

Version 2 Release 3

*IBM IMS Configuration Manager for
z/OS
User's Guide*



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z/OS
User's Guide*



Note:

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

First Edition (April 2018)

This edition applies to Version 2 Release 3 of IBM IMS Configuration Manager for z/OS (product number 5655-WR2) and to all subsequent releases and modifications until otherwise indicated in new editions.

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About this information

IBM® IMS™ Configuration Manager for z/OS® (also referred to as IMS Configuration Manager) is a tool that you can use to manage IMS parameters on z/OS.

These topics provide instructions for installing, configuring, and using IMS Configuration Manager.

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

- Plan for the installation of IMS Configuration Manager
- Install and operate IMS Configuration Manager
- Customize your IMS Configuration Manager environment
- Diagnose and recover from IMS Configuration Manager problems
- Use IMS Configuration Manager with other z/OS products

You should have a working knowledge in the following areas to use these topics:

- The z/OS operating system
- ISPF
- IMS systems
- Microsoft Windows operating systems

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

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

Part 1. Getting started

These topics provide an overview of IMS Configuration Manager and help you get started.

Chapter 1. IMS Configuration Manager overview

IBM IMS Configuration Manager for z/OS (also referred to as IMS Configuration Manager) is a configuration management tool that you can use to analyze IMS parameters.

Easy to set up and use, IMS Configuration Manager automatically builds an inventory of your IMS topology and allows you to instantly drill down into the parameter details for each and every system.

IMS Configuration Manager helps you to achieve the following benefits:

- Automated mapping of your entire IMS environment.
- Create a common, consistent configuration across your enterprise by identifying inconsistencies.
- A better understanding of your parameter configurations across all the IMS systems in your enterprise.

These benefits can be realized by using these product features:

- Autodiscovery via batch command or via the Common Services Library server. Discover IMSplexes, IMS systems, IMS Connect, Common Service Layer (CSL) components, and parameter configurations.
- Powerful ISPF-based parameter editor.
- Eclipse plug-in for z/OS Explorer with intelligent parameter comparison capabilities.
- History and auditing of changes to parameters.
- Ability to list parameters based on your IMS topology, showing you which members are active on which systems.
- Advanced parameter editing support including context sensitive help for members of the IMS PROCLIB data set.

What's new in IMS Configuration Manager

This topic describes some of the recent developments in IMS Configuration Manager.

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.

IMS V15 PROCLIB member support (PI75644)

Support for new and updated IMS V15 PROCLIB members. See Chapter 13, “PROCLIB members supported by IMS Configuration Manager,” on page 123 for further detail.

Parameter history support in z/OS Explorer (PI75644)

Add support to view PROCLIB member history data in the IMS Configuration Manager Eclipse plug-in for z/OS Explorer. See “Listing active parameter members across your enterprise” on page 68 for further detail.

Product realignment

Refocus IMS Configuration Manager features and associated documentation on IMS parameter management.

What does IMS Configuration Manager do?

IMS Configuration Manager allows you to manage parameters using an ISPF interface and an Eclipse plug-in.

The parameter management features allows you to easily find and edit parameters, coordinate parameter changes across IMSplexes, and ease migration to newer versions of IMS. IMS Configuration Manager helps ensure changes are more reliable by providing syntax and value-checking, context-sensitive help, parameter statement generation, and a history of changes.

The IMS Configuration Manager Eclipse plug-in provides an enterprise-level view of your IMSplexes and systems. The Eclipse plug-in augments the ISPF interface with powerful search and parameter comparison capabilities.

IMS Configuration Manager features and benefits

IMS Configuration Manager makes your IMS environment easier to manage and audit by providing you with utilities for modifying IMS parameters.

Autodiscovery

Use IMS Configuration Manager to automatically reveal and catalog your IMS topology.

Use the autodiscovery feature to perform the following tasks:

- Automatically reveal your IMS topology. Detect IMSplexes, IMS systems (within an IMSplex and without), IMS Connect, Common Service Layer (CSL) components, and system parameter configurations.
- Securely store the results of autodiscovery in an IMS Configuration Manager definitions repository. Use the definitions repository to unify and control all your definitions from a single location.
- Use the DISCOVER batch command to quickly populate the IMS Configuration Manager definitions repository with minimal initial input, or use the Common Services Library server together with the AUTODISCOVER keyword and the Eclipse plug-in to view and analyze your topology in z/OS Explorer.

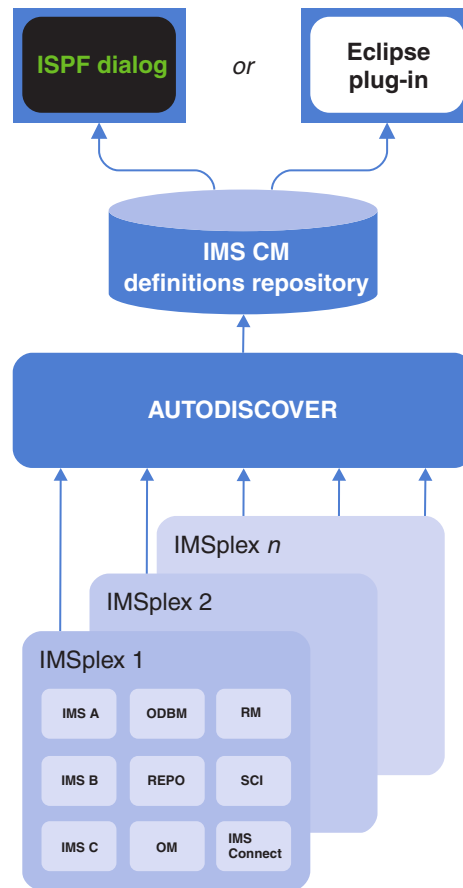


Figure 1. Discovering your IMS environment with IMS Configuration Manager

Consider the following benefits of using autodiscovery:

Map your IMS environment

Quickly identify the topology of your IMS, IMSplex, and IMS Connect environment. Identify differences and inconsistencies across all your global sites, and provide a path forward for simplifying, consolidating, and leveraging your IMS environment.

Prepare to use IMS Configuration Manager

Once your IMS topology is stored in the IMS Configuration Manager definitions repository, you are ready to use the parameter management features of IMS Configuration Manager.

Related tasks:

“Establishing an IMS Configuration Manager definitions repository” on page 22
 The IMS Configuration Manager definitions repository is a VSAM key-sequenced data set (KSDS) that contains an inventory of IMS Configuration Manager definitions and parameter change history. To begin using IMS Configuration Manager, you must create a definitions repository and then populate it with definitions using the autodiscovery feature.

Advanced parameter management

The IMS Configuration Manager parameter manager provides the following features.

- A parameter smart editor that supports most IMS configuration members, including all DFS members.

- Powerful search capabilities to find parameters in any supported member using keywords. For example, identify all members with “DRD” parameters or identify all “IMS V15” parameters, just by entering those terms in a parameter search.
- Parameter listing based on your IMS topology, showing you which members are active on which systems.
- Context-sensitive help makes updating parameters easier and more efficient.

Eliminate confusion and save time

IMS Configuration Manager allows you to quickly and reliably list the relevant PROCLIB parameter members for an IMS system. Use IMS Configuration Manager to identify and work with only those parameter members that are currently in use for a particular system.

De-skill the process of managing parameters

IMS Configuration Manager provides help and validation for the offline management of parameters. Using IMS Configuration Manager, your changes become safer, you have context-sensitive help for each and every parameter, and if you make a mistake you can revert to a historical version.

Enterprise-wide system and parameter management

The IMS Configuration Manager Eclipse plug-in provides an enterprise-level view of your resources and parameters and allows you to control and manage systems.

Use the Eclipse plug-in to perform the following tasks:

- Centralize and consolidate your system and IMSplex configurations. Automatically reveal your IMS topology using the AUTODISCOVER keyword and the Common Services Library server.
- View IMS systems, resources, and parameters.
- Compare parameters across multiple systems.
- Submit type-2 commands and view the output.
- Use filters to highlight transactions matching certain attributes.
- Identify transactions that can perform commands.
- Identify transactions with a zero queue count.
- List all active parameter members across your enterprise and drill down to parameter values.
- Export data to external spreadsheet applications for further analysis.

Source	IMSplex	SystemName	MemberName	ParmSource	ALOT	AOIS	AOH	APPLID1	APPC	APPCSE	ARC	ARMRST	ASOT	AUTO	BSIZ	CMDMCS
1	PLBDP	IBDR	DFSPBPLP	INEFFECT							01			N	02048	
1	PLCDH	ICDH	DFSPBHWS	INEFFECT	60		N	ICDHEVT1			01	N	60	N	02048	
1	PLCDP	ICDR	DFSPBPLP	INEFFECT	1440	N	N	CCDR			1		1440			Y
1	PLDDH	IDDH	DFSPBHWS	INEFFECT	60		N				01	N	60	N	02048	
1	PLDDQ	ICDQ	DFSPBQ1	INEFFECT	60		N	ICDQEV1			01	N	60	N	02048	
1	PLDDQ	IDQ	DFSPBQ1	INEFFECT	60		N				01	N	60	N	02048	
1	PLXDH	IBDH	DFSPBHWS	INEFFECT	60		N	IBDHEVT1			01	N	60	N	02048	
1	PLXDP	IBDP	DFSPBPLP	INEFFECT	60	S	N	IBDHEVT1			01	Y	60	N	02048	
1	PLXDP	ICDP	DFSPBPLP	INEFFECT	60	S	N	ICDHEVT1	N	F	1		60	N	2048	
1	PLXDP	IDDP	DFSPBPLP	INEFFECT	60	S	N				01	N	60	N	02048	
1	PLXNU	IADP	DFSPBPLP	INEFFECT	60	S	N	IADHEVT1			01		60	N	02048	
1	IPABX	ABS0	DFSPB00M	INEFFECT		R	R	IMABIMS0	Y		01			N		R
1	IPABX	ABS1	DFSPB01M	INEFFECT		R	R	IMABIMS1	Y		01			N		R
1	IPABX	ABS2	DFSPB02M	INEFFECT		R	R	IMABIMS2	Y		01			N		R
1	IPABX	ABS3	DFSPB03M	INEFFECT		R	R	IMABIMS3	Y		01			N		R

Figure 2. Comparing parameters using the plug-in

Consider the following benefits of using the Eclipse plug-in:

Simplify your IMS environment

Quickly identify the topology of your IMS, IMSplex, and IMS Connect environment. Instantly highlight differences and inconsistencies across all your global sites, and provide a path forward for simplifying, consolidating, and leveraging your IMS environment.

Make your configuration easier to analyze

The IMS Configuration Manager Eclipse plug-in and the autodiscovery feature makes it simpler to interrogate your parameter configuration. Use the Eclipse plug-in to:

- Rapidly compare consolidated IMS parameter values across multiple IMS systems and IMSplexes.
- Quickly search for key values, highlight differences, and apply filtering to further refine the result.
- Identify which parameter values are in a JCL override and which are in PROCLIB member.
- List and review live IMS system resources and conduct cross-system comparisons.
- Submit IMS type-2 commands, view formatted responses, and compare response output between multiple systems.
- Save commonly used parameter, resource, and command queries for later use.
- Export result sets to external spreadsheet applications for additional analysis or record keeping.

IMS Configuration Manager components

The main components of IMS Configuration Manager include the IMS Configuration Manager definitions repository, the ISPF dialog, the Eclipse plug-in, and the batch command interface.

IMS Configuration Manager definitions repository

The IMS Configuration Manager definitions repository is a VSAM key-sequenced data set (KSDS) that contains configuration information for your IMS environment.

You can use the IMS Configuration Manager definitions repository in the following ways:

- Import definitions into the IMS Configuration Manager definitions repository using autodiscovery.
- Browse and edit the contents of the IMS Configuration Manager definitions repository using the IMS Configuration Manager “ISPF dialog” on page 8 or the “Eclipse plug-in” on page 8.

Related tasks:

“Establishing an IMS Configuration Manager definitions repository” on page 22
The IMS Configuration Manager definitions repository is a VSAM key-sequenced data set (KSDS) that contains an inventory of IMS Configuration Manager definitions and parameter change history. To begin using IMS Configuration Manager, you must create a definitions repository and then populate it with definitions using the autodiscovery feature.

ISPF dialog

The IMS Configuration Manager ISPF dialog provides you with the ability to view systems and parameters.

The following figure shows the Primary Menu of the IMS Configuration Manager ISPF dialog.

IMS Configuration Manager - Primary Option Menu

Option ==>

0 Profile

Customize your IMS Configuration Manager profile

1 IMSplexes

Maintain IMS parameters across an IMSplex

2 Systems

Maintain IMS parameters for a system

3 PROCLIBs

Maintain IMS PROCLIB data sets

4 Discovery

Run the autodiscover utility

X Exit

Exit IMS Configuration Manager

Environment:

Definitions Repository 'USR.REPOS'

+

Figure 3. The IMS Configuration Manager Primary Menu

Related concepts:

“Using the ISPF dialog” on page 18

The IMS Configuration Manager ISPF dialog is used to view IMSplexes, IMS systems, and parameters and provides access to the IMS Configuration Manager definitions repository. The dialog uses the default Common User Access (CUA) attributes.

Eclipse plug-in

The IMS Configuration Manager Eclipse plug-in provides you with a consolidated view of your systems and IMSplexes.

The screenshot shows the Eclipse IDE interface with the IMS Configuration Manager plug-in. The left pane displays a navigation tree with 'All Sources' selected. The main pane shows a table of IMSplexes and parameters.

IMSplex	SystemName	Syst...	MemberName	DataSetName	LibraryNumber	Size	CreateDate	ChangeTimestamp	ChangeUserID	MemberType	Message
PLXDR	OMH10M	OM	BPECFG11	BDH.VB10.PROCLB	1	45	2010-09-21	2010-09-21-09:30:09	AXW1	BPECFG	
PLXDR	RMH1RM	RM	BPECFG11	BDH.VB10.PROCLB	1	45	2010-09-21	2010-09-21-09:30:09	AXW1	BPECFG	
PLXDR	SCH1SC	SCI	BPECFG11	BDH.VB10.PROCLB	1	45	2010-09-21	2010-09-21-09:30:09	AXW1	BPECFG	
PLXDR	ODH1OD	ODBM	CSLDC0H1	BDH.VB10.PROCLB	1	26	2010-08-10	2010-08-10-09:35:47	AXW1	CSLDC	
PLXDR	ODH2OD	ODBM	CSLDC0H1	BDH.VB10.PROCLB	1	26	2010-08-10	2010-08-10-09:35:47	AXW1	CSLDC	
PLXDR	OMH10M	OM	CSLD0H1	BDH.VB10.PROCLB	1	12	2008-12-30	2010-09-21-09:38:52	AXW1	CSLDI	
PLXDR	RMH1RM	RM	CSLD0H1	BDH.VB10.PROCLB	1	9	2008-12-30	2010-09-21-09:38:56	AXW1	CSLDI	
PLXDR	SCH1SC	SCI	CSLD0H1	BDH.VB10.PROCLB	1	11	2008-12-30	2010-09-21-09:37:01	AXW1	CSLDI	
PLXDR	ODH1OD	ODBM	CSLD0H1	BDH.VB10.PROCLB	1	7	2008-12-30	2010-09-22-21:19:32	AXW1	CSLDI	
PLXDR	ODH2OD	ODBM	CSLD0H2	BDH.VB10.PROCLB	1	7	2010-02-26	2010-09-22-21:19:36	AXW1	CSLDI	
PLCDH	DOH1OD	ODBM	BPECFG12	ICDH.VC10.PROCLB	1	45	2010-11-09	2010-11-09-12:16:24	AXW1	BPECFG	
PLCDH	DOH2OD	ODBM	BPECFG12	ICDH.VC10.PROCLB	1	45	2010-11-09	2010-11-09-12:16:24	AXW1	BPECFG	
PLCDH	DOH1OD	ODBM	BPECFG12	ICDH.VC10.PROCLB	1	45	2010-11-09	2010-11-09-12:16:24	AXW1	BPECFG	
PLCDH	DOH2OD	ODBM	BPECFG12	ICDH.VC10.PROCLB	1	45	2010-11-09	2010-11-09-12:16:24	AXW1	BPECFG	
PLCDH	DOH1OD	ODBM	BPECFG12	ICDH.VC10.PROCLB	1	45	2010-11-09	2010-11-09-12:16:24	AXW1	BPECFG	
PLCDH	DOH2OD	ODBM	BPECFG12	ICDH.VC10.PROCLB	1	45	2010-11-09	2010-11-09-12:16:24	AXW1	BPECFG	
PLCDJ	DCJ1OD	ODBM	BPECFG12	ICDJ.VC10.PROCLB	1	45	2010-11-09	2010-11-09-12:19:32	AXW1	BPECFG	
PLCDJ	DCJ2OD	ODBM	BPECFG12	ICDJ.VC10.PROCLB	1	45	2010-11-09	2010-11-09-12:19:32	AXW1	BPECFG	
PLCDJ	DCJ1OD	OM	BPECFG12	ICDJ.VC10.PROCLB	1	45	2010-11-09	2010-11-09-12:19:32	AXW1	BPECFG	

Figure 4. The IMS Configuration Manager Eclipse plug-in

You can use the Eclipse plug-in to compare parameters across multiple systems, list all active parameter members across your enterprise, and export data to external spreadsheet applications for further analysis. The Common Services Library server provides core IMS Configuration Manager services to the Eclipse plug-in.

Related tasks:

“Installing the plug-in” on page 30

The IMS Configuration Manager plug-in for IBM Explorer for z/OS (z/OS Explorer) provides a graphical user interface (GUI) to some of the functions provided by the IMS Configuration Manager ISPF dialog. The plug-in communicates with IMS Configuration Manager via Common Services Library server, which is supplied with IBM Common Services Library for z/OS (Common Services Library).

Batch commands

The batch utility (GPLUTIL) allows you to maintain your IMS Configuration Manager definitions repository.

Related reference:

Chapter 14, “ IMS Configuration Manager batch utility (GPLUTIL),” on page 127
The IMS Configuration Manager batch utility allows you to perform IMS Configuration Manager functions in batch.

Importing

The IMS Configuration Manager batch utility (GPLUTIL) allows you to import existing definitions into your IMS Configuration Manager definitions repository.

The following batch commands can be used to import definitions:

DISCOVER

Automatically discovers your IMSplexes, IMS systems, IMS Connect, and Common Service Layer (CSL) members and creates corresponding definitions in your IMS Configuration Manager definitions repository.

MAINT

Create IMSplex, IMS, IMS Connect, and CSL members using a series of sub-commands.

Editing

The IMS Configuration Manager batch utility (GPLUTIL) allows you to edit objects stored in your IMS Configuration Manager definitions repository.

The following batch commands can be used to edit the contents of the IMS Configuration Manager definitions repository:

MAINT

Edit IMSplex, IMS, IMS Connect, and Common Service Layer (CSL) members stored in an IMS Configuration Manager repository.

COPY

Copies definitions within an IMS Configuration Manager definitions repository, or from one IMS Configuration Manager definitions repository to another.

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:

Product documentation and updates

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

Information on the web

The IMS 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/imstools-library.html>

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

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

IBM Redbooks® publications that cover IMS 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 IMS databases while staying ahead of today's top data management challenges:

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

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4. Click **Continue** to specify the types of updates that you want to receive.
5. Click **Submit** to save your profile.

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- 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. See 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. Installation

These topics explain how to install and configure the IMS Configuration Manager ISPF dialog and Eclipse plug-in. The Eclipse plug-in is installed into the Common Services Library server client.

Hardware and software prerequisites

Before you install and configure IMS Configuration Manager, make sure that your environment meets the following minimum hardware and software requirements.

To install IMS Configuration Manager, you use SMP/E and standard RECEIVE, APPLY, and ACCEPT processing. For complete information about installation requirements, prerequisites, and procedures for IMS Configuration Manager, see the IMS Configuration Manager Program Directory.

Hardware prerequisites

IMS Configuration Manager V2.3 operates on any hardware configuration that supports the required software.

Software prerequisites

Installation requirements and operating system

- z/OS, V1.13 or later (5694-A01)

Mandatory operational requirements

- One of the following IMS versions:
 - IMS, V13.1 (5635-A04)
 - IMS, V14.1 (5635-A05)
 - IMS, V15.1 (5635-A06)
- IBM Common Services Library for z/OS, V1.1

IMS Configuration Manager libraries

The components of the IMS Configuration Manager dialog are delivered in these libraries.

SGPLEXEC

REXX EXECs

SGPLLINK

Executable load modules

SGPLSAMP

Sample utility programs and user macros

SGPLMENU

ISPF messages

SGPLPENU

ISPF panels

SGPLSENU

ISPF skeleton JCL

Recommended ISPF setup

You can use ISPF standard facilities to customize the dialog. These recommendations help you use IMS Configuration Manager efficiently.

Screen size and scrolling

Set the screen size for your terminal session to 32 lines. IMS Configuration Manager panels are optimized for 32 lines, but accommodate 24 lines by scrolling with the Backward function key (F7) and the Forward function key (F8).

Point-and-shoot fields

Point-and-shoot fields perform an action when you select them. For example, when you select a column heading in a list of PROCLIB members, IMS Configuration Manager sorts the list by that column.

Tabbing to point-and-shoot fields

To make it easier to select point-and-shoot fields, you can include them in the tabbing order when you press the Tab key to skip between fields:

1. Enter the ISPF SETTINGS command to display the ISPF Settings panel.
2. Select **Tab to point-and-shoot fields** as shown in Figure 6 on page 16.

Highlighting point-and-shoot fields

The dialog uses the default CUA attributes. However, it is recommended that you set the color of point-and-shoot fields to distinguish them from other fields:

1. Enter the ISPF CUAATTR command.
2. Scroll to the **Point-and-Shoot** panel element, and then enter a color name (for example, YELLOW, as shown in the following figure).

To make these fields even more distinct, you can also set their highlight attribute to REVERSE (reverse video).

ISPF Settings
 CUA Attribute Change Utility

Command ==>
Defaults

Change colors, intensities, or highlights for panel attribute elements.
 Enter the EXIT command to save changes or enter the CANCEL command to exit
 without saving. To restore the defaults for a type, clear the field and
 press Enter or select the Defaults point-and-shoot field to restore all
 default settings for all types.

Panel Element	Color	Intensity	Highlight	More: - +
List Items	WHITE	LOW	NONE	
Normal Entry Field	TURQ	LOW	USCORE	
Normal Text	GREEN	LOW	NONE	
Panel ID	BLUE	LOW	NONE	
Panel Instruction	GREEN	LOW	NONE	
Panel Title	BLUE	LOW	NONE	
Point-and-Shoot	YELLOW	HIGH	NONE	
PD Available Choices	WHITE	LOW	NONE	
PD Unavailable Choices	BLUE	LOW	NONE	

Figure 5. Recommended CUAATTR settings: point-and-shoot fields

Displaying the command line and long messages

IMS Configuration Manager uses both long and short messages. ISPF displays short messages at the upper right of a panel, next to the panel title. ISPF usually displays long messages in a pop-up window. However, if a long message is less than the screen width, then, by default, ISPF displays it adjacent to the command line.

Recommendation: Set the command line to appear at the top of the screen and set long messages to display adjacent to the command line, not in a pop-up. This avoids the potential for message windows to overlay data entry fields and make the field help inaccessible.

To optimize ISPF settings for IMS Configuration Manager:

1. Enter the ISPF SETTINGS command to display the ISPF Settings panel.
2. Ensure **Command line at bottom** and **Long message in pop-up** are *not* selected, as shown in the following figure:

ISPF Settings	
Command ==>	
Options	Print Graphics
Enter "/" to select option	Family printer type 2
Command line at bottom	Device name
7 Panel display CUA mode	Aspect ratio . . . 0
- Long message in pop-up	
- Tab to action bar choices	
7 Tab to point-and-shoot fields	General
- Restore TEST/TRACE options	Input field pad . . N
- Session Manager mode	Command delimiter . ;
- Jump from leader dots	
- Edit PRINTDS Command	
7 Always show split line	
- Enable EURO sign	
:	

Figure 6. Recommended ISPF settings

Starting IMS Configuration Manager with GPLOREXX

To start the IMS Configuration Manager ISPF dialog, run the GPLOREXX initialization module.

About this task

You can start IMS Configuration Manager by first installing IMS Configuration Manager libraries statically within your ISPF library setup (see “Static setup” on page 17), or you can start IMS Configuration Manager dynamically (see “Dynamic setup”). Optionally, you can add IMS Configuration Manager to an ISPF menu.

GPLOREXX accepts four parameters:

prefix The data set prefix for IMS Configuration Manager data sets. For example, **GPL.V2R3M0**. Alternatively, specify **NODYNAM** to tell IMS Configuration Manager to use the existing allocation settings.

lang Identifies the national language. The default is **ENU** (U.S. English). Currently, IMS Configuration Manager only supports U.S. English.

PASSAPPL

Optional. Overrides the enforcement of the default IMS Configuration Manager application **NEWAPPL(GPLO)**. IMS Configuration Manager uses the invoking application's APPL specification.

low-level qualifiers

Optional. Overrides the default low-level qualifiers for the six IMS Configuration Manager data sets. All six qualifiers must be specified in the correct order, enclosed in brackets and separated by commas. For example: (EXEC, LINKLIB, MESSAGE, PANEL, SKELETON, TABLE)

Dynamic setup

The simplest way to start the IMS Configuration Manager ISPF dialog is to allow the startup REXX exec, GPLOREXX, to dynamically allocate the IMS Configuration Manager libraries. This is known as *dynamic setup*.

To start IMS Configuration Manager and have the IMS Configuration Manager libraries dynamically set up when the dialog is started, do the following tasks:

1. On the TSO command processor panel (ISPF option 6), enter:

```
EX 'prefix.SGPLEXEC(GPLOREXX)' 'prefix lang'
```

For example:

```
EX 'GPL.V2R3M0.SGPLEXEC(GPLOREXX)' 'GPL.V2R3M0 ENU'
```

If the qualifier for your installation data sets is not GPL.V2R3M0, then alter the command accordingly.

2. To add IMS Configuration Manager to an ISPF menu, set &ZSEL to:

```
CMD(EX ''prefix.SGPLEXEC(GPLOREXX)'' ''prefix lang'') NOCHECK
```

NOCHECK is specified to support the entry of concatenated commands through the direct option (trail). Also specify on the calling panel:

```
&ZTRAIL=.TRAIL
```

Note: Dynamic setup requires that the supplied library names are retained. These are listed under “IMS Configuration Manager libraries” on page 13.

Static setup

If you prefer not to have the IMS Configuration Manager libraries dynamically allocated each time you start the ISPF dialog, you can instead add the libraries to the appropriate ISPF concatenations in your TSO logon procedure. This is known as *static setup*.

To install the IMS Configuration Manager libraries statically within your ISPF library setup, do the following tasks:

1. Include the library *prefix.SGPLEXEC* in your SYSEXEC or SYSPROC concatenation. This library contains the required EXECs. It is allocated during installation with fixed-block record format and record length 80 bytes (RECFM=FB, LRECL=80).

You must put these libraries in the SYSEXEC concatenation. However, if you want to put them in SYSPROC, it must have a record length of 80 bytes.

Ensure that all libraries contained in your concatenations are in the same record format with the same block size or are in the order of decreasing block size.

2. Add the remaining libraries to your ISPF library setup:
 - Include the link/load module library *prefix.SGPLLINK* in the ISPLLIB concatenation.
 - Include the message library *prefix.SGPLMENU* in the ISPLMLIB concatenation.
 - Include the panel library *prefix.SGPLPENU* in the ISPLPLIB concatenation.
 - Include the skeleton library *prefix.SGPLSENU* in the ISPLSLIB concatenation.
 - Include the table library *prefix.SGPLTENU* in the ISPTLIB concatenation.
3. On the TSO command processor panel, enter:

```
%GPLOREXX 'NODYNAM lang'
```
4. To add IMS Configuration Manager to an ISPF menu, set &ZSEL to:

```
CMD(%GPLOREXX ''NODYNAM lang'') NOCHECK
```

Overriding the default application

You can override the default IMS Configuration Manager application, **GPLO**.

Procedure

Use the PASSAPPL parameter in the ISPF menu &ZSEL setting:

For example:

```
CMD(EX 'prefix.SGPLEXEC(GPLOREXX)' 'prefix lang PASSAPPL') NOCHECK NEWAPPL(GPLZ)
```

IMS Configuration Manager will then use **GPLZ** as the application rather than the default.

Overriding the data set low-level qualifier

You can override the IMS Configuration Manager data set low-level qualifiers by specifying the required qualifiers as the last parameter in the ISPF menu &ZSEL setting.

Procedure

Specify the required qualifiers as the last parameter in the ISPF menu &ZSEL setting. All six qualifiers must be specified in the correct order, enclosed in brackets and separated by commas.

For example:

```
CMD(EX 'prefix.SGPLEXEC(GPLOREXX)' 'prefix lang (EXEC,LNK,MSG,PNL,SKL,TBL)')
```

IMS Configuration Manager will then use the following libraries:

prefix.EXEC

REXX EXECs

prefix.LNK

Executable load modules

prefix.MSG

ISPF messages

prefix.PNL

ISPF panels

prefix.SKL

ISPF skeletons JCL

prefix.TBL

ISPF input tables

Using the ISPF dialog

The IMS Configuration Manager ISPF dialog is used to view IMSplexes, IMS systems, and parameters and provides access to the IMS Configuration Manager definitions repository. The dialog uses the default Common User Access (CUA) attributes.

Related concepts:

“ISPF dialog” on page 8

The IMS Configuration Manager ISPF dialog provides you with the ability to view systems and parameters.

Related tasks:

“Establishing an IMS Configuration Manager definitions repository” on page 22

The IMS Configuration Manager definitions repository is a VSAM key-sequenced data set (KSDS) that contains an inventory of IMS Configuration Manager definitions and parameter change history. To begin using IMS Configuration Manager, you must create a definitions repository and then populate it with definitions using the autodiscovery feature.

Navigating

To navigate the ISPF dialog, you perform a combination of actions.

Navigating involves the following actions:

- Selecting menu options
- Entering line actions (one- to three-letter commands) next to items in lists
- Entering primary commands on the command line
- Pressing function keys
- Selecting an option from the action bar menu

At any point, you can find out what actions are available to you:

- To display a pop-up menu of available line actions, enter / (a forward slash) next to a list item.
- To get help on the available commands, open the **Help** menu, and then select **Command Help**.
- To get help on the available function keys, open the **Help** menu, and then select **Keys Help**.

Prompt (F4)

Some entry fields have a Prompt action that allows you to complete the field by selecting a value from a pop-up list of valid values.

Prompt fields are indicated by a plus sign (+) at the end of the field. To display the pop-up list, move the cursor to the field and press the Prompt function key (F4). A list of available values is displayed from which you can select one or more depending on the circumstance.

Prompt fields are automatically completed if you enter enough characters to make the value unique. For example, a field with allowed values YES, NO, NEVER, is automatically completed if you enter Y, NO, NE.

Action bar

An action bar is available at the top of panels to assist with navigation and function.

To select an option in the action bar, move the cursor to it and press Enter. A pull-down menu of choices is displayed. To select one, either move the cursor to it, or type the number of your selection, then press Enter.

The action bar options in IMS Configuration Manager are:

File File choices are New, Save, Saveas, Cancel, or Exit. File is available on all panels, but with only some of the choices depending on the function of the panel.

Settings

Used to turn Save and Cancel confirmations on or off in your profile settings bypassing the Primary Menu. Settings is available on system definition and member edit panels.

View Controls the contents displayed in the member list; whether the members are from the PROCLIB, the IMS Configuration Manager definitions repository, or both, or only supported members. View is available from the IMS All Members and PROCLIB member lists.

Help Displays product help information, described in “Online help” on page 21. Help is available on all panels.

Function keys

Function keys are used extensively throughout the IMS Configuration Manager dialog.

Until you are familiar with IMS Configuration Manager, it might be helpful to display the function key labels. To display function key labels, enter the ISPF command PFSHOW ON. To hide labels, enter PFSHOW OFF.

These are the function keys that are available in IMS Configuration Manager:

Help (F1)

Displays help information for panels and keywords.

Split (F2)

Splits the ISPF screen at the cursor position.

Exit (F3)

Exits the current panel and saves the changes. Also, on parameter member edit panels, swaps from standard ISPF edit to assist mode.

Prompt (F4)

Displays a selection list of available choices for an entry field. A plus sign (+) adjacent to a field or column heading indicates that prompt is available.

Preview (F5)

Swaps from assist mode to standard ISPF edit.

Resize (F6)

Removes or restores the window border.

Backwards (F7)

Scrolls the list of data backwards.

Forwards (F8)

Scrolls the list of data forwards.

Swap (F9)

Swaps between screens when in ISPF split-screen mode.

Left (F10)

Scrolls a section of the panel left to see more data.

Right (F11)

Scrolls a section of the panel right to see more data.

Cancel (F12)

Cancels the panel without saving changes.

Online help

IMS Configuration Manager help is context-sensitive, that is, the information displayed is appropriate to the position of the cursor when you request help.

F1 function key

Function key F1 is the default key to request help.

Extended help is available from the command line of every panel. Move the cursor to the command line and press F1 or enter the HELP command.

Field help is available on every input field. Move the cursor to the field and press F1.

Reference phrases are used to indicate that more information is available on a topic. By default, they are white and highlighted. You can use the ISPF command SETTINGS to change the attributes of reference phrases to ensure that they are easily distinguished from the surrounding text. When a help window is displayed, press the Tab key to move the cursor to a reference phrase then press F1. A pop-up window displays additional information on the topic.

Action bar help

Help in the action bar provides the following types of information to help you use IMS Configuration Manager:

Extended Help

The help information for the currently displayed panel. This describes what the panels does, and the fields that appear on the panel.

Command Help

The commands available on this panel.

Keys Help

The function keys available on this panel. The list shows the default function key assignments, but you can reassign them using the ISPF KEYS and KEYLIST commands.

About IMS Configuration Manager

Information about this release of IMS Configuration Manager.

Parameter help

On the parameter member edit panels, IMS Configuration Manager provides context-sensitive help about the parameter values. It describes the parameter's relevance to the IMS version and control region type of the IMS system, and provides release-dependent default values and allowed values.

Setting IMS Configuration Manager ISPF profile options

The IMS Configuration Manager profile allows you to set options such as whether to have a delete confirmation, and what job statement information to use when generating JCL from the dialog.

Procedure

1. From the IMS Configuration Manager Primary Menu, select option 0 **Profile**. The Personal Profile panel is displayed.

2. Edit your profile options as required. Press the Help function key (F1) for additional information.
3. Press the Exit function key (F3) to save the new settings.

Establishing an IMS Configuration Manager definitions repository

The IMS Configuration Manager definitions repository is a VSAM key-sequenced data set (KSDS) that contains an inventory of IMS Configuration Manager definitions and parameter change history. To begin using IMS Configuration Manager, you must create a definitions repository and then populate it with definitions using the autodiscovery feature.

Procedure

1. On the IMS Configuration Manager Primary Menu, specify the fully qualified data set name of the IMS Configuration Manager definitions repository in the **Definitions Repository** field. The IMS Configuration Manager definitions repository stores your IMS definitions for use in IMS Configuration Manager.

Note: To use an existing IMS Configuration Manager definitions repository, overwrite the data set name, or press the Prompt function key (F4) to select from a list of previously defined data sets.

2. Select option **4 Discovery**.
3. Complete the fields on the **Define Definitions Repository** panel as required. Press the Help function key (F1) for additional details on each field. If you have selected **Edit IDCAMS command**, review and modify the output and then enter the command EXEC. Otherwise, press Enter.

Define Definitions Repository

Command ===> _____

The IMS Configuration Manager Definitions repository contains system definitions.

Enter "/" to select option
 _ Edit IDCAMS command
 _ Browse errors only

Definitions repository 'USER.IMSCM.REPOS.SAMPLE' _____

Cluster Level Information:

Space Units	1	1. Cylinders	Primary Quantity . . .	1
		2. Tracks	Secondary Quantity . .	1
		3. Records		
		4. Kilobytes		
		5. Megabytes		

Volume _____

Data Class _____

Management Class . . . _____

Storage Class _____

Figure 7. Defining an IMS Configuration Manager definitions repository data set

4. To create the definitions repository, press Enter. The definitions repository is created and the **Autodiscovery** panel is displayed.
5. Complete the fields on the **Autodiscovery** panel. The following options are available:

Discover IMSplexes and member systems

Select this option to discover all systems across your IMS topology that are part of an IMSplex. If you wish to limit autodiscovery to one or more IMSplexes (optional), enter their names in the spaces below. Alternatively, use a mask to discover all IMSplexes beginning with a particular prefix. For example, to limit autodiscovery to all IMSplexes with the prefix PLX, enter PLX*.

Note: If you are working with an existing definitions repository and it already contains IMSplex definitions, you can press PF4 to select a single IMSplex for re-discovery and update.

Discover systems that are not part of an IMSplex

Select this option to discover all systems on specific LPARs that are **not** part of an IMSplex. To use this option, you must also enter the names of the LPARs in the spaces provided.

Note: If you have more LPARs than the number of spaces provided, simply run the autodiscover utility again for the additional LPARs.

Autodiscovery

Command ==> _____

Definitions repository: 'USER.IMSCM.REPOS.SAMPLE'

/ Discover IMSplexes and member systems

- Limit discovery to the following IMSplexes:

____ + ____ + ____ + ____ + ____ +

____ + ____ + ____ + ____ + ____ +

____ + ____ + ____ + ____ + ____ +

____ + ____ + ____ + ____ + ____ +

- Discover systems that are not part of an IMSplex

Specify one or more LPARs:

Instructions:

Enter the EDIT command to edit generated JCL before job submission.

Enter the SUBmit command to run the autodiscovery job.

Figure 8. The IMS Configuration Manager Autodiscovery panel

6. On the command line, enter EDIT to review, edit, and then submit the generated JCL, or enter SUB to submit the job immediately without review. To reset the display, enter RESET.

Results

After you have submitted the JCL, the discovery job searches your IMS topology and stores the results in the IMS Configuration Manager definitions repository.

What to do next

To see what the autodiscovery process has found, return to the primary option menu and select option **1 IMSplexes** or option **2 Systems**.

Related concepts:

“IMS Configuration Manager definitions repository” on page 7

The IMS Configuration Manager definitions repository is a VSAM key-sequenced data set (KSDS) that contains configuration information for your IMS environment.

“Using the ISPF dialog” on page 18

The IMS Configuration Manager ISPF dialog is used to view IMSplexes, IMS systems, and parameters and provides access to the IMS Configuration Manager definitions repository. The dialog uses the default Common User Access (CUA) attributes.

“Autodiscovery” on page 4

Use IMS Configuration Manager to automatically reveal and catalog your IMS topology.

Related reference:

“Example JCL for discovering systems and IMSplexes” on page 132

This JCL uses the DISCOVER batch command to automatically discover IMS components for use in IMS Configuration Manager.

Installing Common Services Library server

If you want to use the IMS Configuration Manager plug-in for IBM Explorer for z/OS (z/OS Explorer), you need to install Common Services Library server on z/OS. The plug-in uses Common Services Library server to communicate with IMS Configuration Manager.

About this task

Common Services Library server is a component of IBM Common Services Library for z/OS , V1.1 (Common Services Library), a no-charge product.

Other products also use Common Services Library server. If you have already installed the same release of Common Services Library server to support another product, you do not need to install the server again: skip the following procedure, and configure your existing server to support IMS Configuration Manager. You can either start separate instances of the server configured for each product, or you can configure the server to support more than one product.

Procedure

To install Common Services Library server:

1. Get Common Services Library from IBM.
2. Follow the instructions in the *Common Services Library Program Directory*.

Common Services Library server consists of members in the following two target libraries:

SFUNLINK

Contains Common Services Library server load modules. Must be APF-authorized.

SFUNSAMP

Contains sample Common Services Library server startup JCL and configuration files.

Common Services Library server introduces no installation prerequisites beyond those required by IMS Configuration Manager.

What to do next

Verify that you have successfully installed Common Services Library server.

Verifying installation of Common Services Library server

You should verify that Common Services Library server starts before you configure it to support the IMS Configuration Manager plug-in.

About this task

The following procedure describes how to start Common Services Library server. This procedure is independent of IMS Configuration Manager. Later procedures describe how to configure the server to work with IMS Configuration Manager.

Procedure

1. Copy the following three members from the Common Services Library server sample library SFUNSAMP to a data set of your choice, and then edit the copies according to the comments inside each member.

FUNSRVST

Startup JCL:

```
//SERVER EXEC PGM=FUNSRV,  
// PARM=('BPECFG=FUNBPECF,FUNCFG=FUNCONFG') 1  
//*  
//STEPLIB DD DISP=SHR,DSN=FUNHLQ.SFUNLINK 2  
//PROCLIB DD DISP=SHR,DSN=MY.FUN.PROCLIB 3
```

1 The PARM parameter specifies the member names of the two configuration files required by Common Services Library server. These members must be in the concatenation specified by the PROCLIB DD statement (**3**). In this example, both members belong to the same data set, MY.FUN.PROCLIB.

2 In this example, FUNHLQ is the high-level qualifier of the data set where you have installed the Common Services Library server load module library, SFUNLINK.

3 The PROCLIB DD statement specifies the location of the Common Services Library server configuration files.

FUNBPECF

IMS Base Primitive Environment (BPE) configuration parameter file. Common Services Library server uses BPE services. The BPE configuration file defines the BPE execution environment settings for the server.

Unless you have a specific requirement to set different tracing options, use the sample member as supplied.

FUNCONFG

Common Services Library server configuration file.

You must edit the sample member to specify your own site-specific values for the following parameters:

SERVER_NAME

The name of this Common Services Library server.

TCP_PORT

The TCP/IP port number on which the server listens for messages from the IMS Configuration Manager plug-in.

For the other parameters, you can either use the default values or specify values according to your site-specific requirements.

2. Submit the startup JCL.
3. View the JESMSGLG job output data set.

If Common Services Library server started successfully, the JESMSGLG data set contains the following message:

```
FUN3226I Server start completed
```

4. Stop the server.

For example, enter the following MVS™ operator command:

```
F jobname,SHUTDOWN
```

What to do next

Configure the Common Services Library server startup JCL and Common Services Library server configuration file to support the IMS Configuration Manager plug-in.

BPECFG: Common Services Library server BPE configuration file

You need to configure the Common Services Library server by setting options in the BPECFG file.

The BPECFG file can specify the following parameters. For an example file, see member FUNBPECF of the Common Services Library server sample library SFUNSAMP.

Unless you have a specific requirement to set different tracing options, use the sample member as supplied.

LANG=ENU

The language of BPE and IMS component message text. ENU is for US English, which is currently the only supported language. This parameter is required.

TRCLEV=(*type,level,component*),PAGES=*num_pages*)

The trace level for a trace table and, optionally, the number of storage pages allocated for the trace table.

The supported values of *type* are:

BPE Sets tracing options for the BPE.

FUN Sets tracing options for Common Services Library server. It is recommended that you leave these trace levels at high.

FUNCFG: Common Services Library server configuration file

You need to configure the Common Services Library server by setting parameters in the FUNCFG file.

The FUNCFG file can contain the following parameters. For an example configuration file, see member FUNCONFIG in the Common Services Library server sample library SFUNSAMP.

SERVER_NAME=*name*

1 - 8 alphanumeric character server name. The name must be unique across the sysplex. This is a required parameter.

PRODUCT=*prd*

A 3-character product code representing a product to be supported by the server. For example, GPL for IMS Configuration Manager. A server can support multiple products. Specify a PRODUCT parameter for each product. If you do not specify any products, then you will only have access to basic server administration functions.

TCP_NAME=*name*

A 1 - 8 character name of the TCP/IP stack. If this parameter is omitted or blanks are specified, the server uses the default TCP/IP stack.

TCP_PORT=*port*

The TCP/IP port number that the server listens on: 1 - 65535. This parameter is required. Consult your network administrator to identify a suitable (not in use) port.

TCP_THREADS=*threads*

The maximum number of threads that can accept client connections concurrently: 0 - 64. The default is 16.

TCP_MAXSOC=*sockets*

The maximum number of TCP sockets available for concurrent client connections: 50 - 2048. The default is 50.

TCP_IPV6=Y|N

Whether the server supports IPv6 clients. Specify Y to allow IPv6 clients to connect to the server. Your TCP/IP stack must be configured for IPv6; if it is configured to also allow IPv4 clients, then the server will support both. The default is N: the server supports only IPv4 clients, regardless of the stack configuration.

CCSID=*ccsid*

Specifies the coded character set identifier (CCSID) for the server: 1 - 65533. The CCSID must specify a single-byte character set (SBCS) that is supported by z/OS Unicode Services. The special identifiers 0, 65534, and 65535 are not supported. The default is 37.

CCSID2=*ccsid2*

The client CCSID assumed for session data translation if a CCSID specification isn't given in the client-server communication. Default: 819 (ISO 8859-1 ASCII) if not specified.

The CCSID must represent a single byte character set (SBCS) that is supported by z/OS Unicode Services. The special identifiers 0, 65534, and 65535 are not supported.

IRM_EXIT(*ID(identifier)*,*NAME(routine_name)*,*ID2HEX(hex_string)*)

IRM message exit specification.

Instructs the Common Services Library server to route IRM messages with a matching IRM_ID to the nominated IRM message exit routine in order to facilitate IRM request support.

IRM_EXIT has the following parameters:

ID(*identifier*)

The 8-character IRM identifier.

NAME(*routine_name*)

The name of the IRM message exit.

ID2HEX(*hex_string*)

Optional, secondary 8-character IRM identifier specified in a 16-character hexadecimal string representation.

If ID2HEX is not specified the Common Services Library server generates the secondary identifier string by translating the given 8-character EBCDIC identifier (ID) to ASCII. For example, ID(*HWSCSL*) will have a value of ID2HEX(2A48575343534C2A) generated by default.

Multiple IRM_EXIT parameter definitions may be specified.

SAF_CLASS=*class*

The 1 - 8 character SAF security class name, used for product access authorization. If this parameter is omitted or explicitly set to blanks, then product access authorization is not performed.

SDA_BARLIM=*kilobytes*

The Session Data Area (SDA) bar limit size in kilobytes: 64 - 4096. An SDA is used to hold any incoming client request data and subsequently any outgoing client response data generated for the request. An SDA of a length that exceeds the SDA_BARLIM will reside above the bar. If this parameter is omitted, the default is 2048 kilobytes.

SDA_MAXLEN=*megabytes*

The Session Data Area (SDA) maximum length in megabytes: 4 - 100. An SDA is used to hold incoming client request and outgoing client response data. A client request with data that exceeds the SDA_MAXLEN will fail. If this parameter is omitted the default is 32 megabytes.

Common Services Library server security

Common Services Library server can check whether users are authorized to use a product. Common Services Library server performs actions according to the authority of the client user ID.

Access authorization for basic server functions

In addition to the products that are specified by the PRODUCT parameter in the Common Services Library server configuration file, Common Services Library server starts its own default product, with product code FUD, that provides basic functions such as verifying connections with clients. If the Common Services Library server configuration file specifies a SAF_CLASS parameter, the server performs a security check for that default product using the following general resource profile:

FUNPRD.FUD

If the user has at least READ access for this resource profile, Common Services Library server allows access to the basic functions.

Users of the GPL plug-in must have at least READ access to this resource profile.

Product access authorization

Products running under Common Services Library server manage authorization internally, within the constraints of the Common Services Library server environment.

Optionally, Common Services Library server can restrict access to each product. If the Common Services Library server configuration file specifies a SAF_CLASS parameter, the server performs a security check using the following general resource profile:

`FUNPRD.product`

where *product* is one of the 3-character product codes specified by the PRODUCT parameter in the Common Services Library server configuration file. For example, GPL is the product code for IMS Configuration Manager.

If the user has at least READ access for this resource profile, Common Services Library server allows access to that product. Otherwise, Common Services Library server denies access to that product.

Users of the GPL plug-in must have at least READ access to this resource profile.

Client user ID authentication

Common Services Library server authenticates the client user ID when a client establishes a connection with the server. Client request threads running in the target product are associated with the user ID of the connected client.

Starting Common Services Library server

To start Common Services Library server, you submit an MVS batch job.

Procedure

1. Customize the JCL in the FUNSRVST member of the Common Services Library server sample library SFUNSAMP.
2. Submit the batch job.

Stopping Common Services Library server

To stop an instance of Common Services Library server, you stop the corresponding MVS batch job.

Procedure

Enter one of the following MVS operator MODIFY (F) or STOP (P) commands:

Option	Description
F <i>jobname</i>,SHUTDOWN	Quiesce the server before shutting down. The server rejects new client request threads and shuts down when all active client request threads have completed.
F <i>jobname</i>,SHUTDOWN FORCE	Force the server to shut down immediately, cancelling any active client request threads. You can upgrade a quiesce shut down to a forced shut down; see the following command SHUTDOWN FORCE command.

Option	Description
P <i>jobname</i>	<p>Quiesce the server before shutting down.</p> <p>This STOP command is a shorthand alternative to F <i>jobname</i>, SHUTDOWN, with the following difference: the server will not respond to subsequent MODIFY commands, so you cannot upgrade this request to a forced shut down.</p>

where *jobname* refers to the batch job for the instance of the server that you want to stop.

Common Services Library server administrative functions

Common Services Library server provides administrative functions that allow you to control the server and the products it runs.

The Common Services Library server accepts operator commands to perform many operations. The format of the command is:

F *servername*, *command*

Where the commands include the following

DISPLAY PRODUCT *product_code*

Displays information about a particular product.

RESTARTIP

Restarts the TCP/IP layer.

SHUTDOWN

Shuts down the server, waiting for any products to complete their functions.

SHUTDOWN FORCE

Forces shut down even if some products have not responded.

START PRODUCT *product_code*

Starts a product with the given code.

STOP PRODUCT *product_code*

Stops a product with the given code.

Installing the plug-in

The IMS Configuration Manager plug-in for IBM Explorer for z/OS (z/OS Explorer) provides a graphical user interface (GUI) to some of the functions provided by the IMS Configuration Manager ISPF dialog. The plug-in communicates with IMS Configuration Manager via Common Services Library server, which is supplied with IBM Common Services Library for z/OS (Common Services Library).

Before you begin

- Install Common Services Library server on z/OS.

About this task

The following figure shows how the environment required to run the plug-in spans systems.

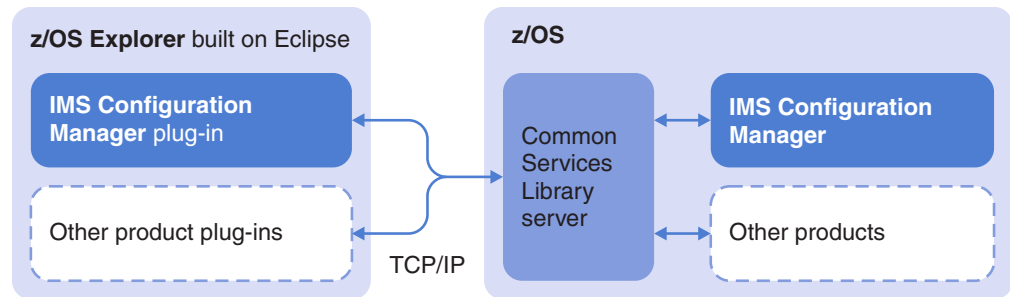


Figure 9. IMS Configuration Manager plug-in environment

Procedure

1. Configure Common Services Library server to support IMS Configuration Manager:
 - a. Add the parameter `PRODUCT=GPL` to the Common Services Library server configuration file, `FUNCFG`.
 - b. Customize the server startup job to include the IMS Configuration Manager link library and IMS RESLIB in the STEPLIB concatenation. Add each IMS Configuration Manager definitions repository you want to view with the IMS Configuration Manager Eclipse plug-in. In the following example, replace label placeholders as required:

```

//FUNSRV JOB (ACCOUNT), 'NAME'
//SERVER EXEC PGM=FUNSRV,
//  PARM=('BPECFG=BPECONFIG,FUNCFG=FUNCFG')
/*
//STEPLIB DD DISP=SHR,DSN=FUNHLQ.SFUNLINK
//          DD DISP=SHR,DSN=PRDHLQ.SGPLLINK
//          DD DISP=SHR,DSN=IMSHLQ.SDFSRESL
//PROCLIB DD DISP=SHR,DSN=FUNHLQ.SFUNSAMP <--- BPE and FUN config.
//GPLCNTL DD *          <--- GPL product control parms
      REPOSITORY NAME=MYREPOS1,
                  DESC=(A CONFIGURATION REPOSITORY),
                  DSN=REP.HLQ
      REPOSITORY NAME=MYREPOS2,
                  DESC=(ANOTHER REPOSITORY),
                  DSN=REP.HLQ
/*
//GPLPRINT DD SYSOUT=*
  
```

where:

- 1** The IMS Configuration Manager link library.

Note: The IMS Configuration Manager link library, and all other libraries in the STEPLIB, must be APF-authorized to successfully start the Common Services Library server.

- 2** The IMS RESLIB.

- 3** One or more IMS Configuration Manager definitions repositories you want to view in the IMS Configuration Manager Eclipse plug-in.

Note: Duplicate IMSplex member systems must not exist across multiple IMS Configuration Manager definitions repositories. Any

duplicate IMSplex member system will be reported at start-up time and the corresponding definitions repositories will be closed. See “GPL7312E” on page 102.

2. Install z/OS Explorer and the IMS Configuration Manager Eclipse plug-in on your PC. For the most up to date information, visit the Install Eclipse Tools page on the IBM developerWorks website.

Related concepts:

“Eclipse plug-in” on page 8

The IMS Configuration Manager Eclipse plug-in provides you with a consolidated view of your systems and IMSplexes.

Chapter 7, “Key features of the Eclipse plug-in,” on page 65

The IMS Configuration Manager Eclipse plug-in has several powerful features that can help you improve your understanding of your environment.

Related tasks:

“Enabling autodiscovery in Common Services Library server” on page 34

Enabling the optional autodiscovery feature in the Common Services Library server instructs IMS Configuration Manager to automatically detect IMS systems and update the IMS Configuration Manager definitions repository with the definitions each time the server starts. This is an **optional** feature that can be used to quickly refresh your definitions repository on a periodic basis or when changes have been made to your topology.

Getting started with z/OS Explorer

This topic explains how to get started with z/OS Explorer and the IMS Configuration Manager Eclipse plug-in.

Before you begin

For large IMS topologies, the IMS Configuration Manager Eclipse plug-in can often present large amounts of parameter, resource, or type-2 command response data from requests whose scope extends across many IMS systems and IMSplexes. If when using the IMS Configuration Manager Eclipse plug-in with z/OS Explorer you encounter an out of memory condition where the Java™ heap space has been exhausted due to large volumes of data being returned, try increasing the maximum java heap size to rectify the issue. To do this:

1. Open the zosexplorer.ini file (or eclipse.ini file as applicable) located in the z/OS Explorer installation directory.
2. If present, remove option -XX:MaxPermSize=xxxx.
3. On a new line, add option -Xms256M. This sets the minimum heap size to 256 MB.
4. On a new line, add option -Xmx4096M. This sets the maximum heap size to 4096 MB.
5. Save the file and restart your z/OS Explorer.

If you continue to receive out of memory errors after this change, increase the maximum value as required and try again. To monitor the heap size, select **Window > Preferences > General** and then select **Show heap status**.

Procedure

1. Double-click the z/OS Explorer shortcut.
2. Select **Window > Open Perspective > Other**.
3. Select IMS Configuration Manager, and then click OK.

4. Follow the prompts to complete the **User ID** and **Password** fields using the TSO credentials you normally use when using the IMS Configuration Manager ISPF dialog.

What to do next

The first time that the IMS Configuration Manager Eclipse plug-in is run, none of your systems are displayed. See “Connecting to a Common Services Library server” to connect the IMS Configuration Manager Eclipse plug-in with one or more running instances of the Common Services Library server.

Related concepts:


Chapter 8, “Exploring your environment,” on page 67

Use the IMS Configuration Manager Eclipse plug-in to explore your systems.

Connecting to a Common Services Library server

The IMS Configuration Manager Eclipse plug-in requires a connection to a running instance of the Common Services Library server.

Procedure

1. In the **Navigation** view, click , and then click **Common Services Library server**.
2. Enter the details of your Common Services Library server as follows:

Server Name

The name of the Common Services Library server. This field is descriptive only, but must be unique.

Host Name

The host name or IP address of the Common Services Library server.

Host Port

The TCP/IP port of the Common Services Library server.

Connection Profile

The **Connection Profile** is a predefined user name and password combination. If you leave this field blank, the default connection profile is used. To create a new connection profile or to change the default connection profile, click the **View Menu** icon, click **Preferences**, and then click **Connection Profiles**.

Test connection

Tests that the client is able to connect to the server.

The new server is displayed in the Common Services Library server section of the **Navigation** panel. If you cannot see the Common Services Library server, you might need to expand the Common Services Library server section of the **Navigation** view.

Tip: The IMS Configuration Manager Eclipse plug-in can be configured to connect to several servers at once. Use this feature to create a unified view of all your z/OS images across your global sites.

Related tasks:

“Exploring the topology of your systems” on page 67

The IMS Configuration Manager Eclipse plug-in allows you to explore the topology of your systems using the **Navigation** view.

Enabling autodiscovery in Common Services Library server

Enabling the optional autodiscovery feature in the Common Services Library server instructs IMS Configuration Manager to automatically detect IMS systems and update the IMS Configuration Manager definitions repository with the definitions each time the server starts. This is an **optional** feature that can be used to quickly refresh your definitions repository on a periodic basis or when changes have been made to your topology.

Before you begin

Ensure that the Common Services Library server has been installed and configured successfully. See “Installing the plug-in” on page 30.

Procedure

1. Customize the Common Services Library server startup job to include the AUTODISCOVER **1** keyword.

```
//GPLCNTL DD *  
    REPOSITORY NAME=REPONAME,           +  
                DESC=(MYREPOSITORY),    +  
                DSN=TEST.REPOS,         +  
                AUTODISCOVER             1  
/*
```

2. Submit the server startup job. The results of autodiscovery are stored in the log. See Chapter 16, “Understanding the result of the discovery process,” on page 163.

What to do next

- To rediscover systems and components, restart the server or the IMS Configuration Manager product component (GPL) running under the server.
- To limit the scope of discovery to certain systems and member types, you can specify additional parameters. See “REPOSITORY keyword” on page 160 for additional details.
- To manage systems and parameters across your enterprise, see Part 3, “Enterprise system management with the Eclipse plug-in,” on page 63.

Related tasks:

“Installing the plug-in” on page 30

The IMS Configuration Manager plug-in for IBM Explorer for z/OS (z/OS Explorer) provides a graphical user interface (GUI) to some of the functions provided by the IMS Configuration Manager ISPF dialog. The plug-in communicates with IMS Configuration Manager via Common Services Library server, which is supplied with IBM Common Services Library for z/OS (Common Services Library).

Related reference:

Chapter 16, “Understanding the result of the discovery process,” on page 163
Results of the IMS Configuration Manager autodiscovery process are summarized in the log.

“Example JCL for autodiscovery” on page 159

This JCL uses the AUTODISCOVER keyword and the Common Services Library server to automatically discover IMS components for use in IMS Configuration Manager.

Chapter 3. Exploring IMS Configuration Manager

Now that your IMS Configuration Manager definitions repository contains system definitions, several options become available.

Continue reading from one of the following sections for further information.

If you are interested in learning more about the parameter management features of IMS Configuration Manager, see Part 2, “Parameter management,” on page 37. In this section, you will learn how to perform the following tasks:

- List and search parameter members using the ISPF dialog.
- Create and edit parameter members.
- Insert parameters based on a model.
- Use the syntax checker.
- View context-sensitive help for parameters.
- View parameter change history.

If you are interested in learning more about the features of the Eclipse plug-in, see Part 3, “Enterprise system management with the Eclipse plug-in,” on page 63. In this section, you will learn how to perform the following tasks:

- Explore your IMSplexes and IMS systems, view resources, and drill down into active parameter members.
- Submit IMS type-2 commands.
- Filter, search, save, and export results to CSV.
- Compare systems and their parameter values.

Part 2. Parameter management

The following topics provide information about how to use the IMS Configuration Manager ISPF dialog to manage IMS parameters defined in IMS PROCLIB data set members.

Related concepts:

“Advanced parameter management” on page 5

The IMS Configuration Manager parameter manager provides the following features.

Chapter 4. Listing and searching parameter members using the ISPF dialog

Use the IMS Configuration Manager ISPF dialog to list and search parameter members based on the systems on which they are active or within a specific PROCLIB.

Regardless of which way you choose to list parameters, IMS Configuration Manager automatically detects and shows placeholders for missing parameter members, allows you to perform semantic searches for parameters and their values, and provides context-sensitive help for each parameter member.

Listing parameter members for all systems in the IMSplex

The IMS Configuration Manager ISPF dialog allows you to view only those parameter members that are currently in use by each IMS system in the IMSplex using the ISPF dialog.

Before you begin

To view active members, you must specify your PROCLIB settings in the system definition. For details, see “Adding PROCLIB data set names to system definitions” on page 168.

Procedure

1. From the IMS Configuration Manager Primary Menu, select option 1 **IMSplexes** to display the IMSplex list. The IMSplex panel is displayed.
2. Enter line action **P** next to the IMSplex you want to examine.

Results

The active member list shows all active parameter members for that system that are in all PROCLIBs defined for that system.

```

File Help
-----
IMSPlex Active Members
Row 1 of 29
Command ===> _____ Scroll ===> PAGE
IMSPlex . . . : PLXAB
Description . :
Search . . _____

/ System      Prompt      Description
+ - IMS
+ - IMSCON
- - ODBM
- - S3XDPOD          ODBM
- -   CSLDIPS3
- -   CSLDCPS3
- -   BPECFLP
- - OM
- - S1XDPOM
- -   CSLOIPS1
- -   BPECFLP
- - S3XDPOM
- -   CSLOIPS3
- -   BPECFLP
- - RM
- - S1XDPRM
- -   CSLRIPS1
- -   BPECFLP
- - S3XDPRM
- -   CSLRIPS3
- -   BPECFLP
+ - SCI
- - REPO
- - S1XDPRP
- -   FRPCFGS1
- -   BPECFLP
- - S3XDPRP
- -   FRPCFGS3
- -   BPECFLP
**End**

```

Figure 10. Viewing active parameter members within the entire IMSPlex

Listing parameter members that are used by a system

The IMS Configuration Manager ISPF dialog enables the IMS administrator to work with only those parameter members that are currently in use for a particular IMS system.

Before you begin

To view active members, you must specify your PROCLIB settings in the system definition. See “Adding PROCLIB data set names to system definitions” on page 168.

Procedure

1. From the IMS Configuration Manager Primary Menu, select option 2 **Systems** to display the IMS System List panel. The IMS Systems List panel is displayed.

2. Enter line action **P** next to the system you wish to examine.

Results

As shown in the following figure, the active member list displays all active parameter members for that system that are in all PROCLIBs defined for that system.

File Help

EDIT
IMS Active Members
Row 1 of 22

Command ==>
Scroll ==> PAGE

IMS System ID . . : SYSX Version (VV.R) . : 13.1

Description . . . : DEVELOPMENT

IMSpIex : IPLEX

Search . . _____

Member	Prompt	Lib	Size	Created	----- Changed -----	ID
/ BPECFG						
- DBFMSDBC		1				
- DFSCGPLe		1	12	2012/11/02	2012/11/02 08:39:04	GPL
- DFSDC000		1	1	2012/11/02	2012/11/02 02:05:24	GPL
- DFSDF						
- DFSDRFDC		1				
- DFSDSCM0		1	117	2015/03/10	2015/03/10 03:05:07	ICM
- DFSDSCTI		1				
- DFSFDR						
- DFSFIXDC		1				
- DFSHSB00						
- DFSMPLDC		1				
- DFSORS						
- DFSPBHWS		1	90	2012/11/02	2012/11/02 08:41:13	PRO
- DFSRSR00		1				
- DFSSPM						
- DFSSQ						
- DFSVSMDC		1				
- DFSYDT0		1	4	2016/01/19	2016/01/19 07:05:44	ADM
- DFS62DT0						
- DSPBI000						
- IDDHssid						

Figure 11. The IMS Active Members panel

Placeholder member names in the list can appear with one or more underscores () as a suffix or display the text *missing in the **Prompt** field. These members do not exist, but are put into the list so that you can easily create them. Members that display the *missing text represent a problem in the system definition.

Listing parameter members in a PROCLIB

The IMS Configuration Manager ISPF dialog PROCLIB view allows you to browse all members in a PROCLIB data set.

Procedure

1. From the IMS Configuration Manager Primary Menu, select option 3 **PROCLIBs**. The IMS PROCLIBs panel is displayed.

```

File Help
-----
                                IMS PROCLIBs                                Row 1 to 2 of 2
Command ==> _____ Scroll ==> PAGE

/   PROCLIB Data Set Name                                VV.R +
   'USER.V13.PROCLIB'                                    13.1
   'USER.V14.PROCLIB'                                    14.1
***** Bottom of data *****

```

Figure 12. The IMS PROCLIBs panel

2. Enter line action **S** next to an existing PROCLIB, or use line action **I** to insert a new row and type the name of a new PROCLIB.

Results

As shown in the following figure, the PROCLIB member list displays all members in the PROCLIB.

```

File Help
-----
EDIT   USER.V13.PROCLIB                                Row 1 of 44
Command ==> _____ Scroll ==> PAGE

Search . . . _____

Member
/   Prompt  Lib  Size  Created  ----- Changed ----- ID
-   BPECFGIT 1    3  2017/01/31  2017/08/20 09:48:59  USER
-   BPEEXIT1 1    5  2017/05/31  2017/06/11 13:15:48  USER
-   CQSIP
-   CQSSGIAN 1   11  2017/02/19  2017/08/20 09:49:42  USER
-   CQSSL
-   CSLDCIAN 1   13  2017/01/10  2017/06/04 14:03:25  USER
-   CSLDCSAM 1   30  2017/01/10  2017/01/10 16:06:06  USER
-   CSLDI
-   CSLOI
-   CSLRITAN 1   13  2017/01/10  2017/01/10 13:27:29  USER
:

```

Figure 13. PROCLIB view of parameter members

What to do next

Comprehensive help on the correct usage and meaning of each member of the IMS PROCLIB data set can be viewed by accessing the online help:

1. Position the cursor on the **Command** line and then press F1.
2. Position the cursor on **PROCLIB member help** and then press F1.

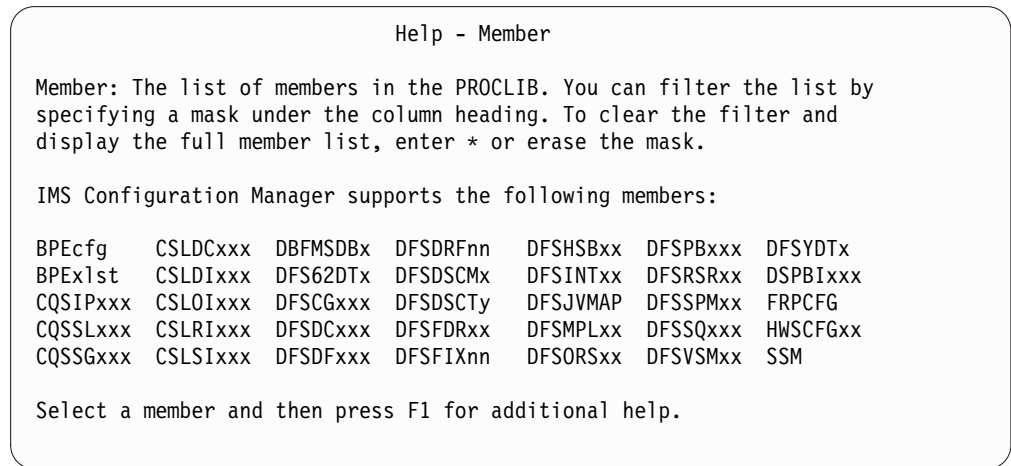


Figure 14. Online member help for the IMS PROCLIB data set

Related reference:

Chapter 13, “PROCLIB members supported by IMS Configuration Manager,” on page 123

The IMS Configuration Manager ISPF dialog supports a large number of PROCLIB members.

Filtering parameter members

The IMS Configuration Manager ISPF dialog allows you to specify masking characters to filter the parameter member list.

Before you begin

Display a list of parameter members.

Procedure

Enter a filter in the member column heading.

These are some of the patterns you can use:

* (asterisk)

The * matches zero or more characters, no matter what they are. The * can be used alone (to display all members) or in combination with other characters. For example:

DFS* Displays all members starting with DFS.

DFS*01 Displays all members starting with DFS and ending with 01. For example, DFSCG01, DFSINT01, and DFSPB001.

% (percent sign)

The % matches exactly one character, no matter what it is. For example:

%%%%% Displays all members of exactly 6 characters.

DFS%%%%%

Displays all 8-character members starting with DFS.

DFS%%%%01

Displays all 8-character members starting with DFS and ending with 01. For example, DFSVSM01, DFSINT01, and DFSSPM01.

Results

```

File Help
-----
EDIT      VIP1.NEW.V13.PROCLIB                               Row 1 of 26
Command ==> _____ Scroll ==> PAGE

Search . . . _____

Member
/  DFS*      Prompt  Lib   Size  Created   ----- Changed -----  ID
-  DFSCGIAN           1      1  2017/06/10 2017/06/12 13:17:58  VIP1
-  DFSDCIAN           1     38  2017/01/07 2017/08/21 09:47:18  VIP1
-  DFSDFCOM           1     17  2017/03/10 2017/08/21 09:46:23  VIP1
-  DFSDFEX1           1      4  2017/04/28 2017/07/11 13:17:23  VIP1
-  DFSDFEX2           1      3  2017/04/28 2017/06/29 17:29:59  VIP1
:
:
```

Figure 15. Displaying all parameter members starting with DFS

Related tasks:

“Using the list filter” on page 73

The IMS Configuration Manager Eclipse plug-in has a filtering function that allows you to filter and highlight entries according to specified criteria.

Searching for members by their parameters and their function

Search is available from an active member list for an IMS system, a group, or a PROCLIB using the IMS Configuration Manager ISPF dialog.

About this task

Search scans all the members in the list, then displays only those members with parameters that match the specified search arguments.

An example of searching for parameters related to dynamic resource definition (DRD) is shown in the following figure by entering DRD into the **Search** prompt.

```

File Help
-----
EDIT DATA.IMSPROC.CO Row 1 of 28
Command ==> Scroll ==> PAGE

Search . . . DRD

Member
/ Prompt Lib Size Created ----- Changed ----- ID
- DFSCGOC0 1 7 2017/03/07 2017/03/07 12:45:02 VIP
- MODBLKS=OLC How MODBLKS resources are changed 1
-----
- DFSDF 2
- AUTOEXP_IMSID How definitions are exported to repository
- AUTOEXPORT Definitions exported at checkpoint time
- AUTOIMPORT Automatic definition import in COLD start
- COMMON_SERVICE_LAYER
- DCLWA Default log write ahead option for created
- DYNAMIC_RESOURCES Options for import and export definitions
- IMPORTERR Action on error during automatic import
- MODBLKS How MODBLKS resources are changed
- MSC Options for Multiple Systems Coupling
- RDDSDSN List of DSNs for RDDS processing
- RDDSERR Action on error when accessing RDDS
- REPOERR Action on error when accessing IMS repository
- REPOSITORY Options for the IMS repository
:

```

Figure 16. Searching for DRD parameters using the IMS Configuration Manager ISPF dialog

The preceding search finds all parameters related to DRD. If there is a value for the parameter, the value is shown (**1**). Parameters where the member does not yet exist are also shown (**2**). To display help for a parameter, enter line action H next to the parameter.

More examples of search arguments include:

ODBM or OPEN DATABASE

Finds all parameters related to IMS Open Database implementation.

VTAM All parameters related to VTAM®.

IOBF 1024

The 1 KB OSAM subpool definition.

FP DATABASE

All fast-path database related parameters.

WHATSNEW V15

All new and changed parameters in IMS V15, useful when migrating to a new release.

WHATSNEW RACF

All new and changed parameters related to RACF® for all releases of IMS.

APPC All parameters related to APPC.

APPC= The APPC parameter in the PB member. The equal sign searches for an exact parameter match.

CLONING

All parameters that need to be changed in a cloned system.

Most common IMS terms are supported as search arguments, and abbreviations are supported. For example, FP, FASTPATH, and FAST PATH are all allowed arguments for fast path.

Clear the search arguments to reset back to the original member list.

To rebuild the displayed results after you have selected and changed a parameter, use the REFRESH command.

Related concepts:

“Searching for values” on page 74

The IMS Configuration Manager Eclipse plug-in has a search functions that make finding values easier.

Chapter 5. Modifying PROCLIB parameters using the ISPF dialog

IMS Configuration Manager allows you to modify parameters using the ISPF dialog.

Related reference:

Chapter 13, “PROCLIB members supported by IMS Configuration Manager,” on page 123

The IMS Configuration Manager ISPF dialog supports a large number of PROCLIB members.

Creating and editing parameter members

IMS Configuration Manager allows you to create new parameter members, or to edit existing members.

Procedure

1. Browse and locate the parameter set you are interested in. See Chapter 4, “Listing and searching parameter members using the ISPF dialog,” on page 39 for details.
2. Select from one of the following options:
 - Edit an existing member by entering line action **S** next to the parameter member.
 - Create a new member by enter *S memname* on the command line.

What to do next

The IMS Configuration Manager parameter editor provides many of the features of ISPF edit but with the following additional features:

- The CHECK command, to check the syntax of a member and highlight syntax errors in context.
- The MODEL command, to insert parameters based on a model.
- The HELP command, and context-sensitive help for parameters by placing the cursor on the item of interest and pressing the Help function key (F1).
- The Backup facility, and retaining a history of your edits.

Inserting parameters based on a model

IMS Configuration Manager allows you to quickly insert new parameters by using template models. A template model contains a fragment of correctly formed parameter syntax that contains default and placeholder values that you can replace as you see fit.

Procedure

1. Edit the parameter member you are interested in. See “Creating and editing parameter members.”
2. Enter **A** on a line to insert a model template after that line (**1**), or **B** to insert before that line.

```

:
000015 PLEXPARM=(GSTSDB=Y,GSTSAREA=N,GSTSTRAN=N)
000016 SCIPROC=@AAB1234
a00017 UOM=MT0 1
***** ***** Bottom of Data *****

```

Figure 17. Selecting a line to insert after

- On the command line, enter MODEL (**2**), or select the point-and-shoot MODEL (**3**) field.

```

File Edit Edit_Settings Help
-----
EDIT      USER.NEW.V13.PROCLIB(DFSDFCOM) - 01.05      Columns 00001 00072
Command ==> MODEL 2                                Scroll ==> PAGE
CHECK Validate the member syntax
MODEL Insert a new parameter with syntax assistance 3
HELP Press F1 to request parameter sensitive help
***** ***** Top of Data *****
000001 *COMMENT
000002 <SECTION=REPOSITORY>
:

```

Figure 18. Selecting the MODEL option

A list of parameter descriptions is displayed.

Note: An asterisk (*) beside a parameter indicates that it is not valid for the specified IMS release of the PROCLIB.

```

Row 1 to 15 of 15
Command ==> _____
Select one or more parameters then press EXIT.

Parameter Description
. CATALOGXXX          Options for the IMS catalog
. COMMON_SERVICE_LAYER Common Service Layer options
. DATABASE            Parameters for databases
. DBD                 Assign the indicated subpool to a DBD data set
. DIAGNOSTICS_STATISTICS IMS Abend Search and Notification options
S DYNAMIC_RESOURCES   Options for import and export definitions
. FASTPATH            Specify Fast Path buffer management
:

```

Figure 19. Viewing parameter models

- Enter an S next to each parameter model you want to insert. When you have finished, press the Exit function key (F3) to insert the parameter models you have selected. The model that has been inserted produces messages that provide additional assistance.

Figure 20. A successfully inserted parameter model (shown in **bold**)

5. Replace the default and placeholder values in the model as required.

Tip: To clear all line actions, error messages, and explanatory notes, enter RESET on the command line.

Checking the syntax of a member

To highlight syntax errors in the parameter member that you are editing, enter the primary command **CHECK** or use the point-and-shoot **CHECK** field.

Procedure

1. Edit the parameter member you are interested in. See “Creating and editing parameter members” on page 47.
2. On the command line, enter **CHECK**, or select the **CHECK** point-and-shoot field. Find errors by scanning the text for the ==MSG> prefix which contains additional information about the error. The position of the error is marked with a + in the previous line.

```

File Edit Edit_Settings Help
EDIT      USER.NEW.V13.PROCLIB(DFSDFCOM) - 01.06      Columns 00001 00072
Command ==> CHECK      Scroll ==> PAGE
Member has 2 errors. Position cursor and press F1 to help fix the problem.
MODEL    Insert a new parameter with syntax assistance
HELP     Press F1 to request parameter sensitive help
*****
000001 *COMMENT
000002
000003
000004 ACBSHR=Y
000005 CMDSEC=R
000006 DBQUIESCETO=999
000007 IMSPLEX=PLEX1
000008 GBL_SERIAL_PGM=N
000009 LEOPT=C /* COMMENT */
===== .....+.
==MSG> Invalid value for parameter: LEOPT
000010 MODBLKS=OLC
000011 OLC=GLOBAL
000012 OLCSTAT=AAAAAAAA.BBBBBBBB.CCCCCCCC.DDDDDDDD.EEEEEEEE
000013 RMENV=Y
000014 OMPROC=Y
000015 PLEXPARM=(GSTSDB=Y,GSTSAREA=N,GSTSTRAN=N
===== .....+.
==MSG> Unmatched parenthesis: PLEXPARM=(GSTSDB=Y,GSTSAREA=N,GSTSTRAN=N
000016 SCIPROC=@AAB1234
000017 UOM=MT0
*****
***** Bottom of Data *****

```

Figure 21. Checking the syntax of a member using the CHECK command

Related reference:

Chapter 13, “PROCLIB members supported by IMS Configuration Manager,” on page 123
The IMS Configuration Manager ISPF dialog supports a large number of PROCLIB members.

Viewing context-sensitive help for parameters

IMS Configuration Manager contains context-sensitive parameter help that allows you to quickly look up information about parameters.

Procedure

1. Edit the parameter member you are interested in. See “Creating and editing parameter members” on page 47.
2. Select an item and press the Help function key (F1).

Example

The following example shows what happens when you press the Help function key (F1) with the cursor positioned on the RDDSERR parameter of the DFSDFxxx member:

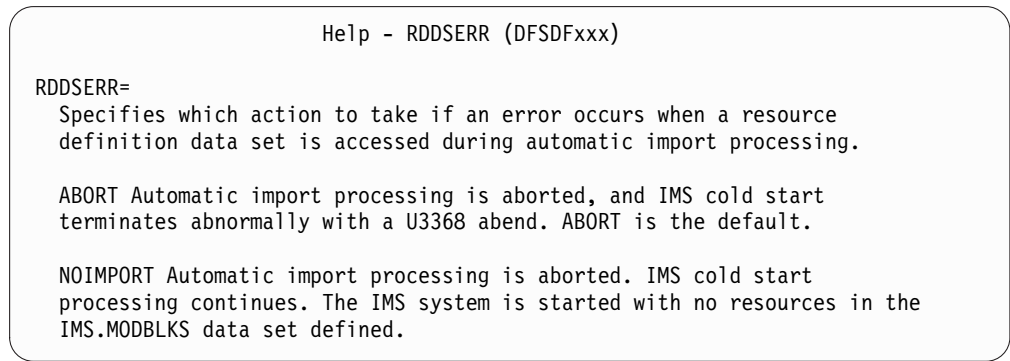


Figure 22. An example of context-sensitive parameter help

Saving and backing up a member

IMS Configuration Manager allows you to make a backup of the parameter members that you edit.

About this task

The first time that you save a supported member during an edit session, you are prompted to perform a backup of the member. A backup contains a snapshot of the member before the first save in the session.

Procedure

To save and backup a member:

1. Edit the parameter member you are interested in using the procedure described in “Creating and editing parameter members” on page 47.
2. Press the Exit function key (F3) to save your changes. The Confirm Member Save dialog is displayed.

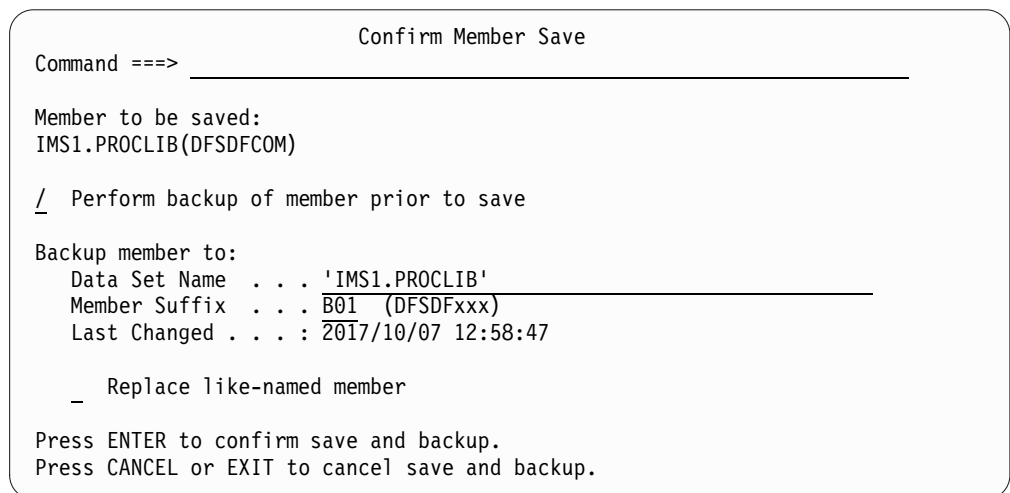


Figure 23. The Confirm Member Save dialog

3. Complete the form as required. The Confirm Member Save panel supplies the following information:

Member to be saved

This is indicated by the first field in the panel, which specifies the member you are saving and its PROCLIB. This information cannot be changed.

Perform backup of member prior to save

Enter / next to this field to backup the member. If this field is not selected, all other fields are ignored.

Data Set Name

To save the backup member in an alternative PROCLIB data set, overwrite the name of the PROCLIB data set or press the Prompt function key (F4) to select from a list of available PROCLIBs.

Member Suffix

You must enter the suffix for the backup member. Depending on the age of the backup member, a default suffix might have been obtained from the PROCLIB Members list. You can overwrite this suffix.

Last Changed

The time stamp of the last time the backup member was saved to the PROCLIB.

Replace like-named member

Enter / next to this field to replace an existing backup if it has the same name as the member about to be saved.

4. Press Enter to confirm the save and backup.

Viewing the history of a member

The history function allows you to examine the contents of back level members, and retrieve old history members to edit and save them back into a PROCLIB.

Before you begin

History is only available for members that have been previously edited with IMS Configuration Manager.

Procedure

1. Use the ISPF dialog to find the member you are interested in. See Chapter 4, "Listing and searching parameter members using the ISPF dialog," on page 39.
2. Enter line action **H** next to a PROCLIB member.

You can view any member in the history but you cannot edit a history member. To restore a history member use standard ISPF member edit functions to copy the contents of the member to a new member or to overwrite the existing member.

File Help			
		Member History	Row 1 to 3 of 3
Command ==>			Scroll ==> PAGE
PROCLIB . . : IMSPROC.CO			
/	Member	Prompt	Level Size ----- Created ----- ID
---	DFSCG0C0		Active 7 2017/08/26 17:27:03 USR
---	DFSCG0C0		00002 7 2017/08/26 17:26:41 USR
---	DFSCG0C0		00001 7 2017/08/26 17:26:03 USR
***** Bottom of data *****			

Figure 24. Viewing the history of a member

3. Enter line action **S** next to the version that you want to view.

Deleting a member

IMS Configuration Manager also allows you to delete a member from a PROCLIB data set.

Procedure

1. Use the ISPF dialog to find the member you are interested in. See Chapter 4, “Listing and searching parameter members using the ISPF dialog,” on page 39 for further information.
2. Enter line action **D** next to the PROCLIB member you want to delete and press Enter. If **Delete Confirmation** is enabled in your profile options, press Enter again to confirm. See “Setting IMS Configuration Manager ISPF profile options” on page 21.

Related tasks:

“Setting IMS Configuration Manager ISPF profile options” on page 21
The IMS Configuration Manager profile allows you to set options such as whether to have a delete confirmation, and what job statement information to use when generating JCL from the dialog.

Chapter 6. Managing parameters to improve IMS performance

You can use IMS Configuration Manager with IMS Performance Analyzer to improve IMS performance.

IBM IMS Performance Analyzer for z/OS (program number 5655-R03) is an ISPF application to assist with IMS system performance monitoring and tuning, resource utilization, transaction transit analysis, capacity planning, and management reporting.

IMS Performance Analyzer provides a comprehensive set of reports that help you identify performance problems. Some of the reports can highlight problems that can be solved by modifying IMS setup and performance parameters that are managed by IMS Configuration Manager. For example:

- **“Database buffers” on page 56**
 - IRUR: OSAM Buffer Pool Statistics
- **“VSAM buffers” on page 58**
 - IRUR: VSAM Buffer Pool Statistics
- **“Logging and checkpoints” on page 59**
 - IRUR: Logger Statistics
 - System Checkpoint report

You can use IMS Configuration Manager to search across a system, group of systems, or a PROCLIB to quickly find and easily change parameters that can impact IMS system performance. For example, you can search for all VSAM BUFFER parameters.

```

File Help
VIEW USER.NEW.V13.PROCLIB Row 1 of 62
Command ==> Scroll ==> PAGE

Search . . . VSAM BUFFER

Member
/ Prompt Lib Size Created ----- Changed ----- ID
- DFSDFCOM 1 17 2013/04/10 2013/08/20 09:47:23 USER
- DBD=... Assign the indicated subpool to a DBD data
- POOLID=... VSAM shared resource pool subpool definiti
- VSAMXXX=... Dynamic subpool definitions for VSAM secti
- VSRBF=... VSAM subpool definitions for one subpool
:
-----
- DFSVSMIT 1 33 2013/01/10 2013/06/11 15:21:24 USER
- BGWRT=... Activate background write
- DBD=... Assign DBD data set to a shared resource p
- DEDB=... Fastpath buffer pool definition
- DEDBMAS=... Fast path buffer pool for multi-area struc
- INSERT=... Buffer handler insert mode for new KSDS re
- RESVPOOL=... Prevent IMS use of listed VSAM LSR pools
- VSAMFIX=... Page fix buffer subpools and control block
- POOLID=POOL, FIXDATA=YES, FIXINDEX=NO, FIXBLOCK=NO, STRINGNM=1
- VSRBF=32768,32767,I,HSR,HS3
- VSRBF=32768,32767,D,HSR,HS3
- VSRBF=2048,20 VSAM subpool definition
- VSRBF=4096,40 VSAM subpool definition
- VSRBF=2048,10,I VSAM subpool definition
- VSRBF=2048,10,D VSAM subpool definition
- VSRBF=4096,20 VSAM subpool definition
- VSRBF=4096,10,HS40,HSR
- VSRBF=8192,10,HS50,HSRE
- VSRBF=12288,4,HS12
- VSRBF=16384,4,HS20,HS0
- VSRBF=20480,4,HS0P,HS8
- VSRBF=24576,4,HSOPTIONAL,HS8
- VSRBF=28672,3,HS9,HSREQUIRED
- VSRBF=32768,3,HSREQ,HS9
- CFNAMES,CFVSAM=(YCCCCCCCCCCCCC)

```

Figure 25. Searching for VSAM BUFFER parameters in IMS Configuration Manager

You can then use IMS Performance Analyzer to provide an insight into the effect on system performance of particular parameter settings.

Database buffers

The PROCLIB member DFSVSMxx defines VSAM, OSAM, and Fast Path DEDB buffer pools.

DFSVSMxx includes the following parameters:

- VSAM buffer pools
 - VSRBF
 - POOLID/DBD
 - RESVPOOL
 - OPTIONS
- OSAM buffer pools
 - IOBF
 - DBD

- SBONLINE
- FP DEDB buffer pools
 - DEDB
 - DEDBMAS

IMS Performance Analyzer IRUR: OSAM Buffer Pool Statistics

This report provides information related to the activity in each OSAM subpool. Subpools with no activity in the reporting period are not reported on. The final report contains cumulative statistics for all of the OSAM buffer pools. This report is similar to the Database Buffer Pool report produced by the IMS DB Monitor.

Enhanced OSAM Buffer Pool Statistics				Interval :	20.00 (HHMM.MS)
	Count	/Transact	/Second		
Subpool ID:	OS4K				
Fix options: Prefix/Buffers	N/N				
Buffer Size	4,096				
Buffer count	20				
Locate-type calls	64,456	7.35	53.71		
Requests to create new blocks	0	.00	.00		
Buffer alter calls	554	.06	.46		
Purge calls	457	.05	.38		
Locate-type calls, data already in pool	57,137	6.51	47.61	88.64% of locate calls	
Buffers searched by all locate-type calls	72,957	8.32	60.80		
Read I/O requests	7,317	.83	6.10	93.34% of OSAM I/O operations	
Single block writes by buffer steal routine	0	.00	.00	.00% of OSAM I/O operations	
Blocks written by purge	522	.06	.43	6.66% of OSAM I/O operations	
Total count of OSAM I/O operations	7,839	.89	6.53		
Locate calls waited due to busy ID	0	.00	.00		
Locate calls waited due to busy write	0	.00	.00		
Locate calls waited due to busy read	0	.00	.00		
Buffer steal/purge waited for ownership releas	12	.00	.01		
Buffer steal requests waited for buffers	0	.00	.00		
Total I/O errors for this subpool	0	.00	.00		
Buffers locked due to write errors	0	.00	.00		
Blocks Read from CF	0	.00	.00		
Blocks expected but not Read	0	.00	.00		
Blocks written to CF (Prime)	0	.00	.00		
Blocks written to CF (Changed)	0	.00	.00		
Blocks not written; Storage Class full	0	.00	.00		
Blocks invalidated with XI	0	.00	.00		
XI Calls issued	0	.00	.00		
SB Immediate (Sync) Sequential Reads	0	.00	.00		
SB Anticipatory Reads	0	.00	.00		

Figure 26. IMS Performance Analyzer IRUR: OSAM Buffer Pool Statistics

A key performance indicator for an OSAM Buffer Pool is the percentage of locate calls where the data was already in the buffer. A high percentage indicates that the OSAM Buffer Pool is satisfying most requests without the need for database I/O.

You can use the report to calculate how many I/O operations were required to read to or write from the OSAM buffer pool. To decrease the number of I/O operations, try increasing the buffer pool size. If the number of I/O operations is increasing over time, you might need to reorganize the database.

When data sharing in IMSplex database environments, there needs to be a balance between maximizing the requests satisfied in the pool and minimizing the occurrence of buffer invalidation.

VSAM buffers

The PROCLIB member DFSVSMxx defines single or multiple VSAM buffer pools.

DFSVSMxx includes the following parameters:

- Reserve pools
- VSAM local shared resource pools
- VSAM shared pools and subpools, linked by Pool ID
- Allocation of data sets to pools, linked by Pool ID
- VSAM performance options such as background write, maximum concurrent requests, fixed blocks

IMS Performance Analyzer IRUR: VSAM Buffer Pool Statistics

One of the Internal Resource Utilization reports (IRUR) is the VSAM Buffer Pool Statistics report. This report provides information related to the activity in each VSAM subpool. Subpools with no activity in the reporting period are not reported on. The final report contains cumulative statistics for all of the VSAM buffer pools. This report is similar to the VSAM Buffer Pool report produced by the IMS DB Monitor. See the *IMS Utilities Reference: Database Manager* for a description of the meaning of the fields and the uses for this report.

Enhanced VSAM Buffer Pool Statistics			Interval :		1.08.59 (HHMM.MS)
		Count	/Transact	/Second	
Shared resource pool ID/type	VS8K/D				
Fix option: index/block/data	N/Y/Y				
Buffer size		8,192			
Buffers in subpool		15			
HS buffers in subpool		75			
Write errors		0			
Largest number of write errors		0	.00	.00	
Retrieve by RBA calls		43,821	4.92	10.59	63.08% of retrieve calls
Retrieve by Key calls		25,653	2.88	6.20	36.92% of retrieve calls
Total retrieve calls		69,474	7.81	16.78	
Logical records inserted into ESDS		1	.00	.00	.07% of update requests
Logical records inserted into KSDS		7	.00	.00	.46% of update requests
Logical records altered in this subpool		1,524	.17	.37	99.48% of update requests
Total number of updates		1,532	.17	.37	
Nbr of background write requests		9	.00	.00	.01% of calls to VSAM
Nbr of Synch calls		624	.07	.15	.94% of calls to VSAM
Nbr of VSAM get calls		65,581	7.37	15.84	99.03% of calls to VSAM
Nbr of VSAM search buffer calls		7	.00	.00	.01% of calls to VSAM
Total Nbr of VSAM calls		66,221	7.44	16.00	
Nbr of times VSAM found CI in pool		54,853	6.16	13.25	83.63% of VSAM buffer requests added
Nbr of times VSAM read CI from DASD		10,738	1.21	2.59	94.19% of VSAM I/O operation
Nbr of writes initiated by IMS		606	.07	.15	5.32% of VSAM I/O operation
Nbr of writes initiated by VSAM		56	.01	.01	.49% of VSAM I/O operation
Total VSAM I/O operations		11,400	1.28	2.75	
Nbr of successful VSAM reads from HS		4,218	.47	1.02	
Nbr of successful VSAM writes to HS		14,957	1.68	3.61	
Nbr of failed VSAM reads from HS		0	.00	.00	
Nbr of failed VSAM writes to HS		0	.00	.00	
Nbr of PLH waits		0	.00	.00	

Figure 27. IMS Performance Analyzer IRUR: VSAM Buffer Pool Statistics

A key performance indicator for a VSAM Buffer Pool is the number of times VSAM found the CI in the pool, rather than reading the CI from DASD.

When data sharing in IMS sysplex database environments, there needs to be a balance between maximizing the requests satisfied in the pool and minimizing the occurrence of buffer invalidation.

Logging and checkpoints

The parameters affecting the performance of logging are spread across two PROCLIB members, PB and VSAM.

DFS PBxxx

- CPLOG
- WADS

DFS VSAMxx

- WADSDEF
- OLDSDEF

IRUR: Logger Statistics

The Logger Statistics report is one of the Internal Resource Utilization reports (IRUR) and provides various statistics describing the performance of the IMS log and write-ahead data set (WADS).

I/O counts and Buffer Wait counts can be used to see if any performance problems are being caused by bad logger or WADS I/O times.

Note: MSC incurs additional forced writes to the log.

Logger Statistics			Interval :	20.00 (HHMM.SS)
		Count /Transact	/Second	
Logical Logger:	Records written	212,075	24.18	176.73
	Check write requests	15,400	1.76	12.83
	Waits for writes	20	.00	.02
	Buffer waits: chkpt invokers	8	.00	.01
	Buffer waits: non-chkpt invokers	1	.00	.00
	Awe submitted on wrt	0	.00	.00
Physical Logger:	WADS EXCPVRs	8,607	.98	7.17
	2K segment writes initiated	24,482	2.79	20.40
	OLDS writes initiated	1,766	.20	1.47
	OLDS reads initiated	2	.00	.00
	Internal checkpoint requests	6	.00	.00
	Accumulative wtw wait time	2,125	.24	1.77

Figure 28. IMS Performance Analyzer IRUR: Logger Statistics

A key performance indicator is the number of Logical Logger Buffer waits for non-checkpoint invokers. A high value might indicate that the Log Buffer allocation might be too low.

System Checkpoint report

The second part of the System Checkpoint report summarizes checkpoint activity, including:

- Average checkpoint duration and frequency
- Record counts by subtype

The following figure shows an example of a Checkpoint Summary report.

Completed Checkpoints = 7
 Average Checkpoint Duration = 0.204 (hhhh.mm.ss.ths)
 Average Checkpoint Frequency = 11.29.713 (hhhh.mm.ss.ths)
 CPLOG = 46613

Checkpoint Start: 21Jan2018 12:58:45:16 End: 21Jan2018 12:58:45:41 Number : 117

Subtype	Description	Count	Bytes	%Total
01	Begin Checkpoint	1	1,504	0.24
03	CNT - Communication Name (Node) Table	2	6,064	0.49
04	SMB - Scheduler Message Block	173	685,128	42.09
05	CTB - Communication Terminal Block	1	3,488	0.24
06	DDIR - DMB Directory Entry	50	50,080	12.17
07	PDIR - PSB Directory Entry	82	83,720	19.95
08	CLB - Communication Line Block	1	192	0.24
0D	CCB - Conversational Control Block	1	1,376	0.24
0F	LCB - Link Control Block	1	176	0.24
10	CRB - Communication Restart Block	1	352	0.24
14	SPQB - Subpool Queue Block	16	60,636	3.89
21	VTCT - VTAM Terminal Control Block	8	30,796	1.95
22	Queue Anchor block (LU 6.2)	1	32	0.24
30	RRE - Residual Recovery Element	6	5,330	1.46
31	SIDX - Subsystem Index Entry	1	132	0.24
32	OTMA TPIPES/QABS	1	240	0.24
33	OTMA MTES/MCBS	1	248	0.24
80	Fast Path Begin Checkpoint	1	307	0.24
83	RCTE - Routing Code Table Entry	1	56	0.24
84	DMCB - DEDB Master Control Block	49	32,396	11.92
86	DMHR - Fast Path Buffer Header	3	13,176	0.73
87	ADSC - Area Data Set Control Block	8	7,696	1.95
89	Fast Path End Checkpoint	1	52	0.24
98	End Checkpoint	1	40	0.24
TOTAL		411	983,217	100.00

Figure 29. IMS Performance Analyzer: System Checkpoint Summary report

A Checkpoint Summary report is produced for each IMS Subsystem ID and contains the following information:

Completed Checkpoints

Number of completed checkpoints found in the log file. A complete checkpoint is one that starts with a 4001 record and ends with a 4098 record.

Average Checkpoint Duration

The average elapsed time per checkpoint in the format *hhhh.mm.ss.ths*.

If there are insufficient completed checkpoints to allow a meaningful calculation, the following message is printed: Insufficient Checkpoints to calculate.

Average Checkpoint Frequency

The average time between checkpoints, or how frequently checkpoints are taken, in the format *hhhh.mm.ss.ths*.

If there are insufficient completed checkpoints to allow a meaningful calculation, the following message is printed: Insufficient Checkpoints to calculate.

CPLOG

Checkpoint frequency. The average number of log records written between checkpoints.

Checkpoint

Start: Checkpoint start date and time.

End: Checkpoint end date and time.

Number:
Checkpoint number.

Subtype
Checkpoint record subtype.

Description
Subtype description.

Count Total number of checkpoint records of this subtype.

Bytes Total bytes of checkpoint records of this subtype.

%Total
Percentage of records of this subtype over all checkpoint records.

Total

Count Total number of records in the checkpoint.

Bytes Total number of bytes of all records in the checkpoint.

%Total
Should always be 100.00.

Adjusting parameters to tune system performance

IMS Performance Analyzer helps you monitor key performance indicators. As a result, you might determine that you need to tune your IMS systems by adjusting startup parameters. You can use the search and locate facilities of IMS Configuration Manager to quickly find the relevant parameters.

Before you begin

Ensure that you are familiar with the procedures described in Chapter 4, “Listing and searching parameter members using the ISPF dialog,” on page 39 and Chapter 5, “Modifying PROCLIB parameters using the ISPF dialog,” on page 47.

Procedure

1. On the IMS Configuration Manager Primary Menu, select option 2 **Systems**. The IMS Systems List panel is displayed.
2. Enter line action **P** next to the system you want to adjust. The IMS Active Members panel is displayed.
3. Enter the search argument for the key performance parameter from the IMS Performance Analyzer report, such as CPL0G, the checkpoint frequency. You can enter the search argument CHECKPOINT to achieve the same result.
4. Enter line action **S** next to the CPL0G parameter and press Enter.

FileHelp

EDIT

IMS Active Members

Row 1 of 3

Command ==>

Scroll ==>

PAGE

IMS System ID . . . : SYSX

Version (VV.R) . . : 13.1

Description . . . :

IMSpIex : IPLEX

Search . . CPL0G

Member	Prompt	Lib	Size	Created	-----	Changed	-----	ID
/ DFSPB038		2	109	2017/03/07		2017/03/07 12:44:12		VIP
- S CPL0G=16M,		IMS internal checkpoint frequency						

End

Figure 30. Searching for CPL0G on the IMS Active Members panel in IMS Configuration Manager

- Adjust the CPL0G parameter value.
- Exit and save changes.
- After running your IMS systems with the changes, rerun the IMS Performance Analyzer reports to monitor whether the changes achieved the required results.

Part 3. Enterprise system management with the Eclipse plug-in

IMS Configuration Manager allows you to manage systems and parameters across your enterprise with the IMS Configuration Manager Eclipse plug-in.

Related concepts:

“Enterprise-wide system and parameter management” on page 6


The IMS Configuration Manager Eclipse plug-in provides an enterprise-level view of your resources and parameters and allows you to control and manage systems.

Chapter 7. Key features of the Eclipse plug-in

The IMS Configuration Manager Eclipse plug-in has several powerful features that can help you improve your understanding of your environment.

Perform the following tasks with the IMS Configuration Manager Eclipse plug-in:

- Centralize and consolidate your system and IMSplex configuration
- View IMS systems, resources, and parameters
- Compare parameters across multiple systems
- Submit IMS commands and view the output
- Use filters to highlight transactions matching certain attributes
- Identify transactions that can perform commands
- Identify transactions with a zero queue count
- List all active parameter members across your enterprise and drill down to parameter values
- Export data to external spreadsheet applications for further analysis

Online help is available throughout the plug-in by clicking the **Help** button ().

Related tasks:

“Installing the plug-in” on page 30

The IMS Configuration Manager plug-in for IBM Explorer for z/OS (z/OS Explorer) provides a graphical user interface (GUI) to some of the functions provided by the IMS Configuration Manager ISPF dialog. The plug-in communicates with IMS Configuration Manager via Common Services Library server, which is supplied with IBM Common Services Library for z/OS (Common Services Library).

Chapter 8. Exploring your environment

Use the IMS Configuration Manager Eclipse plug-in to explore your systems.

Related tasks:

“Getting started with z/OS Explorer” on page 32

This topic explains how to get started with z/OS Explorer and the IMS Configuration Manager Eclipse plug-in.

Exploring the topology of your systems

The IMS Configuration Manager Eclipse plug-in allows you to explore the topology of your systems using the **Navigation** view.

Before you begin

Complete the steps described in the following topics:

1. “Establishing an IMS Configuration Manager definitions repository” on page 22
2. “Installing Common Services Library server” on page 24
3. “Installing the plug-in” on page 30

Procedure

Find the system you are interested in by expanding the items in the **Navigation** view.

1. Click the icon next to the **All Sources** entry to see its contents. **IMS**, **IMS Connect**, and **IMSplex** categories are displayed.
2. Continue to expand the entries in the **Navigation** view until you find the system you are interested in.
3. Double-click an entry to view additional details.

Results

Status icons may appear next to IMSplex, IMS Connect, and IMS entries displayed in the **Navigation** view.

Green circle ()

The IMSplex, IMS, or IMS Connect is available.

Red square ()

The IMSplex, IMS, or IMS Connect is unavailable. For an IMSplex, this can occur if the IMSplex is down, or there is no Operations Manager (OM) available for communication between the IMSplex and the Common Services Library server.

No status (blank)

The status of the IMSplex, IMS, or IMS Connect cannot be determined. This can occur in one of the following situations:

- the system is not in an IMSplex
- the system is in an IMSplex that is not available
- the system is not found within the IMSplex

Status information is only displayed for IMS Connect systems that are part of an IMSplex. IBM IMS Connect Extensions for z/OS can extend the status display for systems that are not part of the IMSplex.

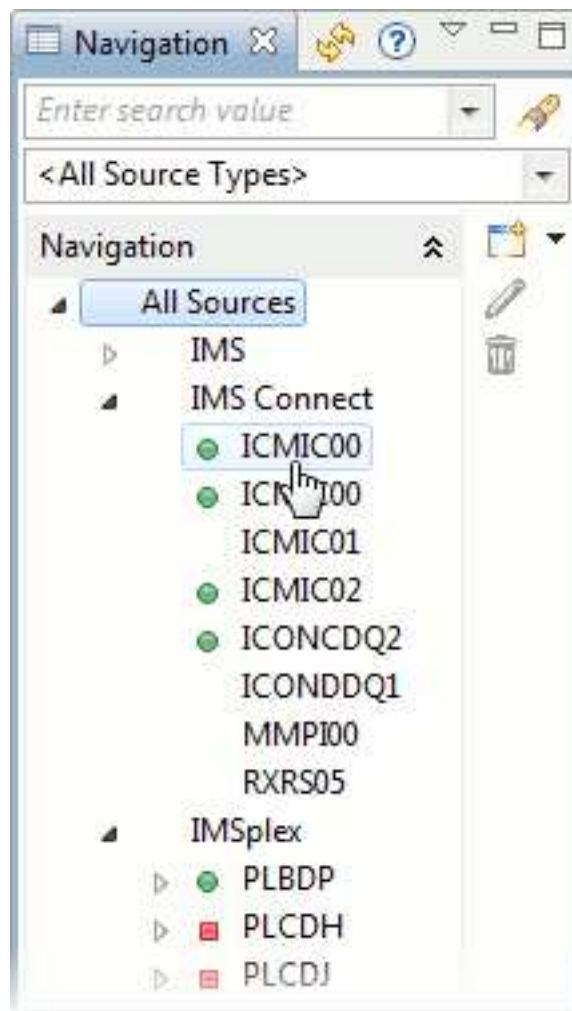


Figure 31. Navigating the topology of your systems using the plug-in

What to do next

- Search for a particular IMS system, IMS Connect system, or IMSplex by typing search terms into the search list. A history of search terms can be accessed by clicking the arrow.
- Navigation items can be filtered by selecting an item from the source types list. By default, the **Navigation** view shows <All Source Types>.

Related tasks:

“Connecting to a Common Services Library server” on page 33

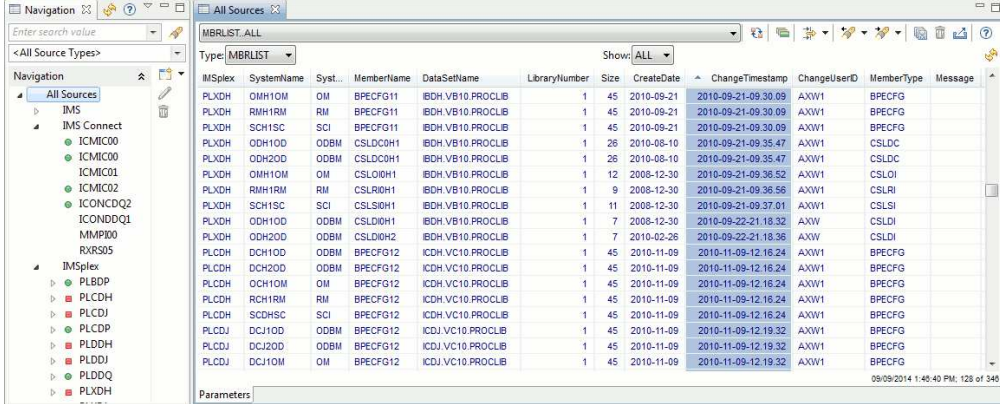
The IMS Configuration Manager Eclipse plug-in requires a connection to a running instance of the Common Services Library server.

Listing active parameter members across your enterprise

The IMS Configuration Manager Eclipse plug-in allows you to list all active parameter members from across your enterprise.

Procedure

1. From the **Navigation** view, double-click **All Sources**. The **All Sources** tab is displayed.
2. In the **All Sources** tab, click the Refresh button (🔄).



IMSplex	SystemName	Syst...	MemberName	DataSetName	LibraryNumber	Size	CreateDate	ChangeTimestamp	ChangeUserID	MemberType	Message
PLXDH	OMH10M	OM	BPECFG11	BDH.VB10.PROCLB	1	45	2010-09-21	2010-09-21-09:30:09	AXW1	BPECFG	
PLXDH	RMH1RM	RM	BPECFG11	BDH.VB10.PROCLB	1	45	2010-09-21	2010-09-21-09:30:09	AXW1	BPECFG	
PLXDH	SCH1SC	SCI	BPECFG11	BDH.VB10.PROCLB	1	45	2010-09-21	2010-09-21-09:30:09	AXW1	BPECFG	
PLXDH	ODH10D	ODBM	CSLDC0H1	BDH.VB10.PROCLB	1	26	2010-08-10	2010-09-21-09:35:47	AXW1	CSLDC	
PLXDH	ODH20D	ODBM	CSLDC0H1	BDH.VB10.PROCLB	1	26	2010-08-10	2010-09-21-09:35:47	AXW1	CSLDC	
PLXDH	OMH10M	OM	CSLDC0H1	BDH.VB10.PROCLB	1	12	2008-12-30	2010-09-21-09:36:52	AXW1	CSLDC	
PLXDH	RMH1RM	RM	CSLDC0H1	BDH.VB10.PROCLB	1	9	2008-12-30	2010-09-21-09:36:56	AXW1	CSLDC	
PLXDH	SCH1SC	SCI	CSLDC0H1	BDH.VB10.PROCLB	1	11	2008-12-30	2010-09-21-09:37:01	AXW1	CSLDC	
PLXDH	ODH10D	ODBM	CSLDC0H1	BDH.VB10.PROCLB	1	7	2008-12-30	2010-09-22-21:18:32	AXW1	CSLDC	
PLXDH	ODH20D	ODBM	CSLDC0H1	BDH.VB10.PROCLB	1	7	2010-02-26	2010-09-22-21:18:36	AXW1	CSLDC	
PLXDH	DCI10D	ODBM	BPECFG12	KDH.VC10.PROCLB	1	45	2010-11-09	2010-11-09-12:16:24	AXW1	BPECFG	
PLXDH	DCI20D	ODBM	BPECFG12	KDH.VC10.PROCLB	1	45	2010-11-09	2010-11-09-12:16:24	AXW1	BPECFG	
PLXDH	DCI10M	OM	BPECFG12	KDH.VC10.PROCLB	1	45	2010-11-09	2010-11-09-12:16:24	AXW1	BPECFG	
PLXDH	DCI20M	OM	BPECFG12	KDH.VC10.PROCLB	1	45	2010-11-09	2010-11-09-12:16:24	AXW1	BPECFG	
PLXDH	DCI10D	ODBM	BPECFG12	KDH.VC10.PROCLB	1	45	2010-11-09	2010-11-09-12:16:24	AXW1	BPECFG	
PLXDH	DCI20D	ODBM	BPECFG12	KDH.VC10.PROCLB	1	45	2010-11-09	2010-11-09-12:16:24	AXW1	BPECFG	
PLXDH	DCI10M	OM	BPECFG12	KDH.VC10.PROCLB	1	45	2010-11-09	2010-11-09-12:16:24	AXW1	BPECFG	
PLXDH	DCI20M	OM	BPECFG12	KDH.VC10.PROCLB	1	45	2010-11-09	2010-11-09-12:16:24	AXW1	BPECFG	

Figure 32. Listing active parameter members across your enterprise

What to do next

- To view parameter history, select **MBRLIST** in the **Type** list and then select **HISTORY** in the **Show** list.
- To sort a column, click the column heading. For example, clicking **ChangeTimestamp** will sort the entries by the date and time that a parameter was modified.
- Right-click an item to reveal additional options.

Viewing system resources

The IMS Configuration Manager Eclipse plug-in allows you to list resources for individual systems or IMSplexes.

Procedure

1. From the **Navigation** view, double-click a system or IMSplex. The system or IMSplex is displayed in a new tab.
2. Select the **Resources** tab.
3. In the **Type** list, select **All** to show all resource types.
4. Click the Refresh button (🔄) to load resources into the **Resources** tab.

What to do next

- To filter the list by resource type, select the resource type in the **Type** list and then click the Refresh button (🔄).
- To sort a column, click the column heading.
- Right-click an item to reveal additional options.

Related concepts:

Chapter 9, “Filtering, searching, and saving,” on page 73

Use the IMS Configuration Manager Eclipse plug-in to filter and search table entries, and to save commonly used displays.



Viewing members of an IMSplex

The IMS Configuration Manager Eclipse plug-in allows you to view the members of your IMSplex.

Procedure

1. From the **Navigation** view, double-click an IMSplex. The IMSplex is displayed in a new tab.
2. Select the **Resources** tab.
3. In the **Type** list, select **Members** to show all members of the selected IMSplex.
4. In the **Show** list, select **Live** to show the current state of the IMS Configuration Manager definitions repository.

Note: To compare live member systems with the definitions stored in your IMS Configuration Manager definitions repository, select **Live vs. Config. Repository**. To see only the definitions in your IMS Configuration Manager definitions repository, select **Config. Repository**.

5. Click the Refresh button (). The members of the IMSplex are displayed. The **Type** column states if the member is an IMS system, IMS Connect system, or one of several possible Common Service Layer (CSL) components.
6. Optional: To view further detail on a CSL member, complete the following steps:
 - a. Right-click on the member and select **Open**.
 - b. Select values from the **Type** and **Show** lists (if available).
 - c. Click the Refresh button ().

Related concepts:


Chapter 9, "Filtering, searching, and saving," on page 73

Use the IMS Configuration Manager Eclipse plug-in to filter and search table entries, and to save commonly used displays.

Viewing parameters for individual systems

The IMS Configuration Manager Eclipse plug-in allows you to view parameters for individual systems.

Procedure

1. From the **Navigation** view, double-click a system. The system is displayed in a new tab.
2. On the **Parameters** tab, click the Refresh button ().
3. To view more detail on a particular item, right-click the item and select **Show Configuration**.
4. Optional: For members that support overrides, such as **DFSPB**, filter the results by selecting an option from the **Show** list:

INEFFECT

Displays the final parameter value that is "in effect" at IMS start after IMSGEN-specific parameter values, member-level parameter values, and any JCL overrides have been applied (in order).

JCLOVERRIDES

Display only the values in JCL overrides.

MEMBER

Display the value directly in the member.

XIMSGEN

Extract IMSGEN-specific parameters (stage 1).

ALL Show all of the options at once. This results in multiple entries for each member.

The **ParmSource** column identifies where the value was obtained from.

What to do next

- To sort a column, click the column heading. For example, clicking **MemberName** will sort the entries by the name of the member.
- To access a history of your selections, click the list in the upper-left corner.

Related concepts:

Chapter 9, “Filtering, searching, and saving,” on page 73

Use the IMS Configuration Manager Eclipse plug-in to filter and search table entries, and to save commonly used displays.

Submitting IMS commands

The IMS Configuration Manager Eclipse plug-in allows you to submit IMS command to individual systems or IMSplexes.


About this task


The Eclipse plug-in issues commands through the Operations Manager (OM) API, which supports all type-2 commands, and many type-1 commands. For a complete list of commands, see the IMS documentation on commands and keywords supported by the OM API.

Procedure

1. From the **Navigation** view, double-click a system. A new tab is displayed showing the system or IMSplex you have selected.
2. Select the **Commands** tab.
3. Type your command in the **Command** box. Examples:
 - QUERY IMSPLEX SHOW(ALL)
 - DISPLAY STATUS
 - DISPLAY TRAN ALL or QUERY TRAN SHOW(ALL)
 - QUERY TRAN NAME(*) SHOW(QCNT)

Note: Commands are submitted with the TSO credentials used to connect to the Common Services Library server. This TSO userid must be authorized to run the commands using the appropriate IMS command access authority.

4. Press Enter, or click the Refresh button (). The results of the query are displayed in the table.

Command: QUERY IMSPLEX SHOW(ALL) 

IMSpIex	MbrName	CC	Member	JobName	Type	Subtype	Version	OSName	Status
CSLPLXDH	OMH1OM	0	ACMEPLX	FUDREA	AOP	FUDSRVR	1.4.0	FTS1	ACTIVE
CSLPLXDH	OMH1OM	0	IDTCSEVR	IDT#FUD	AOP	FUDSRVR	1.4.0	FTS1	ACTIVE
CSLPLXDH	OMH1OM	0	AXLFUD	FUDAXL	AOP	FUDSRVR	1.4.0	FTS1	ACTIVE
CSLPLXDH	OMH1OM	0	MARK	FUDMMA	AOP	FUDSRVR	1.4.0	FTS1	ACTIVE
CSLPLXDH	OMH1OM	0	IBDH	IBDHCTL	IMS	DBDC	11.1.0	FTS1	READY,ACTIVE
CSLPLXDH	OMH1OM	0	SCH1SC	IBDHSCI	SCI		1.4.0	FTS1	READY,ACTIVE
CSLPLXDH	OMH1OM	0	OMH1OM	IBDHOM	OM		1.4.0	FTS1	READY,ACTIVE
CSLPLXDH	OMH1OM	0	RMH1RM	IBDHOM	RM	SNGLRM	1.4.0	FTS1	READY,ACTIVE

04/11/2013 9:42:16 AM; 1 of 8

Figure 33. Viewing command output using the plug-in

What to do next

- To sort a column, click the column heading. For example, clicking **Status** will sort the entries by their reported status.
- A history of commands can be found by clicking the **Command** list.
- Right-click an item to reveal additional options.

Related concepts:

Chapter 9, “Filtering, searching, and saving,” on page 73

Use the IMS Configuration Manager Eclipse plug-in to filter and search table entries, and to save commonly used displays.


Chapter 9. Filtering, searching, and saving

Use the IMS Configuration Manager Eclipse plug-in to filter and search table entries, and to save commonly used displays.

Using the list filter

The IMS Configuration Manager Eclipse plug-in has a filtering function that allows you to filter and highlight entries according to specified criteria.

Procedure

1. Select a system, IMSplex or IMS Connect system, and then load resources, parameters, or command results into the corresponding tab. See Chapter 8, “Exploring your environment,” on page 67 for details.
2. Click the **Manage/Define List Filters** button () The **Manage List Filters** dialog is displayed.
3. Click **New** to create a new filter. Enter a description for the new list filter and click **OK**. The new list filter is displayed in the list.
4. Select the check box to activate the filter. The conditions for the list filter can be entered in the space below.
5. Click **New** to create a new condition for the filter. The conditions you enter take the form of an equation and determine how the list will be filtered or highlighted.
6. Click each column to enter the terms of your condition:
 - a. Select a **Field** (a column heading from your input data set), an **Operator**, and a **Value** to use.
 - b. Select **Highlight** if you want to apply a colored highlight to list entries that match this condition.
 - c. Select **Case Sensitive** if you want to apply case-sensitivity to the **Value** field.

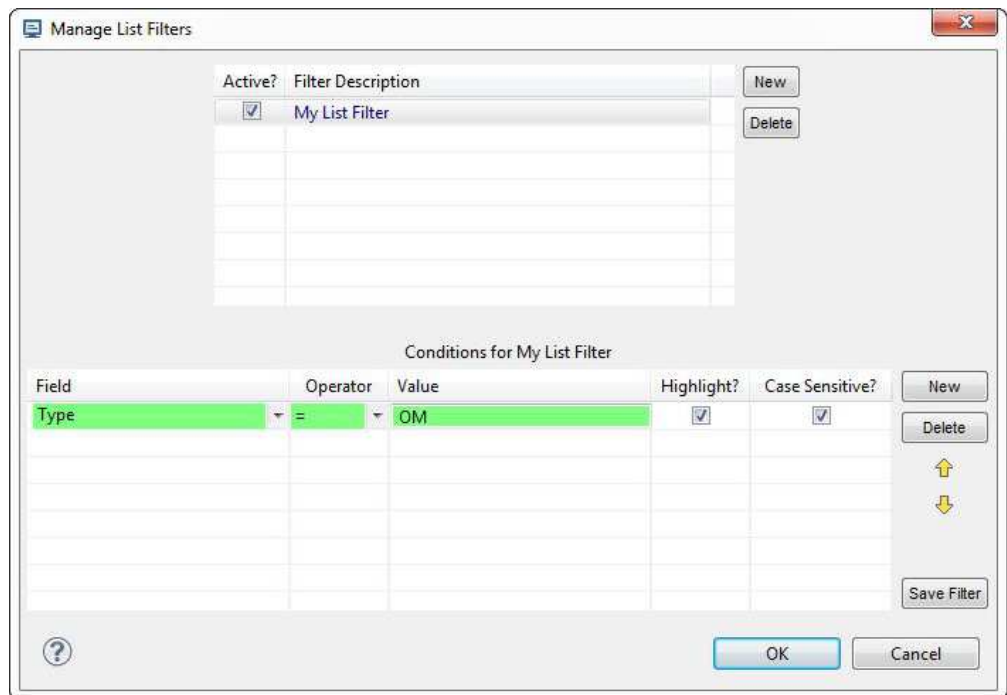


Figure 34. Managing list filters in the plug-in

- Click **Save Filter**.
- Click **OK** to apply the list filter. The results of the filter are displayed in the table.

[illegible]

Figure 35. Highlighting items in type-2 command output using the plug-in list filter

Related tasks:

“Filtering parameter members” on page 43

The IMS Configuration Manager ISPF dialog allows you to specify masking characters to filter the parameter member list.

Searching for values

The IMS Configuration Manager Eclipse plug-in has a search functions that make finding values easier.

Find value buttons ( and )

Allows you to search for rows with any column matching the value you specify.


Related tasks:

“Searching for members by their parameters and their function” on page 44
Search is available from an active member list for an IMS system, a group, or a PROCLIB using the IMS Configuration Manager ISPF dialog.

Saving the display

The IMS Configuration Manager Eclipse plug-in allows you to save commonly used resource, parameter, and command displays of your systems. Saving your display allows you to quickly access the data you use most without the need to re-input all of your settings.

Procedure

1. Select a system, IMSplex or IMS Connect system, and then load resources, parameters, or command results into the corresponding tab. See Chapter 8, “Exploring your environment,” on page 67 for details.
2. Click the **Save the Current Display** button (). The **Save Display** dialog is displayed.
3. Enter a name for your saved display.

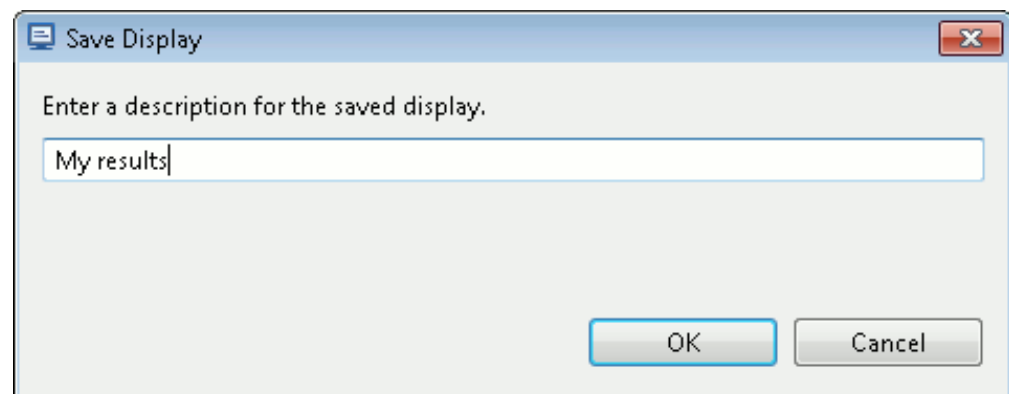


Figure 36. Entering a name for the saved display in the plug-in

4. Click **OK** to create the saved display. The name is displayed in the history list.

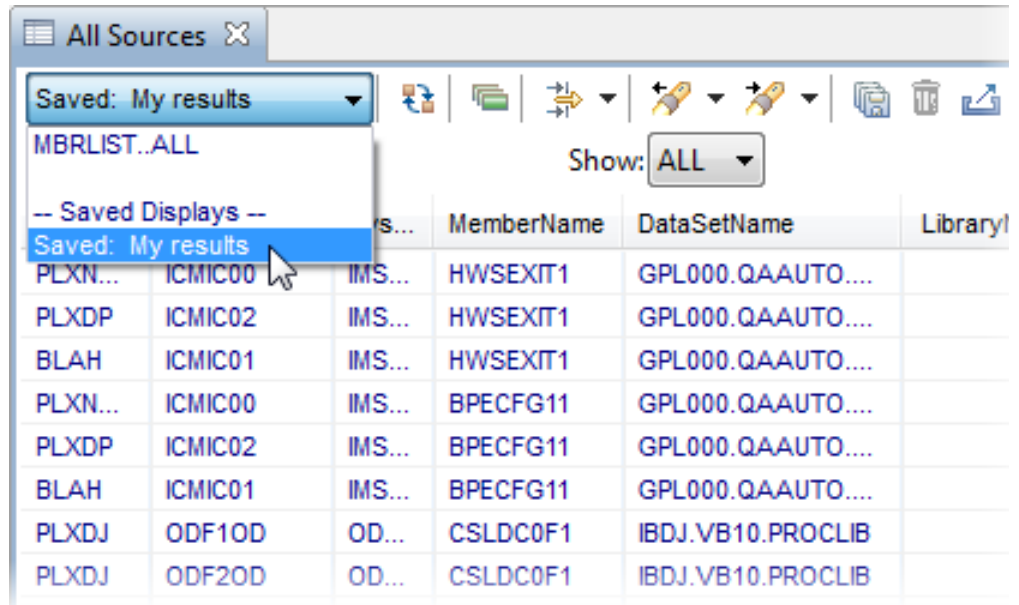


Figure 37. Showing results from a saved display using the plug-in

What to do next

- Click the **Export** button (📄) to export displayed results to a comma-separated values (CSV) file for further analysis.
- If you no longer want the saved display, click the **Delete** button (🗑️) to delete it.

Chapter 10. Comparing systems and parameters

The IMS Configuration Manager Eclipse plug-in comparator allows you to perform comparisons across your enterprise. You can use the comparator to compare systems, parameters, resources, saved views, and the results of IMS type-2 commands with pre-configured comparison criteria, or you can perform your own customized comparisons. The comparator can be configured to ignore inconsequential differences between two result sets so you can focus on functionally significant differences within your IMS environment.

Using the comparator with a single data source

Compare data displayed in a results tab of the IMS Configuration Manager Eclipse plug-in with the comparator.

About this task

When using the comparator, a *data source* refers to the data presented in a tab or saved display of the IMS Configuration Manager Eclipse plug-in. The comparator can compare data within a single data source, or across multiple data sources.

This procedure demonstrates a simple comparison using a single data source. For additional examples using single and multiple data sources, see “Common uses of the Eclipse plug-in comparator” on page 79. For additional information on comparing data sources, see “Comparison criteria” on page 81.


Procedure

1. Load a list of parameter values, live resources, or the result of submitting an IMS command in a tab of the IMS Configuration Manager Eclipse plug-in. For more information on how to do this, see Chapter 8, “Exploring your environment,” on page 67 for details.

In the following examples, the comparison is based on list of parameters associated with a particular IMSplex.

IMSplex	SystemName	SystemType	MemberName	ParmSource	ALOT	AOIP	AOIS	AOII	APPC	APPCSE	APPLID1	APPLID2	APPLID3	ARC	ARI
PLXDP	IBDP	IMS	DFSPBPLP	INEFFECT	60		S	N			IBDPEVT1			01	Y
PLXDP	ICDP	IMS	DFSPBPLP	INEFFECT	60		S	N	N	F				1	
PLXDP	IDDP	IMS	DFSPBPLP	INEFFECT	60		S	N						01	N
PLXDP	IEDP	IMS	DFSPBPLP	INEFFECT	60		S	N						01	N

Figure 38. Viewing a list of parameter values using the plug-in

2. Click the **Compare** button (). The **Configure Comparison Criteria** dialog is displayed, providing suggested comparison criteria based on the result set you selected in step 1. This result set is referred to in the dialog as **Data Source 1**. The columns contained within that result set are listed as follows.

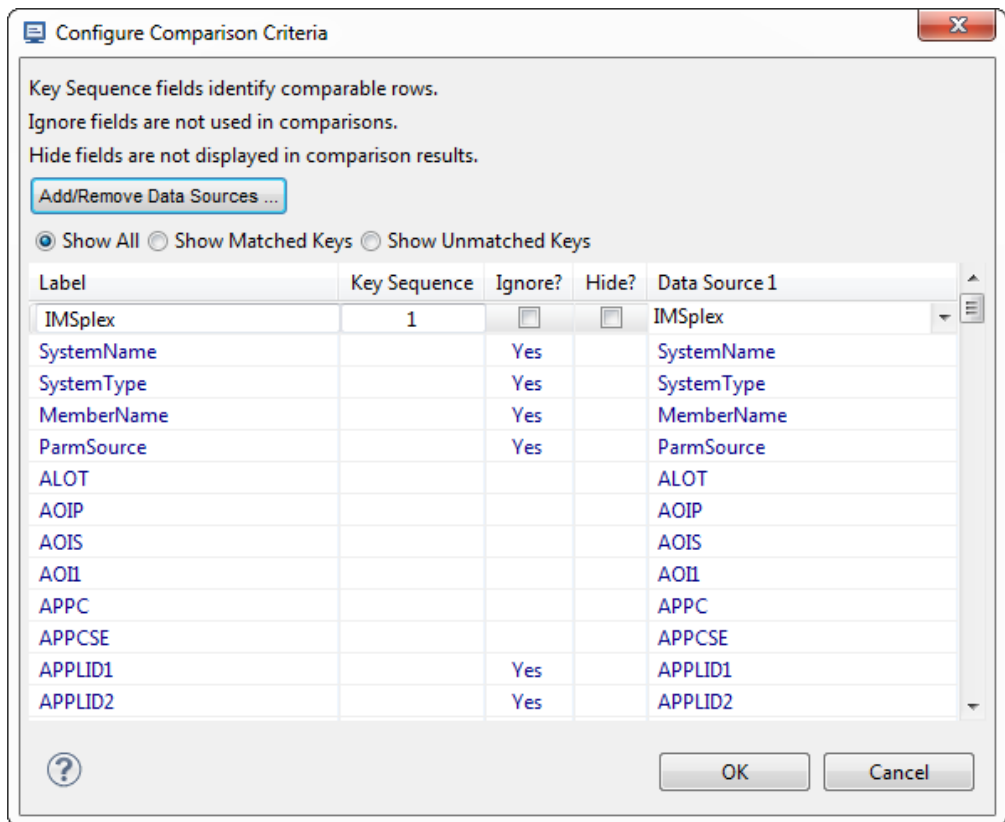


Figure 39. The **Configure Comparison Criteria** dialog

3. Customize the output of your comparison. For additional detail on the **Configure Comparison Criteria** dialog, see “Comparison criteria” on page 81.
4. Click **OK** to perform the comparison.

The results of the comparison are displayed in the **Compare** tab. Highlights draw your attention to columns where adjacent cells contain different values. Differences in ignored columns are not highlighted.




B	CSLG	DBBF	DBFP	DBFX	DBRCNM	DBRCGRP	DBRSE	DBWP	DC	DESC	DFSDf	DLINM	DLIPSB	DLQT	DM
PS1	00050			00010	IBDPDBRC			024	PS1	7	PS1	IBDPDLIS	40	60	04
PS1	00050			00010	ICDPDBRC			024			PS1	ICDPDLIS	40	60	04
	00050			00010	IDDPDBRC			024			PS3	IDDPDLIS	40	60	04
	00050			00010	IEDPDBRC			024			PS3	IEDPDLIS	40	60	04

Figure 40. Reviewing the results of a simple comparison using the plug-in comparator

In the preceding example, the following information is displayed:

- A highlight is shown in the DESC column to indicate the change in values from row 1 (7) to row 2 (empty).
- No highlight is shown in the CSLG or DC columns as they have been ignored using the **Configure Comparison Criteria** dialog.

What to do next

- Click the **Compare** button () in this tab to change the comparison criteria.
- Use the **Previous Difference** () and **Next Difference** () buttons to jump between differences and to quickly examine the result set.

Related tasks:

“Saving the display” on page 75

The IMS Configuration Manager Eclipse plug-in allows you to save commonly used resource, parameter, and command displays of your systems. Saving your display allows you to quickly access the data you use most without the need to re-input all of your settings.



Common uses of the Eclipse plug-in comparator

The following section describes common uses of the comparator.

Identifying parameter differences across your enterprise

The IMS Configuration Manager Eclipse plug-in comparator allows you to identify parameter differences across your entire enterprise.

Procedure

- From the **Navigation** view, double-click **All Sources**. The **Navigation** view is usually located on the left side of the screen but can be relocated if required. The **All Sources** tab is displayed.
- On the **All Sources** tab, click the Refresh button ().
- Right-click an item in the **MemberName** column and then click **Show Configuration**.
- Click the **Compare** button (). The **Configure Comparison Criteria** dialog is displayed.
- Click **OK** to perform the comparison using the suggested settings. The results of the comparison are displayed in the **Compare** tab. A highlight is displayed over two cells within a column where the value changes between rows.

Source	IMSplex	SystemName	MemberName	ParmSource	ALOT	AOIS	AOH	APPLID1	APPC	APPCSE	ARC	ARIRST	ASOT	AUTO	BSIZ	CMDMCS
1	PLBDP	IBDR	DFSPBPLP	INEFFECT							01			N	02048	
1	PLCDH	ICDH	DFSPBHWIS	INEFFECT	60		N	ICDHEVT1			01	N	60	N	02048	
1	PLCDP	ICDR	DFSPBPLP	INEFFECT	1440	N	N	CCDR			1		1440			Y
1	PLDDH	IDDH	DFSPBHWIS	INEFFECT	60		N				01	N	60	N	02048	
1	PLDDQ	ICDQ	DFSPBQ1	INEFFECT	60		N	ICDQEV1			01	N	60	N	02048	
1	PLDDQ	IDDQ	DFSPBQ1	INEFFECT	60		N				01	N	60	N	02048	
1	PLXDH	IBDH	DFSPBHWIS	INEFFECT	60		N	IBDHEVT1			01	N	60	N	02048	
1	PLXDP	IBDP	DFSPBPLP	INEFFECT	60	S	N	IBDPEVT1			01	Y	60	N	02048	
1	PLXDP	ICDP	DFSPBPLP	INEFFECT	60	S	N	ICDPEVT1	N	F	1		60	N	2048	
1	PLXDP	IDDP	DFSPBPLP	INEFFECT	60	S	N				01	N	60	N	02048	
1	PLXNU	IADP	DFSPBPLP	INEFFECT	60	S	N	IADPEVT1			01		60	N	02048	
1	IPABX	ABS0	DFSPB00M	INEFFECT		R	R	IMABIMS0	Y		01			N		R
1	IPABX	ABS1	DFSPB01M	INEFFECT		R	R	IMABIMS1	Y		01			N		R
1	IPABX	ABS2	DFSPB02M	INEFFECT		R	R	IMABIMS2	Y		01			N		R
1	IPABX	ABS3	DFSPB03M	INEFFECT		R	R	IMABIMS3	Y		01			N		R

Figure 41. Comparing parameters across your enterprise using the plug-in comparator

Identifying resource differences between live IMS systems

Use the IMS Configuration Manager Eclipse plug-in comparator to display resource differences between two or more live IMS systems.

Procedure

1. Load a list of live resources for two or more IMS systems in separate tabs in the IMS Configuration Manager Eclipse plug-in. For more information on how to do this, see “Viewing system resources” on page 69 for details.

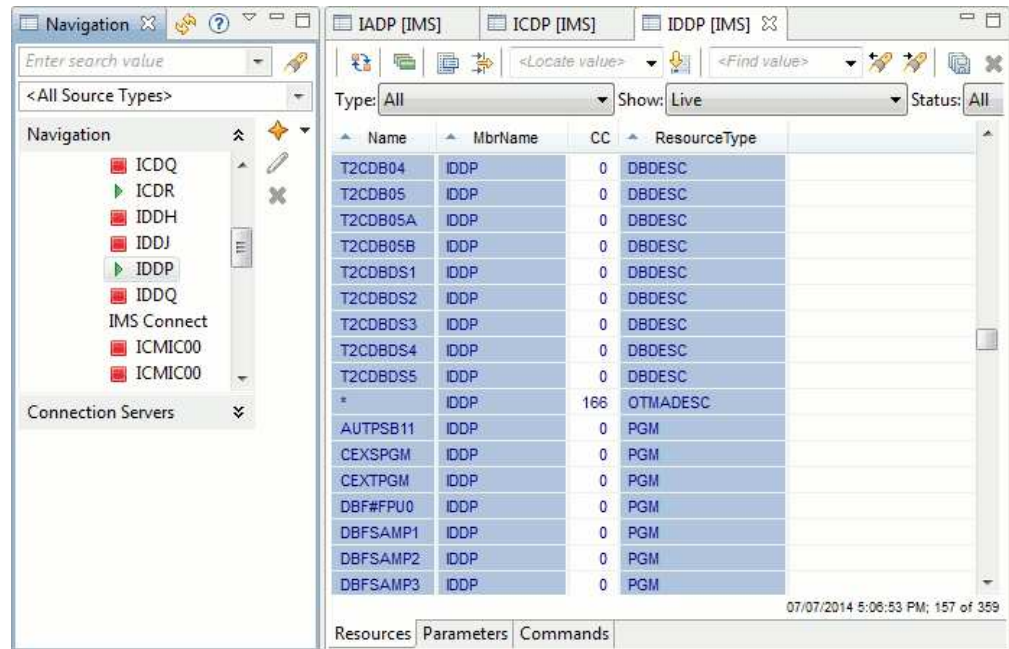



Figure 42. Loading resources for three IMS systems in separate tabs with the IMS Configuration Manager Eclipse plug-in

2. Click the **Compare** button (). The **Configure Comparison Criteria** dialog is displayed.
3. Add your IMS systems as data sources and then select your comparison criteria. For additional information, see “Comparison criteria” on page 81. An example is provided in Figure 43

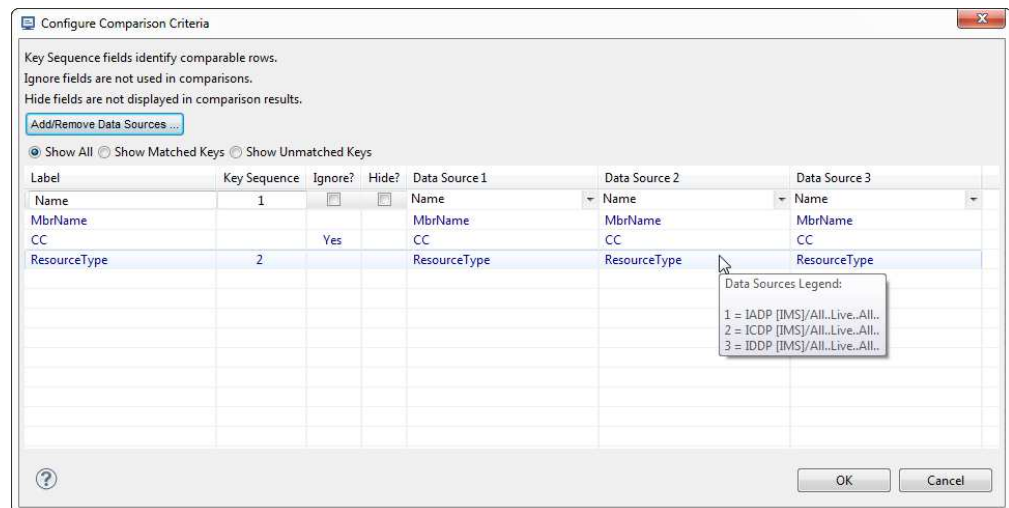


Figure 43. Selecting three comparison data sources using the Eclipse plug-in

- Click **OK** to perform the comparison. The results of the comparison are displayed in the **Compare** tab.

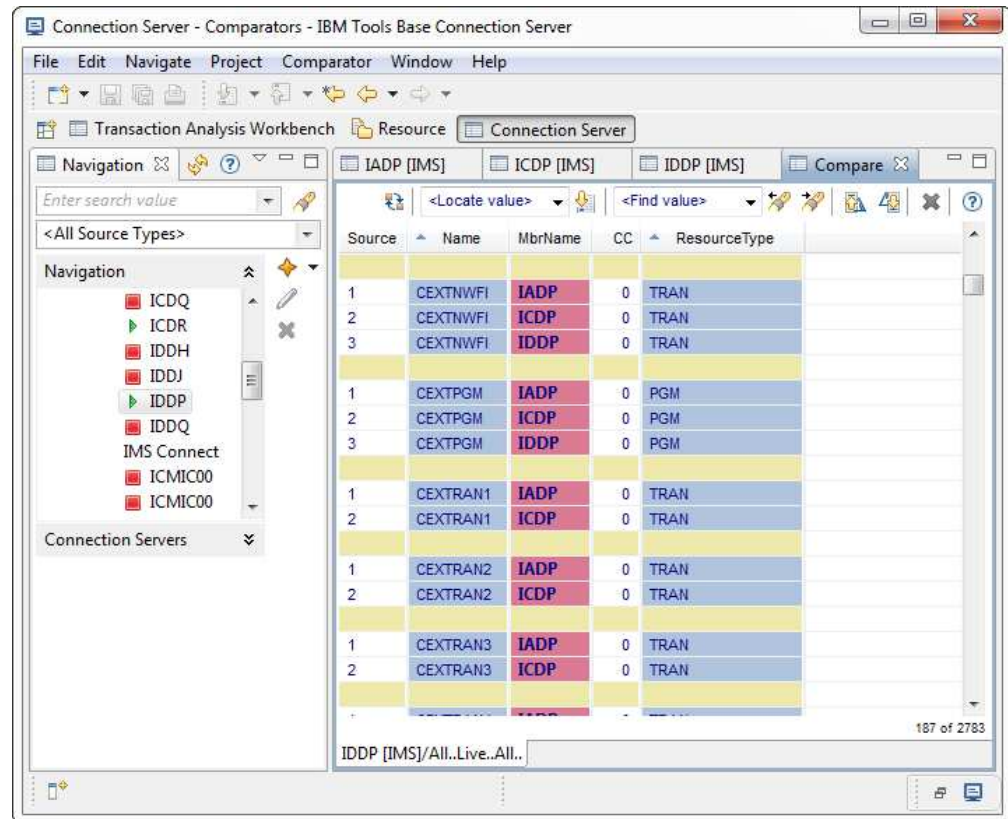



Figure 44. Resource comparison between three live IMS systems using the **Show All** option. Resources matching the **Key Sequence** conditions are grouped using beige rows. In this example, *CEXTNWF1* and *CEXTPGM* are present in all three IMS systems. *CEXTRAN1*, *CEXTRAN2*, and *CEXTRAN3* are only present in two systems.

What to do next

- To change your comparison criteria, click the **Compare** button (). To learn more about the **Configure Comparison Criteria** dialog, see “Comparison criteria.”
- To add additional IMS systems to the comparison, open new resources tabs and then add them as new data sources at step 3 on page 80. Alternatively, use a saved display in your comparison. To create a saved display, see “Saving the display” on page 75.

Comparison criteria

Use the **Configure Comparison Criteria** dialog to customize the result of your comparison.

Click the **Compare** button () to display the dialog.

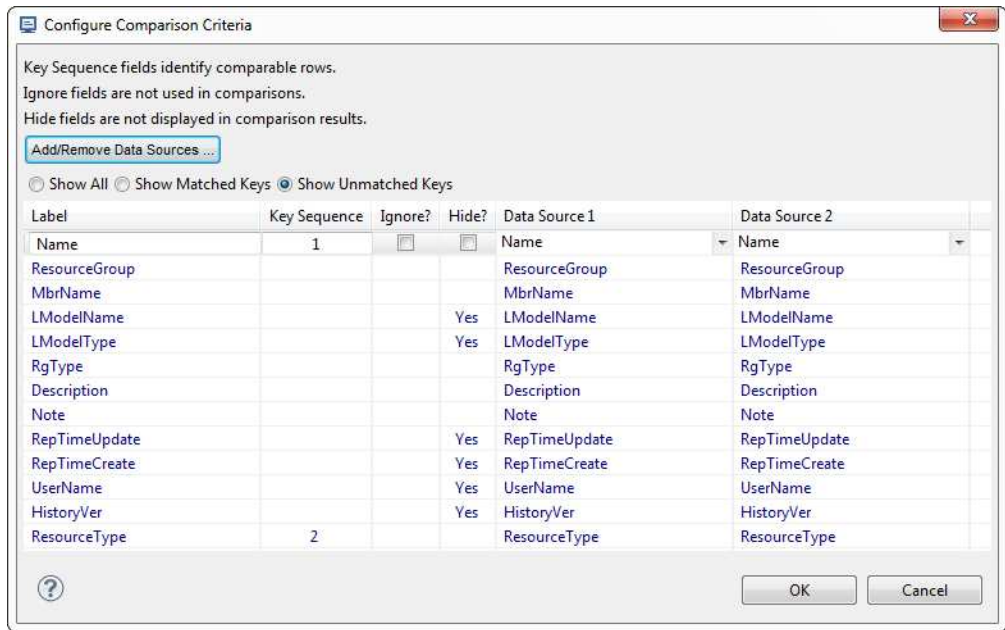


Figure 45. The **Configure Comparison Criteria** dialog

Data sources:

In the Eclipse plug-in, a data source is the name given to a set of results displayed in a tab. A data source can be one of the following:

- A tab you have opened containing a set of resources, parameters, or the results return from an IMS command. See Chapter 8, “Exploring your environment,” on page 67.
- A tab you have saved. See “Saving the display” on page 75.

The comparator can compare data within a single data source, or between two or more data sources. When you click the **Compare** button, **Data Source 1** is automatically assigned to the open tab.

Comparing with a single data source allows you to compare between the rows of a result set. Highlighting is applied over table cells where the value between rows has changed. For an example of a single data source comparison, see “Using the comparator with a single data source” on page 77.

Comparing with multiple data sources allows you to compare across different open tabs and saved displays. To add additional data sources to your comparison, use the following procedure:

1. Click **Add/Remove Data Sources**.
2. Select your data sources. The list is derived from the results tabs you currently have open in the Eclipse plug-in and any saved displays you have.
3. Click **OK**.

For examples using multiple data sources, see “Common uses of the Eclipse plug-in comparator” on page 79.

Table options:

Label Items in the **Label** column will appear as column headings in your comparison output. By default they are derived from the column names of **Data Source 1**, but can be renamed if desired.

Key Sequence

The **Key Sequence** column controls your comparison output in two important ways:

- It allows you to bind related items together to form a comparison *key*.
- It allows you to sort the output by defining a *sequence*.

To sort the output by a particular column, place a 1 in the **Key Sequence** column next to the label. For example, enter 1 next to the **RepTimeUpdate** label in Figure 45 on page 82 to sort the output chronologically by update time of the definitions repository.

To sort and group related items together, number the items sequentially. For example, resources are uniquely identified by their **Name** and **ResourceType**. To bind these items together, enter 1 and 2 next to their respective labels, as shown in Figure 45 on page 82.

When a new comparison is first created, the Eclipse plug-in suggests default values based on the content of **Data Source 1**. You can override these values as desired.

Ignore By default, the comparator places a highlight over two cells in a column that have different values. Select the check box in the **Ignore** column to disable highlighting in that column.

Hide Select the check box in the **Hide** column to remove that column from the output.

Data Source *n*

A list of column headings in the selected data source. Add additional data sources by clicking the **Add/Remove Data Sources** button.

Advanced: Use the drop-down lists to perform the following tasks:

- Change the column ordering.
- Change the mapping between columns in your data sources. Use this technique if two data sources contain the same data, but use different naming conventions for column headings.

Key matching options:

These options allow you to define the behaviour of the comparator when it searches your data sources for the specified **Key Sequence**.

Show Matched Keys

Displays items where the key sequence is found in all data sources. For example, if **Show Matched Keys** was selected in Figure 45 on page 82, the comparison result would show a list of resources that are present in both IMS systems.

Show Unmatched Keys

Displays items where the key sequence is *not* found in all data sources. For example, the selections in Figure 45 on page 82 will list all resources, identified as the pairing of **Name** and **ResourceType**, that are present in one IMS system but not the other.

Show All

Displays the combination of selecting both **Show Matched Keys** and **Show Unmatched Keys**.

Part 4. Troubleshooting

Use these topics to diagnose and correct problems that you experience with IMS Configuration Manager.

Chapter 11. IMS Configuration Manager messages

This topic describes the messages issued by IMS Configuration Manager batch utilities.

Return codes

IMS Configuration Manager sets the following return codes:

- | | |
|-----------|--|
| 0 | Operation was successful. |
| 4 | Operation completed, but a warning (W) message was issued during processing. |
| 8 | Operation may be incomplete. A failure (F) message was issued and IMS Configuration Manager continues processing. |
| 12 | Operation may be incomplete. An error (E) condition caused premature termination. |
| 16 | Operation is incomplete. A severe error (S) condition occurred. |

Message format

IMS Configuration Manager messages begin with a unique message identifier, followed by message text which might contain variable information to identify the particular circumstance that caused the message.

The message identifier has the format `GPLnnnnx` or `FUNnnnnx` where:

GPL or FUN

Three-character prefix to identify the origin of the message.

GPL refers to errors associated with parameter processing or errors associated with IMS Configuration Manager components.

FUN refers to functional support messages issued by IMS Configuration Manager.

- | | | | | | | | | | | | |
|-------------|--|----------|-------------------------------------|----------|--|----------|---|----------|--|----------|--|
| nnnn | Represents a four-digit message number. The preceding three-character prefix combined with this number uniquely identifies the message. | | | | | | | | | | |
| x | Represents a single-letter severity level that indicates the return code, the purpose of the message, and the type of response required from you. The severity levels, from least to most severe, are: <table border="0"><tr><td>I</td><td>Information. No action is required.</td></tr><tr><td>W</td><td>Warning. IMS Configuration Manager detected a possible error condition that you should evaluate.</td></tr><tr><td>F</td><td>Failure. IMS Configuration Manager detected a failure condition that you should evaluate.</td></tr><tr><td>E</td><td>Error. Your action is required before IMS Configuration Manager can continue processing.</td></tr><tr><td>S</td><td>Severe. IMS Configuration Manager processing is suspended until you have taken action.</td></tr></table> | I | Information. No action is required. | W | Warning. IMS Configuration Manager detected a possible error condition that you should evaluate. | F | Failure. IMS Configuration Manager detected a failure condition that you should evaluate. | E | Error. Your action is required before IMS Configuration Manager can continue processing. | S | Severe. IMS Configuration Manager processing is suspended until you have taken action. |
| I | Information. No action is required. | | | | | | | | | | |
| W | Warning. IMS Configuration Manager detected a possible error condition that you should evaluate. | | | | | | | | | | |
| F | Failure. IMS Configuration Manager detected a failure condition that you should evaluate. | | | | | | | | | | |
| E | Error. Your action is required before IMS Configuration Manager can continue processing. | | | | | | | | | | |
| S | Severe. IMS Configuration Manager processing is suspended until you have taken action. | | | | | | | | | | |

Each message also includes the following information:

Explanation:

The Explanation section explains what the message text means, why it occurred, and what its variables represent.

System action:

The System action section explains what the system will do in response to the event that triggered this message.

User response:

The User response section describes whether a response is necessary, what the appropriate response is, and how the response will affect the system or program.

GPL-prefixed messages

This topic describes messages with the GPL*nnnnx* message identifier format.

GPL5001F Selected repository (*dsn*) is not suitable for this product

Explanation: The named IMS Configuration Manager definitions repository is from an older version of IMS Configuration Manager and is not supported.

System action: No IMS Configuration Manager functions can be used.

User response: Create a new IMS Configuration Manager definitions repository data set, or specify an existing data set supported by this version of IMS Configuration Manager and retry the request.

Explanation: The data set failed to open due to one of the following reasons:

1. Security error
2. Invalid data set organization (not PO)
3. Data set cataloged but does not exist

System action: The requested product function fails.

User response: Examine the job log to determine the cause of the error. Correct the problem and retry the function.

GPL5002F Member (*mem*), identified by RGSUE, had parameters that were not able to be parsed. Use List of all members (L) to edit member and correct problem

Explanation: The named member contains syntax errors and cannot be parsed to determine the further list of Proclib members.

System action: The list of applicable members is not built.

User response: Obtain a list of PROCLIB members via the L line command. Select the named member and correct the syntax errors then retry.

GPL5100F Proclib:*dsn* Member:*mem* IMS Release:*imsr* Function:*func*

Explanation: A failure has occurred.

System action: The utility stops.

User response: Contact IBM Software Support.

GPL5003F Access denied to parameter data set *dsn*

Explanation: The user does not have access to the named definitions repository data set.

System action: The requested product function fails.

User response: Refer the error to your security administrator and request access to the named data set. Alternatively, specify a data set to which you have access.

GPL6000I *line* *ctlcd*

Explanation: A line of the SYSIN utility parameter file is displayed along with its relative line number within the file.

System action: None. Informational message only.

User response: None. Informational message only.

GPL6003I *cmd* completed RC=*rc*

Explanation: The utility has ended with the displayed return code.

System action: If the return code is greater than 4 then the utility stops. Otherwise the utility will process the next defined utility command.

User response: If the return code is greater than 4, review prior messages in SYSPRINT to determine the recovery action.

GPL5004F Invalid parameter data set *dsn*

GPL6004E Utility command *cmd* failed, RC=*rc*

Explanation: The utility has ended with the displayed return code.

System action: If the return code is greater than 4 then the utility job stops. Otherwise the utility will process the next defined utility command.

User response: If the return code is greater than 4, review prior messages in SYSPRINT to determine the recovery action.

GPL6005E Error in the SYSIN control cards, RC=*rc*

Explanation: The utility has detected a parameter error.

System action: The utility stops.

User response: Review prior messages in SYSPRINT, correct the indicated error, and rerun the utility.

GPL6006E No parameters in the SYSIN control cards, RC=*rc*

Explanation: The utility has detected that there are no SYSIN parameters.

System action: The utility stops.

User response: Enter utility parameters and rerun the IMS Configuration Manager utility.

GPL6007E Processing error *rsn*. INFO=*info/info2*

Explanation: The utility has detected an error in a sub component.

System action: The utility stops.

User response: Save all files and job logs. Contact IBM Software Support.

GPL6008W SET MAXCC=*mrc*, command processing continues

Explanation: The utility has modified the return code from the prior utility command to the MAXCC value.

System action: Processing continues.

User response: None required. This is a warning message only.

GPL6010I COPY started from DD=*ddname1* to DD=*ddname2*

Explanation: The utility job is starting to copy from *ddname1* to *ddname2*.

System action: None. Informational message only.

User response: None. Informational message only.

GPL6013I DISCOVER started output to DD=*ddname*

Explanation: The DISCOVER utility is starting. Output will be to the IMS Configuration Manager definitions repository *ddname*.

System action: None. Informational message only.

User response: None. Informational message only.

GPL6020E DDname *ddname* not found

Explanation: A required *ddname* for the utility is missing.

System action: The utility stops.

User response: Supply the required *ddname* and resubmit the IMS Configuration Manager utility.

GPL6021E Leading spaces not allowed in *prm*

Explanation: The parameter does not allow leading spaces.

System action: The utility stops.

User response: Correct the parameter and rerun the utility.

GPL6022E Error *act* DDname *ddn* system code *cde*

Explanation: An error has been encountered reading or writing a QSAM utility file.

System action: The utility stops.

User response: Correct the problem described in the MVS system code and resubmit the utility.

GPL6023E Duplicate *typ* in list: *obj*

Explanation: A duplicate resource group or NEWNAME was found in a list.

System action: The utility stops.

User response: Remove the duplicate resource group or NEWNAME and resubmit the utility.

GPL6026E *prm* must be one alphabetic character followed by alphanumeric characters

Explanation: The parameter contains invalid characters. PLEX and IMSID names, and their new names, must conform to IBM naming conventions.

System action: The utility stops.

User response: Correct the parameter and resubmit the utility.

GPL6041E PLEX is required for MBRTYPE(PLEX)

Explanation: MBRNAME must contain the PLEX name when copying an IMSplex.

System action: The run stops.

User response: Add the PLEX parameter and resubmit COPY.

GPL6042E SYSTEM is required for MBRTYPE(SYSTEM)

Explanation: The SYSTEM parameter must contain at least one IMSID or an asterisk when copying an IMS system.

System action: The run stops.

User response: Add the SYSTEM parameter and resubmit COPY.

GPL6052E prn 'plx' must conform to IMSplex naming conventions. One optional trailing asterisk is allowed for generic selection

Explanation: The parameter contains invalid characters. The parameter value must be one alphabetic character followed by alphanumeric characters. One trailing asterisk is allowed for generic IMSplex selection.

System action: The utility stops.

User response: Correct the parameter and resubmit the utility.

GPL6055I cmd processing started for DD=dd, target repository DD=ddname

Explanation: The MAINT utility is starting. Output will be to the repository *ddname*.

System action: None. Informational message only.

User response: None. Informational message only.

GPL6300I Copying obt 'obn' ob2

Explanation: The object is being copied.

System action: None. Informational message only.

User response: None. Informational message only.

GPL6301I To target obt 'obn' ob2

Explanation: The resource group is being copied to a new resource group name.

System action: None. Informational message only.

User response: None. Informational message only.

GPL6303W obt 'obn' ob2 exists and REPLACE not specified. Not copied

Explanation: The IMS Configuration Manager definitions repository already contains the object. The object is not replaced because the COPY parameters do not include the REPLACE parameter.

System action: The copy of the object is skipped.

User response: Add the REPLACE parameter to your parameters and rerun COPY.

GPL6304I COPY has act obt 'obn' ob2

Explanation: The object has been either created or replaced in the IMS Configuration Manager repository depending on if it already existed.

System action: None. Informational message only.

User response: None. Informational message only.

GPL6307E Repository call call failed, RC=rc RSN=rsn DD=dd

Explanation: An error has been encountered accessing the IMS Configuration Manager definitions repository. The type of access is displayed along with the return and reason code and the ddname of the IMS Configuration Manager definitions repository in error.

System action: The utility stops.

User response: Save all job logs and report problem to IBM support.

GPL6308E Resource 'obn','ob2','res' of type obt

Explanation: An error has been encountered accessing the IMS Configuration Manager definitions repository. The name and type of resource that was being processed is displayed.

System action: The utility stops.

User response: Save all job logs. Contact IBM Software Support.

GPL6309E The NEWSYSTEM parameter is required when copying an IMS system to the same repository

Explanation: IMS systems cannot be copied to the same IMS Configuration Manager definitions repository unless they are going to be renamed.

System action: The utility stops.

User response: Add a new system name in the NEWSYSTEM parameter and rerun the utility.

GPL6314E An XMIT file cannot be both the source and target of a COPY operation

Explanation: The COPY utility cannot COPY from an XMIT file to another XMIT file.

System action: The utility stops.

User response: Correct the FROM or TO parameter and rerun COPY.

GPL6315E The NEWPLEX parameter must be different from the IMSPLEX name when copying to the same repository

Explanation: The COPY PLEX parameter must not be the same as the IMSplex name when copying to the same IMS Configuration Manager definitions repository.

System action: The utility stops.

User response: Correct the PLEX and NEWPLEX parameters and rerun COPY.

GPL6317I Copying *typ nam*

Explanation: The named object is being copied.

System action: None. Informational message only.

User response: None. Informational message only.

GPL6319E The NEWPLEX parameter is required when copying an IMSplex to the same repository

Explanation: The NEWPLEX parameter is required when copying a new IMSplex to the same IMS Configuration Manager definitions repository.

System action: The COPY utility stops.

User response: Add the NEWPLEX parameter and rerun COPY.

GPL6320E Resource *obn* of type *obt*

Explanation: An error has been encountered accessing the definitions repository for MAINT processing. The name and type of the object that was being processed is displayed.

System action: The utility stops.

User response: Save all job logs. Contact IBM Software Support.

GPL6321E IMSplex *plx* not found in DDname=*dd*

Explanation: The COPY utility did not find the IMSplex name in the file that was requested for copy.

System action: The utility stops.

User response: Correct the PLEX name parameter and rerun COPY.

GPL6324I COPY has *act* IMSplex *plx*

Explanation: The IMSplex has been either created or replaced in the IMS Configuration Manager definitions repository depending on whether it already existed.

System action: None. Informational message only.

User response: None. Informational message only.

GPL6326E The NEWSYSTEM parameter is required when copying a new system to the same repository

Explanation: The NEWSYSTEM parameter is required when copying a system to the same IMS Configuration Manager definitions repository.

System action: The COPY utility stops.

User response: Add the NEWSYSTEM parameter and rerun COPY.

GPL6328E The NEWSYSTEM parameter(s) must be different from the SYSTEM name when copying to the same repository

Explanation: The COPY NEWSYSTEM parameter must not be the same as the SYSTEM name when copying to the same IMS Configuration Manager definitions repository.

System action: The utility stops.

User response: Correct the SYSTEM and NEWSYSTEM parameters and rerun COPY.

GPL6331E The NEWSYSTEM parameter must have the same number of IMSID names as the SYSTEM parameter

Explanation: The NEWSYSTEM parameter, if used, must have the same number of IMSIDs specified as the SYSTEM parameter.

System action: The COPY utility stops.

User response: Change the NEWSYSTEM parameter so that there is one new IMSID name for each IMSID in the SYSTEM parameter. Use a comma for any IMSID name you do not want to rename.

GPL6332E The NEWSYSTEM parameter cannot be specified when SYSTEM(*)

Explanation: The NEWSYSTEM parameter cannot be used with a generic SYSTEM parameter.

System action: The COPY utility stops.

User response: Remove the NEWSYSTEM parameter and resubmit the job.

GPL6333W No matching *mbr* found in DDname=*d*

Explanation: No members matching the MBRTYPE were found in the input file.

System action: The job ends.

User response: Correct the COPY selection parameters and resubmit the job.

GPL6334I *mbr* copied=*cnt*

Explanation: The number of PLEX and SYSTEMs copied are displayed.

System action: None. Informational message only.

User response: None. Informational message only.

GPL6335E Copy 'FROM' and 'TO' data set names are the same and a new name not specified

Explanation: COPY to the same data set cannot be performed unless a new name for the objects is provided.

System action: COPY stops.

User response: Add the appropriate NEWPLEX, NEWSYSTEM or NEWNAME parameter and resubmit COPY.

GPL6337E The NEWSYSTEM parameter cannot be specified without a SYSTEM parameter

Explanation: The NEWSYSTEM parameter of the COPY utility can not out specified without the SYSTEM parameter. The NEWSYSTEM parameter is used to change the name of a system during the COPY operation.

System action: COPY stops.

User response: Remove the NEWSYSTEM parameter and resubmit COPY.

GPL6338E Your userid is not authorized to modify a ICM repository object

Explanation: An attempt to change an object in a IMS Configuration Manager definitions repository has been denied by IMS Configuration Manager access control.

System action: Utility stops.

User response: Contact your SAF administrator for more information.

GPL6339E A SAF error has been detected trying to authorize access to an ICM repository object, SAF RC=*rc*

Explanation: An attempt to change an object in a IMS Configuration Manager definitions repository has resulted in a SAF error.

System action: The utility stops.

User response: Contact your SAF administrator for more information.

GPL6340E SAF Entity: *ent*

Explanation: This message follows "GPL6338E" and "GPL6339E" to display the RACROUTE entity that failed.

System action: The utility stops.

User response: Contact your SAF administrator for more information.

GPL6341E The NEWPLEX parameter cannot be used with a generic PLEX copy

Explanation: The COPY NEWPLEX parameter cannot be used with PLEX(*).

System action: The utility stops.

User response: Remove the NEWPLEX parameter and rerun COPY.

GPL6342E The PLEX(*) parameter cannot be used to copy to the same repository

Explanation: The COPY PLEX(*) parameter cannot be used to copy to the same IMS Configuration Manager definitions repository.

System action: The utility stops.

User response: Correct the PLEX parameter and rerun COPY.

GPL6406E Plex (*plx*) not found in the repository

Explanation: The IMSplex name was not found in the IMS Configuration Manager definitions repository.

System action: The utility stops.

User response: Correct the PLEX parameter and resubmit the utility.

GPL6413E The XMITFILE is empty or invalid format. *reason*

Explanation: The XMITFILE was empty or not in XMITFILE format.

System action: The utility stops.

User response: Resubmit the utility with a valid XMITFILE.

GPL6600I Beginning command file processing

Explanation: MAINT processing has begun.

System action: None. Informational message only.

User response: None. Informational message only.

**GPL6601I Objtype Created Updated Deleted
Notfound DupRec Skipped**

Explanation: This message summarizes MAINT processing results.

When summarizing MAINT.MEMBERS command results, the possible values of Objtype are PLEX, IMS, IMSCON, ODBM, REPO, OM, RM, and SCI.

Counted are the number of each type of object created, updated, deleted, not found (on a create or delete operation), and a duplicate found (on a CREATE). Also displayed is the number of commands that were not executed because of errors in their syntax or values.

System action: None. Informational message only.

User response: None. Informational message only.

GPL6602I -----

Explanation: This line is part of the total resources processed by the MAINT utility.

System action: None. Informational message only.

User response: None. Informational message only.

GPL6603I res cre upd del nof dup skp

Explanation: This message summarizes the actions taken on an object during MAINT processing. A description of each column is provided by "GPL6601I."

System action: None. Informational message only.

User response: None. Informational message only.

**GPL6604E Object *name* of type *typ* already exists -
CREATE rejected**

Explanation: MAINT processing has rejected a CREATE command since the object already exists.

System action: MAINT processing continues with the next command.

User response: Use the DELETE command and then the CREATE command, or use the UPDATE command to change an existing object.

**GPL6605E Object *name* of type *typ* was not found -
cmd rejected**

Explanation: MAINT processing has rejected an UPDATE or DELETE command since the object does not exist.

System action: MAINT processing continues with the next command.

User response: If an UPDATE command failed, use CREATE command to insert the object. A failed DELETE command requires no response.

**GPL6606E Object *name* of type *typ* is in use - *cmd*
rejected**

Explanation: The object specified is in use by the IMS Configuration Manager ISPF dialog or by another batch job.

System action: Processing continues.

User response: If another batch job is running then wait until it completes and resubmit the request. If the IMS Configuration Manager ISPF dialog is locking the object make sure that you exit the system edit session and then resubmit the request.

GPL6607I *line cmd*

Explanation: A line of the MAINT.RESOURCES utility command file is displayed along with its relative line number within the file.

System action: None. Informational message only.

User response: None. Informational message only.

**GPL6608E No commands found in the MAINT
command file, RC=*rc***

Explanation: The MAINT utility has detected that there are no commands in the command input file.

System action: The utility stops.

User response: Enter type-2 commands in the input command file and rerun the utility.

**GPL6609E Error in the MAINT command file,
RC=*rc***

Explanation: The MAINT utility has detected a command error in the input command file.

System action: The utility stops.

User response: Review messages in SYSPRINT, correct the error, and rerun the utility.

**GPL6611E Invalid command NAME field value.
Name=*'name'***

Explanation: The NAME field in the MAINT command must match IMS resource naming conventions. This includes a asterisk and percent signs for generic UPDATE and DELETE commands. Only alphanumeric and national characters are allowed in the name field of a CREATE command.

System action: The utility stops.

User response: Correct the NAME field and rerun.

GPL6612I **Skipping *cmd* object *nam* of type *typ* on line *line***

Explanation: A command is being skipped because of an error. See prior error messages for the reason.

System action: The MAINT utility continues with the next command.

User response: Correct the error and rerun the command.

GPL6613E **Generic names are not allowed on CREATE commands**

Explanation: CREATE commands do not support generic substitution characters in the NAME field.

System action: The utility continues with the next command.

User response: Correct the error and rerun the command.

GPL6614E **No objects of type *typ* are defined - *cmd* rejected**

Explanation: UPDATE and DELETE commands with a GENERIC NAME will fail because there are no object records matching the NAME mask.

System action: The MAINT utility continues with the next command.

User response: Correct the error and rerun the command.

GPL6615I **Generic name '*msk*' matches '*typ nam*' - Processing *cmd* request**

Explanation: A command name mask matches an existing resource or descriptor in the resource group. The UPDATE or DELETE command will be processed.

System action: None. Informational message only.

User response: None. Informational message only.

GPL6616E **LIKE statement model *name* of type *typ* not found - Skipping CREATE request**

Explanation: MAINT.RESOURCES processing has rejected a CREATE using a LIKE parameter because the named resource or descriptor is not found in the resource group.

System action: MAINT.RESOURCES processing continues with the next type-2 command.

User response: Correct the command and rerun MAINT.RESOURCES.

GPL6617E **No objects matched the NAME specification - *cmd* rejected**

Explanation: MAINT processing has rejected an UPDATE or DELETE command since no objects could be found that matched the NAME specification.

System action: MAINT continues with the next command.

User response: Correct the NAME and rerun MAINT.

GPL6618E **NAME='*name*' is invalid. *typ* system names must end in '*suf*'**

Explanation: The NAME field in the MAINT.MEMBERS command with a CREATE subcommand must match IMS resource naming conventions, where:

- ODBM system names must end in "OD"
- REPO system names must end in "RP"
- OM system names must end in "OM"
- RM system names must end in "RM"
- SCI system names must end in "SC"

System action: MAINT processing terminates.

User response: Correct the NAME field and rerun.

GPL6621E *err*

Explanation: MAINT.RESOURCES processing has found an error validating a resource or descriptor.

System action: The utility continues with the next command.

User response: Correct the command and rerun MAINT.RESOURCES.

GPL6630E **Skipping *cmd obj* command on line *line*. No *typ* NAME is specified**

Explanation: A subcommand being driven for a MAINT.MEMBERS command has been found to have no NAME parameter values. At least one NAME value is required to identify the target member or resource respectively.

System action: MAINT processing continues with the next subcommand.

User response: Correct the subcommand.

GPL6631I **Object UPDATE request ignored as it does not alter the existing definition**

Explanation: MAINT processing has ignored an update because the existing object will not be altered by applying the update.

System action: Processing continues.

User response: None. Informational message only.

GPL6632I **The *cmd* command on line *line* ran successfully for object *nam* of type *typ***

Explanation: The given command has run successfully.

System action: Processing continues.

User response: None. Informational message only.

GPL7000I **Processing IMSplex *nam*...**

Explanation: This message displays the IMSplex names discovered and processed by autodiscovery.

System action: None. Informational message only.

User response: None. Informational message only.

GPL7001I *act* **IMSplex *nam***

Explanation: This message displays the IMSplex names discovered or skipped by autodiscovery.

System action: None. Informational message only.

User response: None. Informational message only.

GPL7002I **Discovered *obj* job *job*, XCF member *mem* in IMSplex *plx* on *os* - Version *ver***

Explanation: This message displays the IMS objects discovered by autodiscovery.

System action: None. Informational message only.

User response: None. Informational message only.

GPL7003I **IMSplex *plx* has no active or eligible IMS components**

Explanation: There are no active IMS components for this IMSplex or none match the MBRTYPE criteria.

System action: Autodiscovery continues with the next IMSplex.

User response: None. Informational message only.

GPL7004E *txt*

Explanation: A request to the JES subsystem to process a job has failed. The message describes the system service and error codes associated with the problem.

System action: Autodiscovery stops.

User response: Check the JES service error codes to determine the reason for the problem. Common problems include:

- For Function=SSST, see SYS1.MACLIB(IAZSSST) for errors returned in STATREAS. Common errors are:
 - =08 Invalid job id - not in "JOB01234" format
 - =2C Invalid job name

- For Function=SSJI, see SYS1.MACLIB(IAZSSJI or IAZSPLIO) for errors returned in SSJIRETN. Common errors are:
 - =28 RACF authorization error.
-

GPL7005W **Address space *job* not found**

Explanation: The address space named in a QUERY IMSPLEX DRD command is no longer active.

System action: Autodiscovery continues with the next member.

User response: Determine why the job has abended and restart the IMS component and rerun autodiscovery.

GPL7006I **JESJCL file in address space *job* not found**

Explanation: The JESJCL file in a job cannot be found.

System action: Autodiscovery continues with the next member.

User response: None. Informational message only.

GPL7007I *act* ***obj* object *nam***

Explanation: This message displays the IMS objects added or updated in the IMS Configuration Manager definitions repository during autodiscovery.

System action: None. Informational message only.

User response: None. Informational message only.

GPL7008I **PARM = *prm***

Explanation: This message displays the PARM= string from the IMS component discovered by autodiscovery.

System action: None. Informational message only.

User response: None. Informational message only.

GPL7009I *typ*= *dsn*

Explanation: This message displays the data set names from the IMS component discovered by autodiscovery.

System action: None. Informational message only.

User response: None. Informational message only.

GPL7010E **TYPE 'ALL' and 'PLEX' are mutually exclusive and are not allowed with other types**

Explanation: DISCOVER parameter TYPE values ALL and PLEX are mutually exclusive and cannot be entered with any other TYPE values like IMS or IMSCON, etc.

System action: The DISCOVER utility stops.

User response: Correct the TYPE parameter and rerun the utility.

GPL7011I **Searching for IMSCON jobs in the XCF group *xcf* which is associated with IMS system *ims*...**

Explanation: Autodiscovery is looking for IMSCON regions in an XCF group from the IMS PB XCF group name.

System action: None. Informational message only.

User response: None. Informational message only.

GPL7012I **Discovered *obj*, job *job*, XCF member *mem* in XCF group *xcf***

Explanation: This message displays the IMS objects discovered by autodiscovery outside of an IMSplex.

System action: None. Informational message only.

User response: None. Informational message only.

GPL7013I **Beginning DISCOVER update phase...**

Explanation: This message indicates that DISCOVER is starting the phase when discovered IMS components are added to the IMS Configuration Manager definitions repository.

System action: None. Informational message only.

User response: None. Informational message only.

GPL7014I ***obj* object *nam*, job *job*, XCF member *mem* - Object *sta***

Explanation: This message displays the IMS objects to be updated, added or ignored by autodiscovery.

System action: None. Informational message only.

User response: None. Informational message only.

GPL7015I **MBRTYPE Discovered Added Updated No change Skipped Error**

Explanation: This message is the heading row for a table that summarizes the results of autodiscovery.

MBRTYPE

The type of component that has been discovered by IMS Configuration Manager. Possible values are PLEX (IMSPlex), IMS, IMSCON (IMS Connect), ODBM (Open Database Manager), REPO (Repository Server (RS)), OM (Operations Manager), RM (Resource Manager) and SCI (Structured Call Interface).

Discovered

The number of components of each MBRTYPE found

Added The number of components that were new to the IMS Configuration Manager definitions repository.

Updated

The number of components that were already in the IMS Configuration Manager definitions repository and were changed.

No change

The number of components already in the IMS Configuration Manager definitions repository but are unchanged since the last time autodiscovery was executed.

Skipped

The number of components that were not processed. There are several reasons a component may be skipped:

1. An IMSplex does not have any active components.
2. An IMS is in an IMSplex but NOPLEX processing is being done.
3. The version of a component cannot be determined.
4. An IMS Connect (IMSCON) is not associated with any IMS system that has been discovered.

Error

The number of components that could not be processed further because of an error. Some reasons why a component can't be processed further are:

1. The component address space is not found.
2. JESJCL cannot be parsed.
3. A PROCLIB member cannot be read.
4. A component parameter string cannot be parsed.
5. Component STEPLIB tables cannot be loaded.

System action: None. Informational message only.

User response: None. Informational message only.

Related reference:

Chapter 16, "Understanding the result of the discovery process," on page 163
Results of the IMS Configuration Manager autodiscovery process are summarized in the log.

GPL7016W **No IMS components discovered**

Explanation: This message indicates that DISCOVER did not discover any IMS components.

System action: None required. This is a warning message only.

User response: None required. This is a warning message only.

GPL7017I **Reading IMS Proclib member *pmb* for
obj *job job***

Explanation: This message is issued when autodiscovery is reading an IMS proclib member.

System action: None. Informational message only.

User response: None. Informational message only.

GPL7018E **Proclib member '*pmb*' not found for obj
job *job***

Explanation: This message is issued if a PROCLIB member cannot be read from the data sets on an IMS component JOB's PROCLIB DD statement.

System action: Autodiscovery continues.

User response: Determine why the PROCLIB member is not in the data sets specified on the JOB's PROCLIB DD statement and rerun autodiscovery.

GPL7019I **-----**

Explanation: This message displays the number of objects discovered, added, and updated.

System action: None. Informational message only.

User response: None. Informational message only.

GPL7020I **obj *dct act uct ncg skp err***

Explanation: This message displays the number of objects discovered, added, update, not changed, skipped and in error.

System action: None. Informational message only.

User response: None. Informational message only.

GPL7021E **Dynamic *typ* error - DDname=*ddn*
DSN=*dsn***

Explanation: Dynamic allocation failed for the named STEPLIB dataset. One or more dynamic allocation messages precede this message.

System action: Autodiscovery continues with the next component.

User response: Determine the cause of the dynamic allocate failure. Correct and restart the utility.

GPL7022E **Error opening DDname *ddn* system code
*cde***

Explanation: An error has been encountered opening or closing an IMS component's STEPLIB.

System action: Autodiscovery stops.

User response: Correct the problem described in the MVS system code and resubmit the utility.

GPL7023I **obj object *nam*, job *job*, XCF member *mem*
- Object is *sta***

Explanation: This message displays the status of IMS objects viewed in the IMS Configuration Manager definitions repository by autodiscovery.

System action: None. Informational message only.

User response: None. Informational message only.

GPL7024I **Checking for discovered IMS
components in the ICM repository...**

Explanation: This message indicates that DISCOVER is starting the phase when the IMS Configuration Manager definitions repository is checked for existence of previously discovered IMS components.

System action: None. Informational message only.

User response: None. Informational message only.

GPL7025W **No IMSplex discovered**

Explanation: DISCOVER did not find any IMSplexes in the sysplex. This can occur if the PLEX parameter is used and none of the specified IMSplexes are defined in XCF.

System action: The autodiscovery stops.

User response: Correct the PLEX parameter and rerun.

GPL7026I **Load of IMS table '*tab*' from '*ddn*' failed.
RC=*rc* RSN=*rsn***

Explanation: A load of an IMS table out of an IMS component's library failed.

System action: Autodiscovery continues with the next component.

User response: Return code 4 indicates that the IMS table is not in the library of the IMS component that is being discovered. Add the library with the module that is missing to the IMS component's STEPLIB and rerun autodiscovery.

GPL7027I **CQS job *job*, XCF member *mem* on os is
associated with IMS system *ims* in
IMSplex *plx***

Explanation: A CQS component is being associated with an IMS region in the same plex on the same OS image.

System action: None. Informational message only.

User response: None. Informational message only.

GPL7028E Only MBRTYPES 'IMS' and 'IMSCON' allowed with the NOPLEX option

Explanation: The NOPLEX option only captures IMS and IMSCON components that are not part of an IMSplex.

System action: Autodiscovery stops.

User response: Correct the MBRTYPE parameter and rerun.

GPL7029E The PLEX parameter cannot be specified with the NO PLEX option

Explanation: The NOPLEX and PLEX parameters can not be combined in a single command.

System action: Autodiscovery stops.

User response: Remove one of the parameters and rerun.

GPL7030I Discovered IMS job *job*, IMSID *ims* in subsystem name table

Explanation: This message displays the IMS regions found through the MVS Subsystem Name Table.

System action: None. Informational message only.

User response: None. Informational message only.

GPL7031I IMS system *ims* is in IMSplex *plx* and is therefore being skipped

Explanation: The NOPLEX option of autodiscovery ignores IMS systems that are in an IMSplex.

System action: The IMS is skipped. Autodiscovery continues.

User response: None. Informational message only.

GPL7032I The suffix of parameter member *mbr** is not available in the PARM or PB member of IMS system *ims*

Explanation: Autodiscovery is skipping reading of this parameter member because the suffix is not in IMS parameters or PB member.

System action: None. Informational message only.

User response: None. Informational message only.

GPL7033I CQS PROCLIB DSN=*dsn txt ims* PROCLIB DD

Explanation: Autodiscovery is skipping or adding a CQS PROCLIB dataset to the IMS PROCLIB concatenation based on if the CQS PROCLIB is already in the IMS PROCLIB concatenation.

System action: None. Informational message only.

User response: None. Informational message only.

GPL7034I IMSCON job *job* is connected to IMS system *ims* in IMSplex *plx*

Explanation: Autodiscovery has found that an ICON region is connected to a IMS region though the TMEMBER name in the HWS DATASTORE parameter.

System action: None. Informational message only.

User response: None. Informational message only.

GPL7035I IMSCON job *job*, XCF member *mem* is not connected to any IMS system discovered - Skipping IMSCON region

Explanation: Autodiscovery has not found any connections between an IMSCON region and the IMS regions captured in this invocation of autodiscovery. The IMSCON region is skipped.

System action: None. Informational message only.

User response: None. Informational message only.

GPL7036I *cmd* command error. RC=*rc* RSN=*rsn*

Explanation: A CSL command has failed. Displayed is the CSL command and return and reason code.

System action: Autodiscovery continues with the next IMSplex.

User response: Fix the problem indicated by the IMS CSL return and reason codes displayed in message and rerun autodiscovery.

GPL7037I *txt*

Explanation: Autodiscovery has encountered an error communicating with an IMSplex using CSL.

System action: Autodiscovery continues with the next IMSplex.

User response: Fix the problem indicated by the IMS CSL return and reason codes displayed in message "GPL7036I" and rerun autodiscovery.

GPL7038I Name token services retrieve failed for CQSSN=*cqs*, RC=*rsn*

Explanation: Autodiscovery is unable to retrieve the name token for a CQS address space.

System action: Autodiscovery cannot retrieve CQS information for the IMS system.

User response: The return code is documented in the Assembler services guide for the IEANTRT callable service.

GPL7039I The name token for CQSSN=*cqs* could not be located

Explanation: Autodiscovery is unable to retrieve the name token for a CQS address space.

System action: Autodiscovery continues but cannot retrieve CQS information for the IMS system.

User response: Start the CQS region and rerun autodiscovery.

GPL7040I IMS system *ims* is not connected to a CQS system

Explanation: The IMS system discovered does not have a CQSID defined in the SQ or DF members of the IMS PROCLIB.

System action: None. Informational message only.

User response: None. Informational message only.

GPL7041I Discovered CQS job *job*, XCF member *mem*, CQSSN=*cqs*

Explanation: This message displays the CQS region found through Name/Token services.

System action: None. Informational message only.

User response: None. Informational message only.

GPL7042I CQS job *job*, XCF member *mem*, CQSSN=*cqs* is associated with IMS system *ims*

Explanation: A CQS component is associated with an IMS region not in an IMSplex.

System action: None. Informational message only.

User response: None. Informational message only.

GPL7043I IMS system *ims* is in IMSplex *plx*. Checking CQS connection

Explanation: The NOPLEX option of autodiscovery is checking an IMS that is an IMSplex for a CQS connection on the OSNAME that autodiscovery is running.

System action: None. Informational message only.

User response: None. Informational message only.

GPL7044I IMSCON job *job* is connected to IMS system *ims*

Explanation: Autodiscovery has found that an ICON region is connected to a IMS region though the TMEMBER name in the HWS DATASTORE parameter. The IMS system is not part of a IMSplex.

System action: None. Informational message only.

User response: None. Informational message only.

GPL7045I IMS job *job*, IMSID *ims* is being selected to find connected IMSCON jobs

Explanation: Autodiscovery is selecting an IMS job to try and find IMSCON regions connected to it.

System action: None. Informational message only.

User response: None. Informational message only.

GPL7046I *obj* job *job* selected for further processing

Explanation: Autodiscovery is selecting this object for further processing.

System action: None. Informational message only.

User response: None. Informational message only.

GPL7047I IXCQUERY error. RC=*rc* RSN=*rsn*, XCF group *grp*

Explanation: A XCF query command has failed. The IXCQUERY return and reason code are displayed and the XCF group name.

System action: Autodiscovery continues.

User response: Fix the problem indicated by the IXCQUERY return and reason codes displayed in message and rerun autodiscovery.

GPL7048I *txt*

Explanation: Autodiscovery has encountered an error issuing an XCF QUERY.

System action: Autodiscovery continues with the next IMSplex.

User response: Fix the problem indicated by the IXCQUERY return and reason codes displayed in message "GPL7047I" and rerun autodiscovery.

GPL7049I Found *rcn* DSN=*dsn* in DBRC *ddn* for IMSID *ims*

Explanation: Autodiscovery has found a RECON dataset for an IMSID by loading MDA blocks from STEPLIB or IMSDALIB in the DBRC region.

System action: None. Informational message only.

User response: None. Informational message only.

GPL7050I Discovered *obj* job *job* is associated with IMS system *ims*

Explanation: This message displays the DBRC region that is associated with an IMS system.

System action: None. Informational message only.

User response: None. Informational message only.

GPL7051I Found *ddn* DSN=*dsn* in DBRC job *job*

Explanation: Autodiscovery has found a RECON dataset for an IMSID in the DBRC region's JCL.

System action: None. Informational message only.

User response: None. Informational message only.

GPL7052I Error finding IMSplex associations for IMSCON *hws*. Feedback: RC=*rc* RSN=*rsn*

Explanation: An attempt to find the IMSplex for an IMSCON has failed. The return and reason codes are displayed.

System action: Autodiscovery continues.

User response: Save all job logs. Contact IBM Software Support.

GPL7053I IMSCON *hws* has IMSplex associations with '*plx*'

Explanation: This message shows the first five IMSplex and IMSplex member associations with the IMSCON region whose name is displayed.

System action: None. Informational message only.

User response: None. Informational message only.

GPL7054I *obj job job* in IMSplex *plx* on *os* - Version is zero, skipping object

Explanation: A discovered object has a zero version.

System action: The object is skipped.

User response: When autodiscovery detects a zero version for a discovered object, it is usually because the IMSplex is in an unstable state. Processing for this object is skipped. The user should rerun autodiscovery for the IMSplex, when the IMSplex environment is stable, to ensure completeness.

GPL7055I Loading SCD module *scd* from the IMS job STEPLIB

Explanation: Autodiscovery is loading the suffixed SCD module.

System action: None. Informational message only.

User response: None. Informational message only.

GPL7056I Reading CQS Proclib member *pmb* for *obj job job*

Explanation: This message is issued when autodiscovery is reading a CQS proclib member.

System action: None. Informational message only.

User response: None. Informational message only.

GPL7057I To discover the CQSSN *cqs* connected to IMS system *ims*, autodiscovery must be run on *os*

Explanation: This message is issued when autodiscovery is trying to discover a CQS system not in an IMSplex and not on the same OS system as autodiscovery.

System action: The CQS information is not captured but autodiscovery continues.

User response: Run autodiscovery on the OS named in the message.

GPL7058I Searching for CQS connections to IMS systems...

Explanation: This message is issued when autodiscovery is beginning to search for CQS connection to IMS systems.

System action: None. Informational message only.

User response: None. Informational message only.

GPL7060I Discovering resources for IMS system *ims*, IMSplex *plx*

Explanation: This message is issued when autodiscovery is about to discover resources for an IMS system.

System action: None. Informational message only.

User response: None. Informational message only.

GPL7061E Error processing an IMS SCD '*scd*'. RC=*rc* RSN=*rsn*

Explanation: An attempt to extract the MSGEN parameters from the SCD has failed.

System action: Autodiscovery continues.

User response: Save all job logs. Contact IBM Software Support.

GPL7062I IMS system *ims* is searching for a CQS using CQSSN=*ssn*

Explanation: An attempt is being made to connect an IMS system to a CQS as part of autodiscovery.

System action: None. Informational message only.

User response: None. Informational message only.

GPL7063E Error parsing a spool buffer. INFO=ed

Explanation: An unexpected condition was encountered while parsing a spool buffer.

System action: Autodiscovery skips the affected spool buffer and continues.

User response: Save all files and job logs. Contact IBM Software Support.

GPL7064W System *name*, type *type* not updated, conflicting update in progress

Explanation: Autodiscovery was unable to update a member system as there is another update in progress for that member, either by another batch utility or from an ISPF EDIT session.

System action: Autodiscovery continues with the next member.

User response: Rerun autodiscovery when the other update has completed.

GPL7300E Unable to open file *ddn* - DD statement missing

Explanation: DD statement is missing from the JCL.

System action: IMS Configuration Manager fails to initialize.

User response: Add the missing DD card to the server JCL.

GPL7301E No valid repositories defined

Explanation: GPLCNTL contains no IMS Configuration Manager definitions repositories.

System action: IMS Configuration Manager fails to initialize.

User response: Define at least one IMS Configuration Manager definitions repository via GPLCNTL.

GPL7302E Required load module *mod* not found

Explanation: The required load module was not found.

System action: IMS Configuration Manager fails to initialize.

User response: Add the required library to the server STEPLIB.

GPL7303E Syntax error(s) in GPLCNTL control cards

Explanation: GPLCNTL contains invalid control cards.

System action: IMS Configuration Manager fails to initialize.

User response: The cause of the syntax errors is described in earlier messages. Correct and restart the server.

GPL7304E Dynamic allocation failed for repository *rep*, data set *dsn*

Explanation: Dynamic allocation failed for the named IMS Configuration Manager definitions repository. One or more dynamic allocation messages precede this message.

System action: IMS Configuration Manager initialization continues but the named IMS Configuration Manager definitions repository is not available.

User response: Determine the cause of the dynamic allocate failure. Correct and restart the product.

GPL7305I *rep* repository *act*, data set *dsn*

Explanation: The named IMS Configuration Manager definitions repository data set was successfully allocated, freed, closed or initialized.

System action: Processing continues..

User response: None. Informational message only.

GPL7306E Repository *typ dup* is a duplicate

Explanation: The name or data set name of the IMS Configuration Manager definitions repository has been duplicated.

System action: IMS Configuration Manager fails to initialize.

User response: Remove the duplicate specification.

GPL7307E Initialization failed for repository *rep*, data set *dsn*

Explanation: Initialization failed for the named IMS Configuration Manager definitions repository. One or more messages precede this message.

System action: IMS Configuration Manager initialization continues but the named IMS Configuration Manager definitions repository is not available.

User response: Determine the cause of the IMS Configuration Manager definitions repository failure. Correct and restart the product.

GPL7308I IMS Configuration Manager product *act*

Explanation: Information messages regarding the state of the product.

System action: Processing continues..

User response: None. Informational message only.

GPL7309I *line GPLCNTL: card*

Explanation: Information message echoing the GPLCNTL input control cards.

System action: Processing continues..

User response: None. Informational message only.

GPL7310I **Unable to load CSLSRG00**

Explanation: An IMS Configuration Manager Eclipse plug-in IMSCOMMAND for the given IMSplex name cannot be performed as the load module CSLSRG00 is not available.

System action: The command is rejected.

GPL7311I **Repository unavailable - name**

Explanation: An IMS Configuration Manager Eclipse plug-in command specified an IMS Configuration Manager definitions repository which is not known to the Common Services Library server, or is unavailable.

System action: The command is rejected.

GPL7312E **Repositories rep1 and rep2 have duplicate systems: imsplex**

Explanation: The two named IMS Configuration Manager definitions repositories have duplicate entries. The IMS ID and IMSplex names are the same. This is not supported.

System action: Both IMS Configuration Manager definitions repositories are flagged in error and are not available for processing.

GPL7313I **No records found**

Explanation: The server received a valid request but no data was found to match the specified parameters.

System action: A null response (including the error message and headers) is returned.

GPL7314I **Response length exceeds the server's configured maximum length of maxlenM**

Explanation: The server is unable to respond to the command as the response length exceeds the server's configured maximum length.

System action: A null response (including the error message and headers) is returned.

GPL7315I **Invalid command - type**

Explanation: An IMS Configuration Manager Eclipse plug-in command is invalid for a given reason.

System action: The command is rejected with a response that includes this information message.

User response: Probable user error. Correct and retry the request.

GPL7316I **The typ entered has invalid syntax or contains an invalid keyword**

Explanation: An IMS Configuration Manager Eclipse plug-in command failed in the command parser.

System action: The command is rejected with a response that includes this information message.

User response: Correct and retry the request.

GPL7317I **SCI is not active for IMSplex plex**

Explanation: An IMS Configuration Manager command for the given IMSplex name failed as the IMSplex is not active.

System action: The command is rejected.

GPL7318E **SCI registration error for IMSplex plex - macro RC=rc RSN=rs**

Explanation: The server was unable to register/deregister the named IMSplex with SCI.

System action: No type-2 commands can be issued.

GPL7319E **Processing error rsn. INFO=infoinfo2**

Explanation: Generic error message capturing the error module, reason and associated feedback information.

System action: Processing continues..

User response: Probable server logic error. Capture information to assist in problem diagnosis.

GPL7320E **Conversation subtask initialization error. Subtask: taskid**

Explanation: Product subtask initialization has encountered an error.

System action: Product subtask will be stopped and the associated request will be rejected.

User response: Probable server logic error. Capture information to assist in problem diagnosis.

GPL7321I **Repository rep AUTODISCOVER(PLEX(xnm)) duplication ignored**

Explanation: The AUTODISCOVER parameter on the given definitions repository's GPLCNTL card has a duplicate PLEX name listed. The duplicate name value will be ignored.

System action: Initialization for the IMS Configuration Manager definitions repository continues.

User response: Remove the duplicate specification to avoid this message in the future.

GPL7322I **Repository *rep***
AUTODISCOVER(MBRTYPE(*typ*))
duplication ignored

Explanation: The AUTODISCOVER parameter on the given definitions repository's GPLCNTL card has a duplicate MBRTYPE listed. The duplicate name value will be ignored.

System action: Initialization for the IMS Configuration Manager definitions repository continues.

User response: Remove the duplicate specification to avoid this message in the future.

GPL7323I **Repository *rep***
AUTODISCOVER(MBRTYPE(ALL))
specified. Other MBRTYPE values ignored

Explanation: The AUTODISCOVER parameter on the given definitions repository's GPLCNTL card has MBRTYPE(ALL) as well as other MBRTYPE values listed. MBRTYPE(ALL) incorporates all other values, so the other specified values are ignored.

System action: Initialization for the IMS Configuration Manager definitions repository continues.

User response: Remove the duplicate specification to avoid this message in the future.

GPL7324I **Autodiscovery for repository *rep***
starting...

Explanation: Autodiscovery is commencing for the named IMS Configuration Manager definitions repository.

System action: Processing continues.

User response: None. Informational message only.

GPL7325I **Autodiscovery successful for repository**
rep

Explanation: Autodiscovery was performed successfully for the named IMS Configuration Manager definitions repository.

System action: Processing continues..

User response: None. Informational message only.

GPL7326E **Autodiscovery failed for repository *rep***

Explanation: Autodiscovery failed for the named IMS

Configuration Manager definitions repository. One or more messages preceded this message.

System action: Initialization continues but the named IMS Configuration Manager definitions repository is not available.

User response: Determine the cause of the autodiscovery failure. Correct and restart the product.

GPL7327E **SCI query error for IMSplex *plex* -**
CSLSCQRY RC=*rc* RSN=*rs*

Explanation: The server was unable to query the named IMSplex.

System action: IMSplex member status can not be determined.

GPL7332W **Default repository request ignored for**
***rep* - DEFAULT previously assigned**

Explanation: The request for the named definitions repository to be assigned as the DEFAULT definitions repository has been ignored. A default definitions repository has already been assigned.

System action: IMS Configuration Manager initialization continues.

User response: Remove the secondary DEFAULT specification and restart the server to avoid this message in the future.

GPL7333I **Repository *rep* has been implicitly**
assigned as DEFAULT

Explanation: No definitions repository was explicitly requested to be the DEFAULT, so the first definitions repository has been assigned implicitly.

System action: IMS Configuration Manager initialization continues.

User response: None - Information only. However, you may explicitly specify a DEFAULT definitions repository and restart the server to avoid this message in the future.

GPL7334E **DEFAULT is a reserved repository name**

Explanation: The definitions repository name DEFAULT is reserved.

System action: IMS Configuration Manager fails to initialize.

User response: Correct the REPOSITORY NAME=DEFAULT specification.

FUN-prefixed messages

This topic describes messages with the FUNnnnnx message identifier format.

FUN1003I **Processing** *event* **at time**

Explanation: These are startup and shutdown information messages. *event* identifies 'started' or 'ended'.

System action: The job continues.

User response: None. Informational message only.

FUN1004I **Message file DD** *ddname* **reason - records**
action

Explanation: The output message file is in error or cannot be found and the records have been suppressed or lost. *ddname* identifies the output file, *reason* identifies 'not found' or 'in error' and *action* the action taken with the records.

System action: The job continues.

User response: None. Informational message only.

FUN1005W **Message data with destination** *dest* **has**
been lost

Explanation: Output message data for the specified destination *dest* has been lost.

System action: The job continues.

User response: None required. This is a warning message only.

FUN1006S **Internal logic error** *rsn*. **INFO=***info/info2*

Explanation: The functional support environment has detected an internal error and is about to quiesce its functionality.

System action: The functional support environment quiesces.

User response: Gather the following documentary evidence at the time the problem occurs: copy of the job output, the PRINT data set and a portion of the JES syslog. Contact IBM Software Support.

FUN1007E **Processing error** *rsn*. **INFO=***info/info2*

Explanation: The functional support environment has detected an internal processing error and is about to quiesce its functionality.

System action: The functional support environment quiesces.

User response: Gather the following documentary evidence at the time the problem occurs: copy of the job output, the PRINT data set and a portion of the JES syslog. Contact IBM Software Support.

FUN1008E **JCL parameter** *parm* **is missing or**
invalid

Explanation: There is a missing parameter for this job.

System action: The job will not run.

User response: See the instructions for running the job and then resubmit the job.

FUN1009E **Unable to function module** *name*.
INFO=*info*

Explanation: The functional support environment could not find the specified module. *function* identifies the function being performed and *name* the module name. *info* identifies the reason code.

System action: The functional support environment quiesces.

User response: Gather the following documentary evidence at the time the problem occurs: copy of the job output, the PRINT data set and a portion of the JES syslog. Contact IBM Software Support.

FUN1010E **Insufficient storage available.**
INFO=*info/info2*

Explanation: The functional support environment was unable to acquire sufficient storage. *info* identifies the amount of storage requested.

System action: The functional support environment quiesces.

User response: Increase the region size parameter for the job and restart.

FUN2051E **Error on VSAM file** *dsname*, **VSAM**
request is *func*, **return code =** *rc*, **reason**
code = *rsn*

Explanation: The functional support environment has detected an error with the specified VSAM file *dsname*. *func* identifies the VSAM macro that failed, for example OPEN, GET, PUT, ERASE. *rc* and *rsn* identify the VSAM Macro return and reason codes.

System action: The functional support environment stops processing.

User response: Ensure the file is a valid VSAM file and resubmit the job. If it fails repeatedly, see the DFSMS/MVS Macro Instructions for Data Sets (SC26-4913) for an explanation of the VSAM Macro Return and Reason Codes. If you cannot correct the problem, contact the IBM Support Centre.

FUN2052E Unable to open VSAM file *ddname* - DD statement missing

Explanation: The functional support environment cannot open a VSAM file because the DD statement is missing. *ddname* identifies the VSAM file.

System action: The functional support environment stops processing.

User response: Ensure the file is defined and resubmit the job.

FUN2053E *dsname* is not a VSAM KSDS

Explanation: The functional support environment has identified that the specified file *dsname* is not a VSAM file.

System action: The functional support environment stops processing.

User response: Ensure the file is defined correctly as a VSAM file and resubmit the job.

FUN2055E VSAM file *dsname* data component has shareoptions *dataopt1 dataopt2*, index has *idxopt1 idxopt2*

Explanation: The functional support environment has identified that the shareoptions for the data component and the index component are not the same. *dsname* identifies the VSAM file, *dataopt1* and *dataopt2* the shareoptions for the data component and *idxopt1* and *idxopt2* the shareoptions for the index component.

System action: The functional support environment stops processing.

User response: The shareoptions must be the same for the data and index components. Ensure the file is defined correctly and resubmit the job.

FUN2056E VSAM file *dsname* defined with shareoptions *opt1 opt2* instead of (4 3)

Explanation: The functional support environment has identified that the VSAM file has been specified with incorrect shareoptions. *dsname* identifies the VSAM file and *opt1* and *opt2* the shareoptions. The shareoptions must be defined (4 3).

System action: The functional support environment stops processing.

User response: Ensure the file is defined with the correct shareoptions and resubmit the job.

FUN2060E VSAM file *dsname* defined with incorrect key *length offset* instead of (64 0)

Explanation: The functional support environment has identified an incorrect key for the VSAM file. *length*

and *offset* identify the invalid key values.

System action: The functional support environment stops processing.

User response: Ensure the file is defined with a key of (64 0) and resubmit the job.

FUN2100F Failed to format a message. The Message ID is *messageid*. Reason: *reason*

Explanation: The functional support environment failed to format a message.

System action: Processing continues.

User response: Gather the following documentary evidence at the time the problem occurs: copy of the job output, the PRINT data set and a portion of the JES syslog. Contact IBM Software Support.

FUN2210F Syntax error at end of input: string or comment terminator missing

Explanation: The Parameter Parser has reached the end of the input parameters while trying to locate the end of a string or a comment.

System action: The Parameter Parser stops processing.

User response: Add the missing delimiter and resubmit the job.

FUN2211I Syntax error at line *record*: the input command is not a known command

Explanation: The Parameter Parser has detected an unexpected command. *command* identifies the command and *record* identifies the record number containing the unexpected command.

System action: The Parameter Parser continues.

User response: None. Informational message only.

FUN2212F Syntax error at end of input: record continuation on last record

Explanation: The Parameter Parser encountered a continuation character on the last record of the input parameters.

System action: The Parameter Parser stops processing.

User response: Remove the incorrect continuation and resubmit the job.

FUN2213I Syntax error at line *record*: input does not match known keywords or positional parameters. Input string: '*input*'

Explanation: The Parameter Parser has detected an unexpected parameter. *input* identifies the unknown parameter or keyword, and *record* identifies the record

number where the error was found.

System action: The Parameter Parser stops processing.

User response: Edit the input and resubmit the job.

FUN2214F Syntax error: the command *command* is required

Explanation: The Parameter Parser has detected a missing mandatory command. *command* identifies the input containing the missing command.

System action: The Parameter Parser stops processing.

User response: Add the mandatory command and resubmit the job.

FUN2215F Syntax error: required keyword/parameter is not present. Option:*option*.

Explanation: The Parameter Parser has detected a missing mandatory option. *option* identifies the input containing the missing option.

System action: The Parameter Parser stops processing.

User response: Add the mandatory option and resubmit the job.

FUN2216F Syntax error at line *record*: the command *command* may not be repeated

Explanation: The Parameter Parser has detected multiple commands *command* where only a single command is allowed. *record* identifies the record number where the second or subsequent command was found.

System action: The Parameter Parser stops processing.

User response: Remove the multiple entries and resubmit the job.

FUN2217F Syntax error at line *record*: the keyword/parameter *option* may not be repeated

Explanation: The Parameter Parser has detected multiple keywords or parameters *option* where only a single keyword or parameter is allowed. *record* identifies the record number where the second or subsequent keyword or parameter was found

System action: The Parameter Parser stops processing.

User response: Remove the multiple entries and resubmit the job.

FUN2218F Syntax error at line *record*: invalid length for *option*. Value=*input*.

Explanation: The Parameter Parser has detected input values that do not match expected length parameters. *option* identifies the option where the invalid length was found, *input* identifies the input string containing the invalid value, and *record* identifies the record number where the error was found. *length* identifies the length specified, and *min* and *max* respectively identify the minimum and maximum allowable lengths of the string.

System action: The Parameter Parser stops processing.

User response: Correct the value to conform to the expected length and resubmit the job.

FUN2219F Syntax error at line *record*: Invalid datatype for *option*. Value=*input*.

Explanation: The Parameter Parser has detected an input parameter *option* with a specified value that has an invalid data type.

System action: The Parameter Parser stops processing.

User response: Correct the value to conform to the expected data type and resubmit the job.

FUN2220F Syntax error at line *record*: input value does not match the allowed syntax for *option*. Input:*input*.

Explanation: The Parameter Parser has detected parameter *option* that has invalid syntax. *input* indicates the string in error and *record* identifies the record where the error was detected.

System action: The Parameter Parser stops processing.

User response: Edit the input and resubmit the job.

FUN2221F Syntax error at line *record*: invalid value for *option*. Value=*input*.

Explanation: The Parameter Parser has detected parameter *option* that has been specified with an invalid value. *input* indicates the string containing the invalid value and *record* indicates the record where the error was detected.

System action: The Parameter Parser stops processing.

User response: Correct the parameter to specify a valid value and resubmit the job.

FUN2222F Syntax error at line *record*: number of values for parameter *option* exceed the list limit

Explanation: The Parameter Parser has detected a larger number of items in a list than expected. *option* identifies the input string containing the items, and

record identifies the record where the error was detected.

System action: The Parameter Parser stops processing.

User response: Edit the list of items and resubmit the job.

FUN2223F Syntax error at line *record*: invalid value for *option*

Explanation: The Parameter Parser has detected an invalid parameter. *option* identifies the input string containing the error, and *record* identifies the record where the error was detected.

System action: The Parameter Parser stops processing.

User response: Edit the input and resubmit the job.

FUN2224F Syntax error at line *record*: unmatched parenthesis. Input:*input*.

Explanation: The Parameter Parser has detected a missing parenthesis. *input* identifies the input string containing the missing parenthesis, and *record* identifies the record where the error was detected.

System action: The Parameter Parser stops processing.

User response: Add the missing parenthesis and resubmit the job.

FUN2225F Syntax error at line *record*: unexpected data command expected. Input:*input*.

Explanation: The Parameter Parser has detected a missing command. *input* identifies the input string containing the missing command, and *record* identifies the record where the error was detected.

System action: The Parameter Parser stops processing.

User response: Add the missing command and resubmit the job.

FUN2226F Syntax error at line *record*: command *command* is out of sequence

Explanation: The Parameter Parser has detected an out of sequence command. *command* identifies the input string containing the sequence error, and *record* identifies the record where the error was detected.

System action: The Parameter Parser stops processing.

User response: Put the command in sequence and resubmit the job.

FUN2227F Syntax error at line *record*: invalid delimiter for *option*. Value=*val*.

Explanation: The Parameter Parser has detected an invalid delimiter. *command* identifies the input string containing the error, and *record* identifies the record

where the error was detected.

System action: The Parameter Parser stops processing.

User response: Put the command in sequence and resubmit the job.

FUN2300F Load of resource class *cls* failed, SAF return code=*safrclracfrclracfrs*

FUN2301F RACROUTE *saffc* failed,SAF return code=*safrclracfrclracfrs*

FUN3001E Server terminating due to an error condition.
Feedback: *feedback1: module_id/rsn_code*
feedback2 feedback3

Explanation: An unsupported error condition has occurred. The server must terminate as its integrity is unknown. The feedback words contain IBM diagnostic and debugging information: the module ID and internal reason code for the module in which the error is generated.

System action: Processing ends unconditionally and the server terminates.

User response: Contact IBM Software Support.

FUN3002E The server experienced an error condition.
Feedback: *feedback1: module_id/rsn_code*
feedback2 feedback3

Explanation: An unsupported error condition has occurred in the server. The server can continue processing. The feedback words contain IBM diagnostic and debugging information: the module ID and internal reason code for the module in which the error is generated.

System action: Processing ends for the affected thread but the server attempts to continue processing.

User response: Contact IBM Software Support.

FUN3003E Unable to load module *module*: *description*

Explanation:

module Name of the module that could not be loaded.
description

One of the following:

- Module not found
- BLDL for module failed
- LOAD for module failed
- BPELOAD RC=*BPE return code*

As part of server or product initialization, a LOAD for a required load module failed.

System action: If the routine is a required server module the server will issue a FUN3001E error message and will terminate.

If the routine is a product-based required module, the product will fail initialization and will be stopped.

User response: If possible, resolve the condition and restart the server or product. Otherwise, contact IBM Software Support.

FUN3004I DUMPTRACE command ignored as optional DD *ddname* is not present

Explanation: A DUMPTRACE modify command was issued but the optional destination FUNDIAG DD is not present in the server job, so the command has been ignored.

System action: The command is ignored. The server continues.

User response: Information only; no response needed.

FUN3005I DUMPSTATS command ignored as optional DD *ddname* is not present

Explanation: A DUMPSTATS modify command was issued but the optional destination FUNSTATS DD is not present in the server job, so the command has been ignored.

System action: The command is ignored. The server continues.

User response: Information only; no response needed.

FUN3006E Product task abnormal termination.

Product: *product code*

Symptom: *CODE=completion code from the trapped abend REASON=reason code from the trapped abend*

Component: *product component name*

Explanation: The server has recovered from an abend in a product task.

System action: The product will be stopped. Server processing will continue.

User response: Contact IBM Software Support.

FUN3007E Conversation subtask abnormal termination

Subtask: *product subtask identifier*

Symptom: *CODE=completion code from the trapped abend REASON=reason code from the trapped abend*

Component: *product component name*

Explanation: The server has recovered from an abend in a product subtask.

System action: The failing product subtask will be restarted. Product processing will continue.

User response: Contact IBM Software Support.

FUN3008I Server in final termination phase, command ignored

Explanation: A command was issued after the server had reached the final termination phase. Command processing is suspended for the server when it is in this final phase, so the command has been ignored.

System action: The command is ignored. Server termination continues.

User response: Information only; no response needed.

FUN3009E Server address space MEMLIMIT exceeded. Requested size: *n* MB

Explanation: A MEMLIMIT error condition has occurred in the server. The server can continue processing.

System action: Processing ends for the affected thread but the server attempts to continue processing.

User response: Raise the MEMLIMIT value for the address space to accommodate its storage needs. The server MEMLIMIT must match, or exceed, the server configuration specification for SDA_MAXLEN.

FUN3010I F command *verb,command parameters* (if any)

Explanation: A modify command was issued and has been acknowledged by the server.

System action: Server command processing continues.

User response: Information only; no response needed.

FUN3011W Listener socket connection dropped out. New client connections are suspended

Explanation: Due to events external to the server, the Listener socket connection has dropped out.

System action: Without the Listener socket connection the server is unable to accept new client connections. Existing client connections may be able to continue depending on the event that has caused the Listener socket to be dropped. For example, if the cause was that TCP has ended, then all client connections will have been dropped too.

User response: Use the RESTARTIP command, or recycle the server in order to reestablish the Listener socket connection.

FUN3012I **Insufficient access authority - UserID=x**
SAF class: *SAF class* **Access intent:** *access intent*
Resource: *resource profile*

Explanation: This message is issued when the server detects an unauthorized request (a violation) made by a user.

System action: The user request will be rejected.

User response: Follow the security procedures established for your installation. If no such procedures have been established, report the complete text of this message to the security administrator.

FUN3013E **Maximum initialization time exceeded for product 'product code'**

Explanation: The server has attempted to start the given product. However, the product failed to initialize in the maximum time allowed.

System action: The product will be stopped. Server processing will continue.

User response: Attempt to identify the cause of the product initialization delay in order to correct the issue. If possible, resolve the condition and restart the server or product. Otherwise, contact IBM Software Support.

FUN3014I **DISPLAY PRODUCT** *product code*
Status : *status indicator*

Explanation: Result of a console DISPLAY command:

F *server*,DISPLAY PRODUCT *product*

System action: None.

User response: Information only; no response needed.

FUN3015I **In-core user security profiles refreshed**

Explanation: Result of a console SECURITY command:

F *server*,SECURITY REFRESH

System action: None.

User response: Information only; no response needed.

FUN3101E **Configuration error:** *description*

Explanation: An error in the JCL initialization script prevented the server from initializing. The error can be one of the following:

- FUNCFG keyword missing, check PARM in JCL
- FUNCFG parameter missing, check PARM in JCL
- FUNCFG parameter must specify a PDS member name

System action: The server will terminate.

User response: Review the startup JCL and ensure all

parameters are valid and rerun the job.

FUN3102E **Error processing PROCLIB member**
member
Description: *description*

Explanation:

member Server configuration member

The server configuration parameter member is in error. The error can be one of the following:

- PROCLIB OPEN failed
- PROCLIB not in fixed format
- Member not found
- Member read failed
- Unsupported record format
- PROCLIB not LRECL=80
- Member too large

System action: The server will terminate.

User response: Review the startup JCL and ensure all parameters are valid and rerun the job.

FUN3103E **Error parsing PROCLIB member** *member*,
BPEPARSE RC=rc

Explanation:

member Server configuration member

rc BPEPARSE return code

The server configuration parameter member is in error. BPE0003E console messages are issued with details of the error identified by the BPE parameter parser.

System action: The server will terminate.

User response: Review the server configuration member and ensure that all parameters are valid. Rerun the job.

FUN3104E **TCP_PORT is a required parameter.**
Specify a value in the range 1 through 65535

Explanation: The TCP_PORT server configuration parameter value was not specified, or was specified as zero. A value is required and must be in the range 1 - 65535.

System action: The server will terminate.

User response: Correct the parameter value and rerun the job.

FUN3105E Invalid maximum number of TCP input-threads: *n*. Valid range is 1 through 64

Explanation:

n The TCP_THREADS value specified in the server configuration member

The TCP_THREADS server configuration parameter value is invalid. If specified, the value must be in the range 1 - 64. The default is 16.

System action: The server will terminate.

User response: Correct the parameter value and rerun the job.

FUN3106E Invalid server CCSID: CCSID - *description*

Explanation:

CCSID The CCSID value specified in the server configuration member

The CCSID server configuration parameter value is invalid. This represents the CCSID used by the server and is utilized for SDA data translation, when applicable. If specified, the CCSID must represent a single byte character set (SBCS) supported by z/OS Unicode Services. By default, a value of 37 is used. That is, COM EUROPE EBCDIC.

System action: The server will terminate.

User response: Correct the parameter value and rerun the job.

FUN3107E Invalid SDA bar-limit: *n*. Valid range is 64 - 4096 KB

Explanation:

n The SDA_BARLIM value specified in the server configuration member

The SDA_BARLIM server configuration parameter value is invalid. If specified, the value must be in the range 64 - 4096 KB. By default, a limit value of 2048 KB is used.

System action: The server will terminate.

User response: Correct the parameter value and rerun the job.

FUN3108E Invalid maximum SDA size: *n*. Valid range is 4 - 100 MB

Explanation:

n The SDA_MAXLEN value specified in the server configuration member

The SDA_MAXLEN server configuration parameter value is invalid. If specified, the value must be in the range 4 - 100 MB. By default, a maximum value of 32 MB is used.

System action: The server will terminate.

User response: Correct the parameter value and rerun the job.

FUN3109E Invalid SAF class name: *name*

Explanation:

name The SAF_CLASS value specified in the server configuration member

The specified SAF class is not a valid SAF class name.

System action: The server will terminate.

User response: Ensure that SAF_CLASS is a valid SAF class name and specifies a defined resource class.

FUN3110E SAF class not defined: *name*

Explanation:

name The SAF_CLASS value specified in the server configuration member

The SAF class could not be identified. Possible reasons:

- SAF-enabled security (RACF or similar) is not installed.
- The class was not defined.

System action: The server will terminate.

User response: Correct the server configuration member if the SAF class is not as expected, or ensure that the SAF class is defined.

FUN3111E Invalid SERVER_NAME value: *name*

Explanation:

name The SERVER_NAME value specified in the server configuration member

The specified server name is not a valid name. A name must be 1-8 alphanumeric characters with no imbedded blanks. However, the name cannot start with a numeric character. The characters '@', '#' and '\$' are also allowable and are treated as alphabetic.

System action: The server will terminate.

User response: Correct the parameter value and rerun the job.

FUN3112E Invalid maximum number of TCP sockets: *n*. Valid range is 50 through 2000

Explanation:

n The TCP_MAXSOC value specified in the server configuration member

The TCP_MAXSOC server configuration parameter value is invalid. If specified, the value must be in the range 50 - 2000. The default is 50.

System action: The server will terminate.

User response: Correct the parameter value and rerun the job.

FUN3113I Duplicate PRODUCT code '*code*' will be ignored

Explanation:

code The PRODUCT value specified in the server configuration member

The specified PRODUCT code is a duplicate of an earlier configuration parameter and will be ignored.

System action: The server will continue.

User response: Remove the duplicate parameter value to avoid this notification.

FUN3114E Invalid or unsupported PRODUCT code: '*code*'

Explanation:

code The PRODUCT value specified in the server configuration member

The specified PRODUCT code is invalid, or at least does not represent a product supported by the server.

System action: The server will terminate.

User response: Correct the parameter value and rerun the job.

FUN3118E Invalid TCP_RCVTIMEO value: *x*. Valid are 0 (no limit), or 100000 through 1000000 microseconds

Explanation:

n The TCP_RCVTIMEO value specified in the server configuration member

The TCP_RCVTIMEO server configuration parameter value is invalid. If specified, the value must be 0 (no limit), or in the range 100,000 - 1,000,000. By default a value of 250,000 is used (0.25 seconds).

System action: The server will terminate.

User response: Correct the parameter value and rerun the job.

FUN3119E Invalid TCP_SNDBTIMEO value: *x*. Valid are 0 (no limit), or 100000 through 1000000 microseconds

Explanation:

n The TCP_SNDBTIMEO value specified in the server configuration member

The TCP_SNDBTIMEO server configuration parameter value is invalid. If specified, the value must be 0 (no limit), or in the range 100,000 - 1,000,000. By default a value of 250,000 is used. Ie. 1/4 of a second.

System action: The server will terminate.

User response: Correct the parameter value and rerun the job.

FUN3120E Invalid PRD_MAXCNVQ# value: *n*. Use a value in the range 1 through 255

Explanation:

n The PRD_MAXCNVQ# value specified in the server configuration member

The PRD_MAXCNVQ# server configuration parameter value is invalid. If specified, the value must be in the range 1 - 255. By default a value of 64 is used.

System action: The server will terminate.

User response: Correct the parameter value and rerun the job.

FUN3121E Server instance is already active for SERVER_NAME=*name*

Explanation:

name The SERVER_NAME value specified in the server configuration member

A server instance with the same SERVER_NAME is already active. The server name must be unique across the sysplex.

System action: The server will terminate.

User response: Correct the parameter value and rerun the job.

FUN3122E SERVER_NAME is a required parameter. Specify a 1 to 8 character name

Explanation: The SERVER_NAME server configuration parameter value was not specified, or was specified as blanks. A 1 - 8 alphanumeric character name is required.

FUN3125E • FUN3131E

System action: The server will terminate.

User response: Correct the parameter value and rerun the job.

FUN3125E Invalid TCP_NAME value: *name*

Explanation:

name The TCP_NAME value specified in the server configuration member

The specified TCP/IP stack name is not a valid name. A name must be 1 - 8 alphanumeric characters with no embedded blanks. However, the name cannot start with a numeric character. The characters @, #, and \$ are also allowed and are treated as alphabetic.

System action: The server will terminate.

User response: Correct the parameter value and rerun the job.

FUN3126E Invalid TCP_IPV6 value: '*value*'. Use Y/N

Explanation:

value The TCP_IPV6 value specified in the server configuration member

The specified TCP_IPV6 value is invalid. Specify Y or N.

System action: The server will terminate.

User response: Correct the parameter value and rerun the job.

FUN3127E NAME is required for the IRM_EXIT parameter. Specify a 1 to 8 character exit routine name

Explanation: If the IRM_EXIT server configuration parameter is specified with a non-blank ID, then a 1 - 8 alphanumeric character exit routine NAME is required.

System action: The server will terminate.

User response: Correct the parameter value and rerun the job.

FUN3128E Invalid IRM_EXIT parameter NAME value: *name*

Explanation:

name The IRM_EXIT parameter's NAME sub-parameter value specified in the server configuration member

The IRM exit routine name must be a valid member name.

System action: The server will terminate.

User response: Correct the parameter value and rerun the job.

FUN3129E Invalid IRM_EXIT parameter ID2HEX value: *x*

Explanation:

name The IRM_EXIT parameter's ID2HEX sub parameter specified in the server configuration member

The ID2HEX value must be a 16-byte string consisting of characters 0 - 9, A - F. It is interpreted as a hex-form representation of an 8-byte character string. The IRM_ID in ASCII sub parameter is optional. If it is not given the ID string is translated from EBCDIC to ASCII to establish the IRM_ID in ASCII string.

System action: The server will terminate.

User response: Correct the parameter value and rerun the job.

FUN3130E IRM_EXIT routine load failed:
ID=*identifier* **NAME=***name*

Explanation:

name The IRM_EXIT parameter's NAME sub parameter value specified in the server configuration member

The server attempted to load the IRM exit routine but the load attempt failed. See message FUN3003E for additional information relating to the load failure.

System action: The server will terminate.

User response: Correct the parameter value or the cause of the IRM exit routine load failure and rerun the job.

FUN3131E Invalid default client CCSID2: *CCSID2 - description*

Explanation:

CCSID2

The CCSID2 value specified in the server configuration member

The CCSID2 server configuration parameter value is invalid. This represents the default CCSID used by remote clients and is utilized for SDA data translation, when applicable. If specified, CCSID2 must represent a single byte character set (SBCS) supported by z/OS Unicode Services. By default, a value of 819 (ISO 8859-1 ASCII) is used.

System action: The server will terminate.

User response: Correct the parameter value and rerun the job.

FUN3205I Shutdown command received, server terminating

Explanation: The server has received a SHUTDOWN command or console stop request and has commenced termination.

System action: Server termination continues.

User response: Information only; no response needed.

FUN3206I SHUTDOWN FORCE command received, server terminating

Explanation: The server has received a SHUTDOWN FORCE command and has either commenced server termination with FORCE, or upgraded an earlier shutdown request to use FORCE.

The FORCE option immediately terminates any outstanding client conversations that might be responsible for delaying server termination.

System action: Server termination continues.

User response: Information only; no response needed.

FUN3208E TCP address space *name* is not available, server terminating

Explanation:

name The TCP address space name specified in the server configuration member

The given TCP address space name is invalid.

System action: The server will terminate.

User response: Make the TCP address space available, or change the TCP_NAME parameter of the configuration member to the name of a TCP address space that is available. Alternatively the TCP_NAME configuration parameter can be removed, which will result in the system's default TCP address space being selected.

FUN3209E TCP/IP port *n* in use

Explanation:

n The TCP/IP port number value specified in the server configuration member

The specified TCP/IP port is currently in use.

System action: Server continues without TCP/IP support.

User response: Retry as TCP/IP can take up to 2 minutes to free a port. Change the TCP_PORT parameter of the configuration member.

FUN3210I TCP/IP using port *n*

Explanation:

n The TCP/IP port number value specified in the server configuration member

The given TCP/IP port is being used by the server.

System action: None. Server continues.

User response: None. Information only.

FUN3211E Shutdown command rejected, shutdown in progress

Explanation: The server has received a SHUTDOWN command after it had already commenced server termination.

System action: Server termination continues.

User response: Information only; no response needed.

FUN3212I RESTARTIP initiated

Explanation: The server has initiated the process to perform a RESTARTIP action.

System action: The asynchronous process to perform the RESTARTIP action continues.

User response: Information only; no response needed.

FUN3213I SECURITY REFRESH initiated

Explanation: The server has initiated the process to perform a SECURITY REFRESH action.

System action: The asynchronous process to perform the SECURITY REFRESH action continues.

User response: Information only; no response needed.

FUN3214I Product *code* stop initiated

Explanation: The server has initiated the process to perform a product STOP action for the named product.

System action: The asynchronous process to perform the STOP action continues.

User response: Information only; no response needed.

FUN3215I Product *code* stopped

Explanation: The named product has been stopped.

System action: None.

User response: Information only; no response needed.

FUN3216I Unable to stop product *code*, status: *state*

Explanation: The server cannot STOP the named product at this time due to the product's given status.

System action: The asynchronous process to perform the STOP action terminates.

User response: Information only; no response needed.

FUN3218I Unable to perform *action*, shutdown in progress

Explanation: The server cannot perform the named action as the server is in shutdown.

System action: The asynchronous process to perform the name action terminates.

User response: Information only; no response needed.

FUN3219I Unable to start product *code*, shutdown in progress

Explanation: The server cannot START the named product at this time as the server is shutting down.

System action: The asynchronous process to perform the START action terminates.

User response: Information only; no response needed.

FUN3220I Product *code* start initiated

Explanation: The server has initiated the process to perform a product START action for the named product.

System action: The asynchronous process to perform the START action continues.

User response: Information only; no response needed.

FUN3221I Product *code* started
Description ...: *description*
Version: *version.release.number*
(modification)
Interface Level: *interface module APAR*
level/modification sublevel

Explanation: The named product has been started.

System action: None.

User response: Information only; no response needed.

FUN3222I Unable to start product *code*, status: *state*

Explanation: The server cannot START the named product at this time due to the product's given status.

System action: The asynchronous process to perform the START action terminates.

User response: Information only; no response needed.

FUN3223E *DISPLAY|START|STOP* command failed due to an invalid product specification
Valid products: *products*

Explanation: The command could not be performed because the product specification is invalid, or at least does not identify one of the products configured for the server.

"Valid products: NONE" is possible for START or STOP commands where no products have been configured for the server.

System action: None.

User response: Correct the product specification and reissue the command.

FUN3224I Command ignored, product *code* status: *state*

Explanation: The command has been ignored as it is not applicable to the current state of the given product.

System action: None.

User response: Information only; no response needed.

FUN3225I *command* command ignored, shutdown in progress

Explanation: The command has been ignored as it is not available during server shutdown.

System action: None.

User response: Information only; no response needed.

FUN3226I Server start completed

Explanation: The server is now ready to accept client connections.

System action: None.

User response: Information only; no response needed.

FUN3227I Product *code* initialization failed

Explanation: Initialization has failed for the named product. This could be due to a number of reasons:

- Load failure for required product programs.
- Product CPROG rejected product INIT or failed.
- FUN definition or environment error.

Earlier messages should have been written identifying the cause of the initialization failure.

System action: The product will be stopped.

User response: Information only; no response needed.

FUN3228I Product code stopping

Explanation: The server has commenced the process of stopping the named product.

System action: Product STOP processing continues. Note that a product cannot stop while active request threads are outstanding, so the STOP process can be prolonged. No new external client requests will be accepted for the product at this stage.

User response: Information only; no response needed.

FUN3231E UNIX System Services callable service *fnc* not found

Explanation: The named USS callable service could not be found. This is a z/OS environmental error.

System action: Server processing continues.

User response: Consult your z/OS System Administrator to ensure that UNIX System Services (USS) has been properly installed and configured.

FUN3232E UNIX System Services callable service *fnc (srv)* RETURN_CODE *rc* REASON_CODE *rsn*

Explanation: A TCP/IP function has failed unexpectedly and this message is issued to capture diagnostic feedback. Function: The TCP/IP function that was attempted Service: The function's USS callable service Return code: The return code as a decimal number Reason code: Further qualifies the RETURN_CODE value, given as a hexadecimal value cccrrrr. cccc is a halfword reason code qualifier generally used to identify the issuing module and rrrr is the halfword reason code as described in the UNIX System Services Messages and Codes manual.

System action: Server processing continues.

User response: Look up the USS return code in z/OS UNIX System Services Messages and Codes.

FUN3233E Unexpected TCP/IP response. IP operation *function* received ERRNO *error number*

Explanation:

function The TCP/IP function that was attempted
error The TCP/IP error number

Common Services Library server received an unexpected error attempting to perform the named TCP/IP *function*.

System action: Server processing continues.

User response: Look up the sockets return codes (ERRNOs) in *z/OS Communications Server IP Sockets Application Programming Interface Guide and Reference*.

FUN3234E PassTicket generation failed RC=*RC* - Class=PTKTDATA, UserID=*UserID*, ApplName=*ApplName*

Explanation: A PassTicket generation request has failed.

RC Return code from the RACF routine:

04	Incorrect PassTicket.
08	No PTKTDATA profile found for the application.
12	No task or address space ACEE found.
16	Caller is not authorized.
20	The RACF PTKTDATA class is not active.
24	Error in the session key generator process.

UserID The user ID associated with the failed request.

ApplName

The application name associated with the failed request.

System action: The processing thread that requested the PassTicket is terminated.

User response: Contact IBM Software Support.

FUN3231E UNIX System Services callable service *fnc* not found

Explanation: The named USS callable service could not be found. This is a z/OS environmental error.

System action: Server processing continues.

User response: Consult your z/OS System Administrator to ensure that UNIX System Services (USS) has been properly installed and configured.

FUN3232E UNIX System Services callable service *fnc (srv)* RETURN_CODE *rc* REASON_CODE *rsn*

Explanation: A TCP/IP function has failed unexpectedly and this message is issued to capture diagnostic feedback. Function: The TCP/IP function that was attempted Service: The function's USS callable service Return code: The return code as a decimal number Reason code: Further qualifies the RETURN_CODE value, given as a hexadecimal value cccrrrr. cccc is a halfword reason code qualifier generally used to identify the issuing module and rrrr is the halfword reason code as described in the UNIX System Services Messages and Codes manual.

System action: Server processing continues.

User response: Look up the USS return code in z/OS UNIX System Services Messages and Codes.

FUN3300I Server default product (FUD) *action*

Explanation: Information messages regarding the state of the server's default product (FUD).

System action: Processing continues.

User response: None.

FUN3301E Required load module *mod* not found

Explanation: The required load module was not found.

System action: The server's default product (FUD) will be stopped and the server will terminate.

User response: Add the required library to the server STEPLIB.

FUN3302I Invalid command - *type*

Explanation: GUI client command is invalid for a given reason.

System action: The command is rejected with a response that includes this error message.

User response: Probable syntax error. Correct and redrive the request.

FUN3303I The command entered has invalid syntax or contains an invalid keyword

Explanation: GUI client command specified failed in the command parser.

System action: The command is rejected with a response that includes this error message.

User response: Probable syntax error. Correct and redrive the request.

FUN3304E Product initialization error

Explanation: Server's default product (FUD) initialization has encountered an error.

System action: The server's default product (FUD) will be stopped and the server will terminate.

User response: Probable server logic error. Capture information to assist in problem diagnosis.

FUN3305E Conversation subtask initialization error. Subtask: *tskid*

Explanation: Product subtask initialization has encountered an error.

System action: Product subtask will be stopped and the associated request will be rejected.

User response: Probable server logic error. Capture information to assist in problem diagnosis.

FUN3306W No records found

Explanation: No data was found to match the specified parameters.

System action: A null response (including this informational message and headers) is returned.

User response: None.

FUN3307E Dynamic allocation *type* failed for DSN=*dsn*, UID=*uid*

Explanation: Dynamic allocation failed for the named object, where the allocation request was driven as part of user request processing. One or more dynamic allocation messages preceded this message.

System action: Processing continues but the user request associated with the dynamic allocation fails.

User response: Determine the cause of the dynamic allocation failure. Correct and retry the user request.

FUN3308E JCLIN data set is not a card-image PDS, DSN=*dsn*

Explanation: For a server submit command the specified JCLIN data set was found not to be a card-image (LRECL=80) PDS.

System action: The server submit command fails.

User response: Specify a card-image PDS and retry the request.

FUN3309E Access denied to JCLIN data set, DSN=*dsn*

Explanation: For a server submit command the requesting user is not authorized to read from the JCLIN data set.

System action: The server submit command fails.

User response: Correct the user authorization or modify the data set specification and retry the request.

FUN3310E JCLIN member *mbr* not found, or found to be empty

Explanation: For a server submit command the specified JCLIN data set member was not found, or was found but had no records.

System action: The server submit command fails.

User response: Modify or respecify the JCLIN member and retry the request.

FUN3311E JCL submitted to INTRDR but no job resulted

Explanation: For a server submit command the specified JCLIN data set member was tailored and submitted. However, no job resulted, which is indicative of invalid JCL with no JOB card.

System action: The server submit command fails.

User response: Modify or respecify the JCLIN member and retry the request.

FUN3312I Job *jobid* submitted

Explanation: Job submission has been successful. The job identifier for the submitted job is given. However, if multiple jobs were submitted via a single JCLIN member, then only the last job identifier is returned.

System action: None.

User response: None.

FUN3399E Processing error *rsn*. INFO=*info1info2*

Explanation: Generic error message capturing the error module, reason and associated feedback information.

System action: Processing continues.

User response: Probable server logic error. Capture information to assist in problem diagnosis.

Chapter 12. Gathering diagnostic information

Before you report a problem with IMS Configuration Manager to IBM Software Support, you need to gather the appropriate diagnostic information.

Procedure

Provide the following information for all IMS Configuration Manager problems:

- A clear description of the problem and the steps that are required to re-create the problem
- 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/IMS that you are using and the type and version of the operating system that you are using

Provide additional information based on the type of problem that you experienced:

For online abends, provide the following information:

- A screen capture of the panel that you were using when the abend occurred
- The job log from the TSO session that encountered the abend
- The job log from the server
- A description of the task that you were doing before the abend occurred

For errors in batch processing, provide the following information:

- The complete job log
- Print output
- Contents of the data sets that were used during the processing

Part 5. Reference

These topics provide reference information for IMS Configuration Manager.

Chapter 13. PROCLIB members supported by IMS Configuration Manager

The IMS Configuration Manager ISPF dialog supports a large number of PROCLIB members.

In the following list of member names, *x* represents any of the following suffix characters: A-Z, 0-9, @, #, or \$.

BPE configuration parameter member

Defines BPE execution environment settings such as tracing, language, and statistics time interval settings for an address space that is being started.

BPE Exit List members

Defines user exit routines to BPE.

CQSIPxxx

Parameters related to initialization of the Common Queue Server (CQS) address space.

CQSSLxxx

Defines local CQS parameters that are related to one or more coupling facility structures.

CQSSGxxx

Defines global CQS parameters that are related to one or more coupling facility structures.

CSLDCxxx

Defines the data store connections between one or more Open Database Manager (ODBM) instances and one or more IMS systems.

CSLDIxxx

ODBM initialization member. Parameters related to the initialization of the ODBM address space.

CSLOIxxx

Parameters related to initialization of the Operations Manager (OM) address space.

CSLRIxxx

Parameters related to initialization of the Resource Manager (RM) address space.

CSLSIxxx

Parameters related to initialization of the Structured Call Interface (SCI) address space.

DBFMSDBx

Defines Main Storage Databases (MSDBs) to be loaded at startup.

DFS62DTx

Stores the LU 6.2 device descriptors that are built during IMS initialization.

DFSCGxxx

Parameters related to the Common Services Layer (CSL), including the Operations Manager (OM), the Resource Manager (RM), and the Structured Call Interface (SCI).

DFSDCxxx

Defines data communication options.

DFSDFxxx

Processing options for the following IMS components and functions:

- Databases
- Dynamic database buffer pools
- Dynamic resource definition (DRD)

- Exit routines
- The Fast Path 64-bit buffer manager
- The IMS abend search and notification procedure
- The IMS catalog
- The IMS Common Service Layer (CSL)
- The IMSRSC repository
- Multiple Systems Coupling (MSC)
- Shared queues

DFSDFRxx

Used to specify that portions of the control region be placed in disabled reference (DREF) storage during initialization.

DFSДСMx

Stores Extended Terminal Option (ETO) descriptors generated by IMS during stage 1 system definition.

DFSДСT_y

Specifies override descriptors for the Extended Terminal Option (ETO), including logon descriptors, Message Format Service (MFS) device descriptors, Multiple Systems Coupling (MSC) descriptors, and user descriptors. By default, the suffix *y* on DFSДСT_y is 0.

DFSFDRxx

Specifies the Fast Database Recovery (FDBR) options used by the FDR.

DFSFIXnn

Used to specify that portions of the control region (for example, certain control blocks, buffer pools, loaded modules, and part of the IMS nucleus) be fixed in address space during initialization.

DFSHSBxx

Specifies the Extended Recovery Facility (XRF) options used by the active and alternate subsystems in an XRF complex.

DFSINTxx

Identifies the preinitialization modules to receive control before MPR, IFP, BMP, JMP, and JBP dependent regions are initialized.

DFSJVMAP

Maps uppercase IMS Java application names with the OMVS path name for the IMS solutions for Java development application .class file.

DFSМPLxx

Used to make z/OS, IMS, or user-written program modules that are not automatically preloaded into the IMS control region resident in IMS regions.

DFSORSxx

Defines system-related startup parameters for the recovery manager in a DBCTL or DB/DC online environment.

DFSPBxxx

Specifies execution parameters for the DBCTL, DCCL, or DB/DC control regions.

DFSRSRxx

Specifies the remote site recovery (RSR) options used by the online active and tracking subsystems in an RSR complex.

DFSSPMxx

Used to override the default buffer definitions for the storage pools managed by the DFSPPOOL storage manager.

DFSSQxxx

Parameters related to the shared message queues and the CQS address space in DB/DC and DCCTL environments.

DFSVSMxx

Settings for buffer pools, trace options, DASD logging, coupling facility structures, IRLM lock timeout, and transactions in a HALDB partition.

DFSYDTx

Specifies the OTMA client descriptors and the OTMA destination descriptors that are built during IMS initialization.

DSPBIxxx

Database Recovery Control (DBRC) initialization member. Parameters that initialize the DBRC address space.

FRPCFG

Used to define the Repository Server (RS) configuration parameters relating to performance, communications, and security. FRPCFG also identifies the names of the RS catalog repository data sets.

HWSCFG

Specifies environmental settings for IMS Connect. IMS Connect uses the information it retrieves from this member to establish communication with IMS and TCP/IP.

SSM Subsystem member (SSM). The SSM contains an entry for each external subsystem with which IMS communicates.

Related concepts:

Chapter 5, “Modifying PROCLIB parameters using the ISPF dialog,” on page 47
IMS Configuration Manager allows you to modify parameters using the ISPF dialog.

Related tasks:

“Listing parameter members in a PROCLIB” on page 41

The IMS Configuration Manager ISPF dialog PROCLIB view allows you to browse all members in a PROCLIB data set.

“Checking the syntax of a member” on page 49

To highlight syntax errors in the parameter member that you are editing, enter the primary command CHECK or use the point-and-shoot **CHECK** field.

Chapter 14. IMS Configuration Manager batch utility (GPLUTIL)

The IMS Configuration Manager batch utility allows you to perform IMS Configuration Manager functions in batch.

The GPLUTIL batch utility includes the following commands:

DISCOVER

Automatically discovers your IMS environment and creates corresponding IMSplex, IMS, IMS Connect, and CSL definitions in your IMS Configuration Manager definitions repository.

MAINT.MEMBERS

Create, update, and delete IMSplexes, IMS systems, and CSL component definitions stored in an IMS Configuration Manager definitions repository.

Related concepts:

“Batch commands” on page 9

The batch utility (GPLUTIL) allows you to maintain your IMS Configuration Manager definitions repository.

How to read syntax diagrams

The following rules apply to the syntax diagrams that are used in this information:

- Read the syntax diagrams from left to right, from top to bottom, following the path of the line. The following conventions are used:
 - The >>--- symbol indicates the beginning of a syntax diagram.
 - The ---> symbol indicates that the syntax diagram is continued on the next line.
 - The >--- symbol indicates that a syntax diagram is continued from the previous line.
 - The --->< symbol indicates the end of a syntax diagram.
- Required items appear on the horizontal line (the main path).

▶▶—required_item————▶▶

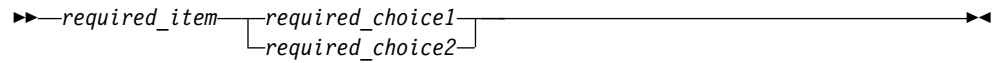
- Optional items appear below the main path.

▶▶—required_item—┐optional_item┘————▶▶

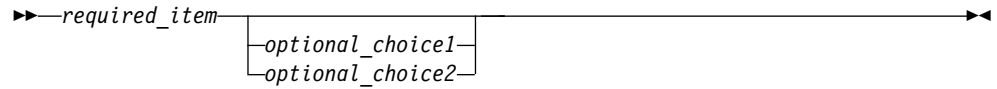
If an optional item appears above the main path, that item has no effect on the execution of the syntax element and is used only for readability.

▶▶—required_item—┐optional_item┘————▶▶

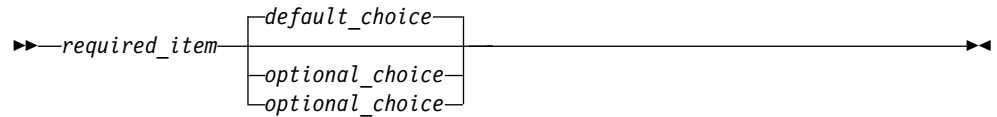
- If you can choose from two or more items, they appear vertically, in a stack. If you *must* choose one of the items, one item of the stack appears on the main path.



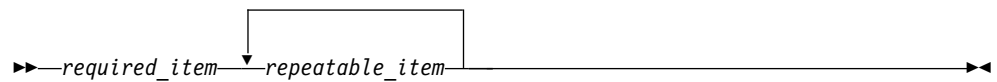
If choosing one of the items is optional, the entire stack appears below the main path.



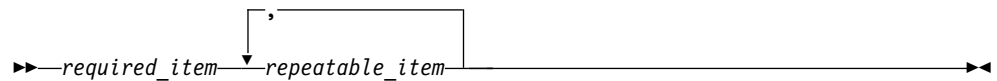
If one of the items is the default, it appears above the main path, and the remaining choices are shown below.



- An arrow returning to the left, above the main line, indicates an item that can be repeated.



If the repeat arrow contains a comma, you must separate repeated items with a comma.



A repeat arrow above a stack indicates that you can repeat the items in the stack.

- Keywords, and their minimum abbreviations if applicable, appear in uppercase. They must be spelled exactly as shown. Variables appear in all lowercase italic letters (for example, *column-name*). They represent user-supplied names or values.
- Separate keywords and parameters by at least one space if no intervening punctuation is shown in the diagram.
- Enter punctuation marks, parentheses, arithmetic operators, and other symbols exactly as shown in the diagram.
- Footnotes are shown by a number in parentheses; for example, (1).

COPY command

Copies objects between two IMS Configuration Manager definitions repositories or within a single IMS Configuration Manager definitions repository. Use this command to migrate definitions or to create backups and snapshots of your definitions.

Syntax

```
►►COPY—MBRTYPE(SYSTEM)——FROM(REPOSITORY,ddname)— FROM options |————→
      |MBRTYPE(PLEX)——
►►TO(REPOSITORY,ddname)— TO options |————→
```

Copying IMS systems

Copy systems using the COPY command and the MBRTYPE(SYSTEM) option.

Syntax

```
►►COPY—MBRTYPE(SYSTEM)——FROM(REPOSITORY,ddname)—SYSTEM(—name—)————→
                                                    |
                                                    |
►►TO(REPOSITORY,ddname)—NEWSYSTEM(—name—)————→
```

Parameters

MBRTYPE(SYSTEM)

Copy one or more IMS systems.

FROM(REPOSITORY,ddname)

Specifies the type of input and a reference to the name of the DD statement for the IMS Configuration Manager definitions repository containing the definitions. For example:

```
FROM(REPOSITORY,GPLDD)
```

SYSTEM(name,...)

A list of one or more systems to be copied. The systems can be renamed using the NEWSYSTEM name.

TO(REPOSITORY,ddname)

Specifies the name of the destination IMS Configuration Manager definitions repository. This can be the same name as the source (FROM) repository.

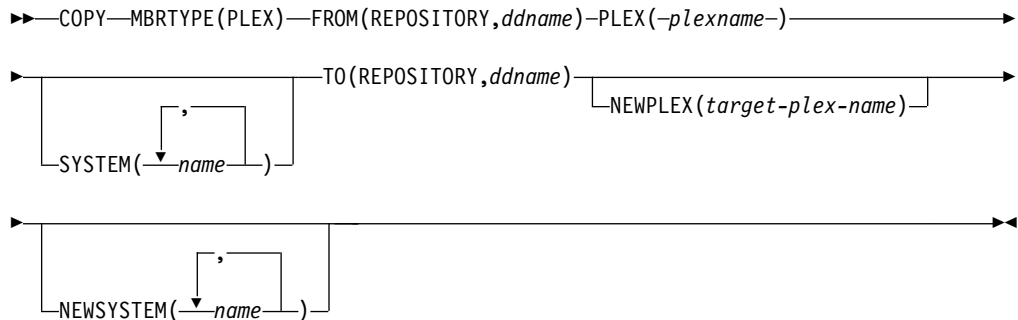
NEWSYSTEM(name,...)

A list of one or more new names for the system. For example,SYSTEM(A,B) NEWSYSTEM(X,Y) will copy system A as system X, and copy system B as system Y. The systems X and Y must not exist for the operation to succeed, or, alternatively, specify the REPLACE option to replace existing systems.

Copying IMSplexes

Copy IMSplexes using the COPY command and the MBRTYPE(PLEX) option.

Syntax



Parameters

MBRTYPE (PLEX)

Copy one or more IMSplices.

FROM(REPOSITORY,*ddname*)

Specifies the type of input and a reference to the name of the DD statement for the IMS Configuration Manager definitions repository containing the definitions. For example:

FROM(REPOSITORY,GPLDD)

PLEX(*plexname*)

The name of the originating IMSplex.

SYSTEM(*name*,...)

A list of one or more systems that are part of the same IMSplex that are to be copied. Specify **SYSTEM(*)** to copy all systems that are associated with the IMSplex. The systems can be renamed using the **NEWSYSTEM** name.

TO(Repository, *ddname*)

Specifies the name of the destination IMS Configuration Manager definitions repository. This can be the same name as the source (FROM) repository.

NEWPLEX(*target-plex-name*)

The name of the IMSpIex in the destination repository.

NEWSYSTEM(*name*,...)

A list of one or more new names for the system. For example, `SYSTEM(A,B)` `NEWSYSTEM(X,Y)` will copy system A as system X, and copy system B as system Y. The systems X and Y must not exist for the operation to succeed, or, alternatively, specify the `REPLACE` option to replace existing systems.

REPLACE

This option specifies whether to replace objects that already exists in the destination IMS Configuration Manager definitions repository.

Any systems that are copied are replaced.

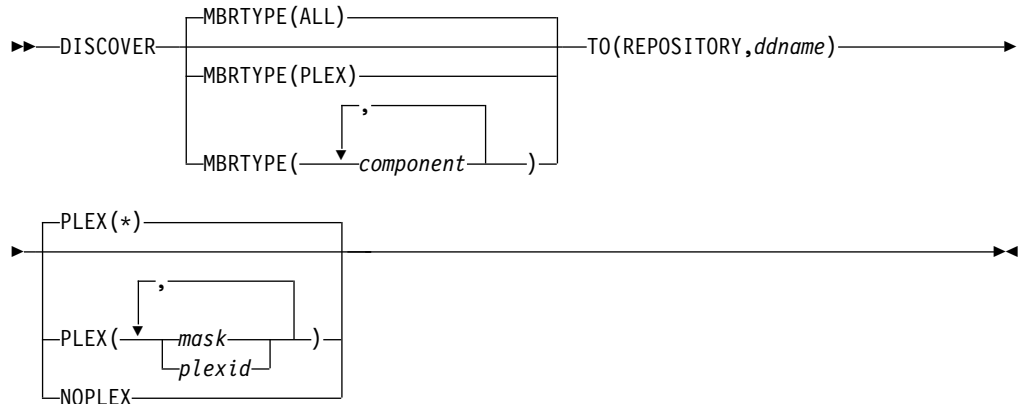
DISCOVER command

Automatically discover IMS components for use in IMS Configuration Manager.

Prerequisites

Users running the DISCOVER command must have access to the JES joblog before proceeding.

Syntax



Parameters

MBRTYPE(ALL|PLEX) or MBRTYPE (component,...)

Limit the discovery of members to one or more types. MBRTYPE accepts one of the following options:

ALL

Inserts all discoverable member types. See *component* for a list of supported member types.

PLEX

Inserts only the IMSplex records.

component,...

Specify a list of one or more systems and components. Options include:

IMS

Inserts IMS systems and their associated IMSplexes. If applicable, Common Queue Server (CQS) components for systems discovered by this option are also inserted.

IMSCON

Inserts IMS Connect systems and their associated IMSplexes.

ODBM

Inserts Open Database Manager (ODBM) Common Service Layer (CSL) components and their associated IMSplexes.

REPO

Inserts Repository Server (RS) CSL components and their associated IMSplexes.

OM Inserts Operations Manager (OM) CSL components and their associated IMSplexes.

RM Inserts Resource Manager (RM) CSL components and their associated IMSplexes.

SCI

Inserts Structured Call Interface (SCI) CSL components and their associated IMSplexes.

Default: MBRTYPE(ALL) (if parameter not specified).

TO(REPOSITORY,ddname)

Specify the ddname of the IMS Configuration Manager definitions repository in which to store discovered components. For example:

TO(REPOSITORY,GPLREPOS)

PLEX(plexid or mask ,...)

Specify a list of IMSplexes that contain the components you want to discover. For example:

PLEX(PLXA,PLXB,PLXC)

Alternatively, use a mask to discover all IMSplexes beginning with a particular prefix. The preceding example can also be expressed as:

PLEX(PLX*)

The mask can be used to create complex search statements. The following examples demonstrate valid examples of how the mask can be used:

PLEX(*) PLEX(ABC*) PLEX(DEF*,XYZ*) PLEX(PLXDP,PLX*)

To discover components in all IMSplexes, use:

PLEX(*)

or omit the parameter.

Default: all IMSplexes (if parameter not specified).

NOPLEX

Default: all IMSplexes (if parameter not specified).

Discover IMS regions not in an IMSplex.

Related reference:

“Example JCL for discovering systems and IMSplexes”

This JCL uses the DISCOVER batch command to automatically discover IMS components for use in IMS Configuration Manager.

Example JCL for discovering systems and IMSplexes

This JCL uses the DISCOVER batch command to automatically discover IMS components for use in IMS Configuration Manager.

```
//GPLUTIL EXEC PGM=GPLUTIL
//STEPLIB DD DISP=SHR,DSN=HLQ.V2R3M0.SGPLLINK
// DD DISP=SHR,DSN=HLQ.VnRnMn.SDFSRESL
//SYSIN DD *
*
DISCOVER MBRTYPE(imscomponenttype)
          TO(REPOSITORY,GPLREPOS)
          PLEX(plex)
/*
//GPLREPOS DD DISP=SHR,
// DSN=HLQ.V2R3M0.REPOSTRY
//SYSPRINT DD SYSOUT=*
//
```

1
2

3

where:

- 1 The IMS Configuration Manager link library.

Note: The IMS Configuration Manager link library, and all other libraries in the STEPLIB, must be APF-authorized.

- 2 The IMS RESLIB.

- 3 The IMS Configuration Manager definitions repository to use to store your definitions.

Related tasks:

“Establishing an IMS Configuration Manager definitions repository” on page 22
The IMS Configuration Manager definitions repository is a VSAM key-sequenced data set (KSDS) that contains an inventory of IMS Configuration Manager definitions and parameter change history. To begin using IMS Configuration Manager, you must create a definitions repository and then populate it with definitions using the autodiscovery feature.

Related reference:

“DISCOVER command” on page 130
Automatically discover IMS components for use in IMS Configuration Manager.

MAINT.MEMBERS command

Edits IMSplexes, IMS systems, and CSL component definitions stored in an IMS Configuration Manager definitions repository.

Syntax

►►—MAINT.MEMBERS—FROM(DDNAME,*ddname*)—TO(REPOSITORY,*ddname*)—►►

Parameters

FROM(DDNAME,*ddname*)

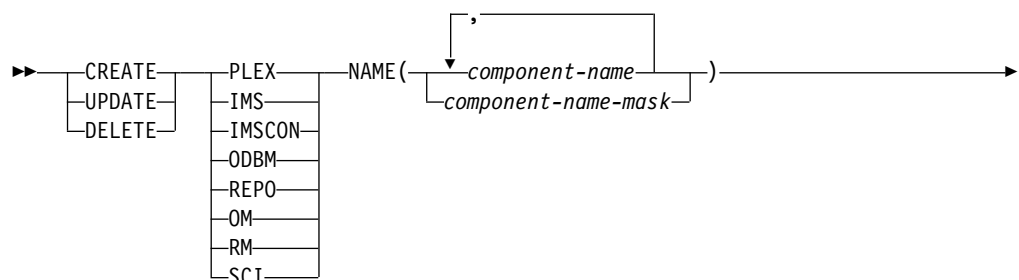
The *ddname* of a statement containing a series of subcommands that are to be applied to the IMS Configuration Manager definitions repository. See “Repository subcommands” for details.

TO(REPOSITORY,*ddname*)

The *ddname* of the IMS Configuration Manager definitions repository containing the definitions. Repository subcommands listed in the *ddname* variable specified by the FROM parameter will be submitted to this IMS Configuration Manager definitions repository.

Repository subcommands

Repository subcommands that are supported by the MAINT.MEMBERS command conform to the following syntax:





Related reference:

“Example JCL for editing systems and IMSplexes” on page 157

This JCL examples uses the MAINT.MEMBERS batch command to create and edit IMSplexes, IMS systems, and Common Service Layer (CSL) component definitions stored in the IMS Configuration Manager definitions repository.

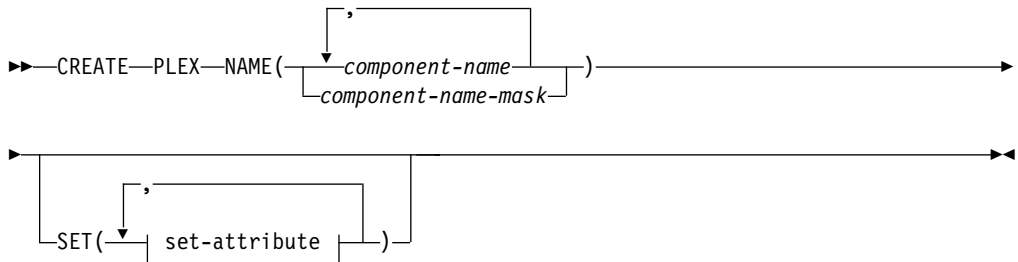
CREATE subcommands

Use a CREATE subcommand with the MAINT.MEMBERS command to create an IMS, IMS Connect system, or Common Service Layer (CSL) component definition in the IMS Configuration Manager definitions repository.

CREATE PLEX subcommand

Creates an IMSplex definition in the IMS Configuration Manager definitions repository.

Syntax



SET attributes: PLEX:

|—DSCR(*description*)—|

Parameters

NAME()

Specifies the name, names, or component name mask of the component. Names may be up to five characters in length.

SET()

Specifies the attributes to be assigned.

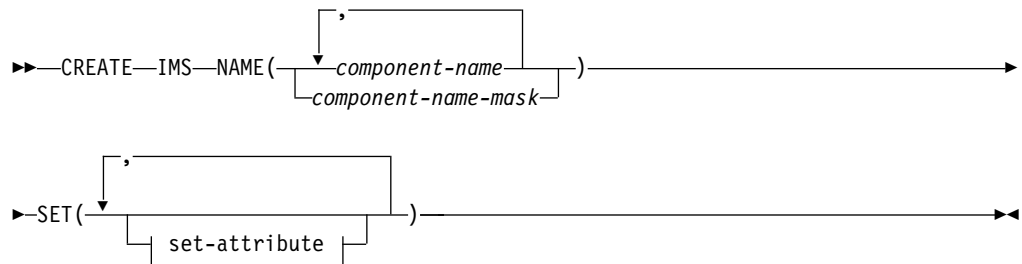
DSCR()

A textual description of the IMSplex. Descriptions may be up to forty characters in length.

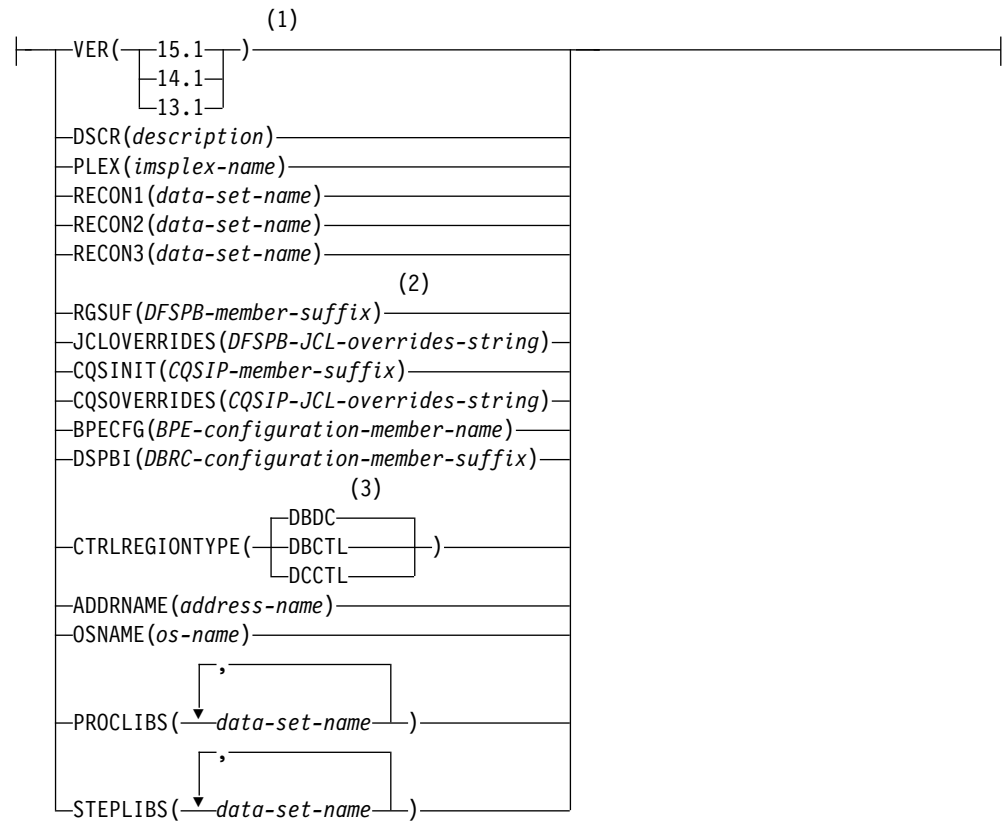
CREATE IMS subcommand

Create an IMS definition in the IMS Configuration Manager definitions repository.

Syntax



SET attributes: IMS:



Notes:

- 1 VER is a mandatory parameter.
- 2 RGSUF is a mandatory parameter.
- 3 If not specified, CTRLREGIONTYPE defaults to DBDC.

Parameters

NAME()

Specifies the name, names, or component name mask of the component. Names may be up to four characters in length.

SET()

Specifies the attributes to be assigned.

VER()

The software version of the IMS.

DSCR()

A textual description of the IMS. Descriptions may be up to forty characters in length.

PLEX()

The five-character name of the participating IMSplex. If the IMSplex is not already defined in the IMS Configuration Manager definitions repository, the action fails and an error message is issued.

RECON1(*data-set-name*)

IMS DBRC Recon data set name 1

RECON2(*data-set-name*)

IMS DBRC Recon data set name 2

RECON3(*data-set-name*)

IMS DBRC Recon data set name 3

RGSUF()

The three-character suffix for DFSPBxxx to be used during startup of the IMS control region. The PROCLIB member DFSPBxxx contains control region execution parameters.

Note: Specify a particular suffix for different control region environments. For example, specify IMS for DB/DC, DBC for DBCTL, and DCC for DCCTL.

JCLOVERRIDES()

One or more execution parameters to document JCL overrides to PROCLIB member parameters for this IMS. Parameters are specified in the form *parameter=value*. Parameter/value pairs are separated using a comma or spaces.

CQSINIT()

The three-character suffix for the CQSIPxxx member which contains CQS initialization parameters (if applicable).

CQSOVERRIDES()

One or more execution parameters to override the corresponding CQSIPxxx suffix parameters at CQS system startup. The particular CQSIPxxx startup member is identified by CQSINIT. Parameters are specified in the form *parameter=suf* where *suf* is the three-character suffix that identifies the corresponding PROCLIB member. For example, specify STRDEFG=001,STRDEFL=002 to select PROCLIB members CQSSG001 and CQSSL002. Parameter/value pairs are separated using a comma or spaces.

BPECFG()

BPE configuration member in PROCLIB for the CQS system (if applicable).

DSPBI()

The suffix of the DBRC configuration member name.

CTRLREGIONTYPE()

The type of control region environment. This information is used in parameter validation.

DBDC

Database/data communication (DB/DC).

DBCTL

Database Control.

DCCTL

Data Communication Control.

ADDRNAME()

Eight character address space name.

OSNAME()

Eight character operating systems MVS ID.

PROCLIBS()

One or more fully qualified procedure library names.

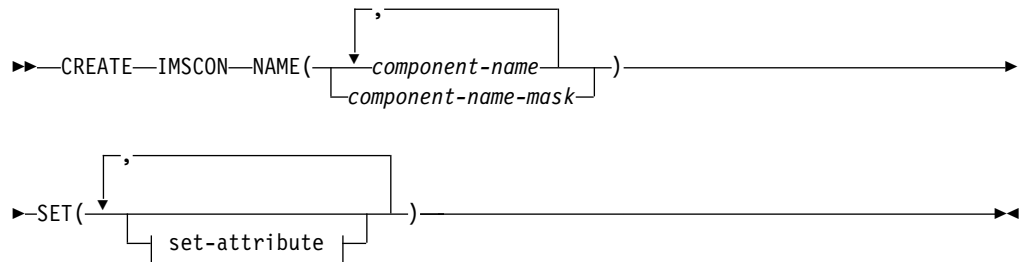
STEPLIBS()

One or more fully qualified step library names.

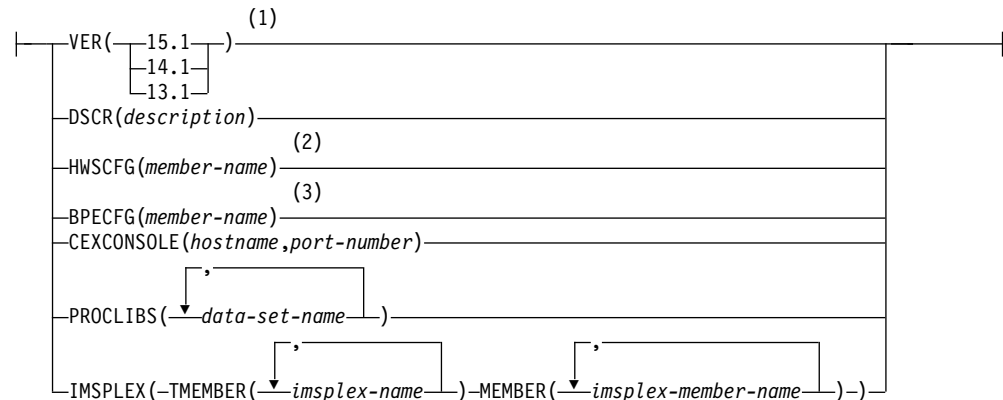
CREATE IMSCON **subcommand**

Create an IMS Connect system definition in the IMS Configuration Manager definitions repository.

Syntax



SET attributes: IMSCON:



Notes:

- 1 VER is a mandatory parameter.
- 2 HWSCFG is a mandatory parameter.
- 3 BPECFG is a mandatory parameter.

Parameters

NAME()

Specifies the name, names, or component name mask of the component. Names may be up to eight characters in length.

SET()

Specifies the attributes to be assigned.

VER()

The software version of the IMS Connect system.

DSCR()

A textual description of the IMS Connect system. Descriptions may be up to forty characters in length.

HWSCFG()

The name of the IMSCON configuration member in PROCLIB.

BPECFG()

The name of the BPE configuration member in PROCLIB for the IMS Connect system.

CEXCONSOLE()

The hostname and port number of the IMS Connect Extensions console, if available.

PROCLIBS()

One or more fully qualified procedure library names.

IMSPLEX(TMEMBER(imsplex-name1, imsplex-name2,...) MEMBER(imsplex-member-name1, imsplex-member-name2,...))

Associate this IMS Connect system with one or more IMSplexes.

The IMSPLEX parameter must contain the following parameters:

TMEMBER()

The name of the IMSplex. This name corresponds to the TMEMBER operand of the IMSPLEX statements in the HWSCFG configuration member. If the IMSplex is not already defined in the IMS Configuration Manager definitions repository, the action fails and an error message is issued.

MEMBER()

The IMSplex member name that IMS Connect uses to connect to the IMSplex. This name corresponds to the MEMBER operand of the IMSPLEX statement in the HWSCFG configuration member.

Each IMSplex association must have an entry in both the TMEMBER and MEMBER parameters. For example, to specify a single IMSplex association, use the following command syntax:

```
IMSPLEX(TMEMBER(PLEX1) MEMBER(ICMI0DP1))
```

To associate this IMS Connect with two IMSplexes (an IMSplex named PLEX1 with a member name of MEMBERP1, and an IMSplex named PLEX2 with a member name of MEMBERP2), use the following syntax:

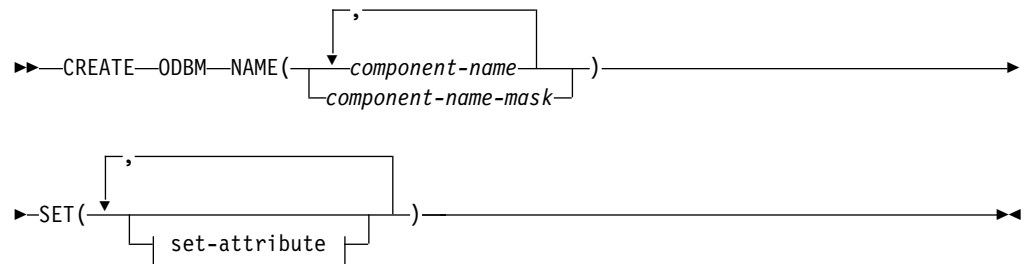
```
IMSPLEX(TMEMBER(PLEX1, PLEX2) MEMBER(MEMBERP1, MEMBERP1))
```

Up to 32 IMSplexes may be specified.

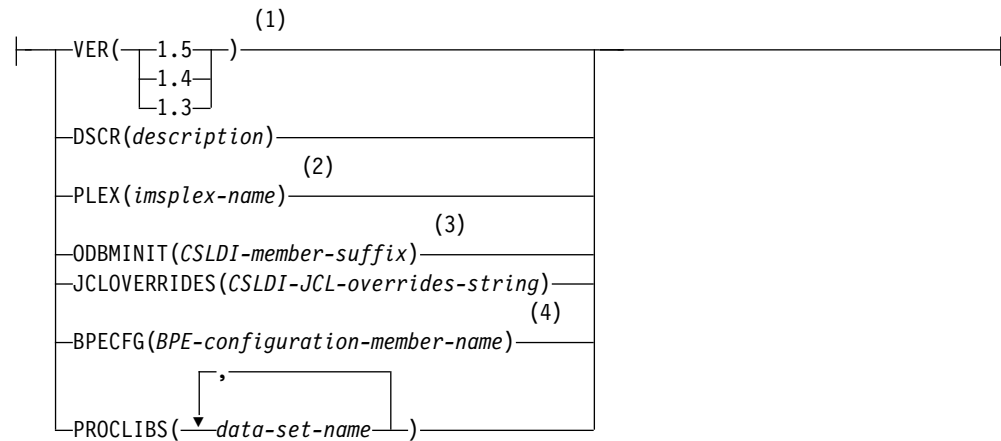
CREATE ODBM subcommand

Create an Open Database Manager (ODBM) Common Services Layer (CSL) component definition in the IMS Configuration Manager definitions repository.

Syntax



SET attributes: ODBM:



Notes:

- 1 VER is a mandatory parameter.
- 2 PLEX is a mandatory parameter.
- 3 ODBMINIT is a mandatory parameter.
- 4 BPECFG is a mandatory parameter.

Parameters

NAME()

Specifies the name, names, or component name mask of the component. Names may be up to eight characters in length and must end in the suffix OD.

SET()

Specifies the attributes of the component to be assigned.

VER()

The software version of the ODBM component.

DSCR()

A textual description of the ODBM component. Descriptions may be up to forty characters in length.

PLEX()

The five-character name of the participating IMSplex. If the IMSplex is not already defined in the IMS Configuration Manager definitions repository, the action fails and an error message is issued.

ODBMINIT()

The three-character suffix of the ODBM initialization member CSLDIxxx in the PROCLIB.

JCLOVERRIDES()

One or more JCL execution parameters which override the corresponding CSLDIxxx parameters at system startup. This is for documentation purposes only and does not affect the live system. Parameters are specified in the form *parameter=value* and are separated by commas or spaces.

BPECFG()

The name of the BPE configuration member in PROCLIB for this CSL component.

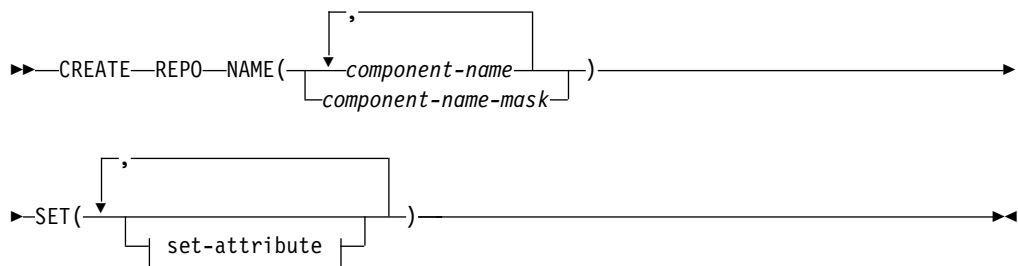
PROCLIBS()

One or more fully qualified procedure library names.

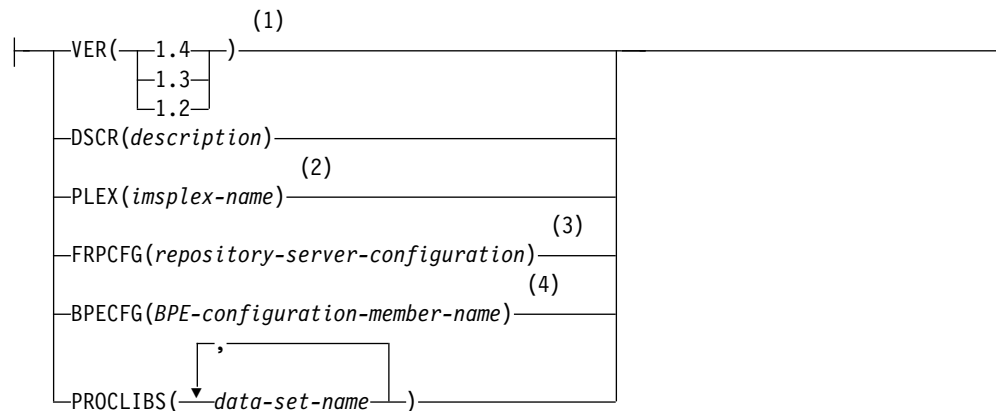
CREATE REPO **subcommand**

Create a Repository Server (RS) Common Services Layer (CSL) component definition in the IMS Configuration Manager definitions repository.

Syntax



SET attributes: REPO:



Notes:

- 1 VER is a mandatory parameter.
- 2 PLEX is a mandatory parameter.
- 3 FRPCFG is a mandatory parameter.
- 4 BPECFG is a mandatory parameter.

Parameters

NAME()

Specifies the name, names, or component name mask of the component.
Names may be up to eight characters in length and must end in the suffix RP.

SET()

Specifies the attributes to be updated.

VER()

The software version of the Repository Server.

DSCR()

A textual description of the Repository Server. Descriptions may be up to forty characters in length.

PLEX()

The five-character name of the participating IMSplex. If the IMSplex is not already defined in the IMS Configuration Manager definitions repository, the action fails and an error message is issued.

FRPCFG()

The name of the FRP configuration member in PROCLIB for the Repository Server.

BPECFG()

The name of the BPE configuration member in PROCLIB for this CSL component.

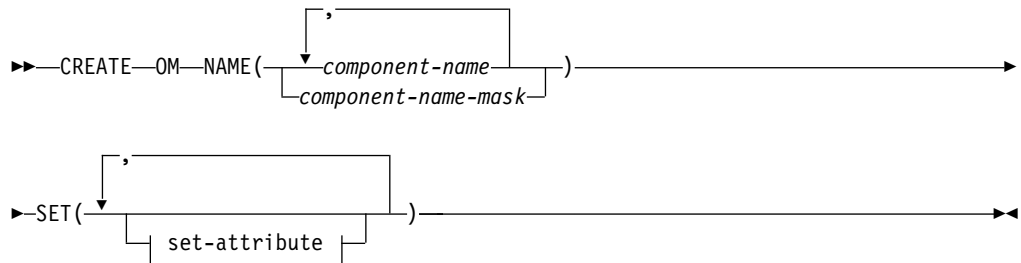
PROCLIBS()

One or more fully qualified procedure library names.

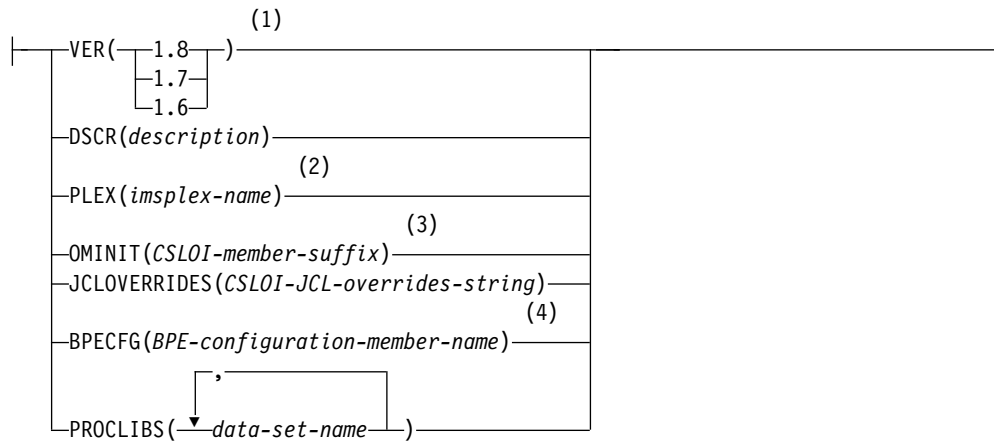
CREATE OM **subcommand**

Create an Operations Manager (OM) Common Services Layer (CSL) component definition in the IMS Configuration Manager definitions repository.

Syntax



SET attributes: OM:



Notes:

- 1 VER is a mandatory parameter.
- 2 PLEX is a mandatory parameter.
- 3 OMINIT is a mandatory parameter.
- 4 BPECFG is a mandatory parameter.

Parameters

NAME()

Specifies the name, names, or component name mask of the component. Names may be up to eight characters in length and must end in the suffix OM.

SET()

Specifies the attributes to be assigned.

VER()

The software version of the Operations Manager.

DSCR()

A textual description of the Operations Manager. Descriptions may be up to forty characters in length.

PLEX()

The five-character name of the participating IMSplex. If the IMSplex is not already defined in the IMS Configuration Manager definitions repository, the action fails and an error message is issued.

OMINIT()

The suffix of the CSLOIxxx member in PROCLIB.

JCLOVERRIDES()

One or more JCL execution parameters which override the corresponding CSLOIxxx parameters at system startup. This is for documentation purposes only and does not affect the live system. Parameters are specified in the form *parameter=value* and are separated by commas or spaces.

BPECFG()

The name of the BPE configuration member in PROCLIB for this CSL component.

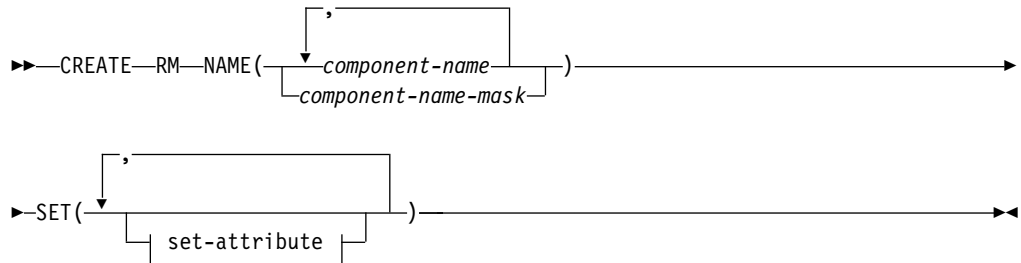
PROCLIBS()

One or more fully qualified procedure library names.

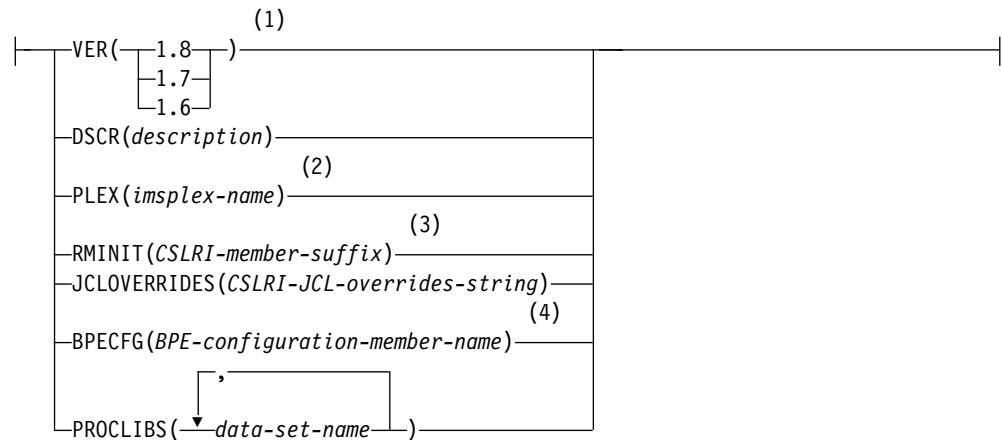
CREATE RM subcommand

Create a Resource Manager (RM) Common Services Layer (CSL) component definition in the IMS Configuration Manager definitions repository.

Syntax



SET attributes: RM:



Notes:

- 1 VER is a mandatory parameter.
- 2 PLEX is a mandatory parameter.
- 3 RMINIT is a mandatory parameter.
- 4 BPECFG is a mandatory parameter.

Parameters

NAME()

Specifies the name, names, or component name mask of the component. Names may be up to eight characters in length and must end in the suffix RM.

SET()

Specifies the attributes to be assigned.

VER()

The software version of the RM.

DSCR()

A textual description of the RM. Descriptions may be up to forty characters in length.

PLEX()

The five-character name of the participating IMSplex. If the IMSplex is not already defined in the IMS Configuration Manager definitions repository, the action fails and an error message is issued.

RMINIT()

The suffix of the CSLRIxxx member in PROCLIB.

JCLOVERRIDES()

One or more JCL execution parameters which override the corresponding CSLRIxxx parameters at system startup. This is for documentation purposes only and does not affect the live system. Parameters are specified in the form *parameter=value* and are separated by commas or spaces.

BPECFG()

The name of the BPE configuration member in PROCLIB for this CSL component.

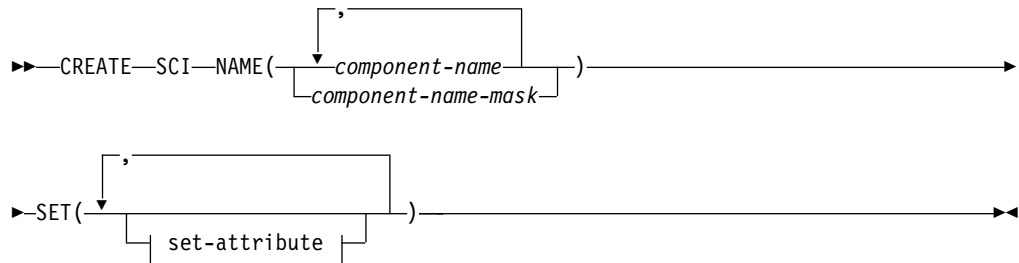
PROCLIBS()

One or more fully qualified procedure library names.

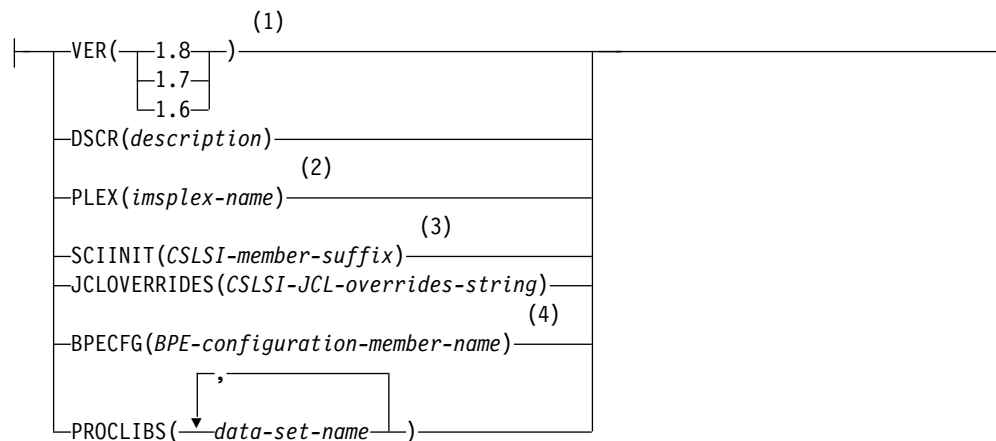
CREATE SCI subcommand

Create a Structured Call Interface (SCI) Common Services Layer (CSL) component definition in the IMS Configuration Manager definitions repository.

Syntax



SET attributes: SCI:



Notes:

- 1 VER is a mandatory parameter.

- ## Parameters

Specifies the name, names, or component name mask of the component.
Names may be up to eight characters in length and must end in the suffix SC.

One or more fully qualified procedure library names.

Chapter 14. IMS Configuration Manager batch utility (GPLUTIL) 145



SET attributes: PLEX:

|—DSCR(*description*)—|

Parameters

NAME()

Specifies the name, names, or component name mask of the component. Names may be up to five characters in length. The action fails and an error is issued if the named component does not exist.

SET()

Specifies the attributes to be updated.

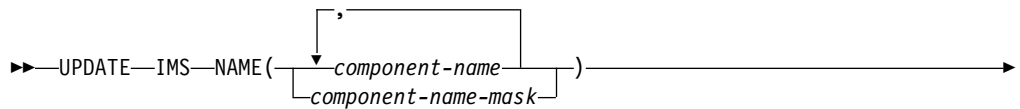
DSCR()

A textual description of the IMSplex. Descriptions may be up to forty characters in length.

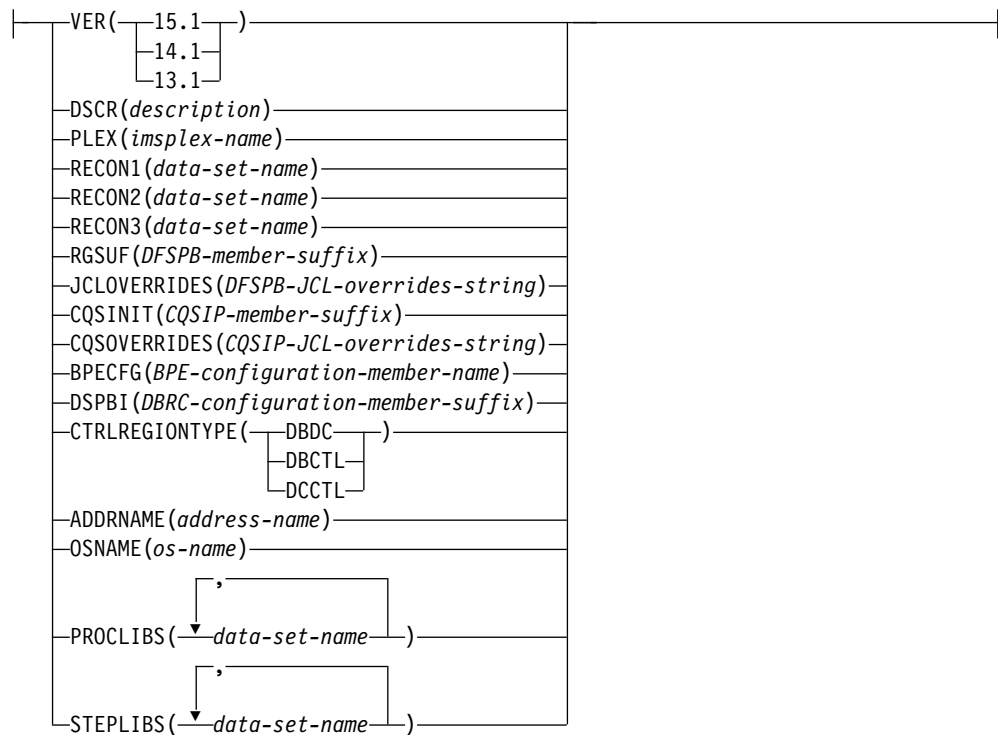
UPDATE IMS **subcommand**

Updates an IMS stored in the IMS Configuration Manager definitions repository.

Syntax



SET attributes: IMS:



Parameters

NAME()

Specifies the name, names, or component name mask of the component. Names may be up to four characters in length. The action fails and an error is issued if the named component does not exist.

SET()

Specifies the attributes to be updated.

VER()

The software version of the IMS.

DSCR()

A textual description of the IMS. Descriptions may be up to forty characters in length.

PLEX()

The five-character name of the participating IMSplex. If the IMSplex is not already defined in the IMS Configuration Manager definitions repository, the action fails and an error message is issued.

RECON1(data-set-name)

IMS DBRC Recon data set name 1

RECON2(data-set-name)

IMS DBRC Recon data set name 2

RECON3(data-set-name)

IMS DBRC Recon data set name 3

RGSUF()

The three-character suffix for DFSPBxxx to be used during startup of the IMS control region. The PROCLIB member DFSPBxxx contains control region execution parameters.

Note: Specify a particular suffix for different control region environments. For example, specify IMS for DB/DC, DBC for DBCTL, and DCC for DCCTL.

JCLOVERRIDES()

One or more execution parameters to document JCL overrides to PROCLIB member parameters for this IMS. Parameters are specified in the form *parameter=value*. Parameter/value pairs are separated using a comma or spaces.

CQSINIT()

The three-character suffix for the CQSIPxxx member which contains CQS initialization parameters (if applicable).

CQSOVERRIDES()

One or more execution parameters to override the corresponding CQSIPxxx suffix parameters at CQS system startup. The particular CQSIPxxx startup member is identified by CQSINIT. Parameters are specified in the form *parameter=suf* where *suf* is the three-character suffix that identifies the corresponding PROCLIB member. For example, specify STRDEFG=001,STRDEFL=002 to select PROCLIB members CQSSG001 and CQSSL002. Parameter/value pairs are separated using a comma or spaces.

BPECFG()

BPE configuration member in PROCLIB for the CQS system (if applicable).

DSPBI()

The suffix of the DBRC configuration member name.

CTRLREGIONTYPE()

The type of control region environment. This information is used in parameter validation.

DBDC

Database/data communication (DB/DC).

DBCTL

Database Control.

DCCTL

Data Communication Control.

ADDRNAME()

Eight character address space name.

OSNAME()

Eight character operating systems MVS ID.

PROCLIBS()

One or more fully qualified procedure library names.

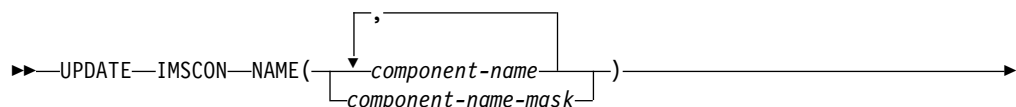
STEPLIBS()

One or more fully qualified step library names.

UPDATE IMSCON **subcommand**

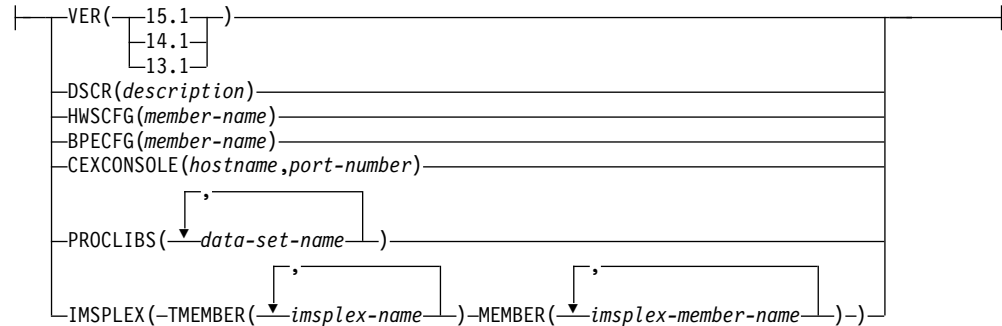
Updates an IMS Connect system stored in the IMS Configuration Manager definitions repository.

Syntax





SET attributes: IMSCON:



Parameters

NAME()

Specifies the name, names, or component name mask of the component. Names may be up to four characters in length. The action fails and an error is issued if the named component does not exist.

SET()

Specifies the attributes to be updated.

VER()

The software version of the IMS Connect system.

DSCR()

A textual description of the IMS Connect system. Descriptions may be up to forty characters in length.

HWSCFG()

The name of the IMSCON configuration member in PROCLIB.

BPECFG()

The name of the BPE configuration member in PROCLIB for the IMS Connect system.

CEXCONSOLE()

The hostname and port number of the IMS Connect Extensions console, if available.

PROCLIBS()

One or more fully qualified procedure library names.

IMSPLEX(TMEMBER(imsplex-name1, imsplex-name2,...) MEMBER(imsplex-member-name1, imsplex-member-name2,...))

Associate this IMS Connect system with one or more IMSplexes.

The IMSPLEX parameter must contain the following parameters:

TMEMBER()

The name of the IMSplex. This name corresponds to the TMEMBER operand of the IMSPLEX statements in the HWSCFG configuration

member. If the IMSplex is not already defined in the IMS Configuration Manager definitions repository, the action fails and an error message is issued.

MEMBER()

The IMSplex member name that IMS Connect uses to connect to the IMSplex. This name corresponds to the MEMBER operand of the IMSPLEX statement in the HWSCFG configuration member.

Each IMSplex association must have an entry in both the TMEMBER and MEMBER parameters. For example, to specify a single IMSplex association, use the following command syntax:

```
IMSPLEX(TMEMBER(PLEX1) MEMBER(ICMI0DP1))
```

To associate this IMS Connect with two IMSplexes (an IMSplex named PLEX1 with a member name of MEMBERP1, and an IMSplex named PLEX2 with a member name of MEMBERP2), use the following syntax:

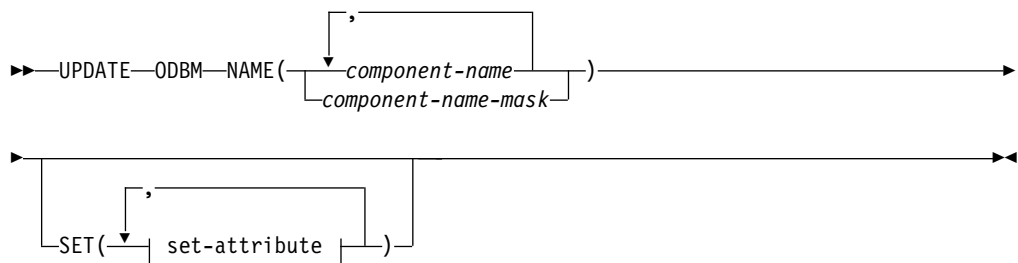
```
IMSPLEX(TMEMBER(PLEX1, PLEX2) MEMBER(MEMBERP1, MEMBERP2))
```

Up to 32 IMSplexes may be specified. This parameter replaces any previously specified IMSplex associations.

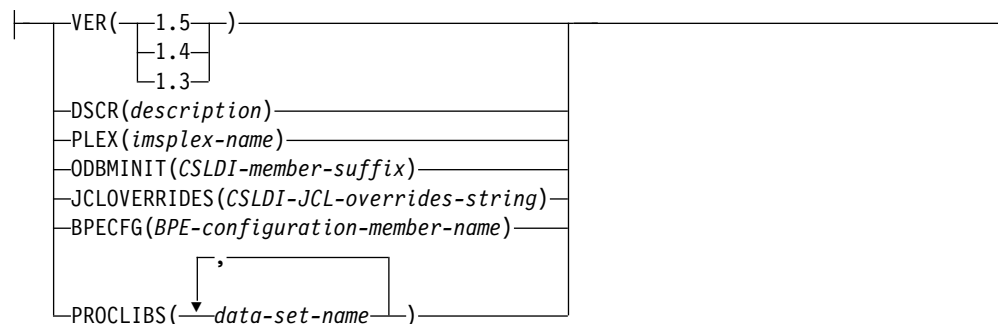
UPDATE ODBM **subcommand**

Updates an Open Database Manager (ODBM) Common Services Layer (CSL) component stored in the IMS Configuration Manager definitions repository.

Syntax



SET attributes: ODBM:



Parameters

NAME()

Specifies the name, names, or component name mask of the component. Names may be up to eight characters in length and must end in the suffix OD. The action fails and an error is issued if the named component does not exist.

SET()

Specifies the attributes of the component to be created.

VER()

The software version of the ODBM component.

DSCR()

A textual description of the ODBM component. Descriptions may be up to forty characters in length.

PLEX()

The five-character name of the participating IMSplex. If the IMSplex is not already defined in the IMS Configuration Manager definitions repository, the action fails and an error message is issued.

ODBMINIT()

The three-character suffix of the ODBM initialization member CSLDIxxx in the PROCLIB.

JCLOVERRIDES()

One or more JCL execution parameters which override the corresponding CSLDIxxx parameters at system startup. This is for documentation purposes only and does not affect the live system. Parameters are specified in the form *parameter=value* and are separated by commas or spaces.

BPECFG()

The name of the BPE configuration member in PROCLIB for this CSL component.

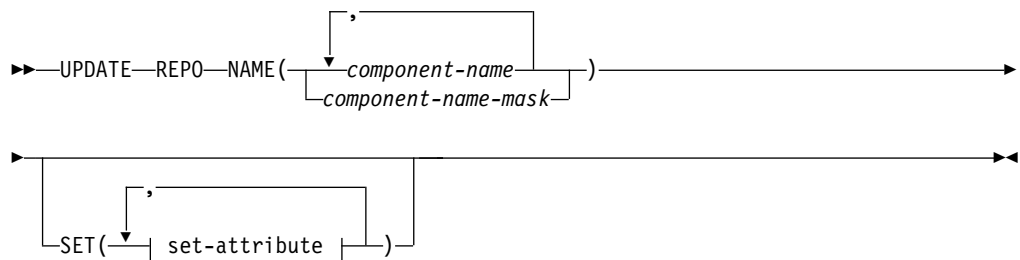
PROCLIBS()

One or more fully qualified procedure library names.

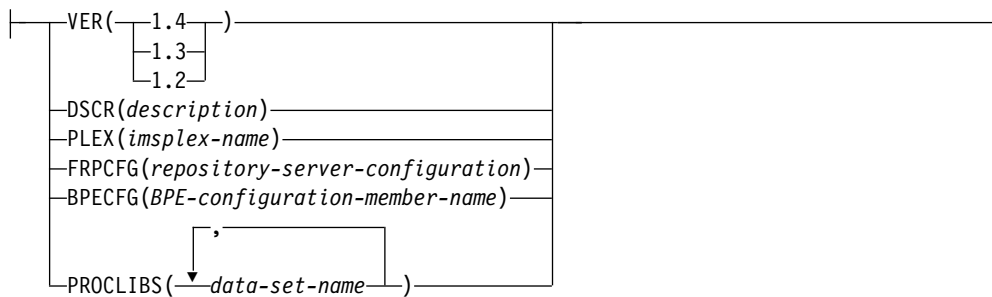
UPDATE REPO **subcommand**

Updates a Repository Server (RS) Common Services Layer (CSL) component stored in the IMS Configuration Manager definitions repository.

Syntax



SET attributes: REPO:



Parameters

NAME()

Specifies the name, names, or component name mask of the component.
Names may be up to eight characters in length and must end in the suffix RP.
The action fails and an error is issued if the named component does not exist.

SET()

Specifies the attributes to be updated.

VER()

The software version of the Repository Server.

DSCR()

A textual description of the Repository Server. Descriptions may be up to forty characters in length.

PLEX()

The five-character name of the participating IMSplex. If the IMSplex is not already defined in the IMS Configuration Manager definitions repository, the action fails and an error message is issued.

FRPCFG()

The name of the FRP configuration member in PROCLIB for the Repository Server.

BPECFG()

The name of the BPE configuration member in PROCLIB for this CSL component.

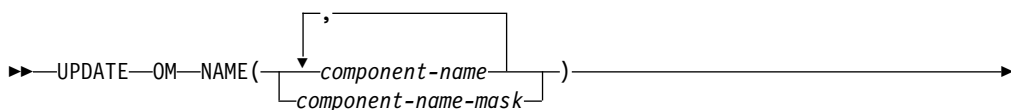
PROCLIBS()

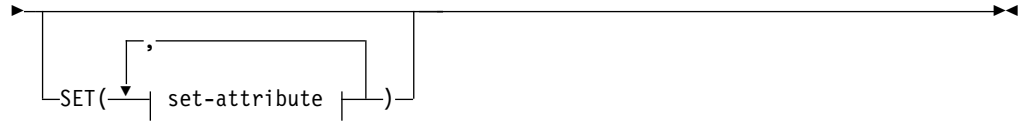
One or more fully qualified procedure library names.

UPDATE OM subcommand

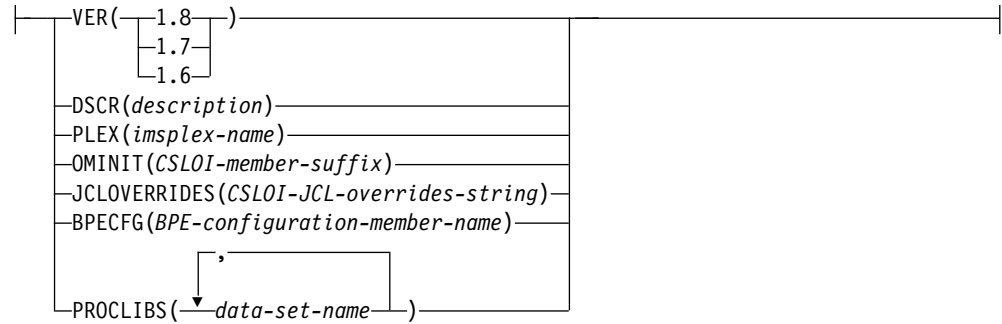
Updates an Operations Manager (OM) Common Services Layer (CSL) component stored in the IMS Configuration Manager definitions repository.

Syntax





SET attributes: OM:



Parameters

NAME()

Specifies the name, names, or component name mask of the component. Names may be up to eight characters in length and must end in the suffix OM. The action fails and an error is issued if the named component does not exist.

SET()

Specifies the attributes to be updated.

VER()

The software version of the Operations Manager.

DSCR()

A textual description of the Operations Manager. Descriptions may be up to forty characters in length.

PLEX()

The five-character name of the participating IMSplex. If the IMSplex is not already defined in the IMS Configuration Manager definitions repository, the action fails and an error message is issued.

OMINIT()

The suffix of the CSLOIxxx member in PROCLIB.

JCLOVERRIDES()

One or more JCL execution parameters which override the corresponding CSLOIxxx parameters at system startup. This is for documentation purposes only and does not affect the live system. Parameters are specified in the form *parameter=value* and are separated by commas or spaces.

BPECFG()

The name of the BPE configuration member in PROCLIB for this CSL component.

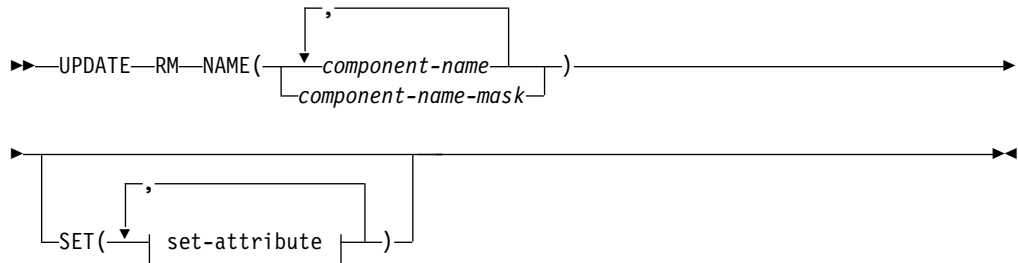
PROCLIBS()

One or more fully qualified procedure library names.

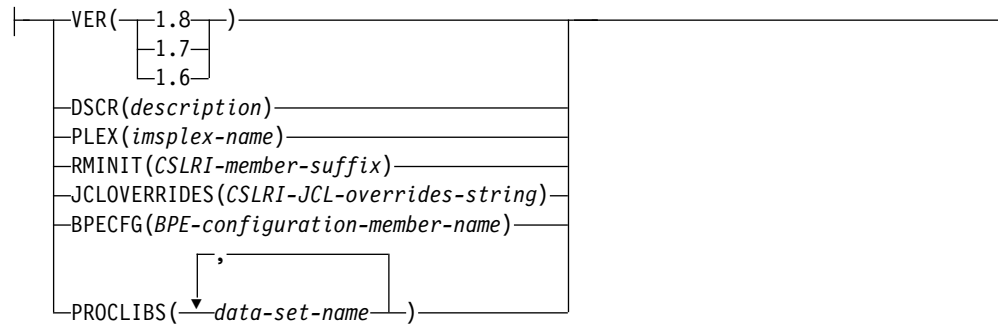
UPDATE RM subcommand

Updates a Resource Manager (RM) Common Services Layer (CSL) component stored in the IMS Configuration Manager definitions repository.

Syntax



SET attributes: RM:



Parameters

NAME()

Specifies the name, names, or component name mask of the component. Names may be up to eight characters in length and must end in the suffix RM. The action fails and an error is issued if the named component already exists.

SET()

Specifies the attributes to be updated.

VER()

The software version of the RM.

DSCR()

A textual description of the RM. Descriptions may be up to forty characters in length.

PLEX()

The five-character name of the participating IMSplex. If the IMSplex is not already defined in the IMS Configuration Manager definitions repository, the action fails and an error message is issued.

RMINIT()

The suffix of the CSLRIxxx member in PROCLIB.

JCLOVERRIDES()

One or more JCL execution parameters which override the corresponding

CSLRIxxx parameters at system startup. This is for documentation purposes only and does not affect the live system. Parameters are specified in the form *parameter=value* and are separated by commas or spaces.

BPECFG()

The name of the BPE configuration member in PROCLIB for this CSL component.

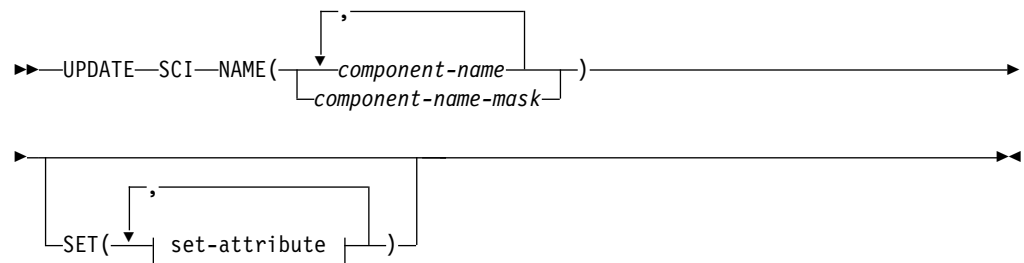
PROCLIBS()

One or more fully qualified procedure library names.

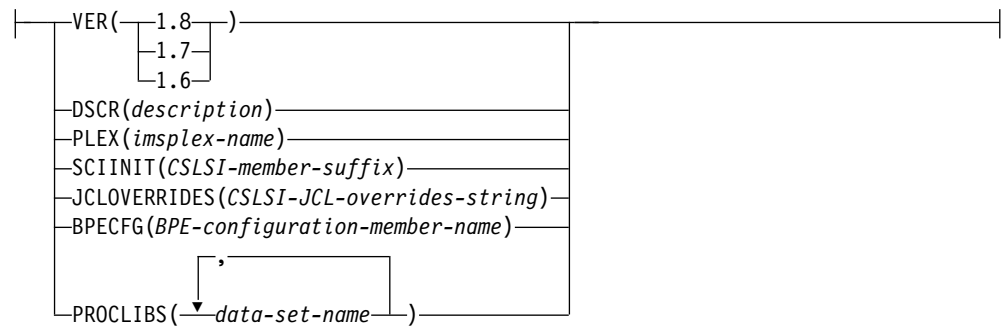
UPDATE SCI subcommand

Updates a Structured Call Interface (SCI) Common Services Layer (CSL) component stored in the IMS Configuration Manager definitions repository.

Syntax



SET attributes: SCI:



Parameters

NAME()

Specifies the name, names, or component name mask of the component. Names may be up to eight characters in length and must end in the suffix SC. The action fails and an error is issued if the named component already exist.

SET()

Specifies the attributes to be updated.

VER()

The software version of the SCI.

DSCR()

A textual description of the SCI. Descriptions may be up to forty characters in length.

PLEX()

The five-character name of the participating IMSplex. If the IMSplex is not already defined in the IMS Configuration Manager definitions repository, the action fails and an error message is issued.

SCIINIT()

The suffix of the CSLSIxxx member in PROCLIB.

JCLOVERRIDES()

One or more JCL execution parameters which override the corresponding CSLSIxxx parameters at system startup. This is for documentation purposes only and does not affect the live system. Parameters are specified in the form *parameter=value* and are separated by commas or spaces.

BPECFG()

The name of the BPE configuration member in PROCLIB for this CSL component.

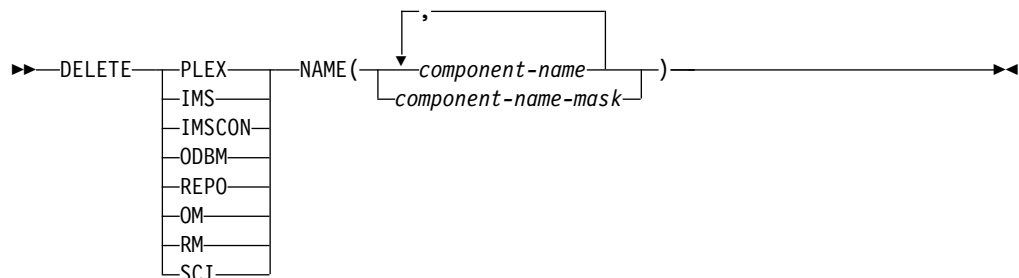
PROCLIBS()

One or more fully qualified procedure library names.

DELETE subcommand

Use the DELETE subcommand with the MAINT.MEMBERS command to delete an IMSplex, IMS, IMS Connect system, or CSL component stored in the IMS Configuration Manager definitions repository.

Syntax



Parameters

PLEX

Delete an IMSplex. Only an IMSplex that is not referenced by any member systems may be deleted. If the IMSplex is referenced by systems in the IMS Configuration Manager definitions repository, the action fails and an error message is issued.

IMS

Delete an IMS.

IMSCON

Delete an IMS Connect system.

ODBM

Delete an Open Database Manager (ODBM) Common Services Layer (CSL) component.

REPO

Delete a Repository Server (RS) CSL component.

OM Delete an Operations Manager (OM) CSL component.

RM Delete a Resource Manager (RM) CSL component.

SCI

Delete a Structured Call Interface (SCI) CSL component.

NAME()

Delete components that match the specified name, names, or component name mask. A warning is issued if the named component does not exist.

Example JCL for editing systems and IMSplexes

This JCL examples uses the MAINT.MEMBERS batch command to create and edit IMSplexes, IMS systems, and Common Service Layer (CSL) component definitions stored in the IMS Configuration Manager definitions repository.

```
//GPLUTIL EXEC PGM=GPLUTIL
//STEPLIB DD DISP=SHR,DSN=HLQ.V2R3M0.SGPLLINK
//GPLREPOS DD DISP=SHR,DSN=HLQ.V2R3M0.REPOSTRY
//SYSPRINT DD SYSOUT=*
//SYSIN DD *
    MAINT.MEMBERS TO(REPOSITORY,GPLREPOS) +
                  FROM(DDNAME,CMDLIST)
/*
//CMDLIST DD *
    CREATE PLEX NAME(PLXTT) SET(DSCR(IMS PLEX PLXTT))
    CREATE IMS NAME(TEST) SET(VER(13.1),
                              PLEX(PLXTT),
                              RGSUF(IMS))
    CREATE IMSCON NAME(TESTIC) SET(VER(12.1),
                                   DSCR(TEST IMS CONNECT),
                                   HWSCFG(HWSCFG01),
                                   BPECFG(BPECFG01))
    CREATE ODBM NAME(TESTOD) SET(VER(1.4),
                                   DSCR(TEST OPEN DATABASE MANAGER),
                                   PLEX(PLXTT),
                                   ODBMINIT(000),
                                   BPECFG(BPECFG22))
    CREATE REPO NAME(TESTRP) SET(VER(1.3),
                                   DSCR(TEST REPOSITORY SERVER),
                                   PLEX(PLXTT),
                                   FRPCFG(FRPCFG00),
                                   BPECFG(BPECFG11))
    CREATE OM NAME(TESTOM) SET(VER(1.5),
                                   DSCR(TEST OPERATIONS MANAGER),
                                   PLEX(PLXTT),
                                   OMINIT(000),
                                   BPECFG(BPECFG11))
    CREATE RM NAME(TESTRM) SET(VER(1.7),
                                   DSCR(TEST RESOURCE MANAGER),
                                   PLEX(PLXTT),
                                   RMINIT(000),
                                   BPECFG(BPECFG11))
    CREATE SCI NAME(TESTSC) SET(VER(1.6),
                                   DSCR(TEST SCI),
                                   PLEX(PLXTT),
                                   SCIINIT(000),
                                   BPECFG(BPECFG11))
    UPDATE IMS NAME(TEST) SET(VER(14.1),
                              DSCR(TEST IMS))
    UPDATE IMSCON NAME(TESTIC) SET(HWSCFG(HWSCFG00),
                                   BPECFG(BPECFG11),
                                   IMS PLEX(TMEMBER(PLXTT)
                                   MEMBER(ICMI00DP)))
    CREATE PLEX NAME(PLXT2) SET(DSCR(IMS PLEX PLXT2))
    UPDATE IMSCON NAME(TESTIC) SET(HWSCFG(HWSCFG00),
```

```

BPECFG(BPECFG11),          +
IMSPLEX(TMEMBER(PLXTT,PLXT2)  +
        MEMBER(MBRPLXTT,MBRPLXT2)))
/*

```

where:

- 1** The IMS Configuration Manager link library.

Note: The IMS Configuration Manager link library, and all other libraries in the STEPLIB, must be APF-authorized.
- 2** The IMS Configuration Manager definitions repository to use to store your definitions.
- 3** Uses the “MAINT.MEMBERS command” on page 133 to edit the IMS Configuration Manager definitions repository.
- 4** The ddname of a DD statement that contains your subcommands.
- 5** Subcommands that edit the IMS Configuration Manager definitions repository. The subcommands in this example perform the following tasks:
 1. Create an IMSplex named PLXTT.
 2. Create an IMS named TEST and associate it with PLXTT.
 3. Create an IMS Connect system named TESTIC.
 4. Create an Open Database Manager (ODBM) Common Service Layer (CSL) component named TESTOD and associate it with PLXTT.
 5. Create a Repository Server (RS) CSL component named TESTRP and associate it with PLXTT.
 6. Create an Operations Manager (OM) CSL component named TESTOM and associate it with PLXTT.
 7. Create a Resource Manager (RS) CSL component named TESTRM and associate it with PLXTT.
 8. Create a Structured Call Interface (SCI) CSL component named TESTSC and associate it with PLXTT.
 9. Update several properties of the IMS named TEST.
 10. Update several properties of the IMS Connect system named TESTIC. Associate it with the IMSplex named PLXTT (member name ICMIOODP).
 11. Create an IMSplex named PLXT2. Update the IMS Connect system named TESTIC to replace the current IMSplex association(s) with two new associations, PLXTT (member name MBRPLXTT) and PLXT2 (member name MBRPLXT2).

Related reference:

“MAINT.MEMBERS command” on page 133
 Edits IMSplexes, IMS systems, and CSL component definitions stored in an IMS Configuration Manager definitions repository.

Chapter 15. Common Services Library server configuration options

The Common Services Library server startup job contains several options to control how IMS Configuration Manager manages system definitions.

Example JCL for autodiscovery

This JCL uses the AUTODISCOVER keyword and the Common Services Library server to automatically discover IMS components for use in IMS Configuration Manager.

```
//FUNSRV  JOB (ACCOUNT),'NAME'
//SERVER  EXEC PGM=FUNSRV,
//        PARM=('BPECFG=BPECONFIG,FUNCFG=FUNCONFIG')
//*
//STEPLIB DD DISP=SHR,DSN=FUNHLQ.SFUNLINK
//        DD DISP=SHR,DSN=PRDHLQ.SGPLLINK
//        DD DISP=SHR,DSN=IMSHLQ.SDFSRESL
//PROCLIB DD DISP=SHR,DSN=FUNHLQ.SFUNSAMP
//GPLCNTL DD *
//        REPOSITORY NAME=testrepo,
//                   DESC=(shortdescription),
//                   DSN=TEST.REPO,
//                   AUTODISCOVER=(PLEX(plexname,...),
//                                MBRTYPE(values))
//
/*
//GPLPRINT DD SYSOUT=*
```

where:

- 1** The IMS Configuration Manager definitions repository to use to store your definitions.
- 2** The AUTODISCOVER keyword and optional parameters. Replace the placeholders *plexname,...* and *values* as required, or remove the PLEX and MBRTYPE parameters completely to discover as many systems in your environment as possible.

Related tasks:

“Enabling autodiscovery in Common Services Library server” on page 34
Enabling the optional autodiscovery feature in the Common Services Library server instructs IMS Configuration Manager to automatically detect IMS systems and update the IMS Configuration Manager definitions repository with the definitions each time the server starts. This is an **optional** feature that can be used to quickly refresh your definitions repository on a periodic basis or when changes have been made to your topology.

Related reference:

“REPOSITORY keyword” on page 160

The REPOSITORY keyword allows users to specify information about IMS Configuration Manager definitions repositories that are accessible to the Common Services Library server.

REPOSITORY keyword

The REPOSITORY keyword allows users to specify information about IMS Configuration Manager definitions repositories that are accessible to the Common Services Library server.

Syntax

```
►►—REPOSITORY—NAME=—repository_name—,—DESC=—(—repository_description—)—►►  
►►,—DSN=—repository_dsn—┐  
└┐,—AUTODISCOVER—┐  
└┐Options└┐
```

Options:

```
|—(┐,—PLEX(*)—┐┐,—MBRTYPE(ALL)—┐  
└┐,—PLEX(—┐,—MBRTYPE(PLEX)—┐  
└┐mask┐└┐,—┐  
└┐plexid┐└┐component┐  
└┐)—┐  
|—)
```

Parameters

NAME

Specify a 1-8 character name to identify the IMS Configuration Manager definitions repository. The name may not start with a numeric character and must be unique within a single running instance of the Common Services Library server.

DESC

Specify a short description for the IMS Configuration Manager definitions repository. The description may be up to 40 characters long.

DSN

Specify the data set name for the IMS Configuration Manager definitions repository.

AUTODISCOVER

Instruct IMS Configuration Manager to perform system autodiscovery on server start. The AUTODISCOVER keyword has a number of additional options. If no options are specified, IMS Configuration Manager attempts to discover as many systems as possible.

The options are:

PLEX(*plexid* or *mask* ,...)

Specify a list of IMSplexes that contain the components you want to discover. For example:

```
PLEX(PLXA,PLXB,PLXC)
```

Alternatively, use a mask to discover all IMSplexes beginning with a particular prefix. The preceding example can also be expressed as:

```
PLEX(PLX*)
```


The mask can be used to create complex search statements. The following examples demonstrate valid examples of how the mask can be used:

PLEX(*) PLEX(ABC*) PLEX(DEF*,XYZ*) PLEX(PLXDP,PLX*)

To discover components in all IMSplexes, use:

PLEX(*)

or omit the parameter.

Default: all IMSplexes (if parameter not specified).

MBRTYPE(ALL|PLEX) or MBRTYPE (*component*,...)

Limit the discovery of members to one or more types. MBRTYPE accepts one of the following options:

ALL

Inserts all discoverable member types. See *component* for a list of supported member types.

PLEX

Inserts only the IMSplex records.

***component*,...**

Specify a list of one or more systems and components. Options include:

IMS

Inserts IMS systems and their associated IMSplexes. If applicable, Common Queue Server (CQS) components for systems discovered by this option are also inserted.

IMSCON

Inserts IMS Connect systems and their associated IMSplexes.

ODBM

Inserts Open Database Manager (ODBM) Common Service Layer (CSL) components and their associated IMSplexes.

REPO

Inserts Repository Server (RS) CSL components and their associated IMSplexes.

OM Inserts Operations Manager (OM) CSL components and their associated IMSplexes.

RM Inserts Resource Manager (RM) CSL components and their associated IMSplexes.

SCI

Inserts Structured Call Interface (SCI) CSL components and their associated IMSplexes.

Default: MBRTYPE(ALL) (if parameter not specified).

Related reference:

“Example JCL for autodiscovery” on page 159

This JCL uses the AUTODISCOVER keyword and the Common Services Library server to automatically discover IMS components for use in IMS Configuration Manager.

Chapter 16. Understanding the result of the discovery process

Results of the IMS Configuration Manager autodiscovery process are summarized in the log.

Discovery process logs have the following basic structure:

```

GPL7324I Autodiscovery for repository TESTREPO starting... 1
:
:
GPL7001I Discovered IMSplex PLXZZ
:
:

GPL7001I Processing IMSplex PLXZZ 2

GPL7002I Discovered ODBM JOB PLXZZ0D1, XCF member DDQ10D in IMSplex PLXZZ on ABC1
GPL7008I      PARM = BPECFG=BPECFG, BPEINIT=CSLDINI0, ODBMINIT=DQ1, ARMST=Y
GPL7009I      STEPLIB = IDQD.VD10.SDFSRESL
GPL7009I      = IMS.V13.SDFSRESL
GPL7009I      PROCLIB = IDQD.VD10.PROCLIB
GPL7046I ODBM JOB PLXZZ0D1 selected for further processing
:
:
GPL7001I Processing IMSplex PLYYY
GPL7036I CSLSCREG command error. RC=01000010 RSN=00004000
GPL7037I IMSplex Register failed: the SCI is not active
GPL7001I Skipping IMSplex PLYYY 3
:
:

GPL7058I Searching for CQS connections to IMS systems

GPL7017I Reading IMS Proclib member DFSSQPS3 for IMS job IAAACTL
GPL7062I IMS system IAAA is searching for a CQS using CQSSN=CDU3
GPL7057I To discover the CQSSN CDU3 connected to IMS IAAA, autodiscovery must be run on ABC3 4
:
:

GPL7011I Searching for IMSCON jobs in XCF group XCFGGPL1 which is associated with IMS system IBBB...

GPL7012I Discovered IMSCON, job ICMIC04, XCF member ICM14DS1 in XCF group XCFGGPL1
GPL7008I      PARM = BPECFG=BPECFG, HWSCFG=HWSCFG04
GPL7009I      STEPLIB = CEX000.SAMPLE.DUMMY.SCEXLINK
GPL7009I      = IMS.V13.SDFSRESL.EXIT
GPL7009I      = IMS.V13.SDFSRESL
GPL7009I      PROCLIB = GPL000.SAMPLE.HWS.PROCLIB
GPL7017I Reading IMS Proclib member HWSCFG04 for IMSCON job ICMIC04
GPL7035I IMSCON job ICMIC04, XCF member ICM14DS1 is not connected to any IMS system discovered - Skipping... 5
:
:

GPL7024I Checking for discovered IMS components in the ICM repository... 6

GPL7023I RM object S3XDPRM, job PLXMMRM, XCF member S3XDPRM - Object is not in the repository
GPL7023I IMS object IB BB, job IB BBCTL, XCF member IB BB - Object is not in the repository
:
:

GPL7013I Beginning DISCOVER update phase... 7

GPL7014I RM object S3XDPRM, job PLXMMRM, XCF member S3XDPRM - Object will be added
GPL7007I Added RM object S3XDPRM
GPL7014I IMS object IB BB, job IB BBCTL, XCF member IB BB - Object will be updated
GPL7007I Updated RM object IB BB
:
:

GPL7015I MBRTYPE   Discovered   Added   Updated   No change   Skipped   Error 8
GPL7019I -----
GPL7020I PLEX             13         1         0           2         0       10
GPL7020I IMS              4         0         4           0         0         0
GPL7020I IMSCON          12         1        10           0         1         0
GPL7020I ODBM             3         3         0           0         0         0
GPL7020I REPO             3         3         0           0         0         0
GPL7020I OM               5         5         0           0         0         0
GPL7020I RM              4         4         0           0         0         0
GPL7020I SCI              5         5         0           0         0         0
GPL7020I -----
GPL7020I TOTALS           51        22        18           2         1        10

GPL7325I Autodiscovery successful for repository TESTREPO 9
GPL7317I SCI is not active for IMSplex PLODH
GPL7317I SCI is not active for IMSplex PLODJ
GPL7317I SCI is not active for IMSplex PLIDH
GPL7317I SCI is not active for IMSplex PLIDJ
GPL7317I SCI is not active for IMSplex PLXXH
GPL7317I SCI is not active for IMSplex PLXXJ
GPL7317I SCI is not active for IMSplex PLXXQ
GPL7308I IMS Configuration Manager product initialized

```

Figure 46. Example output from the discovery process

where:

- 1 The autodiscovery process has begun. Objects discovered are stored in the specified IMS Configuration Manager definitions repository.
- 2 Objects discovered by IMS Configuration Manager are listed together with their details.

- 3** An object that could not be added, updated or skipped by IMS Configuration Manager.
- 4** An indication to the user that autodiscovery is incomplete. To discover more of your environment, follow the instructions in the message displayed.
- 5** An object that can not be processed by IMS Configuration Manager.
- 6** IMS Configuration Manager has finished exploring the environment and is about to compare what it discovered with what is currently stored in the specified IMS Configuration Manager definitions repository.
- 7** IMS Configuration Manager begins the process of updating the specified IMS Configuration Manager definitions repository.
- 8** The result of autodiscovery summarized as a table with the following column headings:

MBRTYPE

The type of object discovered

Discovered

The number of objects found through autodiscovery

Added The number of discovered objects that were newly added to the IMS Configuration Manager definitions repository. These are new objects that have not previously been discovered by IMS Configuration Manager.

Updated

The number of discovered objects updated in the IMS Configuration Manager definitions repository. These are objects that have changed since they were last discovered by IMS Configuration Manager.

No change

The number of discovered objects that did not require an IMS Configuration Manager definitions repository update. These are objects that have not changed since they were last discovered by IMS Configuration Manager.

Skipped

The number of discovered objects that were not processed by IMS Configuration Manager. Search for log message “GPL7035I” on page 98 (**5** in the preceding example) for further details.

Error The number of discovered objects that could not be added, updated or skipped by IMS Configuration Manager. Search for log messages “GPL7001I” on page 95, “GPL7036I” on page 98, and “GPL7037I” on page 98 (**4** in the preceding example) for further details.

- 9** Autodiscovery is complete.

Related tasks:

“Enabling autodiscovery in Common Services Library server” on page 34
 Enabling the optional autodiscovery feature in the Common Services Library server instructs IMS Configuration Manager to automatically detect IMS systems and update the IMS Configuration Manager definitions repository with the definitions each time the server starts. This is an **optional** feature that can be used to quickly refresh your definitions repository on a periodic basis or when changes have been made to your topology.

Related information:

"GPL7015I" on page 96

MBRTYPE Discovered Added Updated No change Skipped Error

Chapter 17. Defining systems and IMSplexes using the ISPF dialog

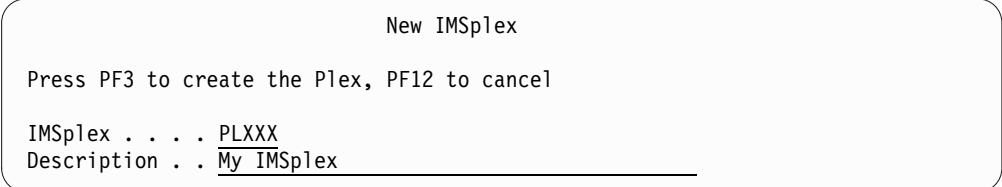
You can use the IMS Configuration Manager ISPF dialog to manually define IMSplexes and systems in the IMS Configuration Manager definitions repository. This can be useful if you do not wish to rediscover your entire topology again using autodiscovery.

Defining an IMSplex

You can use the IMS Configuration Manager ISPF dialog to manually define an IMSplex in the IMS Configuration Manager definitions repository.

Procedure

1. From the IMS Configuration Manager Primary Menu, select option 1 **IMSplexes**. The IMSplex panel is displayed.
2. On the command line, enter NEW. The New IMSplex dialog is displayed.
3. Enter a name and description for the new IMSplex definition.



```

New IMSplex

Press PF3 to create the Plex, PF12 to cancel

IMSplex . . . . PLXXX
Description . . My IMSplex

```

Figure 47. Creating a new IMSplex

4. To finalize the creation of the new IMSplex definition, press the Exit function key (F3).

What to do next

Add member systems to the new IMSplex. See “Defining an IMS system.”

Defining an IMS system

You can use the IMS Configuration Manager ISPF dialog to manually define an IMS system in the IMS Configuration Manager definitions repository.

Before you begin

If the IMS system belongs to an IMSplex, you must first define that IMSplex. See “Defining an IMSplex.”

Procedure

1. From the IMS Configuration Manager Primary Menu, select option 2 **Systems**. The System Member List panel is displayed.
2. On the command line, enter NEW. The New System Member dialog is displayed.
3. Type a name for the system.
4. Select **IMS System** and press Enter.

5. Complete the form as required.
6. To finalize the creation of the new IMS system definition, press the Exit function key (F3).

Adding PROCLIB data set names to system definitions

If you want to list parameter members by system or IMSplex, you must first add the PROCLIB data set names to your system definitions.

About this task

The procedure presented here describes how to use the ISPF dialog to add PROCLIB data set names to system definitions. Alternatively, you can use autodiscovery to add the data set names. See “Establishing an IMS Configuration Manager definitions repository” on page 22.

Procedure

1. From the IMS Configuration Manager Primary Menu, select option 2 **Systems**. The IMS Systems List panel is displayed.
2. In the system list, enter an **S** next to the required system. The IMS System PROCLIB Parameters panel is displayed.
3. Enter your required configuration options. Press the Help function key (F1) to obtain additional information about each field.
4. Specify the PROCLIB data sets used by this system. IMS Configuration Manager uses the information you supply to parse these PROCLIBs and identify the members used by this IMS system within them.

Note: The PROCLIB data sets must be entered in the order in which they appear in the Control Region STEPLIB DD.

File Help	
EDIT	IMS System PROCLIB Parameters
Command ==>	Row 1 to 3 of 3 Scroll ==> PAGE
IMS ID	ICYZ Version . . . : 13.1
Description . . .	
IMSplex	PLXYZ
RGSUF	PLP (DFSPB member suffix)
DFSPB JCL overrides .	SHAREDQ=PS3,ALOT=60,BSIZ=2048,AOIS=S,AOI1=N,APPC=N APPCSE=F,ARC=1,ARMRST=Y,ASOT=60,AUTO=N
CQSINIT	PS3 (CQSIP member suffix)
CQSIP JCL overrides .	BPECFG=BPECFPLP,BPEINIT=CQSINI00
BPECFG	(BPE configuration member name)
DSPBI	(DSPBI member suffix)
Control Region Type .	1. DB/DC 2. DBCTL 3. DCCTL
/	PROCLIB Data Set
	'ICYZ.VC13.PROCLIB'
***** Bottom of data *****	

Figure 48. Specifying PROCLIB settings for systems

5. Press the Exit function key (F3) to save the new settings.

Defining an IMS Connect system

You can use the IMS Configuration Manager ISPF dialog to manually define an IMS Connect system in the IMS Configuration Manager definitions repository.

About this task

Defining an IMS Connect system allows you to track the initialization parameters and configuration members used, and the IMSplex connections for each IMS Connect system.

Procedure

1. From the IMS Configuration Manager Primary Menu, select option 2 **Systems**. The System Member List panel is displayed.
2. On the command line, enter NEW. The New System Member dialog is displayed.
3. Type a name for the system. Enter 2 to specify an IMS Connect system and press Enter. The IMS Connect Settings form is displayed.
4. Complete the form as required. Specify the names of the IMS Connect and BPE configuration members in the PROCLIB as well as the PROCLIB data set name. If you have IBM IMS Connect Extensions for z/OS installed, you can also specify the host name and port number of the IMS Connect Extensions console. If you want to add this system to an IMSplex, press the Right function key (F11) and complete the relevant fields.

```
File Help
-----
EDIT                      IMS Connect Settings IMSC          Row 1 of 1 More: <>
Command ===> _____ Scroll ===> PAGE

IMS Connect . . . . : IMSC      Version . . . . . 13.1  +
Description . . . . : My IMS Connect system

Configuration Member Names:
  HWSCFG . . . . HWSCFG00  IMS Connect configuration
  BPECFG . . . . BPECFG11  Base Primitive Environment configuration

IMS Connect Extensions console (optional):
  Host . . . . . _____
  Port number . . _____

/      PROCLIB Data Set
      'GPL230.HWS.PROCLIB'
***** Bottom of data *****
```

Figure 49. Creating a new IMS Connect system definition

5. To finalize the creation of the new IMS Connect system definition, press the Exit function key (F3).

Results

If the IMS Connect system belongs to an IMSplex, the name of the IMSplex is displayed in the IMSplex column. If it belongs to more than one plex, a plus sign (+) is displayed followed by the number of IMSplex associations. An empty field in the IMSplex column signifies that the IMS Connect system does not belong to an IMSplex.

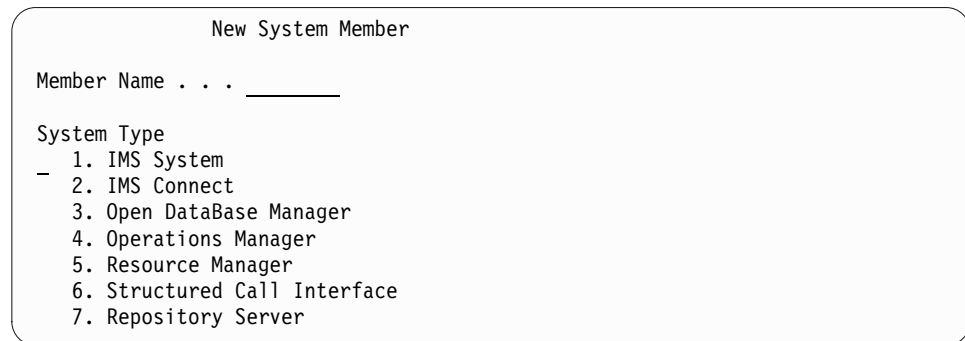
Defining a CSL member

You can use the IMS Configuration Manager ISPF dialog to manually define a Common Service Layer (CSL) member in the IMS Configuration Manager definitions repository.

Procedure

1. From the IMS Configuration Manager Primary Menu, select option 2 **Systems**. The System Member List panel is displayed.
2. On the command line, enter NEW. The New System Member dialog is displayed.

Figure 50. Creating a new CSL member definition



```

New System Member

Member Name . . . _____

System Type
- 1. IMS System
  2. IMS Connect
  3. Open DataBase Manager
  4. Operations Manager
  5. Resource Manager
  6. Structured Call Interface
  7. Repository Server

```

3. Type a name for the member. Different member types have different name validation rules.
4. Select the type of CSL member you want to create from the list and press Enter. A form corresponding to the system you selected is displayed.
5. Complete the form. Press the Help function key (F1) on any field to see additional information.
6. Press the Exit function key (F3).

Deleting a system or IMSplex

You can use the IMS Configuration Manager ISPF dialog to delete an IMSplex, an IMS system, or an IMS Connect system from the IMS Configuration Manager definitions repository using the ISPF dialog.

Before you begin

If you are using the autodiscovery feature, any discoverable systems and IMSplexes you delete may be re-added if they are rediscovered by IMS Configuration Manager. For more information, see “Establishing an IMS Configuration Manager definitions repository” on page 22 and “Establishing an IMS Configuration Manager definitions repository” on page 22.

About this task

If you want to delete an IMSplex, it must not be referenced by any member systems. This reference can be eliminated by deleting the referenced systems or by moving them to another IMSplex.

Procedure

1. From the IMS Configuration Manager Primary Menu, select option 1 **IMSplices** or option 2 **Systems**.
2. Enter line action **D** next to the item you want to delete.
3. If **Delete Confirmation** is enabled in your profile options, press Enter to confirm deletion of the system. See “Setting IMS Configuration Manager ISPF profile options” on page 21.

Part 6. Appendixes

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