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

Version 1 Release 1
Contents

Figures ........................................ v

Tables .......................................... vii

About this information ..................... ix

Chapter 1. DB2 Analytics Accelerator
Loader overview .............................. 1

What's new in DB2 Analytics Accelerator Loader . . 1
What does DB2 Analytics Accelerator Loader do? . . 3
DB2 Analytics Accelerator Loader features and
benefits ........................................ 3
DB2 Analytics Accelerator Loader components and
interfaces ...................................... 5
Tools Customizer overview .................. 6
Service updates and support information ...... 7
Product documentation and updates ......... 7
Accessibility features ........................ 8
DB2 Analytics Accelerator Loader terminology .. 8
DB2 Analytics Accelerator Loader scenarios ... 9
Service updates and support information ...... 11
Product documentation and updates ......... 11
Accessibility features ........................ 12

Chapter 2. Preparing to customize DB2
Analytics Accelerator Loader ............... 15

Modifying SHAREOPTIONS .................. 17
Set up your environment prior to customization 18
Security requirements ........................ 19
Authorization requirements for the started task 19
Authorization requirements for utilities .... 20
Considerations for running multiple started tasks 20
Considerations for DB2 data sharing environments 21
Dispatching priority requirements ......... 22
Consideration for WTO messages for automated
operations .................................. 22
Operational issue related to the vector table .. 22
Worksheets: Gathering required data set names .. 23
Worksheets: Gathering parameter values for Tools
Customizer ................................. 26

Chapter 3. Customizing DB2 Analytics
Accelerator Loader ......................... 53

Starting and preparing Tools Customizer for use . 53
Starting Tools Customizer .................. 53
Modifying Tools Customizer user settings .... 54
Hiding and displaying panel text ............ 58
Customizing DB2 Analytics Accelerator Loader . 58
Roadmap: Customizing DB2 Analytics
Accelerator Loader for the first time ....... 59
Roadmap: Recustomizing DB2 Analytics
Accelerator Loader ....................... 60
Specifying the metadata library for the product
to customize ............................... 61
Discovering DB2 Analytics Accelerator Loader
information automatically .................. 63
Creating and associating DB2 entries ........ 65
Managing multiple configurations .......... 67
Defining parameters ........................ 73
Generating customization jobs ............. 79
Submitting customization jobs ............. 80
Browsing parameters ........................ 82
Copying DB2 entries ........................ 82
Removing DB2 entries ...................... 84
Deleting DB2 entries ...................... 84
Displaying customization jobs ............. 85
Maintaining customization jobs ............. 85
Using Tools Customizer in a multiple-LPAR
environment ............................... 86
Changing the BIND JCL to ENCODING(500) . . 86
APF-authorizing the load library (required) .. 87
Copying the started task PROC (required) .. 87
Copying the DSNUTILF module (required) ... 88
Setting up the WLM application environment
(required) ................................. 88
Starting the started task (required) ........ 89

Chapter 4. Getting started with DB2
Analytics Accelerator Loader ............... 91

Starting the ISPF interface .................. 91
Configuring a DB2 subsystem .............. 92
Specifying DB2 subsystem parameters for DB2
Analytics Accelerator Loader ............. 93
Deleting a DB2 subsystem .................. 94
Specifying job card information ............ 94

Chapter 5. Loading data at a consistent
or historical time ............................ 97

Restrictions and considerations .......... 97
Using the ISPF interface to create a CONSISTENT
load profile .............................. 98
Specifying options for a FlashCopy DSN template 99
Using the batch interface to load from an image
copy ................................... 100

Chapter 6. Loading data from an
external file .................................. 101

Restrictions and considerations .......... 101
Adding DB2 Analytics Accelerator Loader syntax
to an existing load job .................... 105
Using the ISPF interface to create a DUAL load
profile ................................... 106
Specifying options for a DD template ..... 108

Chapter 7. Using and managing load
profiles ...................................... 109

Using the ISPF interface to build a load job from a
profile ................................... 109
## Figures

1. The Tools Customizer Settings panel  
   (CCQPSET) ........................................ 55
2. The Panel Display Options panel (CCQPOPT) ............................ 58
3. The Specify the Metadata Library panel ............................... 62
4. The Discover Customized Product Information panel........... 64
5. The Associate DB2 Entry for Product panel ............................. 65
6. The Create a DB2 Entry panel ........................................... 66
7. The Associate DB2 Entry for Product panel  
   with a new DB2 entry in the master list ........................................ 66
8. The Manage Multiple Configurations of a  
   Product panel ........................................................................ 68
9. The Customizer Workplace panel ........................................... 68
10. The Manage Multiple Configurations of a  
    Product panel ......................................................................... 69
11. The Create a New Configuration of a Product panel ................. 69
12. The Manage Multiple Configurations of a  
    Product panel ......................................................................... 70
13. The Copy a Configuration of a Product panel ............................ 70
14. The Manage Multiple Configurations of a  
    Product panel ......................................................................... 71
15. The Remove a Configuration of a Product panel .................... 71
16. The Manage Multiple Configurations of a  
    Product panel ......................................................................... 72
17. The Edit a Configuration of a Product panel ........................... 72
18. The Manage Multiple Configurations of a  
    Product panel ......................................................................... 73
19. The Product Parameters panel ................................................. 74
20. The LPAR Parameters panel .................................................... 76
21. The DB2 Parameters panel ....................................................... 78
22. The Finish Product Customization panel ................................. 80
23. DB2 Analytics Accelerator Loader main menu ..................... 92
24. Nonparallel load from external file example  
    JCL .................................................................................... 140
25. Define Fixed Columns panel ................................................... 418
26. Define Column Display Order panel ........................................ 420
27. Define Column Size panel ...................................................... 421
28. Define Sort Columns panel ..................................................... 423
Tables
1.
2.
3.
4.
5.
6.

The effect of the value of the Use DB2 group
attach field in a data sharing environment .
Value that is used in the CONNECT
statements in the generated jobs . . . .
Customization roadmaps . . . . . . .
Steps for customizing DB2 Analytics
Accelerator Loader for the first time . . .
Administrative tasks . . . . . . . .
Required steps for recustomizing DB2
Analytics Accelerator Loader . . . . . .

. 56
. 56
. 59

7.
8.
9.
10.

. 59
. 60
. 60

11.

Administrative tasks . . . . . . . . . 61
Intercept messages in the utility SYSPRINT
data set . . . . . . . . . . . . . 368
Intercept messages in the started task
SYSPRINT data set. . . . . . . . . . 369
Status types for the product, the LPAR, and
the DB2 entries . . . . . . . . . . . 377
Data set attributes for allocating the Discover
output, data store, and customization library
data sets . . . . . . . . . . . . . 380

vii


About this information

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

These topics provide instructions for installing, configuring, and using DB2 Analytics Accelerator Loader.

These topics are designed to help database administrators, system programmers, application programmers, and system operators perform these tasks:

- Plan for the installation of DB2 Analytics Accelerator Loader
- Install and operate DB2 Analytics Accelerator Loader
- Customize your 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
Chapter 1. DB2 Analytics Accelerator Loader overview

IBM DB2 Analytics Accelerator Loader for z/OS (also referred to as DB2 Analytics Accelerator Loader) is a tool that you can use to update the data on IBM DB2 Analytics Accelerator without stopping update activity to the production tables while the data is being loaded into the accelerator. You can also load data from an external source, such as IMS™ or VSAM data, into the accelerator, and optionally to DB2, in one step.

Topics:
- "What's new in DB2 Analytics Accelerator Loader"
- "What does DB2 Analytics Accelerator Loader do?" on page 3
- "DB2 Analytics Accelerator Loader features and benefits" on page 3
- "DB2 Analytics Accelerator Loader components and interfaces" on page 5
- "Tools Customizer overview" on page 6
- "DB2 Analytics Accelerator Loader terminology" on page 8
- "DB2 Analytics Accelerator Loader scenarios" on page 9
- "Product documentation and updates" on page 7
- "Accessibility features" on page 8

What's new in DB2 Analytics Accelerator Loader

Review a summary of the technical 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 1.1 SC19-4165-02 (third edition) - December 2014

DB2 Analytics 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 DB2 Analytics 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. For more information, see "Using the batch interface to build a load job from a profile" on page 110.
The Tools Customizer Discover EXEC can discover and use existing information from a previously configured installation of the DB2 Analytics Accelerator Loader. See "Worksheets: Gathering parameter values for Tools Customizer" on page 26. 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 DB2 Analytics 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.
- DB2 Analytics 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). For more information, see "Worksheets: Gathering parameter values for Tools Customizer" on page 26, Chapter 6, “Loading data from an external file,” on page 101, and syntax diagrams and definitions in “Load from external jobs” on page 138.
- DB2 Analytics Accelerator Loader supports the IGNOREFIELDS clause of the DB2 LOAD utility. When loading only the accelerator (option IDAA_ONLY), DB2 Analytics Accelerator Loader generates valid rows when a field specification name begins with "DSN_". Previously, DB2 Analytics Accelerator Loader always behaved as though IGNOREFIELDS YES had been specified (though the product did not support the IGNOREFIELDS clause). DB2 Analytics Accelerator Loader behavior now matches that of the DB2 LOAD utility. That is, when the IGNOREFIELDS clause is omitted, DB2 Analytics Accelerator Loader behaves as though IGNOREFIELDS NO was specified.
- When performing a load to both the accelerator and DB2 (option IDAA_DUAL), DB2 Analytics 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. For more information, see "Worksheets: Gathering parameter values for Tools Customizer" on page 26.
- 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. For more information, see "Discard data set restrictions and considerations" on page 105.
- DB2 Analytics Accelerator Loader supports the NULLIF and DEFAULTIF LOAD utility options.
- DB2 Analytics 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 DB2 Analytics Accelerator Loader output by default. To include debugging and troubleshooting information in the job output, contact IBM Software Support for instructions.

• DB2 Analytics 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.

• DB2 Analytics 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. For more information, see "Using the batch interface to load from an image copy" on page 100.

• 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. For more information, see "Consistent Load Options panel" on page 398 and "Consistent load and image copy load syntax definitions" on page 130.


The DB2 Analytics Accelerator Loader documentation was corrected to remove the following unsupported options from the sample JCL:
• DISCARDDN ISYSDISC
• TEMPLATE ISYSDISC
• NULLIF

What does DB2 Analytics Accelerator Loader do?

DB2 Analytics Accelerator Loader provides the following capabilities to load data into DB2 and IBM DB2 Analytics Accelerator:
• Loads the IBM DB2 Analytics 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.
• Loads data into DB2 and the accelerator in parallel from the same external load file, reducing the process from two steps to one.
• Loads the accelerator with current DB2 data or with data from a historical point in time without stopping update activity to the production DB2 tables.

DB2 Analytics Accelerator Loader features and benefits

DB2 Analytics Accelerator Loader provides the following features to reduce z/OS® CPU use and I/O costs.
**Consistent and historical data load**

Using the last good image copy of an object on DB2, DB2 Analytics Accelerator Loader applies log records forward up to the current time, or for multiple objects, to a consistent historical time. DB2 Analytics 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.

DB2 Analytics Accelerator Loader leverages the power, speed, and efficiency of IBM FlashCopy®. DB2 Analytics Accelerator Loader enables you to create a FlashCopy consistent image copy of the data that is being loaded from DB2 into the accelerator. DB2 Analytics 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.

DB2 Analytics 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.

**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 even 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 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.

**Related concepts:**

- Chapter 6, “Loading data from an external file,” on page 101
- “Restrictions and considerations” on page 101
- Chapter 5, “Loading data at a consistent or historical time,” on page 97

**Related tasks:**
To quickly load data from an external file into both DB2 and an accelerator, you can modify an existing batch job that meets prerequisites instead of using DB2 Analytics Accelerator Loader to generate JCL.

A DUAL load profile is a reusable group of options for building a job to load data from an external file into DB2 and an accelerator. You can create a profile that saves your selections and reuse the profile to perform future loads from an external file.

For a Load from External job, you can specify options for the template DD.

A CONSISTENT load profile is a reusable group of options for building a job to load data at a consistent or historical time into an accelerator. You can create a profile that saves your selections and reuse the profile to perform future consistent load jobs.

For a Consistent Load job, you can specify options for the FlashCopy DSN template.

When you perform a consistent data load, you can use the batch interface to specify an image copy, and load data from that image copy data set into the target table on the accelerator.

### DB2 Analytics Accelerator Loader components and interfaces

DB2 Analytics Accelerator Loader includes the following interfaces and components.

**ISPF interface**

You can use the ISPF interface to select relevant options for using DB2 Analytics Accelerator Loader to build the JCL to load or refresh data on IBM DB2 Analytics Accelerator. After you select all of the options, the ISPF interface generates JCL to execute the function. The JCL is placed in the data set that you specify.

**Batch interface**

The batch interface provides an alternative for loading or refreshing data in IBM DB2 Analytics Accelerator. If your existing LOAD utility JCL meets certain requirements, you can use that JCL with only minor modifications.

**Started task**

The started task receives input from the interfaces through the SVC and then communicates with the DB2 subsystems to implement the supported DB2 utility enhancements. 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:**

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

Product documentation and updates

DB2 Tools information is available at multiple places on the web. You can receive updates to DB2 Tools information automatically by registering with the IBM My Notifications service.

Information on the web

The DB2 Tools Product Documentation web page provides current product documentation that you can view, print, and download. To locate publications with the most up-to-date information, refer to the following web page:

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

You can also access documentation for many DB2 Tools from IBM Knowledge Center:

http://www.ibm.com/support/knowledgcenter

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:


Receiving documentation updates automatically

To automatically receive emails that notify you when new technote documents are released, when existing product documentation is updated, and when new product documentation is available, you can register with the IBM My Notifications service. You can customize the service so that you receive information about only those IBM products that you specify.

To register with the My Notifications service:

1. Go to http://www.ibm.com/support/mysupport
2. Enter your IBM ID and password, or create one by clicking register now.
3. When the My Notifications page is displayed, click **Subscribe** to select those products that you want to receive information updates about. The DB2 Tools option is located under **Software > Information Management**.

4. Click **Continue** to specify the types of updates that you want to receive.

5. Click **Submit** to save your profile.

**How to send your comments**

Your feedback is important in helping to provide the most accurate and high-quality information. If you have any comments about this book or any other IBM product documentation, use one of the following options:

- Use the online reader comment form, which is located at [http://www.ibm.com/software/data/rcf/](http://www.ibm.com/software/data/rcf/)
- Send your comments by email to 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.

**DB2 Analytics Accelerator Loader terminology**

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

**consistent data load**

The process of using DB2 Analytics 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.

**DB2 Analytics Accelerator**

See IBM DB2 Analytics Accelerator.

**dual load**

The process of using DB2 Analytics Accelerator Loader to load DB2 data on the accelerator and into DB2 simultaneously.
historical data load
The process of using DB2 Analytics 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
A workload optimized appliance that combines System z® and Netezza® technologies to deliver mixed workload performance for complex analytic needs. It runs complex queries up to 2000 times faster while retaining single record lookup speed and eliminates costly query tuning while offloading query processing.

IDAA  See IBM DB2 Analytics Accelerator.

external load
The process of using DB2 Analytics Accelerator Loader to update the data on the accelerator with data from a source other than DB2.

Netezza appliance
The IBM Netezza Data Warehouse Appliance that is the foundation for the IBM DB2 Analytics Accelerator. DB2 Analytics Accelerator Loader is a tool that you can use to update the data on IBM DB2 Analytics Accelerator without stopping update activity to the production tables while the data is being loaded into the accelerator.

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**DB2 Analytics Accelerator Loader scenarios**

You can use DB2 Analytics Accelerator Loader to address issues that apply to both frequent and occasional tasks that you perform to refresh production or application table data.

The following scenarios illustrate how you can use DB2 Analytics Accelerator Loader to load and refresh data.

**Loading data into IBM DB2 Analytics Accelerator and DB2**

You want to use IBM DB2 Analytics Accelerator 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 DB2 Analytics 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 stored procedure SYSPROC.ACCEL_LOAD_TABLES to load the data into the IBM DB2 Analytics Accelerator. This stored procedure first runs the DB2 UNLOAD utility and passes the data to IBM DB2 Analytics Accelerator.

By using DB2 Analytics Accelerator Loader, you simply run existing LOAD utility JCL with a few modifications, and DB2 Analytics Accelerator Loader loads data into both DB2 and the accelerator in parallel. DB2 Analytics Accelerator Loader eliminates the manual work required on behalf of the DBA to load data into the accelerator, and 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 DB2 Analytics Accelerator Loader ISPF interface to generate the LOAD utility JCL.

**Loading external data into IBM DB2 Analytics Accelerator only**

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

By using DB2 Analytics Accelerator Loader, you can load data just into IBM DB2 Analytics Accelerator, and not into DB2 first. DB2 Analytics 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 DB2 Analytics Accelerator Loader ISPF interface to generate the LOAD utility JCL.

**Refreshing current data in IBM DB2 Analytics Accelerator for a group of related objects**

You want to refresh sets of related DB2 data in IBM DB2 Analytics Accelerator. To accomplish this goal without DB2 Analytics 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 DB2 Analytics Accelerator Loader, you can accomplish the goal in the following ways.

- DB2 Analytics 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.
  
  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.

- DB2 Analytics 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 to the current point in time.
  
  With this option, you can load data into IBM DB2 Analytics Accelerator 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 DB2 Analytics Accelerator Loader ISPF interface to generate the batch job.
Loading historical data into IBM DB2 Analytics Accelerator

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

By using DB2 Analytics Accelerator Loader, you can load one or more tables into IBM DB2 Analytics Accelerator to any historical time by specifying a time stamp or an RBA/LRSN at which to load the data. DB2 Analytics Accelerator Loader constructs the table data to the specified point in time by using an image copy taken prior to 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 DB2 Analytics Accelerator Loader ISPF interface to generate the batch job.

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

Product documentation and updates

DB2 Tools information is available at multiple places on the web. You can receive updates to DB2 Tools information automatically by registering with the IBM My Notifications service.

Information on the web

The DB2 Tools Product Documentation web page provides current product documentation that you can view, print, and download. To locate publications with the most up-to-date information, refer to the following web page:

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

You can also access documentation for many DB2 Tools from IBM Knowledge Center:

http://www.ibm.com/support/knowledgecenter

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:


Receiving documentation updates automatically

To automatically receive emails that notify you when new technote documents are released, when existing product documentation is updated, and when new product documentation is available, you can register with the IBM My Notifications service. You can customize the service so that you receive information about only those IBM products that you specify.

To register with the My Notifications service:
1. Go to http://www.ibm.com/support/mysupport
2. Enter your IBM ID and password, or create one by clicking register now.
3. When the My Notifications page is displayed, click Subscribe to select those products that you want to receive information updates about. The DB2 Tools option is located under Software > Information Management.
4. Click Continue to specify the types of updates that you want to receive.
5. Click Submit to save your profile.

How to send your comments

Your feedback is important in helping to provide the most accurate and high-quality information. If you have any comments about this book or any other IBM product documentation, use one of the following options:

- Use the online reader comment form, which is located at http://www.ibm.com/software/data/rcf/.
- Send your comments by email to 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.
Chapter 2. Preparing to customize DB2 Analytics Accelerator Loader

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.

Note: If you previously installed and customized DB2 Analytics Accelerator Loader, and then applied APAR PI12417, see Modify SHAREOPTIONS in the following table.

Tip: The following table lists and describes each significant customization step. 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.

<table>
<thead>
<tr>
<th>Task</th>
<th>Link to detailed instructions</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>Modify SHAREOPTIONS</td>
<td></td>
<td></td>
</tr>
<tr>
<td>If you previously installed and customized DB2 Analytics Accelerator Loader, and then applied APAR PI12417, modify SHAREOPTIONS in the PROFILES and PROFILE.RPT VSAM data sets.</td>
<td>“Modifying SHAREOPTIONS” on page 17</td>
<td></td>
</tr>
<tr>
<td>Tools Customizer basics</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Prior to beginning the customization process, familiarize yourself with Tools Customizer terminology and data sets, and other basic information about Tools Customizer.</td>
<td>“Tools Customizer reference” on page 375</td>
<td></td>
</tr>
<tr>
<td>Hardware and software requirements</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Verify that your environment meets the minimum hardware requirements.</td>
<td>“Verify that your environment meets hardware requirements” on page 18</td>
<td></td>
</tr>
<tr>
<td>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.</td>
<td>“Verify that your environment meets software requirements” on page 18</td>
<td></td>
</tr>
<tr>
<td>SMP/E installation</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Verify that DB2 Analytics Accelerator Loader has been installed correctly. DB2 Analytics Accelerator Loader is installed by using standard SMP/E processing.</td>
<td>“Verify that DB2 Analytics Accelerator Loader has been installed successfully” on page 19</td>
<td></td>
</tr>
<tr>
<td>Verify that Tools Customizer for z/OS has been installed correctly. Tools Customizer for z/OS is installed by using standard SMP/E processing.</td>
<td>“Verify that Tools Customizer has been installed successfully” on page 19</td>
<td></td>
</tr>
<tr>
<td>Code page requirement</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ensure that your BIND JCL uses the correct code page.</td>
<td>“Changing the BIND JCL to ENCODING(500)” on page 86</td>
<td></td>
</tr>
<tr>
<td>Region size requirements</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Task</td>
<td>Link to detailed instructions</td>
<td></td>
</tr>
<tr>
<td>---------------------------------------------------------------------</td>
<td>-----------------------------------------------------------------------------------------------</td>
<td></td>
</tr>
<tr>
<td>Ensure that the correct minimum region size is used.</td>
<td>“Verify that your environment meets minimum region size requirements” on page 19</td>
<td></td>
</tr>
<tr>
<td>Started task requirements and considerations</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ensure that the DB2 Analytics Accelerator Loader started task will run under a user ID that has the required authority.</td>
<td>“Authorization requirements for the started task” on page 19</td>
<td></td>
</tr>
<tr>
<td>If you have a very high volume of activity, you can run multiple started tasks concurrently to handle the workload more efficiently.</td>
<td>“Considerations for running multiple started tasks” on page 20</td>
<td></td>
</tr>
<tr>
<td>Data sharing considerations</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Review deployment and configuration issues for DB2 data sharing environments.</td>
<td>“Considerations for DB2 data sharing environments” on page 21</td>
<td></td>
</tr>
<tr>
<td>Dispatching priority requirements</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ensure that the dispatching priority for the DB2 Analytics Accelerator Loader started task is set correctly with respect to other dispatching priorities.</td>
<td>“Dispatching priority requirements” on page 22</td>
<td></td>
</tr>
<tr>
<td>WTO messages for automated operations</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Consider whether to use the Write-to-Operator (WTO) messages that DB2 Analytics Accelerator Loader issues for automated operations.</td>
<td>“Consideration for WTO messages for automated operations” on page 22</td>
<td></td>
</tr>
<tr>
<td>Vector table issue</td>
<td></td>
<td></td>
</tr>
<tr>
<td>DB2 Analytics Accelerator Loader uses the shared 4-KB vector table. Review information about shared storage.</td>
<td>“Operational issue related to the vector table” on page 22</td>
<td></td>
</tr>
<tr>
<td>Gather data set names</td>
<td></td>
<td></td>
</tr>
<tr>
<td>During the customization process, you must specify data set names for the following things:</td>
<td>“Worksheets: Gathering required data set names” on page 23</td>
<td></td>
</tr>
<tr>
<td>• Tools Customizer</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• FEC (common code)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• DB2 Analytics Accelerator Loader</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gather parameter values</td>
<td></td>
<td></td>
</tr>
<tr>
<td>During the customization process, you must specify parameter values for DB2 Analytics Accelerator Loader, for DB2, and for your LPAR.</td>
<td>“Worksheets: Gathering parameter values for Tools Customizer” on page 26</td>
<td></td>
</tr>
<tr>
<td>Customize DB2 Analytics Accelerator Loader</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Start Tools Customizer by running a REXX EXEC from the ISPF Command Shell panel.</td>
<td>“Starting Tools Customizer” on page 53</td>
<td></td>
</tr>
<tr>
<td>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.</td>
<td>“Modifying Tools Customizer user settings” on page 54</td>
<td></td>
</tr>
<tr>
<td>Complete the steps in the appropriate customization roadmap based on the type of customization that you are performing.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Follow <strong>Roadmap: Customizing DB2 Analytics Accelerator Loader for the first time</strong> to customize the product for the first time.</td>
<td>“Roadmap: Customizing DB2 Analytics Accelerator Loader for the first time” on page 59</td>
<td></td>
</tr>
</tbody>
</table>
Follow Roadmap: Recustomizing DB2 Analytics Accelerator Loader if you have customized this version of the product for the first time, want to go back and change parameters and regenerate jobs.

After using Tools Customizer for z/OS to perform customization, complete the following required tasks.

### APF authorization

The following data sets must be APF authorized:

- SHLOLOAD
- SFECLOAD

See "APF-authorizing the load library (required)" on page 87.

### Make the started task address space available to user interfaces

Copy the DB2 Analytics Accelerator Loader started task PROC to your system PROCLIB to make the started task address space available to the user interfaces for the product.

See "Copying the started task PROC (required)" on page 87.

### Copy the DSNUTILF module

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.

See "Copying the DSNUTILF module (required)" on page 88.

### Set up the WLM-managed address space

This step enables the DB2 Analytics Accelerator Loader started task to perform DSNUTILB interception services.

See "Setting up the WLM application environment (required)" on page 88.

### Start the started task

Before you can use the product, you must start the started task.

See "Starting the started task (required)" on page 89.

---

### Modifying SHAREOPTIONS

If you installed and customized the product before you applied APAR PI12417, perform the following steps to modify SHAREOPTIONS (2 3) to SHAREOPTIONS (3 3) on your profile data sets.

#### Before you begin

If you are performing a new installation and customization, and have applied APAR PI12417, then this task is not necessary.

To verify that SHAREOPTIONS (3 3) was defined for your profile data sets, run LISTCAT on the cluster of your profile data sets.

#### About this task

Edit and run the job in member HLOALTER in the SHLOSAMP data set to complete this task.
**Procedure**

For both the PROFILES data set and the PROFILE.RPT data set, perform an ALTER to modify the data and index components of the cluster to specify SHAREOPTIONS (3 3), as shown in the following example. The variable hlq is the high-level qualifier of the VSAM data sets that contain the profile information.

```plaintext
//ALTER     EXEC PGM=IDCAMS
//SYSPRINT   DD SYSOUT=*  
//SYSOUT      DD SYSOUT=*
//SYSIN       DD *  
ALTER       <profiles_data_set_hlq>.DATA  
            SHAREOPTIONS (3 3)  
ALTER       <profiles_data_set_hlq>.INDEX  
            SHAREOPTIONS (3 3)  
ALTER       <profile.rpt_data_set_hlq>.DATA  
            SHAREOPTIONS (3 3)  
ALTER       <profile.rpt_data_set_hlq>.INDEX  
            SHAREOPTIONS (3 3)  
/*
```

---

**Set up your environment prior to customization**

Prior to beginning the customization process, 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 IBM System z196 or later.

**Verify that your environment meets software requirements**

Ensure that you are using z/OS V1.12 (5694-A01) or later.

Ensure that you are using one of the following supported versions of DB2 for z/OS and appropriate maintenance has been applied:

- DB2 V10 (5605-DB2)
- DB2 Value Unit Edition V10.1 (5697-P31)
- DB2 V11 (5615-DB2)
- DB2 Value Unit Edition V11.1 (5697-P43)
- DB2 V10 APAR PM93789
- DB2 V10 and V11 APAR PI10162
- (To use discard data sets) DB2 V10 APAR AI25214 or DB2 V11 APAR AI26321

Ensure that you are using IBM DB2 Analytics Accelerator V3.1.0 (5697-DAA ) or later.

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

- ISPF V4 (5655-042) or later
Verify that DB2 Analytics Accelerator Loader has been installed successfully

See the Program Directory for IBM DB2 Analytics Accelerator Loader for z/OS, GI10-8981 for installation instructions.

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 30000.

Security requirements

Review the security requirements for DB2 Analytics Accelerator Loader.

Authorization requirements for the started task

Make sure that the DB2 Analytics Accelerator Loader started task will run under a user ID that has the required authority.

The started task must run under a user ID that has one of the following authority levels:

- SYSADM
- SYSCTRL
- SYSOPR with MONITOR1 (minimum)

If you use the SYSOPR with MONITOR1 authority level, you must use this user ID in the SET CURRENT SQLID field when customizing DB2 Analytics Accelerator Loader using Tools Customizer.

If you use the SYSOPR with MONITOR1 authority level for the started task authid, the GRANT SELECT ON TABLE SYSIBM.SYTable_name is required to successfully BIND the DB2 Analytics Accelerator Loader plan, as shown in the following list of table names:

- SYSIBM.SYSPLAN
- SYSIBM.SYSPLANDEP
Considerations for running multiple started tasks

A single started task is usually sufficient to handle multiple user requests from the DB2 Analytics Accelerator Loader interfaces to perform work on one or more DB2 subsystems. However, if you have a very high volume of activity, you can run multiple started tasks concurrently to handle the workload more efficiently, with each started task monitoring a different DB2 SSID.

If you run multiple concurrent started tasks, the SHLOSAMP library must contain a separate started task initialization options member for each started task. Each initialization options member must specify a unique SVC number and primary subsystem.

Also, each started task must have its own set of DB2 Analytics Accelerator Loader audit, logging, and DSNUTILB intercept tables.

Authorization requirements for utilities

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.

Related concepts:

“Considerations for running multiple started tasks”

Related tasks:

“Starting the started task (required)” on page 89

Start the DB2 Analytics Accelerator Loader started task so that you can begin using the product interfaces.
Run Tools Customizer for each primary subsystem to generate the following items:

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

**Related concepts:**
- “Authorization requirements for the started task” on page 19
  Make sure that the DB2 Analytics Accelerator Loader started task will run under a user ID that has the required authority.
- “Managing DSNUTILB interception” on page 366
  You can manage DSNUTILB interception by performing some routine and occasional tasks.

**Related tasks:**
- “Starting the started task (required)” on page 89
  Start the DB2 Analytics Accelerator Loader started task so that you can begin using the product interfaces.
- “Copying the started task PROC (required)” on page 87
  Copy the DB2 Analytics Accelerator Loader started task PROC to your system PROCLIB to make the started task address space available to the user interfaces for the product.

---

### Considerations for DB2 data sharing environments

If you plan to deploy DB2 Analytics Accelerator Loader in a DB2 data sharing environment, review this information to learn about deployment and configuration issues.

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 DB2 Analytics Accelerator Loader started task can perform DSNUTILB intercept processing on the active subsystems within a data sharing group that have a DB2 version that DB2 Analytics Accelerator Loader supports. At least one of the member subsystems must be defined as the *primary subsystem* during customization and must contain the DB2 Analytics 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 will share a common set of DB2 objects for DB2 Analytics Accelerator Loader: the 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 other than the primary subsystem, you must also define that subsystem as an *additional subsystem* during customization.

For the started task to communicate with the subsystems in a data sharing group, you must set the 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.

Related concepts:
“Managing DSNUTILB interception” on page 366
You can manage DSNUTILB interception by performing some routine and
occasional tasks.

---

**Dispatching priority requirements**

Ensure that the dispatching priority for the DB2 Analytics Accelerator Loader
started task is set correctly with respect to other dispatching priorities. The
dispatching priority determines the order in which a task can use the processor in
a multitasking environment.

The DB2 Analytics Accelerator Loader dispatching priority must be lower than the
priority values for the DB2 subsystems that DB2 Analytics Accelerator Loader will
use but higher than the priority values for any DB2 LOAD utilities for which DB2
Analytics Accelerator Loader will perform processing. Set the dispatching priorities
for these items in the following order, from highest to lowest priority:

1. The address spaces of the DB2 subsystems that DB2 Analytics Accelerator
   Loader will use (highest dispatching priority).
2. The DB2 Analytics Accelerator Loader started task.
3. The DB2 LOAD utility that DB2 Analytics Accelerator Loader intercepts (any
dispatching priority under the DB2 Analytics Accelerator Loader started task).

---

**Consideration for WTO messages for automated operations**

Consider whether to use the Write-to-Operator (WTO) messages that DB2 Analytics
Accelerator Loader issues for automated operations.

DB2 Analytics Accelerator Loader issues some messages as WTO messages in
addition to printing them to the SYSPRINT data set. If your automation tools can
process WTO messages, you can use these messages to control the flow of
automated operations in your environment.

The following WTO messages on the status of the DB2 Analytics Accelerator
Loader started task are particularly useful: HLOS0001I, HLOS0002I, HLOS0003I,
and HLOS0004I. These messages report the beginning and end of the started task
initialization and termination phases.

---

**Operational issue related to the vector table**

Consider this operational issue regarding the common vector table.

Some IBM products for z/OS systems, including DB2 Analytics Accelerator Loader,
share a 4-KB vector table that resides in ECSA (subpool 228, storage key 0). This
table, called the RVT, serves as an anchor point for these products.

The first product to start after an IPL will obtain and initialize the RVT. If that
product subsequently terminates, the RVT storage is deliberately not released.
because it could be serving multiple products. A system-monitoring product might report the RVT storage as "orphaned" or "owner gone."

**Attention:** In this situation, do not attempt to release the RVT storage. If you do so, the other products that are using the vector table can be severely damaged.

### 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:

<table>
<thead>
<tr>
<th>Data set name</th>
<th>Description</th>
<th>Special requirements</th>
<th>Your data set name</th>
</tr>
</thead>
<tbody>
<tr>
<td>SCCQDENU</td>
<td>Metadata library for Tools Customizer</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SCCQLOAD</td>
<td>Executable load module library for Tools Customizer</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SCCQMENU</td>
<td>ISPF messages for Tools Customizer</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SCCQPENU</td>
<td>ISPF panels for Tools Customizer</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SCCQSAMP</td>
<td>Sample members for Tools Customizer</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SCCQTENU</td>
<td>Table library for Tools Customizer</td>
<td>You must have write access to this data set.</td>
<td></td>
</tr>
</tbody>
</table>

#### Data set names for DB2 Analytics Accelerator Loader

Identify and record the following DB2 Analytics Accelerator Loader data set names. During the customization process, you will enter the following values on panel CCQPPRD.

<table>
<thead>
<tr>
<th>Data set name</th>
<th>Description</th>
<th>Special requirements</th>
<th>Your data set name</th>
</tr>
</thead>
<tbody>
<tr>
<td>SHLOCLST</td>
<td>CLIST library for CLISTs that are used to start the DB2 Analytics Accelerator Loader ISPF interface</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SHLODBRM</td>
<td>DBRM library for DB2 Analytics Accelerator Loader</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SHLOLOAD</td>
<td>Executable load module library for DB2 Analytics Accelerator Loader</td>
<td>You must APF authorize this data set.</td>
<td></td>
</tr>
<tr>
<td>SHLOMENU</td>
<td>ISPF messages for DB2 Analytics Accelerator Loader</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SHLOPENU</td>
<td>ISPF panels for DB2 Analytics Accelerator Loader</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Data set name</td>
<td>Description</td>
<td>Special requirements</td>
<td>Your data set name</td>
</tr>
<tr>
<td>---------------</td>
<td>-------------</td>
<td>----------------------</td>
<td>-------------------</td>
</tr>
<tr>
<td>SHLOSAMP</td>
<td>Sample members for DB2 Analytics Accelerator Loader</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SHLODENU</td>
<td>Metadata library for DB2 Analytics Accelerator Loader product parameters</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ISPMLIB</td>
<td>ISPF skeleton library to use with DB2 Analytics Accelerator Loader</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ISPMLIB</td>
<td>ISPF message library to use with DB2 Analytics Accelerator Loader</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ISPLLIB</td>
<td>ISPF panel library to use with DB2 Analytics Accelerator Loader</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ISPTLIB</td>
<td>ISPF table input library to use with DB2 Analytics Accelerator Loader</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SFECDBRM</td>
<td>FEC DBRM library to use with DB2 Analytics Accelerator Loader</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SFECLOAD</td>
<td>FEC executable load module library to use with DB2 Analytics Accelerator Loader</td>
<td></td>
<td>You must APF authorize this data set.</td>
</tr>
<tr>
<td>SFECMENU</td>
<td>FEC ISPF messages to use with DB2 Analytics Accelerator Loader</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SFECPENU</td>
<td>FEC ISPF panels to use with DB2 Analytics Accelerator Loader</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SADBEXEC</td>
<td>DB2 Admin Tool EXEC library</td>
<td>Used only if you choose to add DB2 Analytics Accelerator Loader to the DB2 Admin Launchpad.</td>
<td></td>
</tr>
</tbody>
</table>

**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).
<table>
<thead>
<tr>
<th>Data set name</th>
<th>Description</th>
<th>Special requirements</th>
<th>Your data set name</th>
</tr>
</thead>
<tbody>
<tr>
<td>Product customization Library</td>
<td>Contains the customization jobs that Tools Customizer generates for DB2</td>
<td>You must have write access to this data set.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Analytics Accelerator Loader.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>To customize DB2 Analytics Accelerator Loader, submit the members of the</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>data set in the order in which they are displayed on the Finish Product</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Customization panel.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>The data set naming convention is:</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>$hlq$.${LPAR-name}.xyzvrm$</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>where:</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• $hlq$ is the value of the</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Customization library</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>qualifier field on the</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Tools Customizer</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Settings panel (CCQPSET)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• $LPAR-name$ is the</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>four-character LPAR name</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• $xyzvrm$ is the three-letter</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>product identifier with the version, release, and</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>modification level</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>For example, the data set</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>name might be</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>DB2TOOL.PRODUCT.CUST.$MVS1$.XYZ410.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Data set name</td>
<td>Description</td>
<td>Special requirements</td>
<td>Your data set name</td>
</tr>
<tr>
<td>-------------------------</td>
<td>-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
<td>-------------------------------------------------------------------------------------------------------------</td>
<td>-------------------</td>
</tr>
<tr>
<td>Discover output data set</td>
<td>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.</td>
<td>You must have write access to this data set.</td>
<td></td>
</tr>
<tr>
<td>Data store data set</td>
<td>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.</td>
<td>You must have write access to this data set.</td>
<td></td>
</tr>
</tbody>
</table>

**Worksheets: Gathering parameter values for Tools Customizer**

During the customization process, you will need to provide parameter values for DB2 Analytics Accelerator Loader, for DB2, and for your LPAR.

Use the worksheets in this topic 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 the 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).

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

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 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.

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Sample or default value</th>
<th>Your value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Discover EXEC for Extracting Information from an Already Customized product</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Discover EXEC library</td>
<td>HLQ.MLQ.SHLODENU</td>
<td></td>
</tr>
<tr>
<td>Discover EXEC name</td>
<td>HLODISC</td>
<td></td>
</tr>
<tr>
<td>Discover output data set</td>
<td>The name that you specified in option 0 User Settings from the Tools Customizer main menu.</td>
<td></td>
</tr>
<tr>
<td>Discover output data set</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Information for Discover EXEC section</td>
<td></td>
<td></td>
</tr>
<tr>
<td>DB2 HLO User Indicator</td>
<td>HLO</td>
<td></td>
</tr>
<tr>
<td>Previous installation control file</td>
<td>DB2TOOL.V110.CONTROL</td>
<td></td>
</tr>
<tr>
<td>Previous installation control file</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Preceding information for Discover EXEC section</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### Previous installation SHLOSAMP data set

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Sample or default value</th>
<th>Your value</th>
</tr>
</thead>
<tbody>
<tr>
<td>SHLOSAMP data set</td>
<td>HLO.V110.SHLOSAMP</td>
<td></td>
</tr>
</tbody>
</table>

The DB2 Analytics 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 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.

### Previous installation OPTS module name

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Sample or default value</th>
</tr>
</thead>
<tbody>
<tr>
<td>No default.</td>
<td></td>
</tr>
</tbody>
</table>

The options module name that was used in DB2 Analytics Accelerator Loader. The Discover EXEC reads the options module and populates the Product Parameters panel with the discovered values. The options module name pattern is **hloid**OPTS, where **hloid** is the four-character product ID that is used to identify your instance of DB2 Analytics Accelerator Loader.

### Product to Customize section

#### Description

The parameters that are listed 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.

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Discovered?</th>
<th>Source of this value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Product metadata library</td>
<td>Yes</td>
<td>This value is specified on the Specify the Product to Customize panel (CCQPHLQ).</td>
</tr>
<tr>
<td>LPAR</td>
<td>Yes</td>
<td>This value is supplied by Tools Customizer.</td>
</tr>
<tr>
<td>Product name</td>
<td>Yes</td>
<td>The default value DB2 Analytics Accelerator Loader is provided by the product metadata file.</td>
</tr>
</tbody>
</table>
### Parameter Discovered? Source of this value

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Discovered?</th>
<th>Source of this value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Version</td>
<td>Yes</td>
<td>This value is provided by the product metadata file. The default value for this release is 1.1.0.</td>
</tr>
<tr>
<td>Product customization library</td>
<td>No</td>
<td>This value is derived from the user-specified customization library qualifier on the Tools Customizer Settings panel (CCQPSET).</td>
</tr>
</tbody>
</table>

### Required parameters section

**Description**

The parameters in this task are required for all customizations. During the customization process, you enter these values on panel CCQPPRD.

**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.

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Required?</th>
<th>Discovered?</th>
<th>Default value</th>
<th>Your value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Startup CLIST library</td>
<td>Yes</td>
<td>No</td>
<td>HLO.SHLOCLST</td>
<td></td>
</tr>
<tr>
<td>Startup CLIST 1</td>
<td>Yes</td>
<td>No</td>
<td>HLOV11</td>
<td></td>
</tr>
<tr>
<td>Accelerator Loader high-level qualifier</td>
<td>Yes</td>
<td>No</td>
<td>HLO.V110</td>
<td></td>
</tr>
<tr>
<td>User indicator</td>
<td>No</td>
<td>Yes (only from a DB2 Analytics Accelerator Loader control file)</td>
<td>HLO</td>
<td></td>
</tr>
</tbody>
</table>
### Task: Configure product CLISTs

#### Description
This task configures the startup CLISTs that are used to start the ISPF interface for DB2 Analytics Accelerator Loader. During the customization process, you enter these values on panel CCQPPRD.

This task is **required**.

#### Jobs generated
The generated jobs are based on the HLOCLIST and HLOCLST2 templates. The templates are generated once per configuration. The generated jobs are stored in the Product Customization Library that is displayed on the Finish Product Customization panel. The generated job names themselves might vary, however, the template names do not. When the jobs are 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.
### Task: Create the started task and its components

**Description**

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

This task is required.

To display the 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. The templates are generated once per configuration. The generated jobs are stored in the Product Customization Library that is displayed on the Finish Product Customization panel. The generated job names themselves might vary, however, the template names do not. When the job is run, the members are stored in the product's `hlq.SHLOSAMP` data set.

<table>
<thead>
<tr>
<th>Step or parameter</th>
<th>Required?</th>
<th>Discovered?</th>
<th>Default value</th>
<th>Your value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Started task identifier</td>
<td>Yes</td>
<td>Yes</td>
<td>HLO1</td>
<td></td>
</tr>
<tr>
<td><strong>Start up CLIST 2</strong> &lt;br&gt;The name of the second startup CLIST.</td>
<td>Yes</td>
<td>No</td>
<td>HLOV11C</td>
<td></td>
</tr>
</tbody>
</table>

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

When this step and the task Create the Started Task and its components are selected, jobs are generated that create the SAMPLIB members for the started task. The SSID on which the JCL is being generated must be defined as the primary subsystem on the DB2 Parameters panel.

<table>
<thead>
<tr>
<th>Step or parameter</th>
<th>Required?</th>
<th>Discovered?</th>
<th>Default value</th>
<th>Your value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Create PROC, PLCY, and other SAMPLIB members</td>
<td>Yes</td>
<td>No</td>
<td>Selected</td>
<td></td>
</tr>
<tr>
<td>Step or parameter</td>
<td>Required?</td>
<td>Discovered?</td>
<td>Default value</td>
<td>Your value</td>
</tr>
<tr>
<td>-------------------</td>
<td>-----------</td>
<td>-------------</td>
<td>---------------</td>
<td>------------</td>
</tr>
<tr>
<td><strong>The primary DB2 subsystem ID</strong>&lt;br&gt;Defines the primary DB2 subsystem on which auditing and logging will take place.&lt;br&gt;Note: The primary subsystem is the DB2_SSID that is displayed in the started task initialization options module. You can manually add secondary subsystems to the policy member (hloidPLCY).</td>
<td>Yes</td>
<td>Yes</td>
<td>ABCD</td>
<td></td>
</tr>
<tr>
<td><strong>The started task user ID</strong>&lt;br&gt;The IBM RACF® user ID under which the started task will run.&lt;br&gt;<strong>Important:</strong> Ensure that this user ID has one of the following authorities on each DB2 subsystem where the DB2 Analytics Accelerator Loader plan will be bound:&lt;br&gt;• SYSOPR with MONITOR1 (minimum)&lt;br&gt;• SYSADM&lt;br&gt;• SYSCTRL</td>
<td>Yes</td>
<td>No</td>
<td>HLOSTC</td>
<td></td>
</tr>
<tr>
<td>Step or parameter</td>
<td>Required?</td>
<td>Discovered?</td>
<td>Default value</td>
<td>Your value</td>
</tr>
<tr>
<td>-------------------</td>
<td>-----------</td>
<td>-------------</td>
<td>---------------</td>
<td>------------</td>
</tr>
<tr>
<td>SYSOUT class</td>
<td>Yes</td>
<td>Yes</td>
<td>*</td>
<td></td>
</tr>
</tbody>
</table>
|                   | Specifies a SYSOUT class for the SYSOUT data sets that DB2 Analytics 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, 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, make sure that you 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, thereby causing DSNUTILB interception errors. If you specify a value other than the asterisk (*) character, note that the HLOSORT data sets (which are used in sort processing for the DSNUTILB intercept) will still use the default asterisk (*) class.  
**Note:** For JES3 environments:  
Customizing DYNAMIC_SYSOUT_CLASS="class"; using the default value (*) is not recommended. Set this option to a SYSOUT class that is defined with the HOLD=TSO 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 SYSnnnn.  
| STC audit active  | Yes       | Yes         | YES           |            |
|                   | Controls whether DB2 Analytics Accelerator Loader records audit information in a DB2 table. Specify YES to record this information, or specify NO to not record this information.  
<p>|</p>
<table>
<thead>
<tr>
<th>Step or parameter</th>
<th>Required?</th>
<th>Discovered?</th>
<th>Default value</th>
<th>Your value</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Maximum STC audit age</strong></td>
<td>Yes</td>
<td>Yes</td>
<td>45</td>
<td></td>
</tr>
<tr>
<td>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 eligible for deletion. It will be 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, you must periodically delete old rows from the audit table. Deleting old rows prevents the table from becoming too large. Use the sample SQL that is provided in the SHLOSAMP member HLOCLNUP.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<p>| <strong>Connect to all DB2 subsystems</strong> | Yes       | Yes         | YES           |            |
| Controls whether DB2 Analytics 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 will be listed in the ISPF interface. |</p>
<table>
<thead>
<tr>
<th>Step or parameter</th>
<th>Required?</th>
<th>Discovered?</th>
<th>Default value</th>
<th>Your value</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Connection idle timeout</strong></td>
<td>Yes</td>
<td>Yes</td>
<td>300</td>
<td></td>
</tr>
<tr>
<td>Specifies the maximum amount of time (in seconds) that the DB2 connection for a DB2 Analytics 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 DB2 Analytics Accelerator Loader connection to the DB2 subsystem that is specified by the DB2_SSID option.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>DB2 tasks count</strong></td>
<td>Yes</td>
<td>Yes</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Specifies the maximum number of z/OS tasks that DB2 Analytics Accelerator Loader can start for connection to a single DB2 subsystem. Valid values are 1 - 2147483647.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>DB2 task idle timeout</strong></td>
<td>Yes</td>
<td>Yes</td>
<td>900</td>
<td></td>
</tr>
<tr>
<td>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.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>STC logging active</strong></td>
<td>Yes</td>
<td>Yes</td>
<td>YES</td>
<td></td>
</tr>
<tr>
<td>Controls whether DB2 Analytics 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.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Step or parameter</td>
<td>Required</td>
<td>Discovered</td>
<td>Default value</td>
<td>Your value</td>
</tr>
<tr>
<td>---------------------------</td>
<td>----------</td>
<td>------------</td>
<td>---------------</td>
<td>------------</td>
</tr>
<tr>
<td><strong>Maximum STC log age</strong></td>
<td>Yes</td>
<td>Yes</td>
<td>45</td>
<td></td>
</tr>
<tr>
<td>Indicates the maximum number of days to retain rows for logged messages in the logging table (HLOGLOG). 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 eligible for deletion. It will be 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, you must periodically delete old rows from the logging table to prevent the table from becoming too large. To do so, use the sample SQL that is provided in the SHLOSAMP member HLOCLNUP.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>SVC number</strong></td>
<td>Yes</td>
<td>Yes</td>
<td>255</td>
<td></td>
</tr>
<tr>
<td>Specifies the numeric identifier for the DB2 Analytics Accelerator Loader supervisor call (SVC) number. This number must be an integer from 200 - 255. Check with your systems programmer to ensure that you choose an SVC number that is available. The SVC will be dynamically installed when the product started task starts and will be dynamically removed when the started task stops.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>STC trace active</strong></td>
<td>Yes</td>
<td>Yes</td>
<td>YES</td>
<td></td>
</tr>
<tr>
<td>Controls whether the product collects trace information. Specify YES to enable tracing, or specify NO to disable tracing. A trace is a record of product internal processing that is primarily used by IBM Software Support for diagnosing a problem.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Size of trace table</strong></td>
<td>Yes</td>
<td>Yes</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Specifies the size (in megabytes) of the table in which the product stores trace information. Valid values are 1 - 2147483647. A value of 0 will result in no trace table allocation. A trace is a record of internal processing that is primarily used by IBM Software Support for diagnosing a problem.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Step or parameter</td>
<td>Required?</td>
<td>Discovered?</td>
<td>Default value</td>
<td>Your value</td>
</tr>
<tr>
<td>--------------------------</td>
<td>-----------</td>
<td>-------------</td>
<td>---------------</td>
<td>------------</td>
</tr>
<tr>
<td>Workfile data class</td>
<td>Yes</td>
<td>Yes</td>
<td>NONE</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Workfile management class</td>
<td>Yes</td>
<td>Yes</td>
<td>NONE</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Workfile storage class</td>
<td>Yes</td>
<td>Yes</td>
<td>NONE</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Work file unit</td>
<td>Yes</td>
<td>Yes</td>
<td>SYSALLDA</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Step or parameter</td>
<td>Required?</td>
<td>Discovered?</td>
<td>Default value</td>
<td>Your value</td>
</tr>
<tr>
<td>------------------------</td>
<td>-----------</td>
<td>-------------</td>
<td>---------------</td>
<td>------------</td>
</tr>
<tr>
<td>Maximum worklist table age</td>
<td>Yes</td>
<td>Yes</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td></td>
<td>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 and can be used for restart purposes if a utility terminates. Worklist data is moved to worklist-error tables for diagnostic use by IBM Software Support in certain situations. After rows in the worklist-error tables reach the specified age limit, they are eligible for deletion. The next time a new row is inserted into a worklist-error table, the rows that meet the age limit are deleted. You can specify a value from 0 - 32767 for this option. The default value is 0, which prevents the deletion of old rows from the worklist-error tables based on this option. If you accept the default value, you might have to periodically delete old rows from these tables to prevent the tables from becoming too large. Use the sample SQL that is provided in the SHLOSAMP member HLOCLNUP.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>WTO routing code</td>
<td>Yes</td>
<td>Yes</td>
<td>11</td>
<td></td>
</tr>
<tr>
<td></td>
<td>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.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Step or parameter</td>
<td>Required?</td>
<td>Discovered?</td>
<td>Default value</td>
<td>Your value</td>
</tr>
<tr>
<td>-------------------</td>
<td>-----------</td>
<td>-------------</td>
<td>---------------</td>
<td>------------</td>
</tr>
<tr>
<td><strong>Parallel load tasks</strong>&lt;br&gt;Specifies the number of partitions that DB2 Analytics Accelerator Loader loads into the accelerator and optionally into DB2 in parallel when loading from an external file. Valid values are 1 through 20.&lt;br&gt;This value cannot exceed the value of the IBM DB2 Analytics Accelerator parameter <code>AQ tw MaxUnloadInParallel</code>, which indicates the number of partitions that can be loaded in parallel into the accelerator. If <code>AQtw MaxUnloadInParallel</code> is set to 2, then 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 <strong>Parallel load tasks ACCEL_LOAD_TASKS</strong>.</td>
<td>Yes</td>
<td>Yes</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td><strong>Enable acceleration after successful load</strong>&lt;br&gt;Controls whether DB2 Analytics Accelerator Loader enables query acceleration for the table after a successful load. Query acceleration will not be enabled if DB2 discarded any rows during the load. Valid values are YES and NO.</td>
<td>Yes</td>
<td>Yes</td>
<td>NO</td>
<td></td>
</tr>
<tr>
<td><strong>Load DB2 if accelerator is offline</strong>&lt;br&gt;Specifies the action that DB2 Analytics Accelerator Loader takes when it detects that the accelerator is down. Valid values are:&lt;br&gt;• FAIL: The load job is to fail.&lt;br&gt;• LOAD_DB2: Continue to load the table on DB2. No data is sent to the accelerator. The product issues message HLOU571W and the utility step ends with RC=4. If the accelerator goes down during a load after DB2 Analytics Accelerator Loader 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 down, then only DB2 is loaded.</td>
<td>Yes</td>
<td>Yes</td>
<td>FAIL</td>
<td></td>
</tr>
</tbody>
</table>
**Load DB2 if load to accelerator fails**

Specifies the action that DB2 Analytics Accelerator Loader takes if the load to the accelerator fails when running a dual load profile. Valid values are:

- **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.
- **LOAD_DB2**: Continue to load the table on DB2 if the load to the accelerator fails.

<table>
<thead>
<tr>
<th>Step or parameter</th>
<th>Required?</th>
<th>Discovered?</th>
<th>Default value</th>
<th>Your value</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Load DB2 if load to accelerator fails</strong></td>
<td>Yes</td>
<td>Yes</td>
<td>FAIL</td>
<td></td>
</tr>
</tbody>
</table>

**Create repository maintenance members**

When this step and the task Create the started task and its components are selected, a job is generated that creates maintenance members to clean up started task tables.

<table>
<thead>
<tr>
<th>Step or parameter</th>
<th>Required?</th>
<th>Discovered?</th>
<th>Default value</th>
<th>Your value</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Create repository maintenance members</strong></td>
<td>No</td>
<td>No</td>
<td>Not selected</td>
<td></td>
</tr>
</tbody>
</table>

**Task: Create DDL, profile data sets and BIND jobs**

**Description**

This task creates repository objects, creates the profile repository data sets, creates the BIND job, and grants EXECUTE authority on the DB2 Analytics Accelerator Loader plan name. During the customization process, you enter these values on panel CCQPPRD.

This task is required.

**Jobs generated**

These jobs are based on the templates HLODDL (generated once per subsystem), HLOPROF (generated once per configuration), HLOBIND (generated once per subsystem), and HLOGRANT (generated once per subsystem). The generated jobs are stored in the Product Customization Library that is displayed on the Finish Product Customization panel. The generated job names themselves might vary, however, the template names do not.

<table>
<thead>
<tr>
<th>Step or parameter</th>
<th>Required?</th>
<th>Discovered?</th>
<th>Default value</th>
<th>Your value</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Drop Accelerator Loader objects</strong></td>
<td>No</td>
<td>No</td>
<td>Not selected</td>
<td></td>
</tr>
</tbody>
</table>

40 DB2 Analytics Accelerator Loader User's Guide
**Task: Create control file, update it, or both**

**Description**
This 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.

This task is *optional.*
Jobs generated
These jobs are based on the templates HLOCNTFL (generated once per configuration) and HLOCNTFU (generated once per subsystem). The generated jobs are stored in the Product Customization Library that is displayed on the Finish Product Customization panel. The generated job names themselves might vary, however, the template names do not.

<table>
<thead>
<tr>
<th>Step or parameter</th>
<th>Required?</th>
<th>Discovered?</th>
<th>Default value</th>
<th>Your value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Create a new control file</td>
<td>No</td>
<td>No</td>
<td>Not selected</td>
<td></td>
</tr>
<tr>
<td>Volume serial number for control file</td>
<td>No</td>
<td>No</td>
<td>No default</td>
<td></td>
</tr>
<tr>
<td>Update the control file</td>
<td>No</td>
<td>No</td>
<td>Not selected</td>
<td></td>
</tr>
</tbody>
</table>

Task: Add the Accelerator Loader to the DB2 Admin Launchpad

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

This task is optional.

Jobs generated
This job is based on the template HLOADBI (generated once per configuration).
## LPAR Parameters section

**Description**

This section contains LPAR parameters. The LPAR Parameters panel becomes active 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 CCQPLPR.

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Required?</th>
<th>Discovered?</th>
<th>Default value</th>
<th>Your value</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Message library</strong></td>
<td>Yes</td>
<td>No</td>
<td>SYS1.ISPMLIB</td>
<td></td>
</tr>
</tbody>
</table>

The data set name of the ISPF message library. DB2 Admin uses this name when building JCL to run ISPF in batch. 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 ISP.ISPMLIB.
<table>
<thead>
<tr>
<th>Parameter</th>
<th>Required?</th>
<th>Discovered?</th>
<th>Default value</th>
<th>Your value</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Panel library</strong></td>
<td>Yes</td>
<td>No</td>
<td>SYS1.ISPPLIB</td>
<td></td>
</tr>
<tr>
<td>The name of the library</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>that contains the ISPF</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>panels that are</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>defined and used by DB2</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Admin.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>All DB2 subsystems will</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>use the value</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>that you specify</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>unless you specify</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>a subsystem-specific</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>value for this parameter</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>on the DB2 Parameters</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>panel. Specify a valid</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>name for the Message</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>library. Examples of valid</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>data set names are</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ISP.SISPPENU and</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ISP.SISPLIB.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Skeleton library</strong></td>
<td>Yes</td>
<td>No</td>
<td>SYS1.ISPSLIB</td>
<td></td>
</tr>
<tr>
<td>The name of the library</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>that contains the ISPF</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>skeletons that are</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>defined and used by DB2</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Admin.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>All DB2 subsystems will</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>use the value</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>that you specify</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>unless you specify</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>a subsystem-specific</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>value for this parameter</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>on the DB2 Parameters</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>panel. Specify a valid</td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>name for the Skeleton</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>library. Examples of valid</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>data set names are</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ISP.SISPTENU and</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ISP.SISPTLIB.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>ISPF table input library</strong></td>
<td>Yes</td>
<td>No</td>
<td>SYS1.ISPSTLIB</td>
<td></td>
</tr>
<tr>
<td>The data set name of the</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ISPF table input library.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>DB2 Admin uses this</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>name when building JCL to</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>run ISPF in batch. Valid</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>names are 1 – 46</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>characters. Specify a</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>valid name for the ISPF</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>table input library.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Examples of valid data</td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>set names are</td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ISP.SISPTENU and</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ISP.SISPTLIB.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**DB2 Parameters section**

**Description**

This section contains DB2 parameters. During the customization process, you enter these values on panel CCQPDB2.

You can create a DB2 entry as the primary subsystem or secondary subsystem and associate it with DB2 Analytics Accelerator Loader. When customizing DB2 Analytics Accelerator Loader, you must define a primary subsystem before you can define product parameters.

You can customize DB2 Analytics Accelerator Loader only on DB2 entries that are associated with DB2 Analytics Accelerator Loader. The list of DB2 entries is on the Customizer Workplace panel. You can customize any associated DB2 entries for DB2 Analytics 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.
<table>
<thead>
<tr>
<th>Parameter</th>
<th>Required?</th>
<th>Discovered?</th>
<th>Default value</th>
<th>Your value</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>DB2 subsystem ID</strong></td>
<td>Yes</td>
<td>Yes</td>
<td>No default</td>
<td></td>
</tr>
<tr>
<td>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.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Group attach name</strong></td>
<td>No</td>
<td>No</td>
<td>No default</td>
<td></td>
</tr>
<tr>
<td>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.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>This is the primary subsystem</strong></td>
<td>Yes</td>
<td>Yes</td>
<td>YES</td>
<td></td>
</tr>
<tr>
<td>Specify YES if this DB2 SSID is to be used as the primary subsystem.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Mode</strong></td>
<td>Yes</td>
<td>No</td>
<td>NFM</td>
<td></td>
</tr>
<tr>
<td>The mode in which the DB2 subsystem is running. Valid value for this product is NFM (new function mode on any DB2 version).</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Level number</strong></td>
<td>Yes</td>
<td>No</td>
<td>No default</td>
<td></td>
</tr>
<tr>
<td>The version, release, and modification level of the DB2 subsystem. Note: The product requires DB2 10 (101) or later.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Load library</strong></td>
<td>Yes</td>
<td>Yes</td>
<td>DSN SDSNLOAD</td>
<td></td>
</tr>
<tr>
<td>The fully qualified data set name of the DB2 load library.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Run library</strong></td>
<td>Yes</td>
<td>Yes</td>
<td>DSN RUNLIB LOAD</td>
<td></td>
</tr>
<tr>
<td>The fully qualified data set name of the DB2 run library.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Exit library</strong></td>
<td>Yes</td>
<td>Yes</td>
<td>DSN SDSNEXIT</td>
<td></td>
</tr>
<tr>
<td>The fully qualified data set name of the DB2 exit library.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Bootstrap data set</strong></td>
<td>Yes</td>
<td>Yes</td>
<td>DSN SDSNBSDS</td>
<td></td>
</tr>
<tr>
<td>The fully qualified data set name of the DB2 bootstrap data set.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>DB2 ZPparms member</strong></td>
<td>Yes</td>
<td>Yes</td>
<td>DSNZPARM</td>
<td></td>
</tr>
<tr>
<td>The ZPARM load module member name that is generated for the DB2 subsystem.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>SYSAFF for DB2 utilities</strong></td>
<td>No</td>
<td>No</td>
<td>No default</td>
<td></td>
</tr>
<tr>
<td>Generates the /*JOBPARM value in a batch job.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Parameter</td>
<td>Required?</td>
<td>Discovered?</td>
<td>Default value</td>
<td>Your value</td>
</tr>
<tr>
<td>---------------------------------</td>
<td>-----------</td>
<td>-------------</td>
<td>---------------</td>
<td>------------</td>
</tr>
<tr>
<td>DSNTEP2 plan name</td>
<td>Yes</td>
<td>No</td>
<td>DSNTEP2</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Accelerator Loader plan name</td>
<td>Yes</td>
<td>Yes</td>
<td>HLOV11PL</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BIND owner ID</td>
<td>Yes</td>
<td>No</td>
<td>DB2USER</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>User ID for GRANT statement</td>
<td>Yes</td>
<td>No</td>
<td>PUBLIC</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SET CURRENT SQLID</td>
<td>Yes</td>
<td>No</td>
<td>DB2USER</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Accelerator Loader database name</td>
<td>Yes</td>
<td>No</td>
<td>HLOV11DB</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Drop Accelerator Loader database first?</td>
<td>Yes</td>
<td>No</td>
<td>NO</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Parameter</td>
<td>Required?</td>
<td>Discovered?</td>
<td>Default value</td>
<td>Your value</td>
</tr>
<tr>
<td>-----------------------------------------------</td>
<td>-----------</td>
<td>-------------</td>
<td>---------------</td>
<td>------------</td>
</tr>
<tr>
<td><strong>Accelerator Loader table schema</strong></td>
<td>Yes</td>
<td>No</td>
<td>HLOV11TB</td>
<td></td>
</tr>
<tr>
<td>The creator (up to eight alphanumeric characters) for the DB2 Analytics Accelerator Loader repository tables. This value is also used as the bind qualifier and as the collection ID for the packages.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Accelerator Loader database STOGROUP</strong></td>
<td>Yes</td>
<td>No</td>
<td>SYSDEFLT</td>
<td></td>
</tr>
<tr>
<td>The storage group in which to create the DB2 Analytics Accelerator Loader objects.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Accelerator Loader index STOGROUP</strong></td>
<td>Yes</td>
<td>No</td>
<td>SYSDEFLT</td>
<td></td>
</tr>
<tr>
<td>The storage group in which to create the DB2 Analytics Accelerator Loader indexes.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Accelerator Loader tablespace buffer pool</strong></td>
<td>Yes</td>
<td>No</td>
<td>BP0</td>
<td></td>
</tr>
<tr>
<td>The buffer pool (up to six alphanumeric characters) that is used for creating the DB2 table spaces.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Accelerator Loader index buffer pool</strong></td>
<td>Yes</td>
<td>No</td>
<td>BP0</td>
<td></td>
</tr>
<tr>
<td>The buffer pool (up to eight alphanumeric characters) that is used for creating the DB2 indexes.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Utility region size</strong></td>
<td>No</td>
<td>Yes</td>
<td>0000</td>
<td></td>
</tr>
<tr>
<td>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 <code>REGION</code> parameter in your job card, the job card <code>REGION</code> parameter overrides the <code>REGION</code> parameter on the EXEC statement. This value can be changed after installation in option 0.3.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Number of buffers</strong></td>
<td>No</td>
<td>Yes</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>The number of buffers to be used by the product. You can specify a value from 1 through 99.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Parameter</td>
<td>Required?</td>
<td>Discovered?</td>
<td>Default value</td>
<td>Your value</td>
</tr>
<tr>
<td>-------------------------------</td>
<td>-----------</td>
<td>-------------</td>
<td>---------------</td>
<td>------------</td>
</tr>
<tr>
<td>Channel programs</td>
<td>No</td>
<td>Yes</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>The number of channel programs to be used by DB2 Analytics Accelerator Loader. If a value of 0 is set, the product will use a predetermined channel program setting to attempt to gain optimal performance. Otherwise, you can specify a value from 1 through 99 to determine the best value for your 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.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sort program installed</td>
<td>No</td>
<td>Yes</td>
<td>D</td>
<td></td>
</tr>
<tr>
<td>Indicates the sort program that is installed and should be used if DB2 Sort is not available. Valid values are $ (Syncsort) and $ (Dfsort).</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Use DB2 Sort when possible?</td>
<td>Yes</td>
<td>Yes</td>
<td>N</td>
<td></td>
</tr>
<tr>
<td>Specify whether to use the DB2 for internal data sorts. If N is specified, DB2 Analytics Accelerator Loader uses the that is installed on the LPAR (DFSORT or SYNSORT).</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sort work file device type</td>
<td>Yes</td>
<td>Yes</td>
<td>SYSALLDA</td>
<td></td>
</tr>
<tr>
<td>The sort work file unit device to be used when utility JCL is generated. Sample values are SYS5DA and DISK.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Number of sort work DDs</td>
<td>No</td>
<td>Yes</td>
<td>No default</td>
<td></td>
</tr>
<tr>
<td>Overrides the calculated number of sort work DD statements. You can specify from 1 - 99. This value can be changed after installation in option 0.3.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Primary sort work space</td>
<td>No</td>
<td>Yes</td>
<td>No default</td>
<td></td>
</tr>
<tr>
<td>Overrides the calculated primary sort work space, specified in cylinders. You can specify from 1 through 9999999 cylinders. This value can be changed after installation in option 0.3.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Secondary sort work space</td>
<td>No</td>
<td>Yes</td>
<td>No default</td>
<td></td>
</tr>
<tr>
<td>Overrides the calculated secondary sort work space, specified in cylinders. You can specify from 1 through 9999999 cylinders. This value can be changed after installation in option 0.3.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Parameter</td>
<td>Required?</td>
<td>Discovered?</td>
<td>Default value</td>
<td>Your value</td>
</tr>
<tr>
<td>-------------------------------</td>
<td>-----------</td>
<td>-------------</td>
<td>---------------</td>
<td>------------</td>
</tr>
<tr>
<td><strong>Device type</strong></td>
<td>No</td>
<td>Yes</td>
<td>DISK</td>
<td></td>
</tr>
<tr>
<td>The device type for any work data sets that DB2 Analytics Accelerator Loader creates as it processes data.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Data set type</strong></td>
<td>No</td>
<td>Yes</td>
<td>B</td>
<td></td>
</tr>
<tr>
<td>The type of data set that will be used for work data sets that DB2 Analytics Accelerator Loader creates. Valid values are B (basic) and L (large).</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Track or cylinder</strong></td>
<td>No</td>
<td>Yes</td>
<td>T</td>
<td></td>
</tr>
<tr>
<td>The allocation unit for work data sets that DB2 Analytics Accelerator Loader creates. Valid values are T (tracks) and C (cylinders).</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Primary quantity</strong></td>
<td>No</td>
<td>Yes</td>
<td>10</td>
<td></td>
</tr>
<tr>
<td>The primary quantity (in units specified in <em>Work file track or cylinder</em>) for work data sets that DB2 Analytics Accelerator Loader creates. You can specify a value from 1 through 16777215.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Secondary quantity</strong></td>
<td>No</td>
<td>Yes</td>
<td>50</td>
<td></td>
</tr>
<tr>
<td>The secondary quantity (in units specified in <em>Work file track or cylinder</em>) for work data sets that DB2 Analytics Accelerator Loader creates. You can specify a value from 1 through 16777215.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Maximum volumes</strong></td>
<td>No</td>
<td>Yes</td>
<td>No default</td>
<td></td>
</tr>
<tr>
<td>The maximum number of tape volumes that can be used for the work data sets (if the specified device type is TAPE). You can specify a value from 1 through 255.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>SMS data class</strong></td>
<td>No</td>
<td>Yes</td>
<td>No default</td>
<td></td>
</tr>
<tr>
<td>The SMS data class (up to eight alphanumeric characters) for work data sets that DB2 Analytics Accelerator Loader creates.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>SMS storage class</strong></td>
<td>No</td>
<td>Yes</td>
<td>No default</td>
<td></td>
</tr>
<tr>
<td>The SMS storage class (up to eight alphanumeric characters) for work data sets that DB2 Analytics Accelerator Loader creates.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>SMS management class</strong></td>
<td>No</td>
<td>Yes</td>
<td>No default</td>
<td></td>
</tr>
<tr>
<td>The SMS management class (up to eight alphanumeric characters) for work data sets that DB2 Analytics Accelerator Loader creates.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Parameter</td>
<td>Required?</td>
<td>Discovered?</td>
<td>Default value</td>
<td>Your value</td>
</tr>
<tr>
<td>-------------------------</td>
<td>-----------</td>
<td>-------------</td>
<td>---------------</td>
<td>------------</td>
</tr>
<tr>
<td>Device type</td>
<td>No</td>
<td>Yes</td>
<td>DISK</td>
<td></td>
</tr>
<tr>
<td>Data set type</td>
<td>No</td>
<td>Yes</td>
<td>B</td>
<td></td>
</tr>
<tr>
<td>Track or cylinder</td>
<td>No</td>
<td>Yes</td>
<td>T</td>
<td></td>
</tr>
<tr>
<td>Primary quantity</td>
<td>No</td>
<td>Yes</td>
<td>10</td>
<td></td>
</tr>
<tr>
<td>Secondary quantity</td>
<td>No</td>
<td>Yes</td>
<td>50</td>
<td></td>
</tr>
<tr>
<td>Maximum volumes</td>
<td>No</td>
<td>Yes</td>
<td>No default</td>
<td></td>
</tr>
<tr>
<td>SMS data class</td>
<td>No</td>
<td>Yes</td>
<td>No default</td>
<td></td>
</tr>
<tr>
<td>SMS storage class</td>
<td>No</td>
<td>Yes</td>
<td>No default</td>
<td></td>
</tr>
<tr>
<td>Parameter</td>
<td>Required?</td>
<td>Discovered?</td>
<td>Default value</td>
<td>Your value</td>
</tr>
<tr>
<td>---------------------------</td>
<td>-----------</td>
<td>-------------</td>
<td>---------------</td>
<td>------------</td>
</tr>
<tr>
<td><strong>SMS management class</strong></td>
<td>No</td>
<td>Yes</td>
<td>No default</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The SMS management class (up to eight alphanumeric characters) for SYSPRINT data sets that DB2 Analytics Accelerator Loader creates.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Chapter 3. Customizing DB2 Analytics Accelerator Loader

After you install DB2 Analytics Accelerator Loader 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 DB2 Analytics 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 DB2 Analytics 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 parameters only after you have selected an option or specified a value on the Product Parameters panel.
6. Generate and submit the customization jobs.

Topics:
- "Starting Tools Customizer" DB2 Analytics Accelerator Loader
- "Customizing DB2 Analytics Accelerator Loader" on page 58
- "Changing the BIND JCL to ENCODING(500)" on page 86
- "APF-authorizing the load library (required)" on page 87
- "Copying the started task PROC (required)" on page 87
- "Copying the DSNUTILF module (required)" on page 88
- "Setting up the WLM application environment (required)" on page 88
- "Starting the started task (required)" on page 89

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.

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)'

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:

![Tools Customizer Settings panel (CCQPSET)](image)

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

<table>
<thead>
<tr>
<th>DB2 subsystem definition</th>
<th>Value of the Use DB2 group attach field</th>
<th>Value that is used in the CONNECT statements</th>
</tr>
</thead>
<tbody>
<tr>
<td>The DB2 subsystem is defined with an SSID.</td>
<td>Yes</td>
<td>Group attach name</td>
</tr>
<tr>
<td></td>
<td>No</td>
<td>SSID</td>
</tr>
<tr>
<td>The DB2 subsystem is not defined with an SSID.</td>
<td>Yes or No</td>
<td>Group attach name</td>
</tr>
</tbody>
</table>

**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:

```
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
```

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

<table>
<thead>
<tr>
<th>SSID</th>
<th>GrpAttach</th>
<th>Value of the Use DB2 group attach field</th>
<th>Value that is used in the CONNECT statements</th>
</tr>
</thead>
<tbody>
<tr>
<td>V91C</td>
<td>--</td>
<td>Yes</td>
<td>SSID</td>
</tr>
<tr>
<td></td>
<td></td>
<td>No</td>
<td>SSID</td>
</tr>
<tr>
<td>V91A</td>
<td>DSG1</td>
<td>Yes</td>
<td>Group attach name</td>
</tr>
<tr>
<td></td>
<td></td>
<td>No</td>
<td>SSID</td>
</tr>
<tr>
<td>--</td>
<td>DSGA</td>
<td>Yes</td>
<td>Group attach name</td>
</tr>
<tr>
<td></td>
<td></td>
<td>No</td>
<td>Group attach name</td>
</tr>
</tbody>
</table>
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:

```plaintext
// 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”

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 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. Customization roadmaps**

<table>
<thead>
<tr>
<th>Environment description</th>
<th>Roadmap</th>
</tr>
</thead>
<tbody>
<tr>
<td>You do not have a customized version of DB2 Analytics Accelerator Loader, and you need to customize it for the first time.</td>
<td>“Roadmap: Customizing DB2 Analytics Accelerator Loader for the first time” on page 59</td>
</tr>
<tr>
<td>You have a customized version of DB2 Analytics Accelerator Loader, but you want to change one or more parameter values.</td>
<td>“Roadmap: Recustomizing DB2 Analytics Accelerator Loader” on page 60</td>
</tr>
</tbody>
</table>

**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.

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

<table>
<thead>
<tr>
<th>Step</th>
<th>Description</th>
<th>Instructions</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Specify the product metadata library for the product that you want to customize. The name of this library is hlq.SHLODENU.</td>
<td>“Specifying the metadata library for the product to customize” on page 61</td>
</tr>
<tr>
<td>2</td>
<td>Create new DB2 entries and associate them with DB2 Analytics Accelerator Loader.</td>
<td>“Creating and associating DB2 entries” on page 65</td>
</tr>
<tr>
<td>3</td>
<td>Define the required parameters.</td>
<td>“Defining parameters” on page 73</td>
</tr>
<tr>
<td>4</td>
<td>Generate the customization jobs for the product or for the DB2 entries on which DB2 Analytics Accelerator Loader is ready to be customized.</td>
<td>“Generating customization jobs” on page 79</td>
</tr>
<tr>
<td>5</td>
<td>Submit the generated customization jobs.</td>
<td>“Submitting customization jobs” on page 80</td>
</tr>
</tbody>
</table>

The following table lists some of the common administrative tasks that you might need to do during the customization process.
Table 5. Administrative tasks

<table>
<thead>
<tr>
<th>Description</th>
<th>Instructions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Manage multiple configurations of DB2 Analytics Accelerator Loader.</td>
<td>“Managing multiple configurations” on page 67</td>
</tr>
<tr>
<td>Browse the different types of parameters.</td>
<td>“Browsing parameters” on page 82</td>
</tr>
<tr>
<td>Copy an existing DB2 entry to the list of DB2 entries on which DB2 Analytics Accelerator Loader can be customized.</td>
<td>“Copying DB2 entries” on page 82</td>
</tr>
<tr>
<td>Remove one or more DB2 entries from the associated list.</td>
<td>“Removing DB2 entries” on page 84</td>
</tr>
<tr>
<td>Delete one or more DB2 entries from the master list.</td>
<td>“Deleting DB2 entries” on page 84</td>
</tr>
<tr>
<td>Display a list of customization jobs that have been previously generated.</td>
<td>“Displaying customization jobs” on page 85</td>
</tr>
<tr>
<td>Maintain the customization jobs in the customization library.</td>
<td>“Maintaining customization jobs” on page 85</td>
</tr>
</tbody>
</table>

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 6. Required steps for recustomizing DB2 Analytics Accelerator Loader

<table>
<thead>
<tr>
<th>Step</th>
<th>Description</th>
<th>Instructions</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Specify the product metadata library for the product that you want to recustomize. The name of this library is hlq.SHLODENU.</td>
<td>“Specifying the metadata library for the product to customize” on page 61</td>
</tr>
</tbody>
</table>
| 2    | Edit the specific tasks, steps, or parameters that need to be changed. | • “Defining DB2 Analytics Accelerator Loader parameters” on page 73  
• “Defining LPAR parameters” on page 75  
• “Defining DB2 parameters” on page 77 |
Table 6. Required steps for recustomizing DB2 Analytics Accelerator Loader (continued)

<table>
<thead>
<tr>
<th>Step</th>
<th>Description</th>
<th>Instructions</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>Generate the customization jobs for the product or for the DB2 entries on which DB2 Analytics Accelerator Loader is ready to be customized.</td>
<td>“Generating customization jobs” on page 79</td>
</tr>
<tr>
<td>4</td>
<td>Submit the new generated customization jobs.</td>
<td>“Submitting customization jobs” on page 80</td>
</tr>
</tbody>
</table>

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

Table 7. Administrative tasks

<table>
<thead>
<tr>
<th>Description</th>
<th>Instructions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Manage multiple configurations of DB2 Analytics Accelerator Loader.</td>
<td>“Managing multiple configurations” on page 67</td>
</tr>
<tr>
<td>Browse the different types of parameters.</td>
<td>“Browsing parameters” on page 82</td>
</tr>
<tr>
<td>Copy an existing DB2 entry to the list of DB2 entries on which DB2 Analytics Accelerator Loader can be customized.</td>
<td>“Copying DB2 entries” on page 82</td>
</tr>
<tr>
<td>Remove one or more DB2 entries from the associated list.</td>
<td>“Removing DB2 entries” on page 84</td>
</tr>
<tr>
<td>Delete one or more DB2 entries from the master list.</td>
<td>“Deleting DB2 entries” on page 84</td>
</tr>
<tr>
<td>Display a list of customization jobs that have been previously generated.</td>
<td>“Displaying customization jobs” on page 85</td>
</tr>
<tr>
<td>Maintain the customization jobs in the customization library.</td>
<td>“Maintaining customization jobs” on page 85</td>
</tr>
</tbody>
</table>

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:
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:
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 73
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:

   Figure 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:
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 nn 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:

Repeat steps b and c for each DB2 entry that you want to create.

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 375
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”
• “Creating configurations” on page 68
• “Copying configurations” on page 69
• “Removing configurations” on page 70
• “Editing configurations” on page 71
• “Restoring configurations” on page 72

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:
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:

```
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.WRK0110.SHLODENU > LPAR . . : RS22
Product name . . . . . . . : DB2 Analytics Accelerato > Version . : 1.1.0

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

Cmd ID  Description
-  --------------------------------------------- End of Configurations

Figure 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 J OBLIST CONFIGURATION

Product to Customize
Product metadata library . : HLO.WRK0110.SHLODENU > LPAR . . : RS22
Product name . . . . . . . : DB2 Analytics Accelerato > Version . : 1.1.0
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 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:
2. Issue the CREATE command. The Create a New Configuration of a Product panel is displayed, as shown in the following figure:

![Figure 10. The Manage Multiple Configurations of a Product panel](image)

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:
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.

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:

   ![Manage Multiple Configurations of a Product panel](image1)

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:

   ![Remove a Configuration of a Product panel](image2)

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:
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:

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:
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.

   ![Product Parameters panel](image)

   **Figure 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"
- "Defining DB2 parameters" on page 77

**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:
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 contain 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 73
  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 65.

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:
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 73

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

“Defining LPAR parameters” on page 75

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.

<table>
<thead>
<tr>
<th>Cmd</th>
<th>Member</th>
<th>SSID</th>
<th>GrpAttach</th>
<th>Template</th>
<th>Date</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>-</td>
<td>A0CLA</td>
<td>--</td>
<td>--</td>
<td>HLOCLST 2</td>
<td>2014/10/17</td>
<td>Configures startup CLIST 1</td>
</tr>
<tr>
<td>A1CLAA</td>
<td>--</td>
<td>--</td>
<td>HLOCLST2</td>
<td>2014/10/17</td>
<td>Configures startup CLIST 2</td>
<td></td>
</tr>
<tr>
<td>A2STA</td>
<td>--</td>
<td>--</td>
<td>HLOSTCJ</td>
<td>2014/10/17</td>
<td>Creates SAMPLIB members for STC</td>
<td></td>
</tr>
<tr>
<td>A5DAAAAA</td>
<td>DA1A</td>
<td>--</td>
<td>HLODDL</td>
<td>2014/10/17</td>
<td>Creates repository objects</td>
<td></td>
</tr>
<tr>
<td>A6PRRA</td>
<td>--</td>
<td>--</td>
<td>HLOPROF</td>
<td>2014/10/17</td>
<td>Creates profile data sets</td>
<td></td>
</tr>
<tr>
<td>A8BIAAAA</td>
<td>DA1A</td>
<td>--</td>
<td>HLOBIND</td>
<td>2014/10/17</td>
<td>Binds packages and plans</td>
<td></td>
</tr>
<tr>
<td>A9GRRAA</td>
<td>DA1A</td>
<td>--</td>
<td>HLOGRANT</td>
<td>2014/10/17</td>
<td>Grants EXECUTE authority</td>
<td></td>
</tr>
</tbody>
</table>

--- End of customized jobs ---

Figure 22. 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 XYZBNDDB2_entry_ID_1 and XYZBNDDB2_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-specific 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.SANLOAD, 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 Inn line command, where nn 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 375
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 375
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)

By default, the DB2 Analytics Accelerator Loader plan and packages are bound using the character set ENCODING(EBCDIC). If your DB2 subsystem defined with an EBCDIC code page in which the quotation character is not X’7F’, then 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 library (required)**

Ensure that the product load libraries are APF-authorized so that they will be available for use when executing the customization jobs. This customization step is required.

**About this task**

The variables in this task are defined as follows:

- `hlq` is the high-level qualifier.
- `mlq` is the mid-level qualifier that you specified when you ran Tools Customizer.
- `volser` is the volume serial number of the DASD device where the load library resides.

**Procedure**

To APF authorize the libraries, include the `hlq.mlq.SHLOLOAD` library and the `hlq.SFECLOAD` library as part of your system APF-authorized list. For example, issue the following z/OS operator command:

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

Contact your systems administrator if you encounter difficulties starting DB2 Analytics Accelerator Loader.

**Copying the started task PROC (required)**

Copy the DB2 Analytics Accelerator Loader started task 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 member that is associated with template HLOSTCJ. The job is located in the data set that is specified in the Product Customization Library field on the Tools Customizer Finish Product Customization panel. This job creates the `hloidPROC` member in your `hlq.mlq.SHLOSAMP` library.

This job is created when both of the following criteria are met:

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

**Procedure**

1. Copy the `hloidPROC` member that is created in the `hlq.mlq.SHLOSAMP` to a member in your system PROCLIB.
2. In the EXEC statement, ensure that `REGION=0M` is specified to avoid storage problems. Also, ensure that `TIME=1440` is specified to allow DB2 Analytics Accelerator Loader to run for an unlimited amount of time.
3. Ensure that the STEPLIB and SVCLIB data sets are APF-authorized.
4. If you plan to use DB2 Analytics Accelerator Loader on multiple DB2 subsystems that have different DB2 versions, ensure that the STEPLIB concatenation specifies the earliest of these DB2 versions as the DSNLOAD library. Otherwise, connection problems might occur when you attempt to use DB2 Analytics Accelerator Loader on DB2 subsystems other than the primary subsystem that contains the audit and logging tables.

**What to do next**

Copy the DSNUTILF module from the hlq.mlq.SHOLOAD product library to a STEPLIB or JOBLIB DD that is used in your DB2 LOAD utility jobs. Optionally, you can add the DB2 Analytics Accelerator Loader load library into the STEPLIB or JOBLIB concatenation of the DB2 LOAD utility jobs that you want to load data to the accelerator.

**Related concepts:**

“Considerations for running multiple started tasks” on page 20

A single started task is usually sufficient to handle multiple user requests from the DB2 Analytics Accelerator Loader interfaces to perform work on one or more DB2 subsystems. However, if you have a very high volume of activity, you can run multiple started tasks concurrently to handle the workload more efficiently, with each started task monitoring a different DB2 SSID.

**Related tasks:**

“Starting the started task (required)” on page 89

Start the DB2 Analytics Accelerator Loader started task so that you can begin using the product interfaces.

---

**Copying the DSNUTILF module (required)**

This customization step is required for the DB2 Analytics Accelerator Loader started task 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 DB2 Analytics Accelerator Loader STC becomes unavailable.

**Procedure**

1. Copy the DB2 Analytics Accelerator Loader DSNUTILF load module into one of the APF-authorized libraries in the STEPLIB or JOBLIB concatenation of your DB2 LOAD utility jobs.

2. Optional: You can leave the DSNUTILF in the module in the DB2 Analytics Accelerator Loader LOAD library and add it to the STEPLIB or JOBLIB concatenation of your DB2 LOAD utility jobs.

**Related tasks:**

“Setting up the WLM application environment (required)”

This customization step is required for the DB2 Analytics Accelerator Loader started task to perform DSNUTILB interception services.

---

**Setting up the WLM application environment (required)**

This customization step is required for the DB2 Analytics Accelerator Loader started task to perform DSNUTILB interception services.
Procedure

1. Place the DB2 Analytics Accelerator Loader load modules DSNUTILF and HLOPIPE into the WLM STEPLIB concatenation for the WLM application environment for the DB2-supplied stored procedure SYSPROC.DSNUTILU.

   Note: If both DB2 Analytics Accelerator Loader and IBM DB2 Utilities Enhancement Tool must coexist at the same time in the same environment, concatenate the DB2 Analytics Accelerator Loader load library before the DB2 UET load library. This concatenation order ensures that DB2 Analytics Accelerator Loader intercepts DSNUTILB only when loading the IBM DB2 Analytics Accelerator, and DB2 UET intercepts DSNUTILB for other appropriate processing.

2. Optional: You can leave the DSNUTILF in the module in the DB2 Analytics 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 366
You can manage DSNUTILB interception by performing some routine and occasional tasks.

Related tasks:

"Copying the DSNUTILF module (required)” on page 88
This customization step is required for the DB2 Analytics Accelerator Loader started task to perform DSNUTILB interception services.

Starting the started task (required)

Start the DB2 Analytics Accelerator Loader started task so that you can begin using the product interfaces.

About this task

The variable hlostc in the command represents the member name of the DB2 Analytics 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

You can 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

What to do next

Start the ISPF interface. See the task “Starting the ISPF interface” on page 91.

Related concepts:
Make sure that the DB2 Analytics Accelerator Loader started task will run under a user ID that has the required authority.

A single started task is usually sufficient to handle multiple user requests from the DB2 Analytics Accelerator Loader interfaces to perform work on one or more DB2 subsystems. However, if you have a very high volume of activity, you can run multiple started tasks concurrently to handle the workload more efficiently, with each started task monitoring a different DB2 SSID.

DB2 Analytics 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.

Related tasks:

Copy the DB2 Analytics Accelerator Loader started task PROC to your system PROCLIB to make the started task address space available to the user interfaces for the product.
Chapter 4. Getting started with DB2 Analytics Accelerator Loader

Review information about opening the DB2 Analytics Accelerator Loader ISPF interface and using it to specify values for product set-up options.

You use the DB2 Analytics Accelerator Loader user settings to configure and manage DB2 subsystems that you use for DB2 Analytics Accelerator Loader. You can also provide job card specifications.

Topics:
- “Starting the ISPF interface”
- “Configuring a DB2 subsystem” on page 92
- “Specifying DB2 subsystem parameters for DB2 Analytics Accelerator Loader” on page 93
- “Deleting a DB2 subsystem” on page 94
- “Specifying job card information” on page 94

Starting the ISPF interface

You can use the DB2 Analytics Accelerator Loader ISPF interface to create the JCL and control cards that are required to load data to build the JCL to load data to DB2 and the IBM DB2 Analytics Accelerator. 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.

Before you begin

Complete the customization steps.

DB2 Analytics Accelerator Loader supports primary commands that you can use to do various general functions such as navigating panels, finding strings, and reformatting panel display. The topics assume a basic familiarity with panel commands and navigation. For details about navigating product and help panels and how to manipulate column display, see the reference information.

About this task

The ISPF interface requires a 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.

Procedure

1. Issue the following operator command from the z/OS console. The variables hlq.mlq represent the high-level and mid-level qualifiers that you specified during customization, and HLOV11 is the default value for the CLIST.

   TSO ex 'hlq.mlq.SHLOCLST(HLOV11)'
2. Press Enter.

Results

The DB2 Analytics Accelerator Loader main menu, shown in the following figure, is displayed when you start the ISPF interface.

![Figure 23. DB2 Analytics Accelerator Loader main menu](image)

Note: When starting DB2 Analytics Accelerator Loader for the first time after installing the product, verify your user settings. Select Option 0 (User parameters) and browse the various subpanels to confirm that the specified values for this option are correct.

The options on the main menu include:

**Settings (Option 0)**
Specify DB2 subsystem and job card information, and set your defaults.

**DB2 Analytics Accelerator Loader profiles (Option 1)**
Work with load profiles, which enable you to specify and save options for your DB2 Analytics Accelerator Loader job.

**Related concepts:**
- “Navigating product panels” on page 381
- “Primary commands” on page 381
- “Column display functions (CSETUP)” on page 416

Configuring a DB2 subsystem

To create a subsystem or configure a subsystem that you have already created, follow these steps.

**About this task**

Detailed information about command parameters and other valid values on the panels is provided in the help panels and the command reference topic “Panel commands and fields reference” on page 382. 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**

1. On the main menu in the **Option** field, type 0 (User Settings) and press Enter.
2. On the User Settings panel in the **Option** field, type 1 (DB2 subsystem) and press Enter.
3. On the DB2 Subsystems panel, take one of the following actions:
   - To create a new DB2 subsystem entry, issue the CREATE command. Continue with step 4.
   - To copy information from one subsystem to another, type C in the **Cmd** line next to the SSID.
   - To edit information about the DB2 subsystem in the control file, type E in the **Cmd** line next to the SSID. Continue with step 5.

   **Tip:** To view information about a subsystem, type V in the **Cmd** line next to the SSID.
4. On the New DB2 Subsystem panel, type the new DB2 subsystem ID and press Enter.
5. On the DB2 Subsystem Parameters panel, enter information that is specific to a particular DB2 subsystem and press Enter. The following parameters are required:
   - DB2 Analytics Accelerator Loader plan
   - DB2 Bootstrap DSN #01
   - DB2 Bootstrap DSN #02
   - DB2 Loadlib1
6. Press PF3 to return to the DB2 Subsystem Parameters panel.
7. Take one of the following actions:
   - To specify or edit DB2 subsystem-specific product options that are used during batch job processing, type 1 in the command line and press Enter. The DB2 Analytics Accelerator Loader Parameters panel opens. Continue with “Specifying DB2 subsystem parameters for DB2 Analytics Accelerator Loader.”
   - Press Enter, and then press PF3 to exit this panel and return to the User Settings panel.

---

**Specifying DB2 subsystem parameters for DB2 Analytics Accelerator Loader**

You can configure DB2 subsystem information in non-data sharing and data sharing environments. The DB2 subsystem-specific product options are used during batch job processing.

**Before you begin**

You must create a DB2 subsystem and access the DB2 Analytics Accelerator Loader Parameters panel as described in “Configuring a DB2 subsystem” on page 92.

**About this task**

Detailed information about command parameters and other valid values on the panels is provided in the help panels and the command reference topic “Panel commands and fields reference” on page 382. 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**

1. On the DB2 Subsystem Parameters panel, type 1 in the command line and press Enter.
2. On the DB2 Analytics Accelerator Loader Parameters panel, specify the appropriate settings for your DB2 Analytics Accelerator Loader environment.
   a. Specify information about the sort program to be used for internal sorts.
   b. In the **File allocation parameters** section, specify the number of buffers and 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.
   c. Specify information for the data sets that DB2 Analytics Accelerator Loader creates. Note the following considerations:
      - For work files and SYSPRINT data sets, valid device types are DASD and TAPE.
      - The maximum values for primary or secondary quantity is 16777215. If you need to specify more space, convert to a different space unit (for example, convert bytes to kilobytes by dividing by 1024) and specify the new value.
      - The **Maximum Volumes** field is valid when the device type is DASD or TAPE.
   d. In the **Sort Work parameters** section, specify information for the DB2 Analytics Accelerator Loader 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.
3. Press Enter to save your changes, then PF3 to exit this panel and return to the User Settings panel.

---

### Deleting a DB2 subsystem

If a subsystem is no longer of use, you can delete it from the control file.

**Procedure**

1. From the main menu in the **Option** field, type 0 (User Settings) and press Enter.
2. On the User Settings panel, in the **Option** field, type 1 (DB2 subsystem) and press Enter.
3. On the DB2 Subsystems panel, in the **Cmd** line next to the subsystem that you want to delete, type D.
4. Optional: To turn off the display of future delete confirmation panels, type a slash character (/) in the field **Set item delete confirmation off**.
5. In the delete confirmation panel, to delete the subsystem, press Enter.

---

### Specifying job card information

DB2 Analytics Accelerator Loader enables you to define a job card to include in your batch jobs.
**Procedure**
1. On the main menu in the **Option** field, type 0 (User Settings) and press Enter.
2. On the User Settings panel, in **Option** field, type 2 (Batch) and press Enter.
3. On the Set Batch Job Card Information panel, specify how you want the batch job built when generating JCL with DB2 Analytics Accelerator Loader.
4. To add a line to the job card, issue the **ADD** command.
5. To delete a line from the job card, type **D** in the **Cmd** field next to the line and press Enter.
6. Press PF3 to return to the User Settings panel.
Chapter 5. Loading data at a consistent or historical time

You can use DB2 Analytics Accelerator Loader to generate JCL that loads data from multiple related DB2 tables without the need to take them offline for updates. You can also specify any historical point in time to load the accelerator.

Topics:
- "Restrictions and considerations"
- "Using the ISPF interface to create a CONSISTENT load profile” on page 98
- "Specifying options for a FlashCopy DSN template” on page 99
- "Using the batch interface to load from an image copy” on page 100

Restrictions and considerations

Review the following usage restrictions and considerations before performing a consistent or historical data load.

- A valid full image copy of the table space to be processed must be recorded in SYSCOPY, or a valid starting point must exist in SYSCOPY for each table space to be processed. Additionally, you must have plan execution access on the DB2 Analytics Accelerator Loader plan for the subsystems on which you intend to run the product.
- DB2 Analytics Accelerator Loader must be able to access the archive and active logs that are required to build the new image copy.
- 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.
- If you use the same end point for all spaces in an DB2 Analytics Accelerator Loader batch job, place all space (...) control cards under one group (...). Do not specify one group for every space.
- DB2 Analytics Accelerator Loader does not support loading many tables from a multiple-table table space. If your DB2 Analytics Accelerator Loader job specifies more than one table of a multiple-table table space, DB2 Analytics Accelerator Loader issues an error and stops processing. If the value of the Continue on error field on the Consistent Load Options panel is Yes, or the CONTINUE_ON_ERROR control card is specified, the job finishes normally, but with return code 4 instead of 0.
- 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.
- 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.
- The following data types are not supported:
  - DECFLOAT
  - LOB
  - ROWID
  - XML
Field procedures are not supported; however, edit procedures are supported.

Parallel load considerations:
- 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.
- 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.

Using the ISPF interface to create a CONSISTENT load profile

A CONSISTENT load profile is a reusable group of options for building a job to load data at a consistent or historical time into an accelerator. You can create a profile that saves your selections and reuse the profile to perform future consistent load jobs.

Before you begin

Review the information in “Restrictions and considerations” on page 97.

About this task

Detailed information about command parameters and other valid values on the panels is provided in the help panels and the command reference topic “Panel commands and fields reference” on page 382. 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.

When you are adding a DB2 table to the profile, in addition to filtering on tables, you can filter on 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. Table creator like and Table name like are case sensitive. Therefore, using the wildcard pattern abc* returns different results from wildcard pattern ABC*.

Procedure

1. From the main menu, select option 1 (Accelerator Loader profiles) and press Enter.
2. On the Profile Display panel, to display a list of existing profiles:
   a. In the Profile like and Creator like fields, specify a wildcard pattern by using an asterisk (*).
   b. Press Enter.
3. Take one of the following actions:
   - To create a new profile, issue the CREATE command. Continue with step 4.
   - To copy an existing profile and save it with a new name, type C in the Cmd line next to the profile. Continue with step 4.
   - To edit an existing load profile, type E in the Cmd line next to a profile of type Consistent. Continue with step 5.

4. On the Profile Options panel, specify a name and other options for the profile, and in the **Profile type** field, specify CONSISTENT, and then press Enter.

5. On the Consistent Load Options panel, to add a DB2 table to the profile, issue the TABLES command.

6. On the DB2 Table List panel, issue one of the following commands:
   - To specify an object filter, issue panel command **Add**. Continue with step 7. 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 **R1S**.
   - To select all related tables, issue line command **RIA**.

7. On the Enter Table and Creator Like to Display panel, specify a table creator name and table name. To display views and aliases in addition to tables, specify **Yes** for **Match views and aliases**. Press **Enter**.

8. On the Add DB2 Tables panel, in the **Cmd** field next to the object that you want to select, type S.

9. To change the accelerator onto which you want to load data, issue the ACCELERATOR command. The DB2 Analytics Accelerator Selection panel opens from which you choose another accelerator to associate with the profile.

10. Specify the DB2 LOAD utility processing options.

11. 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.

12. To define options for a FlashCopy DSN template, specify **Yes** in the **Use FlashCopy DSN template** and **Update** fields. See “Specifying options for a FlashCopy DSN template.” If you do not use a FlashCopy DSN template, DB2 Analytics Accelerator Loader uses the default template in DSNZPARMs.

13. Specify the log apply options.

14. Press PF3 to save and exit.

---

**Specifying options for a FlashCopy DSN template**

For a Consistent Load job, you can specify options for the FlashCopy DSN template.

**About this task**

Detailed information about command parameters and other valid values on the panels is provided in the help panels and the command reference topic “Panel commands and fields reference” on page 382. 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**

1. On the Consistent Load Options panel, specify Yes in the **Use FlashCopy DSN template** and **Update** fields.
2. On the FlashCopy DSN Template panel, specify qualifier codes to create the data set name mask.
3. Issue the **SHOW** command to see the resulting template DSN.
4. Press PF3 to save and return to the Consistent Load Options panel.

---

**Using the batch interface to load from an image copy**

When you perform a consistent data load, you can use the batch interface to specify an image copy, and load data from that image copy data set into the target table on the accelerator.

**About this task**

For more information about the options in this procedure and example JCL, see the "Consistent load and image copy load jobs" on page 121 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 variable values:
   - `<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:
   a. Replace variable 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.
Chapter 6. Loading data from an external file

You can use DB2 Analytics Accelerator Loader to generate JCL that loads data from an external file into IBM DB2 Analytics Accelerator and into DB2.

You can add the DB2 Analytics 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 to generate JCL.

DB2 Analytics 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”
- “Adding DB2 Analytics Accelerator Loader syntax to an existing load job” on page 105
- “Using the ISPF interface to create a DUAL load profile” on page 106
- “Specifying options for a DD template” on page 108

Restrictions and considerations

DB2 Analytics Accelerator Loader enables you to load data into IBM DB2 Analytics Accelerator and optionally into DB2 from an external file. Review usage restrictions and considerations before using this feature.

Data considerations

This section identifies supported data types and SYSIBM.SYSCOLUMNS(DEFAULT) values.

The following data types are supported:
- BIGINT
- BINARY
- When loading data into the accelerator, DB2 Analytics Accelerator Loader does not load this data type. When loading into both the accelerator and DB2 (option IDAA_DUAL), this data type is loaded into DB2, but is not loaded into the accelerator.
- CHAR
- DATE
- DECIMAL
- DOUBLE
- FLOAT
- GRAPHIC
- INTEGER
- REAL
- SMALLINT
- TIME
- TIMESTAMP
- TIMESTAMP WITH TIMEZONE

When loading data into the accelerator, DB2 Analytics Accelerator Loader does not load this data type. When loading into both the accelerator and DB2 (option IDAA_DUAL), this data type is loaded into DB2, but is not loaded into the accelerator.

- VARBINARY

When loading data into the accelerator, DB2 Analytics Accelerator Loader does not load this data type. When loading into both the accelerator and DB2 (option IDAA_DUAL), this data type is loaded into DB2, but is not loaded into the accelerator.

- VARCHAR
- VARGRAPHIC

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).

**General restrictions and limitations**

The following restrictions and limitations apply when loading data from an external file:

- You can specify only one table for the LOAD utility.
  
  The DB2 LOAD utility parameter FORMAT INTERNAL supports only a single table.

- A field specification must be present to describe the format of the input SYSREC file. The default of no field specification is not supported.

- 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.

DB2 Analytics Accelerator Loader converts data from external to DB2 internal format. DB2 Analytics 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 by DB2 Analytics Accelerator Loader:

- ASCII (DB2 restriction)
- CCSID (DB2 restriction)
- CONTINUEIF
- DECFLOAT_ROUNDMODE (DB2 restriction)
- EBCDIC (DB2 restriction)
- FLOAT (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)
- RESUME (IBM DB2 Analytics Accelerator restriction)
- ROWFORMAT
- SHRLEVEL CHANGE (DB2 restriction)
- STRIP
- TRUNCATE
- UNICODE (DB2 restriction)

**Considerations for constraint checking, duplicate key processing, and sorting**

The product does not check the input file for violations or referential constraints and does not perform sorting. If you are loading data into both DB2 and the accelerator, the DB2 LOAD utility will perform constraint checking and will not load violating records. Constraint-violating records are loaded into the accelerator, but are not loaded into DB2. If you are loading data into only the accelerator, no constraint checking is performed. This limitation includes checking for duplicate keys. Check the integrity of the loaded table space by running the CHECK DATA utility with the SCOPE ALL option.

**Considerations for loading only the accelerator**

DB2 Analytics Accelerator Loader provides the option of loading data from an external file into only IBM DB2 Analytics Accelerator, 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 more information, see DB2 for z/OS SQL Reference.

- When loading data from an external file to both the accelerator and to DB2 (option IDAA_DUAL), DB2 Analytics Accelerator Loader relies on DB2 to detect referential integrity (RI) violations and unique index violations. When you are loading only the accelerator, these types of checks are bypassed. Therefore, it is possible that query acceleration will be enabled after loading the accelerator with records that violate DB2 RI constraints or unique index constraints.

- Discard data sets are not supported when you load only the accelerator. If the DISCARDDN option is specified in the LOAD utility statement, then the utility will terminate with errors. DB2 Analytics Accelerator Loader does not write constraint-violating records to a DISCARDDN data set.

**DB2 LOAD utility considerations**

DB2 Analytics Accelerator Loader adheres to the DB2 LOAD utility restrictions for FORMAT INTERNAL data. For example, the DB2 LOAD utility supports only one table in the LOAD utility command: LOAD DATA INTO TABLE. You cannot specify multiple INTO TABLE clauses. For more information, see DB2 10 for z/OS Utility Guide and Reference.

**IBM DB2 Analytics Accelerator considerations**

DB2 Analytics Accelerator Loader adheres to the IBM DB2 Analytics Accelerator restrictions for tables that can be accelerated. For example:

- You cannot use DB2 Analytics Accelerator Loader to load individual partitions of a table with the IBM DB2 Analytics Accelerator status of InitialLoadPending.

- IBM DB2 Analytics Accelerator does not support BINARY and VARBINARY data types. Therefore, DB2 Analytics Accelerator Loader processes BINARY and VARBINARY data as follows:
  - When loading data into DB2, DB2 Analytics Accelerator Loader converts BINARY and VARBINARY data to DB2 internal format and loads it into the DB2 table.
  - When loading data into the accelerator, DB2 Analytics Accelerator Loader skips BINARY and VARBINARY data.

For more information, see the IBM DB2 Analytics Accelerator documentation.

**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. You can then load selected partitions.

- The feature is available for loading range partitioned or index partitioned table spaces only. Partition-by-growth table spaces can be loaded only without the parallel option defined.

- 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. The product will discard records that do not belong to the specified partition.
The PRESORT option is not supported for partition-level SYSREC data sets. If PRESORT is specified in the LOAD utility statement, then the utility will terminate with errors and you must remove the parameter 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.
- Discard data sets are not supported when you load only the accelerator. If the DISCARDDN option is specified in the LOAD utility statement, then the utility will terminate with errors. DB2 Analytics Accelerator Loader does not write constraint-violating records to a DISCARDDN 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, or formats D (variable-length ISO/ANSI tape records) and U (Undefined).
- When DB2 Analytics 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 (DB2 Analytics Accelerator Loader, DB2, or both), records are discarded to the appropriate discard data set, and your specified DISCARDS limits are honored.
- When DB2 discards data records, DB2 Analytics Accelerator Loader disables acceleration to prevent the DB2 table and the accelerator table from becoming out of sync. If only DB2 Analytics Accelerator Loader discards records, acceleration is not disabled.
- Query acceleration is disabled for the loaded table in the following situations:
  - The DB2 LOAD utility discards records after they have been sent to the accelerator. For example, 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.
- DB2 Analytics Accelerator Loader can optionally enable query acceleration for the table at the conclusion of a successful load. Specify this action by using the ACCEL_ON_SUCCESS_ENABLE extended syntax option or the Enable acceleration after successful load option in the options module.
- You can configure DB2 Analytics 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.

**Adding DB2 Analytics Accelerator Loader syntax to an existing load job**

To quickly load data from an external file into both DB2 and an accelerator, you can modify an existing batch job that meets prerequisites instead of using DB2 Analytics Accelerator Loader to generate JCL.
Before you begin

- As a prerequisite, 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” on page 101.

About this task

For more information about the extended syntax options, including examples, see “Load from external jobs” on page 138.

Procedure

1. In your existing batch job, after the LOAD DATA parameter, add the following extended syntax:
   - To load data into only IBM DB2 Analytics Accelerator:
     IDAA_ONLY ON accelerator_name
   - To load data into both IBM DB2 Analytics 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 that is to be loaded.
   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 contain either a NUMRECS or SORTKEYS clause to provide the number of SYSREC records, 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 a DUAL load profile

A DUAL load profile is a reusable group of options for building a job to load data from an external file into DB2 and an accelerator. 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" on page 101.

About this task

Detailed information about command parameters and other valid values on the panels is provided in the help panels and the command reference topic "Panel commands and fields reference" on page 382. 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.

When you are adding a DB2 table to the profile, in addition to filtering on tables, you can filter on 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**. **Table creator like** and **Table name like** are case sensitive. Therefore, using the wildcard pattern abc* returns different results from wildcard pattern ABC*.

Procedure

1. From the main menu, select option 1 (Accelerator Loader profiles) and press Enter. The Profile Display panel opens.
2. To display a list of existing profiles, in the **Profile like** and **Creator like** fields, specify a wildcard pattern by using an asterisk (*) and press Enter.
3. Take one of the following actions:
   - To create a profile, issue the **CREATE** command. Continue with step 4
   - To copy an existing profile and save it with a new name, type C in the **Cmd** line next to the profile. Continue with step 4
   - To edit an existing profile, type E in the **Cmd** line next a profile of type DUAL. Continue with step 5
4. On the Profile Options panel, specify a name and other options for the profile, and in the **Profile type** field, specify DUAL, and then press Enter.
5. Select a DB2 table.
   a. On the Load From External Options panel, to add a DB2 table to the profile, issue the **TABLE** command.
   b. On the Enter Table and Creator Like to Display panel, specify a table creator name and table name. To display views and aliases in addition to tables, specify Yes for **Match views and aliases**.
   c. On the Add DB2 Tables panel, in the **Cmd** field next to the object that you want to select, type S.
6. Select an accelerator.
   a. Issue the ACCELERATOR command.
   b. On the DB2 Analytics Accelerator Selection panel, in the **Cmd** field next to the accelerator that you want to select, type S. To access the list of accelerators, you must have sufficient DB2 authority.
7. Specify target options for loading the data. Note for Load target = A: Existing data in the DB2 table or partition is deleted if the load job specifies LOAD REPLACE.

8. Specify input file data set information. If you want to process and load partitions of a partitioned table in parallel, specify the **Input DSN Template**.
   To change the DSN template, in the corresponding **Update** field, specify Yes.

9. To edit the table column definitions, issue the **COLINFO** command.

10. Specify options for the DB2 LOAD utility. 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 contain either a NUMRECS or SORTKEYS clause to provide the number of SYSREC records, 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.

11. To define options for a template DD, in the **Update** field beside the template DD name, specify Yes. See “Specifying options for a DD template.”

12. Press PF3 to save and exit.

---

**Specifying options for a DD template**

For a Load from External job, you can specify options for the template DD.

**About this task**

Detailed information about command parameters and other valid values on the panels is provided in the help panels and the command reference topic “Panel commands and fields reference” on page 382. 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**

1. On the Load from External Options panel, specify Yes in the **Update** field for any template DD.
2. On the Template Specification panel, to edit the template data set name mask, issue the **TEMPLATE** command.
3. On the DSN Template panel, specify qualifier codes to create the data set name mask.
4. Issue the **$HOW** command to see the resulting DSN mask.
5. Press PF3 to save and return to the Template Specification panel.
6. Update the template options as needed.
7. Press PF3 to save and exit.
You can create reusable groups of load options in a profile. You also associate profiles with an accelerator and a table. A DUAL load profile saves your options for loading data from an external file. A CONSISTENT load profile saves your options for loading data at a consistent or historical time. You can then reuse the profile to generate JCL for future loads, rather than specifying the options again.

When you select option 1 (Accelerator Loader profiles) from the main menu and press Enter, the Profile Display panel opens.

On the Profile Display panel, you use commands to select the task that you want to perform:

- 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, dual or consistent, leave the default (ALL) in the **Profile type** field and press Enter.

If no profiles meet your selection criteria, the Profile Display panel remains open and displays no profiles. Specify different filter criteria and try again.

If existing profiles meet your selection criteria, the Profile Display panel displays matching profiles.

**Topics:**

- “Using the ISPF interface to build a load job from a profile”
- “View load profile specifications” on page 119
- “Renaming a load profile” on page 119
- “Deleting a load profile” on page 119

**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 “Using the ISPF interface to create a CONSISTENT load profile” on page 98 or “Using the ISPF interface to create a DUAL load profile” on page 106.

Procedure

1. From the main menu, select option 1 (Accelerator Loader Profiles) and press Enter.
2. On the Profile Display panel, in the Cmd field next to a profile, type B and press Enter.
3. On the Build Accelerator Loader JCL panel, specify the data set name, and if necessary, the member name for the generated job. DB2 Analytics Accelerator Loader creates this data set if it does not exist.
4. Select processing options by typing a forward slash character (/) beside the option:
   a. To specify how DB2 Analytics Accelerator Loader allocates the new JCL data set, select Specify new data set allocation parameters, and press PF3. The Data set allocation parameters panel opens.
   b. To review and edit the job after it has been generated, select Review generated JCL. The job opens in an edit session when you press PF3.
   c. To be warned if the generated JCL will overwrite existing JCL, select Warn if JCL already exists.
   d. To be warned if the generated JCL will overwrite existing JCL that was edited after it was generated previously, select Warn if JCL was edited after generation.
5. Specify a valid job card for your site. To add a line to the job card, issue the ADD command. To delete a line from the specified job card, type D in the Cmd field next to the line.
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”

Using the batch interface to build a load job from a profile

Before you begin

Before you can use the batch interface to generate JCL, you must create a DUAL or CONSISTENT load profile by using the ISPF interface. In that profile, specify all 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.
Your SYSIN parameter values cannot contain apostrophes, quotation marks, ampersands, less than symbols, or greater than symbols. Use the following encoding for these symbols:

- `&LT;` for less than (`<`)
- `&GT;` for greater than (`>`)  
- `&AMP;` for ampersand (`&`)  
- `&apos;` for apostrophe (`'`)  
- `&quot;` for quotation marks (`"`)  

For a table named `<MY TABLE1> TABLE' "NAME"`, the following example demonstrates encoding:

```<TABLE NAME>='&LT;MY TABLE1&GT; TABLE&APOS; &QUOT;NAME&QUOT;'```

When you are adding a DB2 table to the profile, in addition to filtering on tables, you can filter on 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, either use templates or manually add SYSREC data sets to the generated JCL. Before you can perform a parallel load into the accelerator, you must load the entire table to the accelerator; and then you can load selected partitions.

**Procedure**

1. Locate one of the following members in the SHLOSAMP library:
   - For a DUAL load profile: HLODGEN
   - For a CONSISTENT load profile: HLOCGEN
2. In the SYSIN statement, replace 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 tasks:**

- [“Using the ISPF interface to build a load job from a profile” on page 109](#)
- 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 113](#)
- The following table describes the load profile parameters and indicates the profile types to which the parameter applies.
Example JCL: 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>=&US..IDSD.&DB..ABC&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>=&US..IDSD.&DB..ABC&PA.'
</TABLE>
<TABLE :
<TABLE NAME>='VERY LONG TABLE NAME 1234567890123456789012345678901234567890123456789012345678901234567890123456789012345678901234567890' 
<TABLE CREATOR>=TABLECREATOR3'
<SYSREC-DSN>=HLO.NSBTEST.LOADFILE'
</TABLE>
/*

Example JCL: CONSISTENT load profile

/*
Load profile parameter descriptions

The following table describes the load profile parameters and indicates the profile types to which the parameter applies.

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Applies to profile type</th>
<th>Required?</th>
<th>Default value</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt;JOBPREFIX&gt;=&quot;job_name_prefix&quot;</td>
<td>DUAL, CONSISTENT</td>
<td>No</td>
<td>HLO</td>
</tr>
</tbody>
</table>

Specifies the first three characters of the member name and job name in the job card. You can specify a prefix of one to three characters. If a prefix exceeds three characters, the product uses only the first three, and ignores the remaining characters.

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 will be generated into two jobs with the names HLOAAA and HLOAAB.

Step names in the job begin with prefix S, followed by the job name and the step name in symbolic form. For example, step names in job HLOAAB: SAABAA, SAABAB.
<table>
<thead>
<tr>
<th>Parameter</th>
<th>Applies to profile type</th>
<th>Required?</th>
<th>Default value</th>
</tr>
</thead>
<tbody>
<tr>
<td><code>&lt;TARGET SSID&gt;='ssid'</code></td>
<td>DUAL, CONSISTENT</td>
<td>No</td>
<td>None. If omitted, then the product uses the SSID that is specified in <code>&lt;PROFILE SSID&gt;</code>.</td>
</tr>
<tr>
<td><code>&lt;PROFILE SSID&gt;='profile_ssid'</code></td>
<td>DUAL, CONSISTENT</td>
<td>Yes</td>
<td>None</td>
</tr>
<tr>
<td>`&lt;PROFILE TYPE&gt;='DUAL</td>
<td>CONSISTENT'`</td>
<td>DUAL, CONSISTENT</td>
<td>Yes</td>
</tr>
<tr>
<td><code>&lt;PROFILE NAME&gt;='profile_name'</code></td>
<td>DUAL, CONSISTENT</td>
<td>Yes</td>
<td>None</td>
</tr>
<tr>
<td><code>&lt;PROFILE CREATOR&gt;='profile_creator'</code></td>
<td>DUAL, CONSISTENT</td>
<td>Yes</td>
<td>None</td>
</tr>
<tr>
<td>Parameter</td>
<td>Applies to profile type</td>
<td>Required?</td>
<td>Default value</td>
</tr>
<tr>
<td>-----------</td>
<td>-------------------------</td>
<td>-----------</td>
<td>---------------</td>
</tr>
<tr>
<td><code>&lt;OUTPUT-DSN&gt;='data_set_name'</code>&lt;br&gt;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.</td>
<td>DUAL</td>
<td>No</td>
<td>None. If omitted, then the product uses the value from the existing profile, which is defined in the <strong>Data set name</strong> field on the Build Accelerator Loader JCL panel (<code>HLOLBLDJ</code>).</td>
</tr>
<tr>
<td>`&lt;LOAD BY PARTITION&gt;='YES</td>
<td>NO'`&lt;br&gt;Specifies whether you want to use partition parallelism. Valid values:&lt;br&gt;• 'YES' - One SYSREC per table partition is generated into the JCL using a template.&lt;br&gt;• 'NO' - One SYSREC per table is generated into the JCL.</td>
<td>DUAL</td>
<td>No</td>
</tr>
<tr>
<td><code>&lt;NUMBER OF JOBS&gt;='n'</code>&lt;br&gt;Specifies the number of jobs to generate (from 1 - 17576). The tables will be divided evenly among the jobs. If the maximum number of steps in a job is reached, the product dynamically adds another batch job using the same job card and job name.</td>
<td>DUAL</td>
<td>No</td>
<td>1</td>
</tr>
<tr>
<td>Parameter</td>
<td>Applies to profile type</td>
<td>Required?</td>
<td>Default value</td>
</tr>
<tr>
<td>-----------</td>
<td>------------------------</td>
<td>-----------</td>
<td>---------------</td>
</tr>
<tr>
<td><code>&lt;TABLE&gt;</code></td>
<td>DUAL</td>
<td>Yes</td>
<td>None</td>
</tr>
<tr>
<td></td>
<td>CONSISTENT</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Specifies the table definition section that follows.

*(CONSISTENT load only): The product generates only one JCL file.

*(DUAL load only):

- The number of tables divided by the number of jobs must be less than or equal to 172380.
- 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 from External Options panel (HLOLEXLO) is disabled, then you must specify a value of `No` in the Parallel load field on the Load from External Options panel (HLOLEXLO), 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 from External Options panel (HLOLEXLO).
<table>
<thead>
<tr>
<th>Parameter</th>
<th>Applies to profile type</th>
<th>Required?</th>
<th>Default value</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>&lt;TABLE NAME&gt;=‘table_name’</strong></td>
<td>DUAL, CONSISTENT</td>
<td>Yes</td>
<td>None</td>
</tr>
<tr>
<td>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. 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.</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

| **<TABLE CREATOR>=’table_creator’** | DUAL, CONSISTENT | Yes | None |
| Specifies the table creator for the table name that you specified in the <TABLE NAME> parameter. This value qualifies the table name. |

<p>| <strong>&lt;PARTITION&gt;=’ALL | 1,2,3’</strong> | DUAL, CONSISTENT | No | None |
| Specifies the table partition on which you want to generate JCL. Valid values: • ‘ALL’ specifies that the number of partitions is requested from DB2. • A range of partition numbers in the format a[(::|b)] [a[(::|-)b]]*, where a,b are greater than 0. For example, &lt;PARTITION&gt;=‘1-2,4:5,8’ and &lt;PARTITION&gt;=‘1’ (DUAL load only): • Use of this parameter results in multiple INTO TABLE clauses generated into the JCL. • If you specify &lt;PARTITION&gt;=’ALL’ and the table is not in the SYSTABLEPART table, then it is considered to be nonpartitioned. |</p>
<table>
<thead>
<tr>
<th>Parameter</th>
<th>Applies to profile type</th>
<th>Required?</th>
<th>Default value</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt;PARALLELISM&gt;='n'</td>
<td>DUAL</td>
<td>No</td>
<td>None. If omitted, then the product uses the value from the existing profile, which is defined in the Load tasks field on the Load from External Options panel (HLOLEXLO).</td>
</tr>
<tr>
<td>&lt;FIELDSPEC-DSN&gt;='fieldspec.dsn(mem1)'</td>
<td>DUAL</td>
<td>No, but is required if the table is not already defined in the existing profile.</td>
<td>None. If omitted, then the product uses the value from the existing profile, which is defined in the Table column info DSN and Table column info member fields on the Load from External Options panel (HLOLEXLO).</td>
</tr>
<tr>
<td>&lt;SYSREC-DSN&gt;='sysrec.dsn(mem1)'</td>
<td>DUAL</td>
<td>No</td>
<td>None. If omitted, then the product uses the value from the existing profile, which is defined in the Input data set name and Input member fields on the Load from External Options panel (HLOLEXLO).</td>
</tr>
<tr>
<td>&lt;SYSREC-TEMPLATE-DSN&gt;='&amp;US..IDSD.&amp;DB..ABC &amp;PART'</td>
<td>DUAL</td>
<td>No</td>
<td>None. If omitted, then the product uses the value from the existing profile, which is defined in the Input DSN template field on the Load from External Options panel (HLOLEXLO).</td>
</tr>
</tbody>
</table>

Specifies the number of parallel tasks to use when the product is loading data into the accelerator. Valid values are 1 - 20. In the JCL, the ACCEL_LOAD_TASKS value is set to min(PARALLELISM, partitions count, 20). For best results, the value of this parameter should match the setting of the IBM DB2 Analytics Accelerator environment variable AQT_MAX_UNLOAD_IN_PARALLEL. This environment variable setting indicates how many partitions can be loaded in parallel into the accelerator. If AQT_MAX_UNLOAD_IN_PARALLEL is set to 2, then the maximum number of partitions that can be written to the accelerator at one time is 2, regardless of the <PARALLELISM> value.

Specifies the data set of the table’s column definitions that is to be used as input to the LOAD utility control cards.

Specifies the data set of the table’s SYSREC that is to be used as input to the LOAD utility control cards. The SYSREC data set must be sequential. A partitioned data set (PDS) cannot be defined by TEMPLATE for use as an input data set.

Specifies the template for SYSREC data set that contains the input data that you want to load into the specified table. The variable &PA or &PART must be included. Specify this parameter only for partitioned tables with <LOAD BY PARTITION>=YES.
**Parameter** |
<table>
<thead>
<tr>
<th>Applies to profile type</th>
<th>Required?</th>
<th>Default value</th>
</tr>
</thead>
<tbody>
<tr>
<td><code>&lt;SYSREC-TEMPLATE-NAME&gt;=sysrec_template_name</code></td>
<td>DUAL</td>
<td>No, but is required if the specified <code>&lt;PARTITION&gt;</code> is defined in the JCL.</td>
</tr>
</tbody>
</table>

This parameter closes the table definition section.

**Related tasks:**

"Using the batch interface to build a load job from a profile" on page 110

### 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 Profile Display panel, type V in the **Cmd** line next to the profile that you want to view.
2. On the Load From External Options panel or the Consistent Load Options panel, review the specified options.
3. Press PF3 to return to the Profile Display 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 Profile Display 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, you can delete it from your DB2 Analytics Accelerator Loader 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 option 1 (Accelerator Loader Profiles) and press Enter. opens.
2. On the Profile Display panel, in the Cmd field next to the profile that you want to delete, type D and press Enter.
3. On the confirmation panel, to delete the profile, press Enter.
Chapter 8. DB2 Analytics Accelerator Loader 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:
- "Consistent load and image copy load jobs"
- "Load from external jobs" on page 138

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 or image copy load job, review all reference and conceptual information for the features.

Consistent and image copy load example JCL

Review JCL examples for consistent load and image copy load jobs.

Nonparallel consistent load JCL example

The following JCL example loads data to the accelerator at a consistent time without parallel processing.

```
//JOBCARD 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 14/03/13 **
//** Time: 09:34:14.89 **
//*
//*
// ***********************************
//** Step: HLOC0100 **
//** Desc: This step will invoke Accelerator Loader **
//*
//***********************************
//HLOC0100 EXEC PGM=HLO#MAIN,
// REGION=1024M,
// PARM=(QAA5)
//STEPLIB DD DISP=SHR,DSN=RSQA.HLO110.IBMTAPE.SHLOAD
```
Parallel consistent load JCL example

The following JCL example shows a consistent load job with parallel processing of two 16-partition tables.

```jcl
//JOBCARD 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
```
This step will invoke Accelerator Loader.

```
/****** Desc: This step will invoke Accelerator Loader ******/
/**-----------------------------------------------
//HLOC0100 EXEC PGM=HLOMAIN,
// REGION=0000M,
// PARM=(QAA5)
//STELIB DD DISP=SHR,DSN=RSQA.HLO110.IBMTAPE.SHLOLOAD
// DD DISP=SHR,DSN=RSQA.HLO110.IBMTAPE.SFECLOAD
// DD DISP=SHR,DSN=QDS5.SDSNEXIT
// DD DISP=SHR,DSN=DSN.VA10.SDSNLOAD
//DB2PARMS DD DISP=SHR,DSN=RSTEST.HLO110.DB2CNTL
/*/}
//SORAMSGS DD SYSOUT=*  
//SORAMSGS 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) 
//SROAWK01 DD UNIT=SYSDA,SPACE=(CYL,(00020,00001),,,ROUND) 
//SROAWK02 DD UNIT=SYSDA,SPACE=(CYL,(00020,00001),,,ROUND) 
//SROAWK03 DD UNIT=SYSDA,SPACE=(CYL,(00020,00001),,,ROUND) 
/*/}
//SORBMSG5 DD SYSOUT=*  
//SORBMSG5 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) 
/*/}
//SOREMSG5 DD SYSOUT=*  
//SOREMSG5 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) 
//SROEWK01 DD UNIT=SYSDA,SPACE=(CYL,(00020,00001),,,ROUND) 
//SROEWK02 DD UNIT=SYSDA,SPACE=(CYL,(00020,00001),,,ROUND) 
//SROEWK03 DD UNIT=SYSDA,SPACE=(CYL,(00020,00001),,,ROUND) 
/*/}
//SORFMSG5 DD SYSOUT=*  
//SORFMSG5 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) 
/***/
```
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
Image copy load JCL examples

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.
//HLORUN EXEC PGM=HLO#MAIN,REGION=0M,PARM='<SSID>'
//STEPLIB DD DISP=SHR,
// DSN=#HLQ#.SHLOAD
// DD DISP=SHR,
// DSN=#HLQ#.SFECLOAD
//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=*
//SORTMSG DD SYSOUT=*
//INFOM DD SYSOUT=*
//SYSINLHO DD *
IDAA_LOAD_IC
{
  GROUP
  {
    SPACE
      {
        CREATOR 'USER01'
        NAME 'TBHLOAD05_T01'
        TO_IC 'RSTEST.QAIA.DBHLOTS1.TSHLOSTA.DB2IC1'
        OBIDLAT (
          DBID '863,868'
          PSID '2,2'
          OBID '3,3'
        )
      })
    ACCELNAME QAIAACC1
    PARALLEL '0,1'
    LOG_COPY_PREFERENCE R1R2A1A2
    USER_INDICATOR HLO
  }
}
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-OLA                                                  *
//** (c) Copyright IBM Corp. 2013 All Rights Reserved.       *
//** (c) Copyright Rocket Software, Inc. 2001-2013 All Rights Reserved. *
//** disclosure restricted by GSA ADP Schedule Contract with IBM Corp. *
//** Product : IBM DB2 ANALYTICS ACCELERATOR LOADER FOR Z/OS *
//** Product #: 5639-OLA                                     *
//** Release : 1.1                                          *
//*-------------------------------------------------------------------*
//** 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#.SHLOAD
//   DD DISP=SHR,
//     DSN=#HLQ#.SFECLOAD
//DB2PARMS DD DISP=SHR,DSN=<CONTROL FILE>
//SORAMS5 DD SYSOUT=*  
//SORAMS5 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)
//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)
//SUSUDUMP DD SYSOUT=*   
//SYSOUT DD SYSOUT=*   
//SORTMSG5 DD SYSOUT=*  
//INFORM DD SYSOUT=*  
//SYSINHLO DD *
// IDAA_LOAD_IC  
//    (  
//      GROUP  
//        (  
//          SPACE  
//            (  
//              CREATOR 'USER01'  
//              NAME 'TBHL0A05_T01'  
//              TO IC 'RTEST.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. Steps are required unless otherwise noted.

Procedure
1. Enter a valid job card for your site. If you anticipate a large number of log records to be processed, allocate a generous REGION size to avoid out-of-memory errors.
2. In the EXEC statement, enter the subsystem ID (ssid) for the subsystem on which you will be running the DB2 Analytics Accelerator Loader job. For example,
   ```plaintext
   //HLQ0100 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:
   ```plaintext
   //INFOM DD SYSOUT=*  
   ```
   **Note:** Both of the following INFOM DD definitions are valid:
   ```plaintext
   //INFOM DD SYSOUT=*  
   //INFOM DD DUMMY
   ```
5. Optional: Include the SYSUDUMP DD statement to facilitate finding and correcting problems that are encountered when the job is running.
6. Specify a data set or * for the SYSOUT.
7. Specify a data set or * for messages for the SORTMSGS utility.
8. Specify the VSAM control file for DB2 parameters.
9. Specify the output data sets that will hold the new full image copies. Use either the CAxxnnnn DD statements (which support <5000 objects) or the IC_xx control cards (which support >5000 objects). When you use the CAxxnnnn DD statements, specify at least one CAxxnnnn DD statement for each SPACE card in your job. The variables are as follows: xx is LP, LB, RP or RB and nnnn is a four-digit integer.

Notes:
- 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.
- In certain error conditions, DB2 Analytics Accelerator Loader forces an abnormal termination with user abend code U0012. This condition forces the deletion of the DB2 Analytics Accelerator Loader image copy data set when the disposition of the output data set holding the new full image copy is defined as:
  ```plaintext
  DISP=(NEW,CATLG,DELETE)
  ```
10. The SYSINHLO data set holds the parameters that define the DB2 Analytics Accelerator Loader job options.
11. Modify the DB2 Analytics Accelerator Loader syntax as needed for your site.
Consistent load and image copy load syntax diagram

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.

```
IDAA_CONSISTENT_LOAD
IDAA_LOAD_IC
( 
 TEMPLATE ( NAME template_name DSN template_dsn )

 GROUP ( Space Attributes Group Attributes )

 ACCELNAME accelerator_name PARALLEL '0,1'

 USE_ABOVE_THE_BAR 'primary,secondary,count'
 CONTINUE_ON_ERROR

 LOCAL_SITE
 RECOVERY_SITE
 IMAGE_COPY_PREFERENCE LPLRPRBF
 IMAGE_COPY_PREFERENCE syscopyrowtypes (1)

 LOG_COPY_PREFERENCE RIR2AIA2
 LOG_COPY_PREFERENCE logging_types (2)
 USER_INDICATOR xxx

 Space Attributes:
 SPACE ( CREATOR creator NAME spacename PARTITION number )
```

Chapter 8. DB2 Analytics Accelerator Loader syntax 129
Consistent load and image copy load syntax definitions

DB2 Analytics Accelerator Loader supports the following syntax elements (presented alphabetically) for consistent load and image copy load jobs.

**ACCELNAME** acceleratorName
The name of the IBM DB2 Analytics Accelerator to be loaded.

The ACCELNAME control card can be specified in the ISPF interface by using the **Accelerator Name** field on the Consistent Load Options panel.

The control card can be specified in the ISPF interface by using the **Accelerator name** field on the Consistent Load Options 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 Continue on errors field on the Consistent Load Options 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 Consistent Load Options 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 Consistent Load Options 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 Consistent Load Options 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 Consistent Load Options 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.

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 the last good 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 from an image copy data set (image copy load).

**IMAGE_COPY_PREFERENCE LPLBRPRBFC | IMAGE_COPY_PREFERENCE**

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.
  
  - 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 Consistent Load Options panel:

- **SYSCOPY Scan Operating Mode = L**
  
  LOCAL_SITE

- **SYSCOPY Scan Operating Mode = R**
  
  RECOVERY_SITE

- **SYSCOPY Scan Operating Mode = Z**
  
  omits the LOCAL_SITE, RECOVERY_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 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 Consistent Load Options panel:

SYSCOPY Scan Operating Mode = L
LOCAL_SITE

SYSCOPY Scan Operating Mode = R
RECOVERY_SITE

SYSCOPY Scan Operating Mode = Z
omits the LOCAL_SITE, RECOVERY_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 DB2 Analytics 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 DB2 Analytics 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 Consistent Load Options panel:

Log Reader Copy Preference = log_tokens
LOG_COPY_PREFERENCE log_tokens

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 Consistent Load Options panel.

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 Consistent Load Options panel:

- **Number of PARALLEL log read = x**
- **Number of PARALLEL log apply = y**

**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 Consistent Load Options panel:

**TO_CURRENT | TO_IC | TO_QUIESCE | END_RBA `byte string` | END_LRSN**

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 Consistent Load Options 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 Consistent Load Options 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.
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 Consistent Load Options 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.

---

**Load from external jobs**

DB2 Analytics 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 DB2 Analytics 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 DB2 Analytics 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 //HLODUMMY DD DUMMY.**
You can use DB2 Analytics Accelerator Loader to generate JCL that loads data from an external file into IBM DB2 Analytics Accelerator and into DB2.

**Restrictions and considerations** on page 101
DB2 Analytics Accelerator Loader enables you to load data into IBM DB2 Analytics Accelerator and optionally into DB2 from an external file. Review usage restrictions and considerations before using this feature.

**Managing DSNUTILB interception** on page 366
You can manage DSNUTILB interception by performing some routine and occasional tasks.

**Related tasks:**
- "Adding DB2 Analytics Accelerator Loader syntax to an existing load job” on page 105
  To quickly load data from an external file into both DB2 and an accelerator, you can modify an existing batch job that meets prerequisites instead of using DB2 Analytics Accelerator Loader to generate JCL.
- "Using the ISPF interface to create a DUAL load profile” on page 106
  A DUAL load profile is a reusable group of options for building a job to load data from an external file into DB2 and an accelerator. You can create a profile that saves your selections and reuse the profile to perform future loads from an external file.
- "Specifying options for a DD template” on page 108
  For a Load from External job, you can specify options for the template DD.

---

**Load from external file example JCL**

**Nonparallel load JCL example**

The following figure contains example JCL to load data to both the accelerator and DB2 from an external file.
Figure 24. Nonparallel load from external file example JCL
Parallel load sample utility statement

The following sample shows a DB2 LOAD utility statement to perform a parallel load:

```
LOAD DATA REPLACE
  IDAA_DUAL ON RA1BACC1
  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
      )
```

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.

Load from external syntax diagram

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.
Load from external syntax definitions

DB2 Analytics Accelerator Loader supports the following syntax elements (presented alphabetically) when you are loading from an external file.

**ACCEL_LOAD_TASKS integer**
Specifies the number of partitions that DB2 Analytics Accelerator Loader loads into the accelerator and optionally into DB2 in parallel when loading from an external file. Valid values are 1 through 20.

This value cannot exceed the value of the IBM DB2 Analytics Accelerator parameter `AQT_MAX_UNLOAD_IN_PARALLEL`, which indicates the number of partitions that can be loaded in parallel into the accelerator. If `AQT_MAX_UNLOAD_IN_PARALLEL` is set to 2, then 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 from External Options panel.
ACCEL_ON_SUCCESS_ENABLE YES | NO
Controls whether DB2 Analytics Accelerator Loader enables query
acceleration for the table after a successful load. Query acceleration will
not be enabled if DB2 discarded any rows during the load. Valid values are
YES and NO.
This option can be specified in the ISPF interface by using the Enable
acceleration after successful load field on the Load from External Options
panel.

DATA Specifies that data is to be loaded. This keyword is optional and is used for
clarity only.

DISCARD DDN ddname
Specifies the template or DD name for a data set to be used for discarding
data rows. This data set is required with the ENFORCE option.
This option can be specified in the ISPF interface by using the
DISCARD DDN template DD name field on the Load from External
Options 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 from External Options 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 from External Options 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
Target = B and Accelerator Name fields on the Load from External
Options 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.
Existing data in the DB2 table or partition is deleted if the load job
specifies LOAD REPLACE.
This control card can be chosen in the ISPF interface by using the Load
Target = A and Accelerator Name fields on the Load from External
Options 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** and **Input member** fields on the Load from External Options 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 from External Options 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 from External Options 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 on the Load from External Options 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 contain either a NUMRECS or SORTKEYS clause to provide the number of SYSREC records, 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 contain either a NUMRECS or SORTKEYS clause to provide the number of SYSREC records, 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 from External Options 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 from External Options 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 from External Options 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 from External Options 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 from External Options panel.
Chapter 9. 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 364
- "Diagnostic information for Support" on page 365
- "Producing dumps for diagnostic use" on page 365
- "Clearing common storage after a job fails" on page 366
- "Managing DSNUTILB interception" on page 366

Messages and codes

These topics contain information about the messages and codes that DB2 Analytics Accelerator Loader can issue.

Tools Customizer messages

Use the information in these messages to help you diagnose and solve Tools Customizer problems.

<table>
<thead>
<tr>
<th>Code</th>
<th>Message</th>
<th>Explanation</th>
<th>System action</th>
<th>User response</th>
</tr>
</thead>
<tbody>
<tr>
<td>CCQB000I</td>
<td>The product parameter data was saved in the data store.</td>
<td>Changes that were made to the product parameters were saved in the data store.</td>
<td>None.</td>
<td>No action is required.</td>
</tr>
<tr>
<td>CCQB001I</td>
<td>The DB2 parameter data was saved in the data store.</td>
<td>Changes that were made to the DB2 parameters were saved in the data store.</td>
<td>None.</td>
<td>No action is required.</td>
</tr>
<tr>
<td>CCQB002I</td>
<td>The LPAR parameter data was saved in the data store.</td>
<td>Changes that were made to the LPAR parameters were saved in the data store.</td>
<td>None.</td>
<td>No action is required.</td>
</tr>
<tr>
<td>CCQB003I</td>
<td>At least one step must be selected in a selected task. The selected task is task_description.</td>
<td>When a task is selected, at least one step must be selected. A selected step is missing from the specified task.</td>
<td>Processing stops.</td>
<td>Select a step in the specified task or deselect the task.</td>
</tr>
<tr>
<td>CCQB004I</td>
<td>The required information to run the Discover EXEC was saved in the data store.</td>
<td>The data store contains all the information that is required to run the Discover EXEC.</td>
<td>None.</td>
<td>No action is required.</td>
</tr>
<tr>
<td>CCQB005E</td>
<td>The conflicting values for the parameter_name parameter must be resolved before the information can be saved.</td>
<td>Two values for one parameter conflict with each other, and they must be resolved to save the information.</td>
<td>Processing stops.</td>
<td>Resolve the conflicting values for the parameter.</td>
</tr>
</tbody>
</table>
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.

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.

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.

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.

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.
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.


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.

CCQC012S  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 default values 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.


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.

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.


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.


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.


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.


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.


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.


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 ISPFTTRC command, and press Enter.
3. Issue the Tools Customizer command that issues the error.
4. Specify the ISPFTTRC command, and press Enter. The ISPF file tailoring trace data set is created. It adheres the following naming convention: TSO_ID.ISPF.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 364, 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 364, 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 364, 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 364, 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.
CCQC035E  CCQD006S

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.

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 364 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 364 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 364 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 364 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.
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.


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.


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.


CCQD010S  The XML structure of the member_name environment index member is not valid. 
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.


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.


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.


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.


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.
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.


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.


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.


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.


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.


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.


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.


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(CCCQCDATS) 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.


**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.


**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.


**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.


**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.


**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.


**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.


**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.

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.


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.


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.


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.


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.


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.


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.


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.


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.


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.


CCQD306S  The XML structure of the member_name product environment member is not valid. The element_name element must occur more than maximum_number times.

Explanation: The specified element occurs too many times in the product environment member.

System action: Processing stops.


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.


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.

CCQD300W  CCQD308S
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.


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.


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.


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.


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.


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 metadata library is not associated with the specified 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 warning code while it parsed the product customization member. See the PL/I programming guide for more information about this XML parser warning 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 error code while it parsed the product customization member. 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 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 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 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 store data set could not be opened with the 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 store data set could not be opened with the 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 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.
<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
<th>Explanation</th>
<th>System action</th>
<th>User response</th>
</tr>
</thead>
<tbody>
<tr>
<td>CCQD511E</td>
<td>The DB2 entry already exists in the list of DB2 entries to be associated.</td>
<td>The DB2 entry cannot be added because it already exists in the list of DB2 entries to be associated.</td>
<td>None.</td>
<td>Specify a different DB2 entry.</td>
</tr>
<tr>
<td>CCQD512S</td>
<td>An error occurred while a DB2 entry was being created.</td>
<td>A severe error occurred while a DB2 entry was being created.</td>
<td>Processing stops.</td>
<td>See &quot;Gathering diagnostic information&quot; on page 364. Contact IBM Software Support.</td>
</tr>
<tr>
<td>CCQD513E</td>
<td>The specified DB2 entry already exists and is associated with the current product on the Customizer Workplace panel.</td>
<td>The DB2 entry cannot be added because it already exists, and it is already associated with the product to be customized.</td>
<td>None.</td>
<td>Press F3 to go to the Customizer Workplace panel to see the DB2 entry, or specify a different DB2 entry.</td>
</tr>
<tr>
<td>CCQD514E</td>
<td>A value is required for a DB2 subsystem, a DB2 group attach name, or both before they can be created.</td>
<td>Required information is missing. A DB2 subsystem, a DB2 group attach name, or both must be specified.</td>
<td>None.</td>
<td>Specify a DB2 subsystem, a DB2 group attach name, or both.</td>
</tr>
<tr>
<td>CCQD515E</td>
<td>The specified DB2 entry already exists in the list of DB2 entries and is already associated with the current product.</td>
<td>The DB2 entry has already been created and associated with the product that you want to customize.</td>
<td>None.</td>
<td>Specify a different DB2 entry.</td>
</tr>
<tr>
<td>CCQD516E</td>
<td>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.</td>
<td>The DB2 entry exists, but it must be associated with the product to be customized.</td>
<td>None.</td>
<td>On the Customizer Workplace panel, issue the ASSOCIATE command to associate the DB2 entry with the product.</td>
</tr>
<tr>
<td>CCQD517S</td>
<td>An error occurred while a DB2 entry was being copied.</td>
<td>A severe error occurred while a DB2 entry was being copied.</td>
<td>Processing stops.</td>
<td>See &quot;Gathering diagnostic information&quot; on page 364. Contact IBM Software Support.</td>
</tr>
<tr>
<td>CCQD518E</td>
<td>A value is required for a DB2 subsystem, a DB2 group attach name, or both before they can be copied.</td>
<td>Required information is missing. A DB2 subsystem, a DB2 group attach name, or both must be specified.</td>
<td>None.</td>
<td>Specify a DB2 subsystem, a DB2 group attach name, or both.</td>
</tr>
<tr>
<td>CCQD519I</td>
<td>The DB2 entry was copied.</td>
<td>The DB2 entry was copied and saved in the Tools Customizer data store.</td>
<td>None.</td>
<td>No action is required.</td>
</tr>
<tr>
<td>CCQD520S</td>
<td>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.</td>
<td>The DB2 entry was not completely copied because a product can be associated with only 1200 DB2 entries.</td>
<td>Processing stops.</td>
<td>Remove a DB2 entry from the list, and copy the specified DB2 entry again.</td>
</tr>
</tbody>
</table>
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.

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.

CCQD530E  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.

CCQD531E  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 namer exists and is associated with the product that you are customizing.
System action: None.
User response: Specify another DB2 subsystem.

CCQD532E  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.
User response: Specify a supported DB2 mode.

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.

**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 groupAttach_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.
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.

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.

CCQD600W  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.

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.

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.

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.
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.


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.


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.


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.


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.


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.


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.

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 LPAR 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: Change the user settings.
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.

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.

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 error code.

The XML structure of the member_name DB2 parameter metadata member is not valid. The specified element contains too many characters.

Explanation: The specified element contains too many characters.

System action: Processing stops.

User response: See the Enterprise PL/I for z/OS Programming Guide for more information about the exception warning code.

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 the Enterprise PL/I for z/OS Programming Guide for more information about the exception warning code.
<table>
<thead>
<tr>
<th>CCQI008S</th>
<th>The XML structure of the <code>member_name</code> DB2 parameter metadata member is not valid. The <code>attribute_name</code> attribute in the <code>element_name</code> element cannot occur more than <code>maximum_number</code> times.</th>
</tr>
</thead>
</table>
| **Explanation:** | The specified attribute occurs too many times.  
**System action:** Processing stops.  
**User response:** See “Gathering diagnostic information” on page 364. Contact IBM Software Support. |

<table>
<thead>
<tr>
<th>CCQI009S</th>
<th>The XML structure of the <code>member_name</code> DB2 parameter metadata member is not valid. The <code>attribute_name</code> attribute in the <code>element_name</code> element must occur at least <code>minimum_number</code> times.</th>
</tr>
</thead>
</table>
| **Explanation:** | The specified attribute did not occur enough times.  
**System action:** Processing stops.  
**User response:** See “Gathering diagnostic information” on page 364. Contact IBM Software Support. |

<table>
<thead>
<tr>
<th>CCQI010S</th>
<th>The XML structure of the <code>member_name</code> DB2 parameter metadata member is not valid. Content is not allowed for the <code>attribute_name</code> attribute in the <code>element_name</code> element, but content was found.</th>
</tr>
</thead>
</table>
| **Explanation:** | The specified attribute cannot have content.  
**System action:** Processing stops.  
**User response:** See “Gathering diagnostic information” on page 364. Contact IBM Software Support. |

<table>
<thead>
<tr>
<th>CCQI011S</th>
<th>The XML structure of the <code>member_name</code> DB2 parameter metadata member is not valid. Content is required for the <code>attribute_name</code> attribute in the <code>element_name</code> element, but content was not found.</th>
</tr>
</thead>
</table>
| **Explanation:** | The specified attribute is missing required content.  
**System action:** Processing stops.  
**User response:** See “Gathering diagnostic information” on page 364. Contact IBM Software Support. |

<table>
<thead>
<tr>
<th>CCQI012S</th>
<th>The XML structure of the <code>member_name</code> DB2 parameter metadata member is not valid. The content length for the <code>element_name</code> element cannot exceed <code>maximum_number</code> characters.</th>
</tr>
</thead>
</table>
| **Explanation:** | The specified element contains too many characters.  
**System action:** Processing stops.  
**User response:** See “Gathering diagnostic information” on page 364. Contact IBM Software Support. |

<table>
<thead>
<tr>
<th>CCQI013S</th>
<th>The XML structure of the <code>member_name</code> DB2 parameter metadata member is not valid. The <code>attribute_name</code> attribute in the <code>element_name</code> element is unknown.</th>
</tr>
</thead>
</table>
| **Explanation:** | The specified attribute in the DB2 parameter metadata member is unknown.  
**System action:** Processing stops.  
**User response:** See “Gathering diagnostic information” on page 364. Contact IBM Software Support. |

<table>
<thead>
<tr>
<th>CCQI014S</th>
<th>The content of the <code>member_name</code> DB2 parameter metadata member is not valid because the value of the <code>attribute_name</code> element is incorrect. The value is <code>value_name</code>.</th>
</tr>
</thead>
</table>
| **Explanation:** | The specified value of the element is not a valid value.  
**System action:** Processing stops.  
**User response:** See “Gathering diagnostic information” on page 364. Contact IBM Software Support. |

<table>
<thead>
<tr>
<th>CCQI015S</th>
<th>The content of the DB2 parameter metadata member is not valid because the value of the <code>attribute_name</code> attribute in the <code>element_name</code> element is incorrect. The value is <code>value_name</code>.</th>
</tr>
</thead>
</table>
| **Explanation:** | The specified value of the attribute is not a valid value.  
**System action:** Processing stops.  
**User response:** See “Gathering diagnostic information” on page 364. Contact IBM Software Support. |
CCQI016S The content of the DB2 parameter metadata member is not valid because the data type of the \texttt{element\_name} element is incorrect. The value is \texttt{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 364. Contact IBM Software Support.

CCQI017S The content of the DB2 parameter metadata member is not valid because the data type of the \texttt{attribute\_name} attribute in the \texttt{element\_name} element is incorrect. The value of the attribute is \texttt{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 364. Contact IBM Software Support.

CCQI050S The \texttt{member\_name} DB2 parameter metadata member was not found in the \texttt{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 364. Contact IBM Software Support.

CCQI052S The \texttt{parameter\_name} product parameter in the \texttt{template\_name} template does not have associated metadata in the \texttt{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 364. Contact IBM Software Support.

CCQI053E The following metadata data set was not found: \texttt{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: \texttt{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 \texttt{CCQ$$DB2} DB2 parameter metadata member was not found in the \texttt{data\_set\_name} Tools Customizer metadata data set.

**Explanation:** Tools Customizer could not find the specified DB2 metadata member in the Tools Customizer metadata data set.

**System action:** Processing stops.

**User response:** See “Gathering diagnostic information” on page 364. Contact IBM Software Support.

CCQI056S The \texttt{CCQ$$LPR} LPAR parameter metadata member was not found in the \texttt{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 364. 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 364. 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 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 364. Contact IBM Software Support.

**CCQI061S**  
**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 364. Contact IBM Software Support.

**CCQI062S**  
**The 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 364. Contact IBM Software Support.

**CCQI063S**  
**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 364. Contact IBM Software Support.
CCQI066S  The DB2 parameter in the task, step, and template condition does not have associated metadata in the DB2 parameter metadata member.

Explanation:  Associated metadata is missing for the specified DB2 parameter in a task, step, and template.

System action:  Processing stops.


CCQI067S  The LPAR parameter in the task, step, and template condition does not have associated metadata in the LPAR parameter metadata member.

Explanation:  Associated metadata is missing for the specified LPAR parameter in a task, step, and template.

System action:  Processing stops.


CCQI068S  The product parameter in the task, step, and template condition does not have associated metadata in the product parameter metadata member.

Explanation:  Associated metadata is missing for the specified product parameter in a task, step, and template.

System action:  Processing stops.


CCQI069S  Product metadata does not support multiple configurations, but the product template contains the product 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 DB2 parameter metadata member is not valid. The default length for the 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.


CCQI071E  The LPAR parameter metadata member is not valid. The default length for the 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.


CCQI072E  The product parameter metadata member is not valid. The default length for the 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.


CCQI073S  The XML structure of the DB2 parameter metadata member is not valid. The following value of the attribute attribute in the element element already exists: value.

Explanation:  The specified length cannot be shorter than the default length.

System action:  Processing stops.

CCQI074S  CCQI081S

Explanation: The specified value already exists for an attribute.

System action: Processing stops.


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.


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.


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 for an attribute in the DB2 parameter metadata member is not valid.

System action: Processing stops.


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 value for an attribute in the LPAR parameter metadata member is not valid.

System action: Processing stops.


CCQI078S  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.


CCQI080S  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.

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.

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.

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.

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.

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.

CCQI094S  The CCQS$PRD product customization parameter metadata member was not found in the data_set_name data set.

Explanation:  The specified data set must contain the CCQS$PRD product customization parameter metadata member

System action:  Processing stops.

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.


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.


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.


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.


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 contains too many characters.

System action: Processing stops.


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.


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.


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.


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.
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.

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.

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.

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.

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.

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.

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.

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.
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.


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 element_name element is unknown.

Explanation: The specified element in the information metadata member is unknown.

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. Content is not allowed for the element_name element, but content was found.

Explanation: The specified element cannot contain content.

System action: Processing stops.

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.


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.


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.


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.


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.


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.


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.


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.

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.

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.

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.

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.

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.

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.

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.

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.
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.


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.SCQDENU.

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.
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 the Enterprise PL/I for z/OS Programming Guide for more information about the exception error code, and 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.


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.


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.


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.


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.


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.


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.


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.
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 364. 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 364. 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 364. 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 364. 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 364. 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.


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.


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.


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.


CCQI361S  The XML structure of the member_name sequence metadata member is not valid. A relational operator already exists for the condition element on the specified level.

Explanation: A relational operator already exists for the condition element on the specified level.

System action: Processing stops.


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.


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.


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 if 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 continues.

User response: See the Enterprise PL/I for z/OS Programming Guide for more information about the exception error code.
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 364. 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 364. 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 364. 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 364. 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 364. 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 364. 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 364. 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 364. Contact IBM Software Support.

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Chapter 9. Troubleshooting

185
<table>
<thead>
<tr>
<th>Message Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>CCQI410S</td>
<td>The XML structure of the \textit{member_name} parameter metadata member is not valid. Content is not allowed for the \textit{attribute_name} attribute in the \textit{element_name} element, but content was found.</td>
</tr>
<tr>
<td>Explanation:</td>
<td>The specified attribute cannot have content.</td>
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<td>CCQI411S</td>
<td>The XML structure of the \textit{member_name} parameter metadata member is not valid. Content is required for the \textit{attribute_name} attribute in the \textit{element_name} element, but content was not found.</td>
</tr>
<tr>
<td>Explanation:</td>
<td>The specified attribute is missing required content.</td>
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<tr>
<td>CCQI412S</td>
<td>The XML structure of the \textit{member_name} parameter metadata member is not valid. The content length for the \textit{element_name} element cannot exceed \textit{maximum_number} characters.</td>
</tr>
<tr>
<td>Explanation:</td>
<td>The specified element contains too many characters.</td>
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<td>System action:</td>
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<tr>
<td>CCQI413S</td>
<td>The XML structure of the \textit{member_name} parameter metadata member is not valid. The \textit{attribute_name} attribute in the \textit{element_name} element is unknown.</td>
</tr>
<tr>
<td>Explanation:</td>
<td>The specified attribute in the parameter metadata member is unknown.</td>
</tr>
<tr>
<td>System action:</td>
<td>Processing stops.</td>
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<tr>
<td>CCQI414S</td>
<td>The content of the \textit{member_name} parameter metadata member is not valid because the value of the \textit{element_name} element is incorrect. The value is \textit{value_name}.</td>
</tr>
<tr>
<td>Explanation:</td>
<td>The specified value for an element in the parameter metadata member is not valid.</td>
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<td>The content of the \textit{member_name} parameter metadata member is not valid because the data type of the \textit{element_name} element is incorrect. The value is \textit{value_name}.</td>
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<td>The content of the \textit{member_name} parameter metadata member is not valid because the data type of the \textit{attribute_name} attribute in the \textit{element_name} element is incorrect. The value is \textit{value_name}.</td>
</tr>
<tr>
<td>Explanation:</td>
<td>The specified data type value for an attribute in the parameter metadata member is not valid.</td>
</tr>
<tr>
<td>System action:</td>
<td>Processing stops.</td>
</tr>
</tbody>
</table>
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 364. 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 364. 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 364. 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 364. 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.

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 364. 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 364. 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 364. 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 364. 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 364. Contact IBM Software Support.

---

**CCQI605S** 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 364. Contact IBM Software Support.

---

**CCQI606S** 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 364. Contact IBM Software Support.

---

**CCQI607S** 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 364. 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 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 364. 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.

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.

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.

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.

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 is value_name.

Explanation: The specified value of the element is not a valid value.

System action: Processing stops.

CCQI615S  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 is value_name.

Explanation: The specified data type is not a valid data type.

System action: Processing stops.

CCQI616S  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 is value_name.

Explanation: The specified data type is not a valid data type.

System action: Processing stops.

CCQI617S  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 attribute is value_name.

Explanation: The specified data type is not a valid data type.

System action: Processing stops.
CCQI650S  •  CCQI703S


Explanation: The specified value for an attribute already exists.

System action: Processing stops.


CCQI650W  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.


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.
<table>
<thead>
<tr>
<th>Error Code</th>
<th>Description</th>
<th>Explanation</th>
<th>System Action</th>
<th>User Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>CCQI704S</td>
<td>The XML structure of the <code>member_name</code> solution pack metadata member is not valid. Content is required for the <code>element_name</code> element, but content was not found.</td>
<td>The specified element does not contain required content.</td>
<td>Processing stops.</td>
<td>See “Gathering diagnostic information” on page 364, Contact IBM Software Support.</td>
</tr>
<tr>
<td>CCQI705S</td>
<td>The XML structure of the <code>member_name</code> solution pack metadata member is not valid. The content length for the <code>element_name</code> element cannot exceed <code>maximum_number</code> characters.</td>
<td>The specified element contains too many characters.</td>
<td>Processing stops.</td>
<td>See “Gathering diagnostic information” on page 364, Contact IBM Software Support.</td>
</tr>
<tr>
<td>CCQI706S</td>
<td>The XML structure of the <code>member_name</code> solution pack metadata member is not valid. The <code>element_name</code> element cannot occur more than <code>maximum_number</code> times.</td>
<td>The specified element occurs too many times.</td>
<td>Processing stops.</td>
<td>See “Gathering diagnostic information” on page 364, Contact IBM Software Support.</td>
</tr>
<tr>
<td>CCQI707S</td>
<td>The XML structure of the <code>member_name</code> solution pack metadata member is not valid. The <code>element_name</code> element cannot occur more than <code>maximum_number</code> times.</td>
<td>The specified attribute cannot have content.</td>
<td>Processing stops.</td>
<td>See “Gathering diagnostic information” on page 364, Contact IBM Software Support.</td>
</tr>
<tr>
<td>CCQI708S</td>
<td>The XML structure of the <code>member_name</code> solution pack metadata member is not valid. The <code>attribute_name</code> attribute in the <code>element_name</code> element cannot occur more than <code>maximum_number</code> times.</td>
<td>The specified attribute occurs too many times.</td>
<td>Processing stops.</td>
<td>See “Gathering diagnostic information” on page 364, Contact IBM Software Support.</td>
</tr>
<tr>
<td>CCQI709S</td>
<td>The XML structure of the <code>member_name</code> solution pack metadata member is not valid. The <code>attribute_name</code> attribute in the <code>element_name</code> element must occur at least <code>minimum_number</code> times.</td>
<td>The specified attribute does not occur enough times.</td>
<td>Processing stops.</td>
<td>See “Gathering diagnostic information” on page 364, Contact IBM Software Support.</td>
</tr>
<tr>
<td>CCQI710S</td>
<td>The XML structure of the <code>member_name</code> solution pack metadata member is not valid. Content is not allowed for the <code>attribute_name</code> attribute in the <code>element_name</code> element, but content was found.</td>
<td>The specified attribute cannot have content.</td>
<td>Processing stops.</td>
<td>See “Gathering diagnostic information” on page 364, Contact IBM Software Support.</td>
</tr>
<tr>
<td>CCQI711S</td>
<td>The XML structure of the <code>member_name</code> solution pack metadata member is not valid. Content is required for the <code>attribute_name</code> attribute in the <code>element_name</code> element, but content was not found.</td>
<td>The specified attribute is missing content.</td>
<td>Processing stops.</td>
<td>See “Gathering diagnostic information” on page 364, Contact IBM Software Support.</td>
</tr>
</tbody>
</table>
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.


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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.


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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.


---

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.


---

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.


---

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.


---

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.


---

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.

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.


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.


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.


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.

CCQ0000W  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.

CCQ0001S  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.


CCQ0002S  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.


CCQ0003S  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.

CCQ0004S  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.


CCQ0005S  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.


CCQ0006S  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.


CCQ0007S  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.


CCQ0008S  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.


CCQ0009S  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.


CCQ0010S  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.


CCQ0011S  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.

CCQ012S 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.


CCQ013S 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.


CCQ014S 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: The specified value for an element in the discover parameter metadata member is not valid.

System action: Processing stops.


CCQ015S 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.


CCQ016S 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.


CCQ017S 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.


CCQ050S 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.

CCQ051W 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.

CCQ052S 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.

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.

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 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.


CCQO065W  The value for 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.

CCQO066W  The Discover EXEC did not find the record_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.

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 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.
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.


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.

CCQ003E  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.

CCQP000E  The value of the mode_name DB2 level is missing.

Explanation: The specified DB2 mode is not defined.

System action: Processing stops.

User response: Specify a value for the DB2 mode.

CCQP001E  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.

CCQP002E  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.


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.

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: Processing continues.
User response: Ensure that you have WRITE authority access to this data set.

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.
<table>
<thead>
<tr>
<th>Component</th>
<th>Error Message</th>
</tr>
</thead>
<tbody>
<tr>
<td>CCQS023E</td>
<td>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.</td>
</tr>
<tr>
<td><strong>Explanation:</strong></td>
<td>To open the customization library data set, UPDATE authority on the specified high-level qualifier must be granted.</td>
</tr>
<tr>
<td><strong>System action:</strong></td>
<td>None.</td>
</tr>
<tr>
<td><strong>User response:</strong></td>
<td>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.</td>
</tr>
<tr>
<td>CCQS024E</td>
<td>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.</td>
</tr>
<tr>
<td><strong>Explanation:</strong></td>
<td>To create the customization library data set, ALTER authority on the specified high-level qualifier must be granted.</td>
</tr>
<tr>
<td><strong>System action:</strong></td>
<td>None.</td>
</tr>
<tr>
<td><strong>User response:</strong></td>
<td>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.</td>
</tr>
<tr>
<td>CCQS030E</td>
<td>The following command is not a valid CREATE statement: command_statement.</td>
</tr>
<tr>
<td><strong>Explanation:</strong></td>
<td>The specified CREATE command statement is invalid because it contains blanks or alphabetic characters.</td>
</tr>
<tr>
<td><strong>System action:</strong></td>
<td>Processing stops.</td>
</tr>
<tr>
<td><strong>User response:</strong></td>
<td>Specify a valid CREATE command statement. The correct syntax is CREATE nn, where nn is 1 - 99.</td>
</tr>
<tr>
<td>CCQS031E</td>
<td>The following command is not a valid CREATE statement: command_statement. The number that can be specified with the CREATE command is 1 - 99.</td>
</tr>
<tr>
<td><strong>Explanation:</strong></td>
<td>The specified CREATE command statement is invalid because it contains either 0 or a number greater than 99.</td>
</tr>
<tr>
<td><strong>System action:</strong></td>
<td>Processing stops.</td>
</tr>
<tr>
<td><strong>User response:</strong></td>
<td>Specify a valid CREATE command.</td>
</tr>
</tbody>
</table>

---

<table>
<thead>
<tr>
<th>Component</th>
<th>Error Message</th>
</tr>
</thead>
<tbody>
<tr>
<td>CCQT000I</td>
<td>The product configuration ID copied_configuration_ID was successfully copied from configuration_ID.</td>
</tr>
<tr>
<td><strong>Explanation:</strong></td>
<td>The specified configuration ID was copied.</td>
</tr>
<tr>
<td><strong>System action:</strong></td>
<td>None.</td>
</tr>
<tr>
<td><strong>User response:</strong></td>
<td>No action is required.</td>
</tr>
<tr>
<td>CCQT001E</td>
<td>The command_name line command was specified more than once, which is not allowed.</td>
</tr>
<tr>
<td><strong>Explanation:</strong></td>
<td>The specified line command cannot be specified more than one time.</td>
</tr>
<tr>
<td><strong>System action:</strong></td>
<td>Processing stops.</td>
</tr>
<tr>
<td><strong>User response:</strong></td>
<td>Specify the line command only once.</td>
</tr>
<tr>
<td>CCQT002E</td>
<td>The configuration_ID already exists. Specify a different configuration ID.</td>
</tr>
<tr>
<td><strong>Explanation:</strong></td>
<td>The specified configuration ID exists.</td>
</tr>
<tr>
<td><strong>System action:</strong></td>
<td>Processing stops.</td>
</tr>
<tr>
<td><strong>User response:</strong></td>
<td>Ensure that the specified configuration ID is unique.</td>
</tr>
<tr>
<td>CCQT003I</td>
<td>The product configuration ID configuration_ID was created.</td>
</tr>
<tr>
<td><strong>Explanation:</strong></td>
<td>The specified configuration ID was created.</td>
</tr>
<tr>
<td><strong>System action:</strong></td>
<td>None.</td>
</tr>
<tr>
<td><strong>User response:</strong></td>
<td>No action is required.</td>
</tr>
<tr>
<td>CCQT004I</td>
<td>The product configuration ID configuration_ID was removed.</td>
</tr>
<tr>
<td><strong>Explanation:</strong></td>
<td>The specified configuration ID was removed.</td>
</tr>
<tr>
<td><strong>System action:</strong></td>
<td>None.</td>
</tr>
<tr>
<td><strong>User response:</strong></td>
<td>No action is required.</td>
</tr>
<tr>
<td>CCQT005E</td>
<td>The product configuration ID configuration_ID is not valid. The product configuration ID cannot contain a colon (:).</td>
</tr>
<tr>
<td><strong>Explanation:</strong></td>
<td>The specified configuration ID contains a colon (:), but a colon is not valid.</td>
</tr>
<tr>
<td><strong>System action:</strong></td>
<td>Processing stops.</td>
</tr>
<tr>
<td><strong>User response:</strong></td>
<td>No action is required.</td>
</tr>
</tbody>
</table>
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 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 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 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 • CCX011I

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.
DB2 Analytics Accelerator Loader messages

Look up DB2 Analytics 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 started task.
- HLOU indicates the DSNUTILB intercept.

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.)

<table>
<thead>
<tr>
<th>Message ID</th>
<th>Message Description</th>
<th>Explanation</th>
<th>User response</th>
</tr>
</thead>
<tbody>
<tr>
<td>HLO002E</td>
<td>Insufficient storage size. Region size of at least 30000 is required.</td>
<td>This is an informational message.</td>
<td>No action is required.</td>
</tr>
<tr>
<td></td>
<td><strong>Explanation:</strong> The current storage size is not large enough to work with the product.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>User response:</strong> Contact your system administrator to increase the region size to 30000.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>HLO101E</td>
<td>ISPF error: <em>error_message</em></td>
<td>An ISPF error occurred and caused the displayed message to be generated.</td>
<td>Correct the error and retry the operation. If necessary, review the ISPF documentation to determine the cause of the error.</td>
</tr>
<tr>
<td>HLO102E</td>
<td>An invalid command was entered in the command or option line.</td>
<td>Valid commands are listed on the panel.</td>
<td>Enter a valid command.</td>
</tr>
<tr>
<td>HLO011I</td>
<td>Operation completed successfully.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
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.

HLO200E  message_text
Explanation:  An internal error in the DB2 control file routine or VSAM data repository routine occurred.
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  DB2 Analytics Accelerator Loader repository does not exist.
Explanation:  The base PDS is not a repository HLQ.
User response:  Ensure that the high-level qualifier variable 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.

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 DB2 Analytics 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 Accelerator Loader JCL panel (HLOLBLDJ).
User response: Specify the name of an existing data set or specify a value in the Data set name field on the Build Accelerator Loader JCL panel (HLOLBLDJ). After you change the data set name, run the job again.

HLO215E The output data set for DB2 Analytics Accelerator Loader load JCL 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_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 • HLO250E

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.
Explanation: The <profile type> element has an invalid value.
User response: Specify a valid value.

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.

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 (HLOLETDD) 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.

HLO245E The column info data set must be defined for profile <profile_name>.
Explanation: The data set of the table's column definitions that is to be used as input to the LOAD utility control cards 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 (>)
- & 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 ',' or '-'. 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[(<d1>:<d2>)]<t>, where a,b are greater than 0. For example, <PARTITION>=1-2,4:5,8 and <PARTITION>='T'.

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 profile_creator.profile_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.

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 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, DSNWL2, 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.

HLO309E 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.

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 returned 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: 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 ISPFILE DD - Process did not complete.

Explanation: An allocation error occurred while allocating the ISPFILE 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 ISPFILE DD. Process did not complete.

Explanation: An allocation error was encountered while reading the ISPFILE 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 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 for 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 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 DB2 Analytics 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 the 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  Invalid value.

Explanation: DB2 Loadlib4 data set could not be found in the MVS catalog.

User response: Enter the name of the data set that comprises the load library concatenation for DB2, and is used during batch job processing; up to 47 alphanumeric characters.

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.
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 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.

HLO529E 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.

HLO530E 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.

HLO531E 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.

HLO532E 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.

HLO533E 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.

HLO534E 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.

HLO555E Substring starting position must be 1 - 8.
Explanation: The starting position value must be 1 - 8.
User response: Enter a valid value.

HLO556E 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  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 load target. Valid values are A and B.
Explanation: Specify A to load only the accelerator. Specify B to load the accelerator and DB2.
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 16777215 and blank.
Explanation: The specified value is not valid.
User response: Enter a valid value.

HLO590E Invalid PCTPRIME. Valid values are 0 through 99999999 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.
<table>
<thead>
<tr>
<th>Message Code</th>
<th>Message Text</th>
</tr>
</thead>
<tbody>
<tr>
<td>HLO594E</td>
<td>Invalid profile type. Valid profile types are ALL, CONSISTENT, and DUAL.</td>
</tr>
<tr>
<td>Explanation:</td>
<td>The specified value is not valid.</td>
</tr>
<tr>
<td>User response:</td>
<td>Enter a valid value.</td>
</tr>
<tr>
<td>HLO595E</td>
<td>Invalid <code>templateName</code> template DD name.</td>
</tr>
<tr>
<td>Explanation:</td>
<td>The specified template DD name is not valid for the TEMPLATE utility.</td>
</tr>
<tr>
<td>User response:</td>
<td>Enter a valid value.</td>
</tr>
<tr>
<td>HLO596E</td>
<td>Invalid quiesce end point. Valid values are 1 through 999.</td>
</tr>
<tr>
<td>Explanation:</td>
<td>The specified value is not valid.</td>
</tr>
<tr>
<td>User response:</td>
<td>Enter a valid value.</td>
</tr>
<tr>
<td>HLO597E</td>
<td>Invalid template name.</td>
</tr>
<tr>
<td>Explanation:</td>
<td>The specified value is not valid.</td>
</tr>
<tr>
<td>User response:</td>
<td>Enter a valid value.</td>
</tr>
<tr>
<td>HLO598E</td>
<td>Invalid substring qualifier code. Valid values are 1 through 25.</td>
</tr>
<tr>
<td>Explanation:</td>
<td>The specified value is not valid.</td>
</tr>
<tr>
<td>User response:</td>
<td>Enter a valid value.</td>
</tr>
<tr>
<td>HLO599W</td>
<td>Incomplete profile was saved successfully.</td>
</tr>
<tr>
<td>Explanation:</td>
<td>This is an informational message.</td>
</tr>
<tr>
<td>User response:</td>
<td>Complete the profile before building the job.</td>
</tr>
<tr>
<td>HLO600I</td>
<td>Edited profile was saved successfully.</td>
</tr>
<tr>
<td>Explanation:</td>
<td>This is an informational message.</td>
</tr>
<tr>
<td>User response:</td>
<td>No action is required.</td>
</tr>
<tr>
<td>HLO601I</td>
<td>Created profile was saved successfully.</td>
</tr>
<tr>
<td>Explanation:</td>
<td>This is an informational message.</td>
</tr>
<tr>
<td>User response:</td>
<td>No action is required.</td>
</tr>
<tr>
<td>HLO602I</td>
<td>Renamed profile was saved successfully.</td>
</tr>
<tr>
<td>Explanation:</td>
<td>This is an informational message.</td>
</tr>
<tr>
<td>User response:</td>
<td>No action is required.</td>
</tr>
<tr>
<td>HLO603E</td>
<td>Cannot load profile description from repository.</td>
</tr>
<tr>
<td>Explanation:</td>
<td>The product could not load the profile description from the repository.</td>
</tr>
<tr>
<td>User response:</td>
<td>If unable to determine the reason for the failure, contact IBM Software Support. Have available the listing that contains this message.</td>
</tr>
<tr>
<td>HLO604E</td>
<td>Incomplete profile. Edit profile to specify required options.</td>
</tr>
<tr>
<td>Explanation:</td>
<td>Required profile options are missing.</td>
</tr>
<tr>
<td>User response:</td>
<td>Specify values for the required profile options.</td>
</tr>
<tr>
<td>HLO605E</td>
<td>Profile is inaccessible for specified action.</td>
</tr>
<tr>
<td>Explanation:</td>
<td>The profile is not compatible with the specified action.</td>
</tr>
<tr>
<td>User response:</td>
<td>Specify a valid action.</td>
</tr>
<tr>
<td>HLO606E</td>
<td>Profile with the same creator, name, and type already exists.</td>
</tr>
<tr>
<td>Explanation:</td>
<td>Profile information must be unique.</td>
</tr>
<tr>
<td>User response:</td>
<td>Specify unique profile information.</td>
</tr>
<tr>
<td>HLO607E</td>
<td>Cannot open table column info data set.</td>
</tr>
<tr>
<td>Explanation:</td>
<td>The product cannot open the table column info data set.</td>
</tr>
<tr>
<td>User response:</td>
<td>Make sure that the column info data set exists, and that you have the proper authority to read it.</td>
</tr>
<tr>
<td>HLO608E</td>
<td>Cannot open data set for JCL generation.</td>
</tr>
<tr>
<td>Explanation:</td>
<td>The product cannot open the data set for JCL generation.</td>
</tr>
<tr>
<td>User response:</td>
<td>Make sure that the data set for JCL generation exists, and that you have the proper authority to write to it.</td>
</tr>
<tr>
<td>HLO609E</td>
<td>Cannot create data set for JCL generation.</td>
</tr>
<tr>
<td>Explanation:</td>
<td>The product cannot create the data set for JCL generation.</td>
</tr>
<tr>
<td>User response:</td>
<td>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.</td>
</tr>
<tr>
<td>Message Code</td>
<td>Message Text</td>
</tr>
<tr>
<td>--------------</td>
<td>--------------</td>
</tr>
<tr>
<td>HLO610I</td>
<td>Job was built successfully.</td>
</tr>
<tr>
<td>HLO611E</td>
<td>Accelerators are not associated with this DB2 subsystem.</td>
</tr>
<tr>
<td>HLO612I</td>
<td>Profile was deleted successfully.</td>
</tr>
<tr>
<td>HLO613E</td>
<td>This table is not supported.</td>
</tr>
<tr>
<td>HLO614W</td>
<td>Profile without tables was saved successfully.</td>
</tr>
<tr>
<td>HLO615E</td>
<td>No tables were specified in the profile.</td>
</tr>
<tr>
<td>HLO616E</td>
<td>Invalid utility ID. Valid values are blank and strings of letters, numerals, and symbols (@, $, #, !, ~).</td>
</tr>
<tr>
<td>HLO617E</td>
<td>Invalid parallel task value. Valid values are blank or 1 - 20.</td>
</tr>
<tr>
<td>HLO618E</td>
<td>Invalid <code>&lt;template_name&gt;</code> DSN template. Valid template must contain <code>&amp;PART</code> or <code>&amp;PA</code> variable.</td>
</tr>
<tr>
<td>HLO619E</td>
<td>Input DSN template and template name are required for parallel load.</td>
</tr>
<tr>
<td>HLO620E</td>
<td>Number of PARALLEL log apply must be 1 - 10.</td>
</tr>
<tr>
<td>HLO700E</td>
<td>An error occurred while opening the DB2 load libraries: RC = return_code.</td>
</tr>
<tr>
<td>HLO701E</td>
<td>An error occurred while attaching the DB2 attachment facility subtask: RC = return_code.</td>
</tr>
<tr>
<td>HLO702E</td>
<td>The task is not running APF-authorized.</td>
</tr>
</tbody>
</table>
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 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.

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.

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.
<table>
<thead>
<tr>
<th>Error Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>HLO821E</td>
<td>Operation not valid for specified column.</td>
</tr>
<tr>
<td></td>
<td>Explanation: An invalid operation was entered.</td>
</tr>
<tr>
<td></td>
<td>User response: Enter a valid operation.</td>
</tr>
<tr>
<td>HLO822E</td>
<td>Fixed columns cannot be hidden.</td>
</tr>
<tr>
<td></td>
<td>Explanation: An attempt was made to hide a fixed column, but fixed columns cannot be hidden.</td>
</tr>
<tr>
<td></td>
<td>User response: Either make a selected column unfixed, or select another column to hide.</td>
</tr>
<tr>
<td>HLO823E</td>
<td>Invalid value entered for column size: non-numeric data.</td>
</tr>
<tr>
<td></td>
<td>Explanation: An invalid Cmd value was entered. The column size value must be a number between the values in the MIN and MAX fields.</td>
</tr>
<tr>
<td></td>
<td>User response: Either remove the invalid number or enter a valid value.</td>
</tr>
<tr>
<td>HLO824E</td>
<td>Invalid value entered for column size: out of range.</td>
</tr>
<tr>
<td></td>
<td>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.</td>
</tr>
<tr>
<td></td>
<td>User response: Either remove the invalid number or enter a valid one.</td>
</tr>
<tr>
<td>HLO825E</td>
<td>SIZE is not supported for the specified column.</td>
</tr>
<tr>
<td></td>
<td>Explanation: An attempt was made to change the size of a column, but SIZE is not supported for that column.</td>
</tr>
<tr>
<td></td>
<td>User response: You can change the size of another column in which the minimum and maximum sizes are not equal.</td>
</tr>
<tr>
<td>HLO826E</td>
<td>TBCREATE failed. RC= return_code.</td>
</tr>
<tr>
<td></td>
<td>Explanation: The TBCREATE command was issued to create a VIEW, but it failed with a hexadecimal return code as indicated in the message.</td>
</tr>
<tr>
<td></td>
<td>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.</td>
</tr>
<tr>
<td>HLO827E</td>
<td>TBGET failed. RC= return_code.</td>
</tr>
<tr>
<td></td>
<td>Explanation: The TBGET command failed with a hexadecimal return code as indicated in the message.</td>
</tr>
<tr>
<td></td>
<td>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.</td>
</tr>
<tr>
<td>HLO828E</td>
<td>TBOPEN failed. RC= return_code.</td>
</tr>
<tr>
<td></td>
<td>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.</td>
</tr>
<tr>
<td></td>
<td>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.</td>
</tr>
<tr>
<td>HLO830E</td>
<td>TBDELETE failed. RC= return_code.</td>
</tr>
<tr>
<td></td>
<td>Explanation: The TBDELETE command failed with a hexadecimal return code as indicated in the message.</td>
</tr>
<tr>
<td></td>
<td>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.</td>
</tr>
<tr>
<td>HLO832E</td>
<td>TBCLOSE failed. RC= return_code.</td>
</tr>
<tr>
<td></td>
<td>Explanation: The TBCLOSE command failed with a hexadecimal return code as indicated in the message.</td>
</tr>
<tr>
<td></td>
<td>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.</td>
</tr>
<tr>
<td>HLO834E</td>
<td>TBMOD failed. RC= return_code.</td>
</tr>
<tr>
<td></td>
<td>Explanation: The TBMOD command failed with a hexadecimal return code as indicated in the message.</td>
</tr>
<tr>
<td></td>
<td>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.</td>
</tr>
<tr>
<td>HLO836E</td>
<td>TBOPEN failed. RC= return_code.</td>
</tr>
<tr>
<td></td>
<td>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.</td>
</tr>
<tr>
<td></td>
<td>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.</td>
</tr>
<tr>
<td>HLO838E</td>
<td>TBDELETE failed. RC= return_code.</td>
</tr>
<tr>
<td></td>
<td>Explanation: The TBDELETE command failed with a hexadecimal return code as indicated in the message.</td>
</tr>
<tr>
<td></td>
<td>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.</td>
</tr>
<tr>
<td>HLO840E</td>
<td>TBCLOSE failed. RC= return_code.</td>
</tr>
<tr>
<td></td>
<td>Explanation: The TBCLOSE command failed with a hexadecimal return code as indicated in the message.</td>
</tr>
<tr>
<td></td>
<td>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.</td>
</tr>
<tr>
<td>HLO842E</td>
<td>TBGET failed. RC= return_code.</td>
</tr>
<tr>
<td></td>
<td>Explanation: The TBGET command failed with a hexadecimal return code as indicated in the message.</td>
</tr>
<tr>
<td></td>
<td>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 TBGET.</td>
</tr>
<tr>
<td>HLO844E</td>
<td>View table is in use.</td>
</tr>
<tr>
<td></td>
<td>Explanation: The ISPTLIB and ISPTABL DDs are in use; however, the &quot;in use&quot; state should not prevent the batch JCL generator from reading the DDs.</td>
</tr>
<tr>
<td></td>
<td>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.</td>
</tr>
</tbody>
</table>
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 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: - Decrease the size of the column at which the cursor is pointing so that it can fit in the available unfixed area. - Set the unfixed area to its maximum size (width). - Decrease the size of the fixed area. - 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.
HLO948E • HLO959E

**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.

**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. - 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 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).
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.
<table>
<thead>
<tr>
<th>Error Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>HLO974E</td>
<td>TBMOD failed. RC = return_code.</td>
</tr>
<tr>
<td><strong>Explanation:</strong></td>
<td>The TBMOD command failed with a (hex) return code as indicated in the message.</td>
</tr>
<tr>
<td><strong>User response:</strong></td>
<td>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.</td>
</tr>
</tbody>
</table>

| 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. |

| HLO978E    | Discovery process completed successfully. |
| **Explanation:** | This is an informational message. |
| **User response:** | No action is required. |

| HLO981E    | Control file hlo_control_file not found. |
| **Explanation:** | The discovery process could not locate the specified product control file. |
| **User response:** | Enter a valid control file name. |

| HLO982E    | Configuration hlo_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 hlo_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 hlo_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 IBM Corp. 2001 - 2013. All Rights Reserved. (c) Copyright Rocket Software, Inc. 2001 - 2013 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:** | None. |

| 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:** | Verify and correct the DB2 subsystem ID. |

| HLO003E    | The valid commands are "0" to go to the User Settings, "1" to go to the object profiles display, "2" to go to the utility profiles display, "3" to go to the job profiles display, "4" to go to the mini log clean up options, "5" to go to the XML template build display, and "6" to exit. |
| **Explanation:** | The option specified is not valid for the panel. |
| **User response:** | Select one of the valid options |
described in the message text.

**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** 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 profile_creator.profile_name 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, V, or N to allow other users to update your profile, allow other users to view your profile, or to disallow users from viewing or updating your profile, respectively.

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:** OS/390 does not recognize the device type you specified.

**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.

**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 Mini Log processing or Image Copy processing, not both.

**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"uiesce, "U"nified, "S"pecified or "T"o Consistent IC.

**Explanation:** The value you specified for End Point is not valid.

**User response:** Specify one of the following valid values: C (To Current), Q (To Quiesce), ^S (Specified) or T (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 DB2 Analytics Accelerator Loader syntax.

---

**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 are "1" for single pass and "2" for two passes of the log.

Explanation:  You specified an invalid value.
User response:  Specify either 1 (for one-pass) or 2 (for two-pass).

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.

HLO052E  Internal logic error in the mini log clean up. Nothing was deleted.

Explanation:  There was an internal error when attempting to perform mini log cleanup tasks.
User response:  Contact IBM Software Support.

HLO053I  Rows rows were removed from the HLO mini log control table.

Explanation:  This informational message indicates the number of rows that were removed from the DB2 Analytics Accelerator Loader mini log control table during clean up.
User response:  No action is required.

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.
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.

When producing mini logs, the write mode must remain in the default state of "I" for image copies.

**Explanation:**

**User response:** Specify a valid value for Write Mode.

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 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.

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.

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.

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.

A critical error has occurred attempting to resolve the subsystem RC=rc

**Explanation:** DB2 Analytics Accelerator Loader requires that the target load libraries highlevel.SHLOLOAD and highlevel.SPECLOAD 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.SPECLOAD 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 IKJTSO00 in SYS1.PARMLIB. For more information on IKJTSO00, 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.

**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.

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 Retention Period field.
The only valid values for the Incremental image copy Mode are "S" for Sort and "M" for Merge.

Explanation: You entered a valid in the Incremental Image Copy Mode field that is not valid.

User response: Enter an "S" to select the Sort method or an "M" to select the Merge method.

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.

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

The valid values for Drain are "W"riters, "A"ll, or "N"o.

Explanation: An invalid value was entered for the Drain field.

User response: Enter a valid value as described in the message text.

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.

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.

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.

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.

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.

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.

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  If Volume Count is specified, it must have a value of 1-255.

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.

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.
<table>
<thead>
<tr>
<th>Error Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>HLO903E</td>
<td>The default GDG base data set name could not be located.</td>
</tr>
<tr>
<td><strong>Explanation:</strong></td>
<td>DB2 Analytics Accelerator Loader could not locate the default GDG base data set name.</td>
</tr>
<tr>
<td><strong>User response:</strong></td>
<td>Verify that you specified a GDG base data set name.</td>
</tr>
<tr>
<td>HLO904E</td>
<td>The specified data set could not be opened for I/O.</td>
</tr>
<tr>
<td><strong>Explanation:</strong></td>
<td>DB2 Analytics Accelerator Loader was unable to open the specified data set for I/O.</td>
</tr>
<tr>
<td><strong>User response:</strong></td>
<td>Verify that you specified the correct data set for processing and ensure it is not currently in use.</td>
</tr>
<tr>
<td>HLO905E</td>
<td>An unexpected return code from VSAM was encountered while doing a read of the control file.</td>
</tr>
<tr>
<td><strong>Explanation:</strong></td>
<td>An internal error occurred.</td>
</tr>
<tr>
<td><strong>User response:</strong></td>
<td>Contact IBM Software Support.</td>
</tr>
<tr>
<td>HLO906I</td>
<td>The control file record for DB2 subsystem subsystem has been successfully updated.</td>
</tr>
<tr>
<td><strong>Explanation:</strong></td>
<td>The specified control file record has been updated successfully.</td>
</tr>
<tr>
<td><strong>User response:</strong></td>
<td>No action is required.</td>
</tr>
<tr>
<td>HLO907E</td>
<td>An unexpected return code from VSAM was encountered while doing an update operation of the control file.</td>
</tr>
<tr>
<td><strong>Explanation:</strong></td>
<td>An internal error occurred.</td>
</tr>
<tr>
<td><strong>User response:</strong></td>
<td>Contact IBM Software Support.</td>
</tr>
<tr>
<td>HLO908I</td>
<td>The control file record for DB2 subsystem subsystem has been successfully added.</td>
</tr>
<tr>
<td><strong>Explanation:</strong></td>
<td>The specified control file record has been added successfully.</td>
</tr>
<tr>
<td><strong>User response:</strong></td>
<td>No action is required.</td>
</tr>
<tr>
<td>HLO909E</td>
<td>Invalid value. Valid values are 1, 2, and 3.</td>
</tr>
<tr>
<td><strong>Explanation:</strong></td>
<td>The value you entered was invalid.</td>
</tr>
<tr>
<td><strong>User response:</strong></td>
<td>Enter the appropriate option (1, 2, or 3).</td>
</tr>
<tr>
<td>HLO910E</td>
<td>An unexpected return code from VSAM was encountered while doing an add operation to the control file.</td>
</tr>
<tr>
<td><strong>Explanation:</strong></td>
<td>An internal error occurred.</td>
</tr>
<tr>
<td><strong>User response:</strong></td>
<td>Contact IBM Software Support.</td>
</tr>
<tr>
<td>HLO911E</td>
<td>The only valid dataset types at this time are &quot;B&quot;asic and &quot;L&quot;arge.</td>
</tr>
<tr>
<td><strong>Explanation:</strong></td>
<td>You specified an invalid data set type.</td>
</tr>
<tr>
<td><strong>User response:</strong></td>
<td>Specify a valid value of either B (basic) or L (large) for the data set type.</td>
</tr>
<tr>
<td>HLO912E</td>
<td>The &quot;L&quot;arge option is only supported on z/OS V1.7 or higher.</td>
</tr>
<tr>
<td><strong>Explanation:</strong></td>
<td>You specified a data set type of L (large) but your z/OS level is not V1.7 or higher.</td>
</tr>
<tr>
<td><strong>User response:</strong></td>
<td>Specify a data set type of B (basic).</td>
</tr>
<tr>
<td>HLO912I</td>
<td>The requested find string was not found.</td>
</tr>
<tr>
<td><strong>Explanation:</strong></td>
<td>The string specified in the (F)IND command was not found.</td>
</tr>
<tr>
<td><strong>User response:</strong></td>
<td>No action is required.</td>
</tr>
<tr>
<td>HLO939E</td>
<td>The only valid values are &quot;T&quot; for tracks and &quot;C&quot; for cylinders.</td>
</tr>
<tr>
<td><strong>Explanation:</strong></td>
<td>The value you entered is not valid.</td>
</tr>
<tr>
<td><strong>User response:</strong></td>
<td>Enter T for tracks or C for cylinders.</td>
</tr>
<tr>
<td>HLO940E</td>
<td>The specified data set could not be found in the MVS catalog.</td>
</tr>
<tr>
<td><strong>Explanation:</strong></td>
<td>The data set could not be found.</td>
</tr>
<tr>
<td><strong>User response:</strong></td>
<td>Verify that the data set you specified is correct.</td>
</tr>
<tr>
<td>HLO941E</td>
<td>The quantity fields must be numeric and within the specified range.</td>
</tr>
<tr>
<td><strong>Explanation:</strong></td>
<td>You entered non-numeric values in the quantity fields.</td>
</tr>
<tr>
<td><strong>User response:</strong></td>
<td>Enter numeric values in the quantity fields.</td>
</tr>
<tr>
<td>HLO942E</td>
<td>The Maximum Volumes field is only valid when the device type is a tape device.</td>
</tr>
<tr>
<td><strong>Explanation:</strong></td>
<td>You entered a value in the Maximum Volumes field but this field is not valid because the Device Type you specified is not a tape device.</td>
</tr>
</tbody>
</table>
User response: Remove the value from the Maximum Volumes field or change the Device Type value to a tape device.

HLO943E This value can only be specified when the device type is a disk device.
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.

HLO1001E Could not open the SYSOUT data set 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.
HLO1014I  Database: database  Space: space  Partition: partition

User response:  No action is required.

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 CAxxxx 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 that each CAxxxx DD statement is associated with a SPACE(...) control card group.

HLO1019E  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.

HLO1020I  Each CAxxnnnn 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  The table space table_space is non-partitioned.

Explanation:  Indicates that the table space displayed in the message is non-partitioned.

User response:  No action is required.

HLO1026I  The table space table_space contains n partitions.

Explanation:  Indicates the number of partitions that the table space (displayed in the message) contains.

User response:  No action is required.
HLO1027I  DB2 Analytics Accelerator Loader will process `dataset for tablespace 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.

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.

HLO1043I  Only LOB tablespaces with 4G DSSIZE values are supported at this time.  
Explanation: Support will be added in the future. 
User response: No action is required.

HLO1044I  The attach of program &HLO.#LGAP failed. 
Explanation: An internal error was encountered. 
User response: Contact IBM Software Support.

HLO1045I  An error occurred within the log apply program. 
Explanation: Internal error. 
User response: Contact IBM Software Support.

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.

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  Tape image copy (IC) process required log apply by one task. 
Explanation: The product detected a tape VOLSER usage collision. To avoid an OPEN error, spaces will be processed in one group. 
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.

HLO1054I  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.

HLO1055I  Space #<space_count> sequential distribution used. Group #<group_count>. 
Explanation: Space redistribution was performed by sequential algorithm. 
User response: No action is required.
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.
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 noDB2 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 does not exist in the DB2 catalog.

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  An all parts Consistent Load cannot overlap a single part Consistent Load for the same object. The two objects are:
Explanation: There is an error in your JCL.
User response: Correct the syntax and resubmit the job.
<table>
<thead>
<tr>
<th>Error Code</th>
<th>Message Description</th>
<th>Explanation</th>
<th>User Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>HLO1142E</td>
<td>The DATABASE keyword has already been coded for this space group.</td>
<td>You specified the DATABASE parameter more than once for the SPACE group.</td>
<td>Correct the JCL and resubmit the job.</td>
</tr>
<tr>
<td>HLO1143E</td>
<td>The SPACE_NAME keyword has already been coded for this space group.</td>
<td>You specified the SPACE_NAME parameter more than once for the SPACE group.</td>
<td>Correct the JCL and resubmit the job.</td>
</tr>
<tr>
<td>HLO1144E</td>
<td>The PARTITION keyword has already been coded for this space group.</td>
<td>You specified the PARTITION parameter more than once for the SPACE group.</td>
<td>Correct the JCL and resubmit the job.</td>
</tr>
<tr>
<td>HLO1145E</td>
<td>The END_RBA keyword has already been coded for this space group.</td>
<td>You can only specify the END_RBA once for each SPACE group.</td>
<td>Correct the DB2 Analytics Accelerator Loader JCL and resubmit the job.</td>
</tr>
<tr>
<td>HLO1146E</td>
<td>The END_LSRN keyword has already been coded for this space group.</td>
<td>You specified the END_LSRN parameter more than once for the SPACE group.</td>
<td>Specify the END_LSRN parameter at most once in the JCL and resubmit the job.</td>
</tr>
<tr>
<td>HLO1147E</td>
<td>The TO_CURRENT keyword has already been coded for this space group.</td>
<td>You specified the TO_CURRENT keyword more than once for the SPACE group.</td>
<td>Correct the JCL and resubmit the job.</td>
</tr>
<tr>
<td>HLO1148E</td>
<td>The TO_QUIESCE keyword has already been coded for this space group.</td>
<td>You specified the TO_QUIESCE parameter more than once for the SPACE group.</td>
<td>Correct the JCL and resubmit the job.</td>
</tr>
<tr>
<td>HLO1149E</td>
<td>The STARTING_IC keyword has already been coded for this space group.</td>
<td>You specified the STARTING_IC parameter more than once for the SPACE group.</td>
<td>Evaluate the message as necessary.</td>
</tr>
<tr>
<td>HLO1150E</td>
<td>The MINI_LOG_DSN_2 keyword has already been coded for this run.</td>
<td>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.</td>
<td>Remove the extra MINI_LOG_DSN_2 keywords, leaving at most one.</td>
</tr>
<tr>
<td>HLO1151E</td>
<td>The NO_SYSCOPY_ROW keyword has already been coded for this run.</td>
<td>You specified the NO_SYSCOPY_ROW parameter more than once for the job.</td>
<td>Correct the JCL and resubmit the job.</td>
</tr>
<tr>
<td>HLO1152E</td>
<td>The RECOVERY_SITE keyword has already been coded for this run.</td>
<td>You specified the RECOVERY_SITE parameter more than once for the job.</td>
<td>Correct the JCL and resubmit the job.</td>
</tr>
<tr>
<td>HLO1153E</td>
<td>The LOCAL_SITE keyword has already been coded for this run.</td>
<td>You specified the LOCAL_SITE parameter more than once for the job.</td>
<td>Correct the JCL and resubmit the job.</td>
</tr>
<tr>
<td>HLO1154E</td>
<td>The SPACE(...) set involved that the error was detected in was #.</td>
<td>This message indicates the SPACE set number for which the error was detected.</td>
<td>Correct the JCL and resubmit the job.</td>
</tr>
<tr>
<td>HLO1155I</td>
<td>Control card stream processed by Consistent Load follows...</td>
<td>Indicates the control card stream that was processed by DB2 Analytics Accelerator Loader.</td>
<td>No action is required.</td>
</tr>
<tr>
<td>HLO1156I</td>
<td>Consistent Load processing messages follow...</td>
<td>Indicates that there are DB2 Analytics Accelerator Loader messages that follow.</td>
<td></td>
</tr>
</tbody>
</table>
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.

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.

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.

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.

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.

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.

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.

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.

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.

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.

Operations on the DB2 Catalog table space DSNDDB06.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.

Control cards for SPACE() group cannot refer to both indexes and tables.

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).

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.
**HLO1171E • HLO1182E**

**User response:** Specify a value for the index creator parameter.

**EXPLANATION:**

**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_NAME keyword has already been coded for this space group.

**Explanation:** You specified multiple CREATOR_NAME keywords for a space group. You can only specify the CREATOR_NAME keyword once for the space group.

**User response:** Remove all extra CREATOR_NAME 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 INDEX_NAME keyword has already been coded for this space group.

**Explanation:** The INDEX_NAME keyword was specified more than once for the space group.

**User response:** Remove all unnecessary INDEX_NAME keywords from the space group. Only one INDEX_NAME keyword can be specified for the group.

---

**HLO1176E** The index index was not found in the DB2 catalog.

**Explanation:** The index indicated in the message was not found in the DB2 catalog. Processing cannot proceed for the indicated index.

**User response:** No action is required.

---

**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** Error index space <DBNAME>.<SPNAME> Part <NUMB> does not 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.

---

**HLO1179I** The index index does not exist in the DB2 catalog.

**Explanation:** The index indicated in the message was not found in the DB2 catalog. Processing cannot proceed for the indicated index.

**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.
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.

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.

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.

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.

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.

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.

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.

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

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 SPACE0 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.
- 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.

**HLO1209E** Accelerator Loader is not in an APF authorized library. 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.

**HLO1210E** 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.

**HLO1211E** 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.

**HLO1212E** An internal error occurred 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.

**HLO1301I** 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.

HLO1401I  Incremental image copy *image_copy* could not be deallocated.

**Explanation:** Indicates the incremental image copy that could not be deallocated.

**User response:** No action is required.

HLO1402E  The desired incremental image copy could not be allocated.

**Explanation:** DB2 Analytics Accelerator Loader could not allocate the incremental image copy you specified.

**User response:** Verify that the file is not in use.

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 Accelerator Loader will process the following incremental image copy file(s): 
Explanation: This message indicates the incremental image copy files that will be processed by DB2 Analytics Accelerator Loader.
User response: No action is required.

HLO1417E For table space: `table_space` PART `part`
Explanation: This message is issued in association with HLO1416I and indicates the table space and partition to which HLO1416I applies.
User response: No action is required.

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.

HLO1501I 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 The start point for log processing was not within any archive/active log range.
Explanation: The start point you defined in your JCL was not within any existing archive/active log ranges.
User response: Specify a valid start point for log processing.

HLO1508I 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.

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 for more information.

HLO1512E An unexpected error occurred while trying to read the bootstrap dataset.
Explanation: Accelerator Loader was unable to read the bootstrap dataset.
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.

HLO1517I  All start points are Sharelevel Reference; checkpoint processing skipped.

Explanation:   This informational messages indicates that checkpoint processing has been skipped since all start points are Sharelevel Reference.
User response:  No action is required.

HLO1518I  Reading type dsn

Explanation:   The message displays the type (archive or active) and data set name of the archive or active log data set being processed.
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.

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.

**HLO1700I** An invalid return code was detected from the SORT program (data sharing).

**Explanation:** A data sharing problem has occurred.

**User response:** Verify that you have properly configured the data sharing information in DB2 Analytics Accelerator Loader setup.

**HLO1701I** The following log data set is required for processing, but was not found: *data_set*.

**Explanation:** Processing could not proceed because a required log data set could not be found.

**User response:** Verify that the log data set was specified correctly and exists.

**HLO1702I** A gap was found in the logs needed for processing. Last usable log was: *data_set*.

**Explanation:** A gap found in the logs required for processing was found. Logs after the gap were not usable. Subsequent message HLO1703I indicates the log data set name of the last usable log.

**User response:** Correct the problem with the logs and resubmit the Accelerator Loader job.

**HLO1703I** dsn

**Explanation:** This message accompanies HLO1702I and indicates the log data set name that was last usable.

**User response:** No action is required.

**HLO1704I** An error was detected during end log processing for subsystem *subsystem* RC=rc.

**Explanation:** An internal error occurred.

**User response:** Contact IBM Software Support.

**HLO1705I** 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 currently in use or damaged.

**HLO1706I** 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 that holds the log records as input to sort.

**User response:** Verify that the file is not currently in use or damaged.

**HLO1707I** 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.

**HLO1708I** The start point for reading log records was not within any archive/active log.

**Explanation:** DB2 Analytics Accelerator Loader could not find any log records to process for this member of the data sharing group. This does not mean that there are no log records generated for the spaces being processed. Instead, it means that this particular member ID—being processed as indicated by a prior HLO1709I message, ‘HLO is now processing subsystem xxxx’—has no log records to participate in the merge process. The other members in the data sharing group may have log records.
Note: HLO1708I messages always refers to the most recent HLO1709I message.

User response: No action is required.

HLO1709I Log accumulate processing is beginning on subsystem subsystem.

Explanation: This message indicates that the log accumulate processing has started on the subsystem.

User response: No action is required.

HLO1710I The log apply process will begin at LRSN: X'lrstn".

Explanation: This message indicates that the log apply process will begin at the specified LRSN.

User response: No action is required.

HLO1711I The sort of the data sharing log records was successful.

Explanation: This message indicates that the sort of the data sharing log records completed successfully.

User response: No action is required.

HLO1712I The sort of the data sharing log records was not necessary.

Explanation: This message indicates that the sort of the data sharing log was unnecessary.

User response: No action is required.

HLO1713I An unexpected error occurred while trying to read the bootstrap data set.

Explanation: An unexpected error occurred.

User response: Contact IBM Software Support.

HLO1714I The load module HLO@LOGR could not be found.

Explanation: A load module could not be found.

User response: Verify that the necessary load modules are available.

HLO1715I Error code #1code #2code.

Explanation: An internal error has occurred.

User response: Contact IBM Software Support.

HLO1716I An unexpected error occurred while trying to read the ZPARM information.

Explanation: An unexpected error was encountered.

User response: Contact IBM Software Support.

HLO1717I Dynamic allocation return code = 're'.

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.

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 re-keyed LOAD inline full image copy file was successful.
Explanation:  This message indicates that the re-keyed 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.

HLO1900I  Log range LRSN X'lnsn' to X'lnsn' 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'rba' to X'rba' is being processed.
Explanation:  Indicates the log range that is being processed by DB2 Analytics Accelerator Loader.
User response:  No action is required.

HLO2000I  The output fill 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.
<table>
<thead>
<tr>
<th>Error Code</th>
<th>Message Description</th>
<th>Explanation</th>
<th>User Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>HLO2001E</td>
<td>The sorted incremental page file could not be opened.</td>
<td>DB2 Analytics Accelerator Loader could not open the sorted incremental page file.</td>
<td>Verify that the file is not in use or damaged.</td>
</tr>
<tr>
<td>HLO2002E</td>
<td>The sorted log record file could not be opened.</td>
<td>The sorted log file record was not available and could not be opened.</td>
<td>Verify that the file is not in use and that you have the proper authority to access this file.</td>
</tr>
<tr>
<td>HLO2004I</td>
<td>The number of pages in the full image copy is inconsistent with the page size.</td>
<td>The page size you specified is not consistent with the number of pages in the full image copy.</td>
<td>Correct the page size specified and resubmit the job.</td>
</tr>
<tr>
<td>HLO2005E</td>
<td>The number of pages in the incr. image copy is inconsistent with the page size.</td>
<td>The page size you specified is not consistent with the number of pages in the incremental image copy.</td>
<td>Correct the number of pages specified and resubmit the job.</td>
</tr>
<tr>
<td>HLO2006E</td>
<td>An unexpected EOF was encountered on the sorted log records file.</td>
<td>An unexpected end of file was encountered.</td>
<td>Contact IBM Software Support.</td>
</tr>
<tr>
<td>HLO2007E</td>
<td>The selected full IC has a DBID/PSID mismatch to the DB2 catalog.</td>
<td>The DBID/PSID for the selected full image copy does not match those in the DB2 catalog.</td>
<td>Correct the DBID/PSID for the selected full image copy.</td>
</tr>
<tr>
<td>HLO2008I</td>
<td>Number of pages read from the full image copy file(s)=n.</td>
<td>This informational message indicates the number of pages that were read from the full image copy files.</td>
<td>No action is required.</td>
</tr>
<tr>
<td>HLO2009I</td>
<td>Number of pages read from the incremental image copy file(s)=n.</td>
<td>This informational message indicates the number of pages that were read from the incremental image copy data set(s).</td>
<td>No action is required.</td>
</tr>
<tr>
<td>HLO2010I</td>
<td>Number of records read from the log apply file=n.</td>
<td>This informational message indicates the number of pages that were read from the log apply file.</td>
<td>No action is required.</td>
</tr>
<tr>
<td>HLO2011I</td>
<td>Number of pages written to the new full image copy file(s)=n.</td>
<td>This informational message indicates the number of pages that were written to the new full image copy data set(s).</td>
<td>No action is required.</td>
</tr>
<tr>
<td>HLO2012I</td>
<td>Number of pages written to the table/index space file(s)=n.</td>
<td>Indicates the number of pages written to the table/index space files</td>
<td>No action is required.</td>
</tr>
<tr>
<td>HLO2013I</td>
<td>Since no changes were found for this data set, it has been deleted: dsn</td>
<td>This message appears during dynamic allocation of an output image copy dataset and no output was written to that dataset. It is similar to the other message that is reported when no output is written to an output image copy data set in JCL.</td>
<td>No action is required.</td>
</tr>
<tr>
<td>HLO2014E</td>
<td>Will proceed to be processed anyways due to control card FORCE_COPIES.</td>
<td>This informational message indicates that DB2 Analytics Accelerator Loader processing will continue due to the specification of the FORCE_COPIES control card.</td>
<td>No action is required.</td>
</tr>
</tbody>
</table>
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.

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/O 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=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 want an image copy produced, specify FORCE_COPIES N.

HLO2025E  The SYSIN DD could not be allocated during WRITE_TO_VSAM processing.
Explanation:  DB2 Analytics Accelerator Loader was unable to allocate the SYSIN DD during WRITE_TO_VSAM processing.
User response:  No action is required.

HLO2026E  The SYSIN DD could not be opened for output during WRITE_TO_VSAM processing.
Explanation:  DB2 Analytics Accelerator Loader was unable to open the SYSIN DD during WRITE_TO_VSAM processing.
User response:  No action is required.

HLO2027E  Open error code =
Explanation:  This message displays the open error code.
User response:  No action is required.
HLO2028E  The SYSPRINT DD could not be allocated during WRITE_TO_VSAM processing.

Explanation: DB2 Analytics Accelerator Loader was unable to allocate the SYSPRINT DD during WRITE_TO_VSAM processing.

User response: No action is required.

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  The attempt to recreate the underlying VSAM data set returned an error.

Explanation: DB2 Analytics Accelerator Loader was unable to output to the VSAM file specified in your DB2 Analytics Accelerator Loader job.

User response: Refer to message HLO2031I 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).

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 dataset. If this subsequent code can't find the data set just written and closed, the error occurs.

User response: Contact IBM Software Support.

HLO2056I Could not use XLAT_DSN <DSN> for <XLAT_TARGET>.

Explanation: XLAT_VSAM was specified but XLAT_DSN <DSN> is not a VSAM data set.

User response: Specify the correct VSAM data set.

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: No action is required.
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.

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.

XLAT_DSN &lt;DSN&gt; will be used for &lt;XLAT_TARGET&gt;

Explanation: XLAT_DSN &lt;DSN&gt; 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.

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.

The space space resulted in the error condition.

Explanation: Generic message that follows many other error messages.

User response: No action is required.

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.

An XML update job is needed, but the XML output DSN is missing.

Explanation: The XML output DSN was not specified.

User response: Specify the XML output DSN.

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.

The XML template dataset could not be allocated.

Explanation: Unable to allocate the needed DSN.

User response: Make sure the DSN exists and is accessible.

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.

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.

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.

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.

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/TName
control cards are missing.
Explanation: Missing control cards in the Space(...) set.
User response: Correct the syntax.

HLO2083E  The XML target SSID/DBname/TName
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.

HLO2091E  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.

HLO2096I  Could not use XLAT_DSN <DSN> for
XLAT_COPY
Explanation: XLAT_COPY was specified but
XLAT_DSN <DSN> is a VSAM data set.
User response: Specify the correct XLAT_COPY data
set.

HLO2098E  The attempt to delete the underlying
VSAM data set returned an error.
Explanation: IDCAMS DELETE service returned an
error.
User response: Check the IDCAMS output and correct
the problem.

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 ICBackup

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: LRSN/RBA: X" ( )

Explanation: This message, in conjunction with messages HLO2100, HLO2101, or HLO2102I, indicates the data set name affected by the condition described in the associated message.

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 DB2 Analytics Accelerator Loader processing, there was no reason to output the new data set (no log records, no incremental). 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 unit (X' device_code' ) DSN: dsn Sequence label#

Explanation: When the catalog attempt against a tape data set is successful, this message will be displayed. The unit is the actual 8 character device the dataset was created on. The device_code is a 4-byte hexadecimal number that represents the internal MVS device designation. The dsn is the dataset name cataloged. The label# is the file sequence number of the dataset on the stacked tape. The volders 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'00' End LRSN/RBA: X'00'
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.

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.

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.
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.

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(tsnname) 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 'STOP' 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.

HLO2609E  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 IC_** group (where ** is LP, LB, RP or RB).
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 value you specify 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 ICDEVICE parameter was specified, but no value was found with it.
Explanation: You specified the ICDEVICE parameter but did not specify a corresponding value. The ICDEVICE parameter requires that you specify a device name (up to 8-characters).
User response: Specify a 1-8 character device name with the ICDEVICE parameter or remove the optional ICDEVICE parameter.

HLO2629E The ICDEVICE keyword has already been coded.
Explanation: You specified the ICDEVICE 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 ICDEVICE parameter specified is invalid.
Explanation: The ICDEVICE parameter syntax contains an error.
User response: Verify that you have properly defined the ICDEVICE parameter and corresponding value. The ICDEVICE control card accepts a 1-8 character device name value.

HLO2631E The ICSPACE parameter was specified, but no value was found with it.
Explanation: You specified the ICSPACE parameter but did not specify a corresponding value. The ICSPACE parameter requires that you specify a space name.
User response: Specify a space name with the ICSPACE parameter or remove the optional ICSPACE parameter.

HLO2632E The ICSPACE keyword has already been coded.
Explanation: You specified the ICSPACE 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 ICSPACE parameter specified is invalid.
Explanation: The ICSPACE parameter syntax contains an error.
User response: Verify that you have properly defined
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.

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.

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.

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.

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.

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.

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.

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.

The IC_STOR_CLASS parameter specified is invalid.

**Explanation:** The IC_STOR_CLASS parameter syntax contains an error.

**User response:** Verify that you have properly defined the IC_STOR_CLASS parameter and corresponding value.

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.

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.

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.
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 parameter 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_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.
<table>
<thead>
<tr>
<th>Error Code</th>
<th>Description</th>
<th>Explanation</th>
<th>User Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>HLO2671E</td>
<td>The REPAIR_RECOVER_PENDING keyword has already been coded.</td>
<td>You specified the REPAIR_RECOVER_PENDING keyword more than once.</td>
<td>Correct the JCL and resubmit the job.</td>
</tr>
<tr>
<td>HLO2672I</td>
<td>The REPAIR_RECOVER_PENDING keyword is ignored when only writing to copies.</td>
<td>The REPAIR_RECOVER_PENDING keyword is specified but this parameter is ignored when writing to copies.</td>
<td>Correct the JCL and resubmit the job.</td>
</tr>
<tr>
<td>HLO2673E</td>
<td>The OBIDXLAT keyword group has already been coded.</td>
<td>You specified the OBIDXLAT keyword more than once.</td>
<td>Correct the JCL and resubmit the job.</td>
</tr>
<tr>
<td>HLO2675E</td>
<td>Invalid OBIDXLAT(...) keyword syntax.</td>
<td>The OBIDXLAT syntax you specified is not valid.</td>
<td>Correct the OBIDXLAT syntax and resubmit the job.</td>
</tr>
<tr>
<td>HLO2676E</td>
<td>The XLAT_IN_DSN keyword has already been coded.</td>
<td>You specified the XLAT_IN_DSN keyword more than once.</td>
<td>Correct the JCL and resubmit the job.</td>
</tr>
<tr>
<td>HLO2677E</td>
<td>Invalid XLAT_IN_DSN syntax.</td>
<td>The XLAT_IN_DSN syntax you specified is not valid.</td>
<td>Correct the XLAT_IN_DSN syntax and resubmit the job.</td>
</tr>
<tr>
<td>HLO2678E</td>
<td>The XLAT_IN_DSN parameter was specified, but no value was found with it.</td>
<td>The XLAT_IN_DSN parameter requires that a dsn value be specified with it.</td>
<td>Specify a dsn with the XLAT_IN_DSN parameter.</td>
</tr>
<tr>
<td>HLO2679E</td>
<td>Invalid OBID syntax.</td>
<td>The OBID syntax you specified is not valid.</td>
<td>OBID syntax is of the form OBID 'obid,obid'.</td>
</tr>
<tr>
<td>HLO2680E</td>
<td>The OBID parameter was specified, but no value was found with it.</td>
<td>The OBID parameter requires that you specify with it an obid pair.</td>
<td>OBID syntax is of the form OBID 'obid,obid'.</td>
</tr>
<tr>
<td>HLO2681E</td>
<td>The OBID parameter was specified, but one of the subparms was out of range.</td>
<td>The OBID subparameter you specified was out of range.</td>
<td>Verify that you specified the correct OBID pair.</td>
</tr>
<tr>
<td>HLO2692E</td>
<td>The DBID keyword has already been coded.</td>
<td>The DBID keyword group has already been coded.</td>
<td>Correct the JCL and resubmit the job.</td>
</tr>
<tr>
<td>HLO2693E</td>
<td>Invalid DBID syntax.</td>
<td>The DBID syntax you specified is not valid.</td>
<td>Correct the DBID syntax and resubmit the job.</td>
</tr>
<tr>
<td>HLO2694E</td>
<td>The DBID parameter was specified, but no value was found with it.</td>
<td>The DBID parameter requires that a source and target DBID pair be specified with it.</td>
<td>Correct the DBID syntax and resubmit the job.</td>
</tr>
</tbody>
</table>
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.

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.

HLO2800I The log record sort record write service program could not be started.
Explanation: An internal error has occurred.
User response: Contact IBM Software Support.

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 | 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: 'lrsn'. |
| Explanation: | The message indicates the LRSN value at which the log apply process will begin. |
| User response: | No action is required. |

| HLO2808I | The end point for dbname.tsnme did no 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. |

| HLO2808I | The SPACE(...) set involved that the error was detected in was mmm. |
| Explanation: | Indicates the SPACE set involved in the error. |
| User response: | No action is required. |

| HLO2810I | 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. |

| HLO2811I | The log reader process will launch a total of mnnn tasks. |
| Explanation: | This message indicates the total number of tasks that will be launched. |
| 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 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.

**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 afterwards, waiting for the recover pending flag to be removed by DB2. After checking 5 times in 15 seconds, the space was still in recover pending status. Remove the status manually.

**HLO3002E** An attempt to Repair the Recover Pending status failed.
Explanation: The JCL specified 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 in the setup screens are not complete. When DSNUTILB attempted to use this concatenation, needed load modules were not found. 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: Ensure 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 needs to be allocated to hold the DB2 command processor's output stream. The data set could not be allocated. Check the setup screen work data set configuration for errors.

HLO3006E Dynamic allocation return code = return_code

Explanation: This message indicates 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: After the SYSIN file is allocated, commands are written to it. This operation failed. Check the setup screen work data set configuration for errors.

HLO3008E Open error code=error_code

Explanation: This message indicates the open error code encountered when attempting to open the SYSIN DD.

User response: No action is required.

HLO3009E The Repair operation's SYSPRINT data set 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. The data set could not be allocated. Check the setup screen work data set configuration for errors.

HLO3100I Truncation error displaying panel in HLO$MAIN - ROUTCDE=rc

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 - ROUTCDE=rc

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 ROUTCDE=rc

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.

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: You must specify a VSAM LDS name or pre-existing sequential file with the XLAT_IN_DSN parameter.

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: You must specify the RBA/LRSN of the full image copy data set with the XLAT_IN_LOGPOINT parameter.

HLO3207E Syntax error around XLAT_IN_LOGPOINT value. Form is X"6–byte-hex-value".

Explanation: There is an error in the XLAT_IN_LOGPOINT syntax.

User response: Specify a logpoint with the XLAT_IN_LOGPOINT parameter in the form X"6–byte-hex-value".

HLO3208E The XLAT_IN_LOGPOINT value contains an invalid hexadecimal value.

Explanation: There is an error in the XLAT_IN_LOGPOINT syntax.

User response: Specify a logpoint with the XLAT_IN_LOGPOINT parameter in the form X"6–byte-hex-value".

HLO3209E The XLAT_IN_LOGPOINT value cannot be 0.

Explanation: There is an error in the XLAT_IN_LOGPOINT syntax. The value cannot be 0.

User response: Specify a logpoint with the XLAT_IN_LOGPOINT parameter in the form X"6–byte-hex-value".

HLO3210E The XLAT_IN_LOGPOINT keyword was already specified.

Explanation: You specified the XLAT_IN_LOGPOINT keyword more than once.

User response: Remove the extra occurrences of the XLAT_IN_LOGPOINT keyword.

HLO3211E The INCR_IN_LOGPOINT parameter was specified, but no value was found with it.

Explanation: You must specify the RBA/LRSN for the incremental DSN with the INCR_IN_LOGPOINT parameter.

User response: Correct the syntax to include the RBA/LRSN for the incremental DSN with the INCR_IN_LOGPOINT parameter.

HLO3212E The INCR_IN_DSN keyword has already been coded.

Explanation: You specified the INCR_IN_DSN keyword more than once.

User response: Remove the extra occurrences of the INCR_IN_DSN keyword.
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 INCR_IN_DSN syntax and resubmit the job.

HLO3214E  The INCR_IN_DSN parameter was specified, but no value was found with it.
Explanation:  The INCR_IN_DSN parameter was specified, but no value was found with it. 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 INCR_IN_DSN syntax 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:  Remove the extra occurrences of the INCR_IN_LOGPOINT keyword.

HLO3216E  Syntax error around INCR_IN_LOGPOINT value. Form is X"6-byte-hex-value".
Explanation:  The INCR_IN_LOGPOINT syntax you specified is not valid. Valid syntax is INCR_IN_LOGPOINT X"6-byte-hex-value".
User response:  Correct the syntax and resubmit the job.

HLO3217E  The INCR_IN_LOGPOINT value contains an invalid hexadecimal value.
Explanation:  Verify that the hexadecimal value you specified with the INCR_IN_LOGPOINT keyword is valid.
User response:  Correct the value you specified with the INCR_IN_LOGPOINT keyword.

HLO3218E  The INCR_IN_LOGPOINT value cannot be 0.
Explanation:  The value specified for the INCR_IN_LOGPOINT keyword cannot be 0.
User response:  Specify a valid value for the INCR_IN_LOGPOINT keyword.

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 must be specified together.
User response:  Correct the XLAT_INCREMENTAL syntax 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 XLAT_INCREMENTAL keyword has no subparms. They are required.
Explanation:  You must specify an INCR_IN_DSN and INCR_IN_LOGPOINT for the XLAT_INCREMENTAL syntax.
User response:  Correct the XLAT_INCREMENTAL syntax and resubmit the job.

HLO3222E  Invalid XLAT_INCREMENTAL(...) keyword syntax.
Explanation:  The XLAT_INCREMENTAL syntax you specified is not valid.
User response:  Check the syntax and resubmit the job.

HLO3223E  Using OBIDXLAT incremental image copies requires a starting full image copy.
Explanation:  The OBIDXLAT syntax is not correct.
User response:  Check the syntax and resubmit the job.

HLO3224E  The IC_VOLUME_COUNT parameter was specified, but no value was found with it.
Explanation:  You must specify a value with the IC_VOLUME_COUNT parameter. Valid values are in the range of 1 to 255 or the control card is left out, it defaults to the system default.
User response:  Correct the JCL and resubmit the job.

HLO3225E  The IC_VOLUME_COUNT parameter has already been coded.
Explanation:  You specified the IC_VOLUME_COUNT keyword more than once.
User response:  Correct the JCL and resubmit the job.
<table>
<thead>
<tr>
<th>HLO3227E</th>
<th>The IC_VOLUME_COUNT parameter specified is invalid.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Explanation:</strong></td>
<td>The value specified with the IC_VOLUME_COUNT parameter is not valid. The value you specify with the IC_VOLUME_COUNT parameter is the maximum number of volumes that can be used for the Accelerator Loader Image Copy data sets. Valid values are in the range of 1 to 255 or the control card is left out, it defaults to the system default.</td>
</tr>
<tr>
<td><strong>User response:</strong></td>
<td>Correct the IC_VOLUME_COUNT value.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>HLO3228E</th>
<th>The IC_LP keyword group has already been coded for this space group.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Explanation:</strong></td>
<td>You specified the IC_LP keyword more than once in the space group.</td>
</tr>
<tr>
<td><strong>User response:</strong></td>
<td>Correct the JCL and resubmit the job.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>HLO3229E</th>
<th>The IC_LB keyword group has already been coded for this space group.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Explanation:</strong></td>
<td>You specified the IC_LB keyword more than once in the space group.</td>
</tr>
<tr>
<td><strong>User response:</strong></td>
<td>Correct the JCL and resubmit the job.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>HLO3230E</th>
<th>The IC_RP keyword group has already been coded for this space group.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Explanation:</strong></td>
<td>You specified the IC_RP keyword more than once in the space group.</td>
</tr>
<tr>
<td><strong>User response:</strong></td>
<td>Correct the JCL and resubmit the job.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>HLO3231E</th>
<th>The IC_RB keyword group has already been coded for this space group.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Explanation:</strong></td>
<td>You specified the IC_RB keyword more than once in the space group.</td>
</tr>
<tr>
<td><strong>User response:</strong></td>
<td>Correct the JCL and resubmit the job.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>HLO3232E</th>
<th>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.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Explanation:</strong></td>
<td>The mini log data sets are in the MVS catalog but not in the mini log control table.</td>
</tr>
<tr>
<td><strong>User response:</strong></td>
<td>Remove unusable mini log data sets from the MVS catalog.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>HLO3233E</th>
<th>Mini log data set dsn has mismatched type in the HLO mini log control table.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Explanation:</strong></td>
<td>You attempted to append the mini log with wrong type of data.</td>
</tr>
<tr>
<td><strong>User response:</strong></td>
<td>Specify the mini log DSN at the appropriate GROUP or SPACE level.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>HLO3234E</th>
<th>Only one of two mini log data set name is found in the mini log control table.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Explanation:</strong></td>
<td>You specified two mini log data set names but only one of the pair is found in the mini log control table.</td>
</tr>
<tr>
<td><strong>User response:</strong></td>
<td>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.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>HLO3235E</th>
<th>Mini log DSN dsn is not appended because corresponding dataset not found in the MVS catalog.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Explanation:</strong></td>
<td>The specified mini log data set cannot be found in the MVS catalog.</td>
</tr>
<tr>
<td><strong>User response:</strong></td>
<td>Remove any rows with incorrect data set names from the DB2 Analytics Accelerator Loader mini log control table.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>HLO3236E</th>
<th>Mini log data set dsn contains data for the different tablespace and could not be appended.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Explanation:</strong></td>
<td>The data set contains data for a different table space and could not be appended.</td>
</tr>
<tr>
<td><strong>User response:</strong></td>
<td>Verify that you have specified the correct mini log data set name has used for this object before.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>HLO3237E</th>
<th>The XLAT_TARGET_SSID keyword has already been coded.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Explanation:</strong></td>
<td>The XLAT_TARGET_SSID keyword was already been coded.</td>
</tr>
<tr>
<td><strong>User response:</strong></td>
<td>Correct the JCL and resubmit the job.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>HLO3238E</th>
<th>Invalid XLAT_TARGET_SSID syntax.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Explanation:</strong></td>
<td>The XLAT_TARGET_SSID syntax is not valid.</td>
</tr>
<tr>
<td><strong>User response:</strong></td>
<td>Correct the XLAT_TARGET_SSID syntax.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>HLO3239E</th>
<th>The XLAT_TARGET_SSID parameter was specified, but no value was found with it.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Explanation:</strong></td>
<td>You must specify a valid value with the XLAT_TARGET_SSID parameter.</td>
</tr>
<tr>
<td><strong>User response:</strong></td>
<td>Specify a valid value with the XLAT_TARGET_SSID parameter.</td>
</tr>
</tbody>
</table>
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:  

User response:  

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:  Specify a valid value with the XLAT_TARGET_DBNAME parameter.

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 XLAT_TARGET_TSNAME syntax.

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.

User response:  Specify a valid value with the XLAT_TARGET_TSNAME parameter.

HLO3246E  The XLAT_TARGET_SSID/DBNAME/TSNAME must be specified together.

Explanation:  The XLAT_TARGET_SSID/DBNAME/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 already been coded.

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 XML_JOBS_DSN syntax.

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:  Specify a valid value with the XML_JOBS_DSN parameter.

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 XML_JOBS_MEMBER_PFX syntax.

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:  Specify a valid value with the XML_JOBS_MEMBER_PFX parameter.

HLO3253E  The XML_TEMPLATE_DSN keyword has already been coded.

Explanation:  The XML_TEMPLATE_DSN keyword was 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 XML_TEMPLATE_DSN syntax.

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: Specify a valid value with the XML_TEMPLATE_DSN parameter.

HLO3256E The XML_TEMPLATE_MEMBER keyword has already been coded.
Explanation: The XML_TEMPLATE_MEMBER keyword was 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 XML_TEMPLATE_MEMBER syntax.

HLO3258E The XML_TEMPLATE_MEMBER parameter was specified, but no value was found with it.
Explanation: You must specify a valid value with the XML_TEMPLATE_MEMBER parameter.
User response: Specify a valid value with the XML_TEMPLATE_MEMBER parameter.

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 syntax.

HLO3260I 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: None.

HLO3261E OBIDXLAT processing is not allowed.
Explanation: OBIDXLAT is not allowed.
User response: Correct the syntax.

HLO3262E At least one SPACE() control card set is required.
Explanation: No SPACE control card set has been specified.
User response: Specify at least one SPACE control card set.

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: Specify a corresponding value for the PARALLEL keyword.

HLO3264E Invalid PARALLEL value
Explanation: The value for keyword PARALLEL is not valid.
User response: Verify that the value of PARALLEL is numeric and between the values 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.

HLO3265E The PARALLEL keyword has already been coded.
Explanation: The PARALLEL keyword was already been coded.
User response: Correct the JCL and resubmit the job.

HLO3266E Error index space <DBNAME>.<SPNAME> Part <NUMB> have REBUILD_INDEXES specified. Could not find corresponding table space.
Explanation: You specified the REBUILD_INDEXES parameter for an index space, but a parent table space has been not coded.
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 a table space will be not recovered to a VSAM data set and there will be no data to rebuild indexes.
User response: Correct the JCL and resubmit the job.

HLO3268E Error index space
<DBNAME>,<SPNAME> Part
<NUMB>, and table space
<DBNAME>,<SPNAME> Part <NUMB>
have incompatible OBIDXLAT specification.

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 Error index space
<DBNAME>,<SPNAME> Part <NUMB>
have REBUILD_INDEXES and end point conflict specification.

Explanation: You specified the REBUILD_INDEXES parameter and end point for recovery process.

User response: Correct the JCL and resubmit the job.

HLO3270E Error index space
<DBNAME>,<SPNAME> Part <NUMB>
REBUILD_INDEXES state or end point
could not be determined.

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: Specify one of the following required options in your JCL: TO_CURRENT, TO_QUIESCE, END_RBA, END_LRSN, TOLOGPOINT or REBUILD_INDEXES.

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 syntax.

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: Check input cards.

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 syntax.

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 syntax.

HLO3276E The CHECK_AFTER_QUIESCE keyword conflicts with UNIFIED check specified.

Explanation: The CHECK_AFTER_QUIESCE keyword conflicts with UNIFIED check.

User response: Correct the syntax.

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 syntax.

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: Check input cards.

HLO3282E Error token: token has an invalid value: value. Space# number.

Explanation: An invalid value was detected for token.

User response: Check input cards.

HLO3283E Error token: token1 is unexpected with token: token2. Space# number.

Explanation: token1 could not be used when token2 is used.

User response: Check input cards.
HLO3284E  Error token: token1 using require token: token2.
Explanation:  token1 could not be used without token2 specified.
User response:  Check input cards.

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:  Ensure the generated job was not altered.

HLO3403E  An internal error occurred in program HLO#XMLD
Explanation:  Internal error.
User response:  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.

HLO3500I  The XML target SSID/DBname/TSname control cards are invalid.
Explanation:  The control cards do not conform to expected syntax.
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 to open 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.
<table>
<thead>
<tr>
<th>Message Code</th>
<th>Description</th>
<th>Explanation</th>
<th>User Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>HLO3636E</td>
<td>The ACCEL_LOAD_TABLES stored procedure abended.</td>
<td>The call to the ACCEL_LOAD_TABLES stored procedure resulted in an abend.</td>
<td>Contact IBM Software Support.</td>
</tr>
<tr>
<td>HLO3637E</td>
<td>The pipe interface program returned an unknown error.</td>
<td>The call to the ACCEL_LOAD_TABLES stored procedure resulted in an abend.</td>
<td>Contact IBM Software Support.</td>
</tr>
<tr>
<td>HLO3638E</td>
<td>This message provides the following information:</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>SVC99 details = svc99_details</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>SVC99_CODE_1</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>SVC99_CODE_2</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>SVC99_DDNAME ddname</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>SVC99PIPE</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>User response: No action is required.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>HLO3639I</td>
<td>This message provides the DD name.</td>
<td>DDNAME = ddname.</td>
<td>No action is required.</td>
</tr>
<tr>
<td>HLO3640I</td>
<td>This message provides SSID information.</td>
<td>SSID = ssid.</td>
<td>No action is required.</td>
</tr>
<tr>
<td>HLO3641I</td>
<td>This message provides DB2 connection error information.</td>
<td>SSID = ssid Plan name = plan_name.</td>
<td>No action is required.</td>
</tr>
<tr>
<td>HLO3642I</td>
<td>This message provides a return code.</td>
<td>Return code = return_code.</td>
<td>No action is required.</td>
</tr>
<tr>
<td>HLO3643E</td>
<td>This message provides the message identifier and the table ID.</td>
<td>Table information is as follows:</td>
<td></td>
</tr>
<tr>
<td></td>
<td>BAD_TABLE_ID = table_ID</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>BAD_TABLE_TEXT = table_text</td>
<td></td>
<td></td>
</tr>
<tr>
<td>HLO3644E</td>
<td>This message provides table partition information.</td>
<td>Partition information is as follows:</td>
<td>No action is required.</td>
</tr>
<tr>
<td></td>
<td>BAD_TABLE_PART_1 = partition_number.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>HLO3719E</td>
<td>Error control card stream has no continuation.</td>
<td>An end of control card stream was detected but the expression is incomplete.</td>
<td>Check and correct the control cards.</td>
</tr>
<tr>
<td>HLO3720E</td>
<td>Error control card stream have unexpected continuation.</td>
<td>The control card stream process was complete, but a continuation was found.</td>
<td>Check the control cards and remove the continuation.</td>
</tr>
<tr>
<td>HLO3721E</td>
<td>Error control card stream ended unexpectedly.</td>
<td>The control card context expected additional input but found the end of the file instead.</td>
<td>Check for syntax errors.</td>
</tr>
<tr>
<td>HLO3722E</td>
<td>Error control card stream ended while token &lt;TOKEN&gt; value expected.</td>
<td>The control card context expected a value associated with the token but found the end of the file instead.</td>
<td>Check for syntax errors.</td>
</tr>
<tr>
<td>HLO3723E</td>
<td>Consistent Load operations require DB2 V10 or later. This DB2=db2_version.</td>
<td>The attempted operation requires DB2 Version 10 or later.</td>
<td>Verify that your system meets the minimum software requirements. For more information, see the topic about preparing to customize in the product documentation.</td>
</tr>
<tr>
<td>HLO3736E</td>
<td>Error in checking the IDAA name.</td>
<td>DB2 Analytics Accelerator Loader was unable to check the current IDAA name from the DISPLAY ACCELERATOR command output. The command output is displayed in the messages that follow.</td>
<td>Review the command output and correct the problem.</td>
</tr>
</tbody>
</table>
HLO3737E  Error IDAA name invalid state.
Explanation: The IDAA 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 HLO3728I, HLO3729I, HLO3730I.
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.

HLO3744W  Warning table <schema>,<name> state <state> type <type>.
Explanation: Invalid state for <schema>,<name> on accelerator detected.
User response: To resolve, delete and re-add the table to the accelerator.

HLO3745W  Warning table <schema>,<name> part <part_number> state <state> type <type>.
Explanation: Invalid state for <schema>,<name> on accelerator detected.
User response: To resolve, delete and re-add the table to the accelerator.

HLO3746E  Warning table owner.table partition 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 $hlostc or the SDSF command /S $hlostc. The variable $hlostc 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.
<table>
<thead>
<tr>
<th>HLO3749S</th>
<th>The selected DB2 system is not configured for intercepts by the Loader.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Explanation:</strong></td>
<td>DB2 Analytics Accelerator Loader cannot connect to the DB2 system because the DB2 Analytics Accelerator Loader started task is not running.</td>
</tr>
<tr>
<td><strong>User response:</strong></td>
<td>Start the DB2 Analytics Accelerator Loader started task. Issue the z/OS console command $shlostc or the SDSF command /S shlostc. The variable $hlostc 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.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>HLO3754E</th>
<th>Could not find log data set to determine RBA of TO_TIMESTAMP point.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Explanation:</strong></td>
<td>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.</td>
</tr>
<tr>
<td><strong>User response:</strong></td>
<td>Specify a timestamp that is within the boundaries of the logs that are recorded in the BSDS.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>HLO3760E</th>
<th>The TO_IC keyword has already been coded for this space group.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Explanation:</strong></td>
<td>The space specification set contains duplicate keywords.</td>
</tr>
<tr>
<td><strong>User response:</strong></td>
<td>Correct the syntax.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>HLO3761E</th>
<th>The TO_IC value has no contents.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Explanation:</strong></td>
<td>A syntax error was found in the control card. The data set name is required.</td>
</tr>
<tr>
<td><strong>User response:</strong></td>
<td>Correct the syntax.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>HLO3762E</th>
<th>The TO_IC parameter specified is invalid.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Explanation:</strong></td>
<td>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.</td>
</tr>
<tr>
<td><strong>User response:</strong></td>
<td>Correct the syntax.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>HLO3763E</th>
<th>The selected end point is inconsistent with the run type.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Explanation:</strong></td>
<td>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.</td>
</tr>
<tr>
<td><strong>User response:</strong></td>
<td>Check the run type for consistency.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>HLO3764E</th>
<th>The TO_IC_INLINE control card has already been specified for this object.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Explanation:</strong></td>
<td>A duplicate control card was found in the object specification.</td>
</tr>
<tr>
<td><strong>User response:</strong></td>
<td>Correct the syntax.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>HLO3765E</th>
<th>The DBID, PSID, and at least one OBID must be specified.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Explanation:</strong></td>
<td>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.</td>
</tr>
<tr>
<td><strong>User response:</strong></td>
<td>Ensure that all of the following required options are specified: DBID, PSID, and at least one OBID.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>HLO3766E</th>
<th>When a segmented object is loaded, OBIDXLAT information must be specified.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Explanation:</strong></td>
<td>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.</td>
</tr>
<tr>
<td><strong>User response:</strong></td>
<td>Specify the DBID/PSID/OBID number pairs for the object.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>HLO3767E</th>
<th>The OBIDXLAT_CATALOG control card has already been specified for this object.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Explanation:</strong></td>
<td>A duplicate control card was found in the object specification.</td>
</tr>
<tr>
<td><strong>User response:</strong></td>
<td>Correct the syntax.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>HLO3768E</th>
<th>Options OBIDXLAT and OBIDXLAT_CATALOG cannot be specified at the same time.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Explanation:</strong></td>
<td>The specified options are mutually exclusive, and only one of the options can be specified in the syntax.</td>
</tr>
<tr>
<td><strong>User response:</strong></td>
<td>Correct the syntax.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>HLO3769E</th>
<th>The DEBUG parameter has already been coded for this space group.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Explanation:</strong></td>
<td>A duplicate control card was found.</td>
</tr>
<tr>
<td><strong>User response:</strong></td>
<td>Correct the syntax.</td>
</tr>
</tbody>
</table>
HLO3769W  Warning table `<schema>..<name> state <state> type <type>.

Explanation:  DB2 Analytics Accelerator Loader could not determine whether it is safe to load the table.
User response:  Check the table state. For more information, see the IBM DB2 Analytics Accelerator for z/OS Stored Procedures Reference.

HLO3770E  The DEBUG value has no contents.

Explanation:  The DEBUG parameter has been specified without a value.
User response:  Specify a valid value for the DEBUG parameter.

HLO3771E  The DEBUG parameter specified is invalid.

Explanation:  The value specified for the DEBUG parameter is not valid.
User response:  Specify a valid value for the DEBUG parameter.

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.

HLO4100E  Parameters with the DB2 SSID and PLAN name must be passed to Accelerator Loader.

Explanation:  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.
User response:  Define the DB2 SSID parameters to the Accelerator Loader Tool User Settings, using option 0 from the main menu.

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. Not allowed keyword `word1`.

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.

HLO4110I  The INDEX_THREAD parameter is invalid.
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:  None.

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.

HLO4115S  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.

HLO4146E  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.

HLO4147E  The attempt to reset the RBDP flag returned an error.
Explanation:  DB2 Accelerator Loader was unable to reset the Rebuild pending status for object specified in your Accelerator Loader job.
User response:  Check the output for DSNUTILB error
messages and consult with your systems programmer. 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.

**HLO4153I** message_text

**Explanation:** This message is used to hold text message information.

**User response:** No action is required.

**HLO4156E** 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 Authorised 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  \textit{data\_set\_name}

Explanation: This message is used to hold data set name information.

User response: No action is required.

HLO4211I  \textit{DD\_name}

Explanation: This message is used to hold DD name information.

User response: No action is required.

HLO4212I  Each CAxxnnnn 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 MVS Programming Authorized Assembler Service Guide (SA22-7608).

HLO4215I  Object: Database \textit{db\_name} Indexspace \textit{is\_name} Partition \textit{part\_num} ICBackup '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\textit{data\_set\_name} LRSN/RBA: X'\textit{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 MVS Programming Authorized Assembler Service Guide (SA22-7608).

HLO4221E  An VSAM allocate failure occurred.

\textbf{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.

\textbf{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: 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 random 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 random 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 MVS Programming Authorized Assembler Service Guide(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 MVS Programming Authorized Assembler Service Guide(SA22-7608).

HLO4261I A deallocate failure occurred on the key sort module.
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 HLO4270I. Contact IBM Software Support.

HLO4262I An open failure occurred on the key sort module.
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 message HLO4270I. Contact IBM Software Support.

HLO4263I A close failure occurred on the key sort module.
Explanation: The program could not close the data set specified in message HLO4270I.
User response: Contact IBM Software Support and supply the entire job output.
HLO4264I  A read failure occurred on the key sort module.
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 HLO4270I. Contact IBM Software Support.

HLO4265I  A write failure occurred on the key sort module.
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 HLO4270I. Contact IBM Software Support.

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.

HLO4270I  DD_name
Explanation:  This message is used to hold DD name information.
User response:  No action is required.

HLO4271I  Dynamic allocation return code = 'r'.
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.

HLO4360I  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 stop 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 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' partition part_num 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.
HLO4372I  The index space 'db_name.is_name' partition part_num rebuilding is beginning.
Explanation:  Accelerator Loader is starting to sort the index keys and generating the specified index space.
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 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.

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  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 MVS Programming Authorized Assembler Service Guide (SA22-7608).

HLO4401E  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.

HLO4402E  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.

HLO4403E  An 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.

HLO4404E  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 messages 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.

HLO4998E  Internal error. Contact IBM tech support.

Explanation: This diagnostic message indicates an internal check failure.

User response: Contact IBM Software Support.

HLO9001E  Error func OPEN input DD RELIB 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 RELIB 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 RELIB 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 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_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 • HLOA001E

---

**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 APAR Section Affected report skipped

**Explanation:** No REPORT03 DD was specified. No report was produced.

**User response:** Correct the JCL and resubmit the job.

---

**HLO9031I** APAR Section Affected report started

**Explanation:** Report generation has started.

**User response:** No action is required.

---

**HLO9032I** APAR Section Affected report completed

**Explanation:** Report generation is complete.

**User response:** No action is required.

---

**HLO9033I** (c) Copyright Rocket Software, Inc. 2012. All Rights Reserved.

**Explanation:** Utility starting.

**User response:** No action is required.

---

**HLO9034W** Load Library Report utility started

**Explanation:** Utility started.

**User response:** No action is required.

---

**HLO9035I** Load Library Report utility completed rc = returncode

**Explanation:** Utility completed.

**User response:** Check the return code.

---

**HLO9036I** 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.

---

**HLO9037I** 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; retcode: 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 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.

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 HLOERD (buildLevel buildDate buildTime).

Explanation: The module HLOERD 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  HLOERD 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 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=errorCode.
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 the specified table and partition was opened.
User response: No action is required.

HLOA118I  Closing a pipe for tableName partitionNumber.
Explanation: A connection to the IBM DB2 Analytics Accelerator 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.

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 HLOG8001S 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 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 HLOG8003E 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 HLOG8003E.

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.

HLOG9600E 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_UTILS). See the user’s guide for the functions that are valid for the HLOMAINT utility.

HLOG9601E 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.

HLOG9602E 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.

HLOG9603E 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.

HLOG9604I 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.

HLOG9605W 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.

HLOG9606E 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.

HLOG9607E 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: Remove the duplicate !ELEMENT 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>
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>
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
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 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.
Chapter 9. Troubleshooting

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.

HLOP9854E 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 rule 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 rule element (if that practice is not referenced by other USE_RULESET elements in the policy).

HLOP9855E 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 cannot 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>.

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

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.

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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.

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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.

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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.

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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 and 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=moduleName, 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.

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 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 DISCARDDN 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.

HLOP9957E  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: <tcb_address> <component_name> - 
Component initialization is complete

Explanation: The initialization of the specified 
component completed successfully.

User response: No action is required.

HLOS0009I  TCB: <tcb_address> <component_name> - 
Component termination is complete

Explanation: The termination of the specified 
component completed successfully.

User response: No action is required.

HLOS0010E  TCB: <tcb_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: <tcb_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: <tcb_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.

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**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.

---

**HLOS0082I** parm_name = parm_value_char

**Explanation:** A value for the initialization parameter 'parm_name' must be specified

**User response:** Ensure that this initialization parameter is in the initialization parameters file and is set to a non-blank value.

---

**HLOS0085S** A value for the initialization parameter '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.

**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.

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**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.

---

**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 STIMERM 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 STIMERM macro.
Processing continues.

User response: Contact IBM Software Support.

---

**HLOS0207E**  
TCB: tcb_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: tcb_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: tcb_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: tcb_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.

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**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.

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**HLOS0212I**  
TCB: tcb_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.
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.

TCB: <tcb_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.

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.

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.

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.

CANCEL THREAD was not issued for thread 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.

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.

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.

CANCEL THREAD request failed pre-cancel exit checking 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 pre-cancel exit checking.

User response: No action is required.

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  CB: <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.

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: <tcb_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: <tcb_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: <tcb_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: <tcb_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: tcb_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: tcb_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: <tcb_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: <tcb_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: <tcb_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  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.

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.

Explanation:  An SQL error occurred.

User response:  Review the information in the
HLOS0307E 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 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 HLOLOG table is located.

**HLOS0311W** TCB: <tcb_address> Unable to access HLOADAUDIT table.

**Explanation:** The HLOADAUDIT 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 HLOADAUDIT 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 HLOADAUDIT 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.
Chapter 9. Troubleshooting

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.

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:

324   DB2 Analytics Accelerator Loader User's Guide
DSNDB01, DSNDB06, and DSNDB07.

**User response:** No action is required.

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**HLOS0516W** *message_continuation_number*
(cancel_specification_number) DB: database_name SP: space_name PART: partition_number

**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

**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

**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.

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**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.

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**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:** Correct the partition specification and rerun the job.

---

**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.

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**HLOS0602W** DSNUTILB interception for DB2 SSID=DB2_ssid not enabled.

**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.

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**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.
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.

**HLOS0606I** DB2 SSID=db2_ssid has DB2 Sort enabled.

**Explanation:** DB2 Sort is either enabled (YES) or not enabled (NO) for the specified DB2 subsystem.

**User response:** No action is required.

**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=<exit_function>
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: 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  HLOAD=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  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:  None 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: None 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: None 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.

HLOS5112I 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. Owning 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_fmid,
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=dbh2_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.

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HLOU5017E SORT EXEC 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.

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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.
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.

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.

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**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.

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**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.

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**HLOU5311E**  
**Save worklist 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.

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**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.

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**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.

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**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.

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**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.

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**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.

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**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.
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  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.

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:

User response:  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.
HLOU5331I  dsutilb_syntax

Explanation:  This message contains all or part of the original, unmodified DSNUITLB syntax that was submitted for the utility.

User response:  No action is required.

HLOU5332I  End of original DSNUITLB syntax listing.

Explanation:  This message indicates the end of the original, unmodified DSNUITLB 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 DSNUITLB 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 DSNUITLB 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 DSNUITLB interception program.

HLOU5339E  Session creation failed RC=return_code, RSN=reason_code, Reason=description.

Explanation:  DSNUITLB 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 HLO55113I 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 HLOUMAINT 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** Get discard table ROWID failed for utility ID=utility_ID.

**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.

**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.

**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.

**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.

**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.

**HLOU5349E** IDENTIFY failed, RC=return_code.

**Explanation:** The IDENTIFY service returned a non-zero return code.

**User response:** Contact IBM Software Support.

**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.

**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.

**HLOU5352S** 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.

**HLOU5353S** 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.

**HLOU5354S** 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.

**HLOU5355S** 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.

**HLOU5356S** 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.
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=uojb_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.

HLOU5355E  SYSREC name was specified but no
TEMPLATE or job step allocation was
found.

Explanation:  The utility statement syntax specified
SYSREC but the name did not match any TEMPLATE
or job step allocation.

User response:  Provide a TEMPLATE or DD
statement that matches the SYSREC name specified in
the utility syntax.

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.

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.

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**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 and rerun the job.

---

**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.

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**HLOU5415I** 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.

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**HLOU55001** 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.

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**HLOU5501I** 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.

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**HLOU5502I** Load post-processing finished with RC=return_code.

**Explanation:** Additional actions for IFDISCARDS or SHRLEVEL REFERENCE were performed.

**User response:** No action is required.

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**HLOU5503I** Load post-processing finished with RC=return_code.

**Explanation:** No action is required.

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**HLOU5504E** Storage release failed.

**Explanation:** The specified module failed while attempting to free the specified storage area.

**User response:** No action is required.

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**HLOU5505E** Attempt to obtain storage failed.

**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.

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**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.
HLOU5507I  •  HLOU5517E

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  ERRORTXT=error_text.
Explanation:  An attempt to compile or match a regular expression pattern failed.
User response:  No action is required.

HLOU5516I  ERRORTXT=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  ERRORTXT=`error_text`.

**Explanation:** Failed service function input statements.

**User response:** No action is required.

HLOU5521I  ERRORTXT=`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  ERRORTXT=`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.miq.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 HLOPIPE 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.

HLOU5718E  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.

HLOU5719E  The accelerator is unavailable.

Explanation: The accelerator is in the specified state, which makes it unavailable for loading. As a result, the IDAA_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.

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.

HLOU5807E  Column <column_name> data is too long.
    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.

HLOU5808E  DB2 size limit exceeded for column <column_name> record record_number.

Explanation: The data for the specified column is invalid.

User response: Correct the data in SYSREC and resubmit the job.
HLOU5811E • HLOU5905W

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.

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.

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 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=program_name 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.

HLOU9701I 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 BBYSNMIC not found in started task STEPLIB.

Explanation: Module BBYSNMIC 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 BBYSNMIC does not conform to version 2, release 1 or later.

Explanation: Module BBYSNMIC 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 BBYSNMIC contains invalid offset to data.

Explanation: The module BBYSNMIC 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 BBYSNMIC. RSN=reason_code.

Explanation: The product encountered an error while searching for module BBYSNMIC. DB2 Autonomics Director utility history collection is disabled.
User response: Contact IBM Software Support.

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.
Chapter 9. Troubleshooting

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
FECA947I - FECA958E

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 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 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.

---

**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 Rocket Software 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 cards) 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.
<table>
<thead>
<tr>
<th>Code</th>
<th>Message</th>
<th>Explanation</th>
<th>User response</th>
</tr>
</thead>
<tbody>
<tr>
<td>FEC917E</td>
<td>Put an ending quote at the end of the string.</td>
<td>You must place a quote at the end of the string.</td>
<td>Place a quote at the end of the string.</td>
</tr>
<tr>
<td>FEC918</td>
<td>CHARS string not found. Press PF5 to continue from top.</td>
<td>The indicated character string was not found.</td>
<td>To continue searching for the character string from the top of the dialog, press PF5.</td>
</tr>
<tr>
<td>FEC919</td>
<td>chars found str not found. Press PF5 to continue from bottom.</td>
<td>The indicated character string was not found.</td>
<td>To continue searching for the character string from the bottom of the dialog, press PF5.</td>
</tr>
<tr>
<td>FEC920E</td>
<td>File tailoring open returned a file tailoring already in progress condition</td>
<td>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.</td>
<td>No action is required.</td>
</tr>
<tr>
<td>FEC921E</td>
<td>File tailoring open returned the output file already in use condition -- ENQ failed</td>
<td>An attempt to open the DB2 Control Data Set failed with an ENQ error. The data set is already open for output.</td>
<td>Verify that you are the only user attempting to access this file.</td>
</tr>
<tr>
<td>FEC922E</td>
<td>File tailoring open returned the skeletal file or output file not allocated condition</td>
<td>An attempt to perform file tailoring failed because either the tailoring skeleton file or output file is not allocated.</td>
<td>Verify that all required files are allocated prior to performing file tailoring.</td>
</tr>
<tr>
<td>FEC923E</td>
<td>File tailoring open returned a severe error condition</td>
<td>An attempt to perform file tailoring failed because a severe error condition was encountered on open.</td>
<td>Verify that all required files are allocated and accessible prior to performing file tailoring.</td>
</tr>
<tr>
<td>FEC924E</td>
<td>File tailoring open returned an unknown code -- severe error</td>
<td>An attempt to perform file tailoring failed because a severe error condition was encountered on open.</td>
<td>Verify that all required files are allocated and accessible prior to performing file tailoring.</td>
</tr>
<tr>
<td>FEC925E</td>
<td>File tailoring close returned a file not open condition -- severe error</td>
<td>An attempt to perform file tailoring failed because a File-Not-Open condition was encountered on close.</td>
<td>Verify that all required files are allocated and accessible and that there are no other tailoring sessions running concurrently with your session.</td>
</tr>
<tr>
<td>FEC926E</td>
<td>File tailoring close returned an output file in use condition</td>
<td>An attempt to perform file tailoring failed because an Output-File-In-Use condition was encountered on close.</td>
<td>Verify that all required files are allocated and accessible and that there are no other tailoring sessions running concurrently with your session.</td>
</tr>
<tr>
<td>FEC927E</td>
<td>File tailoring close returned a skeletal file or output file not allocated condition</td>
<td>An attempt to close file tailoring failed because either a tailoring skeleton file or output file was not allocated.</td>
<td>Verify that all required files are allocated and accessible and that there are no other tailoring sessions running concurrently with your session.</td>
</tr>
<tr>
<td>Code</td>
<td>Message</td>
<td>Explanation</td>
<td>User response</td>
</tr>
<tr>
<td>----------</td>
<td>-------------------------------------------------------------------------</td>
<td>----------------------------------------------------------------------------------------------------------------</td>
<td>---------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>FEC928E</td>
<td>File tailoring close returned a severe error</td>
<td>An attempt to perform file tailoring failed because a severe error condition was encountered on close.</td>
<td>Verify that all required files are allocated and accessible prior to performing file tailoring.</td>
</tr>
<tr>
<td>FEC929E</td>
<td>File tailoring close returned an unknown code -- severe error</td>
<td>An attempt to perform file tailoring failed because a severe error condition was encountered on close.</td>
<td>Verify that all required files are allocated and accessible prior to performing file tailoring.</td>
</tr>
<tr>
<td>FEC930E</td>
<td>File tailoring close returned an output member exists in the output library and NOREPL was specified</td>
<td>An attempt to perform file tailoring failed because the close process could not replace the pre-existing tailored member in the output file.</td>
<td>Change the output member name to a new name or ensure that the output library allows for member replacement.</td>
</tr>
<tr>
<td>FEC931E</td>
<td>File tailoring include returned a skeleton does not exist condition</td>
<td>An attempt to perform file tailoring failed because the tailoring process could not locate a required tailoring skeleton.</td>
<td>Assure that all required files are allocated to perform file tailoring.</td>
</tr>
<tr>
<td>FEC932E</td>
<td>File tailoring include returned a skeleton in use -- ENQ failed condition</td>
<td>An attempt to access a tailoring skeleton failed with an ENQ error (member-in-use).</td>
<td>Verify that all required tailoring files are allocated and that there are no other tailoring sessions running concurrently.</td>
</tr>
<tr>
<td>FEC933E</td>
<td>File tailoring include returned a data truncation or skeleton library or output file not allocated condition</td>
<td>An attempt to perform file tailoring failed because either the tailoring skeleton file or output file is not allocated.</td>
<td>Verify that all required files are allocated prior to performing file tailoring.</td>
</tr>
<tr>
<td>FEC934E</td>
<td>File tailoring include returned a severe error condition</td>
<td>An attempt to perform file tailoring failed because a severe error condition was encountered on an include operation.</td>
<td>Verify that all required files are allocated and accessible prior to performing file tailoring.</td>
</tr>
<tr>
<td>FEC935E</td>
<td>File tailoring include returned an unknown condition -- severe error</td>
<td>An attempt to perform file tailoring failed because a severe error condition was encountered on an include operation.</td>
<td>Verify that all required files are allocated and accessible prior to performing file tailoring.</td>
</tr>
<tr>
<td>FEC936E</td>
<td>Allocation error - The ISPFILE DD is already allocated and cannot be deallocated - Process not completed</td>
<td>The ISPFILE DD allocation failed. The DD is already allocated and cannot be deallocated for this TSO session. The process did not complete successfully.</td>
<td>No action is required.</td>
</tr>
<tr>
<td>FEC937E</td>
<td>Allocation Error - An error was encountered allocating the ISPWRK1 or ISPWRK2 DD - Process not completed</td>
<td>The ISPWRK1 or ISPWRK2 DD allocation failed.</td>
<td>Verify TSO session parameters are set correctly for your site prior to allocation of these DD statements. The process did not complete successfully.</td>
</tr>
<tr>
<td>FEC938E</td>
<td>Field Required - The data set entered is a partitioned data set and the member name is required</td>
<td>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.</td>
<td>Enter a valid member name for PDS access.</td>
</tr>
<tr>
<td>FEC939E</td>
<td>The only valid values are &quot;T&quot; for tracks and &quot;C&quot; for cylinders</td>
<td>You specified an invalid value. The only valid values are &quot;T&quot; for tracks and &quot;C&quot; for cylinders</td>
<td></td>
</tr>
</tbody>
</table>
**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 RFIND key works only after a FIND character string is entered.

**Explanation:** A repeat FIND (RFIND) was issued before a FIND command was issued. You must issue FIND before RFIND will work.

**User response:** Issue FIND prior to attempting to issue RFIND.

**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 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 a 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.

---

**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 a 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 • FEC987E**

**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 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).

---

**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.

FEC993E  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  •  FEC999E

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 DB2 Analytics 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 DB2 Analytics Accelerator Loader version.
- The identifier for the latest DB2 Analytics 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 DB2 Analytics 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 DB2 Analytics 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 "Produce dumps for diagnostic use."
- Any messages in the z/OS System Log that might pertain to the problem.

Your Support representative will provide instructions for transmitting this information.

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 DB2 Analytics 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.
- `name1,name2,...` are values that identify the DB2 Analytics 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.

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**Clearing 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 cleanup utility program HLOCOMCL. The job is provided to clear common storage to avoid errors with the data pipe when a DB2 Analytics Accelerator Loader job fails and the common storage is not cleaned up.

The following messages might indicate this condition:

- Function=01 RC=03 in message HLOU5700E: Error from call to HLOPIPE from HLOUSE35 Function=01 RC=03
- HL038081: 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 HLO#PIPE; doing so will corrupt the other job. Because of risks associated with HLO#PIPE, run it only under the guidance of IBM Software Support.

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**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 DB2 Analytics
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.

**Topics:**
- “Determining whether DSNUTILB intercept processing occurred”
- “Displaying the DSNUTILB intercept status” on page 369
- “Terminating a DB2 utility for which interception has occurred” on page 370
- “Restarting a DB2 utility in exceptional circumstances” on page 371

**Related concepts:**
“DB2 Analytics Accelerator Loader components and structure” on page 412
DB2 Analytics 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.

“Considerations for running multiple started tasks” on page 20
A single started task is usually sufficient to handle multiple user requests from the DB2 Analytics Accelerator Loader interfaces to perform work on one or more DB2 subsystems. However, if you have a very high volume of activity, you can run multiple started tasks concurrently to handle the workload more efficiently, with each started task monitoring a different DB2 SSID.

“Considerations for DB2 data sharing environments” on page 21
If you plan to deploy DB2 Analytics Accelerator Loader in a DB2 data sharing environment, review this information to learn about deployment and configuration issues.

“Load from external jobs” on page 138
DB2 Analytics 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 88
This customization step is required for the DB2 Analytics 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 DB2 Analytics Accelerator Loader messages that are incorporated into the SYSPRINT data set for the utility job and the SYSPRINT data set for the DB2 Analytics 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 DB2 Analytics 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 8. Intercept messages in the utility SYSPRINT data set

<table>
<thead>
<tr>
<th>Messages</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>HLOU5001I date time DB2 Analytics Accelerator Loader product_version, FMID=product_fmid, COMP_ID=product_compid</td>
<td>The specified version of the product is installed and the DSNUTILF module, which is required for intercept processing, is available.</td>
</tr>
<tr>
<td>HLOU5012I date time Connected to started task HLOID=configuration_id</td>
<td>The DSNUTILB intercept connected to the specified DB2 Analytics Accelerator Loader started task configuration and completed initialization.</td>
</tr>
<tr>
<td>HLOU5002I date time Initialization is complete.</td>
<td></td>
</tr>
<tr>
<td>HLOU5340E date time Worklist in use by another utility ID=utility_ID</td>
<td>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 HLOU5113I message in the SYSPRINT data set for the started task for more information.</td>
</tr>
<tr>
<td>HLOU5004I date time Analysis started. Step=step_number</td>
<td>DB2 Analytics 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.</td>
</tr>
<tr>
<td>HLOU5005I date time Analysis completed. RC=return_code</td>
<td></td>
</tr>
<tr>
<td>HLOU5008I date time Utility execution started. Step=step_number</td>
<td>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.</td>
</tr>
<tr>
<td>HLOU5009I date time Utility execution completed. RC=return_code</td>
<td></td>
</tr>
</tbody>
</table>
Table 8. Intercept messages in the utility SYSPRINT data set (continued)

<table>
<thead>
<tr>
<th>Messages</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>HLOU5003I date time</td>
<td>The DSNUTILB intercept completed.</td>
</tr>
<tr>
<td>DB2 Analytics Accelerator</td>
<td>DSNUTILB intercept completed for the utility.</td>
</tr>
<tr>
<td>Loader intercept completed.</td>
<td>DSNUTILB intercept completed for the utility.</td>
</tr>
</tbody>
</table>

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 9. Intercept messages in the started task SYSPRINT data set

<table>
<thead>
<tr>
<th>Messages</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>HLOS0101I date time</td>
<td>The DB2 Analytics Accelerator Loader session was created for DSNUTILB intercept processing. Sessions for the DSNUTILB intercept have a session type of &quot;U.&quot;</td>
</tr>
<tr>
<td>TCB: tcb_address</td>
<td>DSNUTILB utility ID: ssid DSNUTILB utility ID: utility_id <em>message_continuation_number</em></td>
</tr>
<tr>
<td>SSID: ssid</td>
<td>DSNUTILB intercept operation is operation_name.</td>
</tr>
<tr>
<td>DSNUTILB utility id</td>
<td></td>
</tr>
<tr>
<td>HLOS5101E date time</td>
<td>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.</td>
</tr>
<tr>
<td><em>message_continuation_number</em></td>
<td>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.</td>
</tr>
<tr>
<td>DSNUTILB intercept operation</td>
<td></td>
</tr>
<tr>
<td>failed</td>
<td>DSNUTILB intercept operation failed.</td>
</tr>
</tbody>
</table>

**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 hlqstc,DISPLAY INTERCEPT[,GLOBAL][ALL]
```
Where hlostc is the member name of the DB2 Analytics 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 B10 HLOID=HLO01 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 DB2 Analytics 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 DB2 Analytics Accelerator Loader repository.

If you manually issue the DB2 -TERM UTILITY command instead, you should still run the hloidMAINT 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 DB2 Analytics Accelerator Loader started task is running and that the DB2 plan for DB2 Analytics 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 DB2 Analytics 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:

      \[ \text{PARM} = 'hloid,#FUNCTION#,\#DB2SSID#,\#UTILITY_ID#' \]

      where:

      - `hloid` is the configuration ID of the DB2 Analytics 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**

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 DB2 Analytics 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. In these circumstances, you can use the DB2 Analytics Accelerator Loader HLOMAINT utility to resume utility processing properly.

**About this task**

Consider using the HLOMAINT utility for restart purposes when an event such as an abend of the DB2 Analytics Accelerator Loader started task or of DB2 occurs and causes the DB2 utility to end before DB2 Analytics 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 DB2 Analytics Accelerator Loader started task is running and that the DB2 plan for DB2 Analytics 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 hlodMNT member (where hlod is the DB2 Analytics Accelerator Loader configuration ID) in the hlq.mlq.SHLOSAMP library, as follows:

   Remember: Tools Customizer creates a separate hlodMNT 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:

      \[ PARM='hlod,#FUNCTION#,#DB2SSID#,#UTILITY_ID#' \]

      where:

      - \[ hlod \] is the configuration ID of the DB2 Analytics 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. DB2 Analytics 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 370.

   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.
Chapter 10. Reference

These reference topics provide you with quick access to information about DB2 Analytics Accelerator Loader customization and functionality.

Topics:

- "Tools Customizer reference"
- "Navigating product panels" on page 381
- "Primary commands" on page 381
- "Panel commands and fields reference" on page 382
- "DB2 Analytics Accelerator Loader components and structure" on page 412
- "Console commands for the started task" on page 414
- "Column display functions (CSETUP)" on page 416

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/1 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>
<thead>
<tr>
<th>Status</th>
<th>Product</th>
<th>LPAR</th>
<th>DB2 entries</th>
</tr>
</thead>
<tbody>
<tr>
<td>Incomplete</td>
<td>The required product parameters are not defined, or the required product parameters are defined but LPAR parameters, DB2 parameters, or both are not defined.</td>
<td>The required parameters are not defined.</td>
<td>The required parameters are not defined.</td>
</tr>
<tr>
<td>Discovered</td>
<td>The product parameter definitions were discovered by using the product Discover EXEC.</td>
<td>N/A</td>
<td>N/A</td>
</tr>
</tbody>
</table>
Table 10. Status types for the product, the LPAR, and the DB2 entries (continued)

<table>
<thead>
<tr>
<th>Status</th>
<th>Product details</th>
<th>LPAR details</th>
<th>DB2 entries details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ready to Customize</td>
<td>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.</td>
<td>The required LPAR parameters are defined or LPAR parameters are not required.</td>
<td>The required DB2 parameters are defined or DB2 parameters are not required.</td>
</tr>
<tr>
<td>Customized</td>
<td>The jobs are customized on the local LPAR.</td>
<td>The jobs are customized for the product or for all of the associated DB2 entries on the local LPAR.</td>
<td>The jobs are customized for the DB2 entry.</td>
</tr>
<tr>
<td>Errors in Customization</td>
<td>Errors occurred while the customization jobs were being generated.</td>
<td>Errors occurred while the customization jobs were being generated.</td>
<td></td>
</tr>
<tr>
<td>Not Required</td>
<td>N/A</td>
<td>LPAR parameters are not required.</td>
<td>DB2 parameters are not required.</td>
</tr>
</tbody>
</table>

Related tasks:

- “Creating and associating DB2 entries” on page 65
  You can create new DB2 entries and associate them with DB2 Analytics Accelerator Loader.
- “Copying DB2 entries” on page 82
  You can copy associated and not associated DB2 entries to other DB2 entries or to new DB2 entries.
- “Removing DB2 entries” on page 84
  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 \textit{high\_level\_qualifier.SHLODENU}, where \textit{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.

\textbf{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:

\textbf{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.

\textbf{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.

\textbf{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.

\textbf{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 11. Data set attributes for allocating the Discover output, data store, and customization library data sets**

<table>
<thead>
<tr>
<th>Data set</th>
<th>Organization</th>
<th>Record format</th>
<th>Record length</th>
<th>Block size</th>
<th>Data set name type</th>
</tr>
</thead>
<tbody>
<tr>
<td>Discover output data set</td>
<td>PO</td>
<td>Variable block</td>
<td>16383</td>
<td>32760</td>
<td>LIBRARY</td>
</tr>
<tr>
<td>Data store data set</td>
<td>PO</td>
<td>Variable block</td>
<td>16383</td>
<td>32760</td>
<td>LIBRARY</td>
</tr>
<tr>
<td>Product customization library</td>
<td>PO</td>
<td>Fixed block</td>
<td>80</td>
<td>32720</td>
<td>LIBRARY</td>
</tr>
</tbody>
</table>

**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.

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 91

You can use the DB2 Analytics Accelerator Loader ISPF interface to create the JCL and control cards that are required to load data to build the JCL to load data to DB2 and the IBM DB2 Analytics Accelerator. 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.

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 91
You can use the DB2 Analytics Accelerator Loader ISPF interface to create the JCL and control cards that are required to load data to build the JCL to load data to DB2 and the IBM DB2 Analytics Accelerator. 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.

Panel commands and fields reference

This topic provides a reference to DB2 Analytics Accelerator Loader ISPF panel commands and fields.

- “Main menu” on page 383
- “User Settings panel” on page 383
- “DB2 Subsystems panel” on page 384
- “New DB2 Subsystem panel” on page 384
- “DB2 Subsystem Parameters panel” on page 384
- “DB2 Analytics Accelerator Loader Parameters panel” on page 385
- “Confirm Action panels” on page 387
- “Set Batch Job Card Information panel” on page 387
- “Profile Display panel” on page 387
- “Profile Options panel” on page 389
- “Rename Profile panel” on page 408
- “Load from External Options panel” on page 389
- “DD Template Specification panel” on page 393
- “DD DSN Template panel” on page 395
- “DD DSN Template (View) panel” on page 397
- “Resulting DSN Using Current Symbolic String panel” on page 398
- “Consistent Load Options panel” on page 398
- “Enter Table and Creator Like to Display panel” on page 403
- “Add DB2 Tables panel” on page 403
- “DB2 Table List panel” on page 404
- “Referentially Dependent Table Selection panel” on page 405
Main menu

This is the main panel for DB2 Analytics Accelerator Loader. The following options and fields are available on this panel.

0 Settings
   Opens the User settings panel.

1 DB2 Analytics Accelerator Loader profiles
   Opens the DB2 Analytics Accelerator Loader Parameters panel.

X 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.

User Settings panel

Use this panel to select the DB2 subsystem on which to run DB2 Analytics Accelerator Loader, and to specify the job card that you want to use when building DB2 Analytics Accelerator Loader JCL.

The following options and fields are available:

1 DB2 subsystem
   Opens the DB2 Subsystems panel.

2 Batch
   Opens the Set Batch Job Card Information panel.

DB2 SSID
   The ID of the DB2 subsystem on which DB2 Analytics Accelerator Loader is running.

User ID
   Your user ID.
System ID
The z/OS system on which DB2 Analytics Accelerator Loader is running.

DB2 Subsystems panel

Use this panel to 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

Use this panel to 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

Use this panel to change the definition of an existing DB2 subsystem entry. The following command and fields are available:

**1 DB2 Analytics Accelerator Loader parameters**
Opens the DB2 Analytics 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.
**DB2 Analytics 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**
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.

**DB2 Analytics Accelerator Loader Parameters panel**

Use this panel to specify product options. The following fields are available:

**Use DB2 Sort when possible**
Specifies whether the DB2 Sort product is to be used for internal DB2 AnalyticsAccelerator Loader sorts.

**Y**
If Y is specified, the DB2 Sort program product is to be used for internal DB2 AnalyticsAccelerator Loader sorts.

**N**
If N is specified, DB2 Analytics Accelerator Loader 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, SYNCSORT, DB2 Sort).

**File allocation parameters:**

**Number of buffers**
The number of buffers to be used by DB2 Analytics Accelerator Loader. Valid values are 1 - 99. (Synonymous with the JCL BUFNO= parameter.)

**Channel programs**
The number of channel programs to be used by DB2 Analytics Accelerator Loader. (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 DB2 Analytics Accelerator Loader 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 DB2 Analytics Accelerator Loader sort work data sets.

**Secondary space**
The secondary space used (cylinders) for DB2 Analytics Accelerator Loader sort work data sets.

**Utility REGION Size**
Indicates the REGION size in megabytes to be used when generating utility JCL. Valid values are 0 - 2047.

**Confirm Action panels**
Use these panels to 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**.

**Set Batch Job Card Information panel**
Use this panel to specify how you want the batch job built when generating JCL with DB2 Analytics 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.

**Profile Display 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 Profile Options 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 DB2 Analytics 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 the Profile Options panel.

The following fields 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.

(Type) Profile Type
The type of profile:
- Dual indicates a load from external file profile.
- Consistent indicates a consistent data load profile.

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
The profile creator.

(Type) Profile Type
The type of profile:
- Dual indicates a load from external file profile.
- Consistent indicates a consistent data load profile.

SSID
The current subsystem ID for the profile. This column is only displayed when the SSID is a data sharing group.

Description
A description of the profile.

Share option
Controls how other users can use a profile:
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.

Profile Options panel
Use this panel to specify the name and type for a new DB2 Analytics Accelerator Loader profile. The following fields are available:

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.”)

(Type) Profile Type
The type of profile:

- Dual indicates a load from external file profile.
- Consistent indicates a consistent data load profile.

Description
A description of the profile.

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.

Load from External Options panel
Use this panel to specify or view options for a load from external file (DUAL) profile. 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.

- TABLES: Type this command on the command line to add a DB2 table to a profile. This command opens the Enter Table and Creator Like to Display panel.
• ACCELERATOR: Type this command on the command line to select the accelerator onto 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 Table 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.

The following fields are available on this panel. Scroll forward to see all fields.

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
Display values for the currently selected DB2 table. To change the table, issue the TABLES command.

Target options:

Load target
Controls the other panel options that are available. Valid options are as follows:
A Loads data into the accelerator that is specified in Accelerator name. Existing data in the DB2 table or partition is deleted if the load job specifies LOAD REPLACE. The control card IDAAONLY ON acceleratorName is generated into the JCL.
B Loads data into both the accelerator that is specified in Accelerator name and DB2. The control card IDA_DUAL ON acceleratorName is generated into the JCL.

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.

Required load options:
**Input (SYSREC) data set name**

**Input member**

The fully qualified data set name of the SYSREC data set that contains the data of the table in external format. If the data set is a PDS, then **Input member** is required. Using quotation marks is not necessary; the product inserts single quotation marks and verifies that the data set exists when you press PF3 to generate JCL.

**Input DSN template**

The template data set name for the SYSREC data set. To update the template and its parameters, specify Yes in the **Update** field.

You must specify the template name and the DSN. The data set name pattern must include the &PART variable to ensure that a unique SYSREC data set name is generated for each partition, and the partition number must be included in your partition-level SYSREC data sets.

**Table column info DSN**

**Table column info member**

The fully qualified data set name that contains the column information from the SYSPUNCH data set. If the data set is a PDS, then **Table column info member** is required. This data set must contain only the table column definitions (without parentheses), and cannot contain the entire LOAD utility syntax.

**Tip:** Copy the SYSPUNCH data set to a new data set, and then delete everything except the column information.

**DB2 load options:**

**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 name**. This data set name pattern is used to generate a template definition.

**Load tasks**

Specifies the number of parallel load tasks. 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 a partitioned table is specified and the value of **Parallel load** is Yes.

**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=IDAA#DLD, PARM=('QA1A,"utility ID")`

**KEEPDICTIONARY**

Valid when the value of **Load Target** is A or B. 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. Valid when the value of Load Target is B. 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. Valid when the value of Load Target is B. 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 contain either a NUMRECS or SORTKEYS clause to provide the number of SYSREC records, 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 when the value of Load Target is B. 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. Valid when the value of Load Target is B. This value can only be specified when a SORTDEVT value also specified. Valid values are 2 through 255.

DISCARDDN template DD name
Specifies the template name for a data set to be used for discarding data rows. If DISCARDDN is not necessary, then this field should be blank. This value is optional. The default is ISYSDISC.

The DISCARDDN template is generated only if Load target = B (Both accelerator and DB2). 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 DISCARDDN 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.

**DD Template Specification panel**

Use this panel to specify allocation options for an ERRDDN, MAPDDN, DISCARDDN, 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:
The default disposition for each type of template is as follows:

- **ERRDDN**: DISP(MOD,CATLG,CATLG)
- **MAPDDN**: DISP(MOD,CATLG,CATLG)
- **DISCARDDN**: 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:**

```plaintext
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**, 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):**

```plaintext
TEMPLATE SYSERR
  UNIT SYSDA
  DSN 'syserr.dataset.name'
  SPACE CYL
  DISP (MOD,DELETE,DELETE)
```

**Example (Space primary, Space secondary, and Space unit are defined):**

```plaintext
TEMPLATE SYSERR
  UNIT SYSALLDA
  DSN 'syserr.dataset.name'
  SPACE (10,5) CYL
  DISP (MOD,DELETE,DELETE)
```

### Space primary

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:**

```plaintext
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.
- **DISCARDDN**: &US..IDSQ..&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 image copy backup type. L indicates local site and R indicates recovery site.

Primary/Backup (P/B)
Includes the image copy backup type. P indicates primary and B indicates backup.
Copy type (Full/Incr)
Includes the image copy 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.

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.

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 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.

Consistent Load Options panel
Use this panel to specify options for a Consistent Load profile. The following commands are available:

- **TABLES**: Type this command on the command line to add a DB2 table to a profile. This command opens the Enter Table and Creator Like to Display panel.
- **ACCELERATOR**: Type this command on the command line to select the accelerator onto 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.

The following fields are available on this panel. Scroll forward to see all fields.

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.

The control card ACCELNAME acceleratorName is generated into the JCL, where acceleratorName is the name of the accelerator that is defined to the DB2 subsystem.

**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**

**Time zone of timestamp**

With this option, the **Load Time** value must be SPECIFIED. Indicates the end point at which the DB2 Analytics Accelerator Loader process will stop. 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.

**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.

**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.
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:

**ZPARM**

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 ZPARMs 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 DB2 Analytics Accelerator Loader syntax. Specifies the order in which the archive and active log lists in the BSDS are to be scanned when DB2 Analytics Accelerator Loader searches for a log to satisfy a need for log records. The value 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 this setting because DB2 may attempt to open one of the active logs for output that DB2 Analytics Accelerator Loader is currently reading for input. This can 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.

Number of PARALLEL log read
(Defaults 0)
The number of parallel log read tasks. Valid values are integers, 0 - 16. If a value of 0 is specified, this 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 for **Number of PARALLEL log read**, 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
(Defaults 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.
Enter Table and Creator Like to Display panel

Use this panel to filter objects 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:* This field is case sensitive. The wildcard patterns abc* and ABC* return different results.

**Table name like**
The table name search criteria. Wildcard values are allowed. The wildcard character is an asterisk (*).

*Note:* This field is case sensitive. The wildcard patterns abc* and ABC* return different results.

**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.

Add DB2 Tables 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.
- **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:* This field is case sensitive. The wildcard patterns abc* and ABC* return different results.

**Table name like**
The table name search criteria. Wildcard values are allowed. The wildcard character is an asterisk (*).

*Note:* This field is case sensitive. The wildcard patterns abc* and ABC* return different results.

**DB2 SSID**
The DB2 subsystem against which DB2 Analytics Accelerator Loader is running.

**Table Name**
The table name.

**Type**
The object type:
- **T** - table
- **A** - alias
- **V** - view
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 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  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.
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. For more detailed information about using a template and the options, see *DB2 for z/OS Utility Guide and Reference*. 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 image copy backup type. L indicates local site and R indicates recovery site.
**Primary/Backup (P/B)**
Includes the image copy backup type. P indicates primary and B indicates backup.

**Copy type (Full/Incr)**
Includes the image copy 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.

**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.
FlashCopy DSN Template (View) panel

Use this panel to view information about a FlashCopy DSN template. For more detailed information about using a template and the options, see DB2 for z/OS Utility Guide and Reference. 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.

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
The profile creator.

(Type) Profile Type
The type of profile:

• Dual indicates a load from external file profile.
• Consistent indicates a consistent data load profile.

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 DB2 Analytics Accelerator Loader 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 DB2 Analytics 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:

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.

Image Copy Load Options panel
This panel contains options for an ICLOAD profile. The following commands are available:

- TABLES: Type this command on the command line to add a DB2 table to a profile. This command opens the Enter Table and Creator Like to Display panel.
- ACCELERATOR: Type this command on the command line to select the accelerator onto 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.
- ICOPY: Type this command on the command line to display the content of the input data set with image copies data sets.

The following fields are available:

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.

The control card ACCELNAME acceleratorName is generated into the JCL, where acceleratorName is the name of the accelerator that is defined to the DB2 subsystem.

Input image copies data set
The MVS path to the data set that contains the image copy data sets for 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 use it in the output JCL in the SPACE() scope as follows: TO_IC data_set.

**Input image copies member**
The member name in the input data set if the data set is a PDS.

**Number of IC tasks**
The number of image copy tasks. Valid values are integers, 1 - 10. If a value greater than 1 is specified, the DB2 Analytics Accelerator Loader will cluster and reorder partitioned objects to distribute the objects into the specified number of tasks, and load the partitions in parallel.

**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.

**Related concepts:**
- Chapter 5, “Loading data at a consistent or historical time,” on page 97
  You can use DB2 Analytics Accelerator Loader to generate JCL that loads data from multiple related DB2 tables without the need to take them offline for updates. You can also specify any historical point in time to load the accelerator.
- “Restrictions and considerations” on page 97
  Review the following usage restrictions and considerations before performing a consistent or historical data load.
- Chapter 6, “Loading data from an external file,” on page 101
  You can use DB2 Analytics Accelerator Loader to generate JCL that loads data from an external file into IBM DB2 Analytics Accelerator and into DB2.
- “Restrictions and considerations” on page 101
  DB2 Analytics Accelerator Loader enables you to load data into IBM DB2 Analytics Accelerator and optionally into DB2 from an external file. Review usage restrictions and considerations before using this feature.

**Related tasks:**
- “Using the ISPF interface to create a CONSISTENT load profile” on page 98
  A CONSISTENT load profile is a reusable group of options for building a job to load data at a consistent or historical time into an accelerator. You can create a profile that saves your selections and reuse the profile to perform future consistent load jobs.
- “Specifying options for a FlashCopy DSN template” on page 99
  For a Consistent Load job, you can specify options for the FlashCopy DSN template.
- “Using the batch interface to load from an image copy” on page 100
  When you perform a consistent data load, you can use the batch interface to specify an image copy, and load data from that image copy data set into the target table on the accelerator.
- “Adding DB2 Analytics Accelerator Loader syntax to an existing load job” on page 105
  To quickly load data from an external file into both DB2 and an accelerator, you can modify an existing batch job that meets prerequisites instead of using DB2
Analytics Accelerator Loader to generate JCL.

“Using the ISPF interface to create a DUAL load profile” on page 106

A DUAL load profile is a reusable group of options for building a job to load data from an external file into DB2 and an accelerator. You can create a profile that saves your selections and reuse the profile to perform future loads from an external file.

“Specifying options for a DD template” on page 108

For a Load from External job, you can specify options for the template DD.

---

**DB2 Analytics Accelerator Loader components and structure**

DB2 Analytics 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.

**Started task**

The 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 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.mlvq.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 DB2 Analytics 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 DB2 Analytics Accelerator Loader DSNUTILB intercept policy.

```xml
<?XML VERSION="1.0" ENCODING="UTF-8"?>
<!DOCTYPE OPTIONS SYSTEM "DD:DTD(HLODTDPL)"
<DSNUTILB_INTERCEPT
  <POLICY>
```

---

412  DB2 Analytics Accelerator Loader User's Guide
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 DB2 Analytics 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 DB2 Analytics 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). DB2 Analytics Accelerator Loader examines the worklist steps and the DSNUTILB intercept policy to implement the enhanced load to the IBM DB2 Analytics Accelerator.

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:**
- “DB2 Analytics Accelerator Loader components and interfaces” on page 5
- “Managing DSNUTILB interception” on page 366

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

**Related tasks:**
Console commands for the started task

DB2 Analytics Accelerator Loader supports several z/OS console commands for the started task. You issue these commands by using the Modify operator command.

Syntax

The Modify command is \texttt{F} if issued from the z/OS console or \texttt{/F} if issued from SDSF.

Use the following syntax to issue a console command from the z/OS console:

\texttt{F started\_task\_name,command\_name}

where \texttt{started\_task\_name} is the name of the DB2 Analytics Accelerator Loader started task and \texttt{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:

\texttt{/F started\_task\_name,command\_name}

For some commands, you can add an option such as \texttt{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:

\texttt{F started\_task\_name,command\_name,option}

Commands

Tip: You can list all DB2 Analytics Accelerator Loader console commands in the started task output by using the \texttt{HELP} console command.

\textbf{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 \texttt{GLOBAL} option to display the global interception status for the entire z/OS image. Alternatively, you can include the \texttt{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.

\textbf{DISPLAY MEPL}

Use this command to write a list of all DB2 Analytics 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 (hloiplcy).

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:

HLO507001 069 10:42:50.10 TCB: 008CA800 SESSION REPORT +00000001+
HLO507001 069 10:42:50.10 +00000001+ SESS: 25C40048-00000002-I-PDRICKB -T0897680-00E0-PDRICKB
HLO507001 069 10:42:50.10 +00000001+ STATUS: SIGNED ON
HLO507001 069 10:42:50.10 +00000001+ STARTED: 12-30-2013 14:42:42 UTC
HLO507001 069 10:42:50.10 +00000001+ SESS: 25C40208-00000001-I-PDRICKA -T0897697-00EB-PDRICKA
HLO507001 069 10:42:50.10 +00000001+ STATUS: SIGNED ON
HLO507001 069 10:42:50.10 +00000001+ STARTED: 12-30-2013 14:42:37 UTC

HLO507001 069 10:43:13.68 TCB: 008CA800 SESSION REPORT +00000002+
HLO507001 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 DB2 Analytics 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 DB2 Analytics Accelerator Loader batch job, intercepted DSNUTILB utility execution, or HLOMAINT job terminates abnormally without ending its session with the DB2 Analytics 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

Chapter 10. Reference 415
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 91

You can use the DB2 Analytics Accelerator Loader ISPF interface to create the JCL and control cards that are required to load data to build the JCL to load data to DB2 and the IBM DB2 Analytics Accelerator. 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.

**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 Profile Display 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, **CHIDE**, 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:

![Define Fixed Columns panel](image)

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.

- **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.

The following fields appear on the Define Fixed Columns panel:

- **Cmd**
- **New**
- **Old**
- **Len**
- **Column_Name**

Enter: Process selections; PF3: Exit and save; CAN: Exit without save
Line Cmds: F Fix U Unfix

*Figure 25. Define Fixed Columns panel*
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/UNFIX 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:
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 date 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:

   ![Define Column Size panel](image)

   **Figure 27. 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:

```
SORT -------------------- Define Sort Columns ------------ YYYY/MM/DD HH:MM:SS
Option ===> Scroll ===> PAGE
------------------------------------------------------------------------ >
ROW 1 OF 9

Column Function ===> 4 (1-Fix/Unfix, 2-Order, 3-Size, 4-Sort)
Permanent View ===> N (Y-Perm, N-Temp) Reset View ===> N (Y,N)
Stop Sorting ===> N (Y,N)

Cmd Dir New Old Column_Name
CMD
- - NAME
- - CREATOR
- - UPDT
- - DESCRIPTION
- - LAST_USER
- - LAST_UPDATED
- - CRTD_USER
- - CREATED_USER

Enter: Process selections; PF3: Exit and save; CAN: Exit without save
Ord: 1-9 Dir: A Asc D Desc
```

Figure 28. Define Sort Columns panel

The following fields appear on the Define Sort 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**

Indicate whether the view you define is permanent or temporary. Valid values are:

- Y—View customizations are permanent.
- N—View customizations are temporary.

**Stop Sorting**

Indicates whether to stop sorting as specified. Valid values are:

- Y—Stop sorting.
- N—Continue sorting.

**Cmd**

Field where you specify the sort order.

**Dir**

Specifies the lexicographic order for the column. Valid values are:

- A—(Default) Values are listed in ascending order, smallest to largest.
- D—Values are listed in descending order, largest to smallest.

**New**

Displays the new CSORT view settings.
Old  Displays the previous CSORT view settings.

Column_Name
  Shows the name of the column.

2. Type A or D in the Cmd field next to the columns on which you want to base your sort.
3. Press Enter. The new sort preferences are displayed in the New column.
4. Press PF3 to return to the display panel.

**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**
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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## Index

### A
- accelerator, associating with a Consistent Load profile 98
- accelerator, associating with a Load from External (dual) profile 107
- accessibility overview 8, 12
- Add DB2 Tables panel 98, 107
- APF-authorizing the load library 87
- authorization requirements for utilities 20

### B
- Build Accelerator Loader JCL panel 110
- Build DB2 Analytics Accelerator Loader JCL panel 382
- building a job 95
- building a job from a profile 110

### C
- changing display options 58
- checking output for DSNUTILB intercept processing to determine whether interception occurred 367
- column display functions 416
  - CFIX 417
  - CORDER 426
  - CSIZE 421
  - CSORT 422, 423
  - fastpath SORT 424
  - restrictions 416
- column display functions, hiding columns 426
- command parameters 382
- commands, primary 381
- common storage, clearing after a job fails 366
- components and interfaces 5
- configuring a DB2 subsystem 92
- Confirm Action panel 382
- considerations
  - Consistent Load 97
  - data sharing environments 21
  - EBCDIC code page 87
  - Load from External 101
  - running multiple started tasks 20
  - vector table 22
- WTO messages for automated operations 22
- Consistent and Historical Data Load overview 4
- consistent data load 8
- consistent load example JCL 121
- Consistent Load feature limitations 97
- Consistent Load Options panel 98, 99, 119, 130, 382
- Consistent Load overview 97
- Consistent Load profile, creating 98
- consistent load syntax diagram 129
- console commands, started task 414
- cookie policy 429, 431
- Copy DB2 Entries panel 82
- Create a New Configuration of a Product panel 68
- CSETUP functions 416
- CSETUP menu 417
- CSETUP Primary Option Menu panel 417
- customization associated list 65
  - adding DB2 entries 65
  - overview 375
- associating DB2 entries 65
- browsing parameters 82
- changing display options 58
- changing parameters 59
- component 373
- configurations 375
  - copying 69
  - creating 68
  - editing 71
  - managing 67
  - removing 70
  - restoring 72
  - selecting 67
  - copying configurations 69
  - copying DB2 entries 82
- Create a DB2 Entry panel 65
- creating configurations 68
- creating DB2 entries 65
- customization jobs
  - deleting 85
  - displaying 85
  - generating 79
  - maintaining 85
  - regenerating 79
  - renaming 85
  - sort sequence 80
  - submitting 80, 85
- customization library
  - deleting jobs 85
  - maintaining 85
  - overview 378
  - recustomizing 85
  - renaming jobs 85
- customization library qualifier
  - specifying 55
- Customized status 375
- Customizer Workplace panel 79
- customizing a new version of a product 59
- customizing a product for the first time 59
- customizing settings 55
- customization (continued)
  - data sets
    - customization library 378
    - data store 378
    - Discover EXEC library 378
    - metadata library 378
    - data store overview 378
    - data store data set specifying 55
- DB2 data sharing members
  - adding 65
  - associating 65
  - copying 82
  - creating 65
- DB2 entries 375
  - adding 65
  - associating 65
  - copying 82
  - creating 65
- DB2 parameters
  - defining 77
  - editing 77
- DB2 Parameters panel 77
- DB2 subsystems
  - adding 65
  - associating 65
  - copying 82
  - creating 65
- defining DB2 parameters 77
- defining LPAR parameters 75
- defining parameters 73, 79
- defining product parameters 73
- deleting DB2 entries 84
- deleting jobs 60
- Discover Customized Product Information panel 63
- Discover EXEC
  - customizing a new version of a product 59
    - overview 378
  - retrieving product information automatically 63
- Discovered status 375
- discovering product information 63
- display options 58
- displaying jobs 85

---

433
customization (continued)
displaying panel text 58
Edit a Configuration of a Product
panel 71
editing configurations 71
editing LPAR parameters 75
editing parameters 59
editing product parameters 73
Errors in Customization status 375
finding trace data set 364
Finish Product Customization
panel 80
first-time 59
first-time customization 59
generating jobs 79
hiding panel text 58
high-level qualifier 375
Incomplete status 375
job sort order 80
jobs
deleting 85
displaying 85
maintaining 85
renaming 85
sort order 80
submitting 80, 85
LPAR parameters
defining 75
editing 75
LPAR Parameters panel 75
LPARs 86
maintaining jobs 85
Manage Multiple Configurations of a
Product panel 67
managing multiple configurations 67
master list
adding DB2 entries 65
Associate DB2 Entry for Product
panel 65
overview 375
maximizing information panels 58
metadata libraries
specifying 61
metadata library
overview 378
specifying 55
modifying parameters 59
modifying settings 55
multiple instances 55
multiple-LPAR environment 86
Not Required status 375
options 58
panel display options 58
panels
Associate DB2 Entry for Product 65
Create a DB2 Entry 65
Create a New Configuration of a
Product 68
Customizer Workplace 79
DB2 Parameters 77
Discover Customized Product
Information 63
Edit a Configuration of a
Product 71
Finish Product Customization 80
LPAR Parameters 75

customization (continued)
panels (continued)
Manage Multiple Configurations of a
Product 67
Product Parameters 73
Specify the Metadata Library 61
parameter values 26
parameters
browsing 82
defining 73, 79
viewing 82
preparing to use Tools
Customizer 55
product 375
product parameters
changing 60
defining 73
editing 60, 73
modifying 60
Product Parameters panel 73
Ready to Customize status 375
recustomization 59, 60
recustomizing 60
removing configurations 70
removing DB2 entries 84
restoring configurations 72
roadmaps
customizing for the first time 59
first-time customization 59
recustomizing 60
selecting configurations 67
Specify the Metadata Library
panel 61
specifying data sets 55
specifying metadata libraries 61
starting Tools Customizer 53
status types
Customized 375
Discovered 375
Errors in Customization 375
Incomplete 375
Not Required 375
Ready to Customize 375
submitting jobs 80
termination 375
trace data set 364
troubleshooting 364
finding trace data set 364
user job card settings
specifying 55
viewing parameters 82
customization library
overview 378
customization library qualifier
specifying 55
customizing settings 55
customizing the product
APF-authorizing the load library 87
copying the DSNUTILB module 87, 88
copying the started task PROC 87
DSNUTILB module, copying 87
setting up WLM 89
starting the started task 89
summary of customization steps 53

D
data set allocation parameters panel 382
data set names
gathering 23
data sharing environments 21
data store
overview 378
data store data set
specifying 55
DB2 Analytics Accelerator Loader
components 5
DB2 Analytics Accelerator Loader
features and benefits 4
DB2 Analytics Accelerator Loader
interfaces 5
DB2 Analytics Accelerator Loader
Parameters panel 382
DB2 Analytics Accelerator Loader
scenarios 9
DB2 Analytics Accelerator Loader
terminology 8
DB2 Analytics Accelerator Selection
panel 98, 107, 382
DB2 data sharing environments 21
DB2 group attach field
specifying 55
DB2 SSID, adding to the DSNUTILB
intercept policy 412
DB2 subsystem parameters 92, 93
DB2 Subsystem Parameters panel 93,
382
DB2 Subsystems panel 382
DB2 subsystems, configuring 92
DB2 subsystems, deleting 94
DB2 subsystems, specifying
parameters 93
DB2 Table List panel 98, 382
DB2 Table Selection panel 382
DD DSN Template (View) panel 382
DD DSN Template panel 382
DD Template Specification panel 382
DD templates 108
Define Hidden Columns panel 426
deleting a load profile 120
diagnostic information
gathering 364
diagnostic information for Support 365
Discover EXEC
overview 378
dispatching priority requirements 22
display options 58
displaying DSNUTILB intercept
status 369
displaying panel text 58
documentation
accessing 7, 11
sending feedback 7, 11
documentation changes 1
DSNUTILB intercept
checking whether interception
occurred 367
displaying current status 369
restarting an intercepted DB2
utility 371
terminating an intercepted DB2
utility 370
DSNUTILB intercept policy 412
DSNUTILB intercept policy, DB2SYSTEM element 412
DSNUTILB intercept, managing interception 366
DSNUTILF module 141
DSNUTILF module, copying 88
dual load 8
DUAL load profile, creating 107
dumps, producing 365

E
Enter Table and Creator Like to Display 382
Enter Table and Creator Like to Display panel 98, 107
element JCL 366

F
features and benefits of DB2 Analytics Accelerator Loader 4
first-time customization 59
FlashCopy DSN template 98, 99
FlashCopy DSN Template panel 99, 382
functions overview 3

G
getting started with the product 91

H
hiding panel text 58
historical data load 8
Historical Load overview 97
HLODUMMY 106
HLOMAINT utility
using to set restart point for a DB2 utility 371
using to terminate a DB2 utility 370

I
image copy load 100
image copy load example JCL 121
image copy load syntax diagram 129
intercept, DSNUTILB checking whether interception occurred 367
displaying current status 369
managing interception 366
restarting an intercepted DB2 utility 371
terminating an intercepted DB2 utility 370
ISPF interface overview 5
ISPF interface, starting 91
ISPF panel commands and fields 382

J
job card information 95

L
legal notices
cookie policy 429, 431
notices 429
programming interface information 429
trademarks 429, 431
load from external example JCL 139, 141
Load from External feature limitations 101
load from external file 8
Load from external options panel 142
Load from External Options panel 108, 382
Load From External Options panel 107
load from external syntax definitions 142
load from external syntax diagram 141
Load from External, adding extended syntax to exiting job 106
load jobs building 110
generating with batch interface 110
generating with ISPF interface 110
load profile parameters 112, 113
load profiles
Consistent Load 98
deleting 120
DUAL load 107
renaming 119
viewing 119
load profiles overview 109
loading external data scenario 9

M
main menu panel 91, 382
maintenance utility
using to set restart point for a DB2 utility 371
using to terminate a DB2 utility 370
managing DSNUTILB interception 366
managing on panels messages reference information for 205
metadata library overview 378
specifying 55
modifying settings 55

N
navigating product panels 381
New DB2 Subsystem panel 382
notices 429

O
operator commands, started task 414
options 58

P
panel display options 58
panels
Copy DB2 Entries 82
parameters
customization 26
preparing to use Tools Customizer 55
primary commands 381
problems diagnostic information about 364
product component details
DSNUTILB intercept 412
DSNUTILB intercept policy 412
started task 412
supervisor call (SVC) 412
product overview 1
product panels, navigating 381
product structure 412
Profile Display panel 98, 107, 109, 110, 119, 120, 382
Profile Options panel 98, 107, 382
PROFILE.RPT data set, modifying 17
profiles data set, modifying 17
programming interface information 429

Q
qualifier codes for DD template
DSN 108
qualifier codes for FlashCopy DSN 99

R
reader comment form 7, 11
reference information 375
Referentially Dependent Table Selection panel 98, 382
refreshing current data scenario 9
Rename Profile panel 382
renaming a load profile 119
requirements dispatching priority 22
hardware 18
mainframe 18
operating system 18
software 18
started task authorization 19
storage 18
TSO/E environment 18
restarting DB2 utilities setting restart point with the HLOMAINT utility 371
restrictions
Consistent Load 97
Load from External 101
Resulting DSN Using Current Symbolic String panel 382

Index 435
roadmaps
  customizing for the first time 59
  first-time customization 59
RVT issue 22
scenario for loading external data 9
scenario for refreshing current data 9
scenarios for DB2 Analytics Accelerator Loader 9
screen readers and magnifiers 8, 12
security 19
sending information to Support 365
service information 7, 11
Set Batch Job Card Information panel 95, 382
SHAREOPTIONS 17
specifying data sets 55
started task
  running multiple started tasks 20
  started task overview 5
  started task PROC, copying 87
  started task, starting 89
  started task, z/OS console commands 414
  starting the ISPF interface 91
  starting the started task 89
  summary of changes 1
support
  required information 364
  support information 7, 11
Support information requirements 365
syntax
  consistent load example JCL 121, 128
  consistent load jobs 121
  image copy load example JCL 121
  image copy load jobs 121
  load from external example JCL 139, 141
  load from external jobs 138
  overview 121
syntax definitions
  consistent load 130
  image copy load 130
syntax definitions, load from external 142
syntax diagram
  consistent load 129
  image copy load 129
syntax diagram, load from external 141

T
table, associating with a Consistent Load profile 98
table, associating with a Load from External (dual) profile 107
technotes 7, 11
Template Specification panel 108
template specifications (continued)
  SYSTUT1 108
terminating a DB2 utility with the HLOMAINT utility 370
terminology 8
Tools Customizer 53
  associated list
    adding DB2 entries 65
    overview 375
  associating DB2 entries 65
  browsing parameters 82
  changing display options 58
  component 375
  configurations 375
    copying 69
    creating 68
    editing 71
    removing 70
    restoring 72
    selecting 67
  Copy a Configuration of a Product panel 69
  Copy DB2 Entries panel 82
  copying DB2 entries 82
  Create a DB2 Entry panel 65
  creating configurations 68
  creating DB2 entries 65
  customization jobs
    deleting 85
    displaying 85
    generating 79
    maintaining 85
    renaming 85
    sort sequence 80
    submitting 80, 85
  customization library
    deleting jobs 85
    maintaining 85
    recustomizing 85
    renaming jobs 85
  customization library qualifier
    specifying 55
  Customized status 375
  Customizer Workplace panel 79
  customizing a new version of a product 59
  customizing a product for the first time 59
  data sets
    customization library 378
    data store 378
    Discover EXEC library 378
    metadata library 378
data store data set
    specifying 55
  DB2 data sharing members
    adding 65
    associating 65
    copying 82
    creating 65
  DB2 entries 375
    adding 65
    associating 65
    copying 82
    creating 65
    defining 79
    deleting 84
  Tools Customizer (continued)
    DB2 entries (continued)
      generating jobs for 79
      removing 84
      selecting 79
      specifying 79
      unassociating 84
    DB2 group attach field
      specifying 55
    DB2 group attach names
      adding 65
      associating 65
      copying 82
      creating 65
    DB2 parameters
      defining 77
      editing 77
    DB2 Parameters panel 77
    DB2 subsystems
      adding 65
      associating 65
      copying 82
      creating 65
      defining DB2 parameters 77
      defining LPAR parameters 75
      defining parameters 73, 79
      defining product parameters 73
      deleting DB2 entries 84
      deleting jobs 60
    Discover Customized Product Information panel 63
    Discover EXEC
      customizing a new version of a product 59
      retrieving product information automatically 63
    discovered status 375
    discovering product information 63
    displaying jobs 85
    displaying panel text 58
    Edit a Configuration of a Product panel 71
    editing LPAR parameters 75
    editing product parameters 73
    Errors in Customization status 375
    features 6
    finding trace data set 364
    Finish Product Customization panel 80
    first-time customization 59
    generating jobs 79
    hiding panel text 58
    high-level qualifier 375
    Incomplete status 375
    job sort order 80
    jobs
      deleting 85
      displaying 85
      maintaining 85
      renaming 85
      submitting 85
    LPAR Parameters panel 75
    maintaining jobs 85
    Manage Multiple Configurations of a Product panel 67
    managing multiple configurations 67

436  DB2 Analytics Accelerator Loader User's Guide
Tools Customizer (continued)

master list
  adding DB2 entries 65
  Associate DB2 Entry for Product panel 65
  overview 375
maximizing information on panels 58
metadata libraries 61
  specifying 61
metadata library specifying 55
multiple configurations 67
multiple instances 55
multiple-LPAR environment 86
Not Required status 375
overview 6
panels
  Associate DB2 Entry for Product 65
  Copy a Configuration of a Product 69
  Copy DB2 Entries 82
  Create a DB2 Entry 65
  Create a New Configuration of a Product 68
  Customizer Workplace 79
  DB2 Parameters 77
  Discover Customized Product Information 63
  Edit a Configuration of a Product 71
  Finish Product Customization 80
  LPAR Parameters 75
  Manage Multiple Configurations of a Product 67
  Product Parameters 73
  Remove a Configuration of a Product 70
  Specify the Metadata Library 61
parameters
  browsing 82
  viewing 82
preparing to use 55
product 375
product parameters
  changing 60
  editing 60
  modifying 60
Product Parameters panel 73
Ready to Customize status 375
recustomization 59
recustomizing a product 59, 60
removing DB2 entries 84
roadmaps
  recustomizing a product 60
  selecting configurations 67
Specify the Metadata Library panel 61
specifying metadata libraries 61
starting 53
status types
  Customized 375
  Discovered 375
  Errors in Customization 375
  Incomplete 375
  Not Required 375

Tools Customizer (continued)

status types (continued)
  Ready to Customize 375
  submitting jobs 80
terminology 375
trace data set 364
troubleshooting 364
user job card settings specifying 55
viewing parameters 82
trace data set
  finding 364
  trademarks 429, 431
troubleshooting 147
troubleshooting, clearing common storage after a job fails 366
troubleshooting, diagnostic information for Support 365
troubleshooting, managing DSNUTILB interception 366
  troubleshooting, producing dumps 365

U
user job card settings
  specifying 55
User settings panel 382
User Settings panel 92, 95

V
vector table issue 22

W
Warning panel 382
what’s new 1
WLM address space, setting up 89
WTO messages, use in automated operations 22

Z
z/OS console commands 414