



Program Directory for VM Performance Reporting Facility

Release 2.2

Program Number 5684-073

for Use with
VM/ESA® 2.3.0 or higher
z/VM Version 3

Document Date: February 2001

GI10-4716-00

Note

Before using this information and the product it supports, be sure to read the general information under "Notices" on page 41.

This program directory, dated February 2001, applies to VM Performance Reporting Facility Release 2.2 (VMPRF), Program Number 5684-073.

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Contents

Summary of Changes	v
VMPRF Web Information	v
1.0 Introduction	1
1.1 Program Description	1
1.2 Enhancements for VM Performance Reporting Facility	2
2.0 Program Materials	3
2.1 Basic Machine-Readable Material	3
2.2 Optional Machine-Readable Material	4
2.3 Program Publications	4
2.3.1 Softcopy Publications	4
2.3.2 Basic Program Publications	5
2.4 Microfiche Support	5
2.5 Publications Useful During Installation	5
3.0 Program Support	7
3.1 Preventive Service Planning	7
3.2 Statement of Support Procedures	7
4.0 Program and Service Level Information	8
4.1 Program Level Information	8
4.2 Service Level Information	8
4.3 Cumulative Service Tape	8
5.0 Installation Requirements and Considerations	9
5.1 Hardware Requirements	9
5.2 Program Considerations	9
5.2.1 Operating System Requirements	9
5.2.2 Other Program Product Requirements	9
5.2.3 Program Installation and Service Considerations	10
5.3 DASD Storage and User ID Requirements	10
6.0 Installation Instructions	13
6.1 VMSES/E Installation Process Overview	13
6.2 Plan Your Installation For VMPRF	14
6.3 Allocate Resources for Installing VMPRF	17
6.3.1 Installing VMPRF on Minidisk	17
6.3.2 Installing VMPRF in SFS Directories	18
6.4 Install VMPRF	20
6.4.1 Update Build Status Table for VMPRF	22
6.5 Post Install Tailoring	22

6.6 Place VMPRF Into Production	26
6.6.1 Copy VMPRF Files Into Production	26
6.7 Post-Installation Considerations	27
7.0 Service Instructions	28
7.1 VMSES/E Service Process Overview	28
7.2 Servicing VMPRF	29
7.2.1 Prepare to Receive Service	29
7.2.2 Receive the Service	31
7.2.3 Apply the Service	32
7.2.4 Update the Build Status Table	33
7.2.5 Build Serviced Objects	35
7.2.6 Additional Service Steps	35
7.3 Place the New VMPRF Service Into Production	36
7.3.1 Copy the New VMPRF Serviced Files Into Production	36
Appendix A. Create Product Parameter File (PPF) Override	38
Notices	41
Trademarks and Service Marks	42
Reader's Comments	43

Figures

1. Basic Material: Program Tape	3
2. Program Tape: File Content	3
3. Basic Material: Unlicensed Publications	5
4. Publications Useful During Installation / Service on z/VM Version 3	5
5. Publications Useful During Installation / Service on VM/ESA 2.3.0 or VM/ESA 2.4.0	6
6. PSP Upgrade and Subset ID	7
7. Component IDs	7
8. DASD Storage Requirements for Target Minidisks	11
9. VMPRF 122 Supplied Sample Customization Files	22

Summary of Changes

The following describes the different revision indicators used and the time frame when they were inserted:

- The first suffix level is February 2001.

VMPRF Web Information

The VMPRF web page can be visited at URL <http://www.ibm.com/s390/vm/related/prf> where you will find:

- Additional useful information, hints, and tips.
- A postscript version of the VMPRF 122 program directory available for downloading.
- A PDF version of the VMPRF 122 program directory available for viewing.
- Additional IBM VM performance resources.

Plan on visiting this URL often.

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 VMPRF. 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 3 identifies the basic and optional program materials and documentation for VMPRF.
- 3.0, “Program Support” on page 7 describes the IBM support available for VMPRF.
- 4.0, “Program and Service Level Information” on page 8 lists the APARs (program level) and PTFs (service level) incorporated into VMPRF.
- 5.0, “Installation Requirements and Considerations” on page 9 identifies the resources and considerations for installing and using VMPRF.
- 6.0, “Installation Instructions” on page 13 provides detailed installation instructions for VMPRF.
- 7.0, “Service Instructions” on page 28 provides detailed servicing instructions for VMPRF.
- Appendix A, “Create Product Parameter File (PPF) Override” on page 38 provides detailed information on overriding the Product Parameter File (PPF).

Before installing VMPRF, read 3.1, “Preventive Service Planning” on page 7. This section tells you how to find any updates to the information and procedures in this program directory.

1.1 Program Description

VM Performance Reporting Facility Version 1 Release 2 Modification 2 (VMPRF 5684-073) provides performance management capabilities for VM systems. It is a post-processor of the VM Control Program (CP) monitor data. It is a performance analysis tool for z/VM and VM/ESA systems which can be used to detect and diagnose performance problems, analyze system performance, and provide printed reports that show the utilizations and response times of key system components.

History files created by VMPRF can be used as input for performance analysis by VMPAF, Service Level Reporter (SLR 5665-397), or installation-written application programs. VMPRF is useful for systems analysts, systems programmers, and systems administrators; it simplifies the work of resource management in z/VM and VM/ESA systems.

1.2 Enhancements for VM Performance Reporting Facility

The following enhancements have been made to VMPRF:

- VM performance reporting support for z/VM Version 3, including 64-bit architecture.
- Enabled to recognize monitor records created by z/VM 3.1.0.
- Recognition of VM/ESA monitor records not supported by VMPRF 1.2.0.
- Installation and service using VMSES/E.

2.0 Program Materials

An IBM program is identified by a program number. The program number for VM Performance Reporting Facility is 5684-073.

The program announcement material describes the features supported by VMPRF. 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 3480 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 13 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 Number	Medium	Physical Volume	Tape Content	External Tape Label
5872	3480 cart.	1	VMPRF 122	VM/PRF Base Product
7118	4MM-DAT cart.	1	VMPRF 122	VM/PRF Base Product

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
6	PTFPARTs
7	VMPRF Service
8	VMPRF Service

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

Tape File	Content
9	VMPRF Base Code
10	VMPRF Executable Code
11	VMPRF Customization Files

2.2 Optional Machine-Readable Material

There are no optional machine-readable materials for VMPRF.

2.3 Program Publications

The following sections identify the basic and optional publications for VMPRF.

2.3.1 Softcopy Publications

The VMPRF publication:

VM Performance Reporting Facility Users Guide and Reference, SC23-0460-07,

is offered in displayable softcopy form on CD-ROM. This publication is shipped on the *IBM Online Library Omnibus Edition VM Collection* (SK2T-2067) CD-ROM. One copy of the VM collection kit CD-ROM is included when you order the basic materials for VMPRF.

Displayable manuals can be used with the BookManager® READ licensed programs in any of the supported environments. Terms and conditions for use of the machine-readable files are shipped with the Online Product Library.

2.3.2 Basic Program Publications

One copy of the following publication is included when you order the basic materials for VMPRF. For additional copies, contact your IBM representative.

Figure 3. Basic Material: Unlicensed Publications

Publication Title	Form Number
<i>IBM Online Library Omnibus Edition VM Collection</i>	SK2T-2067-16

Note:

- In countries outside the United States, the form number for ordering the *IBM Online Library Omnibus Edition VM Collection* may be 5636-PUB.
- The *VM Performance Reporting Facility Users Guide and Reference*, SC23-0460-07, manual is only available on the *IBM Online Library Omnibus Edition VM Collection*.

2.4 Microfiche Support

There is no microfiche for VMPRF.

2.5 Publications Useful During Installation

The publications listed in Figure 4 and Figure 5 on page 6 may be useful during the installation of VMPRF. To order copies, contact your IBM representative.

Figure 4. Publications Useful During Installation / Service on z/VM Version 3

Publication Title	Form Number
<i>z/VM: VMSES/E Introduction and Reference</i>	GC24-5947
<i>z/VM: Service Guide</i>	GC24-5946
<i>z/VM: Planning and Administration</i>	SC24-5948
<i>z/VM: CP Command and Utility Reference</i>	SC24-5967
<i>z/VM: CMS Command Reference</i>	SC24-5969
<i>z/VM: CMS File Pool Planning, Administration, and Operation</i>	SC24-5949
<i>z/VM: System Messages and Codes</i>	GC24-5974
<i>z/VM: Performance</i>	SC24-5952
<i>VM Performance Reporting Facility Users Guide and Reference</i>	SC23-0460

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

Publication Title	Form Number
<i>VM/ESA: VMSES/E Introduction and Reference</i>	GC24-5837
<i>VM/ESA: Service Guide</i>	GC24-5838
<i>VM/ESA: Planning and Administration</i>	SC24-5750
<i>VM/ESA: CP Command and Utility Reference</i>	SC24-5773
<i>VM/ESA: CMS Command Reference</i>	SC24-5776
<i>VM/ESA: CMS File Pool Planning, Administration, and Operation</i>	SC24-5751
<i>VM/ESA: System Messages and Codes</i>	GC24-5841
<i>VM/ESA: Performance</i>	SC24-5782
<i>VM Performance Reporting Facility Users Guide and Reference</i>	SC23-0460

Note

References to VM publications through out this program directory do not include the system name (VM/ESA or z/VM). Add the appropriate system name for your environment.

3.0 Program Support

This section describes the IBM support available for VMPRF.

3.1 Preventive Service Planning

Before installing VMPRF, 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 6. PSP Upgrade and Subset ID

Retain			
COMPID	Release	Upgrade	Subset
568407301	122	VMPRF122	PRF/122

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 7 identifies the component ID (COMPID), Retain Release and Field Engineering Service Number (FESN) for VMPRF.

Figure 7. Component IDs

Retain			
COMPID	Release	Component Name	FESN
568407301	122	VMPRF 122	0401144

4.0 Program and Service Level Information

This section identifies the program and any relevant service levels of VMPRF. 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

The following APAR fixes against the previous release of VMPRF have been incorporated into this release.

VM47165 VM47216 VM47217 VM47220 VM47221 VM47223 VM47225 VM47646 VM47859
VM47877 VM48137 VM48491 VM48976 VM49025 VM49065 VM49222 VM49225 VM49632
VM49826 VM49881 VM50008 VM50187 VM50442 VM50844 VM51172 VM51220 VM51305
VM51710 VM52100 VM52103 VM52225 VM52375 VM52533 VM52716 VM53005 VM53166
VM53182 VM53284 VM53295 VM53430 VM53454 VM53493 VM53741 VM54457 VM54734
VM54911 VM54924 VM55000 VM55076 VM55121 VM55526 VM55672 VM56672 VM57240
VM57497 VM57540 VM57958 VM58149 VM58319 VM58357 VM58490 VM58511 VM58523
VM58575 VM58650 VM58691 VM58756 VM58839 VM58990 VM59038 VM59049 VM59117
VM59153 VM59321 VM59341 VM59419 VM59510 VM59596 VM59598 VM59656 VM59672
VM59857 VM59889 VM60173 VM60180 VM60297 VM60532 VM60550 VM60800 VM60882
VM60986 VM61755 VM61756 VM61819 VM61849 VM61940 VM62233 VM62340 VM62512

4.2 Service Level Information

Check the VMPRF122 PSP bucket for any additional PTFs that should be installed or any additional install information. This can be accomplished by checking with your IBM Support Center or using IBMLink (ServiceLink). In addition, review the VM Performance Reporting Facility web page at <http://www.ibm.com/s390/vm/related/prf> for any additional service hints, tips, and concerns.

4.3 Cumulative Service Tape

Cumulative service for VMPRF Release 2.2 is available through a monthly corrective service tape, Expanded Service Option, ESO.

5.0 Installation Requirements and Considerations

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

5.1 Hardware Requirements

There are no special hardware requirements for VMPRF.

5.2 Program Considerations

The following sections list the programming considerations for installing and activating VMPRF functions.

5.2.1 Operating System Requirements

VMPRF supports the following VM operating systems:

- z/VM Version 3
- VM/ESA Version 2 Release 4
- VM/ESA Version 2 Release 3
- **RSU9904 service level** or above must be applied to VMSES/E on VM/ESA 2.4.0 prior to installing VMPRF
- **RSU9905 service level** or above must be applied to VMSES/E on VM/ESA 2.3.0 prior to installing VMPRF

Note: VMSES/E product packaging APAR VM62316 has to be applied in order to install VMPRF. It is contained in the above RSU's. It is in the base of z/VM 3.1.0.

5.2.2 Other Program Product Requirements

The following software products are required for the execution of VMPRF:

- IBM Language Environment® VM Version 1 Release 8 Modification 0
LE 1.8.0 is shipped preinstalled on VM/ESA 2.3.0, VM/ESA 2.4.0, and z/VM 3.1.0 or higher.
- Apply any outstanding fixes to CP monitor data.
- Monitor data on disk or tape in MONWRITE format. Any program may be used to write the data as long as the format is compatible. Refer to *Performance* manual for the format of MONWRITE output and the use of *MONITOR.

Usage Notes:

1. VMPRF does not load the monitor saved segment.
2. VMPRF does not connect to the *MONITOR CP system service.
3. In the case of a z/VM or VM/ESA system running in LPAR (logically partitioned) mode with the Processor Resource/Systems Manager™ (PR/SM™) feature, VMPRF reports not only on the performance of the VM system collecting the monitor data, but also on the performance of each logical partition, each running its own operating system.
4. VMPRF reports contain information in mixed case (uppercase and lowercase letters). If you are using a printer or terminal that cannot display the lowercase letters, convert the file to uppercase characters with the following command:

```
COPYFILE fn ft fm (UPCASE
```

5.2.3 Program Installation and Service Considerations

This section describes items that should be considered before you install or service VMPRF.

- 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 VMPRF strictly using the MAINT user ID, but will use a new user ID--5684073C. 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 during the installation procedure 6.2, "Plan Your Installation For VMPRF" step 6 on page 15, rather than after you have installed this product.

5.3 DASD Storage and User ID Requirements

Figure 8 on page 11 lists the user IDs, minidisks and default SFS directory names that are used to install and service VMPRF.

Important Installation Notes:

- User ID(s) and minidisks or SFS directories will be defined in 6.2, "Plan Your Installation For VMPRF" on page 14 and are listed here so that you can get an idea of the resources that you will need prior to allocating them.
- 5684073C 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 VMPRF" step 6 on page 15.

- If you choose to install VMPRF on a common user ID the default minidisk addresses for VMPRF may already be defined. If any of the default minidisks required by VMPRF are already in use you will have to create an override to change the default minidisks for VMPRF so they are unique.

Figure 8 (Page 1 of 2). DASD Storage Requirements for Target Minidisks

Minidisk owner (user ID)	Default Address	Storage in Cylinders		FB-512 Blocks	SFS 4K Blocks	Usage
		DASD	CYLS			Default SFS Directory Name
5684073C	2B2	3390 3380 9345	9 10 10	12000	1500	Contains all the base code shipped with VMPRF. VMSYS:5684073C.VMPRF.OBJECT
5684073C	2C2	3390 3380 9345	2 2 2	2400	300	Contains customization files. This disk may also be used for local modifications. VMSYS:5684073C.VMPRF.SAMPLE
5684073C	2D2	3390 3380 9345	75 90 90	108000	13500	Contains serviced files VMSYS:5684073C.VMPRF.DELTA
5684073C	2A6	3390 3380 9345	2 2 2	2400	300	Contains AUX files and software inventory tables that represent the test service level of VMPRF VMSYS:5684073C.VMPRF.APPLYALT
5684073C	2A2	3390 3380 9345	2 2 2	2400	300	Contains AUX files and software inventory tables that represent the service level of VMPRF that is currently in production. VMSYS:5684073C.VMPRF.APPLYPROD
5684073C	597	3390 3380 9345	50 60 60	72000	9000	Test build disk. This code will be copied to VMPRF production disk. VMSYS:5684073C.VMPRF.TBUILD
5684073C	497	3390 3380 9345	50 60 60	72000	9000	Production build disk. VMSYS:5684073C.VMPRF.PBUILD
5684073C	191	3390 3380 9345	5 5 5	6000	750	5684073C user ID's 191 minidisk VMSYS:5684073C.
VMPRF	191	3390 3380 9345	25 30 30	36000	4500	VMPRF user ID's 191 work minidisk VMSYS:VMPRF.

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. 41100 4K blocks are needed for SFS install.

Figure 8 (Page 2 of 2). DASD Storage Requirements for Target Minidisks

Minidisk owner (user ID)	Default Address	Storage in Cylinders		FB-512 Blocks	SFS 4K Blocks	Usage
		DASD	CYLS			Default SFS Directory Name
VMPRF	192	3390 3380 9345	9 10 10	12000	1500	VMPRF user ID's 192 minidisk for output files. VMSYS:VMPRF.WORK192
MONWRITE	191	3390 3380 9345	90 100 100	120000	15000	VM disk containing monitor data Note: This size varies depending on the magnitude of monitor data.
<p>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. 41100 4K blocks are needed for SFS install.</p>						

6.0 Installation Instructions

This chapter describes the installation methods and the step-by-step procedures to install and activate VMPRF.

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 VMPRF, adapt these instructions as needed for your environment.

Note

The sample console output presented throughout these instructions was produced on a z/VM 3.1.0 system. If you're installing VMPRF on a different z/VM or 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 VMPRF using VMSES/E.

- Plan Your Installation

Use the VMFINS command to load several VMSES/E files from the product tape and to obtain VMPRF 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 VMPRF.

- Install the VMPRF Product

Use the VMFINS command to load the VMPRF 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 6.7, "Post-Installation Considerations" on page 27.

- Place VMPRF Files into Production

Once the product files have been tailored and the operation of VMPRF 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 VMPRF

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 VMPRF 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 VMPRF 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 VMPRF 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.

```
VMFINS2767I Reading VMFINS DEFAULTS B for additional options
VMFINS2760I VMFINS processing started
VMFINS1909I VMFINS PRODLIST created on your A-disk
VMFINS2760I VMFINS processing completed successfully
Ready;
```

6 Obtain resource planning information for VMPRF.

Notes:

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

vmfins install ppf 5684073C {VMPRF | VMPRFSFS} (plan nomemo)

Use **VMPRF** for installing on minidisks or **VMPRFSFS** 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 VMPRF. For example, you will need to specify your PPF override file name instead of 5684073C 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 5684073C VMPRF
             :PRODID. 5684073C%VMPRF?
             Enter 0 (No), 1 (Yes) or 2 (Exit)
0
VMFINS2603I Processing product :PPF 5684073C VMPRF :PRODID
             5684073C%VMPRF
VMFREQ1909I 5684073C PLANINFO created on your A-disk
VMFREQ2805I Product :PPF 5684073C VMPRF :PRODID 5684073C%VMPRF
             has passed requisite checking
VMFINT2603I Planning for the installation of product :PPF 5684073C VMPRF
             :PRODID 5684073C%VMPRF
VMFRMT2760I VMFRMT processing started
VMFRMT2760I VMFRMT processing completed successfully
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 *System Messages and Codes*, or use on-line HELP.

vmfview install

6.3 Allocate Resources for Installing VMPRF

Use the planning information in the 5684073C PLANINFO file, created in the **PLAN** step, to:

- Create the 5684073C and VMPRF user directories for minidisk install

OR

- Create the 5684073C and VMPRF user directories for SFS install

6.3.1 Installing VMPRF on Minidisk

- 1** Obtain the user directories from the 5684073C PLANINFO file.

Notes:

- a. User directory entries are 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 5684073C and VMPRF user ID's. Use the directory entries found in PLANINFO as a model as input to your system directory.
- b. Although not recommended, class E is also required for the VMPRF user ID if it will define and save the MONITOR DCSS.

- 2** Add the MDISK statements to the directory entries for 5684073C and VMPRF. Use Figure 8 on page 11 to obtain the minidisk requirements.

- 3** Add the 5684073C and VMPRF directory entries to the system directory. Change the passwords from xxxxx to a valid password, in accordance with your security guidelines.

- 4** Place the new directories on-line using VM/Directory Maintenance (DIRMAINT) or an equivalent CP directory maintenance method.

Note

All minidisks for the 5684073C and VMPRF user ID's must be formatted before installing VMPRF.

6.3.2 Installing VMPRF in SFS Directories

- 1 Obtain the user directories from the 5684073C PLANINFO file.

Notes:

- a. User directory entries are 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 5684073C and VMPRF user ID's. Use the directory entry found in PLANINFO as a model as input to your system directory.
 - b. Although not recommended, class E is also required for the VMPRF user ID if it will define and save the MONITOR DCSS.
- 2 Add the 5684073C and VMPRF directory entries to the system directory. Change the passwords from xxxxx to a valid password, in accordance with your security guidelines.
 - 3 Place the new directories on-line using VM/Directory Maintenance (DIRMAINT) or an equivalent CP directory maintenance method.
 - 4 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 VMPRF SFS directories, the 4K block requirements for the directories are summarized in Figure 8 on page 11.

This information will be used when enrolling the user ID, 5684073C, in the VMSYS filepool.

- b Enroll user 5684073C and VMPRF in the VMSYS filepool using the ENROLL USER command:

```
ENROLL USER 5684073C VMSYS: (BLOCKS blocks)  
ENROLL USER VMPRF 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 VMPRF. 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 VMPRF 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 5684073C PLANINFO file using the CREATE DIRECTORY command.

```
set filepool vmsys:  
create directory dirid  
create directory VMSYS:5684073C.OBJECT  
create directory VMSYS:5684073C.SAMPLE  
create directory VMSYS:5684073C.DELTA  
create directory VMSYS:5684073C.APPLYALT  
create directory VMSYS:5684073C.APPLYPROD  
create directory VMSYS:5684073C.TBUILD  
create directory VMSYS:5684073C.PBUILD  
create directory VMSYS:VMPRF.WORK192
```

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

- e** Give the **MAINT** user ID READ authority to the general-use test build directory, and give the **VMPRF** user ID write authority to the 5684073C user ID's test and production build disks, using the GRANT AUTHORITY command.

```
grant auth vmsys:5684073C.vmprf.tbuid to MAINT (read newread  
grant auth vmsys:5684073C.vmprf.tbuid to VMPRF (read newread  
grant auth vmsys:5684073C.vmprf.pbuid to VMPRF (read newread
```

If necessary, see the *CMS Command Reference* manual for more information about the GRANT AUTHORITY command.

- f** If you intend to use an SFS directory as the work space for the 5684073C and VMPRF user ID's, include the following IPL control statement in the 5684073C and VMPRF directory entries:

```
IPL CMS PARM FILEPOOL VMSYS
```

This will cause CMS to automatically access the 5684073C's and VMPRF's top directory as file mode A.

SFS Considerations

If you are installing to an SFS directory and your A-disk is also an SFS directory but in a different filepool, Coordinated Resource Recovery (CRR) needs to be running on your system.

6.4 Install VMPRF

The *ppfname* used throughout these installation instructions is **5684073C**, which assumes you are using the PPF supplied by IBM for VMPRF. If you have your own PPF override file for VMPRF, you should use your file's *ppfname* instead of **5684073C**. The *ppfname* you use should be used **throughout** the rest of this procedure.

- 1 Logon to the installation user ID **5684073C**.
- 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 VMPRF installation tape mounted and attached to 5684073C at virtual address 181. The VMFINS EXEC requires the tape drive to be at virtual address 181.

- 6 Install VMPRF.

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 (5684073C), 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 5684073C {VMPRF | VMPRFSFS} (nomemo nolink

Use **VMPRF** for installing on minidisks or **VMPRFSFS** 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 5684073C VMPRF
:PRODID. 5684073C%VMPRF?
Enter 0 (No), 1 (Yes) or 2 (Exit)
0
VMFINS2603I Processing product :PPF 5684073C VMPRF :PRODID
5684073C%VMPRF
VMFREQ2805I Product :PPF 5684073C VMPRF :PRODID 5684073C%VMPRF
has passed requisite checking
VMFINT2603I Installing product :PPF 5684073C VMPRF :PRODID
5684073C%VMPRF
VMFSET2760I VMFSETUP processing started for 5684073C VMPRF
VMFUTL2205I Minidisk|Directory Assignments:
String Mode Stat Vdev Label/Directory
VMFUTL2205I LOCALSAM E R/W 2C2 SES2C2
VMFUTL2205I APPLY F R/W 2A6 SES2A6
VMFUTL2205I G R/W 2A2 SES2A2
VMFUTL2205I DELTA H R/W 2D2 SES2D2
VMFUTL2205I BUILD0 I R/W 597 SES597
VMFUTL2205I BASE1 J R/W 2B2 SES2B2
VMFUTL2205I ----- A R/W 191 SES191
VMFUTL2205I ----- B R/O 5E5 MNT5E5
VMFUTL2205I ----- D R/W 51D SES51D
VMFUTL2205I ----- S R/O 190 MNT190
VMFUTL2205I ----- Y/S R/O 19E MNT19E
VMFSET2760I VMFSETUP processing completed successfully
VMFREC2760I VMFREC processing started
VMFREC1852I Volume 1 of 1 of INS TAPE 0100
VMFREC1851I (1 of 7) VMFRCAXL processing AXLIST
VMFRCX2159I Loading n part(s) to DELTA 2D2 (H)
VMFREC1851I (2 of 7) VMFRCPTF processing PARTLST
:
VMFREC1851I (7 of 7) VMFRCALL processing SAMPLE
VMFCA2159I Loading part(s) to BUILD0 597 (I)
VMFCA2159I Loaded n part(s) to BUILD0 597 (I)
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 *System Messages and Codes*, or use on-line HELP.

vmfview install

6.4.1 Update Build Status Table for VMPRF

- 1 Update the VM SYSBLDS software inventory file for VMPRF.

vmfins build ppf 5684073C {VMPRF | VMPRFSFS} (serviced nolink

Use **VMPRF** for installing on minidisks or **VMPRFSFS** 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 5684073C 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 Post Install Tailoring

The following table describes the sample customization files provided with VMPRF that have been installed to the 2C2 local samples disk. This section will have you copy the sample files to the 597 test build disk.

<i>Figure 9 (Page 1 of 2). VMPRF 122 Supplied Sample Customization Files</i>	
Sample File Name	Sample Description
VMPRF INCLUSER	Sample INCLUSER file for VMPRF 122. This file is used with the USER_type reports or type 41, 42 and 43 records. user ID's specified in this file are placed at the top of the listing, in the report record, regardless of their activity level.
VMPRF MASTER	Sample MASTER file for VMPRF 122. This file is used to specify control files as input and generate and store reports and records.

Figure 9 (Page 2 of 2). VMPRF 122 Supplied Sample Customization Files

Sample File Name	Sample Description
VMPRF MDISKS	Sample MDISKS file for VMPRF 122. This file is used as input to the MDISK_SEEK_BY_CONFIG report and contains cylinder delimiters for minidisks.
VMPRF MDISKVOL	Sample MDISKVOL file for VMPRF 122. This file is used to select specific volume serials for the MDISK_SEEK_BY_CONFIG report.
VMPRF REPORTS	Sample REPORTS file for VMPRF 122. This file is used to select VMPRF 122 reports, summary records, or trend records to be produced.
VMPRF SETTINGS	Sample SETTINGS file for VMPRF 122. This file is used to specify the stream parameters that control the operation of VMPRF 122, and the report parameters that affect information in generated reports and records.
VMPRF UCLASS	Sample UCLASS file for VMPRF 122. This file is used when generating reports on specific groups or combinations of users.
Note: See the <i>VM Performance Reporting Facility Users Guide and Reference</i> manual for further information on the sample control files and their use.	

1 Log on to 5684073C if you are not already logged on to it.

2 Copy the sample files to the test build minidisk.

a If installing using minidisks

access 2c2 e

access 597 i

vmfcopy vmprf * e = = i (prodid 5684073C%VMPRF olddate

The VMFCOPY command will update the VMSES PARTCAT file on the 597 minidisk.

b If installing using SFS

access VMSYS:5684073C.VMPRF.SAMPLE e

access VMSYS:5684073C.VMPRF.TBUILD i

vmfcopy vmprf * e = = i (prodid 5684073C%VMPRF olddate

The VMFCOPY command will update the VMSES PARTCAT file on the VMSYS:5684073C.TBUILD SFS directory.

3 Tailor each of the files that you just copied. See the "VMPRF Control Files" chapter in the *VM Performance Reporting Facility Users Guide and Reference* for details on configuring these files.

4 Log on to the VMPRF user ID.

5 Create a PROFILE EXEC file for VMPRF 122.

xedit profile exec a

a If installing using minidisks, insert the following lines:

```
====> input /**/  
====> input 'access 191 a'  
====> input 'access 194 c'  
====> input 'access 192 d'  
====> input 'access 497 b'  
====> file
```

b If installing using SFS, insert the following lines:

```
====> input /**/  
====> input 'access VMSYS:VMPRF a'  
====> input 'access 194 c'  
====> input 'access VMSYS:VMPRF.WORK192 d'  
====> input 'access VMSYS:5684073C.VMPRF.PBUILD b'  
====> file
```

6 The VMPRF command syntax sometimes requires the use of the double quote (") character. Since this is also the default TERMINAL ESCAPE character in CP, it is recommended that you do one of the following:

a Issue the CP TERMINAL command

CP TERMINAL ESCAPE OFF

Add this command in the VMPRF user IDs PROFILE EXEC so that the use of this character will not be a problem in future sessions. See the *CP Command Reference* manual for additional information on this command.

b Use two double quotes (") whenever you are instructed to use one on the command line.

7 Run the VMPRF profile to access required minidisks.

profile

8 Access the 5684073C test build disk

a If installing using minidisks:

'access 597 b'

b If installing using SFS:

'access VMSYS:5684073C.VMPRF.TBUILD b'

9 Set up the MONWRITE user ID

Use Figure 8 on page 11 to obtain the suggested minidisk requirements for the MONWRITE user ID. The following is a sample directory statement for the MONWRITE user ID. The actual MDISK statements that you use will depend on the type of DASD you install the product on. See the *Performance* manual for more information on setting up the monitor.

```
USER MONWRITE xxxxx 4M 8M G
IPL CMS
MACHINE XA Required
OPTION QUICKDSP Recommended
SHARE ABSOLUTE 3% Recommended
ACCOUNT xxxx
IUCV *MONITOR MSGLIMIT 255 Required
NAMESAVE MONDCSS Required
CONSOLE 0009 3270 T VMPRF Recommended
SPOOL 000C 2540 READER *
SPOOL 000D 2540 PUNCH A
SPOOL 000E 1403 A
LINK MAINT 190 190 RR
LINK MAINT 19D 19D RR
LINK MAINT 19E 19E RR
MDISK 191 3380 xxx 100 xxxxxx MR xx Depends on # users
```

*

10 Create the monitor saved segment, if not already created, using the CP DEFSEG and SAVESEG commands as described in the 'Monitoring Performance Using CP Monitor' chapter of the *Performance* manual.

11 Capture monitor data using the CP MONWRITE and MONWSTOP commands as described in the *CP Command Reference* manual.

12 Obtain performance reports by invoking VMPRF.

vmprf vmprf disk monwrite_fn monwrite_ft c

monwrite_fn and *monwrite_ft* are the filename and filetype of the monitor data file as specified on the MONWRITE command. See the *CP Command Reference* manual for further information on the monwrite command. See the *VM Performance Reporting Facility Users Guide and Reference* manual for further information on the VMPRF command.

What's Next?

You have now finished tailoring VMPRF. You should review the contents of the VMPRF RUNFILE created on the VMPRF 192 minidisk to see how successful the performance run was. See the "VMPRF Control Files" chapter in the *VM Performance Reporting Facility Users Guide and Reference* manual for details on the layout of the VMPRF RUNFILE. If applicable, continue tailoring VMPRF prior to continuing with 6.6, "Place VMPRF Into Production."

6.6 Place VMPRF Into Production

6.6.1 Copy VMPRF Files Into Production

- 1 Logon to 5684073C, in order to access the disks that will contain the 'production' level of the VMPRF code.

a If installing using minidisks

access 597 i

access 497 k

vmfcopy ** i = k (prodid 5684073C%VMPRF olddate replace

The VMFCOPY command will update the VMSES PARTCAT file on the 497 minidisk.

b If installing using Shared File System

access 5684073C.VMPRF.TBUILD i

access 5684073C.VMPRF.PBUILD k

vmfcopy ** i = k (prodid 5684073C%VMPRF olddate replace

The VMFCOPY command will update the VMSES PARTCAT file on the production build directory.

2 Logon to MAINT if you plan to put the VMPRF help file on the system AMENG Help (MAINT's 19D) minidisk.

a If installing using minidisks

link 5684073C 597 597 rr
access 597 e
acc 19d f

The VMFCOPY command will update the VMSES PARTCAT file on the AMENG Help (MAINT 19D) minidisk.

vmfcopy * helpcms e = = f2 (prodid 5684073C%VMPRF olddate replace

b If installing using Shared File System

access 5684073C.VMPRF.TBUILD e
acc 19d f

The VMFCOPY command will update the VMSES PARTCAT file on the AMENG Help (MAINT 19D) minidisk.

vmfcopy * helpcms e = = f2 (prodid 5684073C%VMPRF olddate replace

3 Re-build the CMS HELP logical saved segment, to include VMPRF's help files from the AMENG Help (MAINT's 19D) disk. See the "Placing (Serviced) Components into Production" section of the *Service Guide* for detailed information about how these segments should be saved on your system. (Note that you will need to use (**all** instead of (**serviced** on the VMSES/E VMFBLD command when re-building any segments.)

6.7 Post-Installation Considerations

To activate the function of VMPRF refer to the 'Monitor Considerations', 'VMPRF Overview', and 'VMFPRF Command' chapters of the *VM Performance Reporting Facility Users Guide and Reference* manual.

<p>VMPRF is now installed and built on your system.</p>
--

7.0 Service Instructions

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

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 VMPRF 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, etc.

7.2 Servicing VMPRF

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 decompact the envelope file to your A-disk. The decompaction is currently done by using the DETERSE MODULE. The file names of the decompacted files will be of the format:

- *VLSTnum* for the documentation envelope
- *VPTFnum* 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 **5684073C**, which assumes you are using the PPF supplied by IBM for VMPRF. If you have your own PPF override file for VMPRF, you should use your file's *ppfname* instead of **5684073C**. The *ppfname* you use should be used **throughout** the rest of this procedure, unless otherwise stated differently.

1 Logon to VMPRF service user ID **5684073C**

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 VMPRF CORrective service tape mounted and attached to **5684073C**. (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 (5684073C MEMO) before going on.

- 7** Setup the correct product access order.

vmfsetup 5684073C {VMPRF | VMPRFSFS}

Use **VMPRF** for installing on minidisks or **VMPRFSFS** 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 5684073C {VMPRF | VMPRFSFS} apply

Use **VMPRF** for installing on minidisks or **VMPRFSFS** 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 *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 5684073C {VMPRF | VMPRFSFS}

Use **VMPRF** for installing on minidisks or **VMPRFSFS** 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 5684073C {VMPRF | VMPRFSFS} (env vptfnum

Use **VMPRF** for installing on minidisks or **VMPRFSFS** 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 *System Messages and Codes*, or use on-line HELP.

vmfview receive

7.2.3 Apply the Service

- 1 Apply the new service.

vmfapply ppf 5684073C {VMPRF | VMPRFSFS}

Use **VMPRF** for installing on minidisks or **VMPRFSFS** 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 *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 VMPRF. 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 **5684073C**
- *compname* should be **VMPRF** or **VMPRFSFS** (minidisk or SFS)
- *appid* should be **5684073C**
- *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 *Service Guide*, you should return back to this program directory at 7.2.4, "Update the Build Status Table" on page 33.

7.2.4 Update the Build Status Table

- 1 Update the Build Status Table with serviced parts.

vmfbld ppf 5684073C {VMPRF | VMPRFSFS} (status

Use **VMPRF** for installing on minidisks or **VMPRFSFS** 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 5684073C $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 5684073C $PPF
on 191 (A) from level $PFnnnnn
```

vmfppf 5684073C *

Note: If you've created your own PPF override then use your PPF name instead of 5684073C.

**copyfile 5684073C \$PPF a = = d (olddate replace
erase 5684073C \$PPF a**

Note: Do not use your own PPF name in place of 5684073C for the COPYFILE and ERASE commands.

vmfbld ppf 5684073C {VMPRF | VMPRFSFS} (status

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

Use **VMPRF** for installing on minidisks or **VMPRFSFS** 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 Rebuild VMPRF serviced parts.

vmfbld ppf 5684073C {VMPRF | VMPRFSFS} (serviced

Use **VMPRF** for installing on minidisks or **VMPRFSFS** for installing in Shared File System directories.

- 2 Review the build message log (\$VMFBLD \$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 build

7.2.6 Additional Service Steps

- 1 Logon to 5684073C, if you are not already logged onto it.
- 2 Setup the correct product access order.

vmfsetup 5684073C {VMPRF | VMPRFSFS}

Use **VMPRF** for installing on minidisks or **VMPRFSFS** for installing in Shared File System directories.

- 3 Only three copies of the VMPRF TXTLIB file will fit on the DELTA disk due to its size. It is recommended that the two most recent copies should be kept; any older ones can be erased in order to keep from expanding the DELTA disk size.

filelist vmprf tlb* fm-delta

fm-delta should be the fm of the 2D2 minidisk.
Keep the two most recent copies, erase all older versions.

- 4** Update the VMPRF sample customization files from the 2C2 local samples disk.

Review any of the sample customization files which have been serviced to see if any changes should be made to the version you have on the 597 test production disk.

filelist vmprf * e

See the "VMPRF Control Files" chapter in the *VM Performance Reporting Facility Users Guide and Reference* for further details on the sample customization files.

7.3 Place the New VMPRF Service Into Production

7.3.1 Copy the New VMPRF Serviced Files Into Production

- 1** Logon to 5684073C, in order to access the disks that contain the 'production' level of the VMPRF code.

a If servicing using minidisks

access 597 i The VMFCOPY command will update the VMSES
access 497 k PARTCAT file on the 497 minidisk.
vmfcopy * * i = = k (prodid 5684073C%VMPRF olddate replace

b If servicing using Shared File System

access 5684073C.VMPRF.TBUILD i The VMFCOPY command will update the VMSES
access 5684073C.VMPRF.PBUILD k PARTCAT file on the production code directory.
vmfcopy * * i = = k (prodid 5684073C%VMPRF olddate replace

- 2** Logon to MAINT if the VMPRF help file was serviced and you have placed the help file on the system AMENG Help (MAINT's 19D) minidisk.

a If servicing using minidisks

link 5684073C 597 597 rr The VMFCOPY command will update the VMSES
access 597 e PARTCAT file on the AMENG Help (MAINT 19D)
acc 19d f minidisk.

vmfcopy * helpcms e = = f2 (prodid 5684073C%VMPRF olddate replace

b If servicing using Shared File System

access 5684073C.VMPRF.TBUILD e
acc 19d f

The VMFCOPY command will update the VMSES
PARTCAT file on the AMENG Help (MAINT 19D)
minidisk.

vmfcopy * helpcms e = = f2 (prodid 5684073C%VMPRF olddate replace

- 3** Re-build the CMS HELP logical saved segment, to include VMPRF's help files from the AMENG Help (MAINT's 19D)disk. See the "Placing (Serviced) Components into Production" section of the *Service Guide* for detailed information about how these segments should be saved on your system. (Note that you will need to use (**all** instead of (**serviced** on the VMSES/E VMFBLD command when re-building any segments.)

You have finished servicing VMPRF.

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 VMPRF files reside.

Note: Do **not** modify the product supplied 5684073C \$PPF or 5684073C PPF files to change the file pool name or any other installation parameters. If the 5684073C \$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 *fm*2

overname is the PPF override file name (such as 'myvmprf') 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).

- 2 Create (or modify as required) the Variable Declarations (:DCL.) section for the vmprfsfs override area, so that it resembles the :DCL. section shown below.

```

:OVERLST. VMPRFSFS
*
* =====
* Override Section for Initial Installation (Using SFS Directories) *
* =====
:VMPRFSFS. VMPRFSFS 5684073C
:DCL. REPLACE
&INST191 DIR MYPOOL1:5684073C.
&BASE DIR MYPOOL1:5684073C.VMPRF.OBJECT
&LOCALSAM DIR MYPOOL1:5684073C.VMPRF.SAMPLE
&DELTA DIR MYPOOL1:5684073C.VMPRF.DELTA
&APPLY0 DIR MYPOOL1:5684073C.VMPRF.APPLYALT
&APPLY1 DIR MYPOOL1:5684073C.VMPRF.APPLYPROD
&BUILD0 DIR MYPOOL1:5684073C.VMPRF.TBUILD
&BUILD1 DIR MYPOOL1:5684073C.VMPRF.PBUILD
&MONWRITE LINK MONWRITE 191 194 RR
&5684073C USER 5684073C
&VMPRF USER VMPRF
:EDCL.
:END.
*

```

(This override will replace the :DCL. section of the vmprfsfs override area of the 5684073C \$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* VMPRFSFS

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 5684073C as the PPF name to be used for those VMSES/E commands that require a PPF name.

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VM Performance Reporting Facility Release 2.2

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Ease of installing service	1	2	3	4	5	N

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