
Chapter 1. Summary of Changes

The PTF UQ93501 contains the code changes for APARs PQ90316 and PQ92621.

PQ90316

The following documentation changes have occurred as a result of PQ90316:

Dynamic PSB processing options for Browse, Extract and Batch Print (IPR) functions

The modifications in PQ90316 allow the FM/IMS Administrator (and in some cases, the user) to specify the required access to the data provided by the Dynamic PSB in the Browse, Extract and Batch Print functions as either read or read-only.

For DLI mode, Browse and Extract have optional input parameters, PROCOPT=G or PROCOPT=GO, specified on the DLI Mode Settings panel. The IEB, IPR and IXB functions have equivalent parameters. Depending upon the options set in the installation process (see Chapter 3, "Changes to the File Manager Customization Guide," on page 41), FM/IMS uses these values to control the data access provided by the generated Dynamic PSB.

Optional protection of existing and new installation defaults

Options have been added to the FMN1POPD macro, allowing the FM/IMS Administrator to set defaults for some values. Administrators are also able to prevent the user from overriding these values (and other existing options) or to allow the user to change them. These options are:

PSBTYPE

This is a new option, which can be set to STATIC or DYNAMIC. Administrators can allow users to change the setting by specifying a value for the UPSBTYPE option.

UPSBTYPE

This is a new option, which specifies whether or not users can override the setting of the PSBTYPE option. UPSBTYPE=YES allows users to override the setting of PSBTYPE. UPSBTYPE=NO prevents users from overriding the setting of PSBTYPE.

RSR This is a new option, which can be set to YES or NO in the FMN1POPD macro, specifying whether or not the IMS system accessed by File Manager/IMS in DLI mode is part of an RSR complex. Administrators can allow users to change the setting by specifying a value for the URSR option.

URSR This is a new option in the FMN1POPD macro, which specifies whether or not users can override the setting of the RSR option. If this option is set to NO (prevents user changes) and RSR is set to YES, users will also be unable to override the GSGNAME and TMINAME specifications.

GSGNAME

This is a new option in the FMN1POPD macro, which specifies the installation-default GSG (Global Service Group) name, for IMS systems accessed by File Manager/IMS in DLI mode. This option is only applicable when RSR=YES (whether set by the

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Administrator at installation or by the user). If URSR is set to NO, users will be unable to override the GSGNAME specifications.

TMINAME

This is a new option in the FMN1POPD macro, which specifies the installation-default TMI (Transport Manager Instance) name, for IMS systems accessed by File Manager/IMS in DLI mode. This option is only applicable when RSR=YES (whether set by the Administrator at installation or by the user). If URSR is set to NO, users will be unable to override the TMINAME specifications.

UDBRC

This is a new option in the FMN1POPD macro, which specifies whether or not users can override the setting of the DBRC (Database Recovery Control) option.

UIMSBKO

This is a new option in the FMN1POPD macro, which specifies whether or not users can override the setting of the IMSBKO (Dynamic Backout) option.

UIRLM

This is a new option in the FMN1POPD macro, which specifies whether or not users can override the setting of the IRLM (Internal Resource Lock Manager) option. If this option is set to NO and the IRLM option is set to YES, users will also be unable to change the IRLMNAME option.

Redesign of system settings panels

Some of the panels accessed via the Set Processing Options menu panel have been redesigned and fields have been moved between the panels, to create a more intuitive and logical grouping of options. The affected panels are:

Table 1. Panel Redesign

Old Panel Name	New Panel Name	Panel Description
Set System Processing Options	System Settings	System Settings panel
IMS Specifications	DLI Mode Settings	DLI Mode Settings panel
IMS Data Set Settings	DLI Mode Data Sets	DLI Mode Data Sets panel
(new panel)	BMP Mode Settings	BMP Mode Settings panel

PQ92621

DOPT ACBLIB Data Set Cleanup

The modifications in APAR PQ92621 provide a new installation option (XDOPTLB) in the FMN1POPI macro. When the FM/IMS administrator sets this option to YES, FM/IMS deletes all members of the DOPT ACBLIB data set and compresses the data set before each ACBGEN is executed. (FM/IMS executes an ACBGEN when a dynamic PSB is used to access databases in BMP mode.) This option can be useful on sites that do not have existing housekeeping routines for the DOPT ACBLIB data set.

Chapter 2. Changes to the File Manager User Guide for IMS Data

This section details the impact upon the **File Manager for z/OS - User Guide and Reference for IMS Data**

Changes to Part 1: Working with FM/IMS

Changes to Chapter 2: Getting Started

The following text has been changed or added to the **Setting processing options** section:

System Settings (option 0.2)

The System Settings panel allows you to control options that are used in both BMP and DLI modes, to determine how FM/IMS browses, edits, extracts and loads IMS data.

DLI Mode Settings (option 0.8)

The DLI Mode Settings panel allows you to specify the IMS parameters used when processing in DLI mode.

DLI Mode Data Sets (option 0.9)

The DLI Mode Data Sets panel allows you to specify the IMS data sets used by FM/IMS to access the IMS databases in DLI mode.

BMP Mode Settings (option 0.11)

The BMP Mode Settings panel allows you to specify the IMS parameters used when processing in BMP mode.

Changes to Chapter 3: Viewing your databases

The following text has been changed or added to the **Accessing your databases** section:

About the different access modes

The marked section has been inserted into the **About the different access modes** section (previous and following paragraphs are quoted to give context):

You can also use Dynamic PSB's in BMP mode, if your site installation has been set up to allow this type of access. Because this combination provides full access to live data, some sites may choose not to enable it. Dynamic PSB's are generated by FM/IMS from the specified DBD and allow both Read and Update access to all segments in a database (PROCOPT=G for Browse and PROCOPT=A for Edit). This type of access might be required by a Database Administrator who wants to make critical changes to live data, without having to bring the entire IMS subsystem offline.

You can also control the type of read provided in the browse and extract processes by changing the PROCOPT settings (PROCOPT=G for normal read, PROCOPT=GO for read without integrity) in the System Settings panel (option 0.2). A setting of G means that database read locks are set and released as you browse the data, ensuring that you are always reading the complete updated database record. A setting of GO means that no

Changes to the File Manager User Guide for IMS Data

locks are set, which can result in internally inconsistent segments (with different parts of the segment updated by two different units of work).

Note: To allow the use of Dynamic PSB's in BMP mode, your FM/IMS System Administrator must have followed the setup process, as explained in the Customization Guide.

Accessing in BMP mode using a Static PSB

The initial steps in this process have changed as a result of changes in the panels. The steps now begin as:

1. From the Primary Option Menu, select option **0 Settings** and then option **2 System settings**.
2. In the **PSB type** field, type **2** to select Static.

Accessing in BMP mode using a Dynamic PSB

The initial steps in this process have changed as a result of changes in the panels. The steps now begin as:

1. From the Primary Option Menu, select option **0 Settings** and then option **2 System settings**.
2. In the **PSB type** field, type **1** to select Dynamic, then press the Exit function key (F3) twice.

The following note has also been added to this section:

Note: If the FM/IMS Administrator has set the DOPT ACBLIB data set option (XDOPTLB) to YES and the DOPT ACBLIB data set is in use when you attempt to access a database, FM/IMS displays the DOPT ACBLIB Data Set In Use popup. You can press Enter to continue attempting to access the database, or you can enter the Exit or Cancel command to return to the Browse/Edit Entry panel. If you choose to continue, FM/IMS makes five more attempts to access the database before re-displaying the popup.

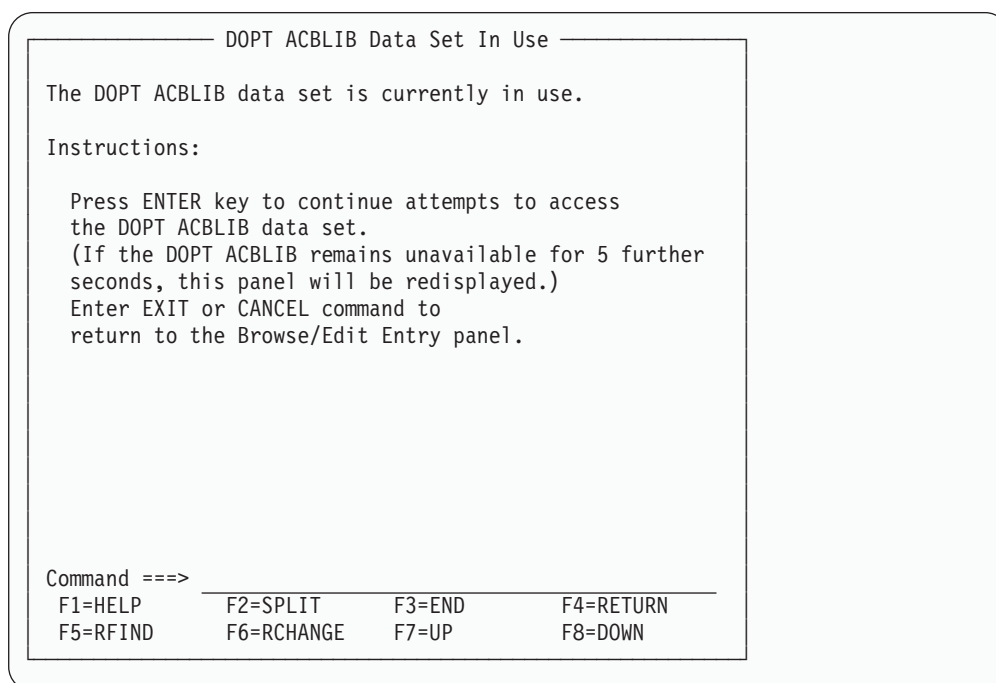


Figure 1. DOPT ACBLIB Data Set In Use popup

If the initial attempt access a database using a dynamic PSB in BMP mode fails in a batch job, 19 further attempts are made with one second intervals between attempts. If all these attempts fail, the job is terminated.

Accessing in DLI mode using a Static PSB

The initial steps in this process have changed as a result of changes in the panels. The steps now begin as:

1. From the Primary Option Menu, select option **0 Settings** and then option **2 System settings**.
2. In the **PSB type** field, type **2** to select Static, then press F3 to exit to the Set Processing Options menu panel.
3. Select **8 DLI Mode settings**.

Accessing in DLI mode using a Dynamic PSB

The initial steps in this process have changed as a result of changes in the panels. The steps now begin as:

1. From the Primary Option Menu, select option **0 Settings** and then option **2 System settings**.
2. In the **PSB type** field, type **1** to select Dynamic, then press F3 to exit to the Set Processing Options menu panel.
3. Select **8 DLI Mode settings**.

Panel changes

The panels listed in this section have been changed as a result of this PTF.

Set Processing Options panel

The Set Processing Options panel is a menu panel, that presents a list of the various types of options that affect the behavior of FM/IMS panels.

Set Processing Options panel

Panel and field definitions

<u>P</u> rocess	<u>O</u> ptions	<u>H</u> elp
FM/IMS		Set Processing Options
1	Print	Print settings
2	System	System settings
3	Batch	Job card specifications
4	LANG	Compiler language selection
5	COBOL	COBOL compiler specifications
6	PL/I	PL/I compiler specifications
7	EDIT	Edit/Browse options
8	DLI	DLI mode settings
9	DLID	DLI mode data sets
10	IMSA	FM/IMS output data set allocations
11	BMP	BMP mode settings

Command ==>

F1=Help	F2=Split	F3=Exit	F4=CRetriev	F7=Backward	F8=Forward
F9=Swap	F10=Actions	F12=Cancel			

Figure 2. Set Processing Options panel

- | | |
|-----------------|---|
| 1 Print | Displays the Print settings panel. |
| 2 System | Displays the System settings panel. |
| 3 Batch | Displays the Job card specifications panel. |
| 4 LANG | Displays the Compiler language selection panel. |
| 5 COBOL | Displays the COBOL compiler specifications panel. |
| 6 PL/I | Displays the PL/I compiler specifications panel. |
| 7 EDIT | Displays the Edit/Browse options panel. |
| 8 DLI | Displays the DLI Mode Settings panel. |
| 9 DLID | Displays the DLI Mode Data Sets panel. |
| 10 IMSA | Displays the ISPF Settings panel. |
| 11 BMP | BMP mode settings |

System Settings panel

The System Settings panel allows you to set system-wide setting for PSB processing and Checkpoint Frequencies, that will operate in both BMP and DLI modes.

Panel and field definitions

<u>P</u> rocess	<u>O</u> ptions	<u>H</u> elp
FM/IMS		System Settings
Options:		
Enter "/" to select option		
_ Fast PSB validation		
PSB type		
2	1. Dynamic	
	2. Static	
Checkpoint Frequency:		
Edit 1	
Change all	. 100	
Load 00100	
Parameters:		
Pad character	_____	(Character or hex value)
Command ==>>>		
F1=Help	F2=Split	F3=Exit
F9=Swap	F10=Actions	F12=Cancel
	F4=CRetriev	F7=Backward
		F8=Forward

Figure 3. System Settings panel

Options

Fast PSB validation

Select this option if you use static PSBs with a large number of PCBs and you experience poor response times when you press Enter on the Edit, Browse, Extract or Load Entry panels.

To fully validate the PSB that you specify, FM/IMS loads the DBD for each PCB that is in the PSB. This may result in poor response times.

When this option is selected, FM/IMS does not load the DBD for each PCB in the PSB. If you are attempting to use an invalid PSB and this option is selected, you may get an IMS abend when connecting to IMS (rather than an FM/IMS error message when the option is not selected). But apart from the improved response time, most users will not notice any difference between the two settings.

PSB type

Specifies what type of PSB, FM/IMS uses to edit or browse a database.

Dynamic PSB

FM/IMS dynamically generates a PSB to browse or edit a

System Settings panel

database. This gives full access to all segments listed in the DBD. A dynamic PSB is also specifically created for your extract and load jobs.

Static PSB

FM/IMS uses an existing PSB to browse or edit a database. The static PSB must already exist in a PSB library. The PSB provides control over segment access and editing rights.

The setting of this option effects the panels that are displayed in the Browse, Edit, Load and Extract dialogs.

Checkpoint Frequency

Edit Enter the number that specifies the frequency of the automatic save function when editing databases. When AUTOSAVE is on, FM/IMS:

- increments a count by 1 each time you press an action key and data changes have been requested
- issues a checkpoint when the count is equal to the number specified in this field

The value may be in the range 1 to 99.

The value specified is used in DLI mode. It is also used in BMP mode when your installation allows you to change the autosave settings for the IMS subsystem.

Change all

Enter the number that specifies the frequency of the automatic save function during a CHANGE ALL operation. When AUTOSAVE is on, FM/IMS:

- increments a count by 1 each time a segment is updated during a CHANGE ALL operation
- issues a checkpoint when the count is equal to the number specified in this field

The value may be in the range 1 to 9,999.

The value specified is used in DLI mode. It is also used in BMP mode when your installation allows you to change the autosave settings for the IMS subsystem.

Load Enter the number that specifies the frequency of the automatic save function when running FM/IMS load jobs.

FM/IMS increments a count by 1 each time your load job updates, deletes or inserts a segment and issues a checkpoint when the count is equal to the number specified in this field.

The value may be in the range 1 to 99,999.

Pad character

This value is used for padding segments when you are not using a View and you are expanding the length of a variable length segment or inserting a new segment. It can be a single character or a hexadecimal value (enter an X followed by two hexadecimal characters enclosed in single quotation marks, for example, X'00').

In SNGL or TABL display format, the segment is always padded with X'00' (null) characters.

DLI Mode Settings panel

This panel is used to set processing options that are specific to working in DLI mode.

Panel and field definitions

<u>P</u> rocess	<u>O</u> ptions	<u>H</u> elp
FM/IMS	DLI Mode Settings	
Options:		
Enter "/" to select option		DBRC
/	Dynamic backout	1 1. DBRC used
	IRLM	2. DBRC not used
	RSR	3. Determined by IMS
PSB Processing Options:		
Browse		Extract
1	1. G	1 1. G
	2. GO	2. GO
DLI Parameters:		
IRLM name	_____	(If IRLM selected)
GSG name	_____	(If RSR selected)
TMI name	_____	(If RSR selected)
Number of IMS buffers	_____	
LOCKMAX	_____	
Command ==>		
F1=Help	F2=Split	F3=Exit
F9=Swap	F10=Actions	F12=Cancel
F4=CRetriev	F7=Backward	F8=Forward

Figure 4. DLI Mode Settings panel

Dynamic Backout

Select this option if you want:

- IMS to perform a dynamic backout when an IMS pseudo-abend occurs in an FM/IMS function running in DLI mode
- to use the UNDO or CANCEL command when editing a database in DLI mode

This option will only take affect if you are running the FM/IMS function with an IMS log data set.

Your FM/IMS Administrator might have specified that you cannot update this value.

IRLM Select this option if you want FM/IMS functions to use an Internal Resource Lock Manager (IRLM) when running in DLI mode. If you select this option, you must specify the name of the IRLM in the IRLM Name field.

Your FM/IMS Administrator might have specified that you cannot update this value.

DLI Mode Settings panel

RSR Select this option if your IMS subsystems are part of an RSR complex. If you select this option, you must specify the global service group name that is to be used in the GSG Name field.

Your FM/IMS Administrator might have specified that you cannot update this value.

DBRC

- 1 Use DBRC.
- 2 Do not use DBRC. DBRC will not be used unless DBRC=FORCE was specified on the IMSCTRL macro statement during IMS system definition.
- 3 Use DBRC if DBRC=YES or DBRC=FORCE was specified on the IMSCTRL macro statement during IMS system definition. Otherwise, don't use DBRC.

Your FM/IMS Administrator might have specified that you cannot update this value.

PSB Processing Options

Specify whether the IMS will process data for Browse and Extract operations, in "Read" or "Read without integrity" modes.

- 1 The dynamic PSB generated for browse operations has an option of PROCOPT=G (Read).

Read access is the preferred option when:

- There is no data sharing or
- Data sharing is at the database level but no IMS system has update authority or
- Data sharing is at the block level.

- 2 The dynamic PSB generated for browse operations has an option of PROCOPT=GO (Read without integrity).

There are some IMS data sharing situations that require this setting, however, be aware that when PROCOPT=GO, it is possible to get an internally inconsistent segment (with different parts of the segment updated by two different units of work).

IRLM Name (Used only if IRLM is selected)

The one-to four-character alphanumeric name assigned to the Internal Resource Lock Manager (IRLM) included in your system.

GSG Name (Used only if RSR is selected)

Specifies the Global Service Group (GSG) name to be used.

TMI Name (Used only if RSR is selected)

Specifies the one- to four-character Transport Manager Instance (TMI) name that is used to identify a particular transport manager subsystem in the RSR complex.

No of IMS Buffers

The number of buffers (in 1K block lengths) to be used in calculating the size of the OSAM subpools. This only applies in DLI mode, and is only used if no DFSVSAMP options have been specified.

LOCKMAX

Indicates the maximum number of locks an FM/IMS session can get at one time. Specify a value between 0 and 32767 (in units of 1000). For example,

a LOCKMAX value of 5 permits 5000 locks at one time. The LOCKMAX parameter overrides the PSBGEN LOCKMAX value if one was specified.

A LOCKMAX value of 0 turns off all locking limitations for this FM/IMS session.

DLI Mode Data Sets panel

This panel displays and sets data set default names. FM/IMS uses the parameters specified on this panel when editing, browsing, extracting and loading databases in DLI mode.

Panel and field definitions

<u>P</u> rocess	<u>O</u> ptions	<u>H</u> elp
FM/IMS	DLI Mode Data Sets	
DFSVSAMP:		
Data set name . . .	'IMSV810.IF32.PROCLIB'	
Member	DFSVMDC	
RESLIB:		
Data set name #1	'IMSV810.IF32.SDFSRESL'	
Data set name #2	'IMSV810.IF32.USERLIB'	
Data set name #3		
IMS Macros:		
Data set name . . .	'IMSV610.IF12.MACLIB'	
RECON:		
Primary data set		
Secondary		
Spare		
Command ==>>		
F1=Help	F2=Split	F3=Exit
F9=Swap	F10=Actions	F12=Cancel
F4=CRetrieval	F7=Backward	F8=Forward

Figure 5. DLI Mode Data Sets panel

DFSVSAMP

Data set name

The sequential data set or partitioned data set containing the DFSVSAMP parameters.

These parameters determine the IMS buffers that are allocated when calling IMS. Refer to your IMS Installation Volume 2: System Definition & Tailoring manual.

Member

The name of the member that contains the DFSVSAMP parameters.

RESLIB

DLI Mode Data Sets panel

Data set name #1

The name of the IMS SVC Library that contains the IMS nucleus and required action modules.

Data set name #2

The name of any additional user defined libraries that are required.

Data set name #3

The name of any additional user defined libraries that are required.

IMS Macros Enter the name of the IMS Macro data set that will be used to generate a dynamic PSB in DLI mode.

RECON

Primary Data set

The name of the primary DBRC RECON data set. When the RECON specifications are filled in, FM/IMS allocates these data sets when editing, browsing, extracting and loading databases in DL/I mode.

If you leave these specifications blank and DBRC is active in your FM/IMS DLI region, IMS allocates the data sets specified in the RECON dynamic allocation modules in the RESLIB.

If you leave these specifications blank, which means there are no RECON dynamic allocation modules in the RESLIB, and FM/IMS determines RECON data sets are required, then FM/IMS issues an error message.

Secondary

The name of the secondary DBRC RECON data set.

Spare The name of the spare DBRC RECON data set.

BMP Mode Settings panel

This panel is used to set processing options that are specific to working in BMP mode.

Panel and field definitions

<u>P</u> rocess	<u>O</u> ptions	<u>H</u> elp			
FM/IMS		BMP Mode Settings			
Override Fast Path:					
NBA	<u>10</u>			
OBA	<u>6</u>			
Command ==>					
F1=Help	F2=Split	F3=Exit	F4=CRetriev	F7=Backward	F8=Forward
F9=Swap	F10=Actions	F12=Cancel			

Figure 6. BMP Mode Settings panel

Override FastPath NBA

The Normal Buffer Allocation for BMP regions associated with this FM/IMS session. If blank, the default value is used.

Override FastPath OBA

The Overflow Buffer Allocation for BMP regions associated with this FM/IMS session. If blank, the default value is used.

Changes to the Functions

There have been comprehensive editing changes made to the Functions chapter of the User Guide, in addition to the updates required to support the technical changes. This section shows the entire new text of the chapter, with the technical changes marked by a vertical bar on the left.

Functions

This reference section contains information about FM/IMS functions that you can use in batch jobs.

FM/IMS provides four functions that you can use in batch jobs. These are:

IEB (IMS Edit Batch)	Runs a REXX procedure that can edit segments in an IMS database. In addition to using any other valid REXX in this procedure, IEB defines several new REXX functions that you can use to delete, retrieve, insert, print or update segments, or to create a view.
IPR (IMS Print)	Prints either all the segments in an IMS database, or only those segments selected by the view you specify. You can choose to print the segments in CHAR, HEX, SNGL or TABL format (similar to the display formats in the FM/IMS editor under ISPF).
IXB (IMS Extract)	The online IMS Extract utility generates JCL that runs the IXB function. This function extracts all segments or selected segments from an IMS database, and saves them to a sequential data set. You can modify this JCL and edit the IXB parameters before submitting the job, or you can create your own batch job to run the IXB function.
ILB (IMS Load)	The online IMS Load utility generates JCL that runs the ILB function. This function loads previously extracted data from a sequential data set into all segments or selected segments of an IMS database. You can modify this JCL and edit the ILB parameters before submitting the job, or you can create your own batch job to run the ILB function.

How to use this reference chapter

This chapter lists FM/IMS functions in alphabetical order.

The following subsections are supplied, where relevant, for each function:

Purpose

A short summary of what you can do with the function.

Function reference: How to use this chapter

Usage notes

A more detailed explanation of the function.

Options

A more detailed explanation of the function.

Return Codes

Lists the return codes that are specific to the function.

Related functions

Other functions that are related in some way.

Syntax

A syntax diagram, followed by a parameter list. The parameter list describes the parameter, and shows (where appropriate) its maximum value and default value.

If you specify parameters that are not relevant to the function, FM/IMS ignores them. If you specify the same parameter more than once, FM/IMS uses the first value that you specify.

Batch example

A listing of a sample batch job.

How to read the syntax diagrams

FM/IMS function syntax is described using the structure defined below.

- Read the syntax diagrams from left to right, from top to bottom, following the path of the line.

The ► symbol indicates the beginning of a statement.

The → symbol indicates that a statement is continued on the next line.

The ► symbol indicates that a statement is continued from the previous line.

The →◄ symbol indicates the end of a statement.

- Required items appear on the horizontal line (the main path).

►►—STATEMENT—*required_item*—→◄

- Optional items appear below the main path.

►►—STATEMENT—→◄
└—*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.

►►—STATEMENT—└—*required_choice1*
└—*required_choice2*—┘—→◄

If choosing one of the items is optional, the entire stack appears below the main path.

►►—STATEMENT—→◄
└—*optional_choice1*
└—*optional_choice2*—┘

Function reference: How to read the syntax diagrams

- An arrow returning to the left above the main line indicates an item that can be repeated.



- Keywords (for example, SEGMENT) are in uppercase letters. They must be spelled exactly as shown.
- Variables (for example, *segname*) are in lowercase letters. They represent user-supplied names or values.
- For the batch functions:
 - Each control statement must begin with \$\$FILEM in columns 1 to 7, followed by a blank in column 8, followed by the function name, followed by the first keyword and parameter (if any).
 - An equal sign (=) is placed between each keyword and its value.
 - Each keyword or value pair, except the last one, must be followed immediately by a comma.
 - To continue a command onto the next line, you do not need a continuation character; simply end the first line with a comma and begin the next line with \$\$FILEM and a blank.
 - Comment statements, which begin with an asterisk (*), are also allowed.

Notes:

1. If you specify parameters that are not relevant to the function, then FM/IMS ignores them.
2. If you specify the same parameter more than once, then FM/IMS uses the first value that you specify.

IEB (IMS Edit Batch)

Purpose

Runs a REXX procedure that, in addition to containing any other valid REXX, can contain the following functions which are all described in separate sections later in this chapter.

DELIMS	Delete an IMS segment
GETIMS	Retrieve an IMS segment
ISRTIMS	Insert an IMS segment
PRINT	Print an IMS segment
REPLIMS	Update an IMS segment
VIEWIMS	Create a view for later use, or load an existing view (that you can then use with the GETIMS function to retrieve a segment).

Usage notes

The REXX functions are available only in REXX procedures that you use with IEB.

Some of these functions pass values to, or read from, the following REXX variables:

INREC, OUTREC

The GETIMS function retrieves a segment, and passes the contents of the segment to both INREC and OUTREC. Use INREC as a reference variable only, and do not update it. You can update OUTREC, and use it as the contents of a new segment that you insert with the ISRTIMS function, or you can use it with the REPLIMS function to replace the contents of an existing segment.

FMSTATUS

Contains the DL/I status code from the previous DELIMS, GETIMS, ISRTIMS or REPLIMS function call. For a description of DL/I status code values, see *IMS Messages and Codes*.

FMCONKEY, FMSEGNM

Contains the concatenated key (FMCONKEY) or name (FMSEGNM) of the segment deleted, retrieved, inserted or replaced by the previous DELIMS, GETIMS, ISRTIMS or REPLIMS function call.

FMNDBDNM

Contains the DBD name. (However, this variable is null until you call a DELIMS, GETIMS, ISRTIMS or REPLIMS function.)

When using the Rexx function EXECIO, ensure that you code the command "ADDRESS MVS" before the EXECIO, otherwise you will get an RC-3 executing the REXX.

These REXX variable names must be specified in all uppercase.

For all IEB functions:

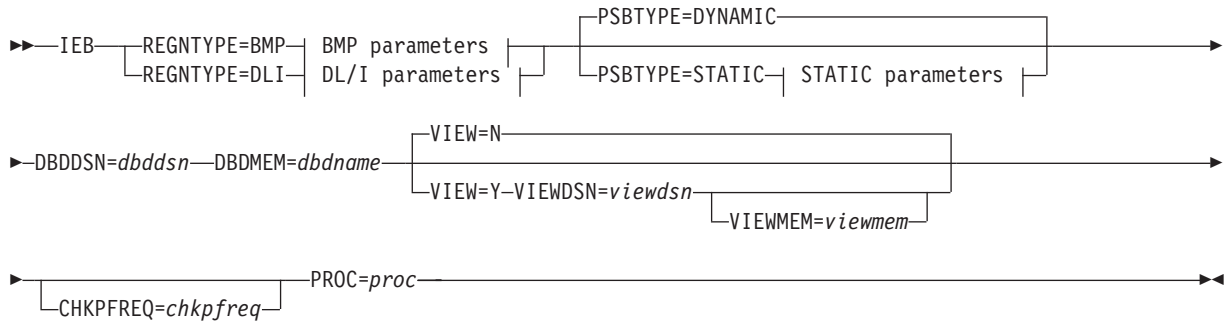
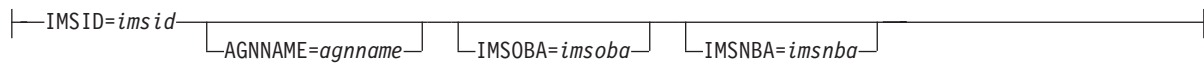
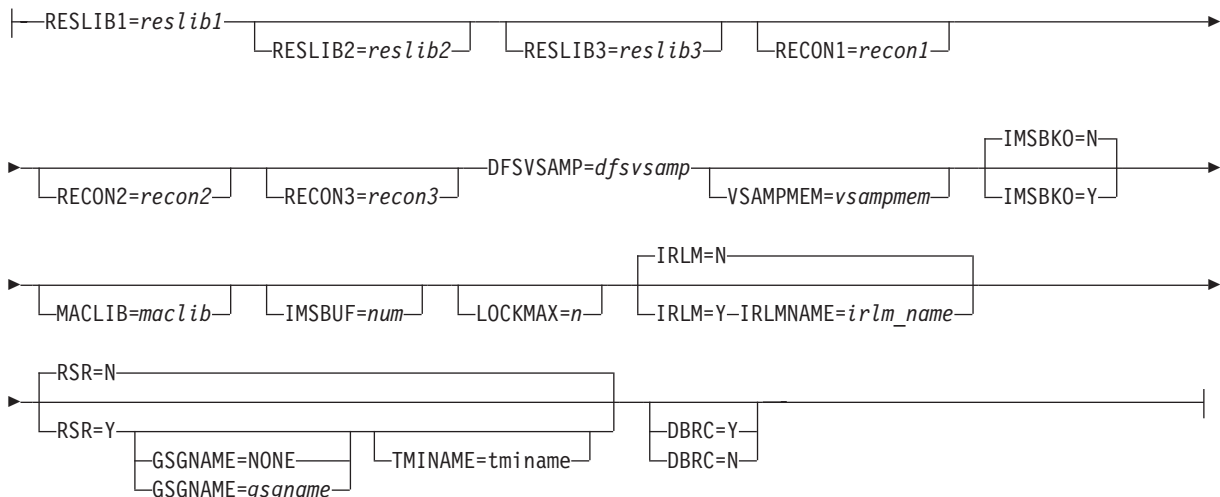
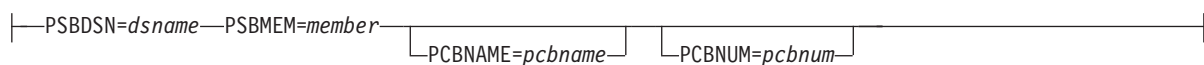
The string of keywords and keyword values for each IEB function statement **MUST** be enclosed in single quotes. For statements requiring more than one line, each line must be enclosed in single quotes with the end quote followed by a comma to indicate the continuation to the next line.

For IEB functions DELIMS, GETIMS, IRSTIMS and REPLIMS :

Where a field_value variable is specified for a #field_name or #field_ref keyword, the field_value variable may be enclosed in single or double quotes or may be specified without quotes.

For IEB function VIEWIMS:

Field *selection_criteria* are specified as REXX expressions. The *selection_criteria* expression should **NOT** be enclosed within single or double quotes.

Syntax**BMP parameters:****DL/I parameters:****STATIC parameters:****REGNTYPE**

Required keyword. Specifies the Region Type of your database connection.

BMP Sets the database connection within the online IMS subsystem. If this is specified, you must also complete the required BMP parameters.

DLI Sets the database connection within your TSO address space. If this is specified, you must also complete the required DLI parameters.

PSBTYPE

Optional keyword. Specifies the type of PSB to use to connect to your database. If unspecified, the default is Dynamic.

DYNAMIC

Generates a dynamic PSB when the function is run, that provides complete access to all segments listed in the DBD.

Static Specifies that you are using a pre-defined static PSB to control access to the segments in your IMS database. Details of which PSB to use must be specified in the STATIC parameters.

DBDDSN=*dbdsn*

Required keyword. The name of the load library data set that contains the DBD you want to use.

DBDMEM=*dbdname*

Required keyword. The name of the load library data set member that defines your DBD.

VIEW Optional keyword. Determines whether or not a view is to be applied to the database.

N Default value. No view is used. If the VIEWDSN or VIEWMEM keywords are specified, they are ignored.

Y A view is used. The VIEWDSN keyword must also be specified.

VIEWDSN=*viewdsn*

One of:

- The name of the sequential data set containing the view.
- The name of the PDS containing the view. (You must specify the member name in the VIEWMEM parameter.)

VIEWMEM=*viewmem*

The member name of the view.

CHKFREQ=*chkpfreq*

Optional keyword. The number of database updates between checkpoints. If you do not specify this parameter, then IEB uses the IMS installation default setting.

PROC=*proc*

Required keyword. Is one of:

- The name of a PDS member containing the REXX procedure that you want to use.

In the JCL preceding the call to IEB, you must define an FMNEXEC ddname that identifies the PDS containing this member.

- An asterisk (*), indicating that the REXX procedure is inline.

The procedure is read from SYSIN immediately after the control statement for the IEB function. The inline procedure is terminated by a record containing a slash and a plus sign (/+) in columns 1-2.

BMP parameters

IMSID=*imsid* Required keyword. The four-character IMS subsystem identifier.

AGNNAME=*agnname*

Optional keyword. The application group name (AGN) to use when calling IMS.

IMSNBA=imsnba

Optional keyword. Normal buffer allocation. If you do not specify this parameter, then IEB uses the IMS installation default setting.

IMSOBA=imsoba

Optional keyword. Overflow buffer allocation. If you do not specify this parameter, then IEB uses the IMS installation default setting.

DL/I parameters**RESLIB1=reslib1**

Required keyword. Specifies the name of the IMS SVC library that contains the IMS nucleus and required action modules.

RESLIB2=reslib2/RESLIB3=reslib3

Optional keywords. Specifies the names of any additional libraries that are required to run IMS in DL/I mode. These libraries contain dynamic allocation and randomizer modules.

RECON1=recon1/RECON2=recon2/RECON3=recon3

Optional keywords. Specifies the IMS RECON libraries used by FM/IMS. If the RECONS are not included, the IMS dynamically allocated data sets are used.

DFSVAMP=dfsvsamp

Required keyword. Specifies the source data set that contains the parameter settings that determine what IMS buffers are allocated when calling IMS. Is one of:

- The name of the sequential data set containing the DFSVSAMP parameters.
- The name of the PDS or PDSE containing the member that contains the DFSVSAMP parameters. If a PDS or PDSE is specified, you must specify the member name in *vsampmem*.)

VSAMPMEM=vsampmem

Required keyword when DFSVAMP=*dfsvsamp* specifies a PDS or PDSE. The name of the PDS or PDSE member that contains the DFSVSAMP parameters.

IMSBKO

Optional keyword. Specifies whether or not dynamic backout is to be performed.

N The default value. Dynamic backout is not performed.

Y Dynamic backout is performed.

MACLIB=maclib

Optional keyword. Specifies the name of the IMS MACRO library that is used in DLI mode to generate a Dynamic PSB. If not specified, FM/IMS uses the IMS MACLIB DSN specified at installation time, via the FM/IMS MACRO, FMN1POPD.

This parameter is only applicable when the PSBTYPE=DYNAMIC.

- IMSBUF=*num*** Optional keyword. Specifies the number of IMS buffers to be used in DLI mode.
- LOCKMAX** Indicates the maximum number of locks an FM/IMS session can get at one time. Specify a value between 0 and 32767 (in units of 1000). For example, a LOCKMAX value of 5 permits 5000 locks at one time. The LOCKMAX parameter overrides the PSBGEN LOCKMAX value if one was specified.
- A LOCKMAX value of 0 turns off all locking limitations for this FM/IMS session.
- IRLM** Optional keyword. Specifies whether or not IRLM is to be used during this execution. If you do not specify this parameter, then IEB uses the IMS installation default setting.
- Your FM/IMS Administrator might have specified that you cannot override this value.
- N** IRLM is not used.
- Y** IRLM is used. If you specify Y, then you must also specify the IRLMNAME parameter.
- IRLMNAME=*irlm_name*** Required when IRLM=Y has been specified. The one- to four-character alphanumeric name assigned to the IRLM of your system.
- RSR** Optional keyword. Specifies whether your system is part of an IMS RSR complex.
- Your FM/IMS Administrator might have specified that you cannot override this value.
- N** Default value. Your system is not part of an IMS RSR complex.
- Y** Your system is part of an IMS RSR complex. If specified, you can also specify the GSGNAME and TMINAME keywords.
- GSGNAME** Optional keyword, but can only be specified if RSR=Y. Specifies the Global Services Group Name to be used as a part of the RSR complex. If not specified, the GSGNAME provided in the IMSCTRL macro is used.
- Your FM/IMS Administrator might have specified that you cannot override this value.
- NONE** If NONE is specified, no GSG is used and any activity performed is not tracked by RSR.
- gsgname* The name of the GSG to be used. If specified, this overrides the GSGNAME provided in the IMSCTRL macro and DBRC=Y is required.
- TMINAME=*tminame*** Optional keyword but can only be specified if RSR=Y. Specifies the one- to four-character Transport Manager

Instance (TMI) name that is used to identify a particular transport manager subsystem in the RSR complex. If specified, TMINAME overrides the TMINAME= parameter in the IMSCTRL macro. If not specified, IMS will use a series of blanks as the default name, and associates IMS with the TMS that uses a default instance name.

Your FM/IMS Administrator might have specified that you cannot override this value.

DBRC

Optional keyword. Specifies whether DBRC is to be active. If you do not specify this parameter, then IEB uses the IMS installation default setting.

This parameter is only applicable when the PSBTYPE=DYNAMIC. Your FM/IMS Administrator might have specified that you cannot override this value.

Y DBRC is active. If GSGNAME=*gsgname* is specified, DBRC=Y is required.

N DBRC is not active.

STATIC parameters

When PSBTYPE=STATIC has been specified, these parameters specify the details of the PSB.

PSBDSN=*dsname*

Required when PSBTYPE=STATIC has been specified. The name of the PDS(E) data set in which your PSB's have been stored.

PSBMEM=*member*

Required when PSBTYPE=STATIC has been specified. The name of the data set member in which your PSB has been defined.

PCBNAME=*pcbname*

Optional keyword. Specifies the PCB name from the PSB that corresponds to the database being maintained.

PCBNUM=*pcbnum*

Optional keyword. Specifies the relative PCB number (not including the I/O PCB) from the PSB that corresponds to the database being maintained.

IEB example - BMP Mode

```
//FMNIEB JOB 'Print every segment'
//FMNBAT EXEC PGM=FMN1IMSB
//STEPLIB DD DSN=FMN.SFMNMOD1,DISP=SHR
//SYSPRINT DD SYSOUT=*
//FMIMSIN DD *
$$FILEM IEB REGNTYPE=BMP,
$$FILEM PSBTYPE=DYNAMIC,
$$FILEM DBDDSN=FMN.IMS.IVP.FMN.DBDLIB,
$$FILEM DBDMEM=DJ2E,
$$FILEM IMSID=IF32,
$$FILEM IMSOBA=6,
$$FILEM IMSNBA=10,
$$FILEM PROC=*
  filerc = VIEWIMS('TPLDSN=FMN.IMS.IVP.TEMPLATE')
  filerc = GETIMS('NEXT')
do while filerc = 0
```

IEB (IMS Edit Batch)

```
PRINT(INREC)
  filerc = GETIMS('NEXT')
end
/+
```

IEB example - DLI Mode

```
//FMNIEB JOB 'Print every segment'
//FMNBAT EXEC PGM=FMN1IMSB
//STEPLIB DD DSN=FMN.SFMNMOD1,DISP=SHR
//SYSPRINT DD SYSOUT=*
//FMIMSIN DD *
$$FILEM IEB REGNTYPE=DLI,
$$FILEM PSBTYPE=DYNAMIC,
$$FILEM DBDDSN=FMN.IMS.IVP.FMN.DBDLIB,
$$FILEM DBDMEM=DJ2E,
$$FILEM RESLIB1='IMS.IMK2.V610.RESLIB',
$$FILEM RESLIB2='IMS.IMK2.V610.USERLIB',
$$FILEM DBRC=N,
$$FILEM CHKPFREQ=00100,
$$FILEM DFSVSAMP=IMS.IMK2.V610.PROCLIB,
$$FILEM VSMPMEM=DFSVM01,
$$FILEM PROC=*
  filerc = VIEWIMS('TPLDSN=FMN.IMS.IVP.TEMPLATE')
  filerc = GETIMS('NEXT')
do while filerc = 0
  PRINT(INREC)
  filerc = GETIMS('NEXT')
end
/+
/* -----
/* -- IMS DLI DATA SETS REQUIRED FOR THE IEB -
/* -----
//DJ2E DD DSN=FMN.IMS.IVP.DB.DJ2E,DISP=SHR
//DJ2F DD DSN=FMN.IMS.IVP.DB.DJ2F,DISP=SHR
//DJ3E DD DSN=FMN.IMS.IVP.DB.DJ3E,DISP=SHR
//DJ3F DD DSN=FMN.IMS.IVP.DB.DJ3F,DISP=SHR
//DJ1E DD DSN=FMN.IMS.IVP.DB.DJ1E,DISP=SHR
//DJ1F DD DSN=FMN.IMS.IVP.DB.DJ1F,DISP=SHR
/*
```

The REXX functions defined by IEB are described in the following sections.

For general information about programming in REXX, see the *TSO/E REXX Reference* and the *TSO/E REXX User's Guide*.

General tips for using the REXX functions defined by IEB

Rather than repeating this information under each function description, here are some general tips:

What is the "current" segment?

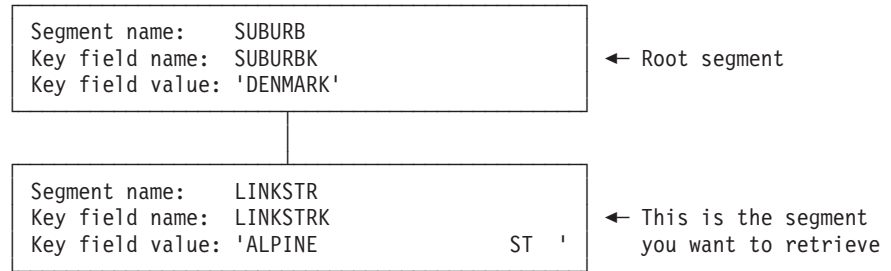
Several of the function descriptions refer to the "current" segment. This is the segment most recently retrieved, inserted or replaced by a GETIMS, ISRTIMS or REPLIMS function.

Locating a segment by specifying its key values

With the DELIMS, GETIMS, ISRTIMS and REPLIMS functions, you can use a WHERE clause to locate a segment according to its key values. On the WHERE clause, you can specify one of:

- A complete concatenated key as a single parameter, CKEY.
- The segment names and key fields for one or more levels in the hierarchical path of the segment you want, as separate parameters.

For example, given the following segment hierarchy:



then you would specify:

```
GETIMS('SEGMENT=LINKSTR ',
      'WHERE SEGMENT=SUBURB #SUBURBK=DENMARK ',
      'SEGMENT=LINKSTR #LINKSTRK=ALPINE ST')
```

You do not have to specify all the segments in the hierarchical path. If, for example, there is only one LINKSTR segment with the key 'ALPINE ST ' in the entire database, you can simply specify:

```
GETIMS('SEGMENT=LINKSTR',
      'WHERE SEGMENT=LINKSTR #LINKSTRK=ALPINE ST')
```

Or, if 'ALPINE ST ' is the first or only LINKSTR segment under the SUBURB segment with a key of DENMARK, you can simply specify:

```
GETIMS('SEGMENT=LINKSTR',
      'WHERE SEGMENT=SUBURB #SUBURBK=DENMARK')
```

You can specify the fields using either the field names (as in the previous examples) or their reference numbers (such as #1, #2). Field values can be placed directly after the equals (=) sign or inside quotes after the = sign. Quotes are required if the field value contains leading or trailing spaces which would otherwise be ignored. In this way:

```
GETIMS('SEGMENT=LINKSTR',
      'WHERE SEGMENT=LINKSTR #LINKSTRK=ALPINE ST')
```

and

```
GETIMS('SEGMENT=LINKSTR',
      'WHERE SEGMENT=LINKSTR #LINKSTRK= ALPINE ST ')
```

are evaluated as identical, but

```
GETIMS('SEGMENT=LINKSTR',
      'WHERE SEGMENT=LINKSTR #LINKSTRK=" ALPINE ST "')
```

is evaluated differently.

To list these reference numbers, you can use either the FM/IMS ISPF panels to browse the template for this DBD, or the VIEWIMS DESCRIBE REXX function with IEB.

You can mix field names and reference numbers in the same WHERE clause.

Before you can use this type of WHERE clause, you must call the VIEWIMS function, and load a template or view that matches the DBD you are using. This enables the WHERE clause to match the field names or reference numbers with the appropriate fields in the IMS segments.

Locating a segment with non-unique keys or no keys

If more than one segment in the database matches the key values that you specify on the WHERE clause, then the function uses the first matching segment.

To use one of the later matching segments instead, you need to make that segment the current segment. First, use GETIMS with a WHERE clause to move to the first matching segment. Then use GETIMS('NEXT'), examine

the segment contents in the INREC variable, and repeat until the current segment is the one you want. Finally, use DELIMS, ISRTIMS or REPLIMS without a WHERE clause to act on that current segment.

To locate a segment that contains no key fields (this means that you cannot locate it using the WHERE clause), use GETIMS('NEXT'), as previously explained.

Alternatively, you can use the VIEWIMS function to load a view that selects only the segments you want, followed by GETIMS('NEXT USING_VIEW') to move through those segments.

Referring to a previous current segment

The FMCONKEY REXX variable contains the concatenated key of the segment deleted, retrieved, inserted or replaced by the previous DELIMS, GETIMS, ISRTIMS or REPLIMS function call. Similarly, the FMSEGNM REXX variable contains the name of that segment.

If you need to use the FMCONKEY and FMSEGNM values later, you can save them in your own defined variables. These user defined variables can then be used with the SEGMENT and CKEY parameters.

Use of the filerc variable

A variable called 'filerc' is used in several examples. This method is used to get hold of the REXX return code which can be used for testing. You can call the variable any valid REXX name. You can use different names for different statements or you do not need to use a variable at all if you are not going to use the return code.

This variable does not hold the DL/I status code. FMSTATUS is designed for this purpose.

DELIMS (Delete an IMS segment)

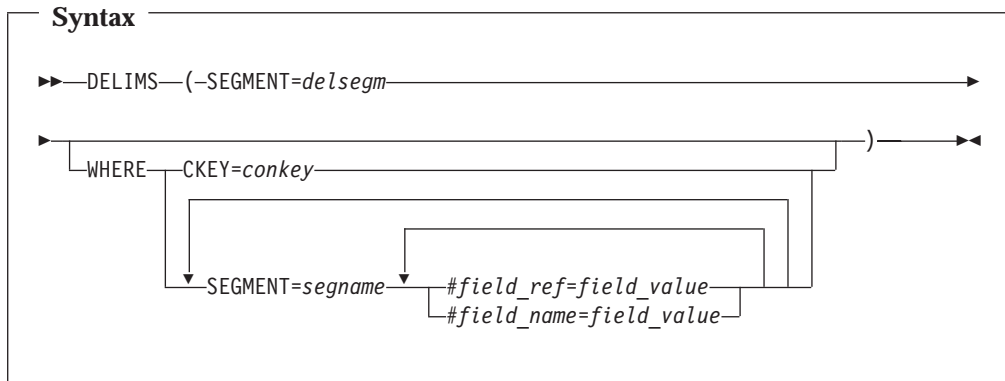
Purpose

To delete an IMS segment

Usage notes

The DELIMS inbuilt FM/IMS REXX function can be used to:

- delete the current segment.
- delete a particular segment by specifying a where clause.



delsegm

The name of the segment you want to delete.

conkey

The concatenated key of the segment you want to delete.

If you specify the concatenated key of a segment that you have already deleted, then DELIMS produces a nonzero return code, and does not delete any segment.

segname

The name of a segment in the hierarchical path of the segment that you want to delete.

field_ref

The reference number of a key field in the *segname* segment, as specified in the template or view.

field_name

The name of a key field in the *segname* segment, as specified in the template or view.

field_value

The value of the key field specified by *field_ref* or *field_name*.

If FM/IMS encounters an unavailable HALDB partition or DEDB area the DELIMS function will receive a return code of 8 and the ISPF variable FMSTATUS will indicate an IMS status code of:

FH for an unavailable DEDB area.

BA an unavailable HALDB partition.

Returns zero if successful, otherwise nonzero. If DELIMS is unsuccessful, then you can check the DL/I status code in the FMSTATUS REXX variable to determine the cause of failure.

To delete the current segment, omit the WHERE clause. Otherwise, use the WHERE clause to identify the segment you want to delete.

IEB example using DELIMS

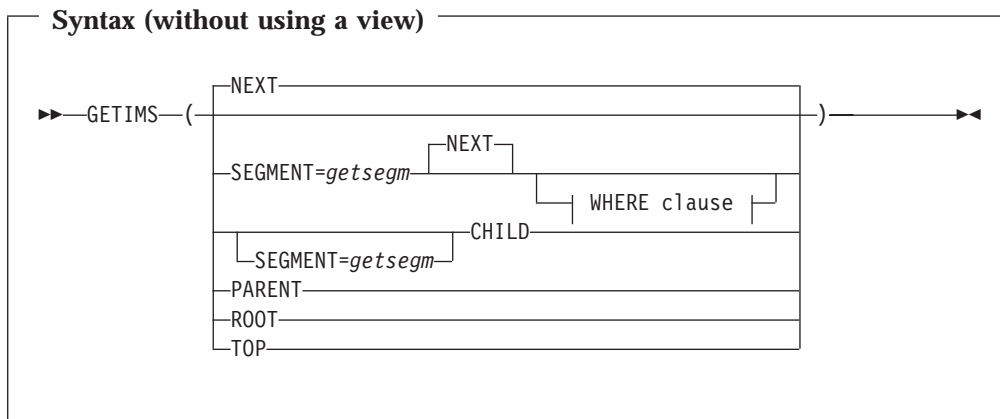
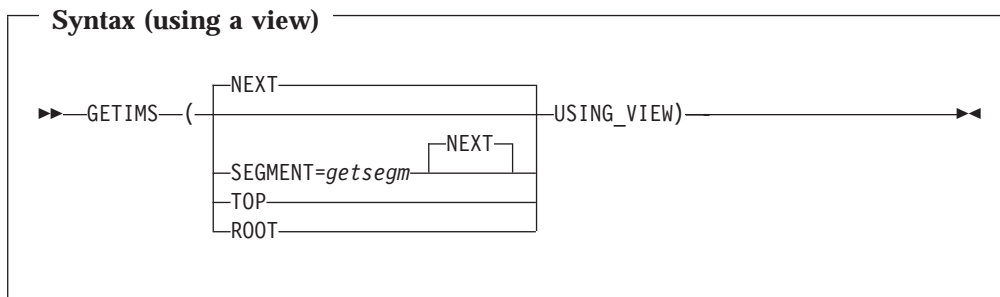
```

:
:
$$FILEM IEB
:
:
$$FILEM PROC=*
filerc = VIEWIMS('TPLDSN=FMN.IMS.IVP.TEMPLATE')
/* Delete Segment at the current position */
filerc = GETIMS('NEXT SEGMENT=NSTREET')
filerc = DELIMS('SEGMENT=NSTREET')
/* Delete Segment using a where Clause */
filerc = DELIMS('SEGMENT=NSTREET ',
                ' WHERE SEGMENT=SUBURB #SUBURB-NAME=CITY BEACH',
                'SEGMENT=NSTREET #2=FLOREAT BEACH ')

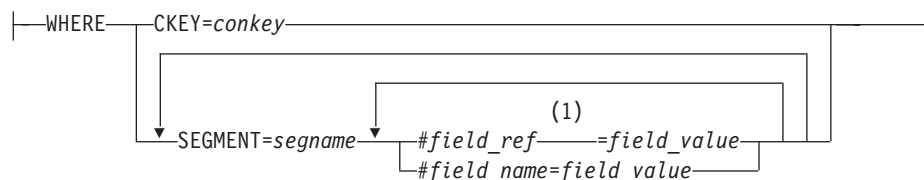
```

/+
⋮

GETIMS (Retrieve an IMS segment)



WHERE clause:



Notes:

- 1 To use field reference numbers, you must have already loaded a view, by preceding this function call with a call to VIEWIMS.

getsegm

The name of the segment you want to retrieve. If you also specify CHILD, then GETIMS retrieves the next hierarchically dependent segment with this name. Otherwise, the default value is NEXT, and GETIMS retrieves the next segment with this name, regardless of hierarchy.

CHILD

Retrieves the next segment in the hierarchical path of the current segment. If you also specify SEGMENT=*getsegm*, then GETIMS retrieves the next segment of that name in the hierarchical path of the current segment.

NEXT Retrieves the next segment in the database after the current segment.

ROOT

Retrieves the root segment in the hierarchical path of the current segment. If you use specify ROOT with USING_VIEW, and the root segment is not selected by the view, then ROOT retrieves the first selected segment after that root segment.

PARENT

Retrieves the parent segment of the current segment.

If the current segment is a root segment, then GETIMS retrieves that same segment. To avoid looping in this situation, you can use the FMSEGNM REXX variable to check the name of the current segment.

TOP Without USING_VIEW, TOP retrieves the first root segment in the database.

With USING_VIEW, TOP retrieves the first segment in the database that is selected by the view; this is not necessarily a root segment.

conkey

The concatenated key of the segment you want to retrieve.

segname

The name of a segment in the hierarchical path of the segment that you want to retrieve.

field_ref

The reference number of a key field in the *segname* segment, as specified in the template or view.

If you want to specify the WHERE clause with field reference numbers, then before you call GETIMS, you must call the VIEWIMS function to load a view that matches the DBD you are using. In this case, GETIMS uses the view only to match the field reference numbers with the appropriate fields; it does not use the view selection criteria (in contrast with USING_VIEW).

field_name

The name of a key field in the *segname* segment, as specified in the template or view.

field_value

The value of the key field specified by *field_ref* or *field_name*.

USING_VIEW

Restricts GETIMS to retrieving segments that are selected by the view, which you must have already loaded by calling the VIEWIMS function before this call to GETIMS.

Returns zero if successful, otherwise nonzero. A return code of 4 indicates that a segment was not found for one of the following reasons:

- The segment specified by the WHERE clause does not exist.
- GETIMS('NEXT') reached the end of the database.
- GETIMS('CHILD') reached the end of the hierarchical path (current segment has no children).

If FM/IMS encounters an unavailable HALDB partition or DEDB area the GETIMS function will receive a return code of 8 and the ISPF variable FMSTATUS will indicate an IMS status code of:

FH an unavailable DEDB area

IEB (IMS Edit Batch)

BA an unavailable HALDB partition

For nonzero return codes other than 4, check the DL/I status code in the FMSTATUS REXX variable to determine the cause of failure.

If successful, GETIMS passes the contents of the retrieved segment to the INREC and OUTREC REXX variables.

You can use GETIMS either with or without a view. If you use a view, then GETIMS only retrieves segments selected by the view. For example, GETIMS(NEXT USING_VIEW) retrieves the next segment selected by the view, skipping any intervening segments that are not selected by the view.

IEB example using GETIMS

```
⋮
$$FILEM IEB
⋮
$$FILEM PROC=*
```

```
filerc = VIEWIMS('TPLDSN=FMN.IMS.IVP.TEMPLATE')
```

```
filerc = GETIMS('NEXT')
```

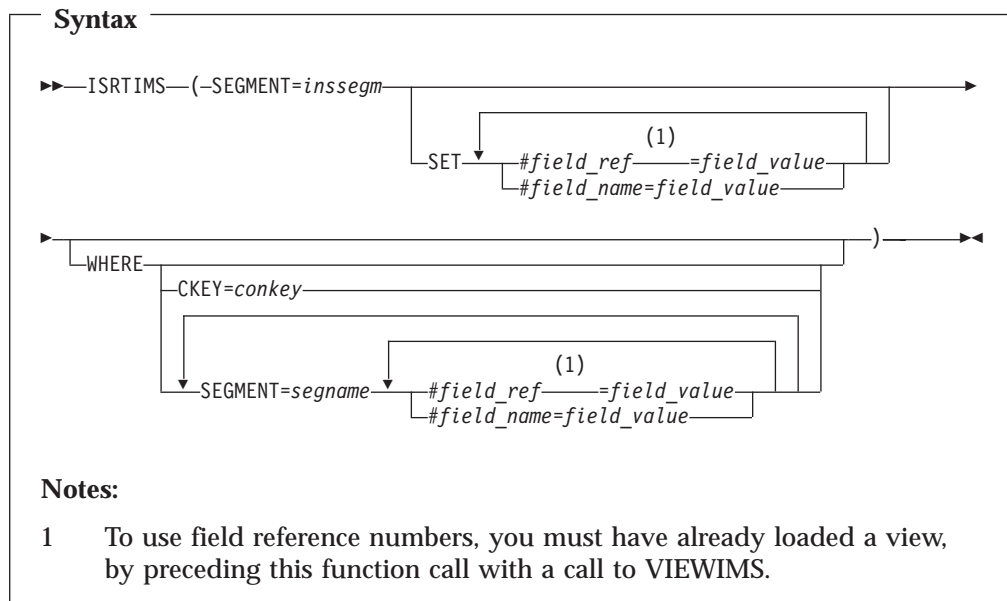
```
filerc = GETIMS()
```

```
filerc = GETIMS('SEGMENT=NSTREET ',
                ' WHERE SEGMENT=SUBURB #SUBURB-NAME=CITY BEACH ',
                'SEGMENT=NSTREET #2=FLOREAT BEACH ')
```

```
filerc = GETIMS('SEGMENT=NSTREET ',
                ' WHERE CKEY=CITY BEACH          FLOREAT BEACH ')
```

```
/+
⋮
```

ISRTIMS (Insert an IMS segment)



inssegm

The name of the segment you want to insert. This must be a child of the

segment that you specify in the WHERE clause, or, if you omit the WHERE clause, a child of the current segment.

conkey

The concatenated key of the parent of the segment you want to insert.

segname

The name of a segment in the hierarchical path of the parent of the segment that you want to insert.

field_ref

A field reference number.

field_name

A field name.

field_value

The value of the field specified by *field_ref* or *field_name*.

Returns zero if successful, otherwise nonzero.

If FM/IMS encounters an unavailable HALDB partition or DEDB area the ISRTIMS function will receive a return code of 8 and the ISPF variable FMSTATUS will indicate an IMS status code of:

FH an unavailable DEDB area

BA an unavailable HALDB partition

To insert a new child segment under the current segment, omit the WHERE clause. Otherwise, use the WHERE clause to identify the parent of the new child segment that you want to insert.

To use OUTREC as the contents of the new segment, omit the SET clause. If you are inserting a variable-length segment, then the first two bytes of OUTREC must specify the length of the segment.

Otherwise, use the SET clause to specify the field values for the new segment.

IEB example using ISRTIMS

```

:
:
$$FILEM IEB
:
:
$$FILEM      PROC=*

filerc = VIEWIMS('TPLDSN=FMN. IMS. IVP. TEMPLATE')

filerc = GETIMS('NEXT')
filerc = GETIMS('SEGMENT=SUBURB ',
                ' WHERE SEGMENT=SUBURB #SUBURB-NAME=CITY BEACH')

/* Insert using OUTREC */

OUTREC = "FLOREAT RESERVE"
filerc = ISRTIMS('SEGMENT=NSTREET')

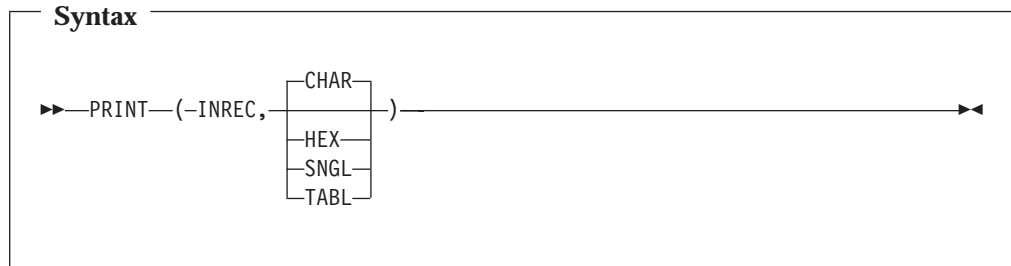
/* Insert using SET */

filerc = ISRTIMS('SEGMENT=NSTREET ',
                ' SET #2=FLOREAT RESERVE ',
                ' WHERE SEGMENT=SUBURB #SUBURB-NAME=CITY BEACH')
```

IEB (IMS Edit Batch)

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⋮

PRINT (Print an IMS segment)



Returns zero if successful, otherwise nonzero.

Prints the segment contents stored in the INREC variable, in one of the following formats:

- | | |
|-------------|---|
| CHAR | Prints the segment as it is stored on the IMS database. |
| HEX | Prints three lines of data. The first line shows the character representation of each byte. The second and third lines show the hexadecimal value of each byte. |
| SNGL | Prints the segment split into individual fields down the report. |
| TABL | Prints the segment split into individual fields across the report. |

The INREC variable contains the data of the current segment.

To print in SNGL or TABL format, you must have already loaded a view, by preceding this function call with a call to VIEWIMS.

IEB example using PRINT

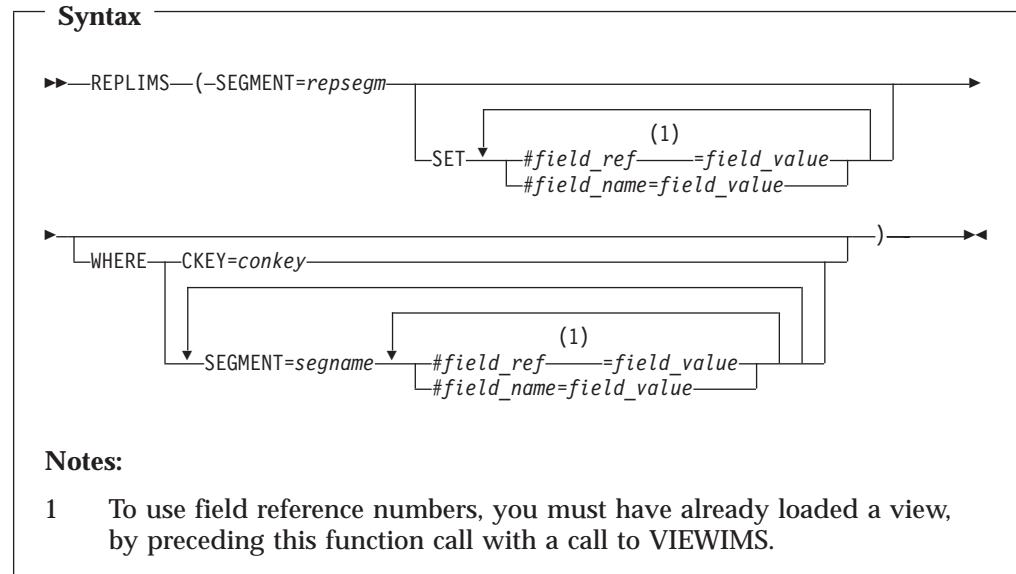
```
⋮  
$$FILEM IEB  
⋮  
$$FILEM PROC=*  
filerc = VIEWIMS('TPLDSN=FMN.IMS.IVP.TEMPLATE')  
  
filerc = GETIMS('SEGMENT=SUBURB ',  
              ' WHERE SEGMENT=SUBURB #SUBURB-NAME=CITY BEACH')  
PRINT(INREC,CHAR)  
PRINT(INREC,HEX)  
PRINT(INREC,SNGL)  
PRINT(INREC,TABL)
```

```

/+
:

```

REPLIMS (Update an IMS segment)



repsegm	The name of the segment you want to update.
conkey	The concatenated key of the segment you want to update.
segname	The name of a segment in the hierarchical path of the segment that you want to update.
field_ref	A field reference number.
field_name	A field name.
field_value	The value of the field specified by <i>field_ref</i> or <i>field_name</i> .

Returns zero if successful, otherwise nonzero.

If FM/IMS encounters an unavailable HALDB partition or DEDB area the REPLIMS function will receive a return code of 8 and the ISPF variable FMSTATUS will indicate an IMS status code of:

FH	an unavailable DEDB area
BA	an unavailable HALDB partition

To update the contents of the current segment, omit the WHERE clause. Otherwise, use the WHERE clause to identify the segment you want to update.

To replace the current contents of the segment with the contents of the OUTREC variable, omit the SET clause. If you are inserting a variable-length segment, then the first two bytes of OUTREC must specify the length of the segment.

Otherwise, use the SET clause to specify replacement field values for the segment.

When you use OUTREC, you replace the entire contents of the segment. When you use the SET clause, you can replace only the field values that you specify; other field values remain unchanged.

IEB (IMS Edit Batch)

IEB example using REPLIMS

```
⋮
$$FILEM IEB
⋮
$$FILEM PROC=*

filerc = VIEWIMS('TPLDSN=FMN.IMS.IVP.TEMPLATE')

filerc = GETIMS('SEGMENT=SUBURB ',
               ' WHERE SEGMENT=SUBURB #SUBURB-NAME=CITY BEACH')

/* Replace a segment using OUTREC */
/* or */
OUTREC = OVERLAY('6168',outrec,19)
filerc = REPLIMS('SEGMENT=NSTREET')
/* or */
/* Replace a segment using SET */

rtrc=REPLIMS('SEGMENT=SUBURB ',
            'SET #POST-CODE=6168',
            ' WHERE SEGMENT=SUBURB #SUBURB-NAME=CITY BEACH')

/⋮
⋮
```

VIEWIMS (Load or create a view)

Syntax (to load an existing view or template)

```
VIEWIMS (VIEWWDSN=viewdsn VIEWMBR=viewmem DESCRIBE)
```

Syntax (to create a new view from an existing template)

```
VIEWIMS (TPLDSN=tpldsn INCLUDE SEGMENT=inclsegm WHERE SEGMENT=segname-selection_criteria SAVE-DSN=viewdsn MBR=viewmem DESCRIBE)
```

If you specify the DESCRIBE parameter, then VIEWIMS prints a report showing the structure of the view or template for each segment in the database.

viewdsn

One of:

- The name of the sequential data set containing the view.

- The name of the PDS containing the view. (You then specify the member name in *viewmem*.)

viewmem

The member name of the view.

tpldsn The name of the data set containing the template that is used as a basis to create a view. The template for the DBD must have already been created on-line in FM/IMS.

inclsegm

The name of a segment to be included in the view.

If you call the GETIMS function with the USING_VIEW parameter, then only the included in the view is retrieved.

However, if you omit the INCLUDE clause entirely, then all segments are included in the view.

segname

The name of a segment for which you want to specify field selection criteria.

selection_criteria

Field selection criteria for the *segname* segment. Determines which segment occurrences are retrieved by calls to the GETIMS function with the USING_VIEW parameter.

IEB example using VIEWIMS

```

:
:
$$FILEM IEB
:
:
$$FILEM      PROC=*
  rtrc=VIEWIMS('TPLDSN=FMN.IMS.IVP.TEMPLATE ',
              'SAVE   DSN=FMN.IMS.IVP.VIEW MBR=ZZ999 ',
              'INCLUDE SEGMENT=SUBURB ',
              '        SEGMENT=LINKSTR ',
              'WHERE   SEGMENT=SUBURB substr(#2,1,1)=F ',
              '        SEGMENT=LINKSTR #4=ST ',
              'DESCRIBE')
:
/+
:

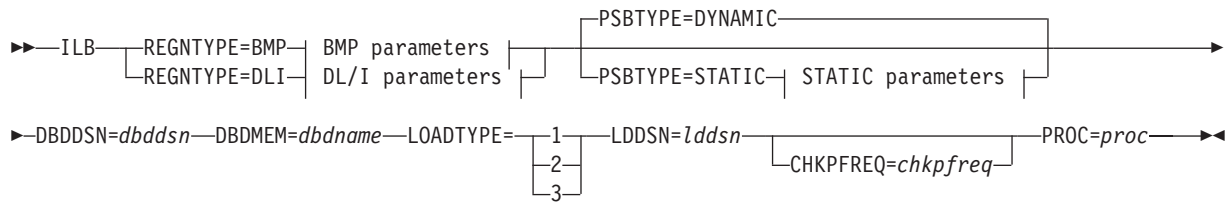
```

ILB (IMS Load)**Purpose**

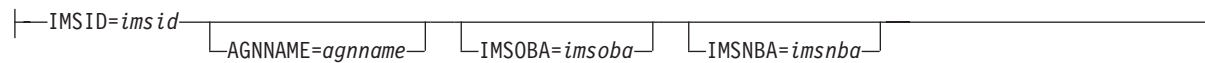
The online IMS Load utility generates JCL that runs the ILB function. This function loads previously extracted data from a sequential data set an IMS database. You can modify this JCL and edit the ILB parameters before submitting the job, or you can create your own batch job to run the ILB function.

ILB (IMS Load)

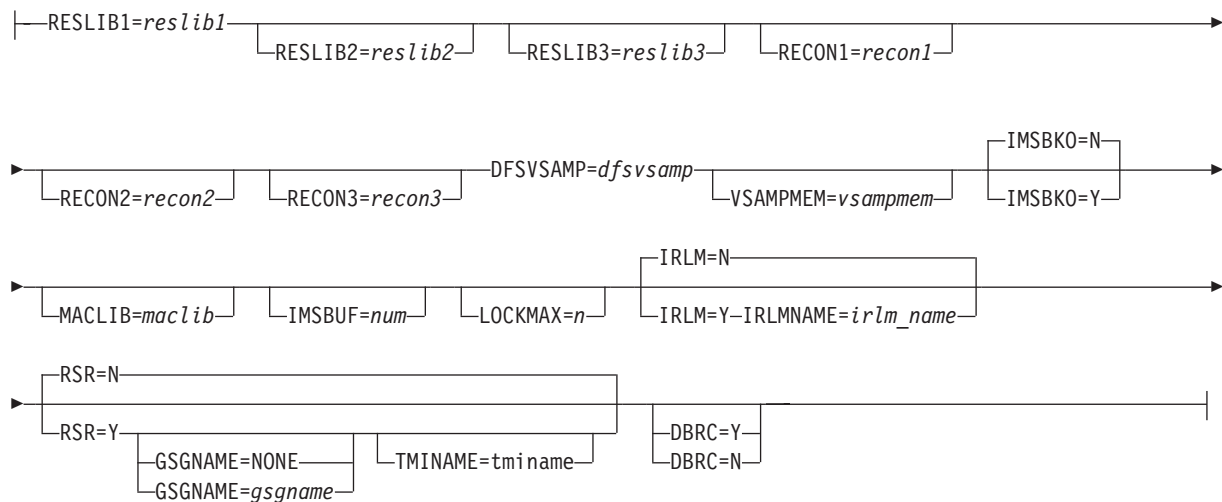
Syntax



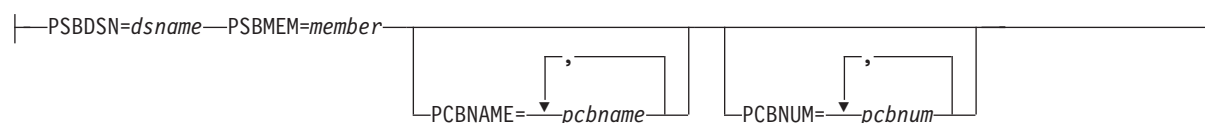
BMP parameters:



DL/I parameters:



STATIC parameters:



Except for the keywords described below, the remaining keyword definitions for this function are identical to those provided in the IEB function description. See “IEB (IMS Edit Batch)” on page 15 for details.

LOADTYPE

Required keyword. Specifies the type of load to be performed.

- 1 Specifies that only new segments are inserted into the database. Any segments already in the database are not replaced.

- 2 Specifies that new segments are inserted into the database and any existing segments are updated with the data being loaded.
- 3 Specifies that new segments are inserted into the database using a LOAD PSB (PROCOPT=L/LS). This option can only be run in DLI mode and the database must be in an un-initialized state.

LDDSN=*lddsn*

Required field. Specifies the name of the data set being loaded. This is used in the Load Report that is produced after the database has been loaded.

PCBNAME=*pcbname*

Optional keyword. Specifies the PCB names from the PSB that correspond to the primary database (and any logically related databases) being loaded.

PCBNUM=*pcbnum*

Optional keyword. Specifies the relative PCB numbers (not including the I/O PCB) from the PSB that correspond to the primary database (and any logically related databases) being loaded.

IPR (IMS Print)**Purpose**

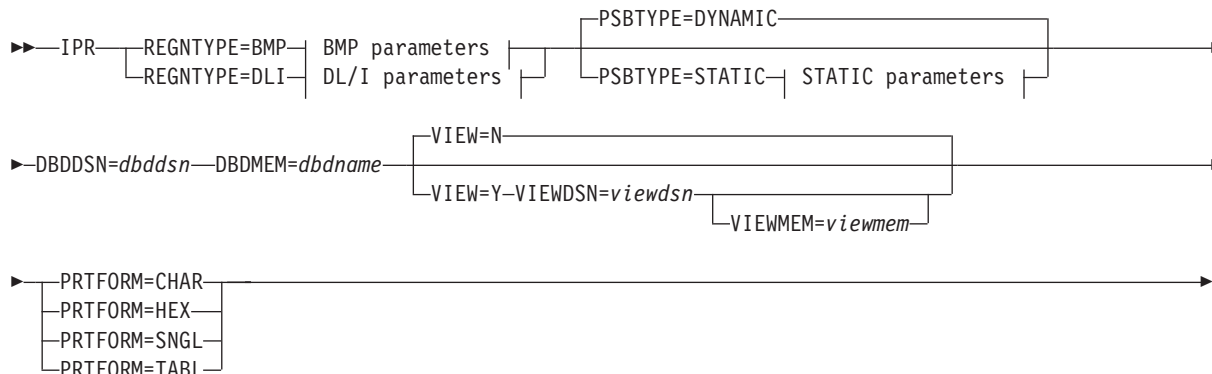
Prints IMS segments.

Usage notes

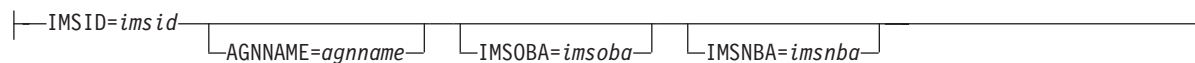
If you specify VIEW=Y, then IPR prints only those segments selected by the view. Otherwise, IPR prints all segments in the database.

IPR (IMS Print)

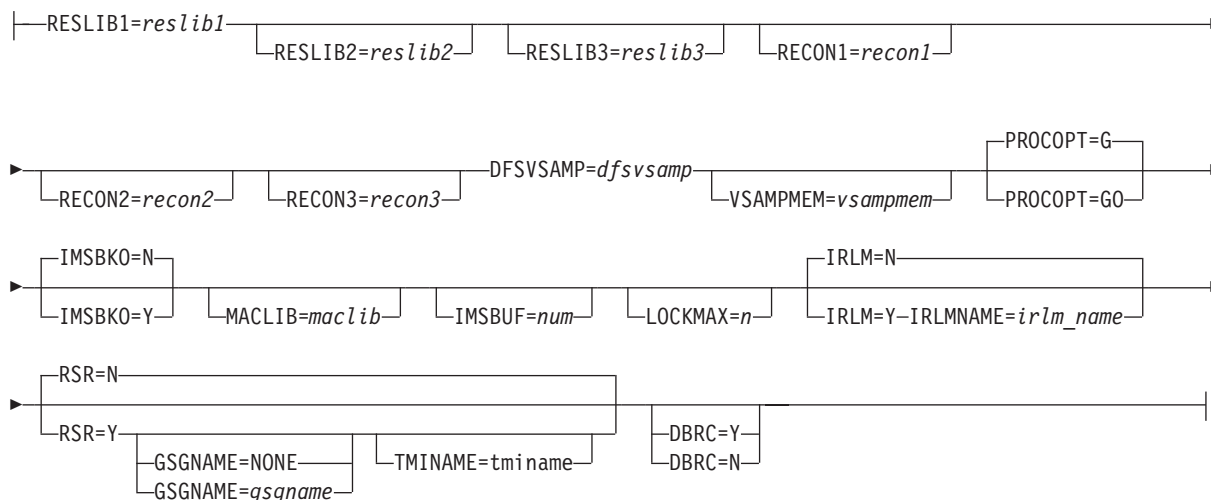
Syntax



BMP parameters:



DL/I parameters:



STATIC parameters:



Except for the keywords described below, the remaining keyword definitions for this function are identical to those provided in the IEB function description. See "IEB (IMS Edit Batch)" on page 15 for details.

PROCOPT

Specifies the IMS Processing Option for reads performed during the Print

operation. FM/IMS uses this value when FM/IMS Administrator has allowed the user to specify the option (by putting PROCOPP=Y in the FMN1POPD macro) or has not specified a permission for this parameter. If the Administrator has specified PROCOPP=N, FM/IMS ignores this value and uses either the value specified in the PROCOPTP parameter in the FMN1POPD macro or, if PROCOPTP is not specified, uses the value G.

G Read access. This is the preferred option when:

- There is no data sharing or
- Data sharing is at the database level but no IMS system has update authority or
- Data sharing is at the block level.

GO Read-only access (read without integrity). There are some IMS data sharing situations that require this setting, however, be aware that when PROCOPT=GO, it is possible to get an internally inconsistent segment (with different parts of the segment updated by two different units of work).

PRTFORM

Required keyword. Determines the format in which the data is to be printed:

CHAR

Prints the segments as they are stored in the IMS database.

HEX Prints three lines of data for each segment. The first line shows the character representation of each byte. The second and third lines show the hexadecimal value of each byte.

SNGL Prints the segments split into individual fields down the report.

TABL Prints the segments split into individual fields across the report.

To print in SNGL or TABL format, you must use a view.

PCBNAME=*pcbname*

Optional keyword. Specifies the PCB name from the PSB that corresponds to the database being printed.

PCBNUM=*pcbnum*

Optional keyword. Specifies the relative PCB number (not including the I/O PCB) from the PSB that corresponds to the database being printed.

IPR example - BMP Mode

```
//FMNIPR JOB 'Print every segment'
//FMNBAT EXEC PGM=FMN1IMSB
//STEPLIB DD DSN=FMN.SFMNMOD1,DISP=SHR
//SYSPRINT DD SYSOUT=*
//FMIMSIN DD *
$$FILEM IPR REGNTYPE=BMP,
$$FILEM PSBTYPE=DYNAMIC,
$$FILEM DBDDSN=FMN.IMS.IVP.FMN.DBDLIB,
$$FILEM DBDMEM=DJ2E,
$$FILEM IMSID=IF32,
$$FILEM IMSOBA=6,
$$FILEM IMSNBA=10,
$$FILEM VIEW=Y,
$$FILEM VIEWDSN=FMN.IMS.IVP.VIEW,
$$FILEM VIEWMEM=FREQ#ST,
$$FILEM PRTFORM=TABL
/+
//*
```

IPR (IMS Print)

IPR example - DLI Mode

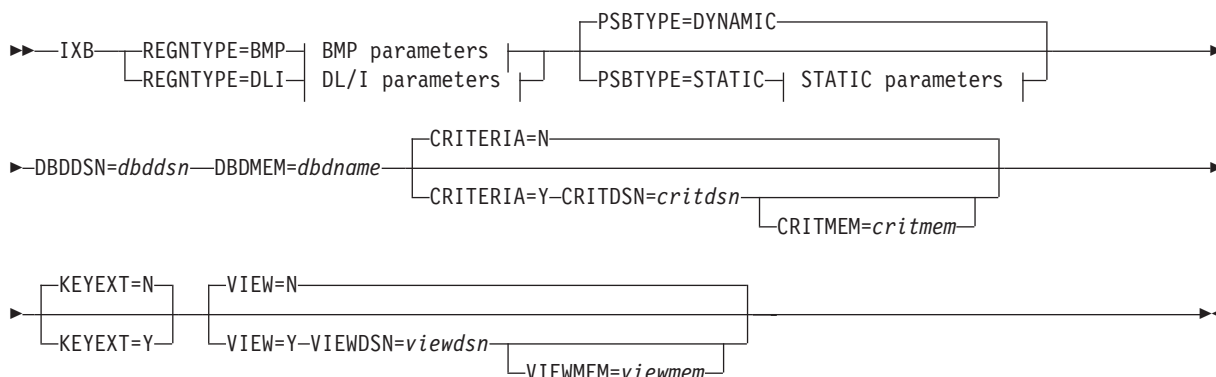
```
//FMNIPR JOB 'Print every segment'
//FMNBAT EXEC PGM=FMN1IMSB
//STEPLIB DD DSN=FMN.SFMNMOD1,DISP=SHR
//SYSPRINT DD SYSOUT=*
//FMIMSIN DD *
$$FILEM IPR REGNTYPE=DLI,
$$FILEM PSBTYPE=DYNAMIC,
$$FILEM DBDDSN=FMN.IMS.IVP.FMN.DBDLIB,
$$FILEM DBDMEM=DJ2E,
$$FILEM VIEW=Y,
$$FILEM VIEWDSN=FMN.IMS.IVP.VIEW,
$$FILEM VIEWMEM=FREQ#ST,
$$FILEM RESLIB1='IMS.IMK2.V610.RESLIB',
$$FILEM RESLIB2='IMS.IMK2.V610.USERLIB',
$$FILEM DBRC=N,
$$FILEM CHKPFREQ=00100,
$$FILEM DFSVSAMP=IMS.IMK2.V610.PROCLIB,
$$FILEM VSMPMEM=DFSVSM01,
$$FILEM PRTFORM=TABL
/+
/* -----
/* -- IMS DLI DATA SETS REQUIRED FOR THE IEB -
/* -----
//DJ2E DD DSN=FMN.IMS.IVP.DB.DJ2E,DISP=SHR
//DJ2F DD DSN=FMN.IMS.IVP.DB.DJ2F,DISP=SHR
//DJ3E DD DSN=FMN.IMS.IVP.DB.DJ3E,DISP=SHR
//DJ3F DD DSN=FMN.IMS.IVP.DB.DJ3F,DISP=SHR
//DJ1E DD DSN=FMN.IMS.IVP.DB.DJ1E,DISP=SHR
//DJ1F DD DSN=FMN.IMS.IVP.DB.DJ1F,DISP=SHR
/*
```

IXB (IMS Extract)

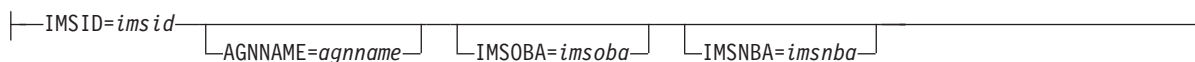
Purpose

The online IMS Extract utility generates JCL that runs the IXB function. This function extracts all segments or selected segments from an IMS database, and saves them to a sequential data set. You can modify this JCL and edit the IXB parameters before submitting the job, or you can create your own batch job to run the IXB function.

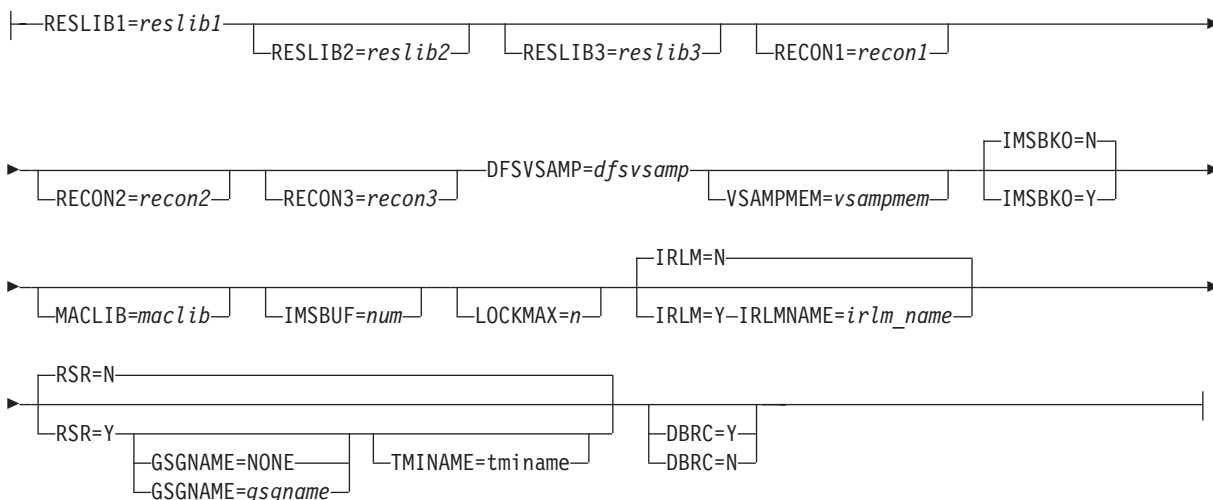
Syntax



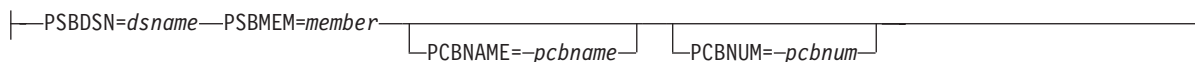
BMP parameters:



DL/I parameters:



STATIC parameters:



Except for the keywords described below, the remaining keyword definitions for this function are identical to those provided in the IEB function description. See "IEB (IMS Edit Batch)" on page 15 for details.

PROCOPT

Specifies the IMS Processing Option for reads performed during the Extract operation. FM/IMS uses this value when FM/IMS Administrator has

allowed the user to specify the option (by putting PROCOPP=Y in the FMN1POPD macro) or has not specified a permission for this parameter. If the Administrator has specified PROCOPP=N, FM/IMS ignores this value and uses either the value specified in the PROCOPTP parameter in the FMN1POPD macro or, if PROCOPTP is not specified, uses the value G.

G Read access. This is the preferred option when:

- There is no data sharing or
- Data sharing is at the database level but no IMS system has update authority or
- Data sharing is at the block level.

GO Read-only access (read without integrity). There are some IMS data sharing situations that require this setting, however, be aware that when PROCOPT=GO, it is possible to get an internally inconsistent segment (with different parts of the segment updated by two different units of work).

CRITERIA

Optional keyword. Determines whether or not extract criteria are to be applied to the database.

N Default value. No extract criteria are used. If the CRITDSN or CRITMEM keywords are specified, they are ignored.

Y Extract criteria are used. The CRITDSN keyword must also be specified.

CRITDSN=critdsn

One of:

- The name of the sequential data set containing the criteria.
- The name of the PDS containing the criteria. (You must specify the member name in the CRITMEM parameter.)

CRITMEM=critmem

The member name of the criteria.

KEYEXT

Optional keyword. Specifies whether or not a KEYS file is used to select the root segments that you want to extract.

N Default value. No KEYS file is used.

Y A KEYS file is to be used in the Extract.

In the JCL preceding the call to IXB, you must define a KEYSFILE ddname that identifies the sequential data set or PDS(E) member containing the keys data. When the FM/IMS Extract utility has been used to generate the JCL, these details are automatically created from the panel information.

PCBNAME=pcbname

Optional keyword. Specifies the PCB names from the PSB that correspond to the primary database (and any logically related databases) being extracted.

PCBNUM=pcbnum

Optional keyword. Specifies the relative PCB numbers (not including the I/O PCB) from the PSB that correspond to the primary database (and any logically related databases) being extracted.

Chapter 3. Changes to the File Manager Customization Guide

This sections lists the changes to the FM/IMS Customization process.

Customizing to use File Manager/IMS in DLI mode

The installation settings for DLI mode are specified in the FMN1POPD macro. For some of these options, you can choose whether or not users can override the default values in from the panels or within batch jobs.

See “FMN1POPD” on page 48 for information about options you can change in FMN1POPD. See “Changing the default options” on page 43 for information about implementing these changes.

Customizing to use File Manager/IMS in BMP mode

If you plan to use File Manager/IMS to access IMS subsystems in BMP mode, you **must** define to File Manager/IMS the IMS subsystems which are to be accessed by File Manager/IMS in BMP mode. If you do not plan to use File Manager/IMS to access any IMS subsystems in BMP mode, you do not need carry out this step.

To do this you must provide an FMN1POPI macro for each IMS subsystem you plan to access in BMP mode. Furthermore, if you plan to use File Manager/IMS in BMP mode and Application Group Name Security is in use in the IMS subsystem, you must also supply an FMN1AGNT macro. For each such IMS subsystem for which Application Group Name Security is in use, you must supply an FMN1AGNT macro for each AGN that File Manager/IMS can use. FMN1AGNT is called for each AGN.

You code these macros in the File Manager/IMS options macro, FMN1POPT. You then install FMN1POPT on your File Manager/IMS system using the usermod, FMN1UMDP.

For information about the options in FMN1POPI, see “FMN1POPI” on page 60. For information about the options in FMN1AGNT, see “FMN1AGNT” on page 66. See “Changing the default options” on page 43 for information about other changes to make to FMN1POPT and how to install your version of FMN1POPT.

If you supply more than one FMN1POPI macro, and one or more FMN1AGNT macros, you must place all the FMN1POPI macros together, followed by all the FMN1AGNT macros. If you do not do this, then even if you have provided for several IMS subsystems in your macros, only one will be defined. See “Examples of FMN1POPI and FMN1AGNT macros” for sample code showing the FMN1POPI and FMN1AGNT macros you would code to define IMS subsystems.

Examples of FMN1POPI and FMN1AGNT macros

The following sample code shows the FMN1POPI and FMN1AGNT macros you would code to define IMS subsystems to File Manager/IMS, for IMS versions 7 and 8. You would code FMN1POPI and FMN1AGNT macros similar to these in your version of FMN1POPT. (Do not change FMN1POPI or FMN1AGNT in FMN.SFMNMAC1.) For an explanation of the statements see the notes at the end of the example.

Examples of FMN1POPI and FMN1AGNT macros

```

*
      FMN1POPI SSID=IF22,                                + IF22
      DESC='IMS Version 7.1 FM/IMS TEST System',        +
      RESLIB1='IMSV710.IF22.SDFSRESL',                 +
      RESLIB2='IMS.V7R1M0.SDFSRESL',                   +
      RESLIB3='IMSV710.IF22.USERLIB',                  +
      DYNACB='IMSV710.IF22.DOPTLIB',                   +
      DYNPRFX=FMN0,                                     +
      DYNPRFN=50,                                       +
      INTGCHK=N,                                        +
      MACLIB='IMSV710.IF12.MACLIB'

*
      FMN1POPI SSID=IF42,                                + IF42
      DESC='IMS Version 8.1 AUTOSAVE OFF',              +
      RESLIB1='IMSV810.IF42.SDFSRESL',                 +
      RESLIB2='IMSV810.IF42.USERLIB',                  +
      RESLIB3=,                                         +
      DYNACB='IMSV810.IF42.DOPTLIB',                   +
      DYNPRFX=FMN0,                                     +
      DYNPRFN=50,                                       +
      INTGCHK=Y,                                        +
      MACLIB='IMSV810.IF12.MACLIB',                    +
      AUTOSAVE=N

*
      FMN1POPI SSID=IMA,DESC='IMS - IMA SubSystem',     + IMA
      RESLIB1='IMS.IMK3.V710.RESLIB',                  +
      DYNPRFX=FMN0,                                     +
      MACLIB='IMSV710.IF12.MACLIB',                    +
      DYNPRFN=50

*
      FMN1POPI SSID=IMC,DESC='IMS - IMC SubSystem',     + IMC
      RESLIB1='IMS.IMK3.V710.RESLIB',                  +
      DYNPRFX=FMN0,                                     +
      MACLIB='IMSV710.IF12.MACLIB',                    +
      DYNPRFN=50

*
      FMN1AGNT SSID=IF22,AGN=FMNA0002,DESC='Read AGN IF22' AGN
      FMN1AGNT SSID=IF22,AGN=FMNA0001,DESC='Update AGN IF22'
      FMN1AGNT SSID=IMA,AGN=FMNA0002,DESC='Read AGN IMA'
      FMN1AGNT SSID=IMA,AGN=FMNA0001,DESC='Update AGN IMA'

```

Notes:

1. In this example, the + characters are in column 72.
2. This example shows the statements you would code to define four IMS subsystems to be used by File Manager/IMS in BMP mode. In addition, application group name security is in use in two of these IMS subsystems.
3. Note that all the FMN1POPI macros are specified together, followed by the FMN1AGNT macros.

IF22

1. These statements define an IMS subsystem, called IMS Version 7.1 FM/IMS TEST System, as specified on the DESC keyword. The SSID is IF22. This is the value that must be entered on the File Manager/IMS entry panels.
2. The three RESLIB keywords specify three IMS reslibs to be used by File Manager/IMS in BMP mode.
3. The DYNACB keyword specifies the name of the Dynamic ACB library where File Manager/IMS will dynamically generate ACBs.
4. The DYNPRFX keyword specifies that the prefix used to build the dynamic PSB name will be FMN0; the DYNPRFN keyword specifies that File Manager/IMS will use 50 dynamic PSBs.

5. The MACLIB to be used in this subsystem to generate dynamic PSBs will be IMSV710.IF12.MACLIB.
6. In addition, **IF22** uses application group name security, so two FMN1AGNT statements are coded. See the first two statements at **AGN**.

IF42

1. These statements define an IMS subsystem, called IMS Version 8.1 AUTOSAVE OFF, as specified on the DESC keyword. The SSID is IF42.
2. For this subsystem, only two IMS reslibs are specified.
3. The AUTOSAVE keyword indicates that when editing a database in BMP mode, in subsystem IF42, the user can turn autosave on or off using option 0.7. See “AUTOSAVE” on page 60 for more information about AUTOSAVE.
4. **IF42** does not use application group name security, therefore no FMN1AGNT statements are provided.

IMA and **IMC**

1. These statements define two IMS subsystems, called IMS - IMA SubSystem and IMS - IMC SubSystem.
2. Only one IMS reslib is specified for either subsystem. All other keywords take the defaults.
3. **IMA** uses application group name security, so two FMN1AGNT macros are coded. See the second two statements at **AGN**.

IMC does not use application group name security, therefore no FMN1AGNT macros are coded.

Changing the default options

Default processing options are supplied with File Manager/IMS in the module FMN1POPT. You can change these options to suit your installation requirements. You also use FMN1POPT to define your IMS subsystem information, and the AGNs that File Manager/IMS can use. You use the usermod FMN1UMDP to install your version of FMN1POPT.

Note: Some options in FMN1POPT are also available to File Manager base function in FMN0POPT. However, any option changed in the File Manager/IMS options macro only takes effect in File Manager/IMS.

You change the options as follows:

1. Copy the member FMN1POPT from FMN.SFMNSAM1 into your own source library.
2. Change the options in FMN1POPT in your library, according to your requirements. For a description of the options in FMN1POPT, and the values you can specify, see Appendix A File Manager options.
3. Change the options in FMN1POPD in the copy of FMN1POPT in your library, according to your requirements. For information about the options in FMN1POPD, see “Customizing to use File Manager/IMS in DLI mode” on page 41, and “FMN1POPD” on page 48.
4. Change or add any FMN1POPI macros in the copy of FMN1POPT in your library, if required, as described in “Customizing to use File Manager/IMS in BMP mode” on page 41, and “FMN1POPI” on page 60. If you do not require FMN1POPI, because you do not intend to use File Manager/IMS to access any IMS subsystems in BMP mode, remove the FMN1POPI macros from FMN1POPT.

Changing the default options

5. Change or add any FMN1AGNT macros in the copy of FMN1POPT in your library, if required, as described in “Customizing to use File Manager/IMS in BMP mode” on page 41, and “FMN1AGNT” on page 66. If FMN1AGNT is not required, remove the FMN1AGNT macro from FMN1POPT.
6. Modify the FMN1UMDP member in FMN.SFMNSAM1 to meet your site’s requirements. Refer to the usermod for information about changes you may need to make.
7. Install SMP/E usermod FMN1UMDP.

Figure 7 shows FMN1POPT, FMN1POPI and FMN1AGNT macro statements, as supplied by IBM.

```
FMN1POPT TITLE 'File Manager IMS z/OS: Profile Options'
FMN1POPT CSECT
FMN1POPT AMODE 31
FMN1POPT RMODE ANY
      FMN0POPI ASCII=BOTH,           or YES, IN, OUT or BOTH      X
          DATAHDR=YES,             or NO for left aligned data  X
          DUMP=UPDOWN,              or ACROSS for horizontal DUMP X
          HEADERPG=YES,             or NO if none desired       X
          LANGUAGE=ENGLISH,        or installation provided lang. X
          LMS=NO,                   or PANVALET or USERLMS     X
          PAGESKIP=NO,             or YES for new page each time X
          PRINTLEN=132,            or 80 for example on terminals X
          PRTRTRANS=ON,            or OFF, KN                   X
          PRTDISP=MOD,             or OLD for replace          X
          DBCSPRT=OFF,            or 3200 or SOSI (2-byte chars) X
          PAD=OFF,                 or ON or char or hex value   X
          RECLIMIT=(1,*),          or limit it, e.g. (1,80)     X
          TERMTYPE=3270,          or 3270KN if using Katakana  X
          TAPELBL=SL,             or AL for ASCII labels      X
          CYLHD=ABSOLUTE,         or RELATIVE if desired      X
          PRINTOUT=SYSPRINT,      or TERMINAL or SYSOUT=c     X
          PAGESIZE=60,            or any value between 1 and 999 X
          AUDITLOG=NO,            or YES if desired           X
          AUDITHLQ=,              or something, e.g. AUDIT     X
          SMFNO=0,                or any number from 128 to 255 X
          USEIOX=DISABLE,         or (ENABLE,name) if enabled  X
          PRINTDSN=&&USER..FMN.LIST
*

```

Figure 7. (Part 1 of 2)

Changing the default options

```

*****
*       File Manager/IMS Options
*****
*
      FMN1POPD DBRC=YES,           DBRC default (YES/NO/IMS)      X
      UDBRC=Y,                   DBRC overrideable (Y/N)       X
      IMSBKO=Y,                  Dynamic Backout default (Y/N)  X
      UIMSBKO=Y,                IMSBKO overrideable (Y/N)    X
      IRLM=NO,                   IRLM default (YES/NO)        X
      UIRLM=Y,                   IRLM overrideable (Y/N)     X
      IRLMNAME=,                Default IRLM name             X
      IMSOBA=,                   Default Override Fast Path OBA X
      IMSNBA=,                   Default Override Fast Path NBA X
      BTCHFREQ=100,              Default Batch CHKP Frequency  X
      EDITFREQ=1,                Default Edit CHKP Frequency   X
      CHGAFREQ=100,             Default Change All CHKP Freq  X
      DFSVSAMP='IMS.PROCLIB',    Default DFSVSAMP dsname      X
      VSMPMEM=DFSVSM01,         Default DFSVSAMP member name X
      RESLIB1='DFS.SDFSRESL',    Default IMS RESLIB           X
      RESLIB2=,                  X
      RESLIB3=,                  X
      MAXGN=10000,              Max Get Next calls for Find   X
      DFSRRC00=,                Alternate name for DFSRRC00   X
      MACLIB='IMS.MACLIB',       Default IMS Macro Library     X
      PROCOPTB=G,                Browse Procopt default (G/GO) X
      UPROCOPTB=Y,               PROCOPTB overrideable (Y/N)  X
      PROCOPTX=G,                Extract Procopt default (G/GO) X
      UPROCOPTX=Y,               PROCOPTX overrideable (Y/N)  X
      PROCOPTP=G,                Batch Print Procopt dflt (G/GO) X
      UPROCOPTP=Y,               PROCOPTP overrideable (Y/N)  X
      RSR=N,                      RSR default (Y/N)           X
      TMINAME=,                  Default RSR complex TMI name  X
      GSGNAME=,                  Default RSR complex GSG name  X
      URSR=Y,                     RSR defaults overrideable (Y/N) X
      PSBTYPE=DYNAMIC,           Default PSB Type DYNAMIC/STATIC X
      UPSBTYPE=Y,                PSBTYPE overrideable (Y/N)   X
      XDOPTLB=N,                 DOPT ACBLIB cleanup dflt (Y/N)
*
*****
* Include one FMN1POPI invocation for each IMS subsystem that FM/IMS
* is to access in BMP mode. If none are to be accessed in BMP mode
* then delete the following 18 lines.
*****
      FMN1POPI SSID=IMS1,           X
      RESLIB1=DFS.SDFSRESL,       IMS SUBSYSTEM RESLIB         X
      RESLIB2=,                    X
      RESLIB3=,                    X
      DYNACB=,                     DYNAMIC ACB LIBRARY         X
      DYNPRFX=FMN0,                DYNAMIC PSB PREFIX          X
      DYNPRFN=50,                  NO OF DYNAMIC PSBS          X
      INTGCHK=Y,                   INTEGRITY CHECK Y/N          X
      AUTOSAVE=Y,                   AUTOSAVE Y/N                 X
      CHGAFREQ=100,                CHANGE ALL CHKP FREQUENCY    X
      EDITFREQ=1,                   EDIT CHECKPOINT FREQUENCY    X
      PARDLI=0,                     IMS PARDLI DEFAULT           X
      LOCKMAX=,                     MAXIMUM NO OF LOCKS         X
      MACLIB='IMS.MACLIB',         IMS Macro Library            X
      PROCOPTB=G,                   Browse Procopt (G/GO)        X
      PROCOPTX=G,                   Extract Procopt (G/GO)        X
      PROCOPTP=G,                   Batch Print Procopt (G/GO)    X
      XDOPTLB=N,                     Clear DOPT ACBLIB (Y/N)
*****
* IMS Subsystem Definitions
* Only include FMN1AGNT if File Manager/IMS is to be used in BMP
* Mode and Application Group Name Security is in use in the
* IMS region. If not required, remove the following statement.
*****
      FMN1AGNT SSID=IMS1
*
      END      FMN1POPT

```

Changing the default options

For a description of the options and the values you can specify, see Appendix A File Manager options and “File Manager/IMS options” on page 48.

Setting the default national language

If you installed the File Manager/IMS Japanese component (or you provided other locally translated messages and panels), you may change the default national language for your installation, for File Manager/IMS batch processing. The language used by File Manager/IMS under ISPF depends on the language setting for your ISPF session. To change the language for File Manager/IMS batch processing, set the LANGUAGE option in FMN1POPT to your language.

For other customization you can do for File Manager/IMS for national languages, refer to Chapter 21: Customizing File Manager/IMS for national languages.

Changing the JCL skeleton for batch mode

Several functions in File Manager/IMS are available in batch mode. For these functions to run successfully, appropriate job control must be provided. This is done by means of the set processing options, and a skeleton in FMN.SFMNSLIB. The job control skeleton for File Manager/IMS is the member FMN1FTEX in FMN.SFMNSLIB.

FMN1FTEX assigns a STEPLIB DD statement for the File Manager/IMS load library, and a ISPSLIB DD statement for the File Manager/IMS skeleton library. FMN1FTEX assumes that you have installed File Manager/IMS into the default target libraries, and that the load library is FMN.SFMNMOD1 and the skeleton library is FMN.SFMNSLIB. If you have installed File Manager/IMS into different libraries than these, you must modify the FMN1FTEX skeleton accordingly.

You modify the job control skeleton using the usermod FMN1UMDB, which is distributed in FMN.SFMNSAM1. To do this perform the following steps:

1. Copy the member FMN1FTEX from FMN.SFMNSLIB to your own source library.
2. Modify the FMN1FTEX member in your own library. Change the name of the File Manager load library on the STEPLIB DD statement to the name of your load library. Change the name of the File Manager skeleton library on the ISPSLIB DD statement to the name of your skeleton library.
3. Modify the FMN1UMDB member in FMN.SFMNSAM1 to meet your site's requirements. Refer to the usermod for information about changes you may need to make.
4. Install SMP/E usermod FMN1UMDB.

Note: File Manager/IMS does not provide support for the automatic generation of job routing control statements in the JCL generated by FMN1FTEX.

Customizing for randomizing routines that cause IMS abends

Under certain circumstances, File Manager/IMS fails when it attempts to free the lock on the current database record. File Manager/IMS issues a GU call, qualified at the root level, with a greater-than operator or an equal-to operator for a key of X'FF' (high values). This method of freeing the lock fails when:

- the root segment of the database has no key.
- the randomizing routine for an HDAM or a DEDB database does not handle this key value and returns a return code of 4.

Customizing for randomizing routines that cause IMS abends

- the randomizing routine for a DEDB database does not handle this key value and returns a return code not equal to 0 or 4. IMS abends with a U1021 when the return code from the randomizing routine is not 0 or 4.
- the randomizing routine for an HDAM database does not handle this key value and returns a return code not equal to 0 or 4. IMS abends with a U0812 when the return code from the randomizing routine is not 0 or 4.
- the randomizing routine for an HDAM or a DEDB database abends when processing this key value.

In the case of randomizing routines that cause the freeing of the lock to fail, File Manager/IMS will use a checkpoint to free the lock, if the name of the randomizing routine for the database being edited or browsed matches a pattern in the FMN1POPR options module.

You should provide an FMN1POPR module if you have randomizing routines that abend or cause IMS U1021 or U0812 abends. In the case of such an abend, the abend panel indicates if the abend occurred while freeing the lock and will give the name of the randomizing routine.

Indications of the problem

The following messages indicate the problem. If you are receiving any of these messages you should provide an FMN1POPR module to your File Manager/IMS system.

- IMS AbendU1021 followed by messages:
 - 'FMN1IMSI DBD not found in External DBD table'
 - 'FMNISPF_ free lock rc=96 sc= '
 - 'Panel display error 96 for panel FMN1PAB2' when attempting to browse or edit a DEDB database.
- IMS AbendU0812 followed by messages:
 - 'FMN1IMSI DBD not found in External DBD table'
 - 'FMNISPF_ free lock rc=96 sc= '
 - 'Panel display error 96 for panel FMN1PAB2' when attempting to browse or edit an HDAM database.
- AbendS0C7 followed by messages:
 - 'FMN1IMSI DBD not found in External DBD table'
 - 'FMNISPF_ free lock rc=96 sc= '
 - 'Panel display error 96 for panel FMN1PAB2' when attempting to browse or edit an HDAM or a DEDB database.

Providing your own FMN1POPR module

File Manager/IMS does not supply a default FMN1POPR module. You can provide your own FMN1POPR module, using the sample FMN1POPR, and the usermod FMN1UMDR, distributed in FMN.SFMNSAM1.

1. Copy the member FMN1POPR from FMN.SFMNSAM1 to your own source library.
2. Code the names of your randomizing routines that you want to include, on the FMN1RAND RANDNAME statements, in your copy of FMN1POPR. Specify each routine on a separate statement. You can provide as many statements as you need. You can specify wildcards, using * (multiple characters) and % (single character).

Do not include the name of a routine unless you are sure that it will abend. Routines that abend are those that cannot handle a key of x'FF'.

Customizing for randomizing routines that cause IMS abends

The supplied sample, FMN1POPR, already includes the names of the three sample randomizing routines supplied with IMS, that abend when File Manager/IMS attempts to free the lock on the current database record. These routines are: DFSHDC10, DFSHDC20, DFSHDC30. Include these routine names if you use them at your installation.

Note that the fourth IMS sample routine, DFSHDC40, is not included, because it does NOT abend when the lock is freed.

3. Modify the FMN1UMDR member in FMN.SFMNSAM1 to meet your site's requirements. Refer to the usermod for information about changes you may need to make.
4. Install SMP/E usermod FMN1UMDR.

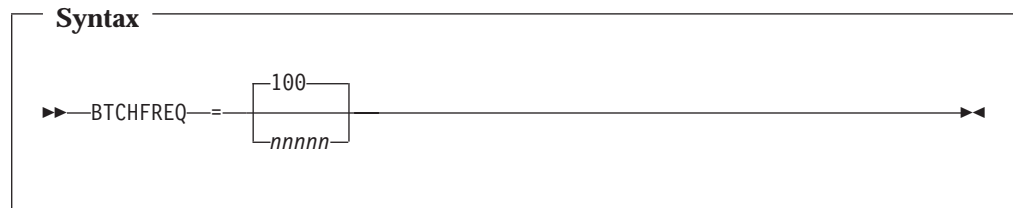
File Manager/IMS options

This appendix describes the File Manager/IMS options. The syntax described here applies to the FMN1POPD, FMN1POPI, and FMN1AGNT macros. You can modify these File Manager/IMS options to suit your requirements. See "Changing the default options" on page 43 for information on how to do this.

FMN1POPD

You use the options in FMN1POPD to specify the File Manager/IMS installation defaults. Some of the options are specific to DLI mode, some to BMP mode; some options can be overridden by your users. Refer to the description of each option for details.

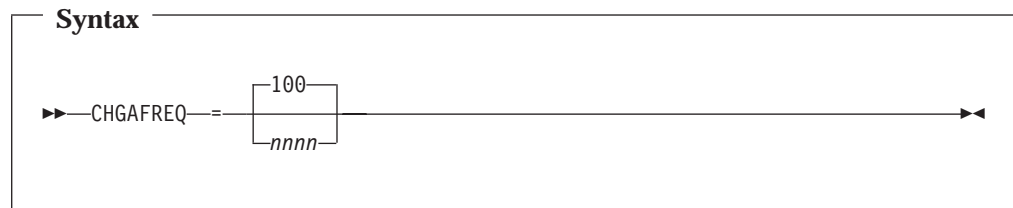
BTCHFREQ



BTCHFREQ specifies the frequency with which File Manager/IMS will checkpoint when running in batch. You can specify a number between 1 and 99999. The default is 100.

This option applies to DLI and BMP modes. It can be overridden by users from a File Manager/IMS settings panel.

CHGAFREQ



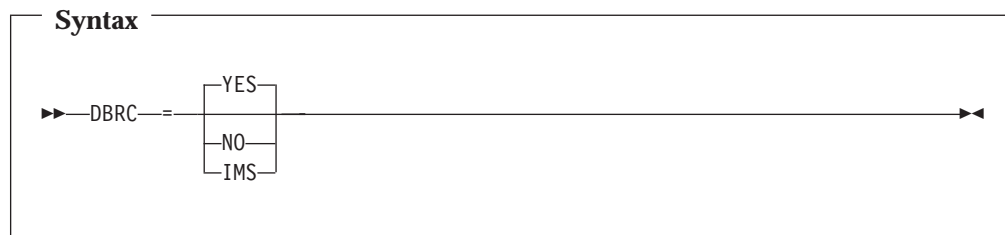
CHGAFREQ specifies the number of updates performed by the "Change All" command before an IMS checkpoint is taken. You can specify a number between 1 and 9999. The default is 100.

When AUTOSAVE is on, File Manager/IMS will:

- increment a count by 1 each time a segment is updated during a "Change All" operation.
- issue a checkpoint when the count is equal to the number specified.

This option applies to DLI mode and can be overridden by users from a File Manager/IMS settings panel. It is also used in BMP mode when AUTOSAVE is set to NO in the FMN1POPI macro for the IMS subsystem. In this case, it may also be overridden by users from a File Manager/IMS settings panel.

DBRC



DBRC specifies whether or not File Manager/IMS will use Database Recovery Control (DBRC) when running in DLI mode.

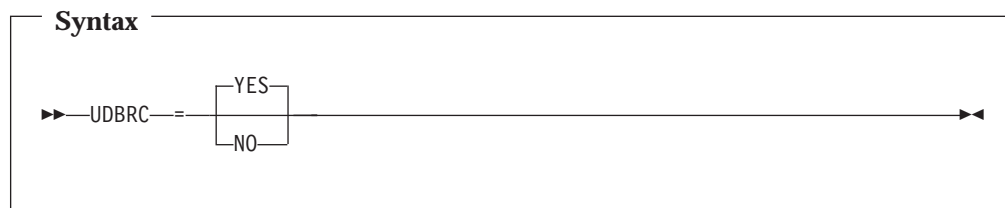
Yes DBRC will be used.

No DBRC will not be used unless DBRC=FORCE was specified on the IMSCTRL macro statement during IMS system definition.

IMS DBRC will only be used if DBRC=YES or DBRC=FORCE was specified on the IMSCTRL macro statement during IMS system definition.

This option applies to DLI mode only, and can be overridden by users from a File Manager/IMS settings panel, unless the UDBRC option is set to NO.

UDBRC



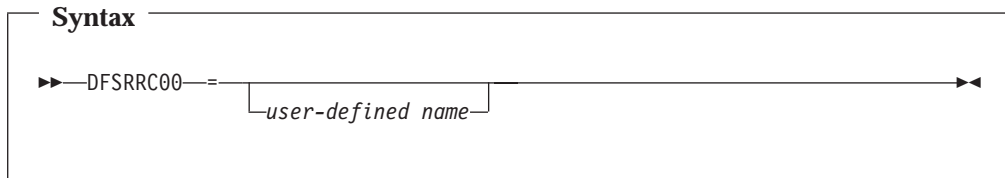
UDBRC

specifies whether or not users can override the setting of the DBRC option.

Yes Users can override the setting of DBRC.

No Users cannot override the setting of DBRC.

DFSRRRC00



DFSRRRC00

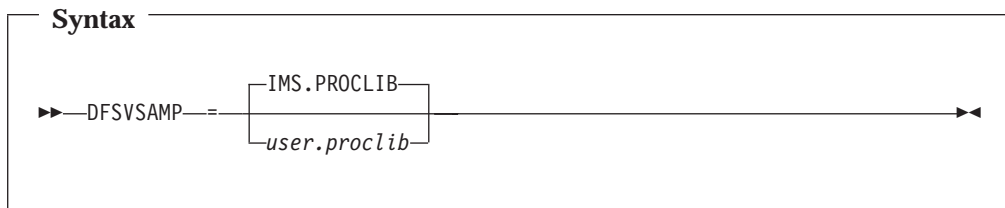
specifies the name used for the IMS Control Region program.

user-defined name

specifies the name of the DFSRRRC00 module to be invoked by File Manager/IMS. If the default name of DFSRRRC00 was used, leave blank.

This option applies to DLI and BMP modes. It cannot be overridden from any File Manager/IMS settings panel.

DFSVSAMP

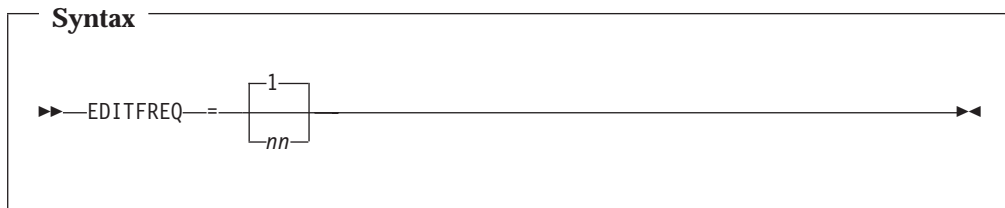


DFSVSAMP specifies the data set name containing the parameters defining the IMS buffer sub pools for VSAM and OSAM data sets, in DLI mode.

user.proclib The IMS PROCLIB data set name used at your installation.

This option applies to DLI mode only, and is required. It can be overridden by users from a File Manager/IMS settings panel.

EDITFREQ



EDITFREQ specifies the frequency of the automatic save function when editing databases. You can specify a number between 1 and 99. The default is 1.

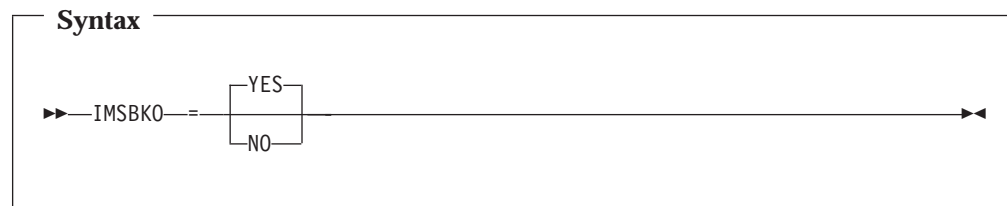
When AUTOSAVE is on, File Manager/IMS will:

- increment a count by 1 each time you press an action key and data changes have been requested.

- issue a checkpoint when the count is equal to the number specified.

This option applies to DLI mode and can be overridden by users from a File Manager/IMS settings panel. It is also used in BMP mode when AUTOSAVE is set to NO in the FMN1POPI macro for the IMS subsystem. In this case, it may also be overridden by users from a File Manager/IMS settings panel.

IMSBKO



IMSBKO specifies whether Dynamic Backout is used by File Manager/IMS in DLI mode.

YES Dynamic Backout is used by File Manager/IMS. IMS will perform a dynamic backout when an IMS pseudo-abend occurs in a File Manager/IMS function running in DLI mode.

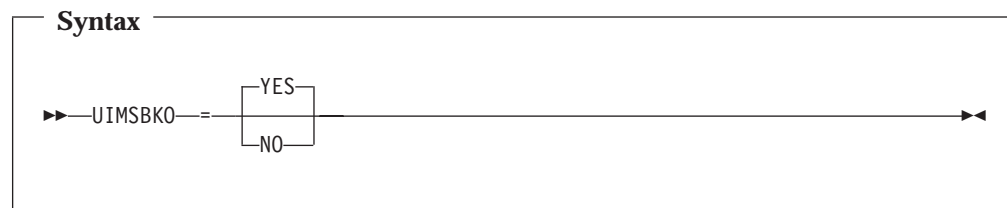
If YES is specified, users will be able to use the UNDO or CANCEL command when editing a database in DLI mode.

For this option to take effect, also ensure that the processing option for IMS logs is 'Keep' or 'Delete'.

NO Dynamic Backout will not be used by File Manager/IMS.

This option applies to DLI mode only and can be overridden by users from a File Manager/IMS settings panel, unless the UIMSBKO option is set to NO.

UIMSBKO

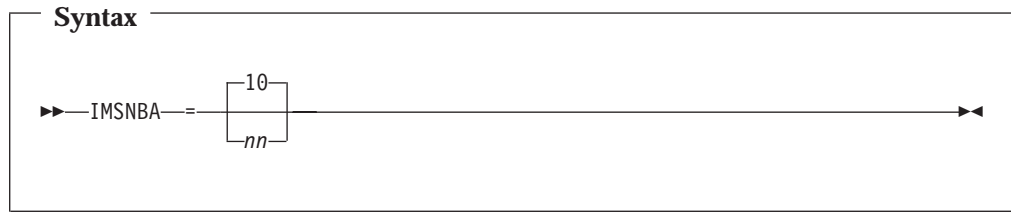


UIMSBKO specifies whether or not users can override the setting of the IMSBKO option.

YES Users can override the setting of UIMSBKO.

NO Users cannot override the setting of UIMSBKO.

IMSNBA



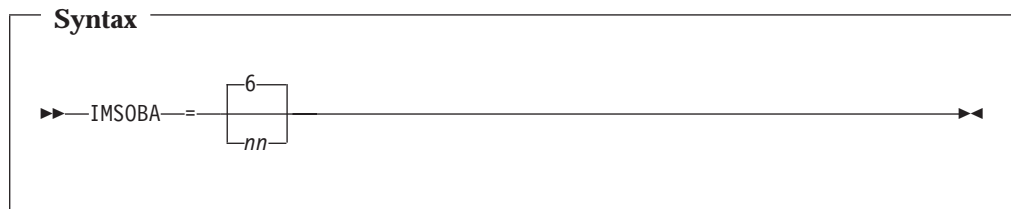
IMSNBA specifies the number of IMS fast path buffers to be available in the Common Service Area (CSA) when using Fastpath databases within File Manager/IMS

10 default number of IMS fast path buffers available in the CSA.

nn the number, in the range 1 - 99, of IMS fast path buffers available in the CSA specified at your installation.

This option applies to BMP mode only, and can be overridden by users from a File Manager/IMS settings panel.

IMSOBA



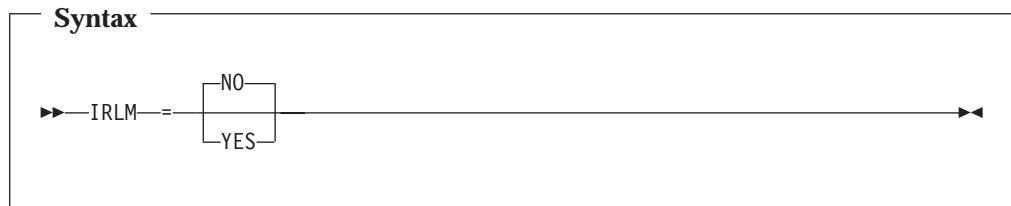
IMSOBA specifies a value for the number of additional fixed page buffers to be available if the NBA buffers has been used.

6 the default value for the number of additional fixed page buffers to be available if the NBA buffers has been used.

nn the value, in the range 1 - 99, for the number of additional fixed page buffers available as defined at your installation.

This option applies to BMP mode only, and can be overridden by users from a File Manager/IMS settings panel. It is only used by File Manager/IMS when accessing Fastpath databases.

IRLM

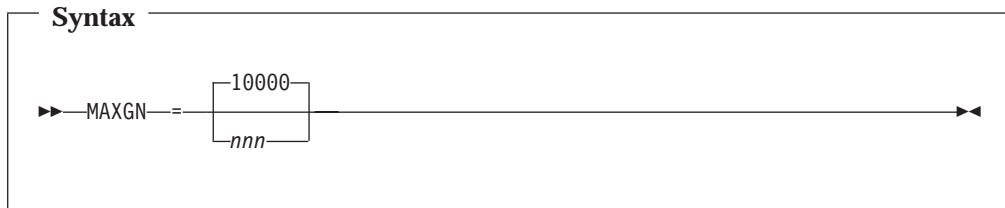


IRLM specifies whether Internal Resource Lock Manager (IRLM) is used by File Manager/IMS in DLI mode.

NO IRLM is not used.

YES IRLM is used.

MAXGN



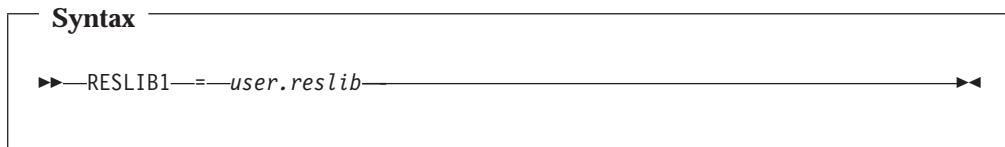
MAXGN specifies the maximum Get Next calls File Manager/IMS will issue in attempting to handle a Change or Find command in the EDITOR/BROWSE functions.

10000 specifies the default maximum Get Next calls File Manager/IMS will issue.

nnn specifies the maximum Get Next calls File Manager/IMS will issue as defined at your installation. If you set this value to zero, File Manager/IMS will not limit the number of records scanned, but will process the entire data base.

This option applies to DLI and BMP modes. It cannot be overridden by users from any File Manager/IMS settings panel.

RESLIB1



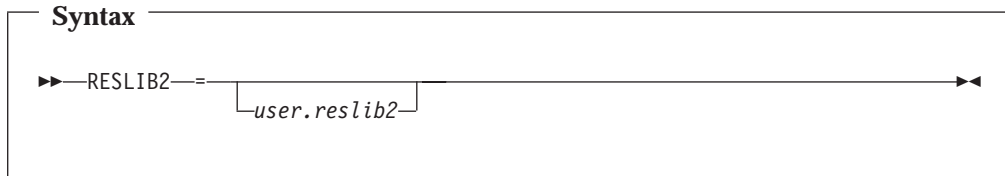
RESLIB1 specifies the IMS RESLIB that will be used when calling File Manager/IMS in DLI mode.

This option applies to DLI mode only, and can be overridden by users from a File Manager/IMS settings panel.

This data set should contain the IMS nucleus modules defined as a part of the IMS installation. *user.reslib* is the name of the IMS RESLIB at your installation.

This option is required.

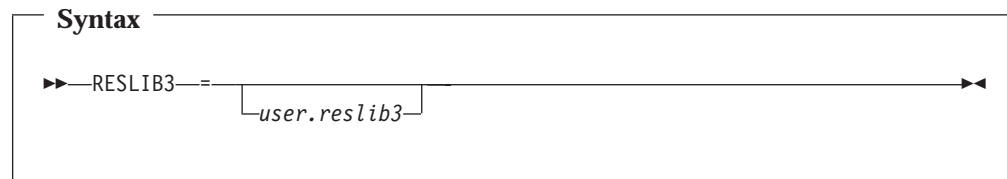
RESLIB2



RESLIB2 specifies an additional user-defined library, if required, for File Manager/IMS in DLI mode: for example, a library containing Dynamic allocation or user exit routines. If an additional library is not required, leave this option blank.

This option applies to DLI mode only, and can be overridden by users from a File Manager/IMS settings panel.

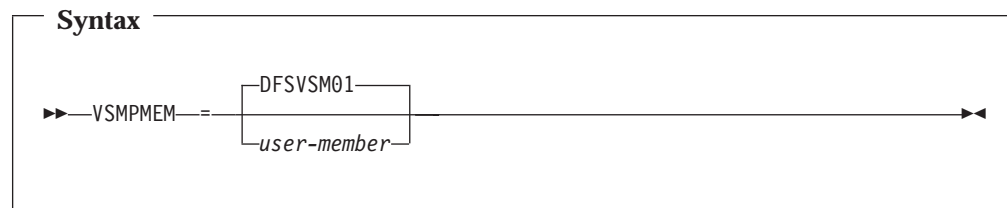
RESLIB3



RESLIB3 specifies an additional user-defined library, if required, for File Manager/IMS in DLI mode: or example, a library containing Dynamic allocation or user exit routines. If an additional library is not required, leave this option blank.

This option applies to DLI mode only, and can be overridden by users from a File Manager/IMS settings panel.

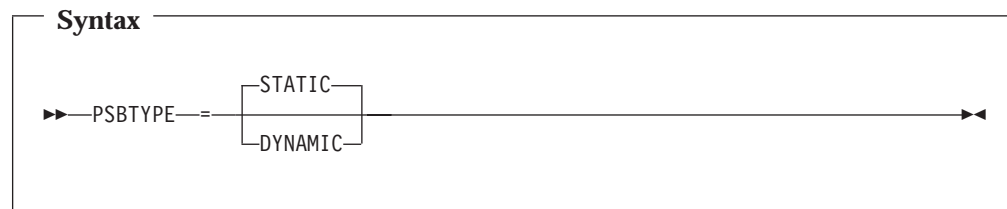
VSMPMEM



VSMPMEM specifies the member that contains the parameters if the DFSVSAMP data set is a partitioned data set.

This option applies to DLI mode only, and can be overridden by users from a File Manager/IMS settings panel.

PSBTYP



PSBTYP specifies the type of PSB that File Manager/IMS will use to access IMS databases.

STATIC

The PSB type is STATIC. File Manager/IMS will use the existing PSB that is specified in the online function dialog or batch function JCL.

DYNAMIC

The PSB type is DYNAMIC. File Manager/IMS will use a temporary PSB that it generates at the start of the Edit/Browse dialog or batch job.

This option applies to DLI and BMP modes, and can be overridden by users from a File Manager/IMS settings panel, unless the UPSBTYPY option is set to NO.

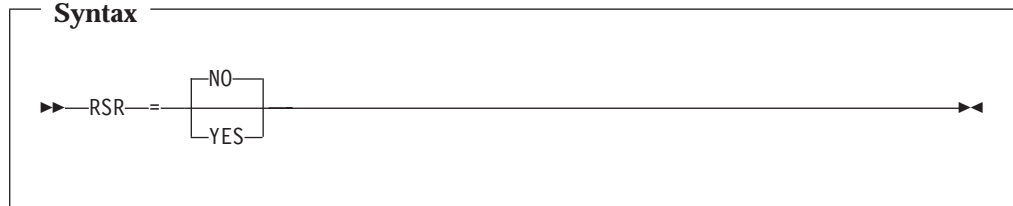
UPSBTYPY



UPSBTYPY specifies whether or not users can override the setting of the PSBTYPY option.

- YES** Users can override the setting of PSBTYPY.
- NO** Users cannot override the setting of PSBTYPY.

RSR

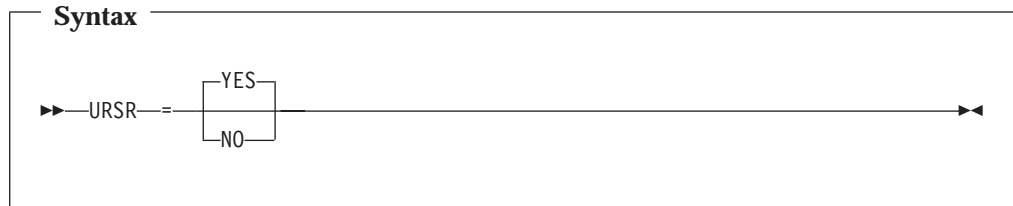


RSR specifies whether or not the IMS system accessed by File Manager/IMS in DLI mode is part of an RSR complex.

- NO** The IMS system accessed by File Manager/IMS in DLI mode is not part of an RSR complex.
- YES** The IMS system accessed by File Manager/IMS in DLI mode is part of an RSR complex. If RSR=YES is specified, then a value must also be specified for GSGNAME.

This option applies to DLI mode only, and can be overridden by users from a File Manager/IMS settings panel, unless the URSR option is set to NO.

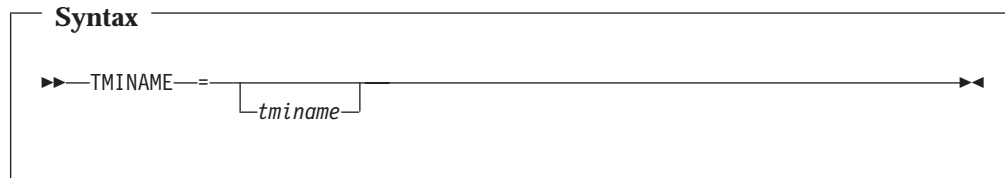
URSR



URSR specifies whether or not users can change the RSR setting in the File Manager/IMS DLI mode settings.

- YES** Users can change the RSR setting in the File Manager/IMS DLI mode settings.
- NO** Users cannot change the RSR setting in the File Manager/IMS DLI mode settings.

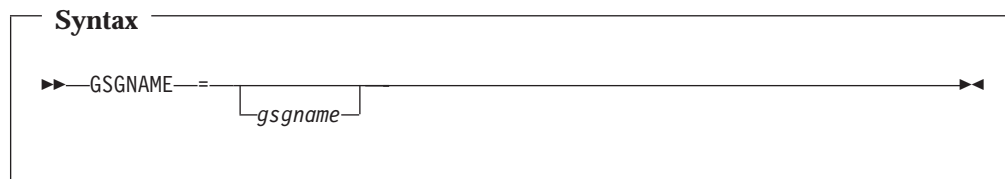
TMINAME



TMINAME specifies the installation-default TMI (Transport Manager Instance) name, for IMS systems accessed by File Manager/IMS in DLI mode, when RSR is set to YES. This keyword is optional, but if you specify RSR=YES, then a value must be specified for TMINAME. The first character of *tminame* cannot be numeric.

This option applies to DLI mode only, and can be overridden by users from a File Manager/IMS settings panel, unless the URSR option is set to NO.

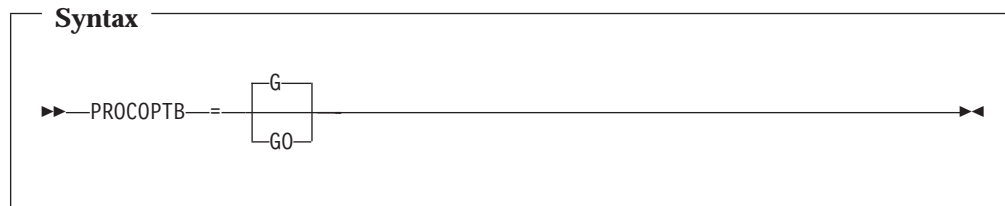
GSGNAME



GSGNAME specifies the installation-default GSG (Global Service Group) name, for IMS systems accessed by File Manager/IMS in DLI mode, when RSR is set to YES. This keyword is optional, but if you specify RSR=YES, then a value must be specified for GSGNAME. The first character of *gsgname* cannot be numeric.

This option applies to DLI mode only, and can be overridden by users from a File Manager/IMS settings panel, unless the URSR option is set to NO.

PROCOPTB

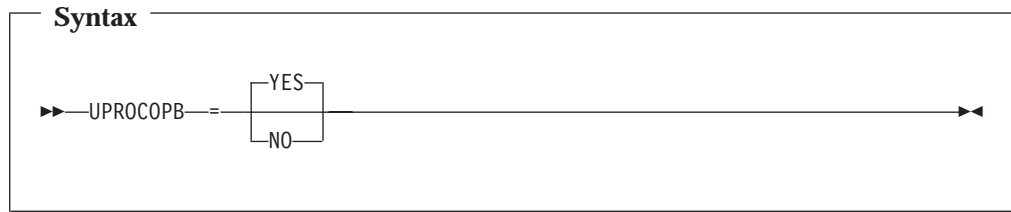


PROCOPTB specifies the PSB Processing Option (PROCOPT) for the dynamic PSB generated for browse in DLI mode.

- G** Browsing with a dynamic PSB will read with integrity.
- GO** Browsing with a dynamic PSB will read without integrity.

This option applies to DLI mode and can be overridden by users from a File Manager/IMS settings panel, unless the UPROCOPB option is set to NO. It also applies to BMP mode, when it can be overridden by the PROCOPTB option in the FMN1POPI macro for the IMS subsystem.

UPROCOPB

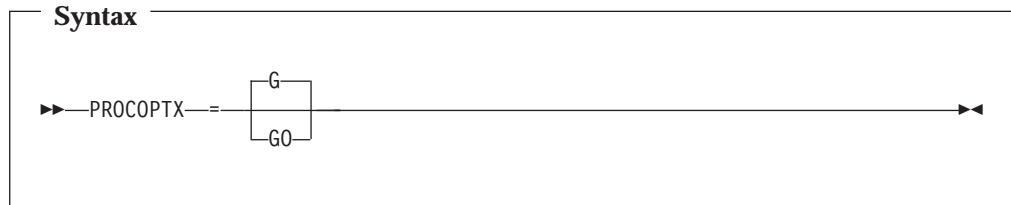


UPROCOPB specifies whether or not users can override the setting of the PROCOPTB option.

YES Users can override the setting of PROCOPTB.

NO Users cannot override the setting of PROCOPTB.

PROCOPTX



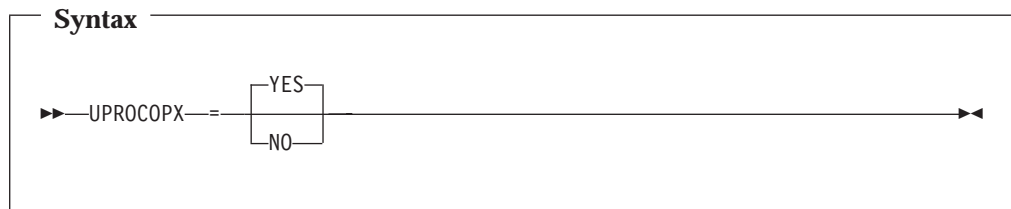
PROCOPTX specifies the PSB Processing Option (PROCOPT) generated for the dynamic PSB when running an Extract in DLI mode.

G Extracting with a dynamic PSB will read with integrity.

GO Extracting with a dynamic PSB will read without integrity.

This option applies to DLI mode and can be overridden by users from a File Manager/IMS settings panel or by use of a JCL parameter in the batch job, unless the UPROCOPX option is set to NO. It also applies to BMP mode, when it can be overridden by the PROCOPTX option in the FMN1POPI macro for the IMS subsystem.

UPROCOPX

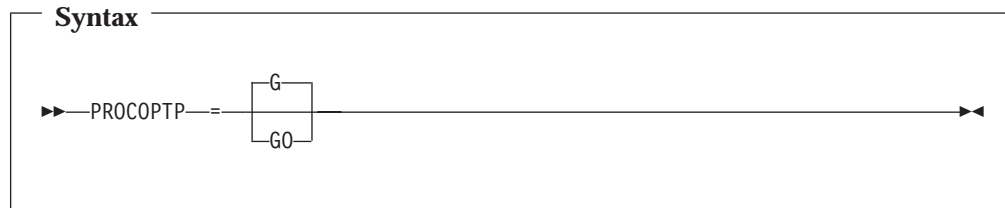


UPROCOPX specifies whether or not users can override the setting of the PROCOPTX option.

YES Users can override the setting of PROCOPTX.

NO Users cannot override the setting of PROCOPTX.

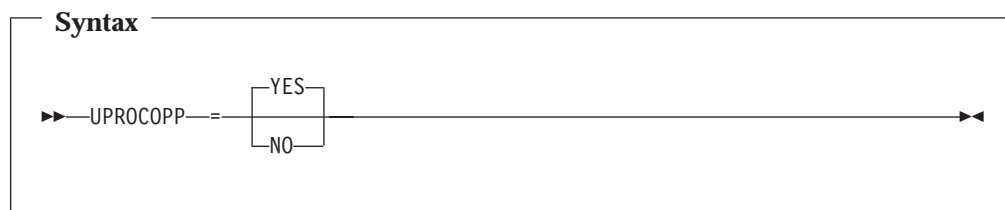
PROCOPTP



- PROCOPTP** specifies the PSB Processing Option (PROCOPT) for batch print (IPR).
- G** Batch printing with a dynamic PSB will read with integrity.
 - GO** Batch printing with a dynamic PSB will read without integrity.

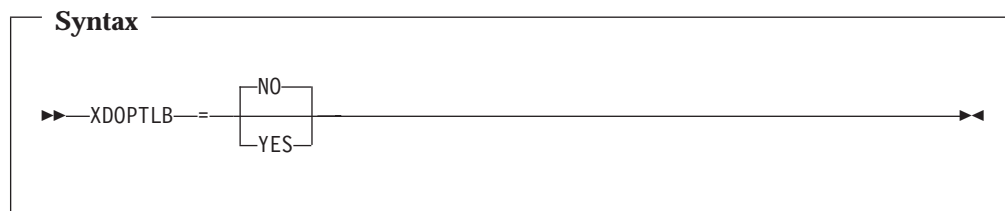
This option applies to DLI mode and can be overridden by use of a JCL parameter in the batch job, unless the UPROCOP option is set to NO. It also applies to BMP mode, when it can be overridden by the PROCOPTP option in the FMN1POPI macro for the IMS subsystem.

UPROCOP



- UPROCOP** specifies whether or not users can override the setting of the PROCOPTP option.
- YES** Users can override the setting of PROCOPTP.
 - NO** Users cannot override the setting of PROCOPTP.

XDOPTLB



- XDOPTLB** specifies whether or not the members of the DOPT ACBLIB data set will be deleted and the DOPT ACBLIB data set compressed, before File Manager/IMS executes an ACBGEN.
- NO** File Manager/IMS will delete the PSB from the DOPT ACBLIB data set after IMS termination. File Manager/IMS will not delete any other members of the DOPT ACBLIB data set and will not compress the data set.
 - YES** File Manager/IMS will delete all the members of the DOPT ACBLIB data set and compress the data set before each ACBGEN.

FMN1POPD

This option applies to BMP mode only. It can be overridden by the XDOPTLB option in the FMN1POPI macro for the IMS subsystem.

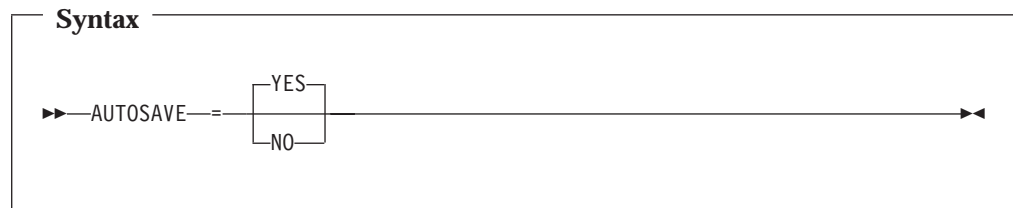
Note: You should only set the XDOPTLB option to YES when FM/IMS is the sole user of the DOPT ACBLIB.

FMN1POPI

The options you can change in FMN1POPI apply to individual IMS regions defined to File Manager/IMS. You can supply a FMN1POPI macro for each IMS subsystem that File Manager/IMS will access in BMP mode. If you do not supply a value for an option in FMN1POPI, then the value specified for that option in FMN1POPD will take effect.

If you supply more than one FMN1POPI macro and one or more FMN1AGNT macros, you must place all the FMN1POPI macros together, followed by all the FMN1AGNT macros.

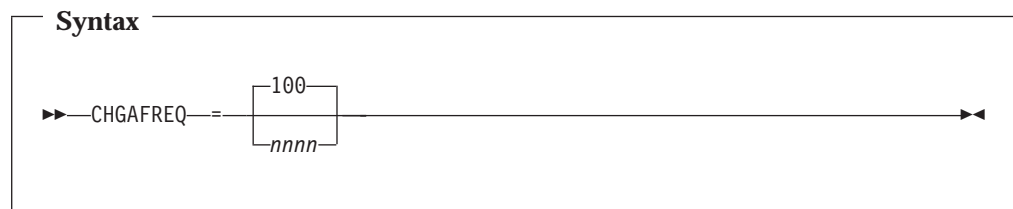
AUTOSAVE



AUTOSAVE specifies whether or not the user can change the AUTOSAVE settings for this IMS subsystem when editing a database in BMP mode.

- YES** AUTOSAVE will be set on, and the user will not be able to override this setting. Any changes the user makes to the autosave setting using option 0.7, or to either the "Edit Checkpoint Frequency" or the "Change All Checkpoint Frequency" settings using option 0.2, will have no effect.
- NO** the user will be able to turn autosave on or off using option 0.7, and File Manager/IMS will use the "Edit Checkpoint Frequency" and "Change All Checkpoint Frequency" selected using option 0.2, or as specified in FMN1POPD.

CHGAFREQ



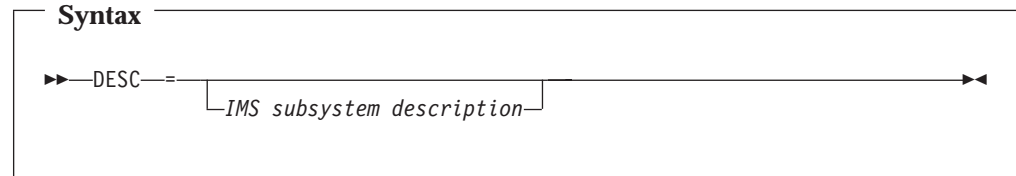
CHGAFREQ specifies the number of updates performed by the "Change All" operation before an IMS checkpoint is taken for this IMS subsystem. You can specify a number between 1 and 9999. The default is 100.

When AUTOSAVE is on, File Manager/IMS will:

- increment a count by 1 each time a segment is updated during a "Change All" operation.
- issue a checkpoint when the count is equal to the number specified in this field.

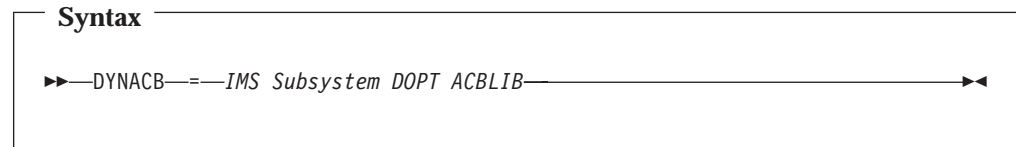
The value specified is only used if AUTOSAVE=YES is specified for this IMS subsystem.

DESC



DESC specifies a description of the IMS subsystem, which will appear in the File Manager/IMS "IMS Subsystem Selection Panel" for this subsystem. The maximum length of the description is 45 characters, including quotes. Leave this option blank if you do not want to supply a description.

DYNACB

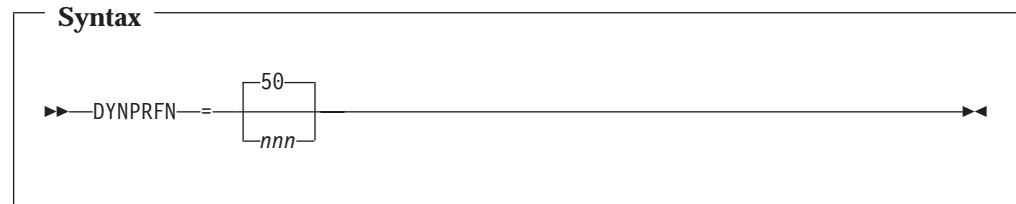


DYNACB specifies the name of the DOPT ACBLIB data set into which File Manager/IMS dynamically generates PSBs.

If dynamic PSBs are to be used to access databases in the IMS subsystem (BMP mode), then this parameter must be specified. If you do not supply a value for DYNACB, File Manager/IMS will not run BMPs with dynamic PSBs. Any attempt to do so will result in the message "Input not accepted".

If you are not using Dynamic PSBs in this IMS subsystem, delete this option, and also the DYNPRFN option, from this FMN1POPI macro.

DYNPRFN



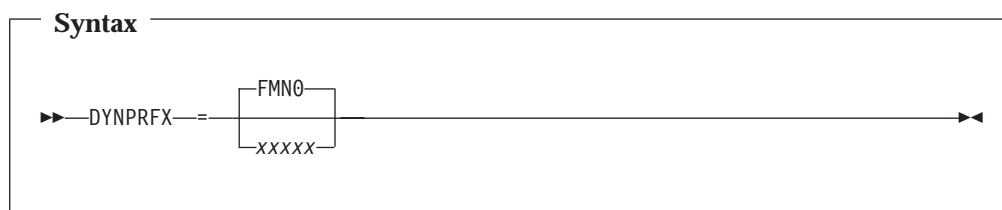
DYNPRFN specifies the number of Dynamic PSBs for use by File Manager/IMS.

- 50** number of Dynamic PSB's for use by File Manager/IMS as specified in the macro.
- nnn* number of Dynamic PSB's for use by File Manager/IMS, in the range 1-999.

The number of Dynamic PSBs required for concurrent File Manager/IMS BMP users. A number in the specified range is concatenated with the value specified for DYNPRFX to build a Dynamic PSB name.

If dynamic PSBs are to be used to access databases in the IMS subsystem (BMP mode), then this parameter must be specified. If you are not using Dynamic PSBs in this IMS subsystem, delete this option, and also the DYNACB option, from this FMN1POPI macro.

DYNPRFX

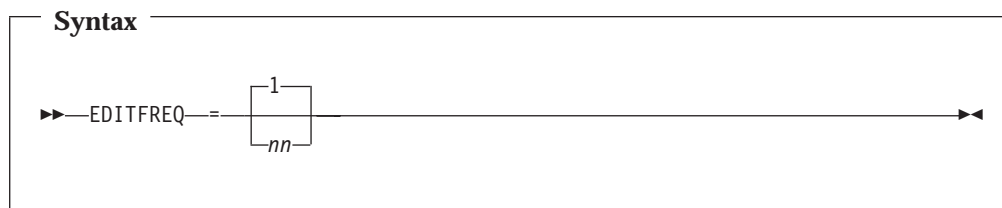


- DYNPRFX** specifies a 1-5 character prefix used to build the Dynamic PSB name.
- FMN0** the 4-character prefix of the Dynamic PSB in this macro.
- xxxxx* user-defined PSB prefix set up in the IMS subsystem for use by File Manager/IMS.

You must specify a value for DYNPRFX even if you do not require dynamic PSBs in BMP mode.

Note: The dynamic PSB name is the concatenation of the values in DYNPRFX and DYNPRFN. The number part (DYNPRFN value) will always take up 3 positions. For example, if you specify DYNPRFX=DYN and DYNPRFN=3, you will need to define an APPLCTN macro for DYN001, DYN002 and DYN003 in your IMSGEN.

EDITFREQ



- EDITFREQ** specifies the frequency of the automatic save function when editing databases. You can specify a number between 1 and 99. The default is 1.

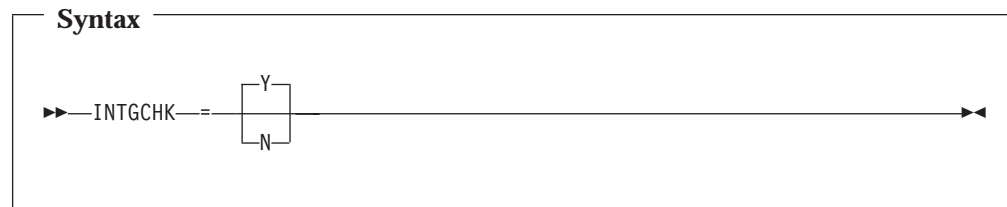
When AUTOSAVE is on, File Manager/IMS will:

- increment a count by 1 each time you press an action key and data changes have been requested.

- issue a checkpoint when the count is equal to the number specified.

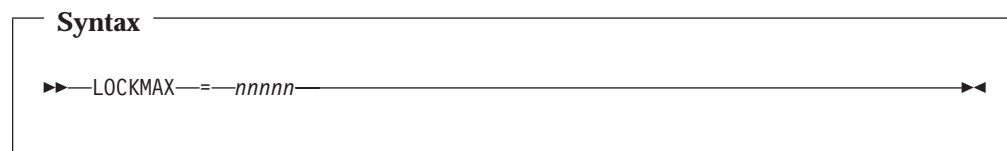
The value specified is only used if AUTOSAVE=YES is specified for this IMS subsystem.

INTGCHK



INTGCHK This option is no longer used. It is retained here for compatibility with previous versions of File Manager/IMS.

LOCKMAX



LOCKMAX prevents a single application program from consuming all locking storage and thereby causing other programs to abend. LOCKMAX specifies the number of IMS locks File Manager/IMS will handle. You must specify a number between 0 and 32767. The number of locks handled is in multiples of 1000, for example, if you specify LOCKMAX=1, the number of locks handled will be 1000.

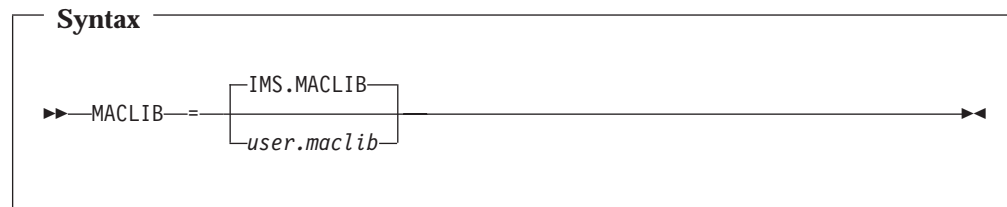
LOCKMAX has no default. You must supply a value for LOCKMAX.

This option overrides the PSBGEN LOCKMAX value if one was specified.

If you specify LOCKMAX=0 there will be no limit on the number of locks handled.

If LOCKMAX is exceeded an IMS 3301 abend will result.

MACLIB

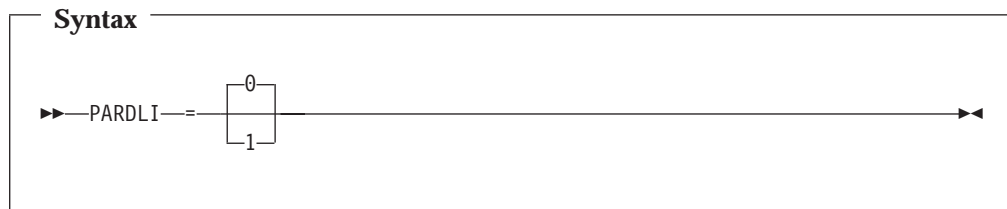


MACLIB specifies the name of the IMS macro library for this IMS subsystem, to be used in generating a Dynamic PSB.

user.maclib the IMS MACLIB as defined at your installation.

This option is optional. If you do not specify a value for MACLIB the installation default, specified in FMN1POPD, will be used.

PARDLI

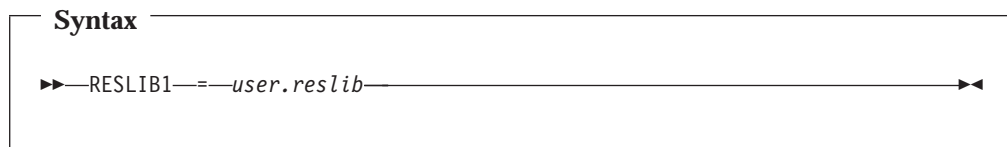


PARDLI specifies whether or not DL/I processing is performed within the BMP region.

- 0** forces DL/I processing to be performed within the BMP region. This is the default.
- 1** forces all DL/I processing for this BMP to be performed in the IMS control region. This prevents control region system 113 abends resulting from system X22 abends in the BMP region.

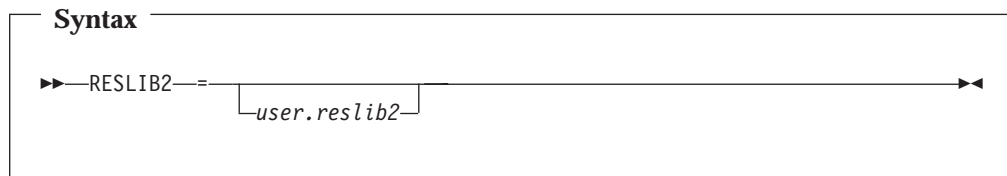
Note: Setting PARDLI=1 will disable parallel DL/I, which may degrade performance.

RESLIB1



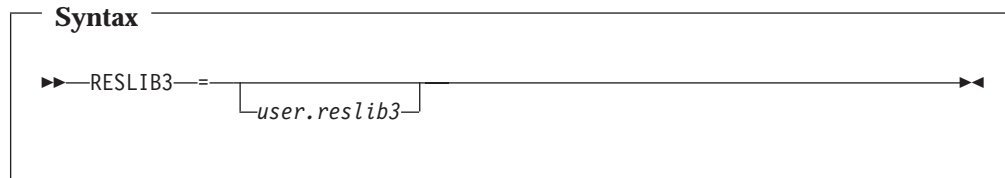
RESLIB1 specifies the default IMS RESLIB that will be used by File Manager/IMS in BMP mode for this subsystem. This option is required. *user.reslib* is the name of the IMS RESLIB as defined at your installation.

RESLIB2



RESLIB2 specifies an additional user-defined library, if required, for File Manager/IMS in DLI mode: for example, a library containing Dynamic allocation or user exit routines. If an additional library is not required, leave this option blank.

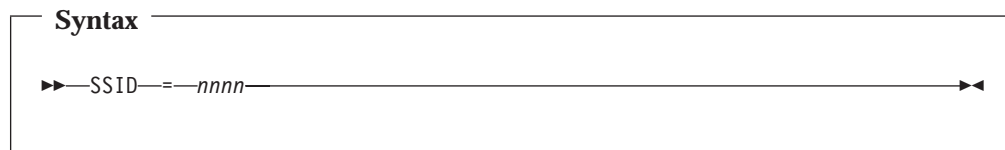
RESLIB3



RESLIB3

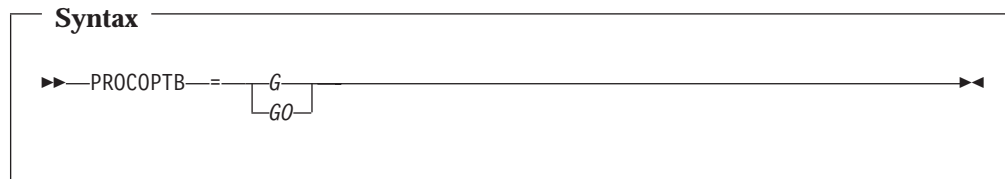
specifies an additional user-defined library, if required, for File Manager/IMS in DLI mode: for example, a library containing Dynamic allocation or user exit routines..

SSID



SSID defines the IMS subsystem ID. *nnnn* is a unique 1-4 character subsystem ID. This option is required, and corresponds to the SSID definition for the IMS subsystem.

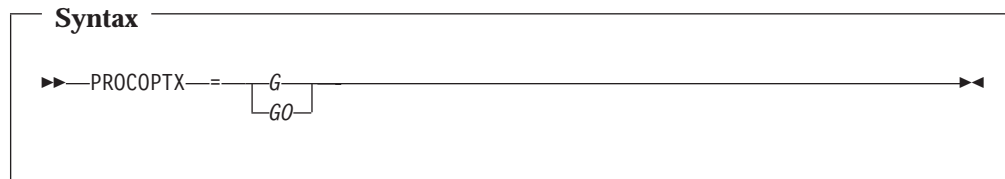
PROCOPTB



PROCOPTB specifies the PSB Processing Option (PROCOPT) for the dynamic PSB generated for browse when accessing databases in this IMS subsystem (BMP mode).

- G** The Browse of the dynamic PSB will read with integrity.
- GO** The Browse of the dynamic PSB will read without integrity.

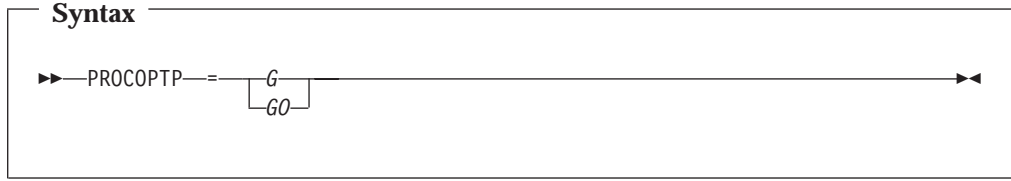
PROCOPTX



PROCOPTX specifies the PSB Processing Option (PROCOPT) generated for the dynamic PSB for extract when accessing databases in this IMS subsystem (BMP mode)

- G** The Extract of the dynamic PSB will read with integrity.
- GO** The Extract of the dynamic PSB will read without integrity.

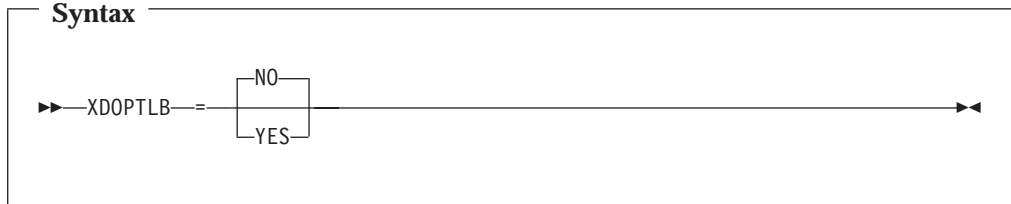
PROCOPTP



PROCOPTP specifies the PSB Processing Option (PROCOPT) for batch print (IPR), when accessing databases in this IMS subsystem (BMP mode).

- G** The batch print of the dynamic PSB will read with integrity.
- GO** The batch print of the dynamic PSB will read without integrity.

XDOPTLB



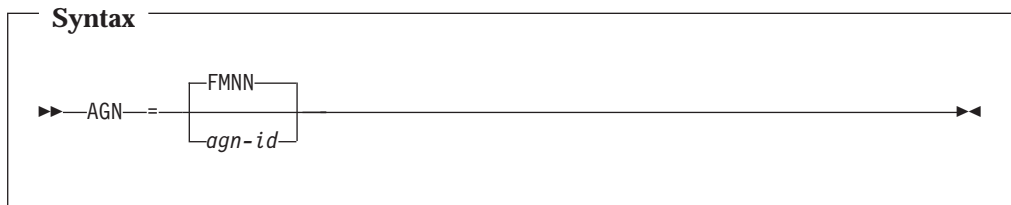
XDOPTLB specifies whether or not the members of the DOPT ACBLIB data set will be deleted and the DOPT ACBLIB data set compressed, before File Manager/IMS executes an ACBGEN.

- NO** File Manager/IMS will delete the PSB from the DOPT ACBLIB data set after IMS termination. File Manager/IMS will not delete any other members of the DOPT ACBLIB data set and will not compress the data set.
- YES** File Manager/IMS will delete all the members of the DOPT ACBLIB data set and compress the data set before each ACBGEN.

FMN1AGNT

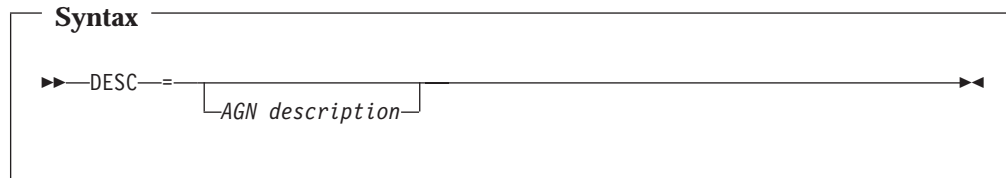
If you supply more than one FMN1POPI macro and one or more FMN1AGNT macros, you must place all the FMN1POPI macros together, followed by all the FMN1AGNT macros.

AGN



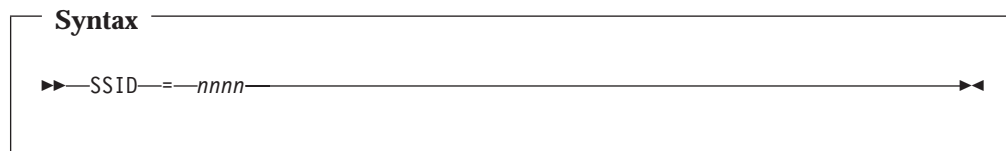
AGN specifies the 1-8 character AGN-ID as specified in the IMS Security Maintenance utility for this SSID.

DESC



DESC specifies a description for this AGN. The maximum length of the description is 45 characters, including quotes. Leave this option blank if you do not want to supply a description.

SSID



SSID defines the subsystem ID of the IMS subsystem. *nnnn* is a unique 1-4 character subsystem ID as defined in FMN1POPI for this IMS subsystem. This parameter is required.