

File Manager for z/OS V10R1



# Addenda to V10R1 User's Guides and Customization Guide



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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 10.1, since the most recent edition of the product manuals in November 2009. These editions are:

- Customization Guide (SC19-2856-00) - First Edition
- User's Guide and Reference (SC19-2857-00) - First Edition
- User's Guide and Reference for DB2 Data (SC19-2858-00) - First Edition
- User's Guide and Reference for IMS Data (SC19-2859-00) - First Edition
- User's Guide and Reference for CICS (SC19-2860-00) - First 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 10 Release 1 documentation that are required to reflect new behavior 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 10 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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## UK76451, UK76452, UK76453, UK76454

Release Date: 25 February 2012

This set of PTFs contains the following APAR fixes:

APAR #	APAR Abstract	Doc Impact
PM52873	When using FM/DB2 to view large tables, and 'ALL' is entered in row count, DB2 global temporary tablespace fills up.	Customization Guide (SC19-2856-00)

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### PM52873

#### Initial problem description

DB2 issues SQLCODE-904 errors on the temporary database when a File Manager DB2 user edits a DB2 object with row count = 0.

#### Outline of solution

Enhancement APAR. File Manager DB2 component has been changed to allow the product installer to disable large object support for the File Manager DB2 editor. A new FMN2SSDM macro parameter EDIT\_MAX\_ROWS can be specified. The default is 0, meaning that large object support is available, this preserves the existing product behaviour. Specifying EDIT\_MAX\_ROWS= $n$ ,  $n > 0$  has two effects:

1. Large object support is disabled. When a File Manager DB2 editor user specifies row count = 0, they instead get a normal editor session with at most  $n$  rows loaded.
2.  $n$  sets an absolute limit on the number of rows that may be loaded for any File Manager DB2 editor user. If a user sets row count =  $m$ ,  $m > n$  they instead get a normal session with at most  $n$  rows.

Note that the new parameter is specified as an FMN2SSDM macro parameter, therefore editor large object support can be disabled/enabled for each DB2 system defined in the FMN2POPT module.

The FMN2POPT module is affected by this APAR, however the module only needs to be modified/re-created when the new EDIT\_MAX\_ROWS parameter is specified with a non-zero value.

#### Documentation impact

This APAR requires changes to be made to:

- Customization Guide (SC19-2856-01)

## Changes to the Customization Guide

### Chapter 11, "Preparing to customize FM/DB2"

In the section, "Improving FM/DB2 performance", add the following text at the end of the current section:

The File Manager DB2 editor can operate in two modes: "normal" and "large". The mode of operation is determined by the value entered in the **row count** field for

those FM/DB2 functions that use the FM/DB2 editor to display data. The characteristics of the two editor modes are documented in the *File Manager User's Guide and Reference for DB2 Data*.

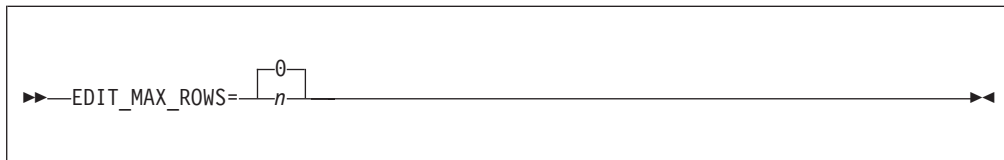
The use of "large" editor mode may have negative DB2 performance implications. When the FM/DB2 editor operates in "large" mode, it uses a DB2 scrollable cursor for access to DB2 data. This minimizes the memory usage in the FM/DB2 user's TSO address space, but might require DB2 to build a temporary copy of the entire result table in a DB2 temporary database. For large tables, this can lead to SQLCODE-904 (unavailable resource) on table spaces defined within the DB2 temporary database. For these reasons, providing access to the FM/DB2 editor in production DB2 environments, where there are large DB2 tables, should be carefully considered.

The product installer can disable the use of "large" editor mode, by DB2 subsystem. This is achieved by setting the FMN2SSDM macro parameter EDIT\_MAX\_ROWS to a non-zero value. See the description for the EDIT\_MAX\_ROWS parameter in Appendix C: FM/DB2 Options, FMN2SSDM. The FMN2SSDM macro is discussed further in installation checklist item 15: "Identifying all the DB2 systems that FM/DB2 will access and defining these in the FMN2POPT module (required)".

### Appendix C, "FM/DB2 options"

In the section, "FMN2SSDM", add the following text, between the entries for "Display" and "LDFDDLN":

#### EDIT\_MAX\_ROWS



#### EDIT\_MAX\_ROWS

Controls the maximum number of rows that can be loaded into any FM/DB2 editor session, and can be used to disable "large" table support.

The default is 0, meaning that:

- "Large" editor mode is available to all FM/DB2 users. If an FM/DB2 user specifies row count = 0 for an editor-related function, FM/DB2 may use a scrollable cursor to access DB2 data. This might require DB2 to build a copy of the result table in a DB2 temporary database.
- "Normal" editor mode is available to all FM/DB2 users. An FM/DB2 user can specify row count =  $n$ ,  $n > 0$  for an editor-related function, FM/DB2 attempts to load up to  $n$  rows into the FM/DB2 editor session. There is no restriction on the value  $n$  that can be specified up to a maximum of 2G-1.

Specify a positive value ( $mn$ ) to:

- Disable "large" editor mode. If an FM/DB2 user specifies row count = 0 for an editor-related function, FM/DB2 ignores the 0 value, the resulting FM/DB2 editor session is a "normal" edit session and FM/DB2 loads at most  $mn$  rows.
- Set an absolute limit on the number of rows that any FM/DB2 can process in an FM/DB2 editor session. If an FM/DB2 user specifies row

count =  $m$ ,  $m > nn$  on a function entry panel, FM/DB2 ignores the  $m$  value and loads at most  $nn$  rows into the editor.

**Tips:**

Specify a large value (for example, 2,000,000,000) to disable "large" editor mode, while setting no reasonable upper limit to the number of rows that can be loaded into an FM/DB2 editor session. Specify a modest value (for example, 10,000) to limit TSO memory usage when using the FM/DB2 editor.



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## UK70930, UK70931, UK70932, UK70933, UK70934

Release Date: 25 August 2011

This set of PTFs contains the following APAR fixes:

APAR #	APAR Abstract	Doc Impact
PM40296	After applying PTF UK59244, FM/DB2 Export utility (DBX) output data contains additional double quotes.	User's Guide and Reference for DB2 (SC19-2858-00)

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### PM40296

#### Initial problem description

After applying UK59244, the output from FM/DB2 export, in CSV format, may contain additional double quotes.

#### Outline of solution

This APAR provides an enhancement to FM/DB2 export, CSV data format, allowing an "ASIS" encapsulation option. When this option is selected, character data is exported "ASIS", even when the data contains, for example, an imbedded separator character, or double quote.

#### Documentation impact

This APAR requires changes to be made to the User's Guide and Reference for DB2 (SC19-2858-00).

### Changes to the User's Guide and Reference for DB2

#### Chapter 15, "FM/DB2 panels and fields"

In the section "Export Options (2 of 3) panel":

- Replace the screen capture ("Export Options (2 of 3) panel") with:

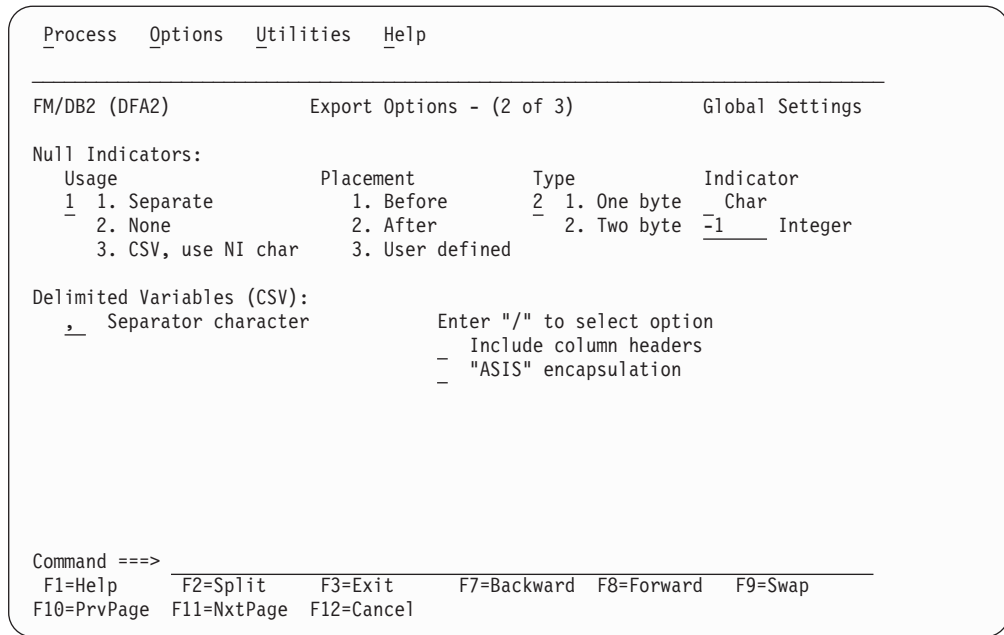


Figure 1. Export Options (2 of 3) panel

- Add the following after the description for **Include column headers** :
  - "ASIS" encapsulation**  
Determines whether automatic encapsulation of column data is disabled. Select this option when the data has already been encapsulated in a user-defined character, prior to storage in DB2.

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## UK68127

Release Date: 2 June 2011

This PTF contains the following APAR fix:

APAR #	APAR Abstract	Doc Impact
PM22978	FINDNEXT function returning "TOF" value instead of record number or zero.	<ul style="list-style-type: none"><li>• Users Guide and Reference (SC19-2857-00)</li></ul>
PM33506	Receive message FMNBE338 when attempting to use I/O exit, written in Assembler, from a COBOL user program.	<ul style="list-style-type: none"><li>• Customization Guide (SC19-2856-00)</li></ul>

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## PM22978

### Initial problem description

This problem affects DSEB users.

The FINDPREV() and FINDNEXT() commands are:

1. Returning EOF or TOF instead of 0.
2. Not searching the current record as documented.
3. Only finding one occurrence of a string in a given record.

The DOWN() command returns EOF inconsistently.

### Outline of solution

The FINDPREV() and FINDNEXT() commands have been changed to ensure the documented behaviour is followed.

1. 0 is returned when the string is not found.
2. Searching takes place from the current record as documented. Repeated searching resumes from the previously located string unless the record location has been changed by a UP(), DOWN(), TOP() or BOT() command.

DOWN() behavior is changed so that it only returns end of file when you are positioned on the last record and the command is issued.

### Documentation impact

This APAR requires changes to be made to:

- User's Guide and Reference (SC19-2857-00)

## Changes to the User's Guide and Reference

### Chapter 16, "Functions"

In the "DOWN (DSEB only)" topic, which is in the section "Function reference: External REXX functions":

- Change the first sentence in the **Returns** paragraph from:  
If, after moving, the current record is the last record, then the DOWN function returns the string value "EOF" (end of file).

to

If, **before** moving, the current record is the last record, then the DOWN function returns the string value "EOF" (end of file).

In the "**FINDNEXT, FINDPREV (DSEB only)**" topic, which immediately follows "DOWN (DSEB only)":

- Insert these paragraphs immediately after the first paragraph:

If a FINDNEXT() or FINDPREV() has located a needle on a given record then repeated searching resumes from the previously located needle plus 1 for FINDNEXT and minus 1 for FINDPREV.

If the record location has been changed by a UP(), DOWN(), TOP(), or BOT() command or there is no previous located needle then FINDPREV searches from the end of the current record backward and FINDNEXT searches from the start of the current record forward.

## PM33506

### Initial problem description

Various problems relating to the invocation of File Manager from a Language Environment (LE) enabled application such as a COBOL or PL/I program.

Symptoms include:

- Message: 'User I/O exit xxxxxxxx terminated because of LE problem, RC=16' when using an HLASM I/O exit.
- Abend U4088 RC63 when creating a template for a PL/I copybook or when using the FM Auto detect option for Compiler Language Selection.

### Outline of solution

File Manager has been updated to correct the problems related to invoking FM from an active LE environment.

### Documentation impact

This APAR requires changes to be made to:

- Customization Guide (SC19-2856-00)

## Changes to the Customization Guide

### Chapter 2, "Customizing the operating environment for File Manager"

After the section "**Running File Manager with APF-authorization**", add this new section, "**Language Environment Considerations**":

During the File Manager Initialization process, Language Environment (LE) preinitialization facilities (CEEPIPI) are used to create and initialize a common run-time environment.

This means that if LE is active when File Manager is invoked, there are restrictions on File Manager functionality because the CEEPIPI functions are not available.

Note that these restrictions **only** apply if LE is active when File Manager is invoked. (LE active means that File Manager has been invoked directly via an LE application (for example, from Enterprise COBOL).)

The restrictions are:



- TRAP(ON,NOSPIE) should be set to allow File Managerabend handler to function correctly.
- An LE-enabled I/O exit cannot be used.
- MOD\_DATE REXX Built-in function cannot be used.
- Scramble Exit (if used) must be in Assembler (non-LE).
- Library Management exit (LMS=USERLMS) cannot be used.



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## UK67495

Release Date: 6 May 2011

This PTF contains the following APAR fix:

APAR #	APAR Abstract	Doc Impact
PM30945	Receive messages FMNBE000, FMNBA650, and FMNBB569 from FMNVERIF, when a msgexit is coded for IGYCDOPT.	<ul style="list-style-type: none"><li>Customization Guide (SC19-2856-00)</li></ul>

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## PM30945

### Initial problem description

When creating a template from a COBOL Copybook, File Manager may abend with any of the following symptoms:

```
MSG FMNBE000 IKJ56246I FILE FMNIN NOT
ALLOCATED, FILE IN USE
FMNBA650 SVC99 concatenate failed, RC 4
ERR 0410, INFO 0000 (FMNIN)
RC16 AbendU3002 AbendS0C3
```

This problem can occur when the COBOL installation options module IGYCDOPT specifies a MSGEXIT (Enterprise COBOL 4.2 and above), for example MSGEXIT=IGYMSGXT. File Manager does not support the use of a message exit.

### Outline of solution

File Manager has been updated to specify NOMSGEXIT (NOMSGX) when invoking the COBOL compiler at 4.2 level and above. MSGEXIT has been added to the list of options that may not be specified as fixed in IGYCDOPT.

### Documentation impact

This APAR requires changes to be made to:

- Customization Guide (SC19-2856-00)

## Changes to the Customization Guide

### Chapter 2, "Customizing the operating environment for File Manager"

In the subsection "Using COBOL compiler options with File Manager", which is in the section "Using a supported COBOL compiler":

- Add the compile options MSGEXIT to the list of options that cannot be marked as 'fixed' in the COBOL default options module IGYCDOPT. The list of options should now read:

```
ADATA      LIB
ADEXIT    LINECOUNT
ARITH     MSGEXIT
COMPILE   OBJECT
```

## PM30945

DBCS	OPTIMIZE
DECK	PRTEXT
FLAG	SQL
INEXIT	

---

# UK65207, UK65208, UK65209, UK65210, UK65211, UK65212, UK65213, UK65214, UK65215, UK65216, UK65217, UK65218

Release Date: 2 March 2011

This set of PTFs contains the following APAR fixes:

APAR #	APAR Abstract	Doc Impact
PM27057	HEX primary command not working as expected	<ul style="list-style-type: none"><li>• User's Guide and Reference (SC19-2857-00)</li><li>• User's Guide and Reference for DB2 (SC19-2858-00)</li><li>• User's Guide and Reference for IMS (SC19-2859-00)</li></ul>

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## PM27057

### Initial problem description

In the editor, issuing the HEX editor primary command is allowed, but results in a "no operation".

### Outline of solution

The File Manager editor has been changed to support HEX being issued without parameters. The effect is to reverse the current HEX-display status.

### Documentation impact

This APAR requires changes to be made to:

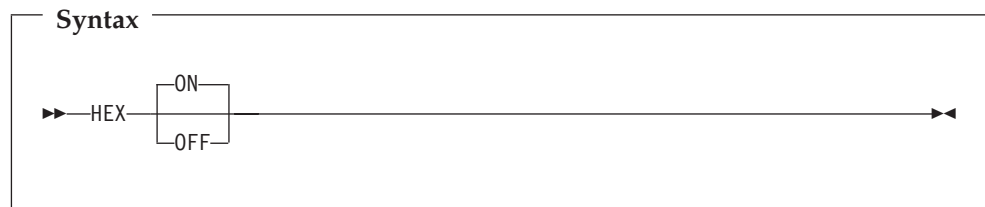
- User's Guide and Reference (SC19-2857-00)
- User's Guide and Reference for DB2 (SC19-2858-00)
- User's Guide and Reference for IMS (SC19-2859-00)

## Changes to the User's Guide and Reference

### Chapter 15, "Primary commands"

In the section "HEX primary command":

- Change the syntax diagram to:



- Add the following to the option descriptions:

#### (no parameter)

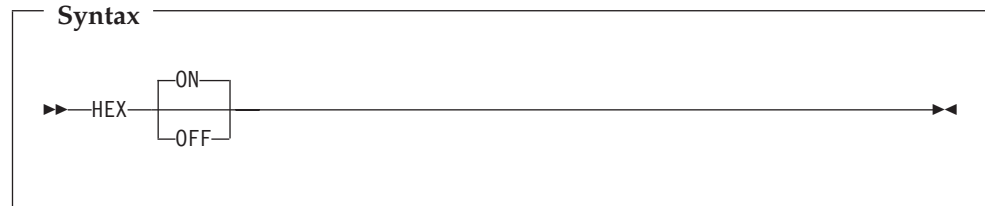
Toggles the current hexadecimal-display status. That is, it turns hexadecimal display ON if currently OFF, and turns hexadecimal display OFF if currently ON.

## Changes to the User's Guide and Reference for DB2

### Chapter 16, "FM/DB2 commands"

In the section "HEX primary command":

- Change the syntax diagram to:



- Add the following to the option descriptions:

**(no parameter)**

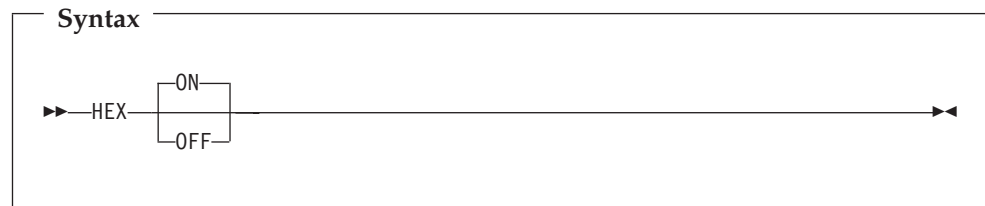
Toggles the current hexadecimal-display status. That is, it turns hexadecimal display ON if currently OFF, and turns hexadecimal display OFF if currently ON.

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

### Chapter 10, "Commands"

In the section "HEX primary command":

- Change the syntax diagram to:



- Add the following to the option descriptions:

**(no parameter)**

Toggles the current hexadecimal-display status. That is, it turns hexadecimal display ON if currently OFF, and turns hexadecimal display OFF if currently ON.

---

## UK64385, UK64396, UK64386, UK64394, UK64395, UK64403, UK64434, UK64435

Release Date: 7 February 2011

This set of PTFs contains the following APAR fixes:

APAR #	APAR Abstract	Doc Impact
PM20620	Receive SQLCODE -530 when attempting to copy a DB2 table using FM/DB2 COPY utility.	User's Guide and Reference for DB2 (SC19-2858-00)
PM25350	When using FM/DB2 view or edit, additional rows are displayed than what exists in the DB2 table.	User's Guide and Reference for DB2 (SC19-2858-00)

---

### PM20620

#### Initial problem description

In the FM/DB2 Copy utility, the option **Ignore referential integrity errors** is not working.

#### Outline of solution

FM/DB2 has been updated to correct the problem. The option description has been changed to better reflect the option's function. When the option is selected, any SQLCODE-530 or SQLCODE-545 errors are ignored.

#### Documentation impact

This APAR requires changes to be made to:

- User's Guide and Reference for DB2 (SC19-2858-00)

### Changes to the User's Guide and Reference for DB2

#### Chapter 15, "FM/DB2 panels and fields"

In the section, "Copy Options panel":

- Replace the panel with:

<u>P</u> rocess	<u>O</u> ptions	<u>U</u> tilities	<u>H</u> elp
FM/DB2 (DFA2)	Copy Options	Global Settings	
From Table Concurrency Option: Enter "/" to select option / Use uncommitted read		To Table Locking Option: Locking 1 1. None 2. Share mode 3. Exclusive mode	
Copy Options: Duplicate key processing 2 1. Ignore 2. Update For ALL _____ duplicates		Enter "/" to select option - Delete existing rows - Ignore RI/Constraint errors 7 Create audit trail	
Command ==>			
F1=Help	F2=Split	F3=Exit	F7=Backward F8=Forward F9=Swap
F12=Cancel			

- Replace the text and description for the **Ignore referential integrity errors** option with the following:

#### Ignore RI/Constraint errors

Determines what processing occurs when the Copy utility encounters an SQLCODE-530 (RI error - no primary key) or SQLCODE-545 (Constraint error).

/ The Copy process ignores the error and continues with the next row. The row is not copied or updated and is not included in the copy count.

**(blank)**

Copy utility canceled. This is the default setting.

---

## PM25350

### Initial problem description

In File Manager DB2 edit, large table mode, scrolling to the bottom (max) of the object shows extraneous rows beyond the last row in the object.

### Outline of solution

File Manager DB2 component has been changed to correct the problem. This APAR also changes the error message displayed when the editor SORT command is issued in an FM/DB2 large edit session. The FM/DB2 User's Guide and Reference for DB2 data is updated to explicitly state that the editor SORT command is not available in a large mode editor session.

### Documentation impact

This APAR requires changes to be made to the User's Guide and Reference for DB2 (SC19-2858-00).



## Changes to the User's Guide and Reference for DB2

### Chapter 4, "Viewing and changing DB2 data"

In the section "Starting and ending FM/DB2 editor sessions", subsection "Specifying the editor session mode: normal mode or large mode?", subsection "Choosing the appropriate editor mode", add the following to Table 4, "Characteristics of editor modes":

Table 1.

	"Normal mode"	"Large mode"
Sort command	Allowed.	Prohibited.



---

## UK63177, UK63178, UK63179, UK63180, UK63181, UK63182, UK63183, UK63184, UK63185

Release Date: 23 December 2010

This set of PTFs contains the following APAR fixes:

APAR #	APAR Abstract	Doc Impact
PM22895	When using FM COPY utility (FM 3.3) to copy a KSDS, the 'from' data set is not unpacked before inserting records into the 'to' KSDS.	User's Guide and Reference (SC19-2857-00)

---

### PM22895

#### Initial problem description

1. When copying an ISPF packed data set to a KSDS data set, the data may not be unpacked.
2. The description of the MOD Disposition Processing option on the Copy utility "to" panel provides no information about VSAM KSDS data set processing.

#### Outline of solution

When copying an ISPF packed input data set to a KSDS data set, DFSORT will not be used.

#### Documentation impact

- This APAR requires changes to be made to:
- User's Guide and Reference (SC19-2857-00)

### Changes to the User's Guide and Reference

#### Chapter 14, "Panels and fields"

In the section "Copy To panel", in the description for **Disposition**, replace the description for **Mod** with the following:

"Appends the input records to the end of the data set unless the data set is a VSAM KSDS data set. In this case, the records are positioned in the data set using the key value in the input record. MOD is invalid for a member of a partitioned data set."



---

## UK62573

Release Date: 6 December 2010

This set of PTFs contains the following APAR fixes:

APAR #	APAR Abstract	Doc Impact
PM20331	File Manager alternate field heading too short for DBCS headings.	User's Guide and Reference for DB2 (SC19-2858-00)

---

## PM20331

### Initial problem description

1. Header field for template edit is restricted to 20 bytes.
2. There is no function to create or update a DB2 template in batch.

### Outline of solution

1. Header field space has been increased to 36 bytes.
2. A new function D2TP has been created to facilitate batch create and update of DB2 templates.

### Documentation impact

This APAR requires changes to be made to:

- User's Guide and Reference for DB2 (SC19-2858-00)

## Changes to the User's Guide and Reference for DB2

### Chapter 17, "Functions"

#### Subsection: "File Manager DB2 batch functions"

Add the following new function:

#### D2TP (Template create/update) batch command:

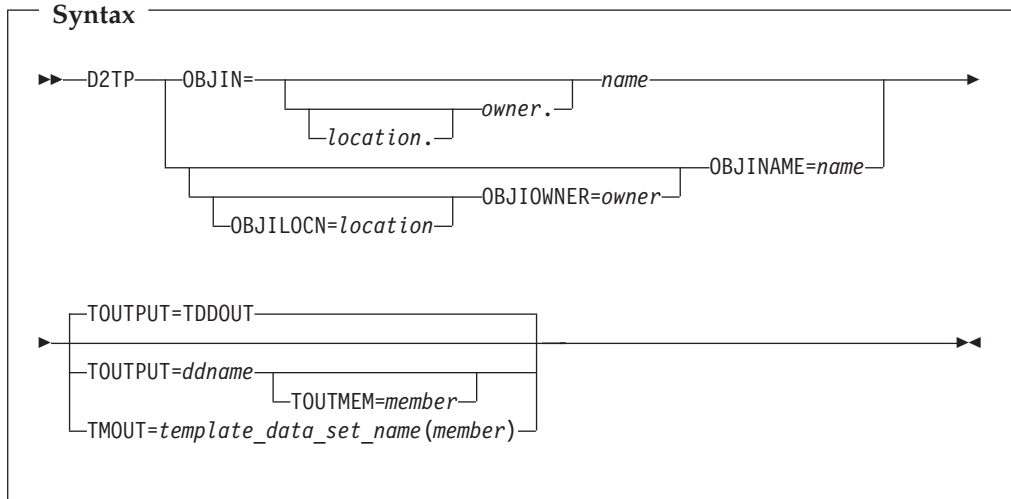
##### Purpose

To create or update a template based on one DB2 object. The object must be accessible from the currently connected DB2 system.

##### Usage

The FM/DB2 template create/update utility creates a template if it does not exist, or updates the template if it does exist.

##### Syntax



**OBJIN location.owner.object**

The optional name of the DB2 remote server (*location*) where the source object is located; the optional name of the owner of the source object (*owner*) and the source object name (*name*).

When *location* is not specified the current (local) DB2 server is used. When the *owner* is not specified the object name is qualified using the current SQLID. When FM/DB2 generates the utility control statements, the *owner* value is non-blank.

OBJIN should be used when the fully qualified name fits on a single line in the JCL deck. The last usable column is column 71. When the fully qualified name does not fit on a single line in the JCL deck, use one or more of the OBJILOCN, OBJIOWNR, OBJINAME keywords to specify the object.

**OBJILOCN=*location***

The optional name of the DB2 remote server (*location*) where the source object is located. See "Specifying a DB2 object name".

**OBJIOWNR=*owner***

The optional name of the owner of the source object (*owner*). See "Specifying a DB2 object name".

**OBJINAME=*name***

The object name (*name*) for the source object. See "Specifying a DB2 object name".

**TOUTPUT=*ddname***

Defines a reference to a DD statement for the data sets which contain the DB2 template that describes the target DB2 object. Concatenated DD statements are not supported and the referenced data set must be catalogued. If you have not specified a member name in the referenced DD statement, then you must provide a TOUTMEM keyword. If no TOUTPUT or TMOUT parameter has been provided, then TOUTPUT=TDDOUT is used. See "Specifying the template for a DB2 object".

**TOUTMEM=*member***

The name of the template member in the dataset identified by the TOUTPUT or TMOUT parameter. This parameter is ignored if the member

name is provided with the DD statement or the TMOUT parameter. See "Specifying the template for a DB2 object".

**TMOUT**=*template\_data\_set\_name(member)*

The PDS (*template\_data\_set\_name*) and member name (*member*) of the File Manager DB2 template that describes the target DB2 object. See "Specifying the template for a DB2 object".

### Examples

Example 1: Create a DB2 template for the DSN8810.EMP using TMOUT keyword.

```
//D2TPJOB (acct),'name'
/* Create template FMN.TEMPLATE(EMP) for DSN8810.EMP table
/*
//FMNDB2 EXEC PGM=FMNDB2,PARM=('SSID=DSN1,SQID=ID1')
//STEPLIB DD DSN=FMN.SFMNMOD1,DISP=SHR
// DD DSN=DB2V810.DSN1.SDSNEXIT,DISP=SHR
// DD DSN=DB2.V810.SDSNLOAD,DISP=SHR
//SYSPRINT DD SYSOUT=*
//FMNTSPRT DD SYSOUT=*
//SYSTEM DD SYSOUT=*
//SYSIN DD *
$$FILEM D2TP OBJIN="DSN8810"."EMP",
$$FILEM TMOUT=FMN.TEMPLATE(EMP)
/*
```

Example 2: Use TOUTPUT, TOUTMEM keywords to create output template for DSN8810.EMP

```
//D2TPJOB (acct),'name'
/* Create template FMN.TEMPLATE(EMP) for DSN8810.EMP table
/*
//FMNDB2 EXEC PGM=FMNDB2,PARM=('SSID=DSN1,SQID=ID1')
//STEPLIB DD DSN=FMN.SFMNMOD1,DISP=SHR
// DD DSN=DB2V810.DSN1.SDSNEXIT,DISP=SHR
// DD DSN=DB2.V810.SDSNLOAD,DISP=SHR
//TOUT DD DSN=FMN.TEMPLATE,DISP=SHR
//SYSPRINT DD SYSOUT=*
//FMNTSPRT DD SYSOUT=*
//SYSTEM DD SYSOUT=*
//SYSIN DD *
$$FILEM D2TP OBJIN="DSN8810"."EMP",
$$FILEM TOUTPUT=TOUT,TOUTMEM=EMP
/*
```

Example 3: Use Default output DD TDDOUT with TOUTMEM to create output template for DSN8810.EMP

```
//D2TPJOB (acct),'name'
/* Create template FMN.TEMPLATE(EMP) for DSN8810.EMP table
/*
//FMNDB2 EXEC PGM=FMNDB2,PARM=('SSID=DSN1,SQID=ID1')
//STEPLIB DD DSN=FMN.SFMNMOD1,DISP=SHR
// DD DSN=DB2V810.DSN1.SDSNEXIT,DISP=SHR
// DD DSN=DB2.V810.SDSNLOAD,DISP=SHR
//TDDOUT DD DSN=FMN.TEMPLATE,DISP=SHR
//SYSPRINT DD SYSOUT=*
//FMNTSPRT DD SYSOUT=*
//SYSTEM DD SYSOUT=*
//SYSIN DD *
$$FILEM D2TP OBJIN="DSN8810"."EMP",
$$FILEM TOUTMEM=EMP
/*
```

Example 4: Use Default output DD TDDOUT with member to create output template for DSN8810.EMP

```
//D2TPJOB (acct),'name'
/* Create template FMN.TEMPLATE(EMP) for DSN8810.EMP table
/*
//FMNDB2 EXEC PGM=FMNDB2,PARM=('SSID=DSN1,SQID=ID1')
//STEPLIB DD DSN=FMN.SFMNMOD1,DISP=SHR
// DD DSN=DB2V810.DSN1.SDSNEXIT,DISP=SHR
// DD DSN=DB2.V810.SDSNLOAD,DISP=SHR
//TDDOUT DD DSN=FMN.TEMPLATE(EMP),DISP=SHR
//SYSPRINT DD SYSOUT=*
//FMNTSPRT DD SYSOUT=*
//SYSTEM DD SYSOUT=*
//SYSIN DD *
$$$FILEM D2TP OBJIN="DSN8810"."EMP"
/*
```

Example 5: Create 3 templates

```
//D2TPJOB (acct),'name'
/* Create template TOUT1-3 for DSN8810.EMP table
/*
//FMNDB2 EXEC PGM=FMNDB2,PARM=('SSID=DSN1,SQID=ID1')
//STEPLIB DD DSN=FMN.SFMNMOD1,DISP=SHR
// DD DSN=DB2V810.DSN1.SDSNEXIT,DISP=SHR
// DD DSN=DB2.V810.SDSNLOAD,DISP=SHR
//TOUT1 DD DSN=FMN.TEMPLATE(T1),DISP=SHR
//TOUT2 DD DSN=FMN.TEMPLATE(T2),DISP=SHR
//TOUT3 DD DSN=FMN.TEMPLATE(T3),DISP=SHR
//SYSPRINT DD SYSOUT=*
//FMNTSPRT DD SYSOUT=*
//SYSTEM DD SYSOUT=*
//SYSIN DD *
$$$FILEM D2TP OBJIN="DSN8810"."EMP",TOUTPUT=TOUT1
$$$FILEM D2TP OBJIN="DSN8810"."EMP",TOUTPUT=TOUT2
$$$FILEM D2TP OBJIN="DSN8810"."EMP",TOUTPUT=TOUT3
/*
```



---

# UK62400, UK62402, UK62407, UK62445, UK62463, UK62508, UK62529, UK62530

Release Date: 2 December 2010

This set of PTFs contains the following APAR fixes:

APAR #	APAR Abstract	Doc Impact
PM08419	File Manager invalid command received when using select command from member list for option 3.6.	User's Guide (SC19-2857-00)

---

## PM08419

### Initial problem description

Incorrect documentation.

### Outline of solution

Correct documentation.

### Documentation impact

This APAR requires changes to be made to:

- User's Guide (SC19-2857-00)

## Changes to the User's Guide

### Chapter 2, "Getting started with File Manager"

In the:

- Section "Using the File Manager interface"
  - Subsection "Manipulating your view of selection lists"
  - Subsection "Sorting the data"

replace the sentence (and bullet points that follow it) starting "You can specify a column to be used in determining the sort order in any of these ways:..."

with the following:

You can specify a column to be used in determining the sort order in any of these ways:

- Setting the column attributes for a *single* column:
  1. Scroll (if necessary) so that the column is displayed.
  2. Perform any of these actions:
    - a. Position the cursor within the column filter and press Enter to display a Column Settings panel.
    - b. Set the **Sort** value to A, D, or N according to how you want the column sorted.
    - c. Press the Exit function key (F3) to return to the selection list.

or

- a. Position the cursor within the column heading and press Enter. The column sort order is changed to the default. The default sort order for the column can be found in the Column Settings panel.
- or
- a. Tab *past* the column heading (to the rightmost position of the column heading area) and press Enter.
- b. Each time you tab to this position and press Enter, the sort order rotates through ascending (↓), descending (↑), and none (no arrow displayed).
- Setting the column attributes for *one or more* columns:  
Perform either of these actions:
  1. Enter the TAILOR primary command to display a list of columns together with their column attributes.
  2. Set the **Sort** value to A, D, or N according to how you want the column sorted.
  3. Press the Exit function key (F3) to return to the selection list.
- or
- 1. Use the SORT command.

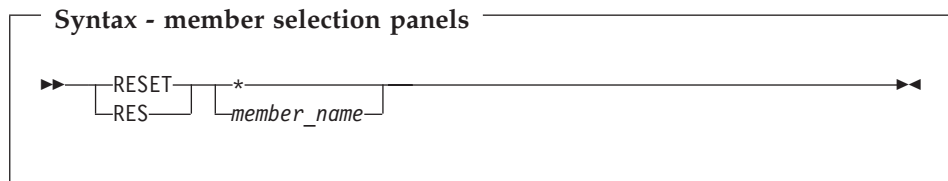
**Note:** When you change the sort order for a column, the sort order for all other columns is set to none.

RELATED TOPICS

**Chapter 15, "Primary commands"**

In the section "RESET primary command":

- In the subsection "RESET in member selection panels":
  - Remove the sentence:  
"If you do not specify any member name or pattern, all prefix commands are removed."
  - Replace the syntax diagram with:



- In the subsection "RESET in WebSphere MQ selection lists":
  - Change the name of the subsection to "RESET in selection lists".
  - In the first sentence, remove "WebSphere MQ".
  - Change the title of the syntax diagram to "Syntax (for selection lists)".

In the section "SORT primary command":

- Replace these subsections:
  - "SORT command in the Display VTOC Data Set List panel"
  - "SORT command in the Volume Summary/Selection panel"
  - "SORT command in member selection panels"

with this section:

**SORT command in selection list panels**

You can use the SORT command to sort specified column names in a panel showing a selection list.

When more than one column is to be sorted, the sequence in which you specify the columns has no impact on the sequence in which the columns are sorted. The columns are always sorted from left to right.

If you do not specify a sort order (A or D) for a column, the default sort order for that column is used. You can find the default sort order for a column in the Column Settings panel. To display this panel, position the cursor on the filter value for the column and press Enter.

After the SORT command has been entered, the list display is scrolled to the top with the order reflecting the changes after applying the sort to the specified columns.

**Syntax: selection list panels**

**Notes:**

1 You can specify up to 5 columns to be sorted.

*column* Column to be sorted.

**A** Sort column in ascending order.

**D** Sort column in descending order



---

## UK59575

Release Date: 20 August 2010

This set of PTFs contains the following APAR fixes:

APAR #	APAR Abstract	Doc Impact
PM08179	File Manager V10 samples are showing FM V9 FMIDS.	None
PM09722	File Manager trace options not available in options pulldown in V10 panels.	None
PM12261	FM/IMS datasets in FMN1POPT not correct used FMN1PDL2 DLI MODE data sets 1 cannot contain ' ' X'40'.	None
PM13152	In FM/IMS, receive message 'PSBLIB It;DSN> NOT A LOADLIB' WHEN PSBLIB HAS BEEN MIGRATED.	None
PM19787	Row count limited to specification on object list options panel instead of that specified on the view panel.	User's Guide and Reference for DB2 (SC19-2858-00)

---

## PM19787

### Initial problem description

The documentation for the "row count" field, on the Object List Options" panel, should mention that the row count value also applies to the number of rows fetched when an object selection list is displayed, as part of other File Manager DB2 functions, such as the editor, print, copy etc.

### Outline of solution

The documentation has been updated to better document the function for the "row count" field.

### Documentation impact

This APAR requires changes to be made to:

- User's Guide and Reference for DB2 (SC19-2858-00)

## Changes to the User's Guide and Reference for DB2

### Chapter 15, "FM/DB2 panels and fields"

In the section "FM/DB2 Object List Options (1 of 2) panel", change the description for the **Row count** field:

#### Row count

Limits the number of rows fetched from the DB2 catalog. The value entered applies to:

- Object List selection panels displayed by FM/DB2 functions such as the editor, print, copy, import, export, and data create. For more information

on object list selection, see "Specifying a DB2 object name" on page 29. Note that FM/DB2 functions such as edit, copy, print, and so on also have a **Row count** field on the function entry panel. Once an object has been selected, the function entry **Row count** field acts to control the number of rows processed in the specified DB2 object.

- Object lists displayed by these FM/DB2 functions:
  - Object List Utility (3.4).
  - Object Privileges Utility (3.5).
  - Explain Utilities (4.5).

A value of 0 or ALL specifies no limit; all rows from the relevant catalog tables are fetched and displayed. When you specify 0, FM/DB2 accesses the DB2 catalog using *large mode*, thereby minimizing storage usage for the list of DB2 objects.

If you experience "insufficient storage" conditions, you can specify a value to limit the number of rows fetched from DB2. Another way to limit the number of rows fetched in the Object List utility (option 3.4) is to specify selection criteria on the function entry panel.

The default for this option is 1000.

## UK59235

Release Date: 5 August 2010

This set of PTFs contains the following APAR fixes:

APAR #	APAR Abstract	Doc Impact
PM04792	Unable to connect to DB2 subsystem with DISPLAY=HIDDEN specified on FMN2SSDM statement.	None
PM04796	File Manager DB2 object list utility SQLCODE-331.	None
PM05022	FM/DB2 export not wrapping graphic fields with shift out/shift in for CSV output.	User's Guide and Reference for DB2 (SC19-2496-00)
PM05024	FM/DB2 requires all product end users to have access to SYSIBM.SYSUSERAUTH.	None
PM05025	File Manager DB2 view insufficient storage message not issued after storage failure.	None
PM05038	ABEND0C4 occurred in FM/DB2 using Import utility (option 3.6) if there is no template file that is specified.	None
PM07702	On panel FMN2PEO7 the settings for the two options are swapped.	Customization Guide (SC19-2856-00)
PM09316	SQLCODE=-501 during copy from remote to local view.	None
PM13531	FM/DB2 may ABENDS0C4 when enter is pressed on the advanced select prototyping panel.	None
PM14353	SQLCODE-104 accessing a DB2 V8 system (NFM) using DDF from a DB2V9 system (NFM), with CATOWNER ≠SYSIBM.	None
PM14355	Receive message DSNT408I SQLCODE = -4700 when attempting to display object list with FM/DB2 using DB2 V8 compatibility mode.	None

APAR #	APAR Abstract	Doc Impact
PM15391	FM/DB2 editor and import functions enhancements to support auto-commit of DB2 updates after a user-specified count is reached.	User's Guide and Reference for DB2 (SC19-2496-00)
PM16531	SQLCODE-313 in FM/DB2 editor.	None

---

## PM05022

### Initial problem description

A number of issues, specific to FM/DB2 export utility, CSV format.

1. GRAPHIC data is not wrapped with the appropriate shift out/shift in characters.
2. No ability to produce the column headers in CSV format.
3. Data with embedded commas is not enclosed within double quotes.
4. Embedded double quotes need escape character or another double quote.

### Outline of solution

1. Graphic data will be wrapped with shift out/shift in values.
2. A new online option "Include column headers" and a new batch keyword CSVHDR has been added to optionally produce column header values for the first record.
3. Data with an embedded delimiter value has been enclosed in double quotes.
4. An extra double quote will be inserted for each embedded double quote.

### Documentation impact

This APAR requires changes to be made to:

- User's Guide and Reference for DB2 (SC19-2858-00)

## Changes to the User's Guide and Reference for DB2

### Chapter 15, "FM/DB2 panels and fields"

In the section "Export Options (2 of 3) panel", change the panel to include new panel option **Include column headers** after the **Separator character** field as follows:



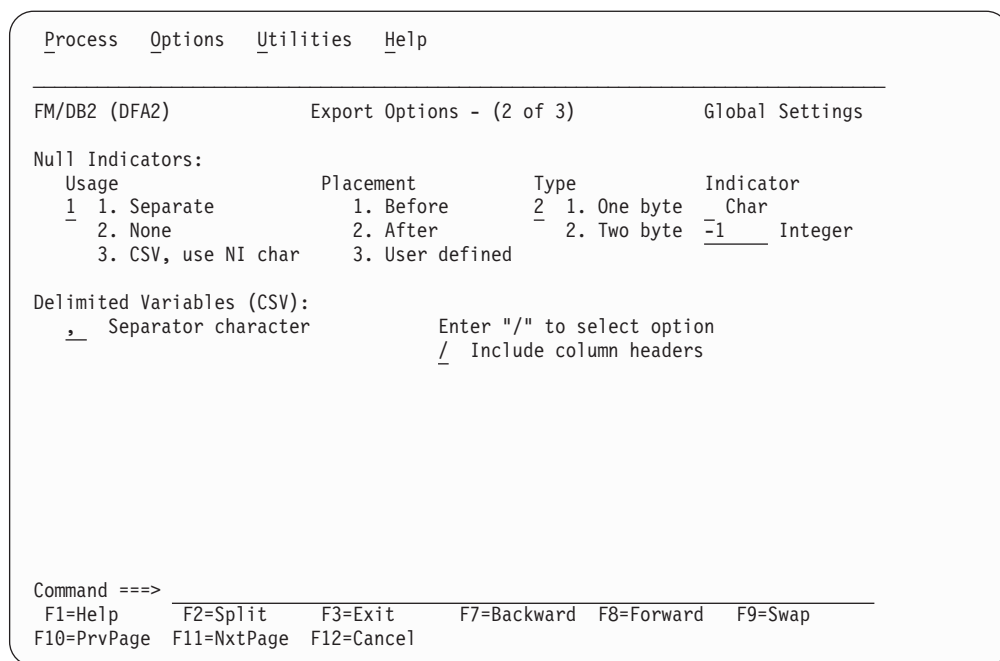


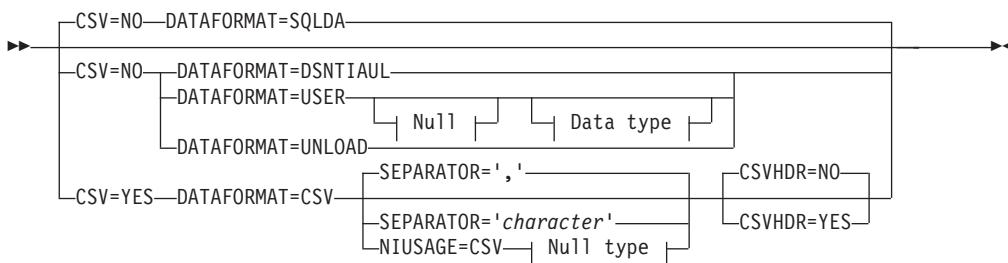
Figure 2. Export Options (2 of 3) panel

**Include column headers**

Selecting this option produces comma-delimited column headers as the first export record.

**Chapter 17, "FM/DB2 functions"**

In the section "File Manager DB2 batch functions", subsection "DBX (Export) batch command", add new keyword CSVHDR which is a subset of CSV=YES to the syntax diagram.



**CSVHDR**

Specifies whether column headers are to be produced on the first record of the export file when CSV=YES has been specified.

**NO** Column headers are not produced.

**YES** Column headers are produced.

**PM07702**

**Initial problem description**

1. FM/DB2 issues "LOCK TABLE" statements in edit even though the appropriate editor option is set for no (table) locking.
2. FM/DB2 is not adding the "WITH UR" clause to the SELECT statement used to access DB2 data for browse and view only, even though the appropriate editor option is set for uncommitted read.

**Outline of solution**

File Manager DB2 component has been updated to correct the problems.

**Documentation impact**

This APAR requires changes to be made to:

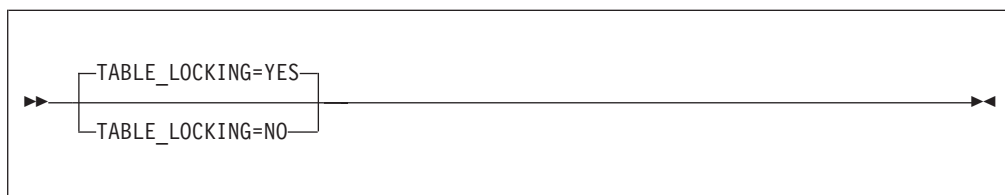
- Customization Guide (SC19-2856-01)

## Changes to the Customization Guide

### Appendix C, "FM/DB2 options"

In the section, "FMN2SSDM", add the following new option:

#### TABLE\_LOCKING:



#### TABLE\_LOCKING

specifies whether the table being edit should be locked.

<b>YES</b>	The table is to be locked.
<b>NO</b>	The table is not to be locked.

## PM15391

**Initial problem description**

File Manager DB2 component does not provide facilities for issuing progressive DB2 commit points in the import utility or the editor.

**Outline of solution**

File Manager DB2 component has been enhanced to provide a DB2 auto-commit facility in both the editor and import utilities.

**Documentation impact**

This APAR requires changes to be made to:

- User's Guide and Reference for DB2 (SC19-2496-00)

## Changes to the User's Guide and Reference for DB2

### Chapter 4, "Viewing and changing DB2 data"

In the section "Starting and ending FM/DB2 editor sessions" --->

Subsection "Validating and saving changes with an FM/DB2 editor session" --->

Subsection "DB2-related considerations when changing data in an FM/DB2 Edit session":

- Add a point after "A DB2 commit is issued as part of...".

The new entry is:

- A DB2 commit point is issued automatically because the number of successful changes reached the **Auto-commit count** value specified on the Editor Options (6 of 7) panel.

- Add a paragraph after the paragraph starting "When you issue a SAVE primary command...".

The new paragraph is:

FM/DB2 may issue DB2 commit points automatically during the SAVE process, if a non-zero value has been specified for the **Auto-commit count**, specified on the Editor Options (6 of 7) panel. Such commit points are issued whenever there have been the specified number of successful changes; it is possible for multiple commit points to be issued during the SAVE process. The commit points are issued regardless of whether errors are encountered when processing other rows.

In the section "**Starting and ending FM/DB2 editor sessions**" --->

Subsection "**Ending an FM/DB2 editor session**" --->:

Change the bullet point starting with: "FM/DB2 issues a DB2 COMMIT...".

The replacement bullet point is:

- FM/DB2 issues DB2 COMMIT points according to these commit options:
  - **Commit when save issued**
  - **Commit when no save errors**
  - **Auto-commit count**

The settings for these options are either the global settings, or as specified for this FM/DB2 editor session only. The first two options influence whether a DB2 COMMIT is issued at the end of the SAVE process. The third option influences whether DB2 COMMIT points are issued during the SAVE process.

## Chapter 7, "Copying data"

In the section "**Copying data from a VSAM or QSAM file**" --->:

- Change the bullet point:
  - Specify the number of rows that are imported.
 to:
  - Specify the number of rows to be imported, and the starting record in the import file.
- After the bullet point:
  - Specify that any duplicate rows are to be updated ...
 add a new bullet point:
  - Specify how often FM/DB2 should commit changes to DB2 during the import process.

## Chapter 15, "FM/DB2 panels and fields"

In the section "**Editor Options (6 of 7) panel**":

- Update the screen capture:

```

Process Options Utilities Help
-----
FM/DB2 (DFA2) Editor Options (6 of 7) Global Settings

Enter Key Processing:
Enter key usage
 1 1. No action
 2 2. Save data
 3 3. Save data and commit changes

Commit Options:
Enter "/" to select option
/ Commit when save issued
- Commit when no save errors

Auto Commit (Changes):
Auto-commit count . . . . . 0

Command ==>
F1=Help F2=Split F3=Exit F7=Backward F8=Forward F9=Swap
F10=PrvPage F12=Cancel

```

- Add a new entry as follows:

**Auto-commit count**

The default action, indicated by a zero value, is that no automatic DB2 commit points are during the editor SAVE process. When a positive value is specified, FM/DB2 issues an automatic DB2 commit point whenever there have been *value* successful changes during the SAVE process (where *value* is the value specified for **Auto-commit count**). Specifying a non-zero value can cause multiple DB2 commit points to be issued during the SAVE process.

Example:

With an auto-commit count of 2 and 11 successful changes processed during a SAVE process, five DB2 commit points are issued. The changes for the last row processed remain uncommitted.

Add a new section, "Import Options panel":

You use the Import Options panel to set either global or local import options, depending on how the panel is displayed.

```

Process Options Utilities Help
-----
FM/DB2 (DG03) Import Options Global Settings

Import dataset:
Data format
 1 1. FM/DB2 (SQLDA) format
 2 2. DB2 UNLOAD format
 3 3. DSNTIAUL format
 4 4. User defined

Import Options:
Duplicate key processing Enter "/" to select option
 1 1. Ignore _ Delete existing rows
 2 2. Update
Max duplicates ALL

Auto Commit (Changes):
Auto-commit count . 0

Command ==>
F1=Help F2=Split F3=Exit F7=Backward F8=Forward F9=Swap
F12=Cancel

```

### Data format

Allows you to specify the data format that corresponds to the template or copybook used:

- 1 FM/DB2 (SQLDA) format
- 2 DB2 UNLOAD format
- 3 DSNTIAUL format
- 4 User defined

### Duplicate key processing

#### 1. Ignore

Ignore duplicate rows.

#### 2. Update

Updates duplicate rows when DB2 returns a duplicate row error (SQLCODE -803) in response to an INSERT SQL statement. When you select this option, FM/DB2 attempts to update the existing row. All columns of the table that are part of at least one unique index are used to identify the row. No comparison is made between the imported row and the existing row prior to the update operation (that is, the update is done regardless of whether the imported row and existing row are the same). When you use this option it is recommended that you specify a DB2 table name, rather than a view name. FM/DB2 does not attempt to update existing rows in a view defined on a view.

#### Max duplicates

The maximum number of duplicates permitted.

Valid values: A number in the range 0–999999999, or “ALL”.

**Auto-commit count**

Use this option to take progressive DB2 commit points as records are imported. Any positive value entered will cause FM/DB2 to issue a DB2 commit automatically after the specified number of successful DB2 changes. A successful DB2 change is either the successful insert of a record; or the successful update of a row when a duplicate key error is encountered on the insert. The change counter is reset after each DB2 commit is issued, so multiple DB2 commit points may be issued. Specify a zero value if no progressive DB2 commit points are required; in this case the DB2 commit is deferred until the end of the import utility and any error encountered during the import will cause all changes to be backed out.

**Delete existing rows**

Deletes all the rows in the target table before importing.

In the section "**Import Utility ("From") panel**":

- Update the screen capture:

```

  _Process  _Options  _Utilities  _Help
  -----
FM/DB2 (DFA2)                      Import Utility

From Partitioned, Sequential or VSAM Data Set:
  Data set name . . . 'FMNUSER.EXPORT'
  Member . . . . . _____
  Volume . . . . . _____
  Start position . . . 1_____
  Import Count . . . ALL_____      Number of rows to import

From Copybook or Template:
  Data set name . . . 'FMNUSER.TEMPLATE'
  Member . . . . . EXPORT1_____

Processing Options:
  Template usage          Enter "/" , "A" always to select option
  1 1. Above              _ Edit options
  _ 2. Previous           _ Edit template

Command ==>
F1=Help      F2=Split      F3=Exit      F7=Backward  F8=Forward  F9=Swap
F12=Cancel

```

- Add a new entries as follow:

**Start position**

Indicates at which record FM/DB2 is to begin importing records from the import data set. If you specify a value *n*, and *n* is greater than 1 (the default), FM/DB2 skips *n*-1 records in the import data set before importing rows into the target DB2 object.

**Edit options**

Select this option to display the Import Options panel.

- Remove the entry for **Data format**.

In the section "Import Utility ("To") panel":

- Update the screen capture:

```

Process  Options  Utilities  Help
-----
Import from FMUSER.EXPORT

To DB2 Object:
Location . . . . . Database . . . . . (optional)
Owner . . . . . DSN8610 + Table space _____ (optional)
Name . . . . . EMP +

To Template: From FMUSER.TEMPLATE(EXPORT1)
Data set name . . .
Member . . . . . _____

Processing Options:
Template usage          Enter "/", "A"lways to select option
3 1. Above             - Edit options
_ 2. Previous          - Edit template mapping
3. Generate from table - Batch execution
4. Generate/Replace   - Create audit trail (*)
                       - Use REXX proc
                       - REXX proc name . . _____

Command ==>
F1=Help   F2=Split   F3=Exit   F4=Expand   F7=Backward   F8=Forward
F9=Swap   F10=Left   F11=Right  F12=Cancel

```

- Add a new entry as follows:

#### Edit options

Select this option to display the Import Options panel.

- Remove the entries for **Duplicate row options**.
- Remove the entry for **Delete existing rows**.

In the section "Set Processing Options panel":

- Update the screen capture:

```

Process  Help
-----
FM/DB2 (DFA2)          Set Processing Options

0 System              System Options
1 View                View options
2 Edit                Edit options
3 Utilities
  3.1 Print           Print utility options
  3.3 Copy            Copy utility options
  3.4 Object List    Object list utility options
  3.6 Import          Import utility options
  3.7 Export          Export utility options
  3.L Load           DB2 LOAD utility options
  3.UL LISTDEF       DB2 Utility LISTDEF options
  3.UO OPTIONS        DB2 Utility OPTIONS options
  3.UT TEMPLATE      DB2 Utility TEMPLATE options
  3.UU Unload        DB2 Unload utility options

Command ==>
F1=Help   F2=Split   F3=Exit   F7=Backward F8=Forward F9=Swap
F12=Cancel

```

- Add a new entry as follows:

**3.6 Import**

Displays the Import Options panel

In the section "Set Utility Processing Options panel":

- Update the screen capture:

```

Process  Help
-----
FM/DB2 (DFA2)          Set Utility Processing Options

1 Print              Print utility options
3 Copy              Copy utility options
4 Object list       Object list utility options
6 Import            Import utility options
7 Export            Export utility options
L LOAD             DB2 LOAD utility options
UL LISTDEF         DB2 Utility LISTDEF options
UO OPTIONS          DB2 Utility OPTIONS options
UT TEMPLATE        DB2 Utility TEMPLATE options
UU Unload          DB2 Unload utility options

Command ==>
F1=Help   F2=Split   F3=Exit   F7=Backward F8=Forward F9=Swap
F12=Cancel

```

- Add a new entry as follows:

**6 Import**

Displays the Import Options panel



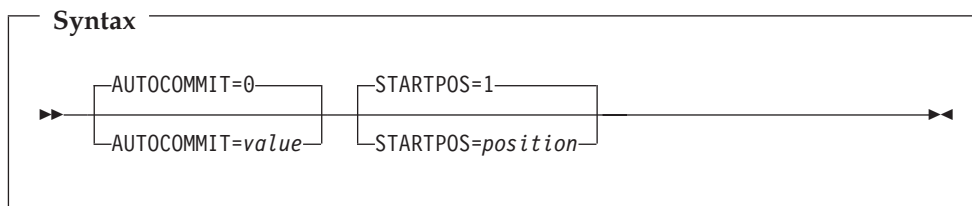
## Chapter 17, "FM/DB2 functions"

In the section "File Manager DB2 batch functions" --->:

Subsection "File Manager DB2 batch functions" --->

Subsection "DBI (Import) batch command":

- Update the syntax diagram with two new keywords, AUTOCOMMIT and STARTPOS:



- Add descriptions for these new keywords as follows:

### **AUTOCOMMIT=*value***

Specifies a numeric value indicating how often FM/DB2 should issue a DB2 commit during the import. The default is zero, meaning that no DB2 commits are issued during the import operation. Any positive value results in FM/DB2 issuing a DB2 commit after *value* successful changes are made during the import. A successful change occurs when either a record is successfully inserted, or when a row is successfully updated after the attempted insert of the record resulted in a duplicate key error. The counter is reset after each DB2 commit is issued, therefore multiple DB2 commits may be issued. If an error occurs during the import and one or more DB2 commits have been issued, only the changes made subsequent to the last DB2 commit point are backed out.

### **STARTPOS=*position***

Specifies a numeric value indicating the starting record for the import. The default is 1, meaning FM/DB2 starts the import with the first record of the import file. Any value greater than 1 causes FM/DB2 to skip *position-1* records before commencing the import.



---

## UK57733, UK57734, UK57773, UK57774, UK57775, UK57776

Release Date: 11 June 2010

This set of PTFs contains the following APAR fixes:

APAR #	APAR Abstract	Doc Impact
PM07852	FMN2PARM in SYS1.PARMLIB with UACC=NONE implies problems.	Customization Guide (SC19-2856-00)
PM08830	When in FM/DB2 Edit, input remains in lower case when character is overtyped, even though editor caps setting is on in option 0.2.	None.
PM08931	File Manager enhancements and fixes.	None.
PM09608	Copy non-VSAM file hit IEC020I 001-4 and TSO session hang.	None.
PM13586	Receive message FMN0067 when &&USER specified for option AUXDSN in FMN0POPT, also unable to control print class for FM server.	None.

---

### PM07852

#### Initial problem description

Parmlib member FMN2PARM cannot be accessed by FM users when customers have UACC(NONE) for 'SYS1.PARMLIB'.

#### Outline of solution

File Manager has been updated to provide an alternative method of placing the required FMN2PARM member into a library in the logical parmlib concatenation.

#### Documentation impact

This APAR requires changes to be made to:

- Customization Guide (SC19-2856-01)

### Changes to the Customization Guide

#### Chapter 11, "Preparing to customize FM/DB2"

In the section, "Defining the FMN2PARM member":

- Add the following at the end of the paragraph containing the sentence, "Copy this member into the appropriate system parmlib library.":  
"See below for details of methods that can be used to make this change."
- Immediately following the above sentence, add this new paragraph:

**Note:** The sample FMN2PARAM member supplied in SFMNSAM1 also includes an FMSECRTY statement. This option is not used in FM/DB2 version 10, and can be either omitted, or commented out. It has no effect.

- Add the following text after the highlighted text starting "**File Manager, DB2 component, will not start...**":

There are two methods that can be used to include the FMN2PARAM member in a library in the logical parmlib concatenation. The choice of method depends on whether the installation's security software is configured to allow FM/DB2 users READ access to data set SYS1.PARMLIB.

Method 1 can only be used when FM/DB2 users have read access to all libraries in the logical parmlib concatenation.

Method 2 can be used regardless of whether FM/DB2 users have READ access to the libraries in the logical parmlib concatenation.

Method 2 must be used when FM/DB2 users do not have READ access to one or more libraries in the logical parmlib concatenation.

#### Method 1

Place the FMN2PARAM member in any library in the current logical parmlib concatenation. No IPL or other action is required to active the new member (unless a new library was added to the logical parmlib concatenation).

**Note:** Method 1 cannot be used in any situation where FM/DB2 users do not have READ access to all of the libraries in the logical parmlib concatenation.

For example, when:

- There are six libraries in the logical parmlib concatenation, for simplicity: libraries A, B, C, D, E and F.
- FM/DB2 users have read access to five of these libraries: A, B, D, E, F.
- Library C may be SYS1.PARMLIB, or any other library in the logical parmlib concatenation.

This will not work, the attempt by an FM/DB2 user to access the logical parmlib concatenation will fail with a security-related (913) abend.

#### Method 2

This method must be used when FM/DB2 users do not have READ access to all of the libraries in the logical parmlib concatenation.

1. Create a new library with dataset attributes similar to SYS1.PARMLIB.
2. The library name for this data set must include the string "FMNPARAM" in one of the qualifiers. You are free to choose any data set name that meets this requirement. Examples of suitable data set names are- SYS1.PARMLIB.FMNPARAM SYS8.FMNPARAM.PARMLIB FMNPARAM.SYS8.PARMLIB SYS2.FMNPARM.SYS8.PARMLIB SYS8.XFMNPARAM.PARMLIB
3. Add member FMN2PARAM to the new library, specifying the appropriate FMAUDIT parameter.
4. Add the new library to the logical parmlib concatenation. This can be done dynamically, or via a system IPL.

**Note:** When Method 2 is used, the FMN2PARM member must be located in the library created in point 1 (as described above). In addition, should the FMN2PARM member specify any include statements (see "Facilities for customizing the FMN2PARM definitions" in Appendix B), all the included members must also reside in the library created in point 1 (as described above).

## Chapter 15, "Customizing the FM/DB2 audit facility (method 2)"

In the section, "Testing SAF-rule controlled auditing", change the example FMN2PARM statements in point 3 to:

```
FMAUDIT SAF_CTRL=NO
<U TEST1>
FMAUDIT SAF_CTRL=YES
</U>
```

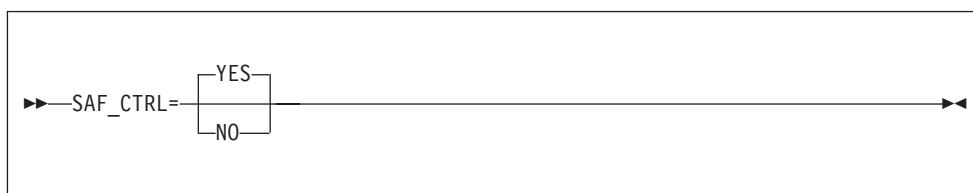
## Appendix B, "File Manager options specified in FMN2PARM"

- Add the following sentences immediately after the pre-amble (and before the description for FMAUDIT):

The FMN2PARM member provides a secure location for sensitive FM/DB2 parameters used to control, for example, audit logging. FM/DB2 uses system macros to locate this member in the current logical parmlib concatenation, making it difficult to over-ride or bypass the contents, which can occur when using FMNxPOPT modules. When used to specify SAF- rule controlled audit logging, particularly to SMF, a high level of integrity over the auditing process is possible. The FMN2PARM member can also be used to force the use of a particular version of the FMN2POPT module, by specifying a specific data set from which the module should be loaded. This can be used to prevent a knowledgeable user creating a private version of the FMN2POPT module and loading it from a data set allocated to their TSO session, thereby bypassing installation-specified parameters.

This appendix includes the description of the options that can be specified in the FMN2PARM member, followed by a description of the facilities that can be used to customize the FMN2PARM member. Customization is entirely optional, but might be necessary, for example, in a sysplex environment where not all z/OS images have the same auditing requirements. It is also possible to specify different auditing options for different users using FMN2PARM statements; these changes can be made directly to the FMN2PARM member. When changes are made to the FMN2PARM member, no IPL is required and the changes become active the next time the user starts FM/DB2.

- In the section, "FMAUDIT", change the syntax diagram for the SAF\_CTRL parameter to reverse the default values, thus YES is the default value (and should appear above the line):



- Change the first sentence in the description for the SAF\_CTRL parameter to: "Specifies whether File Manager should use SAF to control all aspects of File Manager audit logging (for FM/DB2 component only)."
- In the section, "Facilities for customizing the FMN2PARM definitions", at the end of the pre-amble add the following sentence:

"All of the facilities described in this section are optional. You do not need to use any of them.

- In the section, "Tags", add the following at the end of the table describing the tags:

**Note:** The V (version tag) has no useful function at present, since there is only one version of File Manager available that uses the FMN2PARM member. The V tag is intended for future use when, for example, a newer version of File Manager includes options that are not valid with older versions of the product, and would therefore cause errors if processed by an older version of the product.

- In the section, "Rules for Specifying Tags", change the following point:

"Values specified for each tag can include the standard ISPF wildcard characters."

to:

"Values specified for each tag can include the standard ISPF \* wildcard character. When specified, the '\*' matches 0, 1, or many characters. Example: F\* matches F, FRED, FUNNY, but not AFTER. The \*\* specification and any other wildcard character(s) are not supported."

- Replace the entire "Examples of Tag usage" section with the following:

#### **Examples of Tag usage**

Tags can be used to specify different FMN2PARM options based on certain environment variables (the z/OS system ID, the File Manager version and the user's TSO logonid). The most usual usage of tags is to provide an exception to the normal processing, for some particular set of circumstances.

#### **Example 1:**

Suppose SAF-rule controlled auditing is turned off for all users in a single z/OS-image. The FMN2PARM member would be coded as:

```
FMAUDIT SAF_CTRL=NO
```

Now suppose that there is a requirement to implement SAF-rule controlled auditing, and that one particular logonid (TEST1) has been selected for testing purposes. Assuming all the relevant SAF rules have been written, SAF-rule controlled auditing can be turned on for logonid TEST1 using:

```
FMAUDIT SAF_CTRL=NO      (1)
<U TEST1>                (2)
FMAUDIT SAF_CTRL=YES    (3)
<EU>                    (4)
```

#### **Explanation:**

When FM/DB2 parses the above, the line (1) is processed for all users, and turns SAF-rule controlled auditing off. When line (2) is processed, the user's TSO logonid is compared with the value TEST1. For all users other than TEST1, the test fails. When a tag fails to match a condition, all lines from the start tag to the matching end tag (inclusive) are ignored, so the net result is that, in the above example, only line (1) is processed. This ensures that the default of no SAF-rule controlled auditing applies to all users other than TEST1.

For user TEST1 however, the tag comparison on line (2) matches, so line (3) is included. FM/DB2 re-processes the FMAUDIT statement for line (3), this time with SAF\_CTRL=YES, resulting in SAF-rule controlled auditing being turned on for user TEST1.

**Note:** This example demonstrates two important principles when processing the statements within an FMN2PARM member:

- Multiple statements for the same option are allowed.
- If multiple statements for the same option are encountered, the last statement processed is the one that determines the setting.

**Example 2:**

Suppose in a sysplex environment there are nine z/OS images, with system IDs SYS1, SYS2, SYS3 ... SYS9. File Manager is available on all images, and SAF-rule controlled auditing is not required on SYS1, SYS2, ... SYS7 inclusive, but is required on SYS8 and SYS9. Further, on z/OS system SYS8, only TSO logonids that commence with DEV should be subject to SAF rule controlled audit; all other TSO logonids are exempt. On system SYS9 however, all TSO logonids should be subject to SAF-rule controlled audit, with the single exception of TSO logonid MASTER1.

This could be coded as follows:

```
FMAUDIT SAF_SECRTY=NO      (1)
<Z SYS8>                   (2)
<U DEV*>                   (3)
FMAUDIT SAF_SECRTY=YES    (4)
</U>                      (5)
</Z>                      (6)
<Z SYS9>                   (7)
FMAUDIT SAF_SECRTY=YES    (8)
<U MASTER1>              (9)
FMAUDIT SAF_SECRTY=NO    (10)
</U>                      (11)
</Z>                      (12)
```

**Explanation:**

Line (1) sets the default, which is not to use SAF- rule controlled auditing.

For all users on z/OS systems SYS1 ... SYS7 inclusive, the Z tags for SYS8 on line (2) and SYS9 on line (7) will not match the current environment, resulting in lines 2-12 inclusive being ignored.

For users running on z/OS system SYS8, line (2)-(6) inclusive are considered; lines (7)-(12) are ignored. Any TSO logonid that does not start with DEV (for example, PROD1) will not match the U tag (line 3), resulting in lines 3-5 inclusive being ignored. This leaves only line (1) to consider, which sets SAF-rule controlled auditing off. For a TSO logonid such as DEV76, the U tag on line (3) matches, so line (4) is included. FM/DB2 processes the FMAUDIT statement on line (4) and sets SAF-rule controlled auditing on.

For users running on z/OS system SYS9, lines (2)-(6) inclusive are ignored; lines (7)-(12) inclusive are considered. Line (8) changes the default (for all users on system SYS9) to use SAF- rule controlled auditing. For all users other than TSO logonid MASTER1, lines (9)-(11) are ignored, resulting in the new default (line 8) being used. This turns SAF-rule controlled auditing on. For TSO logonid MASTER1 only, the U tag on line (9) matches and the FMAUDIT statement on line (10) is included. This turns SAF-rule controlled auditing off for user MASTER1.

- In the section, "Included Members", add the following:

**Example 1:**

Suppose in a sysplex environment there are 4 z/OS images, with system IDs SYS1, SYS2, SYS3, and SYS4. File Manager is available on all images, with different auditing requirements on each image.

Include members can be used to code this as follows:

```
Member FMN2PARAM
```

```

<Z SYS1>
%FMNPSYS1
</Z>
<Z SYS2>
%FMNPSYS2
</Z>
<Z SYS3>
%FMNPSYS3
</Z>
<Z SYS4>
%FMNPSYS4
</Z>

```

```

Member FMNPSYS1
FMAUDIT SAF_SECURITY=YES
Member FMNPSYS2
FMAUDIT SAF_SECURITY=NO
Member FMNPSYS3
FMAUDIT SAF_SECURITY=NO
Member FMNPSYS4
FMAUDIT SAF_SECURITY=YES

```

This has the advantage of consolidating all the options for each z/OS image in a specific member.

Care should be used when selecting member names for included members, to avoid any conflicts with other member names that might exist in other libraries in the logical parmlib concatenation. This applies only when Method 1 (See Chapter 11, "Defining the FMN2PARM member" for more information) is used to add the FMN2PARM member to the logical parmlib concatenation.

- In the section "Continuing specifications across multiple lines", add the following:

Example:

```

FMAUDIT SAF_CTRL=YES
FMOPTMOD DSN=FILEMAN.V10R1M0.OPTIONS,
MEMBER=FMN2POPX

```



---

## UK54428

Release Date: 22 February 2010

This set of PTFs contains the following APAR fixes:

APAR #	APAR Abstract	Doc Impact
PM04545	<ol style="list-style-type: none"><li>1. Correct documentation for the sort feature in the VTOC utility.</li><li>2. Add documentation for additional compiler options.</li><li>3. Minor changes to some panel descriptions.</li></ol>	User's Guide (SC19-2857-00)

---

## PM04545

### Initial problem description

Incorrect documentation.

### Outline of solution

Correct documentation.

### Documentation impact

This APAR requires changes to be made to:

- User's Guide (SC19-2857-00)

## Changes to the User's Guide

### Chapter 7, "Using File Manager utilities"

In the section "Managing catalog entries":

- In the subsection "Available catalog services", in the description for "List catalog entries", remove the second sentence starting "You can sort...".
- In the subsection "Selecting your service", remove step 5 starting "Select a **Sort field**...".
- In the subsection "Working with a list of catalog entries", under "RELATED TOPICS" add:  
""Manipulating your view of selection lists" on page 25".
- In the subsection "Recalling catalog entries", replace Figure 76 ("Migrated catalog entries in Data Set list") with the following:

Process		Options		Help	
File Manager		Data Set List		Row 00001 of 00027	
Catalog ID ''				Types ALL	
	Data Set Name	Type	Volume	MV	Creat ±
	FMN.V10R1M0.S*	*	*	*	*
	<b>FMN.V10R1M0.SFMNCLIB</b>	<b>HSM</b>	<b>MIGRAT</b>		<b>09/12</b>
	FMN.V10R1M0.SFMNDBRM	NVSAM	D\$FM09		09/12
	FMN.V10R1M0.SFMNEXEC	NVSAM	D\$FM10		09/12
	FMN.V10R1M0.SFMNMAC1	NVSAM	D\$FM00		09/12
	FMN.V10R1M0.SFMNMENU	NVSAM	D\$FM19		09/12
	FMN.V10R1M0.SFMNMJPN	NVSAM	D\$FM09		09/12
	FMN.V10R1M0.SFMNMKOR	NVSAM	D\$FM03		09/12
	<b>FMN.V10R1M0.SFMNMODA</b>	<b>HSM</b>	<b>MIGRAT</b>		<b>09/12</b>
	FMN.V10R1M0.SFMNMODJ	NVSAM	D\$FM00		09/12
	FMN.V10R1M0.SFMNMODK	NVSAM	D\$FM10		09/12
	<b>FMN.V10R1M0.SFMNMOD1</b>	<b>HSM</b>	<b>MIGRAT</b>		<b>09/12</b>
	FMN.V10R1M0.SFMNMOD2	NVSAM	D\$FM04		09/12
	FMN.V10R1M0.SFMNPENU	NVSAM	D\$FM09		09/12
	FMN.V10R1M0.SFMNPJPN	NVSAM	D\$FM16		09/12
	FMN.V10R1M0.SFMNPKOR	NVSAM	D\$FM13		09/12
Command	====>			Scroll PAGE	
F1=Help	F2=Split	F3=Exit	F4=CRetriev	F5=RFind	F6=Process
F7=Up	F8=Down	F9=Swap	F10=Left	F11=Right	F12=Cancel

Figure 3. Migrated catalog entries in Data Set list

Replace the section "Displaying a Volume Table of Contents (VTOC)" with the following:

### Displaying a Volume Table of Contents (VTOC)

To display or print a list of data sets on one or more disks, you can use the Work with VTOC utility. With this utility, you can list either all the data sets, or a subset of the data sets based on a generic data set name. You can also use Work with VTOC to display or print a volume summary list (VTOC list), or print a combined data set and VTOC list.

See "Display VTOC panel" on page 504 for details.

The information in the data set list includes:

- Data set name
- Volume (VOLSER)
- Disk extents
- File organization information
- Creation, expiration, and referred dates

In online mode, you can enter commands to invoke functions that operate on individual data sets.

See "Display VTOC Data Set List panel" on page 508 for details.

The information in the volume summary list includes:

- Volume information
- VTOC information
- Free space information
- Data set statistics

See "Volume Summary/Selection panel" on page 691 for details.

**Note:** Work with VTOC shows “never to expire” expiration dates of 99/999 and 99/366 as 9999.999 and 9999.366, respectively. An expiration date that was explicitly specified as 99/365 is also considered “never to expire”, and is shown as 9999.365. If you sort the list by expiration date, values beginning with 9999 appear first.

To display the VTOC information:

1. From the Utility Functions menu panel, select option **5. VTOC**. The Display VTOC panel shown in Figure 148 on page 505 is displayed.
2. Specify the disk volume or volumes with which you want to work. You can specify a generic volume serial number, such as D\$US1\*.

**Note:** If you specify a pattern that causes a large number of volumes to be accessed, the operation can take a long time.

3. You can limit the data sets that are listed by specifying selection criteria in a number of fields on the Display VTOC panel:

**Data set name** Specify a generic data set name. If you do not specify a data set name, File Manager uses the default generic data set name of '\*' which causes all data sets to be listed or included. If you do not type quotes around the data set name (mask), File Manager prefixes the data set name with your TSO PROFILE PREFIX (usually your user ID). For example, to limit the data sets to just the ones starting with your TSO PROFILE PREFIX, specify the generic data set name of \*\* (no quotes). Any valid ISPF data set name mask can be used as the generic name.

**Volume serial** Specify a fully-qualified or generic volume serial number.

**Volume status** Specify a fully-qualified volume status string of PRIVATE, PRIV/RSDNT, RESIDENT, PUBLIC, or STORAGE.

**Unit** Specify a fully-qualified or generic device address.

**Device type** Specify a fully-qualified or generic device type.

**SMS SG** Specify a fully-qualified or generic SMS storage group name.

To select a non-SMS controlled volume in an SMS environment, specify the reserved name, NONSMS.

**Processing limit**

Type a "/" to select this option and then specify the maximum number of data sets to be selected for VTOC processing.

4. If required, select the **Batch execution** option. File Manager then displays the Display VTOC Batch Sort Options panel.  
On this panel, select the appropriate sort option. File Manager then generates the batch job stream and the JCL is presented in an Edit session. If necessary, you can change the JCL before submitting the job.
5. To display dates in the format YY/MM/DD (instead of the default format YYYY.DDDD), select the **YY/MM/DD date format (default: YYYY.DDD)** option.
6. By default, for data sets with multiple extents, the display format suppresses the data set name on the second and subsequent extents. To show the data set name for each extent, select the **Repeat data set name for each extent** option.

To update your list view, to include any changes that you have made and also any changes made by other users since you first displayed the list, enter the REFRESH primary command.

To display or print a volume summary list (like the one shown in Figure 77 on page 308):

1. Enter the line command **V** to display the list.
2. Enter the line command **P** to print the list. File Manager then displays the Display VTOC Batch Sort Options panel.

On this panel, select the appropriate sort option. File Manager then produces the requested VTOC listing.

When you specify a generic volume serial number, File Manager displays a list of those volumes that contain data sets with names that match the specified data set name. If you select a data set list command, a data set list with all data sets matching the specified data set name and volume serial is produced.

Process		Options		Help		
File Manager		Volume Summary/Selection				Row 00001 of 00005
Unit *	DSN	'TYRONED.FMDATA.**'				
DevType *	VOLSTATE	ALL	SMS	SG	*	
Volumes	5	Data sets	7	VSAM	3	non-VSAM 4
VOLSER	D\$US5*	Trks used	N/A	Free	N/A	Utilized N/A
VOLSER	UNIT	Dtype	SMS-SG	Total	Used	%Used Free trk Tot DSN VSAM nVSA ±
D\$US5*	*	*	*			
-	D\$US51	E801	3390	PRIMARY	150255	128750 86 21505 1 1
-	D\$US53	E81C	3390	PRIMARY	150255	142702 95 7553 1 1
-	D\$US55	E929	3390	PRIMARY	150255	141320 94 8935 1 1
-	D\$US57	EA52	3390	PRIMARY	150255	127706 85 22549 2 2
-	D\$US58	EA55	3390	PRIMARY	150255	131406 87 18849 2 1 1
**** End of data ****						
Command ==>						Scroll PAGE
F1=Help	F2=Split	F3=Exit	F4=CRetriev	F5=RFind	F6=Process	
F7=Up	F8=Down	F9=Swap	F10=Left	F11=Right	F12=Cancel	

Figure 4. Work with VTOC: list of volumes

To see more information about a volume listed on the Volume Summary/Selection panel, enter the line command **I** (Information) in the **SEL** field next to the volume you are interested in. The **I** line command displays the Disk Volume Details panel showing detailed information about the volume you selected.

**Note:** To show data set statistics on the Disk Volume Details panel (under the heading "Data Sets"), the **Limited information for VTOC list** option on the Display VTOC panel (that you used to navigate to this point) must be deselected.

On the Volume Summary/Selection panel you can use the **S** (Select) line command to select which volume you want to work with. If you want lists of data sets from more than one volume, you can enter the **S** line command on multiple lines. If you are going to select many volumes, you can use the **ALL** command to fill in the **S** on every line for you (you might then, if you wish, deselect any volume by overtyping its **S** with a blank).

File Manager lists the data sets as shown in Figure 78 on page 309.

Process		Options		Help	
File Manager		Display VTOC Data Set List		Row 00001 of 00055	
Unit *	DSN	'FMN.V10R1M0.S*'			
DevType *	VOLSTATE	ALL	SMS SG *		
Volumes	10	Data sets 27	VSAM 0	non-VSAM 27	
VOLSER *	Trks used	3752	Free N/A	Utilized N/A	
Data Set Name		Seq	Volume	Begin	CYL-HD ±
FMN.V10R1M0.S*		*	*		
_____	FMN.V10R1M0.SFMNCLIB	1	D\$FM08	32	14
_____	FMN.V10R1M0.SFMNDBRM	1	D\$FM09	8802	4
_____	FMN.V10R1M0.SFMNEXEC	1	D\$FM10	1060	0
_____	FMN.V10R1M0.SFMNMAC1	1	D\$FM00	7885	1
_____	FMN.V10R1M0.SFMNMENU	1	D\$FM19	172	13
_____	FMN.V10R1M0.SFMNMJPN	1	D\$FM09	9025	8
_____	FMN.V10R1M0.SFMNMKOR	1	D\$FM03	6363	10
_____	FMN.V10R1M0.SFMNMODA	1	D\$FM02	2881	0
_____	FMN.V10R1M0.SFMNMODA	2	D\$FM02	109	0
_____	FMN.V10R1M0.SFMNMODA	3	D\$FM02	109	10
_____	FMN.V10R1M0.SFMNMODA	4	D\$FM02	110	5
_____	FMN.V10R1M0.SFMNMODA	5	D\$FM02	111	0
Command ==>		Scroll PAGE			
F1=Help	F2=Split	F3=Exit	F4=CRetrieval	F5=RFind	F6=Process
F7=Up	F8=Down	F9=Swap	F10=Left	F11=Right	F12=Cancel

Figure 5. Work with VTOC: list of data sets

By using the RgtLeft function key (F11), you can switch between three display formats to see all the information you would get on a full-width display or printout.

To print a combined data set and volume summary list report, use the PC line command. File Manager produces a summary output for each disk, followed by the list of data sets located on the volume that match the selection mask (if any).

**Using line commands with Work with VTOC:** For each *line* command (see "Display VTOC Data Set List panel" on page 508), perform either of these actions

- Type the command:
  1. Move the cursor to the beginning of the line that contains the name of the entry that you want to work with.
  2. Type the command (for example, BROWSE). You can type an equal sign (=) to perform the same command for more than one entry.  
You can abbreviate the line commands to their first letter, for example, A instead of ALTER except in the case of EDIT and EXTENTS where you would use the first two letters.
- Select the function from the Process pull-down menu:
  1. Move the cursor to the entry with which you want to work.
  2. Press the Process function key (F6). (If the cursor is outside the list area, you work with the first entry in the list.) The selected line is highlighted in another color. The Process pull-down menu opens below the action bar.
  3. Select an option on the menu to perform a function such as browse or edit.

#### RELATED TOPICS

"Manipulating your view of the data" on page 25

## Chapter 14, "Panels and fields"

In the section "Catalog Services Data Set List panel", under "Available commands", replace the first sentence and listed commands with:

In addition to the commands listed in "Manipulating your view of selection lists" on page 25, the following primary command is available on this panel:

- "AMSMSG primary command" on page 713

In the section "**Data Set Selection panel**", under "Related tasks and examples", add:

"Manipulating your view of the data" on page 25

In the section "**Display VTOC Batch Sort Options panel**", change the first paragraph:

"The Display VTOC Batch Sort Options panel displays or prints a list of data sets obtained from the disk VTOCs, or prints or displays a volume summary list for the disks."

to:

"The Display VTOC Batch Sort Options panel displays the sort options available when the **Batch execution** option or **PV** line command have been selected from the Display VTOC panel."

In the section "**Display VTOC Data Set List panel**":

- Remove the following note:

**Note:** When you use a host session with a width of 160 characters or more, all the data columns are displayed next to each other and no alternate views are available.

- In the section "**Available commands**", remove these commands and their descriptions:

LOCATE  
REFRESH  
RFIND  
SORT

- Under "Related tasks and examples", add:

"Manipulating your view of the data" on page 25

In the section "**File Selection panel**", under "Related tasks and examples", add:

"Manipulating your view of the data" on page 25

In the section "**Load Module Information panel**", under "Related tasks and examples", add:

"Manipulating your view of the data" on page 25

In the section "**Member Selection panel**":

- Remove the following paragraphs:

"This panel displays a selection list of customizable columns. You can:

- Select and order columns.
- Change column widths.
- Change the sort order for column values.
- Provide filters for each column.

You can customize all columns by means of the TAILOR command described below or you can customize displayed columns by positioning the cursor on the header or filter value and pressing Enter."

- Under "Related tasks and examples", add:  
"Manipulating your view of the data" on page 25

In the section "**Volume Summary/Selection panel**":

- Remove the second sentence:  
"The current sort criteria for the listed details is shown in the updateable fields next to **Volumes sorted by**."
- Remove the following paragraph:  
"This panel has 3 possible views on narrow screen, and one view with all columns next to each other in a session with at least 132-character width. Use F11 (Right) and F10 (Left) to scroll to alternative views."
- Replace Figure 256 "Volume Summary/Selection panel" with:

<u>P</u> rocess	<u>O</u> ptions	<u>H</u> elp								
File Manager			Volume Summary/Selection				Row 00001 of 00005			
Unit *	DSN		'TYRONED.FMDATA.**'							
DevType *	VOLSTATE	ALL	SMS SG *							
Volumes 5	Data sets 7		VSAM 3	non-VSAM 4						
VOLSER D\$US5*	Trks used N/A		Free N/A	Utilized N/A						
	UNIT Dtype	SMS-SG	Total	Used	%Used	Free trk	Tot	DSN	VSAM	nVSA ±
D\$US5* *	* *	*								
D\$US51	E801	3390	PRIMARY	150255	128750	86	21505	1		1
D\$US53	E81C	3390	PRIMARY	150255	142702	95	7553	1		1
D\$US55	E929	3390	PRIMARY	150255	141320	94	8935	1		1
D\$US57	EA52	3390	PRIMARY	150255	127706	85	22549	2	2	
D\$US58	EA55	3390	PRIMARY	150255	131406	87	18849	2	1	1
**** End of data ****										
Command ==>								Scroll PAGE		
F1=Help	F2=Split	F3=Exit	F4=CRetriev	F5=RFind	F6=Process					
F7=Up	F8=Down	F9=Swap	F10=Left	F11=Right	F12=Cancel					

Figure 6. Volume Summary/Selection panel

- Under "Related tasks and examples", add:  
"Manipulating your view of the data" on page 25

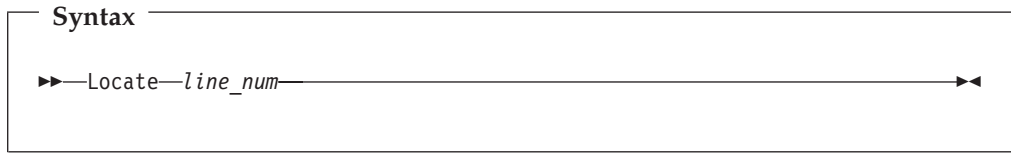
## Chapter 15, "Primary commands"

In the section "**LOCATE primary command**", remove the following section:

### Catalog Services: Data Set List and Display VTOC panels

In the Catalog Services: Data Set List and Display VTOC panels, this command positions a specified line number at the top of the display.

In the Catalog Services: Data Set List and Display VTOC panels, the syntax of this command is:



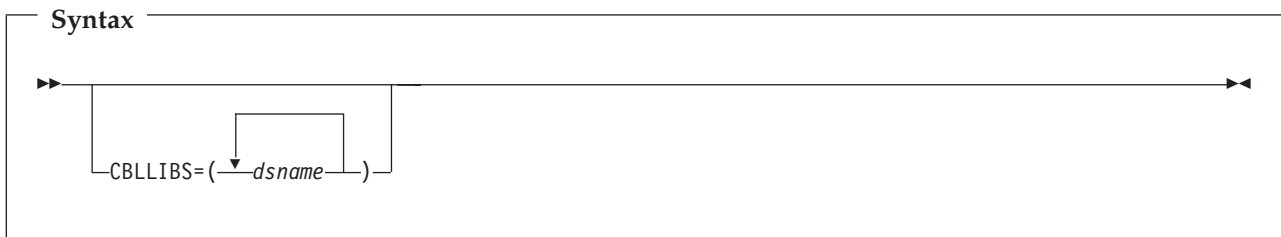
## Chapter 16, "Functions"

In the section "File Manager functions":

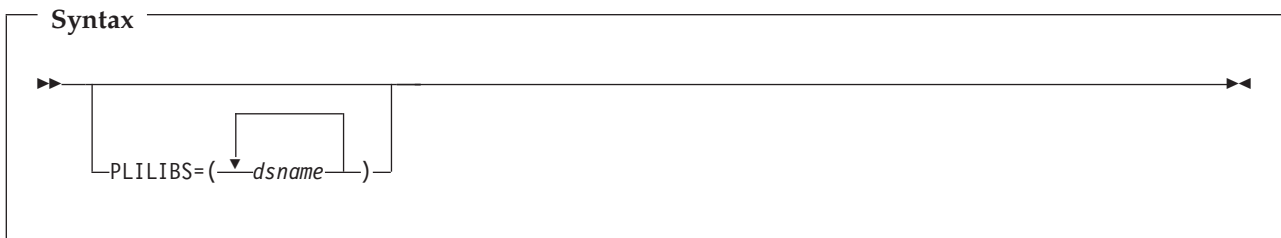
Add the following changes to the functions BTB, PBK, DSB, DSE, DSG, DSV, DSEB, DSP, DSU, DSC and DSM.

In the Copybook Processing options section of the syntax diagrams:

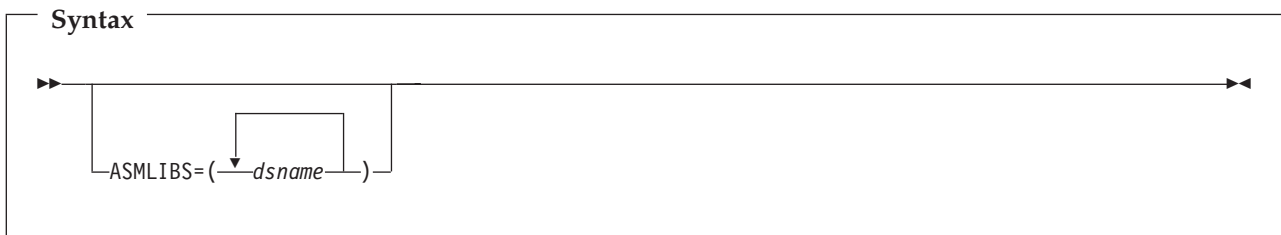
- COBOL options:
  - Add the parameter CBLLIBS:



- Replace the parameter COMPMAXRC with CBLMAXRC.
- PL/I options:
  - Add the parameter PLILIBS:



- Replace the parameter COMPMAXRC with PLIMAXRC.
- HLASM options:
  - Add the parameter ASMLIBS:



- Replace the parameter COMPMAXRC with ASMMAXRC.

In the descriptions following the syntax diagrams:



- COBOL options:

- Replace the description for COMPMAXRC with:

**CBLMAXRC**

Sets the maximum acceptable return code for a copybook compile. A return code higher than the specified level causes the function to stop. Default is 4.

**Note:** The COMPMAXRC parameter is still supported but it is recommended that the CBLMAXRC parameter is used instead. If you do specify the COMPMAXRC parameter, it takes precedence over the language MAXRC.

**CBLLIBS**

Allows you to specify a list of up to ten data set names to be specified in the SYSLIB concatenation list. These data sets are searched in the order specified for COPY and INCLUDE members for the compilation.

*dsname*

The name of the data set name to be processed. Generic name masks are not allowed.

- PL/I options:

- Replace the description for COMPMAXRC with:

**PLIMAXRC**

Sets the maximum acceptable return code for a copybook compile. A return code higher than the specified level causes the function to stop. Default is 4.

**Note:** The COMPMAXRC parameter is still supported but it is recommended that the PLIMAXRC parameter is used instead. If you do specify the COMPMAXRC parameter, it takes precedence over the language MAXRC.

**PLILIBS**

Allows you to specify a list of up to ten data set names to be specified in the SYSLIB concatenation list. These data sets are searched in the order specified for COPY and INCLUDE members for the compilation.

*dsname*

The name of the data set name to be processed. Generic name masks are not allowed.

- HLASM options:

- Replace the description for COMPMAXRC with:

**ASMMAXRC**

Sets the maximum acceptable return code for a copybook compile. A return code higher than the specified level causes the function to stop. Default is 4.

**Note:** The COMPMAXRC parameter is still supported but it is recommended that the ASMMAXRC parameter is used instead. If you do specify the COMPMAXRC parameter, it takes precedence over the language MAXRC.

**ASMLIBS**

Allows you to specify a list of up to ten data set names to be

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specified in the SYSLIB concatenation list. These data sets are searched in the order specified for COPY and INCLUDE members for the compilation.

*dsname*

The name of the data set name to be processed. Generic name masks are not allowed.

## Part 2. General documentation changes

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Chapter 11, "Preparing to customize FM/DB2" . . . . .	63	Change #8: August 2010 . . . . .	81
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This section describes enhancements and updates in the documentation for File Manager for z/OS Version 10 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.



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## Customization Guide (SC19-2856-00)

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### Change #7 April 2013

#### Appendix E, "Customizing the FM Server"

In the section "Syntax of the SERVER statement" (page 363) *add* to the description of the PATH keyword:

If z/OS v1r12 or z/OS v1r13 and APAR OA41101 is applied, then it is necessary to add the APF authorization flag to this file. This can be done by a user with READ permission to the BPX.FILEATTR.APF RACF profile, by issuing the extattr +a command in an OMVS shell, for example:

```
extattr +a /etc/FMNSPAWN
```

---

### Change #6 November 2011

#### Chapter 11, "Preparing to customize FM/DB2"

Replace the third paragraph:

FM/DB2 requires access to various DB2 catalogs in order to function correctly. There are several options for granting access to the required DB2 catalog tables, **you must select one of the available options or FM/DB2 will not function.** If the installation's security requirements prohibit SELECT access on those DB2 catalog tables needed by FM/DB2 from being granted to PUBLIC, or selected DB2 authids, **you should not attempt to install and use FM/DB2.**

with:

FM/DB2 requires access to various DB2 catalog tables in order to function correctly. Granting access to DB2 resources is a DB2 task, not a File Manager task. The configuration of DB2 security/authorization is described in the *DB2 Administration Guide*. If your site has a DB2 Administrator and/or Security Administrator, you should consult with them before proceeding. Only general information is provided on how you might allow FM/DB2 users SELECT access to the DB2 catalog tables. You should carefully consider your site's security requirements and how DB2 security is implemented and administered when selecting the most appropriate method for your installation. For example, many sites have a standard that SELECT access on some, or all, of the DB2 catalog tables must not be granted to PUBLIC. If, after careful consideration of your site's security requirements and FM/DB2's requirement for access to the DB2 catalog, you are unable to provide FM/DB2 user's with the appropriate level of access, **you should not attempt to install and use FM/DB2.**

#### Chapter 12, "Customizing the operating environment for FM/DB2"

Subsection, "Granting access to the DB2 catalogs (required)":

Replace the entire section with the following:

**Granting access to the DB2 catalog (required)**

FM/DB2 uses dynamic SQL, issued against the DB2 catalog, as part of its processing. To make FM/DB2 available and to ensure correct and optimum operation, you must ensure that each FM/DB2 user has SELECT access against the DB2 catalog tables. **This is a non-negotiable requirement.**

DB2 authorization configuration can only be achieved using DB2, or an external security server (or both). Since these are external products, only general guidance is provided here on the authorization and security issues associated with the use of FM/DB2. You must determine the best approach to providing the required level of access for FM/DB2 users, based on your installation's unique requirements. You must ensure SELECT access against the DB2 catalog tables is given for all DB2 systems that are accessible to FM/DB2 users.

FM/DB2 requires the use of DYNAMICRULES(RUN) when the FM/DB2 plan is bound. See Chapter 13, "Customizing FM/DB2", subsection "Binding DB2 (required)" for further information. The effect of DYNAMICRULES(RUN) behaviour is that FM/DB2 uses the *run behaviour* for dynamic SQL statements, as summarized here:

- DB2 uses the authorization ID of the application process and the SQL authorization ID (the value of the CURRENT SQLID special register) for authorization checking of dynamic SQL statements.
- DB2 uses the authorization ID of the application process and the SQL authorization ID (the value of the CURRENT SQLID special register) as the implicit qualifier of table, view, index, and alias names.
- Dynamic SQL statements use the values of application programming options that were specified during installation. The installation option USE FOR DYNAMICRULES has no effect.
- GRANT, REVOKE, CREATE, ALTER, DROP, and RENAME statements can be executed dynamically.

The important point here is that the authorization ID of the application process is used for authorization checking of dynamic SQL statements, including access to the DB2 catalog tables.

In a simple DB2 installation, the user's TSO logonid is used as the DB2 authorization ID, so SELECT access on the appropriate DB2 catalog tables would need to be granted to a list of DB2 authids, which would be the same as the list of the TSO logonids used by FM/DB2 users. You can achieve the same result by granting SELECT access on the DB2 catalog tables to PUBLIC.

In a more complicated DB2 installation, an external security server may be used to control access to DB2 resources, and a DB2 authorization exit may be used to convert a user's TSO logonid into a primary and one or more secondary DB2 authids. See the *DB2 Administration Guide* for the appropriate version of DB2 for more information.

When an external security server is used to manage DB2 authorization, and a DB2 authorization exit is available, one suggested approach to granting FM/DB2 users SELECT access to DB2 catalog tables is as shown here:

- Determine an otherwise unused, generic DB2 authid for use by FM/DB2 users. For example, FMUSER. You can select any DB2 authid as required.
- Use the FM/DB2 sample jobs (see below) to grant SELECT access on the DB2 catalog tables to the selected DB2 authid. You must modify the sample jobs to achieve this.

- Configure the security software and DB2 authorization exit to:
  1. Validate that the user has authority to use the FMUSER DB2 authid.
  2. Convert the user's TSO logonid into DB2 authid FMUSER during the connection to DB2. This means that authorization checking for dynamic SQL statements issued by FM/DB2 are made using DB2 authid FMUSER, rather than the user's TSO logonid.
- As an additional security measure, grant EXECUTE on the FM/DB2 plans to the generic DB2 authid, rather than PUBLIC.

When implemented, the above approach can be used to ensure:

1. SELECT access on the DB2 catalog tables is not granted to PUBLIC.
2. Only the generic DB2 authid need have SELECT access on the DB2 catalog tables.
3. The external security system can be used to validate and control which users are allowed access to the generic DB2 authid, and hence to FM/DB2 functionality.
4. Individual FM/DB2 users may have no direct access - using a DB2 authid that is the same as their TSO logonid - to the DB2 catalog tables.
5. Only those users with access to the generic DB2 authid can execute the FM/DB2 plans.

#### **Sample jobs to grant SELECT access on the DB2 catalog tables**

These jobs are provided in FMN.SFMNSAM1 to grant SELECT access on the DB2 catalog tables to PUBLIC:

1. FMN2GSC8 (DB2 V8)
2. FMN2GSC9 (DB2 V9)
3. FMN2GVW8 (DB2 V8)
4. FMN2GVW9 (DB2 V9)
5. FMN2GV28 (DB2 V8)
6. FMN2GV29 (DB2 V9)

Sample jobs FMN2GSC8 and FMN2GSC9 grant SELECT access on the DB2 catalog tables to PUBLIC. This is the simplest method of ensuring FM/DB2 users have access to the DB2 catalog tables. It is also the least secure.

Sample jobs FMN2GVW8 and FMN2GVW9:

- Create views on the DB2 catalog tables with a different owner, but the same name as the DB2 catalog tables
- Grant access on the newly created views to PUBLIC.

If you intend to use these views, you must set the CATOWNER parameter in the FMN2POPI to match the value of the owner specified in these sample jobs.

For information about FMN2POPI, see "FMN2POPI" on page 297. For information about changing the options in FMN2POPT, see "Changing the default options" on page 106.

Sample jobs FMN2GV28 and FMN2GV29:

- Create views on the DB2 catalog tables with a different owner, but the same name as the DB2 catalog tables.

- These views include all the DB2 catalog tables normally accessed by FM/DB2. Some DB2 catalog tables are not referenced and therefore no views for these DB2 catalog tables are defined.
- Not every column of the referenced DB2 catalog tables is included in the views. The columns that are included are required for the correct functioning of FM/DB2. Omitting additional columns may impact the functioning of FM/DB2, in the worst case rendering the product unusable.
- Grant access on the newly created views to PUBLIC.

If you intend to use these views, you must set the CATOWNER parameter in the FMN2POPI to match the value of the owner specified in these sample jobs.

For information about FMN2POPI, see "FMN2POPI" on page 297. For information about changing the options in FMN2POPT, see "Changing the default options" on page 106.

**Notes:**

1. If you create views of the DB2 catalog tables and change the CATOWNER parameter in the FMN2POPI macro, the following example outlines how FM/DB2 attempts to access the DB2 catalog. In the example, it is assumed that the owner of the views (CATOWNER value) is SYSIBMV.
  - FM/DB2 generates an SQL statement like `SELECT * FROM SYSIBMV.SYSTABLES`.
  - FM/DB2 attempts to execute the SQL statement.
  - If the execution fails (for whatever reason), FM/DB2 does NOT attempt to access the DB2 catalog using, for example, `SELECT * FROM SYSIBM.SYSTABLES`.
  - In summary, FM/DB2 attempts to access the DB2 catalog once only, using the specified CATOWNER value as the owner for the relevant catalog table(s).
2. If you do not want to grant SELECT access against the DB2 catalog tables or views to all users (that is, to PUBLIC), you can customize the GRANT statements in the sample jobs to list individual userids.
3. In situations where you do not want to expose all the information in the DB2 catalog tables, you can define views (a "minimal subset") that refer only to the DB2 catalog tables, and columns within those tables, that are needed by FM/DB2. Sample jobs are provided in FMN.SFMNSAM1 to do this, for DB2 versions 8 and 9. They are:
  - **FMN2GV28** for DB2 version 8 subsystems.
  - **FMN2GV29** for DB2 version 9 subsystems.

The view definitions in these sample jobs refer only to the columns needed by FM/DB2, and not all catalog tables are included. There are consequences to using views that include only some columns of the actual DB2 catalog table. For example, option 3.4 of FM/DB2 provides an option to show all columns of certain catalog tables. The columns shown reflect the columns of the view and not necessarily all columns of the catalog table, reducing the usefulness of the product.

4. If your installation's security standards prevent access to the SYSIBM.\*AUTH tables, you may omit these views, or create the views and then not grant access. This has the effect of disabling the Object Privileges utility (Option 3.5).
5. You can define different views for different DB2 subsystems. For example, you could define the views in FMN2GVW8 against a development system, but the



views in FMN2GV28 against a production system. You must ensure, however, that the owner (CATOWNER value) used is consistent across all DB2 subsystems accessed by FM/DB2.

6. When you define views on the DB2 catalog table for use by FM/DB2, you cannot change the object name of the catalog table; you can only change the owner. For example, defining a view **SYSIBMV.SYSTABLES** on the table **SYSIBM.SYSTABLES** is valid. However, defining a view **SYSIBM.TABLES** on the table **SYSIBM.SYSTABLES** is invalid. You cannot rename the columns of the catalog tables in the views you define for use by FM/DB2. The owner (CATOWNER value) of the views you create must be the same for every view.

## Chapter 13, "Customizing FM/DB2"

Replace the first paragraph:

Before you can use FM/DB2, you **must** bind the FM/DB2 packages and application plans, and grant EXECUTE privilege on these plans to PUBLIC. A sample job, FMN2BIND, is provided in FMN.SFMNSAM1 to help you do this. It is assumed that FM/DB2 will be bound using the DYNAMICRULES(RUN) bind option (the default). The use of other DYNAMICRULES bind options may be possible, but is not recommended.

with:

Before you can use FM/DB2, you must bind the FM/DB2 packages and application plans, and grant EXECUTE privilege on these plans to FM/DB2 users. A sample job, FMN2BIND, is provided in FMN.SFMNSAM1 to help you do this. It is a requirement that FM/DB2 is bound using the DYNAMICRULES(RUN) bind option (the default). The use of DYNAMICRULES(BIND) disables FM/DB2's ability to dynamically execute SQL statements such as GRANT/REVOKE/ALTER and RENAME, and is therefore not recommended. The DEFINERUN and DEFINEBIND options of the DYNAMICRULES bind option are not supported. See the *DB2 Command Reference* for the appropriate version of DB2, section "Bind and Rebind options" for a detailed explanation of the DYNAMICRULES bind options.

---

### Change #5 August 2010

#### Appendix D, "FM/IMS options"

In the section, "LKEYVOL $n$ ", in the syntax diagram change the variable from "xxxxxxx" to "xxxxxx" to depict a parameter length of 6, not 8.

In the section, "RKEYVOL $n$ ", in the syntax diagram change the variable from "xxxxxxx" to "xxxxxx" to depict a parameter length of 6, not 8.

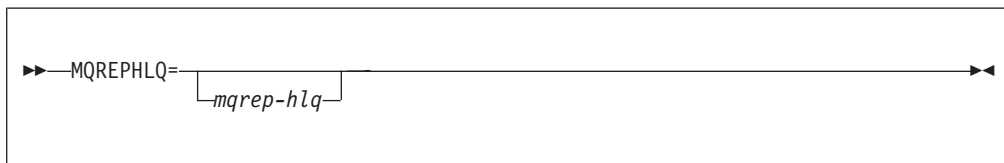
---

### Change #4 August 2010

#### Appendix A, "File Manager options"

Add this new section:

### MQREPHLQ



### MQREPHLQP

Specifies an installation-specific high-level qualifier to be used in the name pattern of the dynamic reply queue for Websphere MQ related functions. The specific queue name used is returned by the Queue Manager being used at the time.

*mqrep-hlq*

You can specify any valid qualifier, including multilevel if required, up to a total length of 38 characters. If you specify `&&USER.` for any part of the qualifier in your FMN0POPT macro, this is replaced with your userid. If you specify `&&PREFIX.` for any part of the qualifier, this is replaced with your TSO prefix. Note that the current userid is always appended to this high-level qualifier when requesting a dynamic queue.

Also note that the characters '#' (X'7C'), '@' (X'7B') and '\$' (X'5B'), while allowed in userids, are not permitted in Websphere MQ. Although specifying them in this parameter is accepted, they are changed at runtime to the allowable MQ character '\_'.

`&&USER.` and `&&PREFIX.` can also be concatenated with a character string. A multilevel qualifier with symbols follows the same rules as in the specification of a data set name with symbolic parameters in JCL procedures. Thus, a single period used after a symbol combines the symbol with the text following it (see Example 2 below). A period separating parts of a multilevel qualifier must be doubled (see Example 3 below).

#### Example 1

If the userid is XXXX, specifying the value FMNTMQL. results in a dynamic name request for the pattern:

```
FMNTMQL.XXXX.*
```

#### Example 2

If the userid is XX#XX and the TSO prefix is YYYY, then specifying `&&USER.1.TEMP.&&PREFIX` results in a dynamic name request for the pattern:

```
XX_XX1.TEMP.YYYY.XX_XX.*
```

#### Example 3

If the userid is ZZZZ, then specifying `FMN.&&USER..ABCD.` results in a dynamic name request for the pattern:

```
FMN.ZZZZ.ABCD.ZZZZ.*
```

**Note:** Concatenation of &&USER.string, or &&PREFIX.string, could result in a part of the high-level qualifier being longer than eight characters. In this case, the string is shortened to the extent that the final part of the qualifier is eight characters long.

## Change #3 May 2010

The following changes relate to a Version 9 PTF (UK52267) and were inadvertently omitted from the Version 10 edition of the Customization Guide.

### Chapter 21, "Customizing the FM/IMS security environment"

Replace the entire contents of the chapter with the following:

This chapter describes:

- How you can control access to the FM/IMS functions and IMS subsystems.
- How you can use user-written security exit routines to control access to various IMS resources.

#### Controlling access to IMS subsystems and FM/IMS functions

FM/IMS allows you to control which IMS subsystems a user can access when using each of the functions listed in Table 2. These functions are protected by default when you receive FM/IMS.

Table 2. Protected FM/IMS Functions

Function code	Description	UPDATE or READONLY
DBI	Initialize dialog - generates JCL for the initialize function	UPDATE
DDD	Delete or define dialog - generates JCL to delete or define database data sets	UPDATE
DIB	Initialize - initialize databases (batch)	UPDATE
IB	Browse - browse a database	READONLY
IBBO	Batch browse dialog - generate JCL for the batch browse function	READONLY
IBB	Batch browse - read a database in batch (batch)	READONLY
IE	Edit - edit a database	UPDATE
IEBO	Batch edit dialog - generates JCL for the batch edit function	UPDATE
IEB	Batch edit - edit a database in batch (batch)	UPDATE
IPRO	Print dialog - generates JCL for the print function	READONLY
IPR	Print - print data from databases (batch)	READONLY
IX	Extract dialog - generates JCL for the extract function	READONLY
IXB	Extract - extract data from databases (batch)	READONLY
IL	Load dialog - generates JCL for the load function	UPDATE
ILB	Load - load data into databases (batch)	UPDATE

Table 2 lists the function's code (column 1), a brief description of the function (column 2), and whether the function has been classified as an update or a read-only function (column 3).

The facility allows you to grant or deny some or all users access to:

## Controlling access to IMS subsystems and FM/IMS functions

1. Individual IMS subsystems by individual functions in Table 2 on page 69.
2. Individual functions in Table 2 on page 69. When you grant or deny users access to individual functions, they are granted or denied access to all IMS subsystems when using these functions.
3. Individual IMS subsystems by the update or read-only functions.
4. The update or read-only functions. When you grant or deny users access to the update or read-only functions, they are granted or denied access to all IMS subsystems when using the update or read-only functions.

FM/IMS provides security for these functions, in one of two ways, either through RACF (or an equivalent security product) or through the FMNSECUR exit.

If Security Server, RACF 1.9 (or later), or an equivalent security product is active, the System Authorization Facility (SAF) with the File Manager enhanced security facility is used for access control and authorization verification. Authorization is controlled by FM/IMS-specific profiles in the FACILITY class. This chapter describes the FM/IMS-specific profiles that you must define to RACF or your equivalent security product. It also describes how you define these profiles to RACF. If you use another security product, consult the documentation for your product to determine how to define these profiles to your product.

If SAF with RACF 1.9 (or an equivalent security product), is not active when an FM/IMS function is started, the function access control checks are passed to the FMNSECUR user exit instead of to SAF.

To use FMNSECUR, it must be installed in the LPA. If the FMNSECUR module is required and it cannot be found in the LPA, an error message is issued and the FM/IMS function will not start.

FMNSECUR is a customizable exit. It provides FMNS macros which allow you to define a table of user names or job names, File Manager-protectable resources (called profiles), and access levels. For information on FMNSECUR, see "Setting up the security environment by using FMNSECUR".

### Notes:

1. The FMNSECUR module is not used (even if present) if SAF with RACF 1.9 (or an equivalent security product), is active when an FM/IMS function is started.
2. FM/IMS functions that are not listed in Table 2 cannot be protected by RACF (or an equivalent security product) or by the FMNSECUR exit.

Most installations will use RACF or an equivalent security product to protect their functions. The rest of this section describes how you implement RACF (or an equivalent security product) security for the functions in Table 2.

## Controlling access to the update or read-only functions

The update functions in Table 2 are protected by the profile FILEM.IMS.UPDATE. The read-only functions in this table are protected by the profile FILEM.IMS.RDONLY. As a minimum, you need to define these profiles and grant or deny users access to them.

You define these profiles in the FACILITY class. You do this by entering the following RACF commands:

```
RDEFINE FACILITY FILEM.IMS.UPDATE UACC(READ or NONE)
RDEFINE FACILITY FILEM.IMS.RDONLY UACC(READ or NONE)
```

Specify:

## Controlling access to the update or read-only functions

- UACC(READ), if you want users or groups to be granted access to these resources, unless they are specifically denied access.
- UACC(NONE), if you want users or groups to be denied access to these resources, unless they are specifically granted access.

In the following, assume that:

- The RDEFINE for the FILEM.IMS.UPDATE profile specifies UACC(NONE), so users and groups are denied access to the update functions unless they are specifically granted access.
- The RDEFINE for the FILEM.IMS.RDONLY profile specifies UACC(READ), so users and groups are granted access to the read-only functions unless they are specifically denied access.

To grant a user (with userid *userid*) or a group (with groupid *groupid*) access to the update functions, you enter one of the following RACF commands:

```
PERMIT FILEM.IMS.UPDATE CLASS(FACILITY) ID(userid) ACCESS(READ)
PERMIT FILEM.IMS.UPDATE CLASS(FACILITY) ID(groupid) ACCESS(READ)
```

To deny a user (with userid *userid*) or a group (with groupid *groupid*) access to the read-only functions, you enter one of the following RACF commands:

```
PERMIT FILEM.IMS.RDONLY CLASS(FACILITY) ID(userid) ACCESS(NONE)
PERMIT FILEM.IMS.RDONLY CLASS(FACILITY) ID(groupid) ACCESS(NONE)
```

## Controlling access to individual IMS subsystems by the update or read-only functions

Access to individual IMS subsystems by the update functions in Table 2 on page 69 is protected by the profiles FILEM.IMS.UPDATE.ssid, where ssid is the IMS subsystem ID. Access to individual IMS subsystems by the read-only functions in Table 2 on page 69 is protected by the profiles FILEM.IMS.RDONLY.ssid, where ssid is the IMS subsystem ID.

If you want to grant or deny some or all users access to individual IMS subsystems by the update or read-only functions in Table 2 on page 69, you will need to define the aforementioned profiles.

You define these profiles in the FACILITY class. You do this by entering the following RACF commands:

```
RDEFINE FACILITY FILEM.IMS.UPDATE.ssid UACC(READ or NONE)
RDEFINE FACILITY FILEM.IMS.RDONLY.ssid UACC(READ or NONE)
```

Specify:

- UACC(READ), if you want users or groups to be granted access to these resources, unless they are specifically denied access
- UACC(NONE), if you want users or groups to be denied access to these resources, unless they are specifically granted access.

You use the PERMIT commands to grant or deny users and groups access to these resources, in the same way as for the FILEM.IMS.UPDATE and FILEM.IMS.RDONLY profiles described in “Controlling access to the update or read-only functions” on page 70.

## Controlling access to individual functions

### Controlling access to individual functions

Individual functions in Table 2 on page 69 are protected by the profiles `FILEM.FUNCTION.fc`, where *fc* is the function code. If you want to grant or deny some or all users access to individual functions in Table 2, you will need to define the profiles for these functions.

You define these profiles in the FACILITY class, by entering the following RECF command:

```
RDEFINE FACILITY FILEM.FUNCTION.fc UACC(READ or NONE)
```

Specify:

- UACC(READ), if you want users or groups to be granted access to this function, unless they are specifically denied access
- UACC(NONE), if you want users or groups to be denied access to this function, unless they are specifically granted access.

You use the PERMIT commands to grant or deny users and groups access to these function, in the same way as for the `FILEM.IMS.UPDATE` and `FILEM.IMS.RDONLY` profiles.

### Controlling access to individual IMS subsystems by individual functions

Access to individual IMS subsystems by individual functions in Table 2 is protected by the profiles `FILEM.FUNCTION.fc.ssid`, where *fc* is the function code and *ssid* is the IMS subsystem ID.

If you want to grant or deny some or all users access to individual IMS subsystems by individual functions in Table 2, you will need to define the aforementioned profiles.

You define these profiles in the FACILITY class. You do this by entering the following RACF command:

```
RDEFINE FACILITY FILEM.FUNCTION.fc,ssid UACC(READ or NONE)
```

Specify:

- UACC(READ), if you want users or groups to be granted access to these resources, unless they are specifically denied access
- UACC(NONE), if you want users or groups to be denied access to these resources, unless they are specifically granted access.

You use the PERMIT commands to grant or deny users and groups access to these resources in the same way as for the `FILEM.IMS.UPDATE` and `FILEM.IMS.RDONLY` profiles described in “Controlling access to the update or read-only functions” on page 70.

**What governs whether access is granted or denied:** Access to a subsystem *ssid* by an *update* function in Table 2 with function code *fc* is governed by the first profile in this list

- `FILEM.FUNCTION.fc.ssid`
- `FILEM.FUNCTION.fc`
- `FILEM.IMS.UPDATE.ssid`
- `FILEM.IMS.UPDATE`

## What governs whether access is granted or denied

Access to a subsystem *ssid* by a *read-only* function in Table 2 with function code *fc* is governed by the first profile in this list that has been defined in the FACILITY class:

- FILEM.FUNCTION.*fc*.*ssid*
- FILEM.FUNCTION.*fc*
- FILEM.IMS.RDONLY.*ssid*
- FILEM.IMS.RDONLY

Figure 7 illustrates the security checking that FM/IMS performs when a function in Table 2 attempts to access an IMS subsystem.

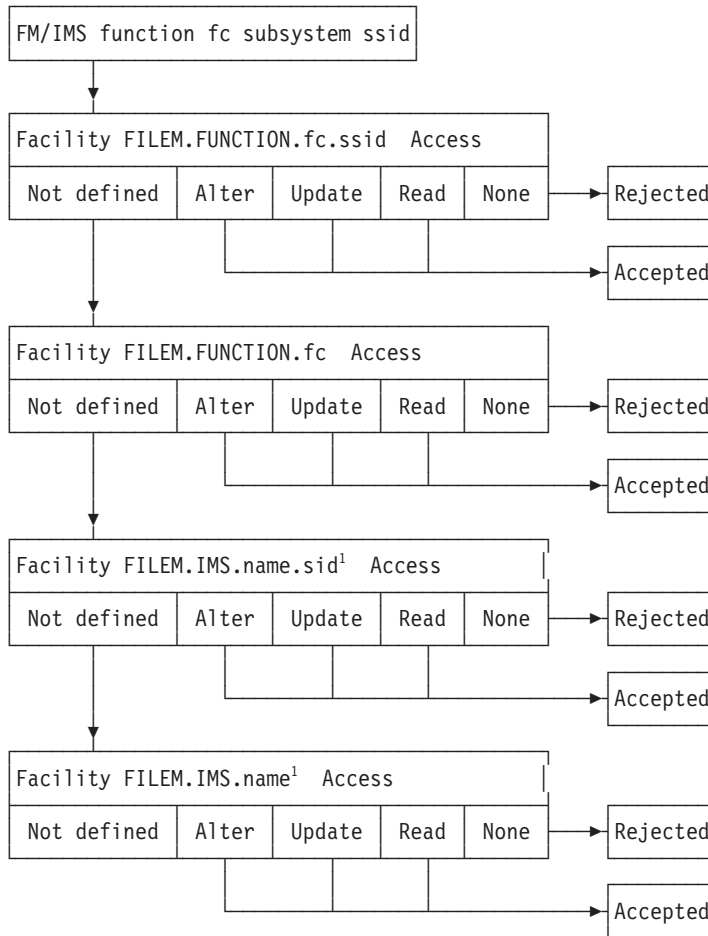


Figure 7. Security checking for FM/IMS functions

### Notes:

1. FILEM.IMS.name is either FILEM.IMS.UPDATE or FILEM.IMS.RDONLY

ALTER, UPDATE or READ access means that the user can use the function. Access NONE means that the user cannot use the function.

## What governs whether access is granted or denied

### Important information for users of non-IBM security products

FM/IMS issues a RACROUTE TYPE=AUTH for FILEM.FUNCTION,*fc*, and if this profile is not defined, RACF returns RC=4. If RC=4 is returned, FM/IMS issues a RACROUTE for either FILEM.IMS.UPDATE (if it is an update function), or FILEM.IMS.RDONLY (if it is a read-only function). If the return code from the RACROUTE TYPE=AUTH for FILEM.FUNCTION,*fc* is greater than 4, no RACROUTE is issued for FILEM.IMS.UPDATE or FILEM.IMS.RDONLY.

You should be aware that not all non-IBM security products issue RC=4 when a RACROUTE TYPE=AUTH for a profile fails; in this case no RACROUTE is issued for FILEM.IMS.UPDATE or FILEM.IMS.RDONLY, and the access request fails immediately. If this applies to your security product, you will have to provide individual profiles for all FM/IMS functions listed in Table 2 on page 69.

### Customizing the FM/IMS security exit

FM/IMS provides a security exit module, FMN1SXT. FMN1SXT is called from four different points during processing.

- Exit Type A - Prior to allocating an audit trail data set when editing a database.
- Exit Type D - When allocating a database data set (DLI mode only).
- Exit Type I - Prior to invoking the IMS region controller.
- Exit Type T - After the IMS region controller terminates.

The default security program supplied returns control immediately for all exit types thus allowing normal processing to continue.

You can provide your own version of FMN1SXT in High Level Assembler or COBOL, using either of the sample source decks, FMN1XITA (HLASM) or FMN1XITC(COBOL), as a base. FMN1XITA and FMN1XITC are distributed in FMN1.SFMNSAM1.

**Types of security exits:** The following describes what you can use each exit type for.

*Audit Trail Exit - Type A:* The Audit Trail exit can be used to:

- Force the creation of an audit trail for a certain database or group of databases or for a certain user or group of users, or both.
- Override the standard audit trail data set name that is constructed by FM/IMS.
- Force the use of System Management Facilities (SMF) recording for the audit trail instead of using an audit trail data set. If you want to use SMF recording, the SMF record ID to be used must have been specified in the options macro, FMN1POPT.
- This exit is called only for the Edit function.

*Database Data set Allocation Exit - Type D:* The database data set allocation exit is called when the function runs in DLI mode. For example, this exit can be used to:

- Control access to database data sets.
- Override the database data set allocation status from OLD to SHR during database edit if IMS data sharing is used at your installation.



*IMS Initialization Exit - Type I:* The IMS Initialization exit can be used to:

- Control access to databases.
- Validate the value entered by the user for the IMS log data set. You can either accept, override, or disallow the value entered by the user.
- Override the standard FM/IMS log data set naming conventions.
- Override the Profile Option MAXGN.

*IMS Termination Exit - Type T:* The IMS Termination exit can be used to perform post-IMS processing of the log data set. This exit type has no parameters, it is provided as a point where you can add your own REXX code for termination processing

**Invoking the security exit:** The security exit program is invoked as follows:

```
CALL FMN1SXT (FMN_SECURITY_PARAMETERS, FMN_SECURITY_WORKAREA, FMN_IMS_SECURITY_PARAMETERS)
```

The security exit interface parameters are:

- The security parameter list passed to the security exit. This parameter list is documented in the following pages.
- A security area work area which is a 256-byte area initialized to binary zeroes. This area is unchanged by FM/IMS and can be used to pass information between multiple calls to the security exit.
- IMS security parameters which are passed to the IMS Initialization and Termination exits.

### Common Exit Parameters:

*Table 3. Common Parameters - All Exit Types*

Field	Update	Size	Description
Request Type	N	Char(1)	<b>A</b> Audit Trail allocation <b>D</b> Database data set allocation <b>I</b> IMS Initialization <b>T</b> IMS Termination
Option	N	Char(1)	<b>B</b> Browse <b>E</b> Edit <b>L</b> Extract/Load <b>P</b> Batch printing <b>U</b> Utilities
User Id	N	Char(7)	TSO userid
Permitted	Y	Char(1)	<b>Y</b> Allow intended action <b>N</b> Disallow intended action <b>Blank</b> N/A Not used for Exit Type A.

### Security Exit Parameters:

*Table 4. Parameters - Exit Type A.*

Field	Update	Size	Description
DB DSN	N	Char(44)	This field is obsolete and no longer populated.
DSN	Y	Char(44)	The Audit Trail DSN to be allocated.

## Security Exit Parameters

Table 4. Parameters - Exit Type A. (continued)

Field	Update	Size	Description
SMF Record Id	Y	Binary(16)	Default is 00 (SMF not used for audit trail). Choose a number between 128 and 255. Only applies if the 'Create Indicator' (below) is set to Y.
Create	Y	Char(1)	Input value from the Edit Entry Panel. Override the value with one of the following: <b>Y</b> Create an audit trail. <b>N</b> Do not create an audit trail. <b>D</b> See IMSAUDLG=D description.
Keep	Y	Char(1)	<b>Y</b> Keep the audit trail data set. <b>N</b> Delete the audit trail data set after printing.
Report	Y	Char(1)	<b>Y</b> Produce the Audit Trail report at the end of the edit session. <b>N</b> Do not produce the Audit Trail report at the end of the edit session.
Job Type	N	Char(1)	<b>B</b> DLI mode <b>M</b> BMP mode
DBD DSN	N	Char(44)	The DBD library that has been allocated.
DBD Name	N	Char(8)	The DBD being processed.
IMS System Id	N	Char(4)	The IMS SYSTEM ID entered.
Appl. Group Name	N	Char(8)	The AGN used.
PSB Type	N	Char(1)	<b>S</b> Static <b>D</b> Dynamic
PSB Name	N	Char(8)	The name of the Program Specification Block (PSB).
PSB DSN	N	Char(44)	The name of the PSB library data set (static DLI).

Table 5. Parameters - Exit Type D.

Field	Update	Size	Description
Primary DBD Name	N	Char(8)	The primary DBD being processed.
Physical DBD Name	N	Char(8)	The physical DBD that has the DATASET= statement for this DDNAME.
DDNAME	N	Char(8)	The DDNAME of the database being allocated.
DSN Status	Y	Char(3)	SHR or OLD. Default is SHR for Browse and OLD for Edit.
DSN	N	Char(44)	The DSN of the database.

Table 6. Parameters - Exit Type I

Field	Update	Size	Description
DBD DSN	N	Char(44)	The DBD library that has been allocated.
DBD Name	N	Char(8)	The DBD being processed.

Table 6. Parameters - Exit Type I (continued)

Field	Update	Size	Description
Subfunction	N	Char(1)	Option subfunction.  Function L, Extract/Load: <b>E</b> Extract <b>L</b> Load  Function U, Utilities: <b>D</b> Delete/define database data sets <b>I</b> Initialize IMS databases
IMS Log Indicator	Y	Char(1)	The user entered IMS log indicator. Only applicable during the online portion of the Edit and Load functions. Values are: <b>K</b> Allocate and keep log data set. <b>D</b> Allocate and delete log data set. <b>N</b> Do not use a log data set
IEFRDER DSN	Y	Char(44)	The IMS log data set name as constructed by FM/IMS when the 'IMS log data set' option has been selected in the Edit and Load online functions.
Job Type	N	Char(1)	<b>B</b> DLI mode <b>M</b> BMP mode
IMS System Id	N	Char(4)	The IMS SYSTEM ID entered.
Appl. Group Name	N	Char(8)	The AGN used.
Processing Option	N	Char(1)	The Database Load Processing Option as specified by the user. <b>1</b> Update and insert segments. <b>2</b> Insert new segments only.
Time	N	Char(6)	The time the exit call is made. Format is HHMMSS.
Date	N	Char(8)	The date the exit call is made. Format is YYYYMMDD.
PSB Type	N	Char(1)	<b>S</b> Static <b>D</b> Dynamic
PSB Name	N	Char(8)	The name of the Program Specification Block (PSB).
PSB DSN	N	Char(44)	The name of the PSB library data set (static DLI).
MAXGN Value	Y	Binary(16)	This value is only applicable during the Edit and Browse functions. The maximum number of GN (Get Next) calls allowed to satisfy a FIND or CHANGE command. Used to override the Profile Option MAXGN value.

### Sample programs for a security exit

Copybooks, sample program source and JCL for the security exit are supplied for High Level Assembler and COBOL. The sample program source and JCL are distributed in FMN.SFMNSAM1, and the copybooks in FMN.SFMNMAC1. They are:

**FMN1AXIT** HLASM copybook for security exit parameters.  
**FMN1XITA** Sample HLASM code for program FMN1SXT.

## Sample programs for a security exit

FMN1UMDS	Usermod to install an HLASM version of FMN1SXT.
FMN1CXIT	COBOL copybook for security exit parameters.
FMN1XITC	Sample COBOL code for program FMN1SXT.
FMN1SECC	Job control to install a COBOL version of FMN1SXT.

To provide your version of FMN1SXT in HLASM you use the usermod FMN1UMDS as follows:

1. Copy the member FMN1XITA from FMN.SFMNSAM1 to your own source library.
2. Code your version of FMN1XITA in your source library, using FMN1XITA from FMN.SFMNSAM1 as a base.
3. Modify the usermod FMN1UMDS member in FMN.SFMNSAM1 to meet your requirements. Refer to the usermod for information about changes you might need to make.
4. Install SMP/E usermod FMN1UMDS.

To provide your version of FMN1SXT in COBOL:

1. Copy the member FMN1XITC from FMN.SFMNSAM1 to your own source library.
2. Code your version of FMN1XITC in your source library, using FMN1XITC from FMN.SFMNSAM1 as a base.
3. Modify the sample job FMN1SECC in FMN.SFMNSAM1 to meet your site's requirements. Refer to the sample job for information about any changes you might need to make.
4. Run the job to FMN1SECC to compile and link your version of FMN1SXT. This job will link FMN1SXT into FMN.SFMNMOD1.

To implement your exit, add FMN.SFMNMOD1 to your LINKLIST or to the STEPLIB DD statement in your TSO logon procedure.

**Note:** If the security exit program is written in COBOL, the performance of the application may be impacted.

## Chapter 12, "Customizing the operating environment for FM/DB2"

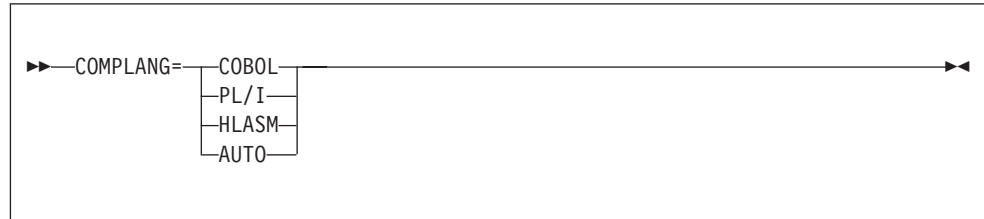
In the section, "Granting access to the DB2 catalogs (required)", replace the first paragraph with the following:

"FM/DB2 uses dynamic SQL, issued against the DB2 catalog, as part of its processing. To make FM/DB2 available and to ensure the product's correct and optimum operation, you need to grant SELECT access against the DB2 catalog tables to all FM/DB2 users.

Granting access to the DB2 catalog tables can be done in a number of ways, as described below. Some sites have security requirements in place that conflict with FM/DB2's requirement for DB2 catalog access. If, after reading the various options described below, it is not possible to grant the required level of DB2 catalog table access to FM/DB2 users, you should not attempt to install the FM/DB2 product."

## Change #2 May 2010

- In Appendix A, "File Manager options", subsection, "COMPLANG", change "COBOL" as the default value to one of the (four) choices (one of which must be specified):



## Change #1 April 2010

- In the section, "Granting access to the DB2 catalogs (required)", change the following:

"The view definitions in these sample jobs use an alternative owner and the same object name as the DB2 catalog table on which the view is defined. Each view includes every column of the DB2 catalog tables on which it is defined (that is, the view is defined as SELECT \* FROM). If you want FM/DB2 to use the views defined on the DB2 catalog tables, you must specify the owner of the views in the FMN2POPI macro."

to:

"The view definitions in these sample jobs use an alternative owner and the same object name as the DB2 catalog table on which the view is defined. Each view includes every column of the DB2 catalog tables on which it is defined (that is, the view is defined as SELECT \* FROM). If you want FM/DB2 to use views defined on the DB2 catalog tables, instead of accessing the DB2 catalog tables directly, you must change the CATOWNER parameter of the FMN2POPI macro to specify the appropriate view-owner value."

- In the description of the ATTACH parameter (for the FMN2SSDM macro) in Appendix C, "FM/DB2 Options", add/change the following:
  - After the pre-amble, add the following:
 

"The properties and requirements of the various DB2 attachment facilities are documented in the DB2 Application Programming and SQL Guide."
  - After the description for CAF, add:
 

"CAF is the default and recommended value. The CAF attachment works concurrently with other DB2 applications that use the DSNELI (DSN) attachment, the DSNALI (CAF) attachment, but not the DSNRLI (RRSAF) attachment."
  - After the description for RRSAF, add:
 

"RRSAF should only be used in situations where there will be no conflicts with other DB2 applications that use other attachment facilities, especially the DSNELI attachment. For example, it is not possible to run DB2's SPUFI and FM/DB2 on separate ISPF split screens when FM/DB2 is using the RRSAF attachment (because of the conflict with the DSN attachment used by DB2's SPUFI)."

## Sample programs for a security exit

---

# User's Guide and Reference (SC19-2857-00)

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## Change #10: March 2013

In Chapter 17, "File Manager messages", add the following error message:

---

### FMNBA719 Change failed

**Explanation:** The File Manager Find/Change utility could not change one or more strings because:

- The change string is longer than the find string and there is insufficient space in the record to accommodate the change string.

- An attempt is being made to change a VSAM KSDS key field, The key field will be identified with a 'K' next to the record number in the report.

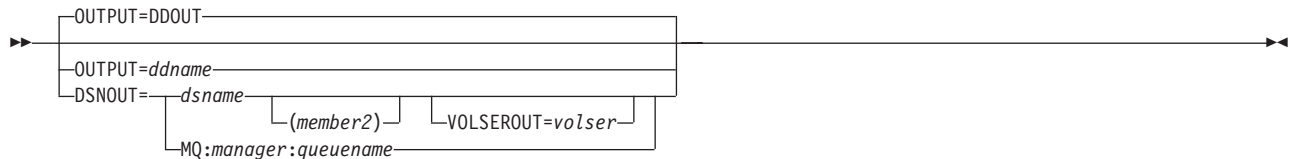
**User response:** Change the find or change string to avoid the problem.

---

## Change #9: March 2011

Chapter 16, "Functions", section "File Manager functions", subsection: "DSC (Data Set Copy)":

- In the syntax diagram "Part 1 of 4", replace the "OUTPUT=" / "DSNOUT=" section of the diagram with:



---

## Change #8: August 2010

Chapter 8, "Tape Specific Functions", section "Specifying an HFS file", subsection: "ASCII translation":

- Replace the wording:  
"Use the **ASCII** entry field on the Set Processing Options (option 0) panel to..."  
with:  
"Use the **ASCII** entry field on the Set Tape Processing Options panel (option 0.3) panel to..."
- 

## Change #7: June 2010

### Chapter 16, "Functions"

#### Subsection: "File Manager functions"

- For the SCS function:
  - In the description for SORTBY, replace the list of possible values with:

<b>ALLOC</b>	Sorts by allocated space
<b>DATE</b>	Sorts by creation date
<b>DSORG</b>	Sorts by organisation
<b>FREESP</b>	Sorts by free space
<b>LRECL</b>	Sorts by logical record length
<b>NAME</b>	Sorts by data set name (the default)
<b>RECFM</b>	Sorts by record format

- In the description for DATEFORM, replace the first value ("YYDD") with "YYDDD".

## Change #6: May 2010

Chapter 11, "Using UNIX System Services and the Hierarchical File System", section "Specifying an HFS file":

- Remove the entire subsection, "Using wildcard characters to specify file names".

## Change #5: May 2010

### Chapter 16, "Functions"

Subsection: "File Manager functions"

- For the FCH function, remove the //FMNOUT DD SYSOUT=\* statement from the sample JCL.

## Change #4: May 2010

The following changes relate to a Version 9 PTF (UK52267) and were inadvertently omitted from the Version 10 edition of the User's Guide and Reference.

### Chapter 16, "Functions"

Subsection: "File Manager functions"

- For the DSC function, in the description for the keyword CPYMBR, change the following sentence in the description for the variable *from\_mem* from:  
"Generic name masks are not allowed."  
to:  
"Generic name masks are allowed."
- For the BTB and BTU functions, in the description for the keyword MEMLIST, change the following sentence in the description for the variable *member\_n* from:  
"Generic name masks are not allowed."  
to:  
"Generic name masks are allowed."
- For the DSP, FCH, and DSU functions:
  - Add the MEMLIST keyword to the syntax diagram:



- Add the following description after the syntax diagram:

#### MEMLIST

Allows you to specify a list of member names.

*member\_n*

The name of the member to be processed. Generic name masks are allowed.

### Chapter 17, "File Manager messages"

Add the following error message:



---

**FMNBA055** WRITE(&dd) issued that would cause a re-open of a file with UNIT=AFF specified

**Explanation:** The DD name referenced has been closed due to processing of another WRITE function that

shares the same tape unit. This file cannot be re-opened once it has been closed.

**User response:** Examine the logic in your procedure and correct the logic so that you are not writing to one file then the next file and then the previous file again.

---

### Change #3: April 2010

Chapter 16, "Functions", section "File Manager functions", subsection "DSM (Data Set Compare)"

- In the last bullet point in the **Purpose** section, remove the sentence in brackets so that the point reads:
    - Create output data sets containing records identified as inserted, deleted, old and new changed records, and old and new matched records.
- 

### Change #2: March 2010

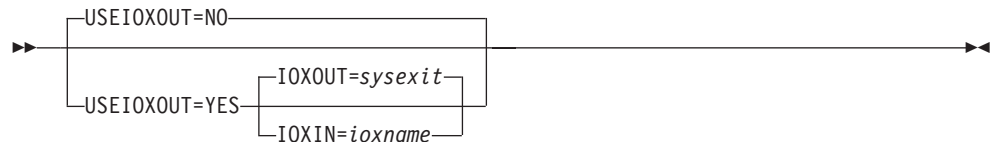
Chapter 15, "Primary commands", section "TAILOR primary command":

- Remove the words "WebSphere MQ" from the sentence:  
"The TAILOR command provides a list of columns and their attributes for the current WebSphere MQ selection list."
  - In the description of **Filter**, remove the words "WebSphere MQ" from the sentence:  
"Restricts the data displayed in a WebSphere MQ selection list to data that matches the specified filter string."
- 

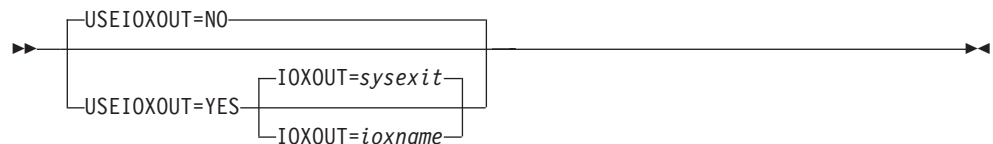
### Change #1: January 2010

Chapter 16, "Functions", section "DSG (Data Set Generate)":

- In the diagram Syntax (1 of 2), change the USEIOXOUT segment from:



to:



- In the description of IOXOUT following the syntax diagram for the DSG function, in the description for *sysexit*, change the 2 occurrences of "USEIOXIN" to "USEIOXOUT" and the one occurrence of "IOXIN" to "IOXOUT" so that it reads:

*sysexit* Default. If you specify USEIOXOUT=YES and do not supply a user I/O exit name, File Manager uses the name of the exit provided in the

installation customization options. If USEIOXOUT has been set to YES and no installation default has been provided, you must specify IOXOUT=*ioxname*.

**Note:** If you have selected batch processing in an online panel, the generated JCL statements use the default name provided in your Set System Processing Options panel.

Chapter 16, "Functions", section "VLM (View Load Module)":

- In the description for the keyword MEMLIST, change the sentence:  
"However, if the MEMLIST keyword is specified, for example as MEMLIST=TEST\*, the members included in the MEMLIST list are selected from the TEST\* subset of members."  
to:  
"However, if the MEMBER keyword is specified, for example as MEMBER=TEST\*, the members included in the MEMLIST list are selected from the TEST\* subset of members."

---

# User's Guide and Reference for DB2 Data (SC19-2858-00)

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## Change #1 November 2010

In Chapter 15, "FM/DB2 panels and fields", subsection "Basic SELECT Prototyping panel", replace the second panel with:

<u>P</u> rocess	<u>O</u> ptions	<u>U</u> tilities	<u>H</u> elp		
FM/DB2 (DFA2)		Basic SELECT Prototyping	Row 1 of 19		
SELECT ? FROM ? WHERE ? ORDER BY ?					
Row count	<u>ALL</u>	Number of rows to display			
Select columns (S/A/D) or enter predicates to build the SELECT statement:					
S	LOp ( Tab Column Name	Data Type(length)	Op Value )		
-	- #1 EMPNO	CHAR(6)	-		
-	- #1 FIRSTNME	VARCHAR(12)	-		
-	- #1 MIDINIT	CHAR(1)	-		
-	- #1 LASTNAME	VARCHAR(15)	-		
-	- #1 WORKDEPT	CHAR(3)	-		
-	- #1 PHONENO	CHAR(4)	-		
-	- #1 HIREDATE	DATE(4)	-		
-	- #1 JOB	CHAR(8)	-		
-	- #1 EDLEVEL	SMALLINT(2)	-		
-	- #1 SEX	CHAR(1)	-		
-	- #1 BIRTHDATE	DATE(4)	-		
-	- #1 SALARY	DECIMAL(9,2)	-		
-	- #1 BONUS	DECIMAL(9,2)	-		
-	- #1 COMM	DECIMAL(9,2)	-		
-	- #2 DEPTNO	CHAR(3)	-		
-	- #2 DEPTNAME	VARCHAR(36)	-		
-	- #2 MGRNO	CHAR(6)	-		
-	- #2 ADMRDEPT	CHAR(3)	-		
-	- #2 LOCATION	CHAR(16)	-		
	**** End of data ****				
Command ==>			Scroll PAGE		
F1=Help	F2=Split	F3=Exit	F4=Expand	F6=Execute	F7=Backward
F8=Forward	F9=Swap	F10=Left	F11=Right	F12=Cancel	



---

## User's Guide and Reference for IMS Data (SC19-2859-00)

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### Change #1 May 2010

The following changes relate to a Version 9 PTF (UK52267) and were inadvertently omitted from the Version 10 edition of the FM/IMS User's Guide and Reference.

#### Chapter 11, "Batch reference"

##### Subsection: "File Manager functions"

- For the ITU, IVU, and ICU functions, in the description for the keyword MEMLIST, change the following sentence in the description for the variable *member\_n* from:  
"Generic name masks are not allowed."  
to:  
"Generic name masks are allowed."



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## **User's Guide and Reference for CICS (SC19-2860-00)**

There are no general documentation changes.





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