

File Manager for z/OS V4R1



Addenda to V4R1 User's Guides and Customization Guide

File Manager for z/OS V4R1



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About this document

This document provides details of all the APAR service fixes that impact upon documentation, for IBM File Manager for z/OS Version 4.1, since the final edition of the product manuals in July 2004. These final editions are:

- User's Guide and Reference (SC18-7792-03) - Fourth Edition
- User's Guide and Reference for DB2 Data (SC18-7794-03) - Fourth Edition
- User's Guide and Reference for IMS Data (SC18-7795-03) - Fourth Edition
- Customization Guide (GC18-7790-03) - Fourth Edition

The Addendum document is divided into two parts:

- **Part One: PTF/APAR Documentation Changes**

This section lists the changes to the File Manager for z/OS Version 4 Release 1 documentation that are required to reflect new behaviour resulting from the application of APAR fixes.

The fixes are listed by PTF number, in reverse date order, so that the most recently released fix appears at the beginning of the document. Each description shows:

- The set of PTF numbers in the release
- The date of the PTF release
- The APARs included in the released fix
- Details of those APAR changes that affect documentation
- Page references for the manuals affected by the change

Notes:

1. This document does NOT describe those APAR fixes that do not have an impact upon documentation.
2. The enhancements and corrections described in this section are only available after applying the listed PTFs for the APAR.

- **General Documentation Changes**

This section describes enhancements, corrections and updates in the documentation for File Manager for z/OS Version 4 Release 1. These changes are not associated with PTF numbers, as they do not require the application of any code updates.

The changes are grouped by manual and listed within each section in reverse date order. That is, the most recent documentation change appears at the beginning of each manual section.

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UK05533, UK05534, UK05535, UK05540, UK05541, UK05542

Release Date: 27 July 2005

This set of PTFs contains the following APAR fixes:

APAR #	APAR Abstract	Doc Impact
PK03363	Message "IBM0361W ONCODE=350 THE STRINGRANGE CONDITION WAS RAISED" is received trying to generate DDL from FM/DB2.	None.
PK05727	FM/DB2 editing date type column error.	None.
PK05875	After using option: 9 utilities, from FM/IMS, the FMN1IMID value is lost from panels FMN1PX1 and FMN1PB1D.	None.
PK06509	When editing or browsing a HALDB in DLI mode, the error message FMNIA109 'DD names for DBD unknown. Call to DSPURX00 failes with return code 12.'	Customization Guide (GC18-7790-03)
PK06682	FMN0331I permanent I/O error on input when using FM Edit on a multi-volume data set(Sysroute of PK06680).	None.
PK07179	In FM Compare utility, any changed fields are not highlighted correctly.	None.
PK08219	Cannot ovrtype hex values for data fields using SNGL mode.(Sysroute of PK05562).	None.
PK08222	Error in File Manager's FIND/CHANGE(Sysroute of PK07116).	None.
PK08223	ABEND0C4 in FMNEDIT1 after RECOVER 1 command(Sysroute of PK07791).	None.

PK06509

Initial problem description

When editing or browsing a HALDB in DLI mode, produces the error message FMNIA109 'DD names for DBD unknown. Call to DSPURX00 fails with return code 12'.

Outline of solution

FM has been modified to: extract the skeleton from any ISPSLIB and write that skeleton to a temporary PDS which is passed to the DBRC utility.

Documentation impact

This APAR requires changes to be made to the Customization Guide (GC18-7790-03).

Changes to the Customization Guide

Chapter 2, Customizing the operating environment for File Manager

In the section “Modifying the ISPF environment”, before the subsection “Adding File Manager to the ISPF menu”, add the following new paragraph:

In order to use File Manager/IMS with HALDBs, you must allocate a PDS(E), with LRECL=80 bytes, to the DDname ISPFIL. This data set will not be updated by File Manager/IMS, but it is an ISPF requirement that the file is allocated.

Chapter 16, Preparing to customize File Manager/IMS

In the section “Supported database access methods”, the note at the end of this section can be removed as there is no longer a requirement to allocate the skeleton library to the ISPSLIB concatenation.

Chapter 18, Customizing File Manager/IMS

In the section “Changing the JCL skeleton for batch mode”:

- The second paragraph should now read:

FMN1FTEX assigns a STEPLIB DD statement for the File Manager/IMS load library, and a FMN1JIN 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.
- Step 2 should read:

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 FMN1JIN DD statement to the name of your skeleton library.

UK03899, UK03900, UK03901, UK03902, UK03920

Release Date: 7 June 2005

This set of PTFs contains the following APAR fixes:

APAR #	APAR Abstract	Doc Impact
PK00805	Invalid values when processing data in FM/IMS	FM/IMS User's Guide and Reference (SC18-7795-03)
PK04356	Wrong display of PL/I unaligned double bit arrays.	None.
PK04428	The full text of a failing SQL statement is not displayed on the SQL error pop-up panel. (Sysroute of PK01884).	None.
PK04617	When specifying selection criteria in a View for a packed decimal key field, the key specified is not found.	None.
PK04675	A 0C4 ABEND when changing SNGL display mode to TABL mode.	None.
PK04832	In batch, audit trail report prints all fields when "print only changed" option selected.	User's Guide and Reference (SC18-7792-03)
PK04988	Page counter will not reset.	None.
PK05438	Browse (opt 1) physical sequential data set with DBCS characters using copybook receives MSGFMN0607I S0C4-11 with FORMAT=SNGL(Sysroute of PK05410).	None.
PK05472	The FM/IMS batch audit trail report shows the wrong segment layouts resulting in "INVALID VALUE" and other messages.	None.
PK06027	Using an edited template with selection criteria, and then using PF6 to browse using the template, results in an ABEND0C4(Sysroute of PK04570).	None.
PK06515	Addresses problems found internally while testing the fix for APAR PK06027.	None.

PK00805**Initial problem description**

When using a view to edit your database, FM/IMS does not allow you to insert a segment under a parent that has an invalid numeric in a (template-defined) numeric key field.

Changing the Insert Format field on the Insert Segment panel does not change the display format of the Parent Keys area.

Outline of solution

FM/IMS has been modified to:

- Allow a segment to be inserted under a parent that has an invalid numeric in a numeric key field.
- Display the Parent Keys area in the format specified in the Insert Format field. There is one exception - when LHEX is specified for the Insert Format, the Parent Keys area is displayed in HEX format.

Documentation impact

This APAR requires changes to be made to the User's Guide and Reference for IMS Data (SC18-7795-03).

Changes to the User's Guide and Reference for IMS Data

Chapter 3, Browse (option 1) and Edit (option 2); section, Primary commands

In the section, "INSERT primary command":

1. At the end of the description for **Insert Format**, add:

Note: The SNGL format is only available when a view is in use.

2. Replace the description for **Key field name** with:

When you are using the SNGL insert format and there is a layout that matches the key field of the segment type, the names of the fields in the segment layout that match the key field are displayed. If the key field is divided into several fields in the template, each subfield is displayed to form the whole key.

When you are not using the SNGL insert format or FM/IMS cannot find a layout to match the key field, the key field name specified in the DBD is displayed. Each key then only has one field associated with it.

3. Under **Type**, replace the description for **U** to:

Unformatted. The data type is unformatted when you are not using insert format SNGL, or when FM/IMS cannot find a layout that matches the key field of the segment type.

PK04832**Initial problem description**

When producing a File Manager Audit report in batch, the 'Print only changed fields' option is not available.

Outline of solution

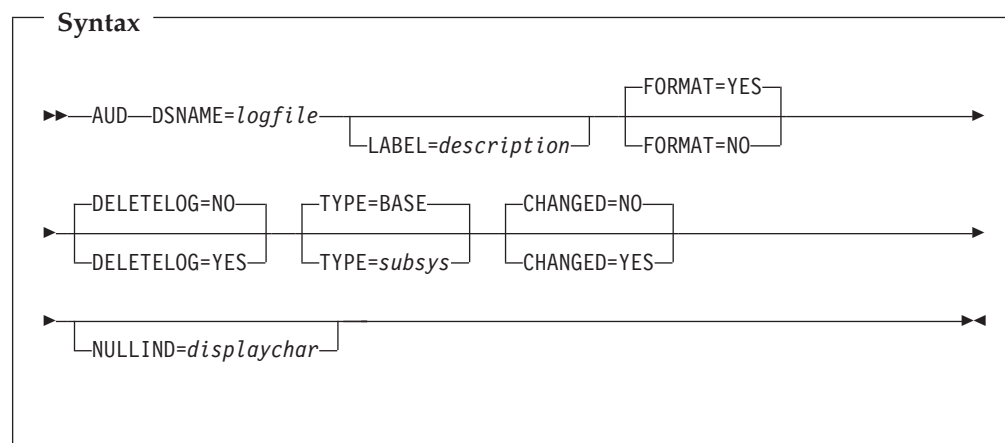
Add parameter CHANGED=NO/YES to the AUD function. If YES is specified, this will cause only fields that are changed to be reported. The default is NO.

Documentation impact

This APAR requires changes to be made to the User's Guide and Reference(SC18-7792-03).

Changes to the User's Guide and Reference**Chapter 16, Functions**

For the AUD (Print Audit Report) function, replace the syntax diagram with the following:



After the description for the TYPE parameter, add:

CHANGED

- NO** Default. All fields are reported.
- YES** Only fields that are changed are reported.

UK02321, UK02322, UK02323, UK02325, UK02368

Release Date: 18 April 2005

This set of PTFs contains the following APAR fixes:

APAR #	APAR Abstract	Doc Impact
PK01623	Cannot connect to a DB2 subsystem if it is hidden and only one.	None.
PK01883	User's Guide and online help need correction for DSC.	User's Guide and Reference (SC18-7792-03)
PK02209	Editing a data set containing a multi-dimension bit array may cause File Manager to abends0c4.	None.
PK02218	After apply of UQ96921 database load failed.	None.
PK02288	Not found condition when unsigned data entered in key search field.	None.
PK02583	Abends0c8 in FM/IMS.	None.
PK02654	ISPF dialog error with MSGISPP126 at FMN28TNM panel.	None.
PK02673	Unable to browse an SMS compressed file using a start position.	None.
PK02817	Receives FMN0607I abend0c4 trying to delete segments from a DB that were already deleted by another user.	None.
PK03244	If selected file is too large to be processed, the results are not satisfactory (sysroute of PK02857,PK03002,PK03099).	None.
PK03381	File Manager continues to process all PDS members even after receiving abendx37.	None.

PK01883

Initial problem description

The File Manager documentation states that a DISP=MOD is acceptable for the output data set using the DSC Batch function. This disposition is not valid for a PDS and is not accepted on the 'To' data set panel when a PDS data set is specified.

Outline of solution

The DSC Batch function will validate the 'To' data set parameters.

Documentation impact

This APAR requires changes to be made to the User's Guide and Reference (SC18-7792-03).

Changes to the User's Guide

The following text should be added to Chapter 16, Function DSC:

- Definition of Output DISP field value MOD should read:

MOD Appends the input records to the end of the data set.

MOD is invalid for a member of a partitioned data set.

UK01064, UK01065, UK01066, UK01073, UK01107

Release Date: 10 March 2005

This set of PTFs contains the following APAR fixes:

APAR #	APAR Abstract	Doc Impact
PK00501	FM invalid record format or record length for source/copybook data set. (Sysroute of PK00166)	None.
PK00559	FM/IMS loading HSAM database gives zero-length sort subkey ! thus give a RC=16 !	None.
PK00627	FM ABEND0C4 with DEL ALL X for large QSAM file. (Sysroute of PQ99876 and PK01219)	User's Guide and Reference (SC18-7792-03)
PK00632	ABEND 404-40 may be reported in DSC batch execution with REXX selection criteria.	None.
PK01105	File Manager may abends0c4 when updating a template which contains selection criteria and the copybook used to generate the template has changed.	None.
PK01407	FVSAM close RC04, error code X'94' RC94 when trying to read mirrored VSAM data sets with FM.	None.
PK01624	FIND command erroneously handles string when paired 0E/0F.	None.
PK02047	PK01105 fix completion.	None.

PK00627

Initial problem description

1. Abend S0C4 may occur while executing a DELETE ALL X command, or a prefix Delete command entered against an exclude set.
2. When writing an audit trail to a data set and the data set or volume becomes full, File Manager continues to attempt to write to the dataset, generating many B37 or E37 messages.
3. When editing a large PDS member using Auxilliary edit, msg FMN0319I Output data set SYS00021 STOW failed, RC 20 may be issued.

4. After an auxiliary edit, when saving to a PDS member, B37 or E37 conditions may not be detected.
5. Browse of sequential VB file may fail with message "Panel FMNPQBD error".
6. After issuing SHADOW XXX OFF commands, FIND and RFIND do not correctly reposition.
7. Block COPY and MOVE commands may produce incorrect results.
8. Exclude commands may result in message 'Prefix command overlap' after a previous prefix command used on lines being excluded.
9. AbendS0C4 may occur when using in-place editing and the Find or Change commands with the LAST operand.
10. Scrolling may cease to operate correctly after a Find with the PREV operand in auxiliary edit.
11. During auxiliary edit, FIND ALL may result in message 'Insufficient Virtual Storage' and not complete.
12. When executing the DSC function from a REXX program the "FMN0113I Parameter MEMOUT invalid..." message may be issued.

Outline of solution

PK00627 modifies FM/IMS to:

1. Correctly process deletions of excluded sets in auxiliary edit. In order to improve the ability to delete large numbers of records, the RECOVER command has been restricted for auxiliary edit, to only the previous ten deleted records.
2. Cease write attempts to the audit data set after a prior write failure.
3. Correctly open the PDS member when saving changes after an auxiliary edit.
4. Cease write attempts to the PDS member after a B37 or E37 error and allow the user to compress the PDS.
5. Added support for LRECL=0 VB sequential files.
6. Correctly reposition for FIND and RFIND commands after a SHADOW XXX OFF command has been issued.
7. Correctly resolve records during block command operation.
8. Correct exclude command operation.
9. Correctly reference records during FIND or CHANGE LAST.
10. Correctly position during and after FIND PREV.
11. Correctly release records during FIND ALL operation.
12. Corrected the keyword table for the DSC function.

Documentation impact

This APAR requires changes to be made to the User's Guide and Reference (SC18-7792-03).

Changes to the FM User's Guide

The following text should be added to Chapter 15 Primary Commands, RECOVER command:

Note: During an Auxiliary Edit, the RECOVER command can only restore up to ten previously deleted lines of data.

UK00194, UK00195, UK00196, UK00197, UK00206, UK00230

Release Date: 8 February 2005

This set of PTFs contains the following APAR fixes:

APAR #	APAR Abstract	Doc Impact
PQ95312	After a search reaches MAXGN in the database, a REPEAT FIND searches the same records over and over	FM/IMS User's Guide
PQ97285	FM/IMS RELATED command doesn't work with IMS logical databases.	FM/IMS User's Guide
PQ98375	ABENDS878 RC14 occurs when attempting to save changes to a DB2 View	None.
PQ99010	FM/IMS 4.1 Browse IMS DB in BMP mode: IKJ56246I file FM FM1LIN not allocated, file in use + FMN0650I SVC99 concatenate failed	None.
PQ99725	FMN00606I error code 80000452 in FMNMOD1 if IMS PSB LANG=PLI	None.

PQ95312

Initial problem description

After a search reaches MAXGN in the database, a REPEAT FIND searches the same records over and over.

Outline of solution

APAR PQ95312 modifies FM/IMS to display the Search Interrupt popup when the MAXGN limit is reached. This popup gives the user the option of continuing or discontinuing the search.

Documentation impact

This APAR requires changes to be made to the User's Guide and Reference for IMS Data (SC18-7795-03).

Changes to the FM/IMS User's Guide

The following text should be added to the end of the FIND primary command section of Chapter 10. Commands.

If the MAXGN option has been set to a nonzero value at your installation, FM/IMS counts the number of segments read during the search and displays the Search Interrupt popup when the count equals the value specified for MAXGN. The Search Interrupt popup gives you the option of continuing or discontinuing the search. If you elect to continue the search and the search is not over when a

further MAXGN segments have been read, the Search Interrupt popup will be redisplayed and you will have the option once again of continuing or discontinuing the search.

There are two variants of the Search Interrupt popup. Figure 1 shows the popup that is displayed when no instances of the search argument have been found. You have three options:

- To continue the search.
- To discontinue the search and display data from the position prior to the search.
- To discontinue the search and display data from the current search position.

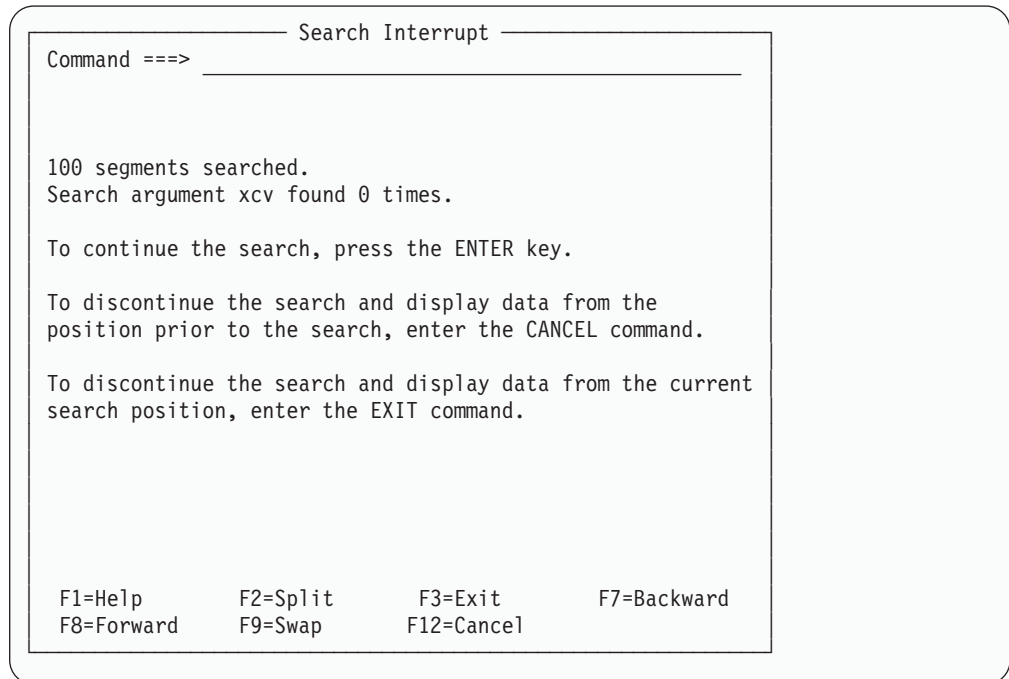


Figure 1. Search Interrupt panel - search string not found

For FIND...ALL requests, the search is not over when one instance of the search argument is found.

Figure 2 on page 15 shows the popup that is displayed when instances of the search argument have already been found. If you elect to discontinue the search when instances of the search argument have already been found, FM/IMS will display data from the position of the the first instance of the search argument, as it would if the search had run to its completion.

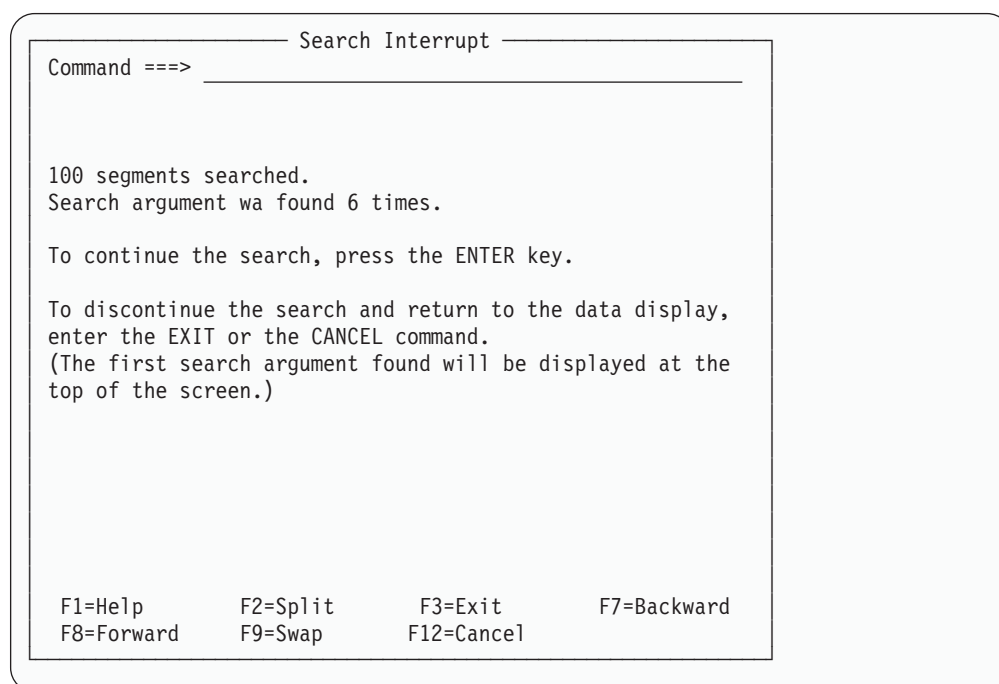


Figure 2. Search Interrupt panel - search string found

PQ97285

Initial problem description: FM/IMS RELATED command doesn't work with IMS logical databases.

APAR PQ97285 modifies FM/IMS RELATED command to provide logical relationship information for logical databases.

This APAR requires changes to be made to the User's Guide and Reference for IMS Data (SC18-7795-03).

Changes to the FM/IMS User's Guide

Replace the text in the Logical Relationship Information section in Chapter 9. Panel and fields with:

The RELATED command provides information about the logical relationships that are defined for the current database.

Panel and field definitions:

<u>P</u> rocess	<u>O</u> ptions	<u>H</u> elp	Logical Relationship Information				
Database	Segment	Related Database	Related Segment	Key Start	Key Length	I D R Rules	Relationship
FM/IMS	DJ1E						
	SHIRE						
	SHIRENP						
	LINKSUB	DJ2E	INSHIRE	1	18		VIRT LOG CHILD
	SUBURB						
	LINKSTR	DJ3E	INSUB	1	28		VIRT LOG CHILD
	NSTREET						
	INSHIRE	DJ1E	LINKSUB	1	20	LLL, LAST	REAL LOG CHILD
	LETRBOX						
Command ==>							Scroll <u>C</u> SR

Figure 3. Logical Relationship Information panel

Database

The name of the current database and, when the current database is a physical database, the names of the logically related databases.

Segment

The names of the segments in the listed databases.

Related Database

The name of the database containing the related segment.

Related Segment

For physical databases, the name of the logical parent of the segment. This field is blank when the segment is not a logical child.

For logical databases, the names of the physical segments that make up the logical segment. For concatenated segments, two segment names are listed. A 'K' appearing after the segment indicates that the KEY operand was specified on the SOURCE= parameter of the SEGM statement. The absence of a 'K' indicates that the DATA operand was specified.

Key Start

The starting position of the segment's key field.

Key Length

The length of the segment's key field.

IDR Rules

The insert, delete and replace rules for the segment. FIRST, HERE and LAST indicate the insert position rules.

Relationship

Whether the segment is a real logical child or a virtual logical child.

REAL LOG CHILD

Real logical child segment

VIRT LOG CHILD

Virtual logical child segment

UQ96921, UQ96922, UQ96924, UQ96928, UQ96940

Release Date: 26 January 2005

This set of PTFs contains the following APAR fixes:

APAR #	APAR Abstract	Doc Impact
PQ95623	SYSPRINT DD in FM skeleton FMN1FTEX generates a JCL error.	None
PQ96612	Option "U" is not processed by FM and FM places no restriction on access to Utility functions.	FM Customization Guide
PQ98493	When editing a large QSAM data set with the "Create Audit Trail" option set, some records get deleted and others are duplicated.	None.
PQ98505	Wrong display of PL/I unaligned double bit arrays.	None.
PQ98865	FMN0999I Message 0202 when browsing RRDS file.	None.
PQ98878	Multi-volume data sets show only first part.	None.
PQ98902	FM 4.1 template VB file.	None.
PQ99004	The TOD value returned in SMF audit trail records is incorrect.	None.

PQ96612

Initial problem description

Option "U" is not processed by FM and FM places no restriction on access to Utility functions.

Outline of solution

APAR PQ96612 modifies the FM/IMS security exit process to:

- set the FM_SEC_OPTIONS field to 'U' for the FM/IMS Utilities Delete/Define Database Data Sets and Initialize IMS Databases.
- set the FM_SEC_IMS_SUB_FUNCTION field to 'D' for the Delete/Define Database Data Sets utility and 'I' for the Initialize IMS Databases utility.

Documentation impact

This APAR requires changes to be made to the File Manager for z/OS V4R1 Customization Guide (GC18-7790-03).

Changes to the FM Customization Guide

In **Chapter 19: Customizing the File Manager/IMS security environment**, in the section headed "Setting up the security environment by using FMN1STX, Security exit parameters" (page 111), add the following lines to the Description for the Subfunction in Table 16 Parameters - Exit Type I:

Function U, Utilities:

- D** Delete/define Database data sets
- I** Initialise IMS Databases

UQ94812, UQ94813, UQ94814, UQ94654

Release Date: 11 November 2004

This set of PTFs contains the following APAR fixes:

APAR #	APAR Abstract	Doc Impact
PQ90513	FM/IMS data truncation error using split screen and large templates. Data variable for "FMNEDYN" or "FMNLNDYN" too long.	None.
PQ97285	FM/IMS 4.1 is not deallocating HALDB data sets when exiting Browse or Edit.	None.
PQ91819	FM/IMS batch job fails loading SDEP segments.	FM/IMS User's Guide.
PQ92342	There is a problem with IEB Print function headings consistency.	None.
PQ95016	FM/IMS does not recognize migrated data sets and gives the message "INVALID INPUT".	None.
PQ95472	Compare Utility (Option 3.11) data element occurrence 1 is repeated in the results, and data elements not flagged correctly.	None.
PQ95487	Status code of "GE" after FM/IMS changes non-displayable HEX values to a value that is displayable.	None.
PQ95569	Length error browsing concatenated segment.	None.
PQ95599	Incorrect data in FM'S SMF audit records.	None.
PQ95697	FM/IMS ABEND 978 followed by ABEND 0C4.	None.
PQ95830	Search string problem and the PF7/PF8 problem.	None.
PQ96375	FM Edit/ Browse gets ABENDOC4 after 'EXCLUDE ALL' then 'FIND STRING ALL' in VSAM KSDS file.	None.
PQ96923	AE PQ95830 fix completion.	None.

PQ91819
Initial problem description

Loading the a DEDB database with sequential dependent segments using a dynamic PSB and load type of 'Insert or Update' causes the generation of the IMS ACB to fail.

FM/IMS is not loading the DEDB sequential dependent segments in the correct sequence.

Outline of solution

APAR PQ95312 modifies FM/IMS to:

1. generate a PSB with a PSB processing option of 'GI' for the sequential dependent segment when loading a DEDB database using a dynamic PSB.
2. allow two different methods for extracting/loading DEDB SDEP segments. FM/IMS will either:
 - write the SDEP timestamp to the unload file during extract. When loading the DEDB database the sequential dependent segments will be restored to their original entry sequence order.
 - load all the sequential dependents of a root segment together in the reverse sequence they were read during the extract process. This will restore the SDEP segments so that when reading them using DLI calls the database will look the same. However when the DEDB database is processed using the Sequential Dependent Scan Utility the order of the segments could be different.

Documentation impact

This APAR requires changes to be made to the User's Guide and Reference for IMS Data (SC18-7795-03).

Changes to the FM/IMS User's Guide

The following text should be inserted into Chapter 6: Managing data, between the "Partial extract using Extract Criteria (BMP mode)" and "Extract data layout" sections.

Extracting and loading DEDB databases with sequential dependent segments

Sequential dependent (SDEP) segments are stored in the sequential dependent part of the DEDB area in the chronological order in which they were inserted without regard to the root or unit of work (UOW) that contains the root. The SDEP segment is then retrieved in a last-in first-out (LIFO) sequence by DL/I calls. Hence, when they are viewed, SDEP segments under a single root are in reverse of the insertion sequence.

Example database after inserting six SDEP segments under two different roots:

```
CUSTROOT ..00000001 CUSTROOT SEGMENT
CUSDEPSG .. 5TH SEGMENT INSERTED
CUSDEPSG .. 4TH SEGMENT INSERTED
CUSDEPSG .. 1ST SEGMENT INSERTED
CUSTROOT ..00000010 CUSTROOT SEGMENT
CUSDEPSG .. 6TH SEGMENT INSERTED
CUSDEPSG .. 3RD SEGMENT INSERTED
CUSDEPSG .. 2ND SEGMENT INSERTED
```

The design of the SDEP segments allows for better performance when inserting SDEP segments or when processing the SDEP segments using the Sequential

Dependent Scan or Sequential Dependent Delete Fast Path utilities. However reading the sequential dependent segments via DL/I calls is slower.

Sample result of the sequential scan utility:

```
1ST SEGMENT INSERTED
2ND SEGMENT INSERTED
3RD SEGMENT INSERTED
4TH SEGMENT INSERTED
5TH SEGMENT INSERTED
6TH SEGMENT INSERTED
```

The SDEP segments can only be deleted by deleting their root segments or by using the IMS Fast Path Sequential Dependent Delete Utility. Since IMS only allows sequential dependent segments to be inserted and not replaced, care must be taken when loading DEDB databases with SDEP segments to avoid duplicate segments being created.

To avoid duplicating SDEP segments, the Fast Path Sequential Dependent Delete Utility can be run to remove the existing SDEPs. When running this utility you need to consider the following:

- Prior to running the Utility, you may want to run the Fast Path Sequential Dependent Scan utility to read the SDEPs to be deleted.
- The Sequential Dependent Delete utility removes the SDEPs from the earliest SDEP inserted until a point you specify. There is no way to specify individual root segment sequential dependents, so be aware you may be deleting other user's data.

Note: For more information on the Fast Path Sequential Dependent Scan and Sequential Dependent Delete Utilities, please refer to the IMS Utilities Reference: Database and Transaction Manager.

Extracting SDEP segments: FM/IMS allowed two possible methods to order extracted SDEP segments:

Reverse-retrieval order (default)

This method reverses the SDEPs order from their retrieval sequence. Loading SDEPs in this order restores their sequence under each root but does not restore the sequence as seen by the sequential scan utility.

Sample result as viewed in the database:

```
CUSTROOT ..00000001 CUSTROOT SEGMENT
CUSDEPSG .. 5TH SEGMENT INSERTED
CUSDEPSG .. 4TH SEGMENT INSERTED
CUSDEPSG .. 1ST SEGMENT INSERTED
CUSTROOT ..00000010 CUSTROOT SEGMENT
CUSDEPSG .. 6TH SEGMENT INSERTED
CUSDEPSG .. 3RD SEGMENT INSERTED
CUSDEPSG .. 2ND SEGMENT INSERTED
```

Sample result of the sequential scan utility:

```
2ND SEGMENT INSERTED
3RD SEGMENT INSERTED
6TH SEGMENT INSERTED
1ST SEGMENT INSERTED
4TH SEGMENT INSERTED
5TH SEGMENT INSERTED
```

SDEP Timestamp order

This method attempts to place the retrieved SDEP segments into their

original insertion order by reading their timestamps with the POS DL/I call. The timestamps are written to the unload file with the SDEP segments. This method is more costly because of the POS call overhead, however, loading SDEPs in this order restores both their order under each root as well as the sequence as seen by the sequential scan utility.

Sample result as viewed in the database:

```
CUSTROOT ..00000001 CUSTROOT SEGMENT
CUSDEPSG .. 5TH SEGMENT INSERTED
CUSDEPSG .. 4TH SEGMENT INSERTED
CUSDEPSG .. 1ST SEGMENT INSERTED
CUSTROOT ..00000010 CUSTROOT SEGMENT
CUSDEPSG .. 6TH SEGMENT INSERTED
CUSDEPSG .. 3RD SEGMENT INSERTED
CUSDEPSG .. 2ND SEGMENT INSERTED
```

Sample result of the sequential scan utility:

```
1ST SEGMENT INSERTED
2ND SEGMENT INSERTED
3RD SEGMENT INSERTED
4TH SEGMENT INSERTED
5TH SEGMENT INSERTED
6TH SEGMENT INSERTED
```

To use this extract method, check the **SDEP in timestamp order** option on the Extract Entry panel when generating the extract JCL, or manually specify the SDEPTSO JCL option in the IXB function.

UQ94293, UQ94296, UQ94297, UQ94311, UQ94320

Release Date: 1 November, 2004

This set of PTFs contains the following APAR fixes:

APAR #	APAR Abstract	Doc Impact
PQ92679	FM modifications in support of the SUBSYS parameter.	Customization Guide (GC18-7790-03) User's Guide and Reference (SC18-7792-03)
PQ93861	MSGISPT050 is issued when executing (PF6) the SQL generated by basic SELECT prototyping function.	None
PQ93894	File Manager ends with a non-zero condition code instead of abending.	Customization Guide (GC18-7790-03) User's Guide and Reference (SC18-7792-03)
PQ95560	Edit "INVALID NUMBER - MAX OR MIN VALUE EXCEEDED" for value 65535.	None
PQ95635	*FASTPROC doesn't work as expected.	User's Guide and Reference (SC18-7792)
PQ95768	FM/IMS copybook compilation error on Panvalet library (Sysroute of PQ95510)	None
PQ96111	FM interactive browse VSAM file with windowed or split screen results in FMN0607I ABEND0C4 - REASON 00000010	None

PQ92679

Initial problem description

1. Limited access to library management systems by other vendors unless a user LMS exit is used.
2. Writing data to variable length data sets with the PACK option on, may result in unreadable data. Data set generate, data set copy and edit may all produce this problem. Validly packed variable length data sets may incorrectly produce message "Input data appears ISPF packed but is not valid."
3. DSU and DSC functions update ISPF statistics when processing PDS members.
4. Some FASTREXX enhancements are being delivered with this APAR.

Outline of solution

APAR PQ92679 modifies File Manager in the following ways:

1. It allows access to an external Library Management System (LMS) by means of a subsystem interface already provided by such systems. The optional installation LMSUBSYS=xxxx keyword will cause File Manager, when accessing COBOL copybooks or PL/I include files, to attempt access via an IO subsystem using the DFSMSdfp SUBSYS=xxxx parameter. SUBSYS allocation will be limited to copy books that exist in BDAM and VSAM data sets.
2. It updates the PACKED data options so that File Manager will correctly pack variable length records and correctly read variable length packed records. (There are no documentation changes associated with this part of the fix.)
3. The DSC and DSU functions will allow now for the ISPF statistics update to be disabled. A panel option is being provided for DSC and a batch keyword of STATS=ON|OFF has been defined for DSC and DSU.
4. It enhances File Manager support for external REXX functions, by providing for "Relative Positioning" the listed functions.

Documentation impact

This APAR requires changes to be made to the Customization Guide (GC18-7790-03) and the User's Guide and Reference (SC18-7792-03).

Changes to the Customization Guide

The following text should be added to the specified sections within the Customization Guide.

Chapter 3: Customizing File Manager

In the section headed "Changing the default options", add the following line to the FMN0POPT options listed in Figure 2:

```
LMSUBSYS=,                or XXXX (lib mgmt SUBSYS name)
```

Figure 4. FMN0POPT macro statements

Chapter 12: Customizing File Manager/DB2

In the section headed "Changing the default options", add the following line to the FMN2POPT options listed in Figure 11:

```
LMSUBSYS=,                or XXXX (lib mgmt SUBSYS name)
```

Figure 5. FMN2POPT macro statements

Chapter 18: Customizing File Manager/IMS

In the section headed "Changing the default options", add the following line to the FMN2POPT options listed in Figure 13:

```
LMSUBSYS=,                or XXXX (lib mgmt SUBSYS name)
```

Figure 6. FMN1POPT macro statements

Appendix A: File Manager Options

Add the following option

LMSUBSYS= [empty] | xxxx

where xxxx keyword will cause FM, when accessing COBOL copybooks or PL/I include files, to attempt access via an IO subsystem using the DFSMSdfp SUBSYS=xxxx parameter. SUBSYS allocation will be limited to copy books that exist in BDAM and VSAM data sets.

Changes to the User's Guide and Reference

The following changes should be made to the User's Guide and Reference:

Chapter 14. Panels and Fields

In the Copy To panel section, add the description of the Stats Off field:

Stats off

When selected, this option ensures that the ISPF statistics for PDS or PDSE members, if present, are not updated. Selecting this option improves performance when processing PDS or PDSE data sets with many members.

Chapter 16. Functions

In the DSC (Data Set Copy) section, update the syntax diagram and add the description for:

STATS=ON

Default. This updates the ISPF statistics (if already present) when a PDS or PDSE member has been changed.

STATS=OFF

The ISPF statistics are not updated when a PDS or PDSE member has been changed.

In the DSU (Data Set Update) section, update the syntax diagram and add the description for:

STATS=ON

Default. This updates the ISPF statistics (if already present) when a PDS or PDSE member has been changed.

STATS=OFF

The ISPF statistics are not updated when a PDS or PDSE member has been changed.

Extended FASTREXX support

APAR PQ92679 provides "extended" FASTREXX support in File Manager Version 4. As a result the following documentation changes are made to the File Manager version 4 User's Guide and Reference, SC18-7792-03.

- Chapter 5, Filtering records with templates, section: About expression processing, subsection: Improving performance using internal expression processing, is rewritten.
- Chapter 16, Functions, section: External REXX functions, is rewritten.

Chapter 5, Filtering records with templates

In the section headed "Improving performance using internal expression processing", add the following to the bullet list.

- **Logical AND (&), OR (|) and exclusive OR (&&) operators:** The only other binary operators that the internal processor allows are the logical AND (&), inclusive OR (|), and exclusive OR (&&:) operators.
- **Logical and arithmetic prefix operators:** You can use the logical not (¬ or \) operator before logical expressions to negate the result of the expression. You can use the plus (+) and minus (-) operators before decimal numerics (to indicate sign), and before and within floating point numerics as defined by the REXX syntax.
- **File Manager field references:** The internal expression processor supports both formatted and unformatted references when evaluating identification or selection criteria. Formatted references are not supported in expressions eligible for FASTREXX processing.
- **Function invocations:** The following functions can be included in an expression that is to be processed internally:
 - FLD
 - FLD_CO
 - FLD_TM
 - FLD_TYPE
 - I_LENGTH
 - O_LENGTH
 - PRTCOUNT
 - RECSIN
 - RECSOUT
- Parentheses

These rules also apply when creating conditions in an IF-THEN-ELSE statement within a FASTREXX procedure.

Chapter 16: Functions

In the "External REXX functions" section, make the following changes:

Absolute and relative positioning in external REXX functions: All File Manager external REXX functions that refer to positions within the input or output record can use absolute values to determine the byte location within the record. For example, the FLD function syntax is:

```
FLD(start_column,length,type)
```

where **start_column** can be an integer that refers to a specific byte in the input record.

However, some external REXX functions also allow positions to be specified as an offset value, relative to the "current position" within the input or output record. The current position is initialized as each record is processed but can be modified by these functions.

For input records, this allows you to perform tasks such as searching for a string in the input record and then testing or copying the contents of a field relative to the located string.

For output records, this allows you to easily append fields or constants at positions relative to the most recently updated output record field. For example, you could append a number of constants and fields, one after the other in the output record,

without needing to keep track of the exact current starting position or manually updating the starting position with the length of added fields.

Note: You cannot use the REXX external functions to write data beyond the logical record limitations of the output data set. For example, when using a Fixed Block data set that has an LRECL of 80, you cannot write data to position 81 or beyond.

The following functions support relative positioning:

- CHG_OUT
- FLD
- FLD_CO
- FLD_OUT
- FLD_TM
- FLD_TYPE
- OVLY_OUT

To maintain the current position within the input and output records, these functions use two internal variables, INPOS and OUTPOS. These values have not been externalized to the REXX environment and can only be accessed or altered indirectly, by using the functions listed above, or SET_OLEN (which does not support relative position arguments but does alter the value of OUTPOS in some circumstances).

INPOS

For each new record that is processed, INPOS is set to 1. INPOS is then changed for the current input record whenever the FLD_CO function executes a successful search for a needle that is a string (type C or U). If a needle is found, INPOS is set to the first byte of the located needle. If no needle is found, INPOS is unchanged.

OUTPOS

For each new record that is processed, OUTPOS is set to 1 greater than the length of the current output record. The output record is initially the same length as the input record, unless templates have been used to reformat the record. OUTPOS is then modified (as a side effect) when the following functions are used:

CHG-OUT

sets OUTPOS to one byte past the end of the last changed field in the output record.

FLD-OUT

sets OUTPOS to 1 byte past the end of the field being overlaid in the output record.

OVLY-OUT

sets OUTPOS to 1 byte past the end of the field being overlaid in the output record.

SET-OLEN

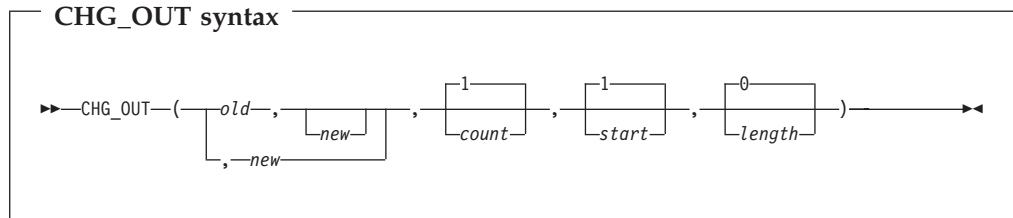
only changes OUTPOS if it truncates the output record so that the existing OUTPOS becomes greater than the reduced record length. In this case, OUTPOS is reset to the reduced length plus 1.

Specifying relative positions: Relative positioning is specified when you use a special character string, in the form of <type><offset>, in place of an integer in the start argument of a supported function. The relative position can be specified in the following ways:

- IPx** The start position is taken from the current INPOS (the “I” in <type>) and then offset a positive (the “P” in <type>) number of bytes, as specified by x. For example, if the INPOS was currently 20 and you specified a start argument of IP5, the start position would be 25.
- INx** The start position is taken from the current INPOS and then offset a negative (the “N” in <type>) number of bytes, as specified by x. For example, if the INPOS was currently 20 and you specified a start argument of IN5, the start position would be 15.
- OPx** The start position is taken from the current OUTPOS (the “O” in <type>) and then offset a positive number of bytes, as specified by x. For example, if the OUTPOS was currently 20 and you specified a start argument of OP5, the start position would be 25.
- ONx** The start position is taken from the current OUTPOS and then offset a negative number of bytes, as specified by x. For example, if the OUTPOS was currently 20 and you specified a start argument of ON5, the start position would be 15.

When the start argument’s natural target is the input record, IPx and INx can be abbreviated to Px or Nx. When the argument’s natural target is the output record, OPx and ONx can be abbreviated to Px or Nx. For example, FLD(start_column,length,type) reads from the input record, so you could specify start_column as IP5 or P5, and get the same result. However, if you want to use the current value of OUTPOS to specify the start_column in the input record, you must specify the <type> in full, that is, as OP5.

CHG_OUT:



Note: Commas following the last specified argument can be omitted.

Can be used in FASTREXX procedures.

Changes one or more occurrences of an *old* string in the output record to a *new* string. On successful execution, also updates the value of OUTPOS to one byte past the end of the last changed field in the output record.

Returns

- A single blank.
- old* Old string to change. If this argument is omitted, the new string is inserted at the *start* location.
- new* New string. If this argument is omitted, then *count* occurrences of *old* are deleted.

count Maximum number of occurrences of *old* to change. Must be a non-negative integer. Default value is 1. A value of 0 indicates that all occurrences should be changed, unless the *old* string field is omitted, in which case it is equivalent to a value of 1.

start Position, in bytes, in the output record at which to start searching for occurrences of *old*. Can be specified as:

Absolute position

Must be a positive integer. Default value is 1. If *start* is greater than the current length of the output record, the function has no effect.

Relative to current INPOS

Must be specified as IPx or INx. If this resolves to a value of less than or equal to zero, the function results in an error. If this resolves to a value that is greater than the current length of the output record, the function has no effect.

Relative to current OUTPOS

Can be specified as OPx or ONx, or as Px or Nx. If this resolves to a value of less than or equal to zero, the function results in an error. If this resolves to a value that is greater than the current length of the output record, the function has no effect.

length Amount, in bytes, of the output record to search for occurrences of *old*. Must be a non-negative integer. If 0 is specified or defaulted, the entire record will be searched.

Example 1

Assuming that the current output record contains 'abcabcabcabcabcabc', then:

```
CHG_OUT('abc','DeF',0)
/* All occurrences of old within the          */
/* output record are changed                  */
```

The output record becomes 'DeFDeFDeFDeFDeFDeFDeF'.

Example 2

Assuming that the current output record contains 'abcabcabcabcabcabc', then:

```
CHG_OUT('abc','DeF',,4)
/* 1 (default) occurrences of old changed,    */
/* starting at position 4 within the output record */
```

The output record becomes 'abcDeFabcabcabcabcab'.

Example 3

Assuming that the current output record contains 'aaaaaaaa', then:

```
CHG_OUT('a','A',0,3,2)
/* all occurrences of old changed, starting at */
/* position 3 in the output record, for a length of 2 */
```

The output record becomes 'aaAAaaaaaa'.

Example 4

Assuming that the current output record contains 'abcabcabcabcabcabc', and that INPOS is currently set to 13 and OUTPOS is currently set to 4, then:

```
CHG_OUT('abc','DeF',1,P3)
/* 1 occurrence of old changed, */
/* uses OUTPOS as the default target, therefore */
/* starts at position 7 within the output record */
```

The output record becomes 'abcabcDeFabcabcabcab' and OUTPOS is set to 10 (INPOS remains unchanged).

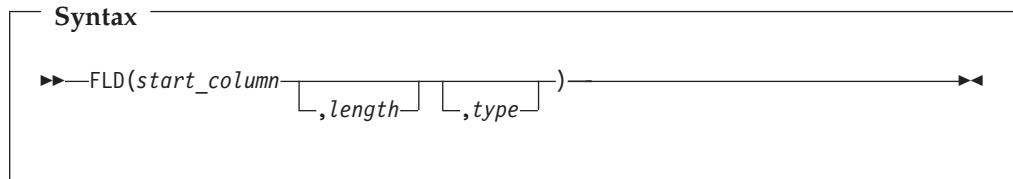
Example 5

Assuming that the current output record contains 'abcabcabcabcabcabc', and that INPOS is currently set to 13 and OUTPOS is currently set to 4, then:

```
CHG_OUT('abc','DeF',1,IN3)
/* 1 occurrence of old changed, */
/* forces start to use INPOS value, therefore */
/* starts at position 10 within the output record */
```

The output record becomes 'abcabcabcDeFabcabcab' and OUTPOS is set to 13 (INPOS remains unchanged).

FLD:



Can be used in FASTREXX condition expressions.

Fetches the value of a field from the current input record (INREC), starting at *start_column*, of *length* number of bytes, interpreted according to the specified *type*.

Returns

The value of the field from the current input record.

start_column

Position, in bytes, in the input record at which to start reading the field value. Can be specified as:

Absolute position

Must be a positive integer. Default value is 1. If start is greater than the current length of the input record, the function has no effect.

Relative to current INPOS

Can be specified as IPx or INx, or as Px or Nx. If this resolves to a value of less than or equal to zero, the function results in an error. If this resolves to a value that is greater than the current length of the input record, the function has no effect.

Relative to current OUTPOS

Must be specified as OPx or ONx. If this resolves to a value of less than or equal to zero, the function results in an error. If this

resolves to a value that is greater than the current length of the input record, the function has no effect.

length The length of the field in bytes.

For binary fields, you must specify the length. It can be 2, 4, or 8.

For character fields, if you omit the length, FLD returns the remainder of the record.

For packed decimal fields, if you specify the length, it must be in the range 1–16. If you omit the length, FLD attempts to determine the packed field length from the record data and returns only that field.

For zoned decimal fields, if you specify the length, it must be in the range 1–31 or, if the field contains a separate sign character, in the range 1–32. If you omit the length, FLD returns the remainder of the record.

type The data type of the field. Valid values are:

B Binary. FLD interprets binary fields as being signed.

C Character. This is the default.

P Packed decimal.

U Interprets the field as Character, but converts it to uppercase before returning the string.

Z Zoned decimal (COBOL external decimal).

If you specify a value for *length* that would cause the record length to be exceeded:

- For character fields (*type* C, U), FLD returns the remainder of the record.
- For numeric fields (*types* B, P, Z), FLD returns a null string.

If you specify a numeric type (*types* B, P, Z), and the specified field contains invalid data for that type, then FLD returns a null string. Numeric data is always returned in integer form; that is, FLD does not perform scaling of numeric data.

The FLD function is similar to the built-in REXX SUBSTR function, except that FLD interprets the “substring” according to the specified data type, and returns the value formatted appropriately. (For a numeric field, FLD returns the value with a sign, and without leading zeros.)

Example 1

If the value of the packed decimal field that starts at column 8 is greater than 100, then do not process the current record.

```
if fld(8,P) > 100 then return 'DROP'
```

Example 2

If the value of the 2-digit year field starting at column 42 is greater than 60, then insert the literal “19” before the year field; otherwise, insert “20”.

```
if fld(42,2,Z) > 60 then
  outrec = fld(1,41)||'19'||fld(42)
else
  outrec = fld(1,41)||'20'||fld(42)
```

Example 3

If the 4-byte field that starts at column 11 does not contain valid packed decimal data, then do not process the current record.

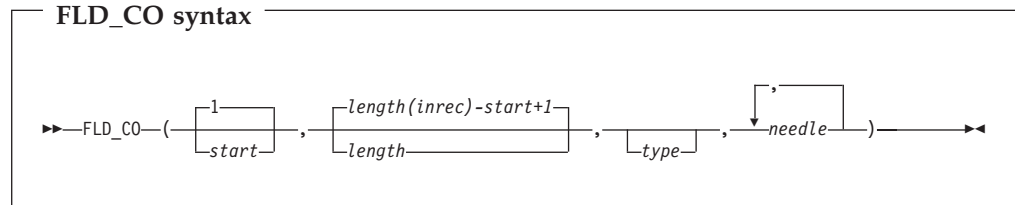
if fld(11,4,p) = '' then return 'DROP'

Example 4

If the value of the packed decimal field that starts at INPOS + 8 is greater than 100, then do not process the current record.

If FLD(P8,P) > 100 Then Return 'DROP'

FLD_CO:



Can be used in FASTREXX condition expressions.

Searches the field within the input record specified by *start* and *length*, for one or more occurrences of *needle*. On successful execution when searching for a string, also updates the value of INPOS to the first byte of the located field in the input record.

Returns

If at least one occurrence of *needle* is found, returns 1. If no occurrences are found, returns 0.

start Position, in bytes, in the input record at which to start searching for occurrences of *needle*. Can be specified as:

Absolute position

Must be a positive integer. Default value is 1. If *start* is greater than the current length of the input record, the function has no effect.

Relative to current INPOS

Can be specified as IPx or INx, or as Px or Nx. If this resolves to a value of less than or equal to zero, the function results in an error. If this resolves to a value that is greater than the current length of the input record, the function has no effect.

Relative to current OUTPOS

Must be specified as OPx or ONx. If this resolves to a value of less than or equal to zero, the function results in an error. If this resolves to a value that is greater than the current length of the input record, the function has no effect.

length Length of the field to be searched.

- For character fields, the length defaults to the remaining record length from the start position to the end of the record (inclusive). A value of 0 also indicates that the field extends to the end of the record.
- For binary fields, you must specify the length. It can be 2, 4, or 8.

- For packed decimal fields, if you specify the length, it must be in the range 1-16. If you omit the length, FLD_CO attempts to determine the packed field length from the record data.
- For zoned decimal fields, if you specify the length, it must be in the range 1-31 or, if the field contains a separate sign character, in the range 1-32. If you omit the length, it defaults to the remainder of the record.

type The data type of the field. Valid values are:

- B** Binary. FLD_CO interprets binary fields as being signed.
- C** Character. This is the default. The comparison is case sensitive.
- P** Packed decimal.
- U** Interprets the field as Character, but converts it to uppercase before comparing it with *needle*.
- Z** Zoned decimal (COBOL external decimal).

needle String(s) or numeric(s) to search for.

To perform case-insensitive searches, specify *type* as 'U' and *needle* in uppercase.

Example 1

If the current input record contains "MIKE", "Mike" or "Mike" in the first ten columns, then write the record.

```
If fld_co(1,10,'U','MIKE') Then write('MDD')
```

Example 2

If the current input record contains "USA", "Australia" or "England", then drop the record from processing.

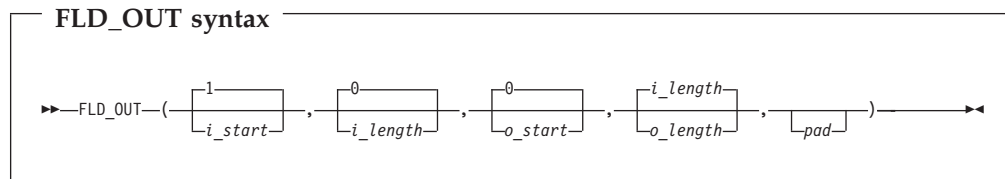
```
If fld_co(,,'USA','Australia','England') Then return 'DROP'
```

Example 3

If the current input record contains "MIKE", "Mike", or "mike" in the ten columns immediately after the current INPOS, then write the record.

```
If FLD_CO(P0,10,'U','MIKE') Then WRITE('MDD')
```

FLD_OUT:



Note: Commas following the last specified argument can be omitted.

Can be used in FASTREXX procedures.

Overlays the output record with a field from the input record. See OVLY_OUT for a function to overlay the output record with a literal. If the target field length exceeds the source field length, then the source field is padded to the specified

length using the pad character. If the source field length exceeds the target field length, then the source field is truncated on the right. On successful execution, also updates the value of OUTPOS to one byte past the end of the field overlaid in the output record.

Returns

A single blank

i_start Position, in bytes, in the input record at which to start reading the field to be copied. Can be specified as:

Absolute position

Must be a positive integer. Default value is 1.

Relative to current INPOS

Can be specified as IPx or INx, or as Px or Nx. If this resolves to a value of less than or equal to zero, the function results in an error. If this resolves to a value that is greater than the current length of the input record, the function has no effect.

Relative to current OUTPOS

Must be specified as OPx or ONx. If this resolves to a value of less than or equal to zero, the function results in an error. If this resolves to a value that is greater than the current length of the input record, the function has no effect.

i_length

Length of the source field. Must be a non-negative whole number. Defaults to 0. If you omit *i_length*, specify zero, or specify a value that causes the source to extend beyond the end of the current input record, the remainder of the input record from character position *i_start* is used.

o_start Position, in bytes, in the output record at which to start overlaying the copied field. Can be specified as:

Absolute position

Must be a non-negative integer that is less than or equal to the maximum length of the output data set. Default value is 0. If *o_start* is greater than the current length of the output record, the record is padded with the specified or defaulted pad character from the current record length to the specified start position. If you omit *o_start*, specify zero, or specify a value one greater than the length of the current output record, the field is appended to the end of the output record.

Relative to current INPOS

Must be specified as IPx or INx. If this resolves to a value of less than or equal to zero, the function results in an error. If this resolves to a value that is greater than the maximum length of the output data set, the function results in an error. If this resolves to a value that is greater than the current length of the output record, the record is padded with the specified or defaulted pad character from the current record length to the specified start position.

Relative to current OUTPOS

Can be specified as OPx or ONx, or as Px or Nx. If this resolves to a value of less than or equal to zero, the function results in an error. If this resolves to a value that is greater than the current length of the output record, the record is padded with the specified or defaulted pad character from the current record length to the specified start position.

o_length

Length of the target field. Defaults to the source field length (*i_length*). A value of 0 indicates that the target field length is the greater of *i_length* and the remaining output record length. If 0 is specified for both *o_start* and *o_length*, then *i_length* is used as the target length.

pad

Pad character. Defaults to the pad character set on the File Manager System Processing Options panel. If the current pad setting is OFF, the pad character is a blank.

Example 1

Copy the characters in columns one and two of the input record to columns three and four of the output record.

```
FLD_OUT(1,2,3,2)
```

Example 2

Append the characters in columns eleven and twelve of the input record to the end of the output record, padded with two blanks.

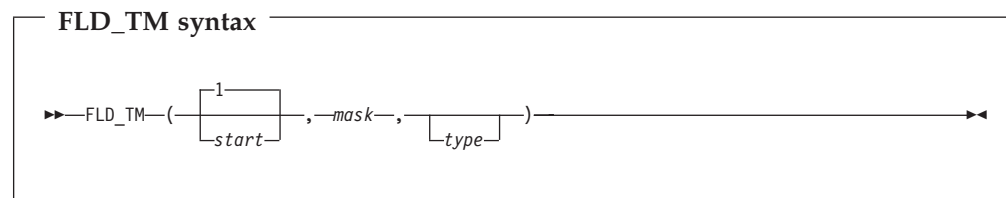
```
FLD_OUT(11,2,0,4,' ')
```

Example 3

Search a field in the input record for the characters 'AA' and, if found, copy to the end of the output record (assumes that OUTPOS is still set to end of output record).

```
IF FLD_CO(10,2,C,'AA') Then
/* when successful, updates INPOS to 12 */
  FLD_OUT(N2,2,P0,2)
/* copies from INPOS - 2, appends to end of output record */
```

FLD_TM:



Note: Commas following the last specified argument can be omitted.

Can be used in FASTREXX condition expressions.

Tests selected bits of a field in the input record.

Returns

Returns 1 if the test evaluates as True, and 0 if the test evaluates as False.

start Position, in bytes, in the input record at which to start testing. The length of the field is defined by the *mask*. Can be specified as:

Absolute position

Must be a positive integer. Default value is 1. If *start* is greater than the current length of the input record, the function has no effect.

Relative to current INPOS

Can be specified as IPx or INx, or as Px or Nx. If this resolves to a value of less than or equal to zero, the function results in an error. If this resolves to a value that is greater than the current length of the input record, the function has no effect.

Relative to current OUTPOS

Must be specified as OPx or ONx. If this resolves to a value of less than or equal to zero, the function results in an error. If this resolves to a value that is greater than the current length of the input record, the function has no effect.

mask Bit-string determining which bits to test in the field. The length of the mask defines the length of the input field. This field defines a bit-string mapping used to test the specified bits in the input record. You can use the bit-string, hex-string or character-string formats to define this field, Therefore, '0100 0000'b, '40'x, and '' are all legitimate and equivalent ways of defining a mask to test the second bit of a one-byte field.

type Type of test.

- 1** FLD_TM returns True (1) if **all** the bits that are **on** in the mask are **on** in the input record field.
- 0** FLD_TM returns True (1) if **all** the bits that are **on** in the mask are **off** in the input record field.
- M** FLD_TM returns True (1) if **at least one** of the bits that are **on** in the mask is **on** in the input record, and **at least one** is **off**.
- N** FLD_TM returns True (1) if **at least one** of the bits that are **on** in the mask is **off** in the input record field.

Example 1

Test the third byte of the input record and, if the low order bit is set, overlay a hex FF into the second byte of the output record.

```
if fld_tm(3,'01'x) then
  ovly_out('ff'x,2,1)
  return
end
return drop
```

Example 2

Test the third byte of the input record and if some of the three high order bits are set, and some are not, overlay the contents of the second byte of that record with a hex 04.

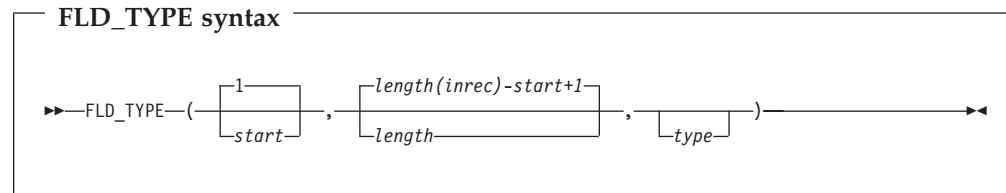
```
if fld_tm(3,'1110000'b,M) then do
  ovly_out('04'x,2,1)
```

Example 3

Test the current INPOS position of the input record and, if the low order bit is set, overlay a hex FF into the byte prior to this location in the output record.

```
If FLD_TM(P0,'01'x) Then Do
  OVLY_OUT('ff'x,IN1,1)
  Return
End
Return 'DROP'
```

FLD_TYPE:



Note: Commas following the last specified argument can be omitted.

Can be used in FASTREXX condition expressions.

Tests the data type of a field in the input record.

Returns

Returns 1 if the test evaluates as True, and 0 if the test evaluates as False.

start Position, in bytes, in the input record at which to start testing. Can be specified as:

Absolute position

Must be a positive integer. Default value is 1. If start is greater than the current length of the input record, the function has no effect.

Relative to current INPOS

Can be specified as IPx or INx, or as Px or Nx. If this resolves to a value of less than or equal to zero, the function results in an error. this resolves to a value that is greater than the current length of the input record, the function has no effect.

Relative to current OUTPOS

Must be specified as OPx or ONx. If this resolves to a value of less than or equal to zero, the function results in an error. If this resolves to a value that is greater than the current length of the input record, the function has no effect.

length Length of the field in the input record.

- For packed decimal fields, if you specify the length, it must be in the range 1-16. If you omit the length, FLD_CO attempts to determine the packed field length from the record data.
- For zoned decimal fields, if you specify the length, it must be in the range 1-31 or, if the field contains a separate sign character, in the range 1-32. If you omit the length, it defaults to the remainder of the record. A value of 0 also indicates that the field extends to the end of the record.

type Data type to test for.

P FLD_TYPE returns 1 if the field is a valid packed decimal field. Variant sign values (such as 'f'x for positive) are considered valid. Returns 0 otherwise.

Z FLD_TYPE returns 1 if the field is a valid zoned decimal field. Returns 0 otherwise.

Example 1

If the first three bytes of the current input record contain a valid packed decimal number, tally the field. Otherwise, tally the first two bytes as a binary number.

```

if fld_type(1,3,P) then
  tally(1,3,P,'Tally packed')
else
  tally(1,2,B,'Tally binary')

```

Example 2

If the three bytes starting at the current INPOS in the input record contain a valid packed decimal number, copy the three bytes to the end of the output record. Otherwise, copy the two bytes starting at INPOS to the end of the output record.

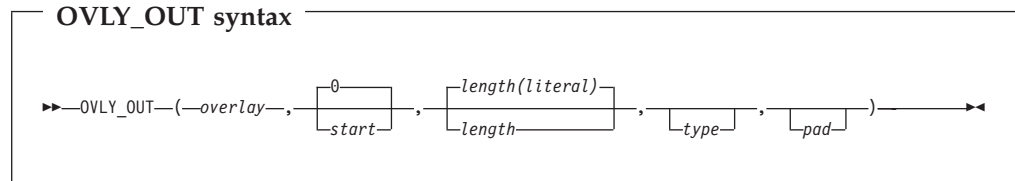
```

If FLD_TYPE(P0,3,P) Then
  FLD_OUT(P0,3,P0,3)
Else
  FLD_OUT(P0,2,P0,2)

```

Note: In this example, the abbreviated form of the relative position specification can be used in both arguments of the FLD_OUT function. This is because *i_start* naturally targets the input record and *o_start* naturally targets the output record.

OVLY_OUT:



Note: Commas following the last specified argument can be omitted.

Can be used in FASTREXX procedures.

Overlays the output record with a string. If the length of the target field exceeds the length of the literal, then for character overlays the target field is padded to the specified length using the pad character. For numeric overlays the target field is padded on the left with the appropriate form of leading zeros. If the source field length exceeds the target field length, then for character overlays the source field is truncated on the right. For numeric overlays an error occurs if the overlay is too big for the target. On successful execution, also updates the value of OUTPOS to one byte past the end of the field overlaid in the output record.

Returns

A single blank.

overlay An expression that resolves to a string, which will overlay that part of the output record specified by *start* and *length*. To be eligible for FASTREXX processing, this must be a literal string, a symbol or a blank-delimited sequence of symbols and/or literal strings.

start Position, in bytes, in the output record at which to start overlaying the string. Can be specified as:

Absolute position

Must be a non-negative integer that is less than or equal to the maximum length of the output data set. Default value is 0. If *start*

is greater than the current length of the output record, the record is padded with the specified or defaulted pad character from the current record length to the specified start position. If you omit *start*, or specify zero, or specify a value one greater than the length of the current output record, the field is appended to the end of the output record.

Relative to current INPOS

Must be specified as IPx or INx. If this resolves to a value of less than or equal to zero, the function results in an error. If this resolves to a value that is greater than the current length of the output record, the record is padded with the specified or defaulted pad character from the current record length to the specified start position.

Relative to current OUTPOS

Can be specified as OPx or ONx, or as Px or Nx. If this resolves to a value of less than or equal to zero, the function results in an error. If this resolves to a value that is greater than the current length of the output record, the record is padded with the specified or defaulted pad character from the current record length to the specified start position.

length Length of target field in the output record. Defaults to the length of the literal. A value of 0 indicates that the target field length is the greater of the source (literal) length and the remaining output record length. In particular, if 0 is specified for both start and length, then the length of the literal is used as the target length.

type The data type of the literal to be written to the output record.

B Binary. The literal string must represent a positive or negative integer, and will be stored in the output field as a signed two's-complement format binary number. The length must be 2, 4, or 8, and cannot be omitted.

C Character. This is the default.

P Packed decimal. The literal string must represent a positive or negative integer, and will be stored in the output field as a signed packed decimal number using the preferred positive ('c'x) and negative ('d'x) sign indicators. The length must be between 1 and 16.

Z Zoned decimal (COBOL external decimal). The literal string must represent a positive or negative integer, and will be stored in the output field as a signed zoned decimal number. The length must be between 1 and 31 or, if the field contains a separate sign, between 2 and 32.

pad Pad character. Defaults to the pad character set on the File Manager System Processing Options panel. If the current pad setting is OFF, the pad character is a blank.

See FLD_OUT for a function to overlay the output record with a field from the input record.

Example 1

Set columns one and two of the output record to asterisks.

PQ92679

```
OVLY_OUT('**',1,2)
```

Example 2

Append the two-byte packed decimal value 2 to the end of the output record.

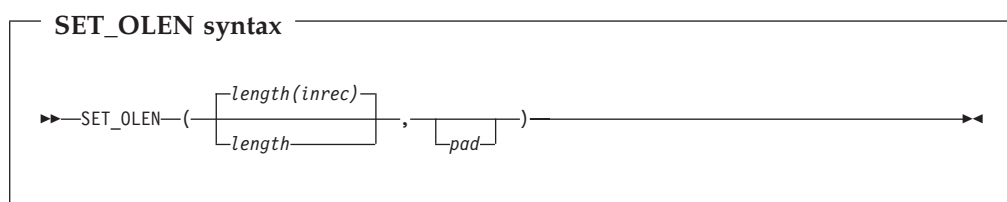
```
OVLY_OUT(2,0,2,P)
```

Example 3

Search the input record for a literal and then overlay the last two bytes of that literal with a new literal in the output record.

```
If FLD_CO(1,,C,'AABB') Then  
  OVLY_OUT('CC',IN2,2)
```

SET_OLEN:



Note: Commas following the last specified argument can be omitted.

Can be used in FASTREXX procedures.

Sets the length of the output record. If the specified length is greater than the current length of the output record, the pad character is used to fill out the record to the specified length. If the specified length is less than the current OUTPOS, OUTPOS is reset to the new length + 1.

Returns

A single blank.

length Length to set. The default value is the length of the input record (which is also the original length of the output record).

pad Pad character. Defaults to the pad character set on the File Manager System Processing Options panel. If the current pad setting is OFF, the pad character is a blank.

Example

Set the length of the current output record to 80.

```
SET_OLEN(80)
```

PQ93894

Initial problem description

In general, File Manager signals errors or warnings via return code. There was no ability to cause an abend in such situations. In some cases however, it may be convenient to finish batch job step abnormally to prevent successor steps/jobs from execution.

Outline of solution

APAR PQ93894 modifies File Manager in the following way:

Added new installation option - ABENDCC.

ABENDCC=NONE (default) will ensure compatibility with the existing versions - no changes in behavior.

ABENDCC=(integer), where integer > 0, will cause abend if return code (including customized return code) is equal to or greater than the integer. Also, system abends will not be intercepted.

The same option was added to the SET command. Both the installation option and option of the SET command will be effective for all FM components working in batch.

Documentation impact

This APAR requires changes to be made to the Customization Guide (GC18-7790-03) and the User's Guide and Reference (SC18-7792-03).

Changes to the Customization Guide

Chapter 3. Changing the default options

In Figure 2, add ABENDCC option.

FMNØPOPI 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
PRTRANS=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
ABENDCC=NONE,	or RC limit	X
SMFNO=0,	or any number from 128 to 255	X
USEIOX=DISABLE,	or (ENABLE,name) if enabled	X
PRINTDSN=&&USER..FMN.LIST		

Chapter 12, Changing the default options

In Figure 11, add ABENDCC option.

ABENDCC=NONE,	or RC limit	X
----------------------	--------------------	----------

Chapter 18, Changing the default options

In Figure 13 (part 1 of 2), add the ABENDCC option.

ABENDCC=NONE,	or RC limit	X
----------------------	--------------------	----------

Chapter 3, Customizing File Manager batch return codes

At the end of the chapter, after 4. Install SMP/E, add the following:

In batch, you may want File Manager to abend rather than end with original or customized non-zero return code to prevent from execution of successors (steps or/and jobs). This is possible by setting the ABENDCC installation option with a value less than or equal to return code, which must be transformed to the abend

(Abend 999, Reason Code=888 (hex: 378)). Please check the ABENDCC installation option (Appendix) and ABENDCC option of the SET command (File Manager User's Guide and Reference).

Appendix A. File Manager

In the option descriptions listed, add the following:

ABENDCC=[(integer) | NONE]

ABENDCC

Specifies how File Manager processing resulting in non-zero return code (including customized return code) will be completed in batch.

NONE

Default. The job step will be finished with non-zero return code.

(integer)

If return code is greater than or equal to the integer, File Manager will abend with U999, Reason Code=888 (hex: 378). An integer, from 1 to 32767 (0 is treated as NONE) can be selected appropriately to the specific return codes (customized return codes) issued by File Manager functions. In addition, specification of any non-zero integer will prevent File Manager from intercepting abnormal terminations (system abends).

PQ95635

Initial problem description

1. No records are being written to secondary data sets specified on OUTFIL statements when RLSE specified for the main output data set.
2. VSAM data set may be reported as empty while there are records in it.
3. Position in the record may not be maintained when using PREV (F10).

Outline of solution

APAR PQ95635 modifies File Manager in the following ways:

1. The DSC function has been modified to remove the requirement that its own output exit be used when the output data set has RLSE specified. This will correct the problem as reported. For other possible conditions when FASTPROC OUTFIL statements may not be used a new message FMN0390I with the following text will be issued:
'FASTPROC OUTFIL statement is not supported for this type of output data set' under the following conditions:
 - the input data set has fixed length records and the output data set has not and one of the following conditions is met:
 - the output record length is undefined,
 - there is a user procedure or a template being used
 - the data is packed
 - the output is a PDS(E)
 - the input data set has not fixed length records and the output data set has and one of the following conditions is met:
 - there is a user procedure or a template being used
 - the output data set has longer records
 - the input data set is a QSAM data set with spanned records with length exceeding 32747 and the output is a VSAM data set
 - the output data set is a VSAM VRDS data set and the user requested a MOD disposition (as opposed to OLD)

2. The check for the number of records will no longer assume that an invalid number means an empty data set.
3. Corrected the PREV (F10) handling.

Documentation impact

This APAR requires changes to be made to the User's Guide and Reference (SC18-7792-03).

Changes to the User's Guide and Reference

Add the following message to Chapter 12 Messages:

```

| FMN1039I  FASTPROC OUTFIL statement is not
|           supported for this type of output data
|           set
|
| Explanation: You ran a DSC function containing
| FASTPROC OUTFIL statements, and one of the
| following is true:
|
| • The input data set has fixed length records, the
|   output data set has variable length or undefined
|   format records, and one of the following conditions
|   is true:
|
|   – the output record length is undefined
|
|   – there is a user procedure or a template being used
|
|   – the data is packed
|
|   – the output is a PDS(E)
|
| • The input data set has variable length or undefined
|   format records, the output data set has fixed length
|   records, and one of the following conditions is true:
|
|   – there is a user procedure or a template being used
|
|   – the output data set has longer records
|
| • the input data set is a QSAM data set with spanned
|   records with length exceeding 32747 and the output
|   is a VSAM data set
|
| • the output data set is a VSAM VRDS data set and
|   the user requested a MOD disposition (instead of
|   OLD)
|
| User Response: Recode the DSC function to avoid
| using FASTPROC OUTFIL statements. For example,
| you might need to recode it to use REXX statements in
| a REXXPROC.

```

UQ93905, UQ93906, UQ93911, UQ93916, UQ93917, UQ93920

Release Date: 18 October 2004

This set of PTFs contains the following APAR fixes:

APAR #	APAR Abstract	Doc Impact
PQ93969	File Manager performance improvements to various functions, including FCH,DSC,DSU AND DSP	Customization Guide (GC18-7790-03) User's Guide and Reference (SC18-7792-03)
PQ94031	1. SQLCODE-104 error in File Manager DB2 object list utility (option 3.4) when processing a list of tables. 2. SQLCODE-104 error in File Manager DB2 edit or browse (options 1, 2)	None
PQ94251	Saving a View abends in updating it after a copybook update (Sysroute of PQ89418)	None
PQ94313	After locating to a specific field in the SNGL display, using the NEXT or PREVIOUS commands while in the same record layout, loses the current field position.	None
PQ94575	Error FMN0353I reported by FM with DSC when using DFSORT.	None
PQ94686	Using the '%' wildcard character yields unpredictable results.	None
PQ94691	FM Edit CHANGE command removing a character gets incorrect result and record count.	None
PQ94970	The formatting for the Table display for the Owner field is only 7 characters wide, but it should be 8 characters.	None
PQ95039	FM Browse shows a VSAM file as "DATA SET EMPTY" even though it contains records with z/OS 1.5.	None
PQ95348	SQLCODE+495 error while trying to update a template in FM/DB2 V3R1. (Sysroute of PQ91210)	None

APAR #	APAR Abstract	Doc Impact
PQ95349	ABENDS0C4 RC11 running DBG TRACE in File Manager DB2 Edit, failing module, FMNRMR2. (Sysroute of PQ94264)	None
PQ95350	File Manager DB2 Edit deletes multiple rows when editing a partitioned table. (Sysroute of PQ94265)	None
PQ95351	DSP output truncates a header or data portion at 384th column. (Sysroute of PQ94428)	None
PQ95699	AE PQ93969 fix completion	None

PQ93969

Initial problem description

1. Certain processing scenarios involving large PDS(E) data sets executed with excessive processing time.
2. "Template data invalid for load, reason=112" message may be issued when printing an audit log which has been created when padding enabled for records.

Outline of solution

1. PQ93969 modifies FM provide faster PDS processing.
2. Corrected the program logic to disable padding for audit log records.

Documentation impact

This APAR requires changes to be made to the User's Guide and Reference (SC18-7792-03) and Customization Guide (GC18-7790-03).

Changes to the Customization Guide

The following change should be made in Chapter 3: Customizing File Manager, in the section headed "Customizing File Manager batch return codes".

In Figure 3, add the DSP NOPRTREXX and REXXCONFLICT options.

FMNORETI FUNC=DSP,	DSP conditions	X
MBRERR=1,	Some members not printed	X
PRTErr=2,	Print error encountered	X
NONESEL=4,	No records selected to print	X
NOMEMBERS=4,	No members to process	X
SKIPPED=4,	Input packed, so skipped	X
EMPTY=4,	Empty input data set	X
NOPRTREXX=2,	No print - REXX	X
REXXCONFLICT=3	REXX return message conflict	

Changes to the User's Guide and Reference

Chapter 14, Print Utility Panel

Add the "REXX member selection" option and default action. See "Copy to" Data Set Copy panel for description.

Chapter 16, Functions, DSP

Update the syntax diagram to include MEMPROC=PROCESS / MEMPROC=DROP, similar to DSC.

Add the following to the Return codes section (similar to DSC):

Return codes

The default return codes from the DSC function have the following modified meanings:

- 3 REXX member selection is in effect but the procedure encountered a RETURN DROP, STOP or STOP IMMEDIATE string. This has been treated as a RETURN string with no arguments. OR REXX member selection is NOT in effect but the procedure encountered a RETURN DROP MEMBER, RETURN PROCESS MEMBER string. This has been treated as a RETURN string with no arguments.

UQ93501, UQ93502, UQ93503

Release Date: 8 October, 2005.

This set of PTFs contains the following APAR fixes:

APAR #	APAR Abstract	Doc Impact
PQ90316	PROCOPT=GO changed to PROCOPT=G for Browse and Extract of dynamic PSB'S.	User's Guide and Reference for IMS data (SC18-7795-03) Customization Guide (GC18-7790-03)
PQ90708	GETIMS(TOP USING_VIEW) command was issued, which returned "SEGMENT WITH RC=0, BUT FMSTATUS WAS SET TO GE (SEGMENT NOT FOUND)"	None.
PQ90736	FM/IMS IEB REPLIMS SET PARAMETER doesn't accept array fields.	None.
PQ90760	Running IEB in DLI mode, where the database cannot be opened due to a security violation.	None.
PQ92204	VIEWIMS/DESCRIBE drops last field from last segment described.	None.
PQ92354	FM/IMS IEB function GETIMS statement.	None.
PQ92621	DOPT ACBLIB data set clean up installation option.	User's Guide and Reference for IMS data (SC18-7795-03) Customization Guide (GC18-7790-03)
PQ95290	AE PQ90316 fix completion.	None.

PQ90316

Initial problem description

1. IMSU0047 abend in Browse, Extract and Batch Print when attempting to access a database that another IMS online or batch system is authorized to update.
2. CANCEL command does not cancel the changes made on the IMS Specification panel (0.8), the IMS Data Set Settings panel (0.9) and the Output Data Set Allocation panel (0.10) when the command is issued after a RESET command or after an EXIT command that fails. (An EXIT command fails if there is invalid data on the panel.)
3. FM/IMS administrator cannot make any of the installation defaults non-overrideable.

4. Abend0C4 in Edit when the Enter key is pressed after overtyping data and typing ZOOM on the Command line.
5. UNDO command issues message "Undo completed" but does not back out the updates made to an MSDB database.
6. FM/IMS Load AbendU0999 with msg: "FMN0606I FILE MANAGER ENCOUNTERED AN INTERNAL ERROR - CODE 80000292"
7. When editing or browsing a database with SHOW SUP OFF, the FIND command sometimes fails to find a string in a segment that has the current layout.
8. FM/IMS Load issues message "Segment Padded/Truncated" in the load statistics when the segments were not padded or truncated.
9. When in SNGL mode (Browse and Edit) the IMS Key indicator field is not displayed and a field may be split across two lines when it will fit on one.
10. When editing or browsing with SHOW SUP OFF using a view that has multiple layouts, FM/IMS does not change the current layout when the VIEW command is issued with the cursor positioned on a suppressed set.
11. FM/IMS Extract does not detect an AbendB37 on the UNLOAD data set and reports that all the segments were successfully extracted.
12. FM/IMS Extract job extracts segments from logically related databases even when the Extract Criteria Set specifies that the logically related databases should be excluded.
13. FM/IMS Load displays message: "Cannot load from a dataset extracted using an alternative processing sequence or a secondary index" even though neither an alternate processing sequence nor a secondary index was used to extract the data.
14. Abend0C4 in Edit or Browse when navigating with SHOW SUP OFF.

Outline of solution

The following changes have occurred to the FM/IMS product 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, 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:

PSBTYP

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 **PSBTYP** option.

UPSBTYP

This is a new option, which specifies whether or not users can override the setting of the **PSBTYP** option.

UPSBTYP=YES allows users to override the setting of **PSBTYP**. **UPSBTYP=NO** prevents users from overriding the setting of **PSBTYP**.

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 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" on page 82
IMS Specifications	DLI Mode Settings	"DLI Mode Settings panel" on page 84
IMS Data Set Settings	DLI Mode Data Sets	"DLI Mode Data Sets panel" on page 86
(new panel)	BMP Mode Settings	"BMP Mode Settings panel" on page 88

Documentation impact

This APAR requires changes to be made to the the Customization Guide (GC18-7790-03) and User's Guide and Reference for IMS Data (SC18-7795-03).

Changes to the 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 60 for information about options you can change in FMN1POPD. See "Changing the default options" on page 54 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 72. For information about the options in FMN1AGNT, see “FMN1AGNT” on page 79. See “Changing the default options” on page 54 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.

```

*
      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 72 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 52, and “FMN1POPD” on page 60.
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 52, and “FMN1POPI” on page 72. 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.
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 52, and “FMN1AGNT” on page 79. 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 on page 56 shows FMN1POPT, FMN1POPI and FMN1AGNT macro statements, as supplied by IBM.


```

*****
*       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
      UQ93501, UQ93502, UQ93503

```

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 60.

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 ISPLIB 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 ISPLIB 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.

- 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.
- AbendsSOC7 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'.

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.

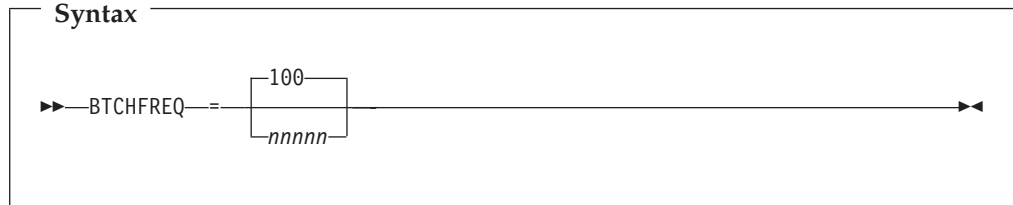
3. Modify the FMN1UMDR member in FMN.SFMNSAM1 to meet your site's requirements. Refer to the usermod for information about changes you may need to make.
4. Install SMP/E usermod FMN1UMDR.

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 54 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:

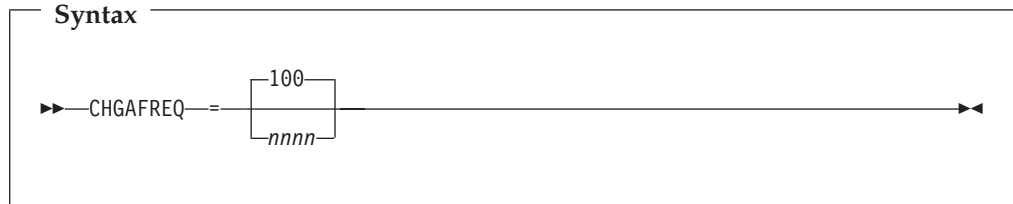


BTCHFREQ

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

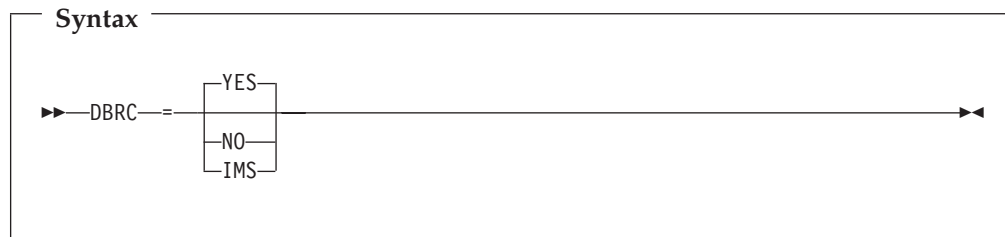
specifies the number of updates performed by the "Change All" command before an IMS checkpoint is taken. You can specify a number between 1 and 9999. The default is 100.

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.

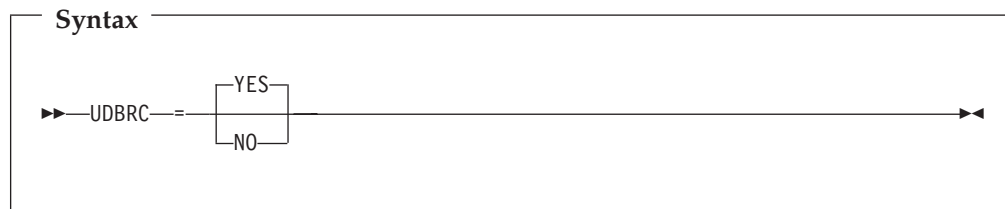
Yes DBRC will be used.

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:

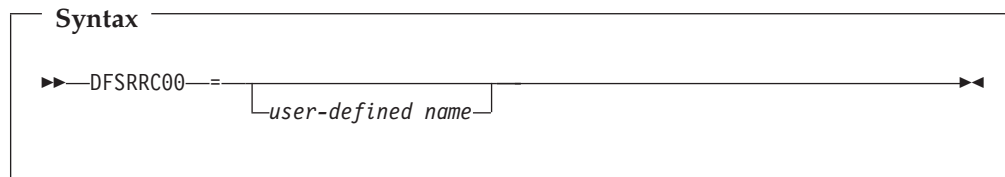


UDBRC specifies whether or not users can override the setting of the DBRC option.

Yes Users can override the setting of DBRC.

No Users cannot override the setting of DBRC.

DFSRR00:



DFSRRC00

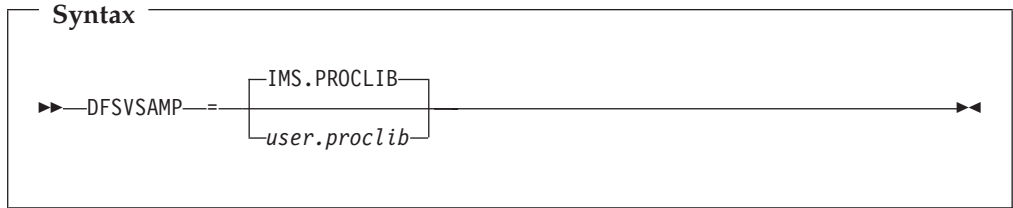
specifies the name used for the IMS Control Region program.

user-defined name

specifies the name of the DFSRRC00 module to be invoked by File Manager/IMS. If the default name of DFSRRC00 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

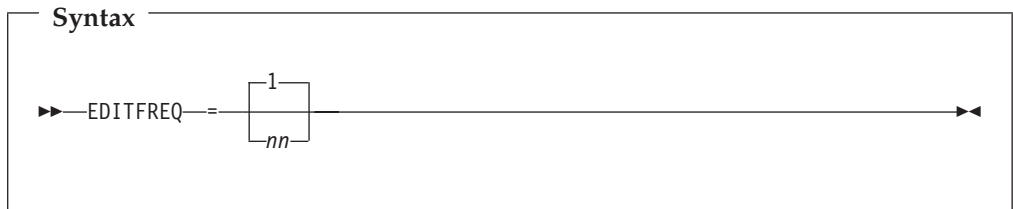
specifies the data set name containing the parameters defining the IMS buffer sub pools for VSAM and OSAM data sets, in DLI mode.

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

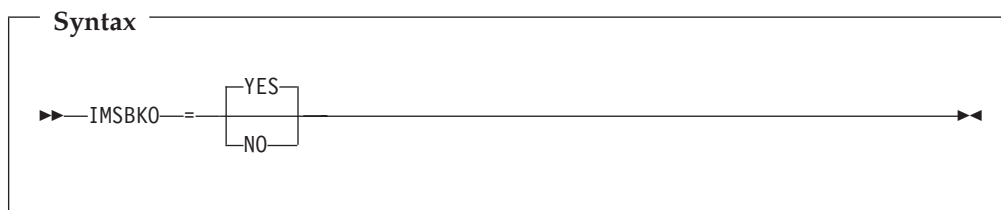
specifies the frequency of the automatic save function when editing databases. You can specify a number between 1 and 99. The default is 1.

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.

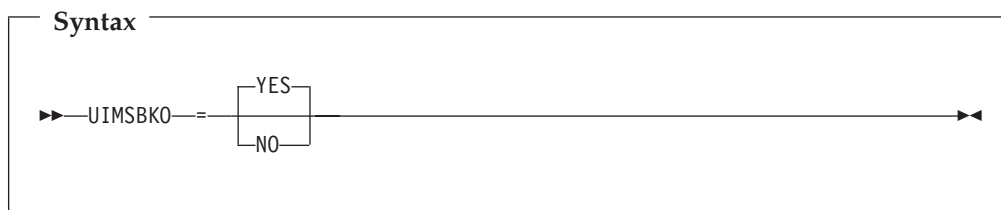
If YES is specified, users will be able to use the UNDO or CANCEL command when editing a database in DLI mode.

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:

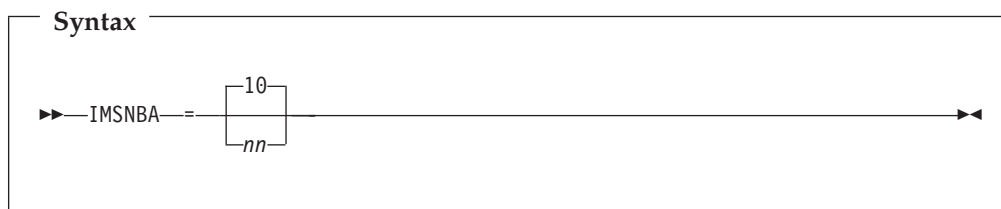
**UIMSBKO**

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**

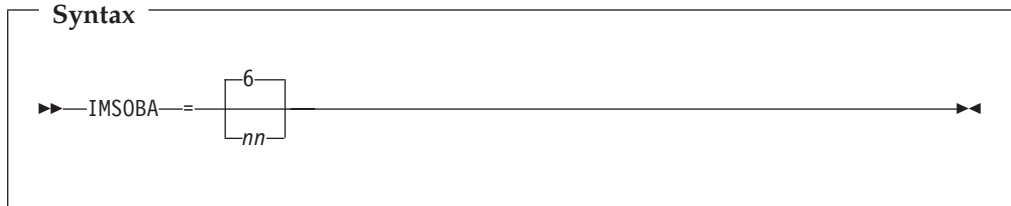
specifies the number of IMS fast path buffers to be available in the Common Service Area (CSA) when using Fastpath databases within File Manager/IMS

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:



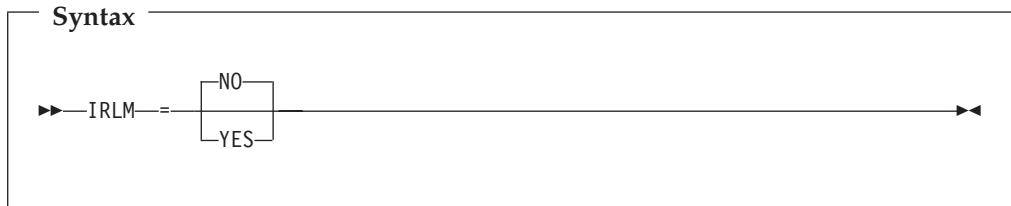
IMSOBA

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:

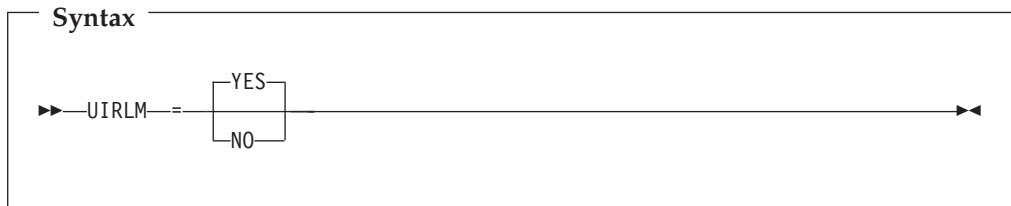


IRLM specifies whether Internal Resource Lock Manager (IRLM) is used by File Manager/IMS in DLI mode.

- NO** IRLM is not used.
- YES** IRLM is used.

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

UIRLM:



UIRLM

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

YES Users can override the setting of IRLM.

NO Users cannot override the setting of IRLM.

IRLMNAME:

Syntax

IRLMNAME= _____

└──user-irlmname──┘

IRLMNAME

specifies the name of the IRLM used at your installation. The maximum length of the name is four characters and it must not be enclosed in quotes. If you have specified IRLM=YES, then you must supply a value for *user-irlmname*.

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

MACLIB:

Syntax

MACLIB= _____

┌──IMS.MACLIB──┐

└──user.maclib──┘

MACLIB

specifies the name of the IMS macro library to be used when generating a Dynamic PSB.

user.maclib

the IMS MACLIB as defined at your installation.

This option applies to DLI mode and can be overridden by users from a File Manager/IMS settings panel. It also applies to BMP mode, when it can be overridden by the MACLIB option in the FMN1POPI macro for the IMS subsystem.

MAXGN:

Syntax

MAXGN= _____

┌──10000──┐

└──nnn──┘

MAXGN

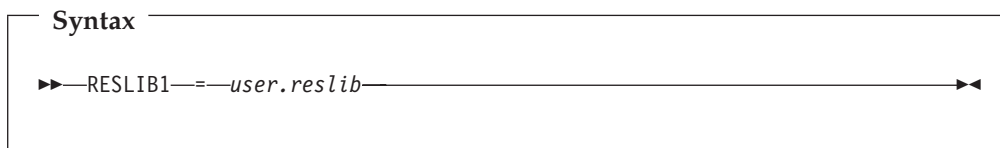
specifies the maximum Get Next calls File Manager/IMS will issue in attempting to handle a Change or Find command in the EDITOR/BROWSE functions.

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

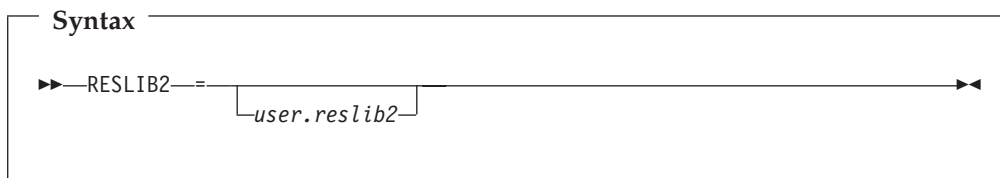
specifies the IMS RESLIB that will be used when calling File Manager/IMS in DLI mode.

| 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:

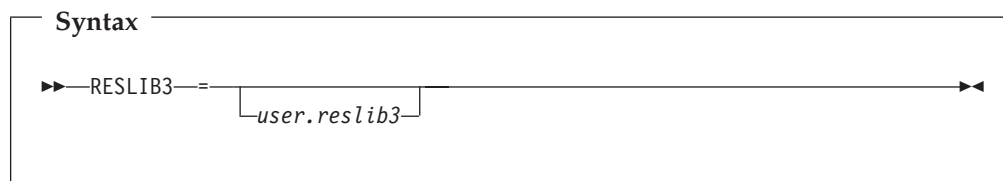


RESLIB2

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.

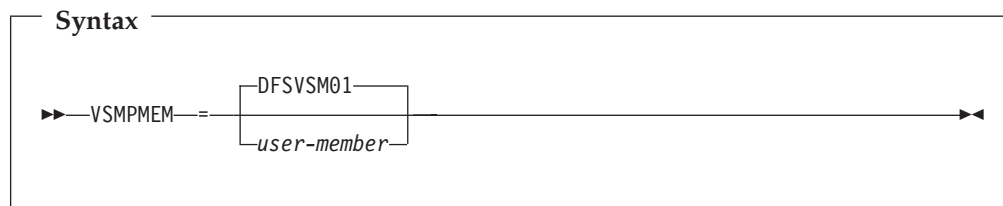
RESLIB3:

**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.

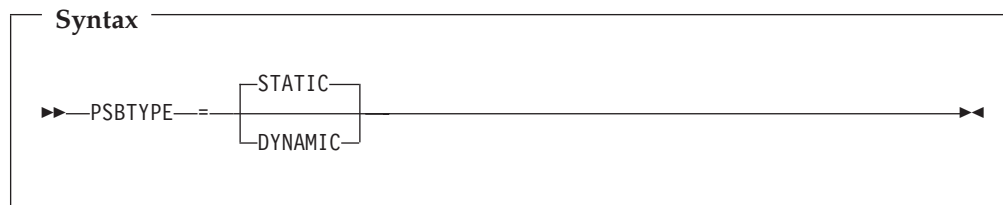
VSMPMEM:

**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.

PSBTYPE:

**PSBTYPE**

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 UPSBTYPE option is set to NO.

UPSBTYPE:



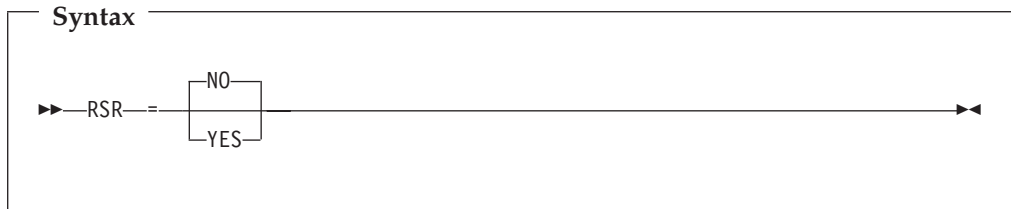
UPSBTYPE

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

YES Users can override the setting of PSBTYPE.

NO Users cannot override the setting of PSBTYPE.

RSR:



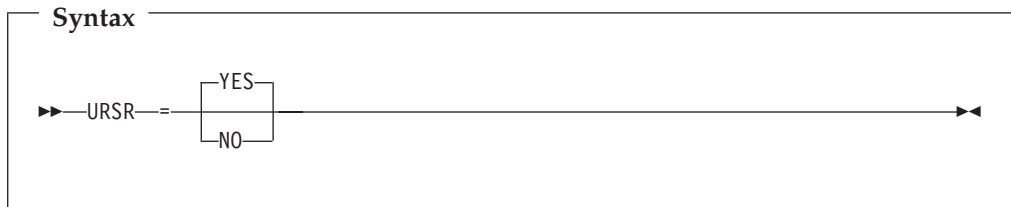
RSR specifies whether or not the IMS system accessed by File Manager/IMS in DLI mode is part of an RSR complex.

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:

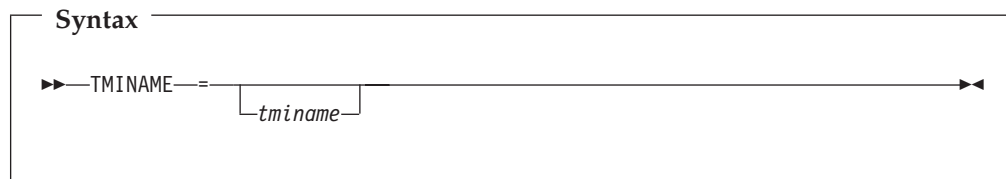


URSR specifies whether or not users can change the RSR setting in the File Manager/IMS DLI mode settings.

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:

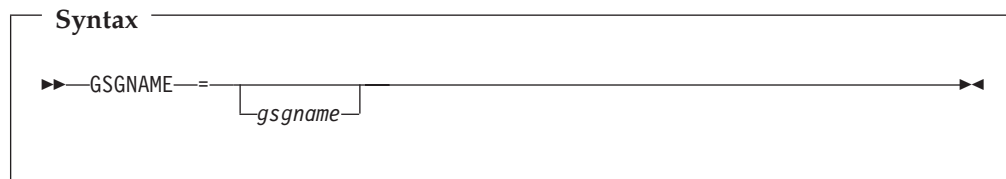


TMINAME

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:

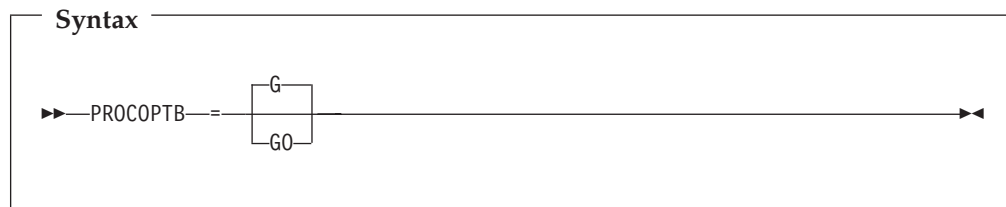


GSGNAME

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:



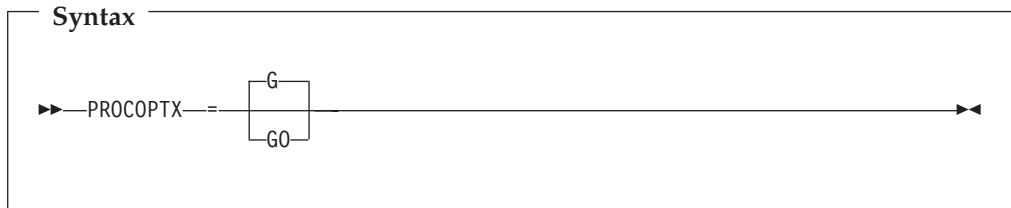
UPROCOPB

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

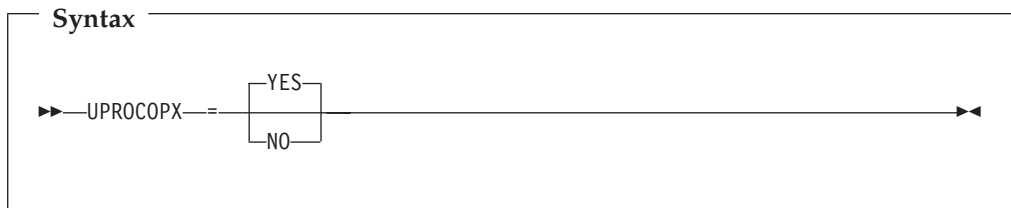
specifies the PSB Processing Option (PROCOPT) generated for the dynamic PSB when running an Extract in DLI mode.

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:

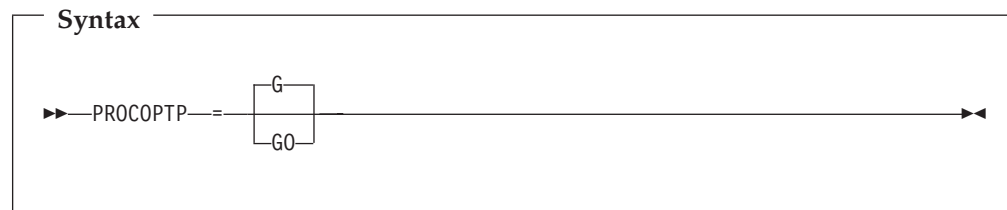


UPROCOPX

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:

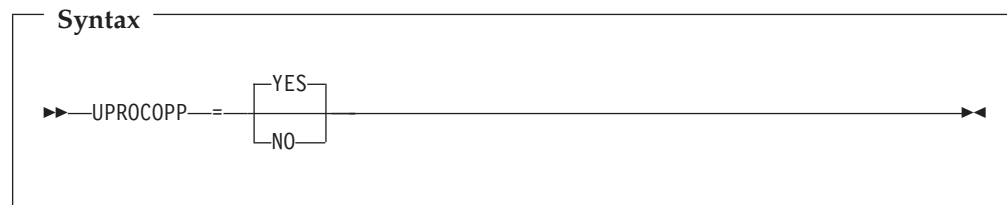


PROCOPTP

- 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 UPROCOPP 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.

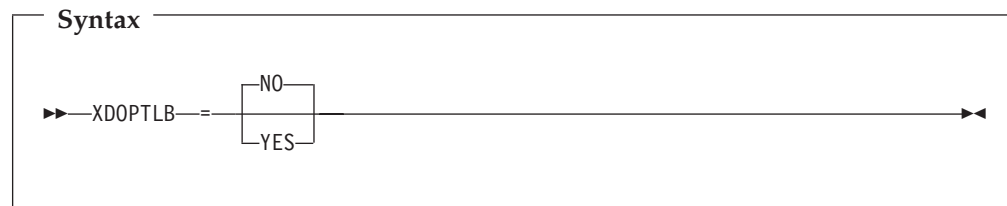
UPROCOPP:



UPROCOPP

- 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.

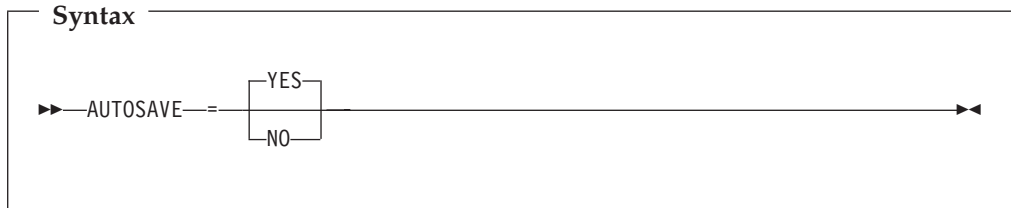
This option applies to BMP mode only. It can be overridden by the XDOPTLB option in the FMN1POPI macro for the IMS subsystem.

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:



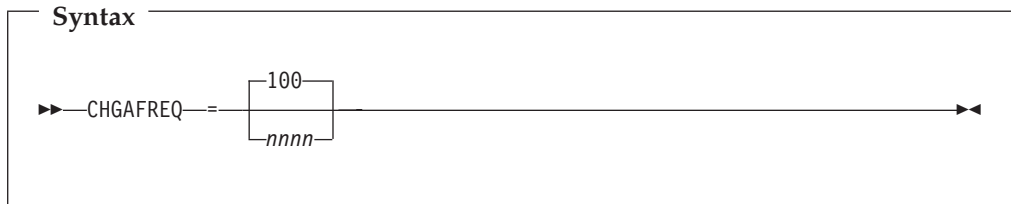
AUTOSAVE

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

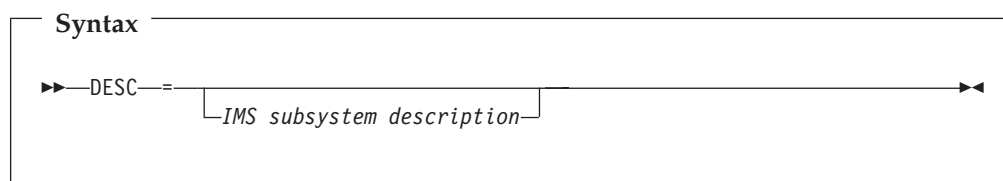
specifies the number of updates performed by the "Change All" operation before an IMS checkpoint is taken for this IMS subsystem. You can specify a number between 1 and 9999. The default is 100.

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.

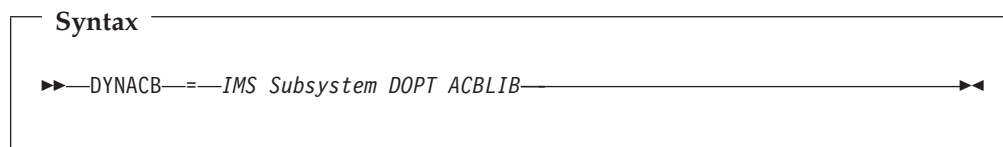
The value specified is only used if AUTOSAVE=YES is specified for this IMS subsystem.

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:

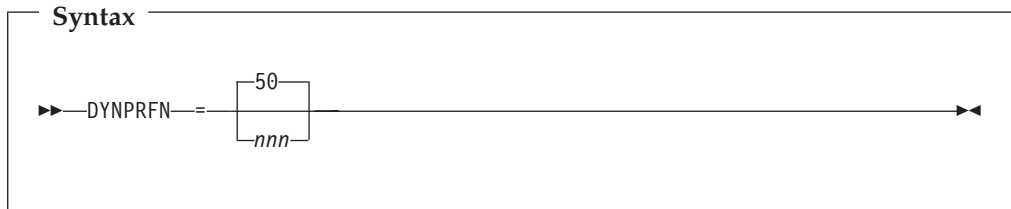
**DYNACB**

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.

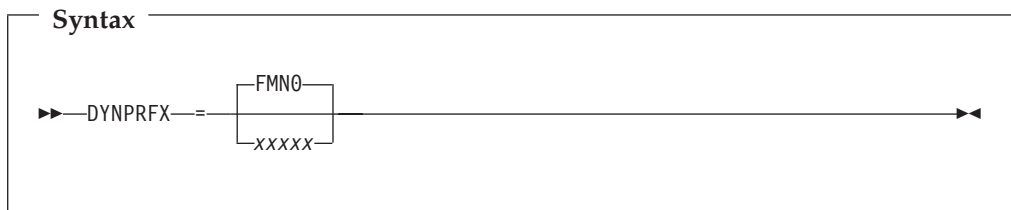
50 number of Dynamic PSB's for use by File Manager/IMS as specified in the macro.

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.

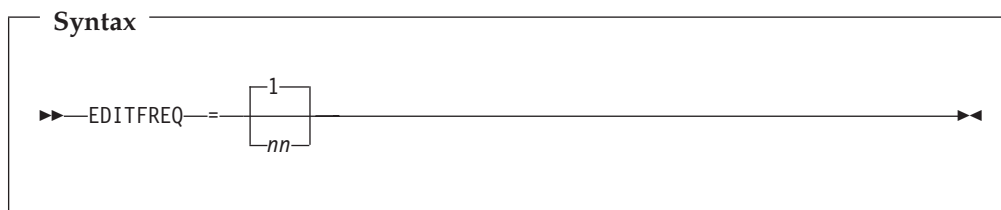
FMN0 the 4-character prefix of the Dynamic PSB in this macro.

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:*

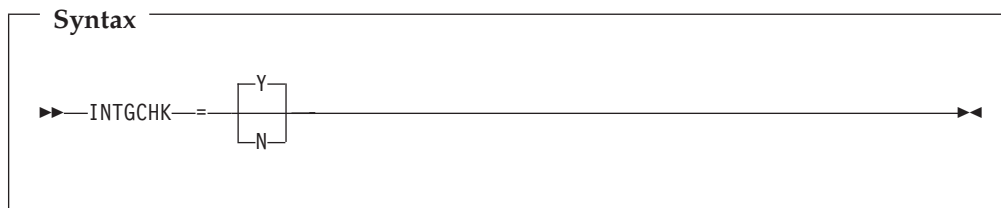
**EDITFREQ**

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

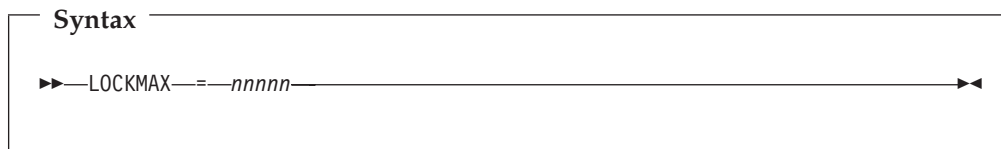
When AUTOSAVE is on, File Manager/IMS will:

- 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.

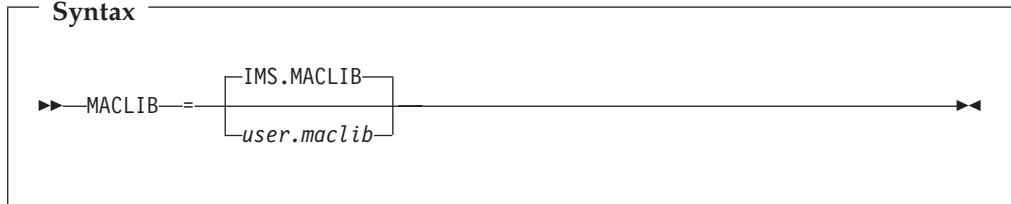
LOCKMAX has no default. You must supply a value for LOCKMAX.

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

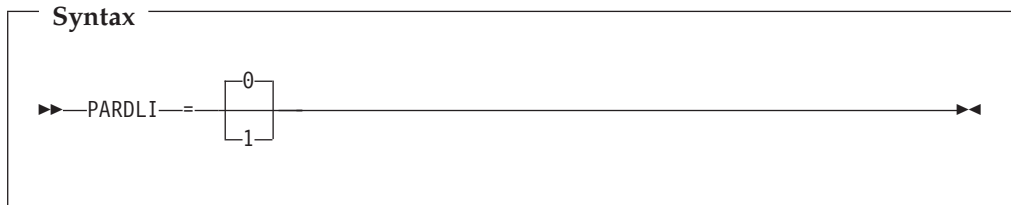
specifies the name of the IMS macro library for this IMS subsystem, to be used in generating a Dynamic PSB.

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

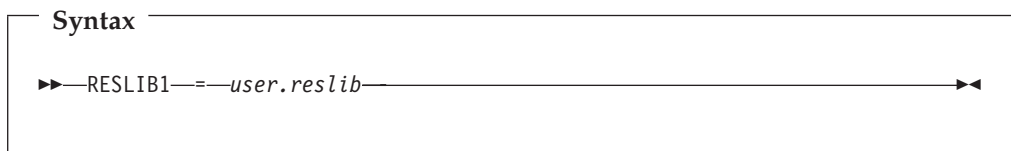
specifies whether or not DL/I processing is performed within the BMP region.

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:

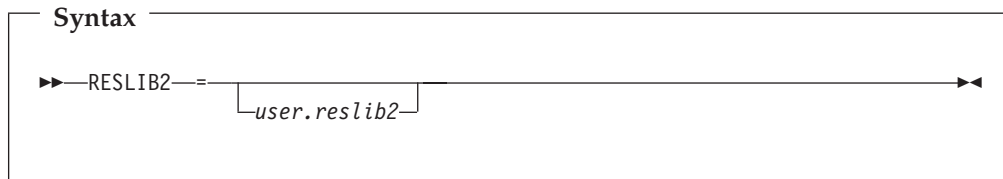


RESLIB1

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.

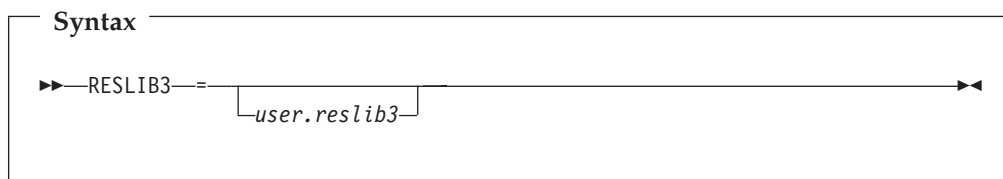
RESLIB2:



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.

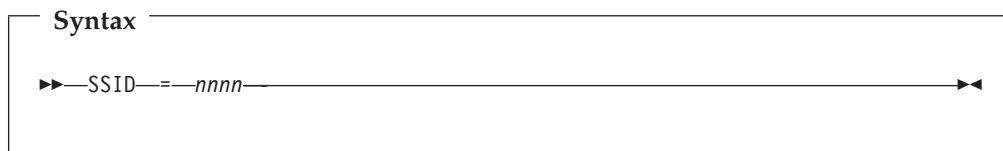
RESLIB3:



RESLIB3

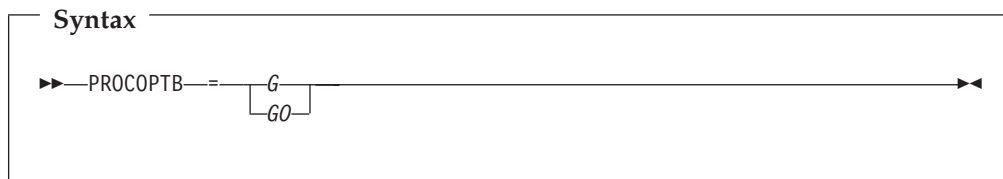
specifies an additional user-defined library, if required, for File Manager/IMS in DLI mode: for example, a library containing Dynamic allocation or user exit routines..

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:

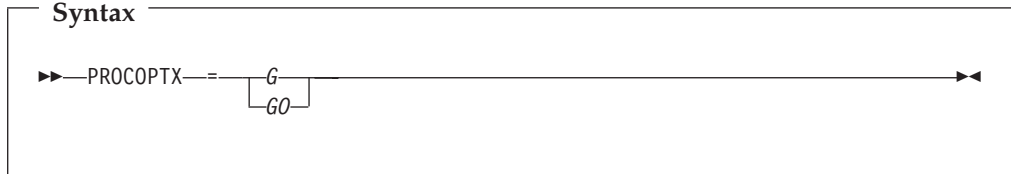


PROCOPTB

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:

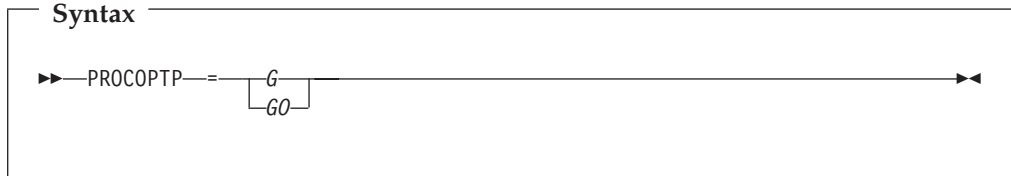


PROCOPTX

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:

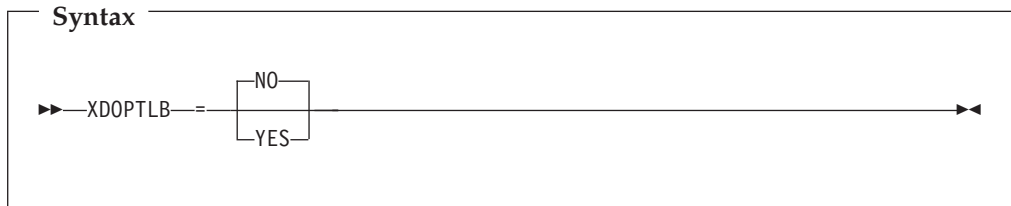


PROCOPTP

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

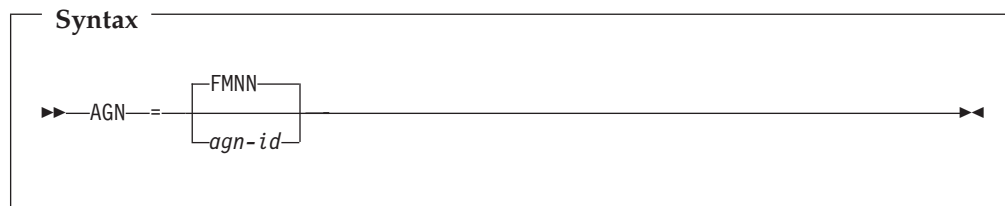
specifies whether or not the members of the DOPT ACBLIB data set will be deleted and the DOPT ACBLIB data set compressed, before File Manager/IMS executes an ACBGEN.

- 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.

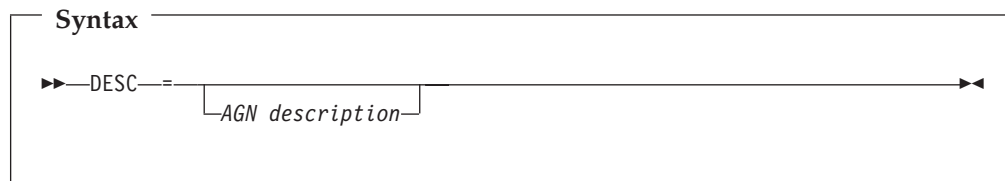
FMN1AGNT: If you supply more than one FMN1POPI macro and one or more FMN1AGNT macros, you must place all the FMN1POPI macros together, followed by all the FMN1AGNT macros.

AGN:



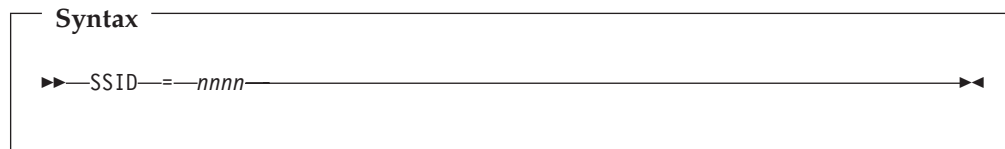
AGN specifies the 1-8 character AGN-ID as specified in the IMS Security Maintenance utility for this SSID.

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.

Changes to the User's Guide and Reference for 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. The marked section has been inserted into the **About the different access modes** section (previous and following paragraphs are quoted to give context):

About the different access modes

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 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

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

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.

Accessing in DLI mode using a Static PSB

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

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 APAR.

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.

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
F9=Swap	F10=Actions	F12=Cancel
	F4=CRetrieV	F7=Backward
		F8=Forward

Figure 8. 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:

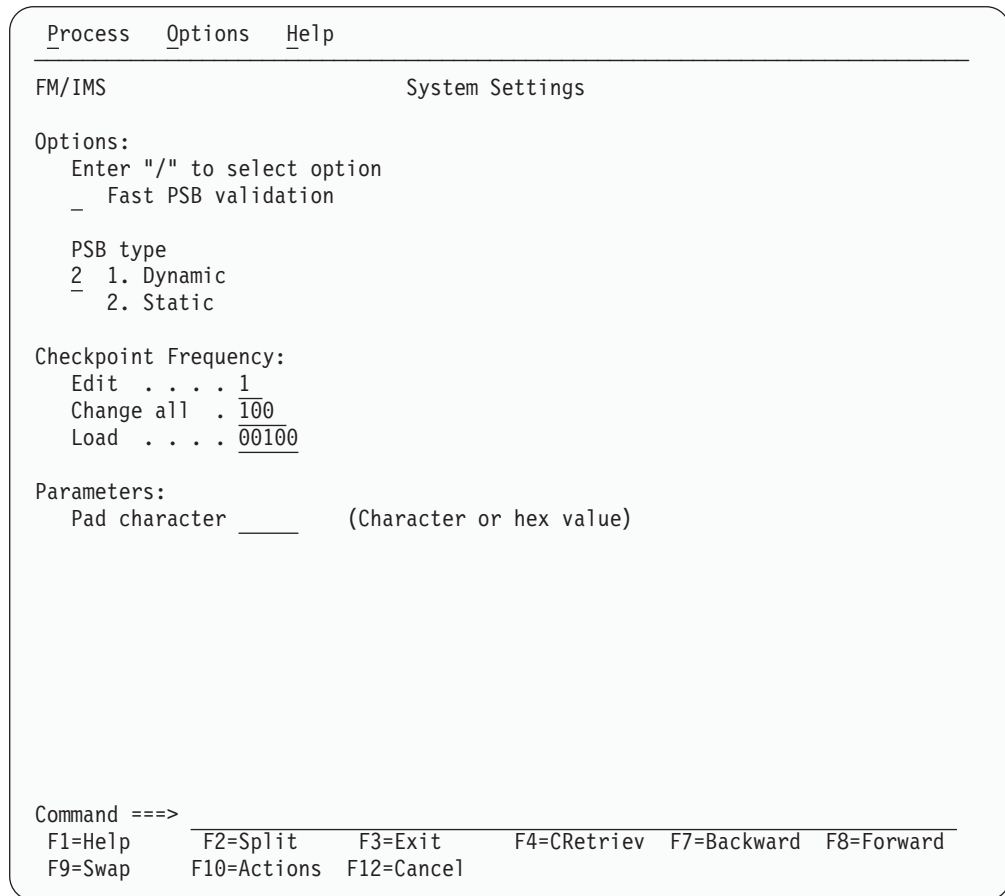


Figure 9. System Settings panel

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 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 10. 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.

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:

Process	Options	Help
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=CRetriev	F7=Backward
		F8=Forward

Figure 11. 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

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
F9=Swap	F10=Actions	F12=Cancel
F4=CRetrieval	F7=Backward	F8=Forward

Figure 12. 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

The installation options allow administrators to set defaults for various function parameters and, if required, to prevent users from overriding these defaults. These changes affect the following function parameters:

IEB (IMS Edit Batch)

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.

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.

IPR (IMS Print)

All of the changes listed for IEB are applicable to IPR, with the addition of the following:

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).

IXB (IMS Extract)

All of the changes listed for IEB are applicable to IXB, with the addition of the following:

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).

PQ92621

Initial problem description

Message IEC031I D37-04 issued for the IMSACBB DD and abendSD37 when using a dynamic PSB and BMP mode. Problem can occur when running an FM/IMS Extract, Load, Edit Batch or Batch Print job or when in the FM/IMS Edit or Browse dialog. When the problem occurs in the Edit and Browse dialog the ACBGEN Abend Display panel is displayed.

Outline of solution

APAR number modifies FM/IMS to provide a new installation option. When this installation option is selected, FM/IMS executes the ACBGEN with BUILD PSB=ALL specified on the SYSIN control statement. With this control statement specified, the ACBGEN deletes all PSBs and DBDs (and any other modules) from the DOPT ACBLIB data set and makes all their space available for reuse, before building blocks for the dynamic PSB.

This option may only be used when FM/IMS is the sole user of the DOPT ACBLIB data set.

Documentation impact

This APAR requires changes to be made to Customization Guide (GC18-7790-03) and the User's Guide and Reference for IMS Data (SC18-7795-03).

Changes to the Customization Guide

The following text should be added to the Customization Guide (GC18-7790-03).

Chapter 18: Customizing File Manager/IMS

Replace the example in Figure 13, with the following:

```

|
| FMN1POPT TITLE 'File Manager IMS z/OS: Profile Options'
| FMN1POPT CSECT
| FMN1POPT AMODE 31
| FMN1POPT RMODE ANY
|
|     FMNØPOPI 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
|

```

Figure 13. (Part 1 of 2)

```
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
```

```
*
*****
* 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
VSPMEM=DFSVSMM01,     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
DFSRRCO0=,             Alternate name for DFSRRCO0  X
MACLIB='IMS.MACLIB',   Default IMS Macro Library    X
PROCOPTB=G,            Browse Procopt default (G/GO) X
UPROCOPB=Y,            PROCOPTB overrideable (Y/N)  X
PROCOPTX=G,            Extract Procopt default (G/GO) X
UPROCOPX=Y,            PROCOPTX overrideable (Y/N)  X
PROCOPTP=G,            Batch Print Procopt dflt (G/GO) X
UPROCOPP=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
UPSBTYP=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
```


| **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.
|

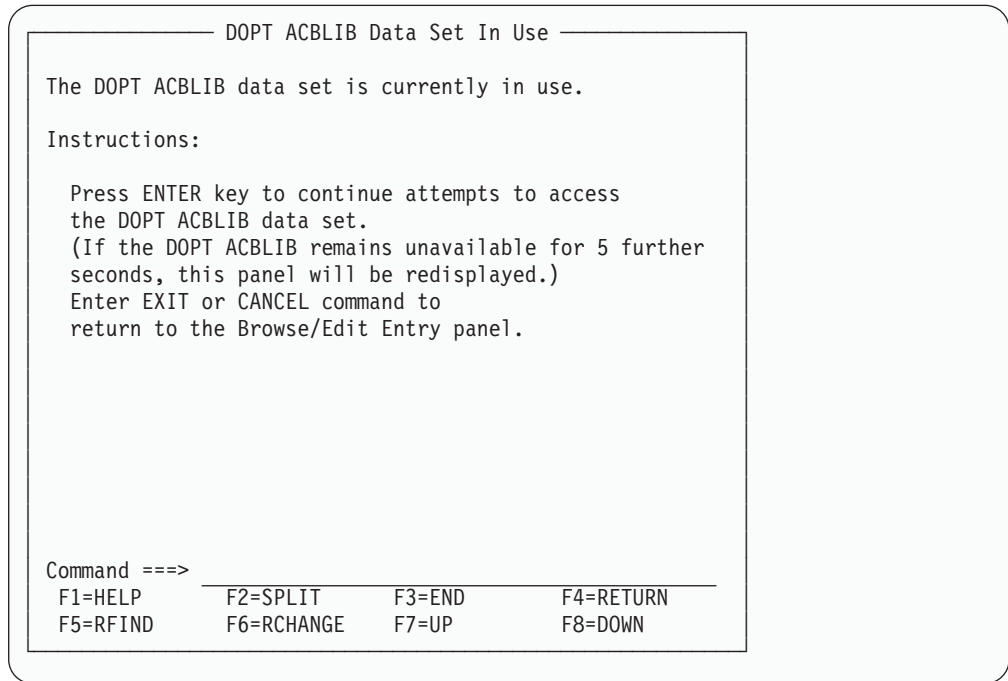


Figure 14. DOPT ACBLIB Data Set In Use popup

| 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.

Part 2. General Documentation Changes

Customization Guide (GC18-7790-03)	97	PQ88603	101
Chapter 7. "Customizing File Manager to use library management system libraries"	97	Changes to Chapter 10 Disk/VSAM Data Functions.	101
Additional text: Chapter 12, "Customizing File Manager/DB2"	97	Changes to Chapter 16 File Manager Functions	101
PQ96677	98	User's Guide and Reference for DB2 Data (SC18-7794-03)	103
Applying service updates.	98	User's Guide and Reference for IMS Data (SC18-7795-03)	105
COBOL compiler options.	99		
User's Guide and Reference (SC18-7792-03)	101		
PQ97877	101		

This section describes enhancements and updates in the documentation for File Manager for z/OS Version 4 Release 1. These changes are not associated with individual APAR or PTF numbers, as they do not require the application of any code updates.

The changes are grouped by manual and listed within each section in reverse date order. That is, the most recent documentation change appears at the beginning of each manual section.

Customization Guide (GC18-7790-03)

Chapter 7. “Customizing File Manager to use library management system libraries”

Section, “Writing your own exit”

The last paragraph in this section, immediately before the notes, refers to the CONCATD command. The CONCATD command is not generally available, so replace this paragraph with the following:

“If you want to test your exit before making it generally available in production, link edit your version of FMNCRAEX into your own load library and use the TSOLIB command to activate your own load library. Refer to the TSO/E Command Reference, SA22-7782, for information about the TSOLIB command.”

Additional text: Chapter 12, “Customizing File Manager/DB2”

Add the following text at the end of Chapter 12, “Customizing File Manager/DB2”, at the end of the section “Changing the JCL skeleton for batch mode”:

The skeleton FMN2FTEX provides printer information to FMN2FTSL. You might also need to modify FMN2FTEX, for example, to change the DCB information for SYSPRINT.

You can modify FMN2FTEX using the following sample job control for a usermod. To do this:

1. Copy the member FMN2FTEX from FMN.SFMNSLIB to your own source library.
2. Modify one or more of the following three statements in FMN2FTEX in your library, as required. Do not change any other statements in FMN2FTEX.

```
//SYSPRINT DD SYSOUT=**  
//FMNTSPRT DD SYSOUT=**  
//SYSTEM DD SYSOUT=**
```

For example, you might want to change

```
//SYSPRINT DD SYSOUT=**
```

to

```
//SYSPRINT DD SYSOUT=*,DCB=(RECFM=FBA,LRECL=133)
```

3. Code the job control for a usermod to modify FMN2FTEX in FMN.SFMNSLIB, using this example:

```
//FMN2004 EXEC PGM=GIMSMP,REGION=4096K  
//SMPCSI DD DSN=globalcsi,DISP=SHR  
//SMPOUT DD SYSOUT=**  
//SMPRPT DD SYSOUT=**  
//SMPLIST DD SYSOUT=**  
//SYSPRINT DD SYSOUT=**  
//FMN2SRC DD DSN=your.sourcelib,DISP=SHR  
//SMPCNTL DD *  
SET BDY (GLOBAL).  
RECEIVE SELECT(FMN2004) SYSMODS.  
SET BDY (tzone).
```

Additional text: Chapter 12, “Customizing File Manager/DB2”

```
APPLY SELECT(FMN2004) RETRY(YES) REDO.  
/*  
//SMPPTFIN DD DATA,DLM=$$  
++USERMOD (FMN2004) REWORK(date).  
++VER (Z038) FMID(J2A0412).  
++SKLENU(FMN2FTEX) TXLIB(FMN2SRC) DISTLIB(AFMNSLIB).  
$$
```

- Change *globalcsi* to the name of your global CSI data set.
- Change *your.sourcelib* to the name of your source library where you have modified FMN2FTEX.
- Change *tzone* to the name of your target zone.
- Change *date* on the ++USERMOD statement to the current date, in the form YYYYDDD.
- If service has been applied to FMN2FTEX, add a PRE operand to the ++VER statement, with the latest RMID for FMN2FTEX. This is usually a PTF number, and can be determined from SMP/E. Format of the ++VER statement will then be:
++VER (Z038) FMID(J2A0412) PRE(UQnnnnn) .

4. Install the SMP/E usermod you have just created.

PQ96677

Initial problem description

The description of the behaviour of the AUDIT option in the FMN2SSDM macro, does not clearly identify the scope of use of this option. Consequently, it could be misinterpreted that auditing occurs whenever any data modification is done while using File Manager/DB2 other than via the editor or copy utility.

Outline of solution

File Manager publications will be updated to state this restriction.

Documentation impact

In Chapter 10 “Customizing File Manager/DB2”, in the section “Customizing the DB2 subsystem selection panel (required)” and under the sub-heading “Syntax of the FMN2SSDM macro”, change the note for the AUDIT operand (note 5) so that it explicitly states:

“NOTE: This option is active only when data is modified via the editor or copy utility. The setting of this option will be ignored for any other File Manager function that allows data to be modified.”

In the introduction to Chapter 11 “Customizing the File Manager/DB2 audit facility”, insert an additional note (following the note about the AUDITLOG option) that states:

“NOTE: The AUDIT option is active only when data is modified via the editor or copy utility. The setting of this option will be ignored for any other File Manager function that allows data to be modified.”

Applying service updates

In **Appendix D: Maintaining File Manager**, within the section headed “Applying service updates” (page 166), add the following two notes after step 6:

Notes:

1. If you are applying service to a member that you have modified by a usermod, you must RESTORE the member using SMP/E before you can apply the

service. If you do not do this, the APPLY of the service will produce MODID errors, for example, messages GIM8201E and GIM31901I.

2. After you have applied service to a member that you require to modify by a usermod, you must add a PRE operand to the ++VER statement in the usermod, specifying the last RMID for that member. This will usually be the number of the latest PTF applied to that member. If you do not do this, the APPLY of the usermod will also produce errors GIM8201E and GIM31901I. You can determine the RMID by performing an SMP/E query on the member in your target zone.

COBOL compiler options

In **Chapter 2: Customizing the operating environment for File Manager**, the section headed "Customizing for processing COBOL copybooks" (page 9), contains a paragraph about COBOL compiler options that may not be 'fixed'. The list of options is incomplete, it should read:

- ADATA
- ADEXIT
- DECK
- DBCS
- INEXIT
- LIB
- OBJECT
- OPTIMIZE
- PRTEXT
- SQL

User's Guide and Reference (SC18-7792-03)

PQ97877

Initial problem description

Various figures in the manual show panel images of the File Manager browser and editor with the words "Top Field" appearing on the panel. This is incorrect and differs from what is presented to the user when executing File Manager.

Outline of solution

Panel images of the File Manager browser and editor in "zoom" and "SNGL" modes used in the User's Guide show the words "Top Field" appearing on the panel. This is incorrect. These panels were modified as a result of an enhancement that changed the text "Top Field" to "Top Line".

Documentation impact

In Chapter 3 "Viewing data sets", in the section "Manipulating your view of the data" and under the sub-heading "Selecting a display format", change the panel image immediately following the discussion of SNGL format so that "Top Field" is replaced by "Top Line".

In Chapter 3 "Viewing data sets", in the section "Zooming in to see all of a record", change the panel image in Figure 15 so that "Top Field" is replaced by "Top Line".

In Chapter 3 "Viewing data sets", in the section "Zooming in to see all of a record", change the panel image immediately following Figure 15 so that "Top Field" is replaced by "Top Line".

In Chapter 14 "Panels and fields", in the section "Browse panel" and under the sub-heading "Panel and field definitions", change the panel image in Figure 80 so that "Top Field" is replaced by "Top Line".

In Chapter 14 "Panels and fields", in the section "Edit panel" and under the sub-heading "Panel and field definitions", change the panel image in Figure 107 so that "Top Field" is replaced by "Top Line".

PQ88603

Initial problem description

There are restrictions for the use of DSX with VSAM data sets

Outline of solution

Use SCS or DVT instead of DSX for VSAM data.

Documentation impact

This APAR requires changes to be made to the User's Guide and Reference (SC18-7792-03).

Changes to Chapter 10 Disk/VSAM Data Functions

The description for Data Set Extents (Option 5.6) should state that the function is not valid for VSAM data sets.

Changes to Chapter 16 File Manager Functions

DSX (Data Set Extents)

PQ88603

The description for the DSX (batch) command should state that File Manager must be authorized in order for DSX to work with VSAM data sets, and that the DSNAME specified must be the actual component - for example DATA - name, not the VSAM CLUSTER name. The description for Data Set Extents (Option 5.6) should state that the function is not valid for VSAM data sets.

User's Guide and Reference for DB2 Data (SC18-7794-03)

November 2005 (change applies to Third Edition onwards)

- Chapter 13. "Working with SQL statements"

Section, "Should you use basic or advanced SQL prototyping?", subsection, "Using basic SQL prototyping":

In the paragraph following the figure, "Primary Basic SELECT Prototyping panel", replace the following sentence :

"On this panel you can specify up to 15 tables, views, synonyms, or aliases that are used to construct a FROM clause as the starting point for prototyping a SELECT statement."

with:

"On this panel you can specify up to 15 tables, views, or synonyms that are used to construct a FROM clause as the starting point for prototyping a SELECT statement."

User's Guide and Reference for IMS Data (SC18-7795-03)

None applicable.

Part 3. Appendixes

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File Manager for z/OS V4R1

Addenda to V4R1 User's Guides and Customization
Guide