**

Controls whether DB2 Analytics Accelerator Loader enables query acceleration for the table after a successful load. Valid values are as follows:

- Y (Yes): Enable a table for acceleration after a successful load. This value generates the control card ACCEL\_ON\_SUCCESS\_ENABLE YES into the JCL.
- (default) N (No): Do not enable a table for acceleration after a successful load. The control card ACCEL\_ON\_SUCCESS\_ENABLE NO is generated into the JCL.

#### **Continue on errors**

Causes most errors to be ignored and the processing to continue. With the value Yes, the control card CONTINUE\_ON\_ERROR is generated into the JCL.

**Note:** If the CONTINUE\_ON\_ERROR control card is included in the JCL and errors that are higher than RC=4 are encountered, the errors are overridden. RC=4 is reported, and the job will not fail. I/O errors and other serious issues (such as out-of-memory issues) are not ignored and will still cause the job to fail.

#### **Input image copies DSN**

The data set that contains the image copy for the table spaces. The data set contains non-unique records in following format: DBNAME TSNAME PART ICDSN

The records come from the DB2 SYSCOPY table and are preordered by time stamp.

The JCL generator gets the image copy DSN from the input data set that you choose when you issue the TABLES command and uses it in the output JCL in the SPACE() scope as follows: T0\_IC *data\_set*.

## **Enter Table and Creator Like to Display panel**

Use this panel to filter tables from which to select for inclusion in the profile. The following fields are available.

#### **Table creator like**

The table creator search criteria. Wildcard values are allowed. The wildcard character is an asterisk (\*).

**Note:** Case sensitivity of this field is controlled by the **Case sensitive** field on the Enter Table and Creator Like to Display panel.

#### **Table name like**

The table name search criteria. Wildcard values are allowed. The wildcard character is an asterisk (\*).

**Note:** Case sensitivity of this field is controlled by the **Case sensitive** field on the Enter Table and Creator Like to Display panel.

#### **Match views and aliases**

The object type criteria. Specify **Yes** to display tables, views, and aliases. Specify **No** to display tables only. The product resolves a view or alias to the base table space and includes the base table space in the generated JCL.

#### **Case sensitive**

Controls case sensitivity in table names when you are selecting objects for a profile. If the value is **No** (the default), then lowercase letters match uppercase object names, and vice versa. If the value is **Yes**, then the wildcard patterns abc\* and ABC\* return different results.



## Add DB2 Tables/DB2 Table Selection panel

Use this panel to select the table to include in a load profile. The following commands are available.

- **DEFAULT**: Type this command on the command line to sort the panel contents in default order.
- **DEFAULT**: Type this command on the command line to sort the panel contents in default order.
- **S**: Type this command in the **Cmd** field next to the table that you want to select.

The following fields are available:

### Table creator like

The table creator search criteria. Wildcard values are allowed. The wildcard character is an asterisk (\*).

**Note:** Case sensitivity of this field is controlled by the **Case sensitive** field on the Enter Table and Creator Like to Display panel.

### Table name like

The table name search criteria. Wildcard values are allowed. The wildcard character is an asterisk (\*).

**Note:** Case sensitivity of this field is controlled by the **Case sensitive** field on the Enter Table and Creator Like to Display panel.

### DB2 SSID

The DB2 subsystem against which DB2 Analytics Accelerator Loader is running.

### Table Name

The table name.

**Part** The partition number (if the table space is partitioned). Note the following values in this column:

**ALL** All partitions will be included.

**N/A** The table space is not partitioned.

### Creator

The user ID of the table space creator.

### Database

The database name.

### Tablespace

The table space name.

**Type** The object type:

- Table
- Alias
- View

## DB2 Table List panel

Use this panel to select the table to include in a Consistent Load profile. The following commands are available.

- **ADD**: Type this command on the command line to open the Enter Table and Creator Like to Display panel.

- D: Type this command in the **Cmd** field next to the table name to delete the table.
- RIS: Type this command in the **Cmd** field next to the table name to display the Referentially Dependent Table Selection panel, which lists related tables from which you can choose.
- RIA: Type this command in the **Cmd** field next to the table name to select all related tables.

The following fields are available:

**Creator/Profile creator**

The profile creator.

**Name/Profile Name**

The name of the profile, up to 30 characters. (Using meaningful names for profiles makes them easier to locate and reuse; for example, "Objects for Employee App.")

**Share option**

Controls how other users can use a profile:

**U (Update)**

Other users can update the profile.

**V (View only)**

Other users can view the profile.

**N (No access)**

Other users cannot view nor update the profile.

**Description**

A description of the profile.

**Table Name**

The table name.

**Part** The partition number (if the table space is partitioned). Note the following values in this column:

**ALL** All partitions will be included.

**N/A** The table space is not partitioned.

**Creator**

The user ID of the table space creator.

**Database**

The database name.

**Tablespace**

The table space name.

## Referentially Dependent Table Selection panel

Use this panel to select the table to include in a Consistent load profile. The following commands are available.

- ALL: Type this command on the command line to select all tables.
- DEFAULT: Type this command on the command line to sort the panel contents in default order.
- S: Type this command in the **Cmd** field next to the table name to select or deselect the table from the profile.

The following fields are available:

**Table Name**

The table name.

**Part** The partition number (if the table space is partitioned). Note the following values in this column:

**ALL** All partitions will be included.

**N/A** The table space is not partitioned.

**Creator**

The user ID of the table space creator.

**Database**

The database name.

**Tablespace**

The table space name.

## DB2 Analytics Accelerator Selection panel

Use this panel to select the accelerator onto which you want to load data. The panel displays the accelerators that are defined to the subsystem that you are using. The following command is available.

S: Type this command in the **Cmd** field next to the accelerator that you want to select.

The following fields are available:

**Name** The name of the accelerator.

**Status** The status of the accelerator.

**SSID** The subsystem to which the accelerator is defined. This column is only displayed when the SSID is a data sharing group.

## FlashCopy DSN Template panel

Use this panel to make changes to a FlashCopy DSN template. The following command is available.

### FlashCopy DSN Template panel

For more detailed information about using a template and the options, see *DB2 for z/OS Utility Guide and Reference*.

**SHOW**

Type this command on the command line to display the DSN mask.

**Template name**

Displays the name of the template that you are editing.

**Qualifier code**

Specify a data set name specification code from the list of valid codes and press Enter.

**Free form literal**

Specify the qualifier code for **Use freeform literal**, and then in this field, type the literal value that you want to include in the data set name.

**Current data set name qualifier string**

Displays the symbolic string for your selected qualifier codes. You can also type the data set name directly in this field.

**Database**

Includes the database name.

**Space name**

Includes the table space name.

**Partition/DSNUM**

When you select this qualifier, you are prompted to enter a prefix to make the data set name valid. Enter the letter P to select a partition.

**Date (YYYYDDD)**

Includes the current date in the format *YYYYDDD*.

**Year (YYYY)**

Includes the current year in the format *YYYY*.

**Month (MM)**

Includes the current month in the format *MM*.

**Day (DD)**

Includes the current day of the month in the format *DD*.

**Julian Day (DDD)**

Includes the Julian day in the format *DDD*.

**Time (HHMMSS)**

Includes the current time in the format *HHMMSS*.

**Hours (HH)**

Includes the current time in hours in the format *HH*.

**Minutes (MM)**

Includes the current time in minutes in the format *MM*.

**Seconds (SS)**

Includes the current time in seconds in the format *SS*.

**Local/Recovery (L/R)**

When selected, this qualifier includes the backup type. L indicates local site and R indicates recovery site.

**Primary/Backup (P/B)**

Includes the backup type. P indicates primary and B indicates backup.

**Copy type (Full/Incr)**

Includes the type. F indicates full image copy type and I indicates incremental image copy type.

**Listdef**

Includes the name of the list that is defined by using the LISTDEF control statement and that is referenced on the same control statement as this TEMPLATE.

**Sequence**

Includes the sequence number of the item in the list being processed.

**Unique**

Unique eight characters that DB2 derives from the system clock at the time of allocation.

**SSID** Includes the relevant subsystem ID.

**User ID**

Includes the TSO user ID of the job builder.

**Job name**

Includes the job name.

**Step name**

Includes the job step name.

**Utility ID**

Includes the utility ID.

**Utility name**

Includes the utility name.

**Use Freeform Literal**

Includes the eight-character literal that you type in the Free Form literal field.

**Substring qualifier**

Includes the substring qualifier. If you specify this qualifier code, the Substring Parameters popup is displayed, and contains the following fields:

**Enter the Qualifier Code**

Type the number corresponding to the qualifier code that you want to add.

**Enter Starting Position**

Type the starting position of the substring.

**Enter Substring Length**

Type the length of the substring.

## FlashCopy DSN Template (View) panel

Use this panel to view information about a FlashCopy DSN template. The following command is available.

For more detailed information about using a template and the options, see *DB2 for z/OS Utility Guide and Reference*.

**SHOW**

Type this command on the command line to display the DSN mask.

**Template name**

Displays the name of the template that you are editing.

**Qualifier code**

Specify a data set name specification code from the list of valid codes and press Enter.

**Free form literal**

Specify the qualifier code for **Use freeform literal**, and then in this field, type the literal value that you want to include in the data set name.

**Current data set name qualifier string**

Displays the symbolic string for your selected qualifier codes. You can also type the data set name directly in this field.

## Rename Profile panel

Use this panel to rename your own profiles or those created by other users if the profile was created with a **Share Option** of **Update**. The following fields are available:

### Creator/Profile creator

The profile creator.

### Type/Profile type

The types of DB2 Analytics Accelerator Loader profiles are as follows:

- **Dual** specifies options for loading table data into both the accelerator and DB2 from an external data input file.
- **Accelerator only** specifies options for loading table data into only the accelerator from an external data input file.
- **Consistent** specifies options for loading data for multiple tables into the accelerator from a cataloged DB2 image copy.
- **Image copy** specifies options for loading data for a single table into the accelerator from a user-defined DB2 image copy.

### Name/Profile Name

The name of the profile, up to 30 characters. (Using meaningful names for profiles makes them easier to locate and reuse; for example, "Objects for Employee App.")

## Build Load JCL panel

Use this panel to specify how you want to build your jobs using an existing load profile. The following commands are available.

- **BUILD**: Type this command on the command line to build JCL for the profile to the specified data set.
- **ADD**: Type this command on the command line to add another line to the job card.
- Type a command in the **Cmd** field next to a line to complete a task:
  - **D** to delete the line.
  - **I** to insert a new line.
  - **M** to move a line to a new position.

The following fields are available:

Generated JCL data set name:

### Data set name

The fully qualified data set name (without quotation marks) in which to save the generated job. If the data set does not exist, DB2 Analytics Accelerator Loader will create it. If you do not specify a member name, DB2 Analytics Accelerator Loader creates a sequential file. If you specify a member name, DB2 Analytics Accelerator Loader creates a PDS. To specify allocation parameters for this data set, select **Specify new data set allocation parameters**.

### Member name

If the data set to hold the generated job is a PDS, indicates a member name for the job output. If the member does not exist, DB2 Analytics Accelerator Loader will create it.

Processing options (Type a forward slash next to the options that you want to select.)

**Specify new data set allocation parameters**

Indicates whether you want to specify allocation parameters for this data set. If selected, when you enter the BUILD command, the **Data set allocation parameters** panel opens.

**Review generated JCL**

Indicates whether you want to review and edit the job after it has been generated. If selected, when you enter the BUILD command, the job appears in an edit session. If not selected, when you enter the BUILD command, the current panel is displayed.

**Warn if JCL already exists**

Indicates whether you want to be warned if the generated JCL will overwrite existing JCL.

**Warn if JCL was edited after generation**

Indicates whether you want to be warned if the generated JCL will overwrite existing JCL that was edited after it was generated.

**Job Card Information**

Specify how you want to build your job.

## Warning panel

On the Build Accelerator Loader JCL panel, you selected the option to be warned if the generated JCL will overwrite existing JCL.

On the Build Accelerator Loader JCL panel, you selected the option to be warned if the generated JCL will overwrite existing JCL.

- To overwrite the JCL and continue, press Enter.
- To cancel JCL generation, press F12.

## Data set allocation parameters panel

Use this panel to define the data set allocation parameters for the DB2 Analytics Accelerator Loader JCL data set. The following fields are available.

Use this panel to define the data set allocation parameters for the DB2 Analytics Accelerator Loader JCL data set. The following fields are available:

**SMS management class**

The SMS management class for data sets created by DB2 Analytics Accelerator Loader.

**SMS storage class**

The SMS storage class for data sets created by DB2 Analytics Accelerator Loader.

**Volume serial**

The volume serial number to use for the JCL data set created by DB2 Analytics Accelerator Loader. To let SMS select the volume on which to allocate the JCL data set, leave the field blank.

**Device type**

The device type to use for the JCL data set created by DB2 Analytics Accelerator Loader. To let SMS select the device type on which to allocate the JCL data set, leave this field blank.

**SMS data class**

The SMS data class for data sets created by DB2 Analytics Accelerator Loader.

**Space units**

Specifies the unit of measure for space allocations. Valid values are BLKS, TRKS, CYLS, KB, MB, BYTES. The default is CYLS.

**Primary quantity****Secondary quantity**

Specifies the primary and secondary allocation quantities of space to use when allocating the JCL data set in the unit of measure that you specify in **Space units**.

**Block size**

Specifies the block size (physical record length), in bytes, of the blocks to be stored in the JCL data set.

## Administer Accelerator Loader server panel

Use this panel to manage the Accelerator Loader server and work with trace and events features.

**Display server trace**

Opens the Server Trace panel, which displays the last full page of the trace data. The trace data is maintained by the Accelerator Loader server and is a record of all communication, SQL, and internal events in message format.

**Configure server**

Opens the Server Management Menu panel, on which you can view and modify server data that is extracted from the main product address space for the subsystem that you have named.

**Manage rules**

Opens the Event Facility (SEF) Control panel, on which you can view and modify server event procedures and sets of rules that apply to procedures (rulesets).

## Server Trace panel

Use this panel to view the list of product events captured by the server that are executing in your environment.

This list contains all of the events (SQL, IMS, TCP/IP, LU 6.2, and so on) that have occurred. The most recent messages are at the bottom of the list, and the oldest messages are at the top. You can display formatted columns of information such as user ID and time.

The following command line commands are available:

- FIND: Search for data or a specific time and date.
- LOCATE: Search for data or a specific time and date.
- DISPLAY: Display additional columns of information.
- STATUS: Display the trace browse status area.

**Related information:**

“Viewing Server Trace information” on page 10-70

Accelerator Loader server provides powerful diagnostic tools that can record critical events in the life of individual transactions. This information can be used to diagnose, debug, and correct problems.



## Server Management Menu

Use this panel to view and modify Accelerator Loader server data that is extracted from the main product address space for the subsystem that you have named.

### **Display and modify ISPF session parameters**

Select this option to open the ISPF Session Parameters panel. ISPF session parameters control only the ISPF application for the current user.

### **Display and modify Server parameters**

Select this option to open the Parameter Groups panel. These parameters control server and affect all product users.

### **Display product module information**

Select this option to display information that Software Support can use to help diagnose problems.

## ISPF Session Parameters panel

Use this panel to change parameters for the product ISPF application. The settings are saved in the current user's profile variable pool under the SDB ISPF application.

### **Subsystem Name (SSID)**

The four-character subsystem name for the product address space. This name is used to construct the name of the parameterization EXEC for the Debug Facility.

### **Status Information**

Product version and build information.

### **Trace Browse Facility**

The four-character subsystem name for the Trace Browse Facility subsystem for the Accelerator Loader server.

## Parameter Groups panel

Use this panel to display a list of parameters that control the Accelerator Loader server address space.

These parameters control the behavior of the interfaces and facilities available within the address space. As indicated by each parameter or parameter group, some of these parameters can be altered while the address space is up and active; altering other parameters requires that the address space be shut down and restarted.

The following line commands are supported:

- D: Display the parameters within the group.
- F: Format the information for the selected row.
- P: Print the associated control block for the selected row.
- S: Display the associated control block for the selected row.

## Product module information panel

Use this panel to view information about the Accelerator Loader server product module.

The panel displays status information about each module that is used in the server address space. Use this information to determine the location of any module and

to obtain other status information. Software Support can use the data set that was created to contain the status information to help with problem diagnosis.

## Event Facility (SEF) Control panel

Use this panel to view and modify Server Event Facility (SEF) event procedures and procedure rulesets.

### Global Variables

Select this option to open the Display Global Variables panel, on which you can view and modify global variables.

### SEF Rule Management

Select this option to open the Event Facility (SEF) Ruleset Entry Profile panel, on which you can control SEF event procedures and libraries.

### Interactive Command

Select this option to open the SEF - Command Response Display panel, on which you can view results of interactive command requests.

## Display Global Variables panel

Use this panel to view, create, and modify global variables.

Global variables are shared by TSO address spaces and Accelerator Loader server Event Facility procedures. They are saved across system IPLs and product restarts. Global variables are implemented as REXX compound and are distinguished from other compound symbols by the stem string "GLOBAL" or "GLOBALx" where "x" is an alphanumeric character (A-Z or 0-9). Modify the "GLOBAL PREFIX:" entry on the panel to display a different Global Variable stem.

### Subnode Name

The last part of the variable tail.

**Nodes** The number of subnodes under this node.

### Nodes Value

The data value assigned to this variable. When this subnode does not exist, the text string "NO VALUE ASSIGNED AT THIS LEVEL" is displayed.

### Created

The date of creation.

### Last Change

The date of the last modification.

**Time** The time of the last modification.

### Rule or Program

The rule or program that last updated the variable.

### Jobname

The job that last updated the variable.

### Updates

The number of updates to the variable.

## Event Facility (SEF) Ruleset Entry Profile panel

Use this panel to control how the SEF procedure ruleset list is displayed, along with the following application control options:

- Restrict display to only the single ruleset in which you are interested, or (using SEF V4 only) display only rulesets containing a specific type of rule.
- Bypass rereading of a ruleset's PDS(E) directory if you do not require update-to-date member statistical information.
- Bypass confirmation panels when requesting a mass change operation.
- Indicate that this entry panel should be bypassed in the future.

## Event Facility Proc. Rulesets - Using SEF V4 Configuration panel

This panel displays a list of event procedure rulesets. You can filter the list by setting entry panel options.

In the **S** column beside a member, type a line command to take one of the following actions:

- S: Display the list of members within the ruleset.
- E: Enable all members of an entire ruleset.
- D: Disable all members of an entire ruleset.
- U: Display the ISPF/PDF utility panel to rename, delete, or print members.
- A: Set the Auto-Enable (AE) flag for all members of a ruleset.
- Z: Reset the Auto-Enable (AE) flag for all members of a ruleset.

## Event Facility (SEF) Event Procedure List panel

This panel displays all members in a specific ruleset and to create a new event procedure.

In the **S** column beside a member, type a line command to take one of the following actions:

- S: Select an event procedure for modification using the ISPF editor.  
To create a new event procedure, type "S" followed by a space and the name of the new event procedure.
- E: Enable an event procedure
- D: Disable an event procedure.
- A: Set the Auto-Enable (AE) flag for an event procedure member.
- Z: Reset the Auto-Enable (AE) flag for an event procedure member.
- B: Set the Auto-Enable (AE) flag and enable the event procedure.
- C: Disable an event procedure and reset the Auto-Enable (AE) flag.

## SEF - Command Response Display panel

To use this test facility, type the required host environment name at the top and then type a valid command for that environment on the command line below it.

The command will be sent to the requested environment, and the subsequent output will be displayed in the table.

---

## Components and structure

Accelerator Loader runs as a started task on a z/OS system. The started task communicates with DB2 to perform product functions and to store information about product activities in DB2 tables.

The following topics provide information about DB2 Analytics Accelerator Loader components and how they work together.

## Accelerator Loader started task

The Accelerator Loader started task receives input from the interfaces through the SVC and then communicates with the DB2 subsystems to run the JCL. A single started task can process simultaneous requests from multiple users across the system. After you start the started task, you can perform product functions.

**Tip:** In DB2 data sharing environments, all subsystems in a data sharing group share the same DB2 catalog. Consequently, you can create worklist tables on any single member within the group.

During customization, you must set several options for the Accelerator Loader started task in the initialization options member. For example, you must set the option that specifies the primary DB2 subsystem where the audit and logging tables are stored.

Tools Customizer generates the sample initialization options member *hloidOPTS* (where *hloid* is the started task configuration ID that you specify in Tools Customizer) in the *hlq.mlq.SHLOSAMP* library for your use. This member specifies the options with which your started task will be initialized. This member includes options that 1) specify the primary subsystem and the DB2 DSNLOAD library, 2) control DB2 connections, and 3) control DB2 tasks. You can edit the options member, if necessary.

## DSNUTILB intercept and the DSNUTILB intercept policy

The Accelerator Loader DSNUTILB intercept is a front end to the DSNUTILB program and the DB2 LOAD utility when loading data from an external file.

To use the intercept, you must use the DSNUTILB intercept policy in XML that is created during product customization. The policy member (*hloidPLCY*) is specified in the started task PROC. The policy specifies the DB2 subsystem for which to perform DSNUTILB interception and the action to be performed, `LOAD_ACCELERATOR`. The following example shows the Accelerator Loader DSNUTILB intercept policy.

```
<?XML VERSION="1.0" ENCODING="UTF-8"?>
<!DOCTYPE OPTIONS SYSTEM "DD:DTD(HLOTDPL)">
<DSNUTILB_INTERCEPT>
  <POLICY>
    <DB2SYSTEM SSID="ssid" ACTION="LOAD_ACCELERATOR">
    </DB2SYSTEM>
  </POLICY>
</DSNUTILB_INTERCEPT>
```

The `<POLICY>` section identifies the DB2 subsystem `"ssid"`.

A `<DB2SYSTEM>` element identifies a DB2 subsystem for which to monitor DB2 LOAD processing. During customization, the primary DB2 subsystem is specified in the policy. You can manually specify additional `<DB2SYSTEM>` elements within the `<POLICY>` section. The `<DB2SYSTEM>` element has the following attributes:

- The SSID attribute indicates a valid subsystem identifier for a DB2 subsystem on which you want to monitor DB2 LOAD processing. This value can be up to four

characters long. No default value is provided. Wildcards are permitted. If you specify a generic wildcard pattern as its attribute value, this element can identify multiple DB2 subsystems.

**Tip:** Ensure that the Accelerator Loader plan is bound on the subsystem that you specify.

- The ACTION attribute indicates the DSNUTILB intercept action that is performed for the defined subsystem when evaluating the policy rules. The only valid value is LOAD\_ACCELERATOR.

You must check the started task initialization options that pertain to the intercept worklist-error tables to ensure that they are set appropriately for your environment and intercept processing needs.

After you perform these configuration steps, the DSNUTILB intercept component can intercept the DSNUTILB program and analyze the DSNUTILB SYSIN stream for an Accelerator Loader job. The intercept divides the original SYSIN stream into separate worklist steps. Each step includes a single LOAD utility command and any applicable setup statements (for example, LISTDEF, TEMPLATE, or OPTIONS). Accelerator Loader examines the worklist steps and the DSNUTILB intercept policy to implement the enhanced load to the IBM DB2 Analytics Accelerator for z/OS.

From time to time, you might need to perform some intercept management tasks. For example, you might need to terminate a utility for which interception has occurred in a manner that removes the associated worklist data.

## Supervisor call (SVC)

The SVC enables the product interfaces to communicate with the started task. One SVC is required for each started task. You specify the SVC number during customization. When you start the started task, the specified SVC is dynamically installed. When you stop the started task, the SVC is dynamically removed. No IPL or SYS1.PARMLIB changes are required.

### Related concepts:

“Components and interfaces” on page 1-8

Accelerator Loader provides the following interfaces and components.

“Managing DSNUTILB interception” on page 11-441

You can manage DSNUTILB interception by performing some routine and occasional tasks.

---

## Console commands for the Accelerator Loader started task

Several z/OS console commands can be issued for the Accelerator Loader started task by using the **Modify** operator command.

### Syntax

The **Modify** command is F if issued from the z/OS console or /F if issued from SDSF.

Use the following syntax to issue a console command from the z/OS console:

```
F started_task_name,command_name
```

where *started\_task\_name* is the name of the Accelerator Loader started task and *command\_name* is the name of a supported console command. These names are separated by a comma only.

Use the following syntax to issue a console command from SDSF:

```
/F started_task_name,command_name
```

For some commands, you can add an option such as GLOBAL after the command name. In this case, specify the command name, a comma, and then the option name (without any blank spaces between these items), as follows:

```
F started_task_name,command_name,option
```

## Commands

**Tip:** You can list all Accelerator Loader console commands in the started task output by using the **HELP** console command.

### DISPLAY INTERCEPT[,GLOBAL|,ALL]

Use this command to write the local DSNUTILB interception status (Enabled or Disabled) for the specified started task to the SYSPRINT data set that is allocated to the started task. You can optionally include the GLOBAL option to display the global interception status for the entire z/OS image. Alternatively, you can include the ALL option to write all of the following information to the SYSPRINT data set: the local interception status; the global interception status; and a list of the DB2 SSIDs for which DSNUTILB interception is occurring, including the HLOIDs of the started task instances that are involved in interception processing.

### DISPLAY MEPL

Use this command to write a list of all Accelerator Loader modules to the SYSPRINT data set that is allocated to the started task. For each module, the list shows the module maintenance level, the date and time when the module was built, and other information for diagnostic use. Usually, you issue this command when directed to do so by IBM Software Support.

### DISPLAY POLICY

Use this command to write the contents of the DSNUTILB intercept policy for the specified started task to the SYSPRINT data set that is allocated to the started task. This information includes the DB2 subsystems that are defined in your policy member (*hloidPLCY*).

### DISPLAY SESSIONS

Use this command to list information on currently active sessions.

Issuing the MODIFY command from SDSF `/F started_task_name,DISPLAY SESSIONS`

produces the following report in the JOBLOG on currently active sessions:

```
HLOS0700I 069 10:42:50.10 TCB: 008CAB00 SESSION REPORT *00000001*
HLOS0701I 069 10:42:50.10 *00000001* SESS: 25C40048-00000002-I-PDRICKB -T0897680-00E0-PDRICKB
HLOS0702I 069 10:42:50.10 *00000001* STATUS: SIGNED ON
HLOS0703I 069 10:42:50.10 *00000001* STARTED: 12-30-2013 14:42:42 UTC
HLOS0701I 069 10:42:50.10 *00000001* SESS: 25C40208-00000001-I-PDRICKA -T0897697-00EB-PDRICKA
HLOS0702I 069 10:42:50.10 *00000001* STATUS: SIGNED ON
HLOS0703I 069 10:42:50.10 *00000001* STARTED: 12-30-2013 14:42:37 UTC
```

```
HLOS0700I 069 10:43:13.68 TCB: 008CAB00 SESSION REPORT *00000002*
HLOS0704I 069 10:43:13.68 *00000002* No active sessions found
```

### DISPLAY TRACE

Use this command to capture trace information for the specified started

task. This information is written to a SNAPTRC data set that is allocated to the started task. Trace information is primarily used for diagnosing problems. You should issue this command only when directed to do so by IBM Software Support.

#### **DUMP**

Use this command to perform an SVC dump of the started task address space. Usually, a dump is produced at the request of IBM Software Support to collect error information for analysis. You can find the location of the dump data set in the system log. If the started task is unresponsive, you can produce a dump of other Accelerator Loader address spaces.

**HELP** Use this command to list all of the z/OS console commands that are supported for the started task in the SYSPRINT data set for the started task. The list indicates the correct syntax for these commands.

#### **STOP [FORCE]**

Use this command to stop the specified started task. The operator command `/F started_task_name,STOP` is equivalent to the standard operator command `/P started_task_name`. If you want to stop the started task immediately, before it completes its current processing, you can add the optional **FORCE** option after the **STOP** command. To separate **FORCE** from **STOP**, use only a single space, as follows:

```
/F started_task_name,STOP FORCE
```

#### **TERMINATE SESSION,SESS=session\_address**

If an Accelerator Loader batch job, intercepted DSNUTILB utility execution, or HLOMAINT job terminates abnormally without ending its session with the Accelerator Loader started task, you can use this command to force the termination of the session. For the **SESS** value in this command, specify a valid session address that is an 8-digit hexadecimal number. (A hexadecimal number can contain only the characters 0 through 9 and A through F.) You should be able to find this session address in an HLOS0101I message. After you issue the command, look for the HLOS0103I message to determine whether the session terminated. You might want to use this command, for example, when the HLOS5113I message is issued. This message indicates that a DB2 utility cannot be restarted because its worklist is in use by another utility. If the other utility has terminated abnormally but is still associated with an active “owning session,” you can terminate the owning session by using this command. You should then be able to perform the restart operation.

---

## **Column display functions (CSETUP)**

Column display functions (**CSETUP** functions) enable you to change the width of individual columns, and control the vertical ordering of columns.

**CSETUP** functionality enables you to:

- Change the width of individual columns using the **CSIZE** option.
- Control the vertical ordering of columns using the **CSORT** option.

Additional column display functions enable you to:

- Scroll horizontally between columns, in both left and right directions.
- Scroll horizontally within a single report column while other report columns remain stationary on the screen.
- Insert column numbers above each display column.

- Generate a ruler at the top of the report columns beneath the headings.
- Display an entire row-column data element.

The customizations, or views, you configure using **CFIX**, **CORDER**, **CSIZE**, and **CSORT** can be saved across sessions.

The following syntax restrictions apply to the use of **CSETUP** functionality:

- Underlined text indicates the minimum acceptable abbreviation for each keyword.
- Variables are shown in italicized lowercase type.
- Keyword options are separated by vertical lines ( | ).

**Related tasks:**

“Starting the ISPF interface” on page 4-1

Use the product's ISPF interface to create the JCL and control cards that are required to build the JCL to load data to DB2 and the IBM DB2 Analytics Accelerator for z/OS from an external file or an image copy.

## Restrictions

The following restrictions apply to CSET options.

- Total fixed column sizes cannot exceed screen width.
- Total fixed column sizes must leave enough unfixed space for the minimum allowed size for all unfixed columns. If a column is not eligible for resizing, the column's minimum size requirement is the same as its maximum size. Minimum and maximum sizes for all columns are shown in the CSIZE display.
- If a column has been resized, then its current width is treated as its smallest allowable size. When a column is resized its current size must fit on the screen completely. For example, on an 80-byte screen with no fixed columns, a 128-byte column can only be resized to 80 bytes or less (assuming no conflicting minimum size associated with the column). If there were two 10-byte fixed columns, for a total fixed area size of 20-bytes, the 128-byte column would be limited to 60 bytes or its minimum allowed size, whichever was smaller.

## Accessing the CSETUP Primary Option Menu

The **CSETUP** primary option menu enables you to access the various **CSETUP** options and configure column display functions according to your display needs.

### About this task

The **CSETUP** command uses the following syntax:

**CSETUP**

Launches the CSETUP Primary Option Menu.

To access and use the CSETUP Primary Option Menu:

### Procedure

1. On any dynamic display (for example, the Manage Loader Profiles panel,) type **CSETUP** (or **CSET**) in the Option line and press Enter. The Setup Primary Option Menu displays.
2. On the command line, type the number corresponding to the option that you want to access and press Enter. The following options are available on the Setup Primary Option Menu:



**CFIX** Option 1, **CFIX**, enables you to fix and unfix columns.

**CORDER** Option 2, **CORDER**, enables you to reposition columns.

**CSIZE** Option 3, **CSIZE**, enables you to change the displayed width of columns.

**CSORT** Option 4, **CSORT**, enables you to select one or more columns for sorting and thus modify the order of the rows displayed.

**CHIDE** Option 5, **HIDE**, enables you to select one or more columns to be hidden.

**CRESET** Option 6, **CRESET**, enables you to reset all customizations.

**PVIEW** Option 7, **PVIEW**, enables you to toggle between permanent view and temporary view.

**Note:** You can also directly invoke each **CSETUP** option by typing the corresponding command (for example, **CFIX**, **CORDER**, **CSIZE**, **CSORT**, **CHIDE**, **CRESET**, or **PVIEW**) in the option line on any dynamic display and pressing Enter.

## Fixing a column

The **CFIX** option enables you to fix and unfix columns. A fixed column is always located at the far left side of the display.

### About this task

It does not shift horizontally (as unfixed columns do) when scrolling to the left or right. **INNER COLUMN SCROLLING** and **CEXPAND** may be used on a fixed column if the column is narrower than its maximum width. Certain columns may be permanently fixed in the report and cannot be unfixed by the user. Such a column has a fix status of **P** (permanently fixed).

A column cannot be fixed if it is larger than the available display area. There are also restrictions for fixing columns related to the size requirements of other columns.

To fix a column:

### Procedure

1. Type **CFIX** in the option line on any display panel and press Enter. The Define Fixed Columns panel displays as shown in the following figure:

```

CFIX ----- Define Fixed Columns ----- YYYY/MM/DD HH:MM:SS
Option ==>                               Scroll ==> PAGE
-----+>
                                           ROW 1 OF 9

Column Function ==> 1 (1-Fix/Unfix, 2-Order, 3-Size, 4-Sort)
Permanent View ==> Y (Y-Perm, N-Temp) Reset View ==> N (Y,N)

Device_Width : 80
Old_Fixed_Width: 37      Old_Unfixed_Width: 43
New_Fixed_Width:         New_Unfixed_Width:
-----

Cmd New Old Len Column_Name
P  P  P   5  CMD
P  P  P  32  NAME
-      10  CREATOR
-      5   UPDT
-      32  DESCRIPTION
-      10  LAST_USER

Enter: Process selections; PF3: Exit and save; CAN: Exit without save
Line Cnds: F Fix U Unfix

```

Figure 12-1. Define Fixed Columns panel

The following fields appear on the Define Fixed Columns panel:

- Column Function**  
Enables you to jump to any of the CSET functions by typing in the appropriate number. The number corresponding to the current option displays in this field.
- Permanent View**  
Indicates whether the view you define is permanent or temporary. Valid values are:
  - Y–View customizations are permanent.
  - N–View customizations are temporary.
- Reset View**  
Resets all customizations.
- Device\_Width**  
Shows the current display device size (screen width).
- Old\_Fixed\_Width**  
Shows the sum of the FIXED column widths prior to any changes in the current CFIX panel.
- Old\_Unfixed\_Width**  
Shows the UNFIXED area prior to any changes in the current CFIX panel.  $Old\_Unfixed\_Width = Device\_Width - Old\_Fixed\_Width$ .
- New\_Fixed\_Width**  
Shows the sum of the FIXED column widths that will result if the FIX/UNIFIX changes are saved.
- New\_Unfixed\_Width**  
Shows the UNFIXED area that will result if the FIX/UNIFIX changes are saved.  $New\_Unfixed\_Width = Device\_Width - New\_Fixed\_Width$ .
- Cmd** Field where you specify line commands. Valid line commands are F (fix) and U (unfix).
- New** Displays the new CFIX view settings.

**Old** Displays the previous CFIX view settings.

**Len** Shows the length of the column.

**Column\_Name**

Shows the name of the column.

2. Type **F** in the **Cmd** field next to column(s) you want to fix.
3. Type **U** in the **Cmd** field next to column(s) you want to unfix.
4. Press Enter. The changed values display in the **New** column next to the corresponding column(s).
5. Press **PF3** to save changes and return to the display panel.

## Repositioning columns

The **CORDER** option enables you to reposition report columns. If any columns are fixed, they are grouped together as the leftmost report columns. The unfixed columns are grouped together to the right of any fixed columns.

### About this task

**CORDER** does not move a column out of its group. A fixed column cannot be relocated to the right of an unfixed column. Likewise, an unfixed column cannot be relocated to the left of a fixed column.

To reposition columns:

### Procedure

1. Type **CORDER** in the option line on any display panel and press Enter. The Define Column Display Order panel displays as shown in the following figure:

```
CTCORD ----- Define Column Display Order ----- YYYY/MM/DD HH:MM:SS
Option ==>                                         Scroll ==> PAGE
----->
                                         ROW 1 OF 9

Column Function ==> 2 (1-Fix/Unfix, 2-Order, 3-Size, 4-Sort)
Permanent View ==> N (Y-Perm, N-Temp) Reset View ==> N (Y,N)

Cmd Fix New Old Column_Name
___ P      1 CMD
___ P      2 NAME
___        3 CREATOR
___        4 UPDT
___        5 DESCRIPTION
___        6 LAST_USER
___        7 LAST_UPDATED
___        8 CRTD_USER
___        9 CREATED_USER
***** Bottom of Data *****

Enter: Process selections; PF3: Exit and save; CAN: Exit without save
Line Cmds: Specify number for column position
```

Figure 12-2. Define Column Display Order panel

The following fields appear on the Define Column Display Order panel:

#### Column Function

Enables you to jump to any of the CSET functions by typing in the appropriate number. The number corresponding to the current option displays in this field.

**Permanent View**

Indicates whether the view you define is permanent or temporary.  
Valid values are:

- Y–View customizations are permanent.
- N–View customizations are temporary.

**Reset View**

Resets all customizations.

**Cmd** Field where you specify the number for column position.

**Fix** Displays fixed columns. Valid values are:

- F–Indicates the column is fixed.
- P–Indicates the column is permanently fixed.

**New** Displays the new CORDER view settings.

**Old** Displays the previous CORDER view settings.

**Column\_Name**

Shows the name of the column.

2. Type a number next to a column to specify its order.
3. Press Enter. The new column order numbers display in the **New** column next to each column.
4. Press **PF3** to return to the display panel.

## Resizing columns

The **CSIZE** option enables you to change the displayed width of columns.

### About this task

This function is primarily intended for non-numeric data where there are large blank areas in all (or most) rows in a given column. Although the displayed width may change, the underlying data does not change.

If a column's size is less than the column maximum, it is possible that some data is not displayed. **INNER COLUMN SCROLLING** and **CEXPAND** can be used to see data outside the display range of the resized column.

**Note:** If the minimum and maximum column widths are equal, the column cannot be resized.

To resize columns:

### Procedure

1. Type **CSIZE** in the option line on any display panel and press Enter. The Define Column Size panel displays as shown in the following figure:

```

CSIZE ----- Define Column Size ----- YYYY/MM/DD HH:MM:SS
Option ==>                                     Scroll ==> PAGE
-----+>
ROW 1 OF 9

Column Function ==> 3 (1-Fix/Unfix, 2-Order, 3-Size, 4-Sort)
Permanent View ==> N (Y-Perm, N-Temp) Reset View ==> N (Y,N)

Device_Width : 80
Old_Fixed_Width: 37      Old_Unfixed_Width: 43
New_Fixed_Width:         New_Unfixed_Width:
-----

Cmd New Old Min Max Fix Column_Name
  5  5  5  5  5 P  CMD
 32 32 32 32 P  NAME
 10 10 10 10   CREATOR
  5  5  5  5   UPDT
 32 32 32 32   DESCRIPTION
 10 10 10 10   LAST_USER

Enter: Process selections; PF3: Exit and save; CAN: Exit without save
Line Cmds: Column size, between MIN and MAX

```

Figure 12-3. Define Column Size panel

The following fields appear on the Define Column Size panel:

**Column Function**

Enables you to jump to any of the CSET functions by typing in the appropriate number. The number corresponding to the current option displays in this field.

**Permanent View**

Indicate whether the view you define is permanent or temporary. Valid values are:

- Y–View customizations are permanent.
- N–View customizations are temporary.

**Reset View**

Resets all customizations.

**Device\_Width**

Shows the current display device size (screen width).

**Old\_Fixed\_Width**

Shows the sum of the FIXED column widths.

**Old\_Unfixed\_Width**

Shows the UNFIXED area.

**New\_Fixed\_Width**

Shows the sum of the FIXED column widths.

**New\_Unfixed\_Width**

Shows the UNFIXED area.

**Cmd** Field where you specify the number for column position.

**New** Displays the new CSIZE view settings.

**Old** Displays the previous CSIZE view settings.

**Min** Displays the minimum column length.

**Note:** If the minimum and maximum column widths are equal, the column cannot be resized.

**Max** Displays the maximum column length.

**Note:** If the minimum and maximum column widths are equal, the column cannot be resized.

**Fix** Displays fixed columns. Valid values are:

- **F**—Indicates the column is fixed.
- **P**—Indicates the column is permanently fixed.

**Column\_Name**

Shows the name of the column.

2. Type the desired column size in the **Cmd** field next to the column you want to resize.

**Note:** The column size you specify must be between the Min and Max values shown for that column.

3. Press Enter. The new view criteria display in the **New** column.
4. Press **PF3** to return to the display panel.

## Sort functionality

**CSORT** functionality enables you to select one or more columns for sorting and thus modify the order of the rows displayed on many product panels.

Columns are selected by sort priority and direction. Direction is either ascending (default) or descending. When more than one column is selected for sorting, the second column only differentiates when rows have matching data in the first column. Similarly, a third column only impacts the sort when data in both the first two columns are identical.

### Defining sort columns

You can sort display data by columns. You can select up to nine columns for sorting.

### About this task

A maximum of nine columns can be selected for sorting at one time. Internal requirements may create a smaller maximum. A message is issued if the maximum number of columns selected for sorting is exceeded.

**Note:** **CSORT** and **SORT** are synonymous.

### Procedure

1. Type **CSORT** (or **SORT**) in the option line on any display panel and press Enter. The Define Sort Columns panel displays as shown in the following figure:



## Fast-path SORT command

The SORT command can be used as a primary (fast-path) command by typing the appropriate SORT syntax in the Option line of any report panel and pressing Enter.

The functionality supports both single and multi-column sorting and enables users to specify sort order (ascending or descending) for each column in the sort.

### Syntax for single-column sorting

The syntax for single-column sorting is as follows:

```
SORT column_identifier dir
```

Where *column\_identifier* is either the **column name** or the **relative column number** and *dir* is the direction in which to sort the column data. Valid values for *dir* are:

**asc** (Default) Sorts data in ascending order.

**desc** Sorts data in descending order.

#### Notes:

1. There must be a space between the *column\_identifier* and its *dir* (if used).
2. The **relative column number** for a column is determined based on the column's placement when visible on the screen. Thus, relative column numbers are only available for columns currently visible on the screen. Relative column numbers are determined by counting the displayed columns from left to right, with the leftmost visible column being assigned the number '1' and each successive column (reading left to right) being assigned a relative column number that is incremented by 1. **Hint:** To quickly determine the column number, use the **CNUM** command to toggle on the column numbers for each display column.
3. You can sort on a column that is not displayed if you use the **column name** (instead of the **relative column number**) as the *column\_identifier* in the SORT syntax.

### Multi-column sorting

The syntax for multi-column sorting is as follows:

```
SORT column_identifier dir column_identifier dir
```

Where *column\_identifier* is either the column name or the relative column number and *dir* is an optional indication of the direction in which to sort the column data. Valid values for *dir* are:

**asc** (Default) Sorts data in ascending order.

**desc** Sorts data in descending order.

The *column\_identifier* and *dir* values must all be separated by spaces. The maximum number of columns that can be sorted at once is 9.

### Usage examples

For a report display that has three columns, all of which display on the screen:

Column 1: Name



Column 2 Creator

Column 3: Status

The following examples show how you can sort these columns:

**SORT NAME**

Sorts display data in ascending order based on the value in the **Name** column (when no dir value is specified, the default sort order is ascending, thus **SORT NAME** and **SORT NAME A** are synonymous).

**SORT NAME D**

Sorts display data in descending order based on the value in the **Name** column.

**SORT NAME DESC**

Sorts display data in descending order based on the value in the **Name** column.

**SORT NAME A CREATOR D**

Sorts display data first in ascending order based on the value in the **Name** column and then sorts data in descending order based on the value in the **Creator** column.

**SORT NAME ASC CREATOR DESC**

Sorts display data first in ascending order based on the value in the **Name** column and then sorts data in descending order based on the value in the **Creator** column.

**SORT 1 A**

Sorts display data in ascending order based on the value in the **Name** column.

**SORT 1 A CREATOR D**

Sorts display data first in ascending order based on the value in the **Name** column and then sorts data in descending order based on the value in the **Creator** column.

**SORT 3 2 1**

Sorts the display data first in ascending order based on the value in the **Status** column, then in ascending order based on the value in the **Creator** column, and finally in ascending order based on the value in the **Name** column.

**Note:** When you specify a column name using any of the above formats, you may enclose it in single quotes, double quotes, or be without any quotes. For example, the following are equivalent:

**SORT NAME D**

**SORT 'NAME' D**

**SORT "NAME" D**

## Hiding columns

The **CHIDE** option enables you to hide one or more columns from the display.

## About this task

Certain columns might be permanently fixed in the report and cannot be hidden. Such a column has a fix status of P (permanently fixed).

## Procedure

1. Type **CHIDE** in the option line on any display panel and press Enter. The Define Hidden Columns panel displays.

The following fields appear on the panel:

### Column Function

Enables you to jump to any of the CSET functions by typing in the appropriate number. The number corresponding to the current option displays in this field.

### Permanent View

Indicate whether the view you define is permanent or temporary. Valid values are:

- Y–View customizations are permanent.
- N–View customizations are temporary.

### Reset View

Reset all customizations (Yes or No).

**Cmd** Field where you specify the number for column function.

**Fix** Displays fixed columns. Valid values are:

- F–Indicates the column is fixed.
- P–Indicates the column is permanently fixed.

**New** Displays the new CHIDE view settings.

**Old** Displays the previous CHIDE view settings.

### Column\_Name

Shows the name of the column.

2. To hide columns, type **H** in the **Cmd** field beside the columns that you want to hide.
3. To display previously hidden columns, type **U** in the **Cmd** field beside columns that you want to unhide.

## Resetting CSET customizations

The **CRESET** option enables you to reset all customizations.

## About this task

After **CRESET** is issued, all fixed columns are unfixed (except for any permanently fixed columns), all selected sort columns are deselected and sorting is disabled, all column sizes are set to the initial values or maximum values if no suggested value previously existed, and original column locations are restored.

## Procedure

1. To issue the **CRESET** option, access the Setup Primary Option Menu by typing **CSET** in the option line of any report display and pressing Enter. The Setup Primary Option Menu displays.
2. Type **5** in the command line and press **Enter**. **CRESET** is issued and all fixed columns are unfixed (except for any permanently fixed columns), all selected

sort columns are deselected and sorting is disabled, all column sizes are set to the initial values or maximum values if no suggested value previously existed, and original column locations are restored.

3. Alternatively, you can issue the **CRESET** command as a primary command using the following syntax:

**CRESET**

Resets all customizations (unfixes fixed columns, deselects selected sort columns, sorting disabled, column sizes set to initial values, original column locations restored).

**Note:** **CRESET** differs from **CREMOVE** in that **CREMOVE** sets all column sizes to their maximum values ignoring any initial, suggested sizes.



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