

# Program Directory for Query Management Facility for VM/ESA®

Version 7 Release 2.0 Program Number 5697-F42

for Use with
z/VM™ Version 4
z/VM Version 3 Release 1
VM/ESA Version 2 Release 4
VM/ESA Version 2 Release 3

Document Date: March 2002

Note —
Before using this information and the product it supports, be sure to read the general information under "Notices" on page 44.
This program directory, dated March 2002, applies to Query Management Facility for VM/ESA (QMF™ for VM), Version 7 Release 2.0, Program Number 5697-F42.
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# 1.0 Introduction

This program directory is intended for the system programmer responsible for program installation and maintenance. It contains information concerning the material and procedures associated with the installation of **Query Management Facility for VM/ESA Version 7 Release 2.0** (abbreviated to QMF for VM in this document). You should read all of this program directory before installing the program and then keep it for future reference.

The program directory contains the following sections:

- 2.0, "Program Materials" on page 2 identifies the basic and optional program materials and documentation for QMF for VM.
- 3.0, "Program Support" on page 6 describes the IBM support available for QMF for VM.
- 4.0, "Program and Service Level Information" on page 7 lists the APARs (program level) and PTFs (service level) incorporated into QMF for VM.
- 5.0, "Installation Requirements and Considerations" on page 8 identifies the resources and considerations for installing and using QMF for VM.
- 6.0, "Installation Instructions" on page 12 provides detailed installation instructions for QMF for VM.
- 7.0, "Service Instructions" on page 30 provides detailed servicing instructions for QMF for VM.
- Appendix A, "Create Product Parameter File (PPF) Override" on page 41 provides detailed information on overriding the Product Parameter File (PPF).

Before installing QMF for VM, read 3.1, "Preventive Service Planning" on page 6. This section tells you how to find any updates to the information and procedures in this program directory.

# 1.1 Program Description

IBM Query Management Facility (QMF) is a tightly integrated, powerful, and reliable tool that performs query and reporting for IBM's DB2® relational database Management System Family. It offers an easy-to-learn, interactive interface. Users with little or no data processing experience can easily retrieve, create, update, insert, or delete data that is stored in DB2.

QMF offers a total solution that includes accessing large amounts of data and sharing central repositories of queries and enterprise reports. It also allows you to implement tightly-controlled, distributed, or client/server solutions. In addition, you can use QMF to publish reports to the World Wide Web that you can view with your favorite web browser.

# 2.0 Program Materials

An IBM program is identified by a program number. The program number for Query Management Facility for VM/ESA Version 7 is 5697-F42.

The program announcement material describes the features supported by QMF for VM. Ask your IBM marketing representative for this information if you have not already received a copy.

The following sections identify:

- basic and optional program materials available with this program
- · publications useful during installation.

#### 2.1 Basic Machine-Readable Material

The distribution medium for this program is 9-track magnetic tape (written at 6250 BPI), 3480 tape cartridge, 1/4-inch tape cartridge, or 4mm tape cartridge. The tape or cartridge contains all the programs and data needed for installation. See section 6.0, "Installation Instructions" on page 12 for more information about how to install the program. Figure 1 describes the tape or cartridge. Figure 2 describes the file content of the program tape or cartridge.

Figure 1. Basic Material: Program Tape

Feature		Physical		
Number	Medium	Volume	Tape Content	External Tape Label
6090	6250 tape	1	QMF/VM BASE	QMF for VM V7.2 (E)
6088	3480 cart.	1	QMF/VM BASE	QMF for VM V7.2 (E)
6049	.25" cart.	1	QMF/VM BASE	QMF for VM V7.2 (E)
6089	4mm cart.	1	QMF/VM BASE	QMF for VM V7.2 (E)

Figure 2 (Page 1 of 2). Program Tape: File Content

Tape	
File	Content
1	Tape Header
2	Tape Header
3	Product Header
4	Product Memo
5	Service Apply Lists

Figure 2 (Page 2 of 2). Program Tape: File Content

Таре	
File	Content
6	PTFPARTs
7	QMF for VM Service
8	QMF for VM Service
9	QMF for VM Base Code
10	QMF for VM Sample
11	QMF for VM Production
12	QMF for VM Distribution

# 2.2 Optional Machine-Readable Material

There are no optional machine-readable materials for QMF for VM.

# 2.3 Program Publications

The following sections identify the basic and optional publications for QMF for VM.

# 2.3.1 Basic Program Publications

One copy of each of the following publications is included when you order the basic materials for QMF for VM. To order additional hardcopy books, contact your IBM representative or visit the IBM Publications website at http://www.ibm.com/shop/publications/order. To view or download a free PDF version of the publication, go to the QMF website at http://www.ibm.com/software/data/qmf/library.html.

Figure 3. Basic Material: Unlicensed Publications

Publication Title	Form Number
Installing and Managing QMF	GC27-0720
QMF Messages and Codes	GC27-0717

# 2.3.2 Optional Program Publications

Figure 4 identifies the optional program publications for QMF for VM that can be ordered. To order hardcopy books, contact your IBM representative or visit the IBM Publications website at http://www.ibm.com/shop/publications/order. To view or download a free PDF version of the publication, go to the QMF website at

Figure 4. Optional Material: Unlicensed Publications

Publication Title	Form Number
Introducing QMF	GC27-0714
QMF Reference	SC27-0715
Using QMF	SC27-0716
Developing QMF Applications	SC27-0718

# 2.4 Microfiche Support

There is no microfiche for QMF for VM.

# 2.5 Publications Useful During Installation

The publications listed in Figure 5, Figure 6, or Figure 7, depending on your VM release, may be useful during the installation of QMF for VM. To order copies, contact your IBM representative.

Figure 5. Publications Useful During Installation / Service on VM/ESA Version 2.3.0 or 2.4.0

Publication Title	Form Number	
VM/ESA: VMSES/E Introduction and Reference	GC24-5837	
VM/ESA: Service Guide	GC24-5838	
VM/ESA: Planning and Administration	SC24-5750	
VM/ESA: CMS Command Reference	SC24-5776	
VM/ESA: CMS File Pool Planning, Administration, and Operation	SC24-5751	
VM/ESA: System Messages and Codes	GC24-5841	

Figure 6. Publications Useful During Installation / Service on z/VM Version 3.1.0

Publication Title	Form Number
z/VM: VMSES/E Introduction and Reference	GC24-5947
z/VM: Service Guide	GC24-5946
z/VM: Planning and Administration	SC24-5948
z/VM: CMS Command Reference	SC24-5969
z/VM: CMS File Pool Planning, Administration, and Operation	SC24-5949
z/VM: System Messages and Codes	GC24-5974

Figure 7. Publications Useful During Installation / Service on z/VM Version 4

Publication Title	Form Number
z/VM: VMSES/E Introduction and Reference	GC24-5994
z/VM: Service Guide	GC24-5993
z/VM: Planning and Administration	SC24-5995
z/VM: CMS Command and Utility Reference	SC24-6010
z/VM: CMS File Pool Planning, Administration, and Operation	SC24-5949
z/VM: System Messages and Codes - Other Components	GC24-6032
z/VM: System Messages and Codes - CMS	GC24-6031
z/VM: System Messages and Codes - CP	GC24-6030
z/VM: Installation Guide	GC24-5992

# 3.0 Program Support

This section describes the IBM support available for QMF for VM.

# 3.1 Preventive Service Planning

Before installing QMF for VM, check with your IBM Support Center or use IBMLink™ (ServiceLink) to see whether there is additional Preventive Service Planning (PSP) information. To obtain this information, specify the following UPGRADE and SUBSET values:

Figure 8. PSP Upgrade and Subset ID

Retain			
COMPID	Release	Upgrade	Subset
566872101	7B0	DB2VSEVM720	QMF/7B0

# 3.2 Statement of Support Procedures

Report any difficulties you have using this program to your IBM Support Center. If an APAR is required, the Support Center will tell you where to send any needed documentation.

Figure 9 identifies the component ID (COMPID), Retain Release and Field Engineering Service Number (FESN) for QMF for VM.

Figure 9. Component IDs

Retain			
COMPID	Release	Component Name	FESN
566872101	7B0	QMF/VM BASE	6472101

# 4.0 Program and Service Level Information

This section identifies the program and any relevant service levels of QMF for VM. The program level refers to the APAR fixes incorporated into the program. The service level refers to the PTFs shipped with this product. Information about the cumulative service tape is also provided.

# 4.1 Program Level Information

QMF for VM V7.2 has incorporated all closed APARS from previous versions/releases which were closed prior to December 31, 2001.

#### 4.2 Service Level Information

Check the DB2VSEVM720 PSP bucket for any additional PTFs that should be installed or any additional install information.

# 4.3 Cumulative Service Tape

Cumulative service for QMF for VM Version 7 Release 2.0 is available through a monthly corrective service tape, Expanded Service Option, ESO.

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# 5.0 Installation Requirements and Considerations

The following sections identify the system requirements for installing and activating QMF for VM.

# 5.1 Hardware Requirements

There are no special hardware requirements for QMF for VM.

## 5.2 Program Considerations

The following sections list the programming considerations for installing and activating QMF for VM.

## **5.2.1 Operating System Requirements**

QMF for VM supports the following VM operating systems:

- z/VM Version 4
- · z/VM Version 3 Release 1
- VM/ESA Version 2 Release 4

**RSU9904 service level** or above must be applied to VMSES/E on VM/ESA 2.4.0 prior to installing QMF for VM

VM/ESA Version 2 Release 3

**RSU9905 service level** or above must be applied to VMSES/E on VM/ESA 2.3.0 prior to installing QMF for VM

# **5.2.2 Other Program Product Requirements**

This section shows the program requirements for QMF for VM V7.2.

Later releases that are not available at the QMF for VM V7.2 announcement time are not supported, unless specifically stated otherwise.

Refer to the *Installing and Managing QMF* book or the QMF for VM V7.2 announcement letter for a list of program products required for optional functions to identify other program products you might need to use for certain QMF functions.

Figure 10 (Page 1 of 2). Prerequisite Software for QMF for VM

Required Products	Version Release	Order Number	
DB2 for VM	Version 7 Release 2	5697-F42	

Figure 10 (Page 2 of 2). Prerequisite Software for QMF for VM

Required Products	Version Release	Order Number	
GDDM®/VMXA, or	Version 2 Release 3	5684-007	
GDDM/VM	Version 3 Release 1.1	5684-16A	
	Version 3 Release 2	5684-16B	

## 5.2.3 Program Installation and Service Considerations

This section describes items that should be considered before you install or service QMF for VM.

- VMSES/E is required to install and service this product.
- If multiple users install and maintain licensed products on your system, there may be a problem
  getting the necessary access to MAINT's 51D disk. If you find that there is contention for write access
  to the 51D disk, you can eliminate it by converting the Software Inventory from minidisk to Shared File
  System (SFS). See the VMSES/E Introduction and Reference manual, section "Changing the
  Software Inventory to an SFS Directory", for information on how to make this change.
- Customers will no longer install and service QMF for VM strictly using the MAINT user ID, but will use
  a new user ID--P697F4BA. This is the IBM suggested user ID name. You are free to change this to
  any user ID name you wish; however, a PPF override must be created.

**Note:** It may be easier to make the above PPF override change during the installation procedure 6.2, "Plan Your Installation For QMF for VM" step 6 on page 14, rather than after you have installed this product.

# 5.3 DASD Storage and User ID Requirements

Figure 11 lists the user IDs, minidisks and default SFS directory names that are used to install and service QMF for VM.

#### **Important Installation Notes:**

- User ID(s) and minidisks or SFS directories will be defined in 6.2, "Plan Your Installation For QMF for VM" on page 13 and are listed here so that you can get an idea of the resources that you will need prior to allocating them.
- P697F4BA is a default user ID and can be changed. If you choose to change the name of the installation user ID you need to create a Product Parameter Override (PPF) to reflect this change. This can be done in 6.2, "Plan Your Installation For QMF for VM" step 6 on page 14.
- If you choose to install QMF for VM on a common user ID the default minidisk addresses for QMF for VM may already be defined. If any of the default minidisks required by QMF for VM are already in use you will have to create an override to change the default minidisks for QMF for VM so they are unique.

Minidisk owner Default		Storage in Cylinders		FB-512	SFS 4K	Usage	
(user ID)	Address	DASD	CYLS	Blocks	Blocks	Default SFS Directory Name	
P697F4BA	2B2	3390 3380 9345	25 30 30	36000	4500	Contains all the base code shipped with QMF for VM VMSYS:P697F4BA.QMF.OBJECT	
P697F4BA	2C2	3390 3380 9345	2 2 2	2400	300	Contains customization files. This disk may also be used for local modifications.  VMSYS:P697F4BA.QMF.SAMPLE	
P697F4BA	2D2	3390 3380 9345	5 5 5	6000	750	Contains serviced files  VMSYS:P697F4BA.QMF.DELTA	
P697F4BA	2A6	3390 3380 9345	2 2 2	2400	300	Contains AUX files and software inventory tables that represent the test service level of QMF for VM VMSYS:P697F4BA.QMF.APPLYALT	
P697F4BA	2A2	3390 3380 9345	2 2 2	2400	300	Contains AUX files and software inventory tables that represent the service level of QMF for VM that is currently in production. VMSYS:P697F4BA.QMF.APPLYPROD	
P697F4BA	501	3390 3380 9345	17 20 20	24000	3000	Test Build disk for QMF for VM Distribution Code. After testing, copy to 500 disk. VMSYS:P697F4BA.QMF.TDISTRIB	
P697F4BA	500	3390 3380 9345	17 20 20	24000	3000	QMF for VM Distribution Code minidisk. VMSYS:P697F4BA.QMF.DISTRIB	
P697F4BA	401	3390 3380 9345	18 21 21	25200	3150	Test Build disk for QMF for VM Production Code. After testing, copy to 400 disk. VMSYS:P697F4BA.QMF.TQMFPROD	
P697F4BA	400	3390 3380 9345	18 21 21	25200	3150	QMF for VM Production Code minidisk. VMSYS:P697F4BA.QMF.QMFPROD	
P697F4BA	191	3390 3380 9345	9 10 10	12000	1500	P697F4BA user ID's 191 minidisk  VMSYS:P697F4BA.	

Note: Cylinder values defined in this table are based on a 4K block size. FB-512 block and SFS values are derived from the 3380 cylinder values in this table. The FBA blocks are listed as 1/2K but should be CMS formatted at 1K size. 19,950 4K blocks are needed for SFS install.

# 5.4 Special Considerations

# 5.4.1 DB2 for VM Version 7.2 PTF Required

If you are planning to connect from DB2 VM Version 7.2 to a database with a database name that is greater than eight characters, you will need to apply the DB2 for VM Version 7.2 PTF for APAR PQ56508 when the PTF is available.

## 6.0 Installation Instructions

This chapter describes the installation methods and the step-by-step procedures to install and activate QMF for VM.

The step-by-step procedures are in two-column format. The steps to be performed are in bold, large numbers. Commands for these steps are on the left-hand side of the page in bold print. Additional information for a command may exist to the right of the command. For more information about the two-column format see "Understanding Dialogs with the System" in the *Installation Guide*.

Each step of the installation instructions must be followed. Do not skip any step unless directed to do so.

Throughout these instructions, the use of IBM-supplied default minidisk addresses and user IDs is assumed. If you use different user IDs, minidisk addresses, or SFS directories to install QMF for VM, adapt these instructions as needed for your environment.

#### Note -

The sample console output presented throughout these instructions was produced on a VM/ESA 2.4.0 system. If you're installing QMF for VM on a different VM/ESA system, the results obtained for some commands may differ from those depicted here.

#### 6.1 VMSES/E Installation Process Overview

The following is a brief description of the main steps in installing QMF for VM using VMSES/E.

Plan Your Installation

Use the VMFINS command to load several VMSES/E files from the product tape and to obtain QMF for VM resource requirements.

Allocate Resources

The information obtained from the previous step is used to allocate the appropriate minidisks (or SFS directories) and user IDs needed to install and use QMF for VM.

Install the QMF for VM Product

Use the VMFINS command to load the QMF for VM product files from tape to the test BUILD and BASE minidisks/directories. VMFINS is then used to update the VM SYSBLDS file used by VMSES/E for software inventory management.

· Perform Post-installation Tasks

Information about file tailoring and initial activation of the program is presented in 6.6, "Post-Installation Considerations" on page 29.

Place QMF for VM Files into Production

Once the product files have been tailored and the operation of QMF for VM is satisfactory, the product files are copied from the test BUILD disk(s) to production BUILD disk(s).

For a complete description of all VMSES/E installation options refer to VMSES/E Introduction and Reference.

#### 6.2 Plan Your Installation For QMF for VM

The VMFINS command will be used to plan the installation. This section has 2 main steps that will:

- · load the first tape file, containing installation files
- generate a 'PLANINFO' file listing
  - all user ID and mdisks/SFS directory requirements
  - required products

To obtain planning information for your environment:

- 1 Log on as QMF for VM installation planner. This user ID can be any ID that has read access to MAINT's 5E5 minidisk and write access to the MAINT 51D minidisk.
- 2 Mount the QMF for VM installation tape and attach it to the user ID at virtual address 181. The VMFINS EXEC requires the tape drive to be at virtual address 181.
- **3** Establish read access to the VMSES/E code.

link MAINT 5e5 5e5 rr access 5e5 b

The 5E5 disk contains the VMSES/E code.

**4** Establish write access to the Software Inventory disk.

link MAINT 51d 51d mr access 51d d

The MAINT 51D disk is where the VMSES/E system-level Software Inventory and other dependent files reside.

Note: If another user already has the MAINT 51D minidisk linked in write mode (R/W), you will only obtain read access (R/O) to this minidisk. If this occurs, you will need to have that user re-link the 51D in read-only mode (RR), and then re-issue the above LINK and ACCESS commands. Do not continue with these procedures until a R/W link is established to the 51D minidisk.

**5** Load the QMF for VM product control files to the 51D minidisk.

#### vmfins install info (nomemo

The NOMEMO option will load the memos from the tape but will not issue a prompt to send them to the system printer. Specify the MEMO option if you want to be prompted for printing the memo.

This command will perform the following:

- · load Memo-to-Users
- · load various product control files, including the Product Parameter File (PPF) and the PRODPART files
- · create VMFINS PRODLIST on your A-disk. The VMFINS PRODLIST contains a list of products on the installation tape.

VMFINS2760I VMFINS processing started VMFINS1909I VMFINS PRODLIST created on your A-disk VMFINS2760I VMFINS processing completed successfully Ready;

**6** Obtain resource planning information for QMF for VM.

#### Notes:

a. The product will **not** be loaded by the VMFINS command at this time.

#### vmfins install ppf 5697F4BA {QMF | QMFSFS} (plan nomemo

Use QMF for installing on minidisks or QMFSFS for installing in Shared File System directories.

The PLAN option indicates that VMFINS will perform requisite checking, plan system resources, and provide an opportunity to override the defaults in the product parameter file.

#### You can override any of the following:

- the name of the product parameter file
- · the default user IDs
- · minidisk/directory definitions

#### Notes:

- a. If you change the PPF name, a default user ID, or other parameters via a PPF override, you will need to use your changed values instead of those indicated (when appropriate), throughout the rest of the installation instructions, as well as the instructions for servicing QMF for VM. For example, you will need to specify your PPF override file name instead of 5697F4BA for certain VMSES/E commands.
- b. If you're not familiar with creating PPF overrides using VMFINS, you should review the "Using the Make Override Panel" section in Chapter 3 of the VMSES/E Introduction and Reference before you continue.
- c. For more information about changing the VMSYS file pool name refer to Chapter 3 in the VMSES/E Introduction and Reference.

```
VMFINS2767I Reading VMFINS DEFAULTS B for additional options
VMFINS2760I VMFINS processing started
VMFINS2601R Do you want to create an override for :PPF 5697F4BA QMF
           :PRODID 5697F4BA%QMF?
            Enter 0 (No), 1 (Yes) or 2 (Exit)
VMFINS2603I Processing product :PPF 5697F4BA QMF :PRODID
           5697F4BA%QMF
VMFREQ1909I 5697F4BA PLANINFO created on your A-disk
VMFREQ2805I Product :PPF 5697F4BA QMF :PRODID 5697F4BA%QMF
           has passed requisite checking
VMFINT2603I Planning for the installation of product :PPF 5697F4BA QMF
            :PRODID 5697F4BA%QMF
VMFRMT2760I VMFRMT processing started
VMFRMT2760I VMFRMT processing completed successfully
VMFINS2760I VMFINS processing completed successfully
```

#### Note

#### Complete this step only if you received message VMFREQ2806W.

If you receive the following VMFREQ2806W message, you must do some additional processing.

VMFREQ2806W The following requisites for product :PPF 5697F4BA QMF :PRODID 5697F4BA%QMF are not satisfied:

Туре	Product	Component	PTF
Prerequisite Prerequisite OR	5697F42R 5684007A 568416A		
OR	568416B		

This message indicates that products DB2 for VM V7R2M0 and GDDM V2R3M0 or higher are prerequisite products for QMF for VM. You need to install these prerequisite products before continuing the install for QMF for VM.

If the prerequisite product is not in VMSES/E format it will not be in the system inventory. If you're certain the product is installed on your system you will need to update the VMSES/E system inventory before proceeding with the install of QMF for VM. Update the software inventories by issuing the following commands (examples with prerequisite product 5684007A):

vmfsim modify vm sysrecs d tdata :prodid 5684007A :PPF 5684007A lib :stat received

VM SYSRECS is the default name of the Receive Status table.

vmfsim modify vm sysapps d tdata :prodid 5684007A :PPF 5684007A lib :stat applied

VM SYSAPPS is the default name of the Apply Status table.

vmfsim modify vm sysreqt d tdata :prodid 5684007A

VM SYSREQT is the default name of the Requisite table.

For additional information about the System Inventory files and the VMFSIM command see the VMSES/E Introduction and Reference.

**<sup>7</sup>** Review the install message log (\$VMFINS \$MSGLOG). If necessary, correct any problems before going on. For information about handling specific error messages, see System Messages and Codes, or use on-line HELP.

# 6.3 Allocate Resources for Installing QMF for VM

Use the planning information in the 5697F4BA PLANINFO file, created in the PLAN step, to:

- · Create the P697F4BA user directory for minidisk install OR
- Create the P697F4BA user directory for SFS install

# 6.3.1 Installing QMF for VM on Minidisk

1 Obtain the user directory from the 5697F4BA PLANINFO file.

Note: The user directory entry is located in the resource section of the PLANINFO file, at the bottom; these entries will contain all of the links and privilege classes necessary for the P697F4BA user ID. Use the directory entry found in PLANINFO as a model as input to your system directory.

- **2** Add the MDISK statements to the directory entry for P697F4BA. Use Figure 11 on page 9 to obtain the minidisk requirements.
- **3** If you have GDDM V3R2 installed, you need to comment out or remove the following LINK statement from the QMF CP directory entry as GDDM V3R2 uses MAINT 19E as its production disk. If you are not using MAINT 19E, then you need to change the LINK statement to reflect the GDDM production disk you are using.
  - For the P697F4BA directory entry:
    - LINK P68416A 401 194 RR \* GDDM TXTLIBS
- 4 If you are using ISPF with QMF for VM, you need to add a link for ISPF such
  - For the P697F4BA directory entry:
    - LINK ISPVM 193 193 RR \* ISPF LIBRARIES
- 5 The DB2 VM Production disk is required when installing QMF. You need to change the LINK statement in the QMF CP directory entry for the DB2 VM V7.2 production disk you are using.
  - For the P697F4BA directory entry:
    - LINK SQLMACH 195 195 RR \* DB2 VM PRODUCTION DISK

If you are using a SFS directory for the DB2 for VM production disk, then remove the LINK statement from the P697F4BA directory. You will need to GRANT read authority to P697F4BA for the DB2 for VM production code SFS directory at this time.

- 6 Add the P697F4BA directory entry to the system directory. Change the password for P697F4BA from xxxxx to a valid password, in accordance with your security guidelines.
- 7 Place the new directories on-line using VM/Directory Maintenance (DIRMAINT) or an equivalent CP directory maintenance method.

#### Note

All minidisks for the P697F4BA user ID must be CMS formatted before installing QMF for VM.

#### 6.3.2 Installing QMF for VM in SFS Directories

**1** Obtain the user directory from the 5697F4BA PLANINFO file.

**Note:** The user directory entry is located in the resource section of the PLANINFO file, at the bottom; these entries will contain all of the links and privilege classes necessary for the P697F4BA user ID. Use the directory entry found in PLANINFO as a model as input to your system directory.

- 2 If you have GDDM V3R2 installed, you need to comment out or remove the following LINK statement from the QMF CP directory entry as GDDM V3R2 uses MAINT 19E as its production disk. If you are not using MAINT 19E, then you need to change the LINK statement to reflect the GDDM production disk you are using.
  - For the P697F4BA directory entry:
    - LINK P68416A 401 194 RR \* GDDM TXTLIBS
- **3** If you are using ISPF with QMF for VM, you need to add a link for ISPF such as:
  - For the P697F4BA directory entry:
    - LINK ISPVM 193 193 RR \* ISPF LIBRARIES
- **4** The DB2 VM Production disk or SFS directory is required when installing

If you are using a minidisk for the DB2 for VM production disk, then you need to add a LINK statement in the QMF CP directory such as:

LINK SQLMACH 195 195 RR \* DB2 VM PRODUCTION DISK

If you are using a SFS directory for the DB2 for VM production disk, then remove the LINK statement from the P697F4BA directory. You will need to GRANT read authority to P697F4BA for the DB2 for VM production code SFS directory at this time.

- **5** Add the P697F4BA directory entry to the system directory. Change the password for P697F4BA from xxxxx to a valid password, in accordance with your security guidelines.
- 6 Place the new directories on-line using VM/Directory Maintenance (DIRMAINT) or an equivalent CP directory maintenance method.
- **7** An SFS installation will also require the following steps:
  - **a** Determine the number of 4K blocks that are required for SFS directories by adding up the 4K blocks required for each SFS directory you plan to use.

If you intend to use all of the default QMF for VM SFS directories, the 4K block requirements for the directories are summarized in Figure 11 on page 9.

This information will be used when enrolling the user ID, P697F4BA, in the VMSYS filepool.

**b** Enroll user P697F4BA in the VMSYS filepool using the ENROLL USER command:

ENROLL USER P697F4BA VMSYS: (BLOCKS blocks

where blocks is the number of 4K blocks that you calculated in the previous step.

**Note:** This must be done from a user ID that is an administrator for VMSYS: filepool.

- C Determine if there are enough blocks available in the filepool to install QMF for VM. This information can be obtained from the QUERY FILEPOOL STATUS command. Near the end of the output from this command is a list of minidisks in the filepool and the number of blocks free. If the number of blocks free is smaller than the total 4K blocks needed to install QMF for VM you will need to add space to the filepool. See the CMS File Pool Planning, Administration, and Operation manual for information on adding space to a filepool.
- **d** Create the necessary subdirectories listed in the 5697F4BA PLANINFO file using the CREATE DIRECTORY command.

set filepool vmsvs: create directory dirid dirid is the name of the SFS directory you're creating. An example of the create command is:

create directory vmsys:P697F4BA.gmf create directory vmsys:P697F4BA.qmf.object

If necessary, see the CMS Command Reference manual for more information about the CREATE DIRECTORY command.

A complete list of default QMF for VM SFS directories is provided in Figure 11 on page 9.

**e** If you intend to use an SFS directory as the work space for the P697F4BA user ID, include the following IPL control statement in the P697F4BA directory entry:

IPL CMS PARM FILEPOOL VMSYS

This will cause CMS to automatically access the P697F4BA's top directory as file mode A.

#### 6.4 Install QMF for VM

The ppfname used throughout these installation instructions is **5697F4BA**, which assumes you are using the PPF supplied by IBM for QMF for VM. If you have your own PPF override file for QMF for VM, you should use your file's ppfname instead of 5697F4BA. The ppfname you use should be used throughout the rest of this procedure.

- 1 Logon to the installation user ID P697F4BA.
- 2 Create a PROFILE EXEC that will contain the ACCESS commands for MAINT 5E5 and 51D minidisks.

xedit profile exec a ===> input /\*\*/ ===> input 'access 5e5 b' ===> input 'access 51d d' ===> file

If either 5E5 or 51D is in a shared file system (SFS) then substitute your SFS directory name in the access command.

**3** Run the profile to access MAINT's minidisks.

#### profile

4 If the Software Inventory disk (51D) was accessed R/O (read only) then establish write access to the Software Inventory disk.

Note: If the MAINT 51D minidisk was accessed R/O, you will need to have the user who has it linked R/W link it as R/O. You then can issue the following commands to obtain R/W access to it.

#### link MAINT 51d 51d mr access 51d d

- **5** Have the QMF for VM installation tape mounted and attached to P697F4BA at virtual address 181. The VMFINS EXEC requires the tape drive to be at virtual address 181.
- 6 Install QMF for VM.

#### Notes:

- a. If you've already created a PPF override file, you should specify your override file name, in place of the default PPF name (5697F4BA), after the PPF keyword for the following VMFINS command.
- b. You may be prompted for additional information during VMFINS INSTALL processing depending on your installation environment. If you're unsure how to respond to a prompt, refer to the "Installing Products with VMFINS" and "Install Scenarios" chapters in the VMSES/E Introduction and Reference to decide how to proceed.

#### vmfins install ppf 5697F4BA {QMF | QMFSFS} (nomemo nolink

Use QMF for installing on minidisks or QMFSFS for installing in Shared File System directories.

The NOLINK option indicates that you don't want VMFINS to link to the appropriate minidisks, only access them if not accessed.

```
VMFINS2767I Reading VMFINS DEFAULTS B for additional options
VMFINS2760I VMFINS processing started
VMFINS2601R Do you want to create an override for :PPF 5697F4BA QMF
            :PRODID 5697F4BA%QMF?
            Enter 0 (No), 1 (Yes) or 2 (Exit)
VMFINS2603I Processing product :PPF 5697F4BA QMF :PRODID
            5697F4BA%QMF
VMFREO2805I Product :PPF 5697F4BA OMF :PRODID 5697F4BA%OMF
            has passed requisite checking
VMFINT2603I Installing product :PPF 5697F4BA QMF :PRODID
            5697F4BA%QMF
VMFSET2760I VMFSETUP processing started
VMFUTL2205I Minidisk Directory Assignments:
             String
                      Mode Stat Vdev
                                          Label/Directory
VMFUTL2205I LOCALSAM E
                              R/W 2C2
                                          OMF2C2
VMFUTL2205I APPLY
                              R/W 2A6
                                          0MF2A6
VMFUTL2205I
                       G
                              R/W
                                   2A2
                                          QMF2A2
VMFUTL2205I DELTA
                       Н
                              R/W
                                   2D2
                                          0MF2D2
VMFUTL2205I BUILD0
                       Ι
                              R/W
                                   401
                                          0MF401
                                          OMF501
VMFUTL2205I BUILD2
                                   501
                       J
                              R/W
VMFUTL2205I BASE1
                       K
                              R/W
                                   2B2
                                          QMF2B2
VMFUTL2205I SYSTEM
                       L
                              R/0
                                   195
                                          SQL195
VMFUTL2205I -----
                       Α
                              R/W
                                   191
                                          OMF191
VMFUTL2205I -----
                       В
                              R/0
                                   5E5
                                          MNT5E5
VMFUTL2205I -----
                              R/W
                                   51D
                                          MNT51D
VMFUTL2205I -----
                       S
                              R/0
                                   190
                                          MNT190
VMFUTL2205I ----- Y/S
                              R/0 19E
                                          MNT19E
VMFSET2760I VMFSETUP processing completed successfully
VMFREC2760I VMFREC processing started
VMFREC1852I Volume 1 of 1 of INS TAPE 0200
VMFREC1851I (1 of 8) VMFRCAXL processing AXLIST
VMFRCX2159I Loading 0 part(s) to DELTA 2D2 (H)
VMFREC1851I (2 of 8) VMFRCPTF processing PARTLST
VMFRCP2159I Loading 0 part(s) to DELTA 2D2 (H)
VMFREC1851I (3 of 8) VMFRCCOM processing DELTA
VMFRCC2159I Loading 0 part(s) to DELTA 2D2 (H)
VMFREC1851I (4 of 8) VMFRCALL processing APPLY
VMFRCA2159I Loading part(s) to APPLY 2A6 (F)
VMFRCA2159I Loaded 2 part(s) to APPLY 2A6 (F) VMFREC1851I (5 of 8) VMFRCALL processing BASE
VMFRCA2159I Loading part(s) to BASE1 2B2 (K)
VMFRCA2159I Loaded 966 part(s) to BASE1 2B2 (K)
VMFREC1851I (6 of 8) VMFRCALL processing SAMPLE
VMFRCA2159I Loading part(s) to LOCALSAM 2C2 (E)
VMFRCA2159I Loaded 1 part(s) to LOCALSAM 2C2 (E)
VMFREC1851I (7 of 8) VMFRCALL processing BUILD400
VMFRCA2159I Loading part(s) to BUILDO 401 (I)
VMFRCA2159I Loaded 156 part(s) to BUILDO 401 (I)
VMFREC1851I (8 of 8) VMFRCALL processing BUILD500
VMFRCA2159I Loading part(s) to BUILD2 501 (J) VMFRCA2159I Loaded 778 part(s) to BUILD2 501 (J)
VMFREC2760I VMFREC processing completed successfully
VMFINT2603I Product installed
VMFINS2760I VMFINS processing completed successfully
```

**7** Review the install message log (\$VMFINS \$MSGLOG). If necessary, correct any problems before going on. For information about handling specific error messages, see VM System Messages and Codes, or use on-line HELP.

vmfview install

## 6.4.1 Update Build Status Table for QMF for VM

**1** Update the VM SYSBLDS software inventory file for QMF for VM.

#### vmfins build ppf 5697F4BA {QMF | QMFSFS} (serviced nolink

Use QMF for installing on minidisks or QMFSFS for installing in Shared File System directories.

The SERVICED option will build any parts that were not built on the installation tape (if any) and update the Software Inventory build status table showing that the product 5697F4BA has been built.

**2** Review the install message log (\$VMFINS \$MSGLOG). If necessary, correct any problems before going on. For information about handling specific error messages, see System Messages and Codes, or use on-line HELP.

vmfview install

#### 6.5 Place QMF for VM Into Production

## 6.5.1 Define and Build the QMF for VM Saved Segments Using VMSES/E

It is recommended that segments be built for QMF for VM. First the segments are defined to the system using the segment mapping tool VMFSGMAP. Once the segments are defined VMFBLD is used to build them.

For more information on using VMSES/E for saved segments, review the chapter, "Using VMSES/E to Define, Build, and Manage Saved Segments" in the VM Planning and Administration manual.

Note: The defining and building of the QMF for VM saved segments should be performed from the installation user ID. If you move any segments that are currently defined on your system you must ensure that they are rebuilt from the user ID that maintains them.

1 Logon to the installation user ID P697F4BA.

2 Establish write access to the VMSES/E and software inventory disks.

#### link MAINT 51d 51d mr access 51d d

**3** Add QMF for VM segment object definitions to the SEGBLIST EXCO0000 build list.

#### vmfsgmap segbld esasegs segblist

This command displays a panel for making segment updates. See Figure 12 for an example of the Segment Map panel that will be displayed.

			VMFSGMAP -	Segment Map	More: + Lines 1 to <i>nn</i> of <i>nn</i>
Meg St Name M CMS M GCS	SYS	0123456789/ W-W	ABCDEF012345678 1		003-MB DABCDEF0123456789ABCDEF 3
Meg St Name CMSPIPES M GCS M HLASM	SYS	0123456789/ 4	ABCDEF012345678 5NNNNNNNNNNNNNNNNNNNNNNNNNNN	INNNNNNN6	007-MB DABCDEF0123456789ABCDEF RRRR 7 RRRRRRR7
Meg St Name DOSBAM CMSBAM CMSDOS CMSVMLIB DOSINST	SPA MEM MEM DCS	8 8 RRRRRRRRRR	ABCDEF012345678 9. 9. 9. RRRRRRR9.	A	00B-MB DABCDEF0123456789ABCDEF BRRRRBBBB.
Meg St Name HELPINST M CMS	DCS	0123456789/ RRRRRRRRRR	ABCDEF012345678 RRRRRRD	E	00F-MB PABCDEF0123456789ABCDEF FRRRRRRRRRRRRRRRRRRRRRRRRR
=======	===:				010 ND
F1=Help F7=Bkwd ====>_	F2 F8	010-MB 2=Chk Obj 8=Fwd	F3=Exit F	012-MB F4=Chg Obj F5=Fi F10=Add Obj F11=[	013-MB ile F6=Save Del Obj F12=Cancel

Figure 12. Segment Map panel example.

4 Go to Add Segment Definition panel by pressing PF10.

F10

**F10** takes you from the Segment Map panel to the Add Segment Definition panel. See Figure 13 on page 25 to see the Add Segment Definition panel that will be displayed.

Add Segment Definition Lines 1 to *nn* of *nn* OBJNAME...: QMF720E DEFPARMS...: SPACE....: TYPE....: SEG OBJDESC...: OBJINFO...: GT\_16MB...: NO DISKS....: SEGREQ....: PRODID....: 5697F4BA QMF BLDPARMS...: UNKNOWN F1=Help F2=Get Obj F3=Exit F4=Add Line F5=Map F6=Chk MEM F7=Bkwd F8=Fwd F9=Retrieve F10=Seginfo F11=Adj MEM F12=Cancel

Figure 13. Add Segment Definition panel example.

**5** Obtain the QMF for VM segment definitions from the PRODPART file by filling in the appropriate fields on the add segment definition panel.

OBJNAME....: QMF720E PRODID.....: 5697F4BA QMF Use **QMF** for building segments from a minidisk or **QMFSFS** for building segments from SFS directories.

F10

**F10** will obtain the QMF for VM segment information from the 5697F4BA PRODPART file. See Figure 14 on page 26 for the refreshed Add Segment definition panel that will be displayed.

```
Add Segment Definition
                                                                   More: +
                                                          Lines 1 to nn of nn
OBJNAME....: QMF720E
DEFPARMS...: 1B00-1DFF SR
SPACE....:
TYPE....:
OBJDESC....: QMF DCSS
OBJINFO....: Do not overlap DB2 and GDDM base segments. You must
              link to the GDDM product disk at the address listed
              below while building the QMF DCSS.
GT 16MB....: YES
DISKS....: 194
SEGREQ....:
PRODID....: 5697F4BA QMF
BLDPARMS...: PPF(5697F4BA QMF DSQ2EBSG)
VMFSMD2760I SEGINFO processing completed SUCCESSFULLY
F1=Help
            F2=Get Obj
                         F3=Exit
                                      F4=Add Line F5=Map
                                                                F6=Chk MEM
F7=Bkwd
            F8=Fwd
                         F9=Retrieve F10=Seginfo F11=Adj MEM
                                                                F12=Cancel
====>
```

Figure 14. Add Segment Definition panel showing the new segments

At this point you can modify the segment definition by updating the Add Segment Definition panel. Some things to keep in mind are:

- a. You must be linked to the GDDM base production (TXTLIB) disk when you load the QMF shared segment. The cuu address (or SFS directory) must be specified in the DISKS field in the panel above. The default address for the GDDM base production (TXTLIB) disk is 194. If you are using MAINT 19E as the GDDM production disk, remove the 194 entry from the DISKS field.
- b. If you have your own PPF override then you need to change the BLDPARMS field to reflect this.
- c. The QMF DCSS should not overlap the DCSS of the QMF interface products, (ie. GDDM, DB2 for VM, ISPF).
- **6** Go back to the Segment Map panel.

F5

F5 will return you to the Segment Map panel. See Figure 15 on page 27 for the refreshed Segment Map panel that will be displayed.

		VMFSGMAP -	· Segment Map	L	M ines <i>nn</i> to	ore: - nn of nn
St Name D QMF720E M BOOKTSTR M GCS1	018-MB Typ 0123456789AB DCS 8 SYS >NNNNNNNNNNN DCS 8 DCS 8	CDEF01234567 9 RRRRRRF	'89ABCDEF01234 A RRRRRRRRRRRRI INNNNNNNA	456789ABCD RRRRRRRRRRR	EF01234567 RRRRRRR RRRRRRRRRR B	RRRRRRRR>
St Name D QMF720E M BOOKTSTR	01C-MB Typ 0123456789AB DCS >RRRRRRRRRR DCS >RRRRRRRRRRR DCS >RRRRRRRRRRRRRRRRRRRRRRRRRRRRRRRRRRRR	CDEF01234567 RRRRRRRRRRR RRRRRRRRRRRR	'89ABCDEF01234 RRRRRRRRRE RRRRRRRRRE	456789ABCD	EF01234567 F F	
St Name M DB2HM69 M DB2HM84 F1=Help	020-MB Typ 0123456789AB DCS RRRRRRRRRRR DCS RRRRRRRRRRR F2=Chk Obj F F8=Fwd F	CDEF01234567 RRRRRRRRRRR RRRRRRRRRRRR 3=Exit	(89ABCDEF01234 RRRRRRRRRRRRR RRRRRRRRRRRRR F4=Chg Obj	456789ABCD RRRRRRRRR RRRRRRRRR F5=File	EF01234567 RRRRRRRRR RRRRRRRRR F6=Sa	RRRRRRR> RRRRRRR> ve

Figure 15. Segment Map panel with added segments.

**7** Save the new information and exit from the Segment Map panel.

F5

Ready; T=nn.nn/nn.nn hh:mm:ss

F5 saves all changed information and exits the map panel.

**8** Prepare to build the segments.

**a** IPL CMS to clear the virtual storage

ipl cms parm clear nosprof instseg no

\*\* DO NOT press ENTER at the VM READ!\*\*

access (noprof

IPL CMS to clear your virtual machine. This command bypasses the execution of the system profile (SYSPROF EXEC) and without loading the installation saved segment (CMSINST).

Bypass the execution of the PROFILE EXEC.

**b** Access the VMSES/E code

#### access 5e5 b

C Establish write access the Software Inventory Disk

#### link MAINT 51d 51d mr access 51d d

**d** You must be linked to the GDDM base production (TXTLIB) disk to load the QMF shared segment. The default address is 194 for GDDM. This was specified in the Add Segment Definition panel. Link to your GDDM disks at the address you specified on the Add Segment Definition Panel.

#### link p68416a 401 194 rr

If GDDM is using the MAINT 19E for its production disk, then do not issue the link for the 194 disk; nor a link for MAINT 19E as it should already be linked.

**9** Issue VMFBLD command to build the QMF for VM segments.

#### vmfbld ppf segbld esasegs segblist QMF720E (serviced

**Note:** If you received the message:

VMFBDS2003W The SYSTEM SEGID D(51D) file has been changed and must be moved to the S disk.

then the SYSTEM SEGID file on the CMS system disk (MAINT 190) and CMS test system disk (MAINT 490) must be updated. You need to log on to your MAINT user ID and copy the SYSTEM SEGID file from the MAINT 51D disk to the MAINT 190 and MAINT 490 disks. (The SYSTEM SEGID must have a filemode of 2.)

# 6.5.2 Copy QMF for VM Files Into Production

- 1 Logon to the installation user ID P697F4BA.
- **2** To copy QMF Test Distribution files to the QMF Distribution disk when installing using minidisks:

access 501 e access 500 f vmfcopy \* \* e = = f (prodid 5697F4BA%QMF olddate replace

> The VMFCOPY command will update the VMSES PARTCAT file on the 500 distribution disk.

Note: When installing using Shared File System directories instead of the access 501 e and access 500 f do access P697F4BA.qmf.tdistrib e and access P697F4BA.qmf.distrib f.

**3** To copy QMF Test Production files to the QMF Production disk when installing using minidisks:

access 401 e access 400 f vmfcopy \* \* e = = f (prodid 5697F4BA%QMF olddate replace

> The VMFCOPY command will update the VMSES PARTCAT file on the 400 production disk.

> Note: When installing using Shared File System directories instead of the access 401 e and access 400 f do access P697F4BA.qmf.tqmfprod e and access P697F4BA.qmf.qmfprod f.

# QMF for VM is now installed and built on your system.

#### 6.6 Post-Installation Considerations

Now that you have completed the VMSES/E installation of QMF for VM V7.2 and built the QMF DCSS, you must follow the steps in Installing and Managing QMF (GC27-0720) to install QMF for VM V7.2 into the DB2 for VM database and run the IVP. Installing and Managing QMF also contains information on starting QMF.

# 7.0 Service Instructions

This section of the Program Directory contains the procedure to install CORrective service to QMF for VM. VMSES/E is used to install service for QMF for VM.

To become more familiar with service using VMSES/E, you should read the introductory chapters in the *VMSES/E Introduction and Reference*. This manual also contains the command syntax for the VMSES/E commands listed in the procedure.

**Note:** Each step of the servicing instructions must be followed. Do not skip any step unless directed to do so. All instructions showing accessing of disks assume the use of default minidisk addresses. If different minidisk addresses are used, or if using a shared file system, change the instructions appropriately.

#### 7.1 VMSES/E Service Process Overview

The following is a brief description of the main steps in servicing QMF for VM using VMSES/E.

Setup Environment

Access the software inventory disk. Use VMFSETUP command to establish the correct minidisk access order.

· Merge Service

Use the VMFMRDSK command to clear the alternate apply disk before receiving new service. This allows you to remove the new service if a serious problem is found.

· Receive Service

The VMFREC command receives service from the delivery media and places it on the Delta disk.

Apply Service

The VMFAPPLY command updates the version vector table (VVT), which identifies the service level of all the serviced parts. In addition, AUX files are generated from the VVT for parts that require them.

• Reapply Local Service (if applicable)

All local service (mods) must be entered into the software inventory to allow VMSES/E to track the changes and build them into the system. Refer to Chapter 7 in the *Service Guide* for this procedure.

· Build New Levels

The build task generates the serviced level of an object and places the new object on a test BUILD disk.

· Place the New Service into Production

Once the service is satisfactorily tested it should be put into production by copying the new service to the production disk, re-saving the NSS (Named Saved System) or DCSS (Discontiguous Saved Segments), etc.

Note: You may want to build a test NSS or DCSS first. After successful test you can re-save the new NSS or DCSS.

## 7.2 Servicing QMF for VM

## 7.2.1 Prepare to Receive Service

#### Electronic Service (envelope file) -

If you have received the service electronically or on CD-ROM, follow the appropriate instructions to retrieve and decompress the envelope file to your A-disk. The decompression is currently done by using the DETERSE MODULE. The file names of the decompressed files will be of the format:

- VLST*num* for the documentation envelope
- VPTF*num* for the service envelope

The file type for both of these files must be SERVLINK. You will need to enter the file name on the VMFREC commands that follow.

The ppfname used throughout these servicing instructions is 5697F4BA, which assumes you are using the PPF supplied by IBM for QMF for VM. If you have your own PPF override file for QMF for VM, you should use your file's ppfname instead of 5697F4BA. The ppfname you use should be used throughout the rest of this procedure, unless otherwise stated differently.

- 1 Logon to QMF for VM service user ID P697F4BA
- 2 If the Software Inventory disk (51D) was accessed R/O (read only) then establish write access to the Software Inventory disk.

Note: If the MAINT 51D minidisk was accessed R/O, you will need to have the user that has it accessed R/W link it R/O. You then can issue the following commands to obtain R/W access to it.

link MAINT 51d 51d mr access 51d d

The 51D minidisk is where the VMSES/E Software Inventory files and other product dependent files reside.

**3** Have the QMF for VM CORrective service tape mounted and attached to P697F4BA. (If you have a SERVLINK file make sure that it is available on the A-disk.)

**4** Receive the documentation.

a If receiving the service from tape

#### vmfrec info

The INFO option loads the documentation (including the product service memo) to the 191 disk and displays a list of products on the tape.

**b** If receiving the service from an envelope file

#### vmfrec info (env vlstnum

The INFO option loads the documentation (including the product service memo) to the 191 disk and displays a list of products on the tape.

**5** Check the receive message log (\$VMFREC \$MSGLOG) for warning and error messages.

#### vmfview receive

Also make note of which products and components have service on the tape. To do this, use the PF5 key to show all status messages which identify the products on the tape.

- **6** Read the product memo (5697F4BA MEMO) before going on.
- **7** Setup the correct product access order.

#### vmfsetup 5697F4BA {QMF | QMFSFS}

Use QMF for installing on minidisks or QMFSFS for installing in Shared File System directories.

**8** Merge previously applied service to ensure that you have a clean alternate APPLY disk for new service.

#### vmfmrdsk 5697F4BA {QMF | QMFSFS} apply

Use QMF for installing on minidisks or QMFSFS for installing in Shared File System directories.

This command clears the alternate APPLY disk.

**9** Review the merge message log (\$VMFMRD \$MSGLOG). If necessary, correct any problems before going on. For information about handling

specific error messages, see VM *System Messages and Codes*, or use on-line HELP.

#### vmfview mrd

# 7.2.2 Receive the Service

**Note:** If you are installing multiple service tapes, you can receive all of the service for this prodid before applying and building it.

For each service tape or electronic envelope you want to receive, do the following:

**1** Receive the service.

**a** If receiving the service from tape

## vmfrec ppf 5697F4BA {QMF | QMFSFS}

Use **QMF** for installing on minidisks or **QMFSFS** for installing in Shared File System directories.

This command receives service from your service tape. All new service is loaded to the DELTA disk.

**b** If receiving the service from the PTF envelope file

## vmfrec ppf 5697F4BA {QMF | QMFSFS} (env vptfnum

Use **QMF** for installing on minidisks or **QMFSFS** for installing in Shared File System directories.

This command receives service from your service envelope. All new service is loaded to the DELTA disk.

**2** Review the receive message log (\$VMFREC \$MSGLOG). If necessary, correct any problems before going on. For information about handling specific error messages, see VM *System Messages and Codes*, or use on-line HELP.

## vmfview receive

# 7.2.3 Apply the Service

**1** Apply the new service.

# vmfapply ppf 5697F4BA {QMF | QMFSFS}

Use QMF for installing on minidisks or QMFSFS for installing in Shared File System directories.

This command applies the service that you just received. The version vector table (VVT) is updated with all serviced parts and all necessary AUX files are generated on the alternate APPLY disk.

You must review the VMFAPPLY message log if you receive a return code (RC) of a 4, as this may indicate that you have local modifications that need to be reworked.

2 Review the apply message log (\$VMFAPP \$MSGLOG). If necessary, correct any problems before going on. For information about handling specific error messages, see VM System Messages and Codes, or use on-line HELP.

vmfview apply

#### Note

If you get the message VMFAPP2120W then re-apply any local modifications before building the new QMF for VM. Refer to chapter 7 in the *Service Guide*. Follow the steps that are applicable to your local modification.

The following substitutions need to be made:

- esa or zvm should be 5697F4BA
- compname should be QMF or QMFSFS (minidisk or SFS)
- appid should be 5697F4BA
- fm-local should be the fm of 2C2
- fm-applyalt should be the fm of 2A6
- outmode localmod should be outmode localsam

If you have changed any of the installation parameters through a PPF override, you need to substitute your changed values where applicable.

Keep in mind that when you get to the "Return to the Appropriate Section to Build Remaining Objects" or "Rebuild Remaining Objects" step in the VM *Service Guide*, you should return back to this program directory at 7.2.4, "Update the Build Status Table" on page 35.

# 7.2.4 Update the Build Status Table

1 Update the Build Status Table with serviced parts.

vmfbld ppf 5697F4BA {QMF | QMFSFS} (status

Use **QMF** for installing on minidisks or **QMFSFS** for installing in Shared File System directories.

This command updates the Build Status Table.

#### Note -

If the \$PPF files have been serviced you will get the following prompt:

VMFBLD2185R The following source product parameter files have been serviced:

VMFBLD2185R 5697F4BA \$PPF

VMFBLD2185R When source product parameter files are serviced, all product parameter files built from them must be recompiled using VMFPPF before VMFBLD can be run.

VMFBLD2185R Enter zero (0) to have the serviced source product parameter files built to your A-disk and exit VMFBLD so you can recompile your product parameter files with VMFPPF.

VMFBLD2185R Enter one (1) to continue only if you have already recompiled your product parameter files with VMFPPF.

0

Enter a 0 and complete the following steps before you continue.

VMFBLD2188I Building 5697F4BA \$PPF on 191 (A) from level \$PFnnnnn

vmfppf 5697F4BA \*

Note: If you've created your own PPF override then use your PPF name instead of 5697F4BA.

copyfile 5697F4BA \$PPF a = = d (olddate replace erase 5697F4BA \$PPF a

> Note: Do not use your own PPF name in place of 5697F4BA for the COPYFILE and ERASE commands.

## vmfbld ppf 5697F4BA {QMF | QMFSFS} (status

1

Re-issue VMFBLD to complete updating the build status table.

Use QMF for installing on minidisks or QMFSFS for installing in Shared File System directories. When you receive the prompt that was previously displayed, enter a 1 to continue.

**2** Use VMFVIEW to review the build status messages, and see what objects need to be built.

#### vmfview build

# 7.2.5 Build Serviced Objects

1 If you are using ISPF with QMF then you need to link and access the ISPF library code disk before you run the VMFBLD in the next step. This is in case there is service to the DSQCISPL MODULE.

If you are not running with ISPF, that is fine, as ISPF is optional. In that case if you receive the following warning message you can ignore it.

ST:VMFBDM2219I Processing object DSQCISPL.MODULE WN:VMFBDM1966W The command, INCLUDE, completed with return code 4 while processing object DSQCISPL.MODULE. It was operating upon WN: WN: file ISPLINK TEXT

**2** Rebuild QMF for VM serviced parts.

## vmfbld ppf 5697F4BA {QMF | QMFSFS} (serviced

Use QMF for installing on minidisks or QMFSFS for installing in Shared File System directories.

Note: If your software inventory disk (51D) is not owned by the MAINT user ID then make sure the VMSESE PROFILE reflects the correct owning user ID.

**3** Review the build message log (\$VMFBLD \$MSGLOG). If necessary, correct any problems before going on. For information about handling specific error messages, see VM System Messages and Codes, or use on-line HELP.

vmfview build

# 7.3 Place the New QMF for VM Service Into Production

# 7.3.1 Rebuild the Saved Segments

Note: Before saving the QMF DCSS, QMF720E, you can build a test DCSS. The commands to do this for a test DCSS called QMF720T are below. You must be linked to the DB2 for VM 195 disk as 195 and the GDDM production disk as 194.

- VMLINK SQLDBA 195 <195</li>
- VMLINK GDDM <194</li>
- DEFSEG QMF720T 1B00-1DFF SR
- DSQ2ESEG QMF720T

You can test the QMF720T DCSS by using the test QMF libraries and the test DCSS.

Once satisfied with the test, you can then save the production DCSS, QMF720E, using the process below.

**1** Prepare to build the segments.

a IPL CMS to clear the virtual storage

ipl cms parm clear nosprof instseg no

\*\* DO NOT press ENTER at the VM READ!\*\*

access (noprof

IPL CMS to clear your virtual machine. This command bypasses the execution of the system profile (SYSPROF EXEC) and without loading the installation saved segment (CMSINST).

Bypass the execution of the PROFILE EXEC.

**b** Access the VMSES/E code

access 5e5 b

C Establish write access the Software Inventory Disk

link MAINT 51d 51d mr access 51d d

> **d** You must be linked to the GDDM base production (TXTLIB) disk to load the QMF shared segment. The default address is 194 for GDDM. This was specified in the Add Segment Definition panel. Link to your GDDM disks at the address you specified on the Add Segment Definition Panel.

## link p68416a 401 194 rr

If GDDM is using the MAINT 19E for its production disk, then do not issue the link for the 194 disk; nor a link for MAINT 19E as it should already be linked.

**2** Re-save the QMF for VM segments.

## vmfbld ppf segbld esasegs segblist QMF720E (serviced

Note: If you received the message:

VMFBDS2003W The SYSTEM SEGID D(51D) file has been changed and must be moved to the S disk.

then the SYSTEM SEGID file on the CMS system disk (MAINT 190) and CMS test system disk (MAINT 490) must be updated. You need to log on to your MAINT user ID and copy the SYSTEM SEGID file from the MAINT 51D disk to the MAINT 190 and MAINT 490 disks.

**3** Review the build message log (\$VMFBLD \$MSGLOG). If necessary, correct any problems before going on. For information about handling specific error messages, see VM System Messages and Codes, or use on-line HELP.

vmfview build

# 7.3.2 Copy the New QMF for VM Serviced Files Into Production

- 1 Logon to the installation user ID P697F4BA.
- **2** To copy QMF Test Distribution files to the QMF Distribution disk when installing using minidisks:

access 501 e access 500 f vmfcopy \* \* e = = f (prodid 5697F4BA%QMF olddate replace

> The VMFCOPY command will update the VMSES PARTCAT file on the 500 distribution disk.

Note: When installing using Shared File System directories instead of the access 501 e and access 500 f do access P697F4BA.qmf.tdistrib e and access P697F4BA.qmf.distrib f.

**3** To copy QMF Test Production files to the QMF Production disk when installing using minidisks:

access 401 e access 400 f vmfcopy \* \* e = = f (prodid 5697F4BA%QMF olddate replace

> The VMFCOPY command will update the VMSES PARTCAT file on the 400 production disk.

> Note: When installing using Shared File System directories instead of the access 401 e and access 400 f do access P697F4BA.qmf.tqmfprod e and access P697F4BA.qmf.qmfprod f.

You have finished servicing QMF for VM.

# Appendix A. Create Product Parameter File (PPF) Override

This section provides information to help you create a product parameter file (PPF) override. The example used in this section shows how to change the shared file system (SFS) file pool where QMF for VM files reside.

**Note:** Do **not** modify the product supplied 5697F4BA \$PPF or 5697F4BA PPF files to change the file pool name or any other installation parameters. If the 5697F4BA \$PPF file is serviced, the existing \$PPF file will be replaced, and any changes to that file will be lost; by creating your own \$PPF override, your updates will be preserved.

The following process describes changing the default file pool name, VMSYS, to MYPOOL1:.

1 Create a new \$PPF override file, or edit the override file created via the 'Make Override Panel' function.

xedit overname \$PPF fm2

overname is the PPF override file name (such as 'myqmf') that you want to use.

fm is an appropriate file mode. If you create this file yourself, specify a file mode of A.

If you modify an existing override file, specify a file mode of A or D, based on where the file currently resides (A being the file mode of a R/W 191 minidisk, or equivalent; D, that of the MAINT 51D minidisk).

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2 Create (or modify as required) the Variable Declarations (:DCL.) section for the gmfsfs override area, so that it resembles the :DCL. section shown below. This override will be used for the installation of QMF for VM. Modifications needed are denoted in **bold**print.

```
:OVERLST. QMFSFS
* Override Section for Initial Installation (Using SFS Directories)
:QMFSFS. QMFSFS 5697F4BA
:DCL. REPLACE
&INST191
          DIR MYPOOL1:P697F4BA.
           DIR MYPOOL1:P697F4BA.QMF.SAMPLE
&SAMPZ
&DELTZ
&APPLX
&APPLZ
&BAS1Z
           DIR MYPOOL1:P697F4BA.QMF.DELTA
           DIR MYPOOL1:P697F4BA.QMF.APPLYALT
           DIR MYPOOL1:P697F4BA.QMF.APPLYPROD
           DIR MYPOOL1:P697F4BA.QMF.OBJECT
&BLD0Z
           DIR MYPOOL1:P697F4BA.QMF.TQMFPROD
&DISK9
           DIR MYPOOL1:P697F4BA.QMF.TDISTRIB
           DIR MYPOOL1:P697F4BA.QMF.QMFPROD
&BLD1Z
&DISK10
           DIR MYPOOL1:P697F4BA.QMF.DISTRIB
&QMFID1
           USER P697F4BA
&DB2195
           DIR MYPOOL:SQLMACH.SQL.PRODUCTION
:EDCL.
:END.
```

(This override will replace the :DCL. section of the qmfsfs override area of the 5697F4BA \$PPF file.)

3 If your \$PPF override file was created at file mode A, copy it to file mode D-the Software Inventory minidisk (MAINT 51D). Then erase it from file mode A.

file copyfile overname \$PPF fm = = d (olddate erase overname \$PPF fm

**4** Compile your changes to create the usable *overname* PPF file.

vmfppf overname QMFSFS

where overname is the file name of your \$PPF override file.

Now that the *overname* PPF file has been created, you should specify *overname* instead of 5697F4BA as the PPF name to be used for those VMSES/E commands that require a PPF name.

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Ease of product installation	1	2	3	4	5	N
Time required to install the product	1	2	3	4	5	Ν
Contents of program directory	1	2	3	4	5	Ν
Readability and organization of program directory tasks	1	2	3	4	5	Ν
Necessity of all installation tasks	1	2	3	4	5	Ν
Accuracy of the definition of the installation tasks	1	2	3	4	5	Ν
Technical level of the installation tasks	1	2	3	4	5	Ν
Installation verification procedure	1	2	3	4	5	Ν
Ease of customizing the product	1	2	3	4	5	Ν
Ease of migrating the product from a previous release	1	2	3	4	5	Ν
Ease of putting the system into production after installation	1	2	3	4	5	N
Ease of installing service	1	2	3	4	5	Ν

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