Program Directory for

Operations Manager for z/VM

version 1 release 6.0

Program Number 5697-J10

for Use with
z/VM version 6 release 4
z/VM version 7 release 1

Document Date: July 2019

GI10-8664-14

Note

Before using this information and the product it supports, be sure to read the general information under “Notices” on page 62.

This program directory, dated July 2019, applies to Operations Manager for z/VM version 1 release 6 (Operations Manager), Program Number 5697-J10.

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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 Operations Manager. 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 Operations Manager.
- 3.0, “Program Support” on page 5 describes the IBM support available for Operations Manager.
- 4.0, “Program and Service Level Information” on page 6 lists the APARs (program level) and PTFs (service level) incorporated into Operations Manager.
- 5.0, “Installation Requirements and Considerations” on page 7 identifies the resources and considerations for installing, migrating, and using Operations Manager.
- 6.0, “Installation Instructions” on page 14 provides detailed installation instructions for Operations Manager.
- 7.0, “Service Instructions” on page 46 provides detailed servicing instructions for Operations Manager.
- Appendix A, “Create Product Parameter File (PPF) Override” on page 52 provides detailed information on overriding the Product Parameter File (PPF).
- Appendix B, “Traditional Service Commands” on page 55 provides alternative instructions for servicing Operations Manager.

Before installing Operations Manager, read 3.1, “Preventive Service Planning” on page 5. This section tells you how to find any updates to the information and procedures in this program directory.

1.1 Program Description

Operations Manager helps improve the monitoring and management of z/VM® virtual machines, including Linux guests. By automating routine maintenance tasks and automatically responding to predictable situations that require intervention, Operations Manager allows z/VM system programmers and administrators to focus on more critical tasks.

2.0 Program Materials

An IBM program is identified by a program number. The program number for Operations Manager for z/VM version 1 is 5697-J10.

The program announcement material describes the features supported by Operations Manager. 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

This program is available through the IBM® z/VM® SDO as an electronic envelope on DVD. You can also receive this program electronically by ordering it through the z/VM SDO using IBM ShopzSeries. For more information about IBM ShopzSeries go to www.ibm.com/software/ShopzSeries. The electronic envelope contains all the programs and data needed for installation. See section 6.0, “Installation Instructions” on page 14 for more information about how to install the program. Figure 1 describes the program material. Figure 2 describes the file content of the product envelope.

Figure 1. Basic Material: DVD

Feature Number	Medium	Physical Volume	DVD Content	External DVD Label
5802	DVD	1	Operations Manager V1.6.0	Ops Mgr z/VM V1.6

Please refer to the Media Report, that comes with your order, for a description of the contents of each individual deliverable.

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

File	Content
1	Header
2	Header
3	Product Header
4	Product Memo
5	Service Apply Lists
6	PTFPARTs
7	Operations Manager Aux Files
8	Operations Manager Service

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

File	Content
9	Operations Manager Server Executable Code
10	Operations Manager User Executable Code
11	Operations Manager Sample/Customization Files
12	Operations Manager Base Files

2.2 Optional Machine-Readable Material

There are no optional machine-readable materials for Operations Manager.

2.3 Program Publications

The following sections identify the basic and optional publications for Operations Manager.

2.3.1 Base Program Publications

Figure 3 identifies the program publications for Operations Manager.

Figure 3. Material: Program Publications

Publication Title	Form Number
Operations Manager for z/VM Administration Guide	SC18-9347

2.3.2 Softcopy Publicatons

The Operations Manager publications can be found in Adobe® Portable Document Format off of the Operations Manager World Wide Web home page at url:

www.ibm.com/software/products/en/operationszvm

They can also be downloaded using the specific publication number through the IBM Publication Center at:

www.ibm.com/shop/publications/order

The Publications Center is a world wide central repository for IBM product publications and marketing material.

2.4 Program Source Materials

No program source materials or viewable program listings are provided for Operations Manager.

2.5 Publications Useful During Installation

The publications listed in Figure 4 may be useful during the installation of Operations Manager. To order copies, contact your IBM representative.

Figure 4. Publications Useful During Installation / Service on z/VM version 6

Publication Title	Form Number
z/VM: VMSES/E Introduction and Reference	GC24-6243
z/VM: Service Guide	GC24-6247
z/VM: CMS Commands and Utilities Reference	SC24-6166
z/VM: CMS File Pool Planning, Administration, and Operation	SC24-6167
z/VM: Other Components Messages and Codes	GC24-6207
z/VM: CMS and REXX/VM Messages and Codes	GC24-6161
z/VM: CP Messages and Codes	GC24-6177
z/VM: CP Planning and Administration	SC24-6178
z/VM: Saved Segments Planning and Administration	SC24-6229
Operations Manager for z/VM Administration Guide	SC18-9347

3.0 Program Support

This section describes the IBM support available for Operations Manager.

3.1 Preventive Service Planning

Before installing Operations Manager, 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 5. PSP Upgrade and Subset ID

	Retain		
COMPID	**Release**	**Upgrade**	**Subset**
5697J1000	160	OPSZVM160	OPS160

Alternatively, the PSP can be found at this website:

www.ibm.com/support/docview.wss?rs=2012&uid=isg1_OPSZVM160_OPS160

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 6 identifies the component ID (COMPID), Retain Release and Field Engineering Service Number (FESN) for Operations Manager.

Figure 6. Component IDs

	Retain		
COMPID	**Release**	**Component Name**	**FESN**
5697J1000	160	Operations Manager V1.6.0	0400008

4.0 Program and Service Level Information

This section identifies the program and any relevant service levels of Operations Manager. 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 is also provided.

4.1 Program Level Information

The following APAR fixes against Operations Manager V1.5.0 have been incorporated into this release.

PI09648 / UI14393
PI13594 / UI16106
PI22093 / UI19646
PI31908 / UI24194
PI39832 / UI27131

Check the OPSZVM160 PSP bucket for any additional PTFs that should be installed or any additional installation information.

4.2 Cumulative Service

Cumulative service for Operations Manager V1.6.0 is available through a monthly corrective service envelope, Expanded Service Option, ESO. You need to specify the product ID, 5697J10F, when ordering the ESO.

5.0 Installation Requirements and Considerations

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

5.1 Hardware Requirements

Operations Manager V1.6.0 will operate on any hardware that supports the prerequisite software.

5.2 Program Considerations

The following sections list the programming considerations for installing and activating Operations Manager.

5.2.1 Operating System Requirements

Operations Manager supports the following z/VM operating systems:

- z/VM version 6 release 4
- z/VM version 7 release 1 or later

5.2.2 Other Program Product Requirements

The following products are required to use specific functions of Operations Manager:

- An External Security Manager, such as the RACF® Security Server feature for z/VM, is required for:
  - Command level authorization
  - Read versus update access to consoles using VIEWCON
  - Read versus update access to spool files using VIEWSPL

5.2.3 Migration Considerations

If you are installing Operations Manager V1.6.0 over a previous release of Operations Manager, both pre-installion and post-installation migration steps may be required. Refer to 6.2, “Complete Migration Steps, If Necessary” on page 15 and 6.9, “Post-Installation Considerations” on page 38 and for more information.

5.2.4 Program Installation and Service Considerations

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

- 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 not install Operations Manager strictly using the MAINT user ID, but will use a new user ID--5697J10F. 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 6.3, “Plan Your Installation For Operations Manager” step 6 on page 22, rather than after you have installed this product.
- If you are installing in a Single System Image (SSI) cluster, there are several considerations. Refer to the following web site for more information:
  http://www.ibm.com/support/docview.wss?rs=0&context=SSMR76&q1=SSI&uid=swg21615678
- If you are using an External Security Manager (such as IBM RACF Security Server), the following must be permitted:
  - From user ID 5697J10F, LINK MAINT 51D in MR mode
  - From user ID 5697J10F, LINK MAINT 5E5 in RR mode
  - From user ID 5697J10F, LINK OPMGRM1 198 in MR mode
  - If you plan to place Operations Manager general use code on MAINT's 19E disk (the 'Y' disk) or the Operations Manager help files on the system AMENG Help (MAINT's 19D) disk, then one of the following is required:
    - From user ID MAINT or MAINT*vrm*, LINK 5697J10F 310 in RR mode
    - From user ID MAINT or MAINT*vrm*, ACCESS 5697J10F.OPMGR.TESTUSER

    The access required depends on whether you are installing Operations Manager on minidisk or in SFS.
  - All LINK statements specified in the sample directory entries for the Operations Manager user IDs. Refer to 5.3, “DASD Storage and User ID Requirements” on page 9 for a list of Operations Manager user IDs.
  - Read access to the Operations Manager user code for all user IDs that will issue Operations Manager commands. By default, this code is on the OPMGRM1 410 minidisk. During product installation you may copy this code to MAINT 19D and MAINT 19E and let users access it from there.

5.3 DASD Storage and User ID Requirements

Figure 7 on page 9 lists the user IDs, minidisks and default SFS directory names that are used to install and service Operations Manager.

Important Installation Notes:

- User ID(s) and minidisks or SFS directories will be defined in 6.3, “Plan Your Installation For Operations Manager” on page 20 and are listed here so that you can get an idea of the resources that you will need prior to allocating them.
- 5697J10F 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 6.3, “Plan Your Installation For Operations Manager” step 6 on page 22.
- If you choose to install Operations Manager on a common user ID, the default minidisk addresses for Operations Manager may already be defined. If any of the default minidisks required by Operations Manager are already in use, you will have to create an override to change the default minidisks for Operations Manager so they are unique.
- Cylinder values defined in this table are based on a 4K block size. FB-512 block and SFS values are derived from the 3390 cylinder values in this table. The FBA blocks are listed as 1/2K but should be CMS formatted at 1K size. You can create a PPF override to specify your own file pool, if you prefer.

  When installing on z/VM V6.4 or later, the default SFS file pool is:

  – VMPSFS for all directories that will be shared across the cluster. These are noted as *filepool1* in the table. You can create a PPF override to specify your own file pool, if you prefer.

  – VMSYS for all directories that should be unique on each member of the cluster. These are noted as *filepool2* in the table. You can create a PPF override to specify your own file pool, if you prefer.

Figure 7 (Page 1 of 4). 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
5697J10F	191	3390	10	14400	1800	5697J10F user ID's 191 minidisk *filepool1*:**5697J10F.**
5697J10F	2B2	3390	5	7200	900	Contains all the base code shipped with Operations Manager *filepool1*:**5697J10F.OPMGR.BASE**
5697J10F	2C2	3390	2	2880	360	Contains sample files *filepool1*:**5697J10F.OPMGR.SAMPLE**
5697J10F	2C4	3390	2	2880	360	Contains customization files. This disk may also be used for local modifications *filepool1*:**5697J10F.OPMGR.LOCALMOD**
5697J10F	2D2	3390	30	43200	5400	Contains serviced files *filepool1*:**5697J10F.OPMGR.DELTA**
5697J10F	2A6	3390	2	2880	360	Contains AUX files and software inventory tables that represent the test service level of Operations Manager *filepool1*:**5697J10F.OPMGR.TESTAPPLY**

Notes:

1. The size of the log disk will depend on the number of consoles Operations Manager is monitoring, the level of activity in Operations Manager, and the period of time you wish to keep files on this disk. Larger installations or installations that wish to keep more log files should make the log disk larger. Refer to Appendix E of the Administration Guide for more details.
2. It is recommended that the MDISK entry for the OPMGRM1 198 disk in the CP directory:
   - Be located in the IDENTITY section instead of the SUBCONFIG section. This allows Operations Manager on multiple members of an SSI cluster to share common configuration information and REXX EXECs.
   - Specify the disk as RR. OPMGRM1 will then link the disk RR, allowing other authorized users to link the disk MR. This allows users to make changes to the configuration data while OPMGRM1 is running.
3. It is recommended that the MDISK entries for the OPMGRM1 400 and 410 disks in the CP directory specify the disk as RR. OPMGRM1 will then link the disks RR, allowing other authorized users to link the disks MR. This allows you to copy service updates to these disks from 5697J10F.

   In addition, while IBM recommends that these disks be unique on each member of a Single System Image cluster, customers who want both the release level and PTF level of Operations Manager the same on all members of the cluster at all times can choose to share these disks across the cluster. To do this, place them in the IDENTITY section of the directory entry for OPMGRM1.

Figure 7 (Page 2 of 4). 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
5697J10F	2A2	3390	2	2880	360	Contains AUX files and software inventory tables that represent the service level of Operations Manager that is currently in production *filepool1*:**5697J10F.OPMGR.PRODAPPLY**
5697J10F	300	3390	5	7200	900	Test build disk for server code *filepool1*:**5697J10F.OPMGR.TESTSRVR**
5697J10F	310	3390	5	7200	900	Test build disk for user code *filepool1*:**5697J10F.OPMGR.TESTUSER**
5697J10F Totals		**3390**	**63**	**90,720**	**11,340**	**Total DASD storage required for user ID 5697J10F.** Use the SFS total for 5697J10F in step 6 on page 26.
OPMGRM1	191	3390	5	7200	900	A-disk for server running GOMMAIN *filepool2*:**OPMGRM1.**
OPMGRM1	194 (1*)	3390	50	72000	9000	Log disk for server running GOMMAIN *filepool2*:**OPMGRM1.LOGS**

Notes:

1. The size of the log disk will depend on the number of consoles Operations Manager is monitoring, the level of activity in Operations Manager, and the period of time you wish to keep files on this disk. Larger installations or installations that wish to keep more log files should make the log disk larger. Refer to Appendix E of the Administration Guide for more details.
2. It is recommended that the MDISK entry for the OPMGRM1 198 disk in the CP directory:
   - Be located in the IDENTITY section instead of the SUBCONFIG section. This allows Operations Manager on multiple members of an SSI cluster to share common configuration information and REXX EXECs.
   - Specify the disk as RR. OPMGRM1 will then link the disk RR, allowing other authorized users to link the disk MR. This allows users to make changes to the configuration data while OPMGRM1 is running.
3. It is recommended that the MDISK entries for the OPMGRM1 400 and 410 disks in the CP directory specify the disk as RR. OPMGRM1 will then link the disks RR, allowing other authorized users to link the disks MR. This allows you to copy service updates to these disks from 5697J10F.

   In addition, while IBM recommends that these disks be unique on each member of a Single System Image cluster, customers who want both the release level and PTF level of Operations Manager the same on all members of the cluster at all times can choose to share these disks across the cluster. To do this, place them in the IDENTITY section of the directory entry for OPMGRM1.

Figure 7 (Page 3 of 4). 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
OPMGRM1	198 (2*)	3390	5	7200	900	Installation-defined configuration files on production system, based on samples provided on the 2C2 minidisk or in the .SAMPLE directory.
OPMGRM1	400 (3*)	3390	5	7200	900	Production build disk for server code
OPMGRM1	410 (3*)	3390	5	7200	900	Production build disk for user code
OPMGRM1 Totals		**3390**	**70**	**100,800**	**9,900**	**Total DASD storage required for user ID OPMGRM1.** Use the SFS total for OPMGRM1 in step 7 on page 34.
OPMGRS1	191	3390	5	7200	900	A-disk for action processing server 1 running GOMSVM. Use the SFS value for OPMGRS1 in step 7 on page 34. *filepool2*:**OPMGRS1.**
OPMGRS2	191	3390	5	7200	900	A-disk for action processing server 2 running GOMSVM. Use the SFS value for OPMGRS2 in step 7 on page 34. *filepool2*:**OPMGRS2.**

Notes:

1. The size of the log disk will depend on the number of consoles Operations Manager is monitoring, the level of activity in Operations Manager, and the period of time you wish to keep files on this disk. Larger installations or installations that wish to keep more log files should make the log disk larger. Refer to Appendix E of the Administration Guide for more details.
2. It is recommended that the MDISK entry for the OPMGRM1 198 disk in the CP directory:
   - Be located in the IDENTITY section instead of the SUBCONFIG section. This allows Operations Manager on multiple members of an SSI cluster to share common configuration information and REXX EXECs.
   - Specify the disk as RR. OPMGRM1 will then link the disk RR, allowing other authorized users to link the disk MR. This allows users to make changes to the configuration data while OPMGRM1 is running.
3. It is recommended that the MDISK entries for the OPMGRM1 400 and 410 disks in the CP directory specify the disk as RR. OPMGRM1 will then link the disks RR, allowing other authorized users to link the disks MR. This allows you to copy service updates to these disks from 5697J10F.

   In addition, while IBM recommends that these disks be unique on each member of a Single System Image cluster, customers who want both the release level and PTF level of Operations Manager the same on all members of the cluster at all times can choose to share these disks across the cluster. To do this, place them in the IDENTITY section of the directory entry for OPMGRM1.

Figure 7 (Page 4 of 4). 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
OPMGRS3	191	3390	5	7200	900	A-disk for action processing server 3 running GOMSVM. Use the SFS value for OPMGRS3 in step 7 on page 34. *filepool2*:**OPMGRS3.**
OPMGRS4	191	3390	5	7200	900	A-disk for action processing server 4 running GOMSVM. Use the SFS value for OPMGRS4 in step 7 on page 34. *filepool2*:**OPMGRS4.**
All user IDs Totals		**3390**	**153**	**220,320**	**27,540**	**Total DASD storage required for all Operations Manager user IDs.**

Notes:

1. The size of the log disk will depend on the number of consoles Operations Manager is monitoring, the level of activity in Operations Manager, and the period of time you wish to keep files on this disk. Larger installations or installations that wish to keep more log files should make the log disk larger. Refer to Appendix E of the Administration Guide for more details.
2. It is recommended that the MDISK entry for the OPMGRM1 198 disk in the CP directory:
   - Be located in the IDENTITY section instead of the SUBCONFIG section. This allows Operations Manager on multiple members of an SSI cluster to share common configuration information and REXX EXECs.
   - Specify the disk as RR. OPMGRM1 will then link the disk RR, allowing other authorized users to link the disk MR. This allows users to make changes to the configuration data while OPMGRM1 is running.
3. It is recommended that the MDISK entries for the OPMGRM1 400 and 410 disks in the CP directory specify the disk as RR. OPMGRM1 will then link the disks RR, allowing other authorized users to link the disks MR. This allows you to copy service updates to these disks from 5697J10F.

   In addition, while IBM recommends that these disks be unique on each member of a Single System Image cluster, customers who want both the release level and PTF level of Operations Manager the same on all members of the cluster at all times can choose to share these disks across the cluster. To do this, place them in the IDENTITY section of the directory entry for OPMGRM1.

6.0 Installation Instructions

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

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.

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, SFS directories, and user IDs is assumed. If you use different user IDs, minidisk addresses, or SFS directories to install Operations Manager, adapt these instructions as needed for your environment.

Note

The sample console output presented throughout these instructions was produced on a z/VM V6.4 system. If you're installing Operations Manager on a different z/VM 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 Operations Manager using VMSES/E.

- Complete any migration steps if necessary
- Plan Your Installation

  Use the VMFINS command to load several VMSES/E files from the product envelope and to obtain Operations Manager resource requirements.
- Allocate Resources

  The information obtained from the previous step is used to allocate the appropriate minidisks (or SFS directories) and user ID needed to install the Operations Manager code.
- Install the Operations Manager Product

  Use the VMFINS command to load the Operations Manager product files from the product envelope 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.
- Install Service for Operations Manager

  Use the SERVICE command or the traditional service commands to install any available PTFs for Operations Manager.

- Allocate Additional Resources

  The information obtained from the previous steps is used to allocate the appropriate minidisks (or SFS directories) and user IDs needed to run Operations Manager.

- Place Operations Manager Files into Production

  Copy files from the test BUILD disks to production BUILD disks.

- Perform Post-installation Tasks

  If you are installing Operations Manager V1.6.0 over a previous release of Operations Manager, complete the appropriate post-installation migration steps.

  For new installations of Operations Manager, information about file tailoring and initial activation of the program is provided in the Operations Manager Administration Guide (SC18-9347).

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

6.2 Complete Migration Steps, If Necessary

If you are installing Operations Manager V1.6.0 over a previous release of Operations Manager, complete the appropriate migration steps before installing V1.6.0. Additional migration steps will required after installation and will be discussed later.

If you are installing Operations Manager for the first time, continue with 6.3, “Plan Your Installation For Operations Manager” on page 20.

6.2.1 Migrating from Operations Manager V1.5.0

The following changes are required to a system running Operations Manager V1.5.0 before installing the V1.6.0 code:

1. The default privilege classes given to OPMGRS1, OPMGRS2, OPMGRS3, and OPMGRS4 in the sample directory entries have been reduced to just G. In previous releases, the default privilege classes were B, C, D, and G. While Operations Manager does not require the action processing servers to have more than privilege class G, you may have actions defined that require one or more action processing servers to have additional privilege classes. Update the directory entries for the existing action processing servers on your system accordingly.

   Privilege classes for OPMGRM1 remain unchanged: ABCDG.

Continue with 6.3, “Plan Your Installation For Operations Manager” on page 20.

6.2.2 Migrating from Operations Manager V1.4.0

The following changes are required to a system running Operations Manager V1.4.0 before installing the V1.6.0 code:

1. The default privilege classes given to OPMGRS1, OPMGRS2, OPMGRS3, and OPMGRS4 in the sample directory entries have been reduced to just G. In previous releases, the default privilege classes were B, C, D, and G. While Operations Manager does not require the action processing servers to have more than privilege class G, you may have actions defined that require one or more action processing servers to have additional privilege classes. Update the directory entries for the existing action processing servers on your system accordingly.

   Privilege classes for OPMGRM1 remain unchanged: ABCDG.

2. The production code for Operations Manager V1.6.0 has moved from the installation user ID's 400 and 410 minidisks (or SFS directories) to the OPMGRM1 400 and 410 minidisks. SFS directories for production disks are no longer recommended. This requires the following changes:

   - You must update the CP directory entry for OPMGRM1 to remove the LINK to 5697J10D 400 and/or 410 minidisks
   - You must define and format new 400 and 410 minidisks for OPMGRM1
   - You must update the PROFILE EXECs or CP directory entries for the following user IDs to link and/or access the V1.6.0 code on the OPMGRM1 400 and 410 minidisks rather than the V1.4.0 code on the 5697J10D 400 and 410 minidisks or SFS directories:
     - OPMGRM1
     - All OPMGRSn user IDs
     - All users and administrators linking and/or accessing the 5697J10D 400 or 410 minidisks or SFS directories

Continue with 6.3, “Plan Your Installation For Operations Manager” on page 20.

6.2.3 Migrating from Operations Manager V1.3.0

The following changes are required to a system running Operations Manager V1.3.0 before installing the V1.6.0 code:

1. The default privilege classes given to OPMGRS1, OPMGRS2, OPMGRS3, and OPMGRS4 in the sample directory entries have been reduced to just G. In previous releases, the default privilege classes were B, C, D, and G. While Operations Manager does not require the action processing servers to have more than privilege class G, you may have actions defined that require one or more action processing servers to have additional privilege classes. Update the directory entries for the existing action processing servers on your system accordingly.

   Privilege classes for OPMGRM1 remain unchanged: ABCDG.

2. The production code for Operations Manager V1.6.0 has moved from the installation user ID's 400 and 410 minidisks (or SFS directories) to the OPMGRM1 400 and 410 minidisks. SFS directories for production disks are no longer recommended. This requires the following changes:

- You must update the CP directory entry for OPMGRM1 to remove the LINK to 5697J10C 400 and/or 410 minidisks
- You must define and format new 400 and 410 minidisks for OPMGRM1
- You must update the PROFILE EXECs or CP directory entries for the following user IDs to link and/or access the V1.6.0 code on the OPMGRM1 400 and 410 minidisks rather than the V1.3.0 code on the 5697J10C 400 and 410 minidisks or SFS directories:
  - OPMGRM1
  - All OPMGRSn user IDs
  - All users and administrators linking and/or accessing the 5697J10C 400 or 410 minidisks or SFS directories

3. You must update the CP directory entry for the main Operations Manager server (OPMGRM1, by default.) Add the SHARE option to the XCONFIG ADDRSPACE statement. The updated statement should look like this:

   ```
   XCONFIG ADDRSPACE MAXNUMBER 1022 TOTSIZE 4G SHARE
   ```

4. You must update the CP directory entries for all action processing servers (OPMGRS1, OPMGRS2, OPMGRS3, and OPMGRS4, by default.)
   - Replace the following line:

     ```
     MACHINE ESA
     ```

     with

     ```
     MACHINE XC
     ```

   - Add the following XCONFIG statements:

     ```
     XCONFIG ACCESSLIST ALSIZE 126
     XCONFIG ADDRSPACE MAXNUMBER 126 TOTSIZE 512M SHARE
     ```

Continue with 6.3, “Plan Your Installation For Operations Manager” on page 20.

6.2.4 Migrating from Operations Manager V1.2.0

The following changes are required to a system running Operations Manager V1.2.0 before installing the V1.6.0 code:

1. The default privilege classes given to OPMGRS1, OPMGRS2, OPMGRS3, and OPMGRS4 in the sample directory entries have been reduced to just G. In previous releases, the default privilege classes were B, C, D, and G. While Operations Manager does not require the action processing servers to have more than privilege class G, you may have actions defined that require one or more action processing servers to have additional privilege classes. Update the directory entries for the existing action processing servers on your system accordingly.

   Privilege classes for OPMGRM1 remain unchanged: ABCDG.

2. The production code for Operations Manager V1.6.0 has moved from the installation user ID's 400 and 410 minidisks (or SFS directories) to the OPMGRM1 400 and 410 minidisks. SFS directories for production disks are no longer recommended. This requires the following changes:
   - You must update the CP directory entry for OPMGRM1 to remove the LINK to 5697J10B 400 and/or 410 minidisks
   - You must define and format new 400 and 410 minidisks for OPMGRM1
   - You must update the PROFILE EXECs or CP directory entries for the following user IDs to link and/or access the V1.6.0 code on the OPMGRM1 400 and 410 minidisks rather than the V1.2.0 code on the 5697J10B 400 and 410 minidisks or SFS directories:
     – OPMGRM1
     – All OPMGRSn user IDs
     – All users and administrators linking and/or accessing the 5697J10B 400 or 410 minidisks or SFS directories
3. Additional statements are required in the directory entry for user ID OPMGRM1. Refer to the Operations Manager Administration Guide (SC18-9347) for details on the requirement for IUCV *SPL, OPTION APPLMON, and IUCV *VMEVENT statements.
4. You must update the CP directory entry and PROFILE EXEC for user ID OPMGRM1 to link and access the new 198 disk or .CONFIGURATION directory. It is recommended that OPMGRM1 link the disk in RR mode so that other authorized users can link it MR and make changes to the configuration data while OPMGRM1 is running.
5. You must update the CP directory entry for the main Operations Manager server (OPMGRM1, by default.) Add the SHARE option to the XCONFIG ADDRSPACE statement. The updated statement should look like this:

   ```
   XCONFIG ADDRSPACE MAXNUMBER 1022 TOTSIZE 4G SHARE
   ```
6. You must update the CP directory entries for all action processing servers (OPMGRS1, OPMGRS2, OPMGRS3, and OPMGRS4, by default.)
   - Replace the following line:

     ```
     MACHINE ESA
     ```

     with

     ```
     MACHINE XC
     ```
   - Add the following XCONFIG statements:

     ```
     XCONFIG ACCESSLIST ALSIZE 126
     XCONFIG ADDRSPACE MAXNUMBER 126 TOTSIZE 512M SHARE
     ```

Continue with 6.3, “Plan Your Installation For Operations Manager” on page 20.

6.2.5 Migrating from Operations Manager V1.1.0

The following changes are required to a system running Operations Manager V1.1.0 before installing the V1.6.0 code:

1. The default privilege classes given to OPMGRS1, OPMGRS2, OPMGRS3, and OPMGRS4 in the sample directory entries have been reduced to just G. In previous releases, the default privilege classes were B, C, D, and G. While Operations Manager does not require the action processing servers to have more than privilege class G, you may have actions defined that require one or more action processing servers to have additional privilege classes. Update the directory entries for the existing action processing servers on your system accordingly.

   Privilege classes for OPMGRM1 remain unchanged: ABCDG.

2. The production code for Operations Manager V1.6.0 has moved from the installation user ID's 400 and 410 minidisks (or SFS directories) to the OPMGRM1 400 and 410 minidisks. SFS directories for production disks are no longer recommended. This requires the following changes:

   - You must update the CP directory entry for OPMGRM1 to remove the LINK to 5697J10A 400 and/or 410 minidisks
   - You must define and format new 400 and 410 minidisks for OPMGRM1
   - You must update the PROFILE EXECs or CP directory entries for the following user IDs to link and/or access the V1.6.0 code on the OPMGRM1 400 and 410 minidisks rather than the V1.1.0 code on the 5697J10A 400 and 410 minidisks or SFS directories:
     - OPMGRM1
     - All OPMGRSn user IDs
     - All users and administrators linking and/or accessing the 5697J10A 400 or 410 minidisks or SFS directories

3. The CP directory entry for the user ID OPMGRM1 now requires "OPTION ACCT" to allow it to use DIAG x'4C' and generate accounting records. This statement is only required if you want accounting records to be created.

4. The user ID OPMGRM1 requires the ability to issue CP QUERY OBSERVER and CP QUERY SECUSER. This is typically privilege class A, B, or C, and requires an update to the CP directory entry for OPMGRM1.

5. If you are planning to use OBSERVER instead of SECUSER to monitor consoles, and plan to send commands back to monitored consoles using Operations Manager, then the user ID OPMGRM1 requires the ability to issue CP SEND. This is typically privilege class C, and requires an update to the CP entry directory for OPMGRM1.

6. Additional statements are required in the directory entry for user ID OPMGRM1. Refer to the Operations Manager Administration Guide (SC18-9347) for details on the requirement for IUCV *SPL, OPTION APPLMON, and IUCV *VMEVENT statements.

7. You must update the CP directory entry and PROFILE EXEC for user ID OPMGRM1 to link and access the new 198 disk or .CONFIGURATION directory. It is recommended that OPMGRM1 link the

disk in RR mode so that other authorized users can link it MR and make changes to the configuration data while OPMGRM1 is running.

8. You must update the CP directory entry for the main Operations Manager server (OPMGRM1, by default.) Add the SHARE option to the XCONFIG ADDRSPACE statement. The updated statement should look like this:

   ```
   XCONFIG ADDRSPACE MAXNUMBER 1022 TOTSIZE 4G SHARE
   ```

9. You must update the CP directory entries for all action processing servers (OPMGRS1, OPMGRS2, OPMGRS3, and OPMGRS4, by default.)

   - Replace the following line:

     ```
     MACHINE ESA
     ```

     with

     ```
     MACHINE XC
     ```

   - Add the following XCONFIG statements:

     ```
     XCONFIG ACCESSLIST ALSIZE 126
     XCONFIG ADDRSPACE MAXNUMBER 126 TOTSIZE 512M SHARE
     ```

Continue with 6.3, “Plan Your Installation For Operations Manager.”

6.3 Plan Your Installation For Operations Manager

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

- load the installation files
- generate a 'PLANINFO' file listing
  - all user ID and minidisk/SFS directory requirements
  - required products

Electronic Delivery (envelope file)

If you have received the product electronically or on DVD, follow the appropriate instructions to retrieve and decompress the envelope files to the MAINT*vrm* 500 minidisk. The decompression is currently done by using the DETERSE MODULE (shipped with VMSES/E).

For more information on retrieving and decompressing products received as envelope files, visit

http://www.vm.ibm.com/install/vmlpinst.html

To obtain planning information for your environment:

1 Log on as Operations Manager 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. IBM suggests using MAINT*vrm*.

2 Provide the installation planning user ID access to the code.

vmlink MAINT*vrm* 500 <* C RR>

3 Establish read access to the VMSES/E code.

vmlink MAINT 5E5 <* B RR>

The 5E5 disk contains the VMSES/E code.

4 Establish write access to the Software Inventory disk.

vmlink MAINT 51D <51D D M>

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 need to have that user re-link the 51D in read-only mode (RR), and then re-issue the above VMLINK command. Do not continue with these procedures until a R/W link is established to the 51D minidisk.

5 Load the Operations Manager product control files to the 51D minidisk.

The VMFINS INFO 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 media.

vmfins install info (nomemo env *envfilename*

envfilename is the file name of the product envelope file. The file type must be SERVLINK.

The NOMEMO option will load the memos from the envelope file 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.

```
VMFUTL2767I 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 Operations Manager.

Note:

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

  When installing on z/VM V6.4 or later, the default SFS file pool is:

  – VMPSFS for all directories that will be shared across the cluster. You can create a PPF override to specify your own file pool, if you prefer.

  – VMSYS for all directories that should be unique on each member of the cluster. You can create a PPF override to specify your own file pool, if you prefer.

- 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 Operations Manager. For example, you will need to specify your PPF override file name instead of 5697J10F for certain VMSES/E commands.
- 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. This same chapter has information about changing the VMSYS file pool name, if you need it.

vmfins install ppf 5697J10F {OPMGR | OPMGRSFS} (plan nomemo env *envfilename*

envfilename is the file name of the product envelope file. The file type must be SERVLINK.

Use **OPMGR** if you are installing the product on minidisks.

Use **OPMGRSFS** if you are installing the product 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

```
VMFUTL2767I Reading VMFINS DEFAULTS B for additional options
VMFINS2760I VMFINS processing started
VMFINS2601R Do you want to create an override for :PPF 5697J10F OPMGR :PRODID
            5697J10F%OPMGR?
            Enter 0 (No), 1 (Yes) or 2 (Exit)
0
VMFINS2603I Processing product :PPF 5697J10F OPMGR :PRODID 5697J10F%OPMGR
VMFINS1909I 5697J10F PLANINFO created on your A-disk
VMFREQ2805I Product :PPF 5697J10F OPMGR :PRODID 5697J10F%OPMGR has passed
            requisite checking
VMFINT2603I Planning for the installation of product :PPF 5697J10F OPMGR
:PRODID
            5697J10F%OPMGR
VMFRMT2760I VMFRMT processing started
VMFRMT2760I VMFRMT processing completed successfully
VMFINS2760I VMFINS processing completed successfully
Ready;
```

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

vmfview install

8 If you manage your system directory on the MAINT 2CC minidisk, re-access it.

acc 2CC c

6.4 Allocate Resources for Installing the Operations Manager Code

Use the planning information in the 5697J10F PLANINFO file, created in the **PLAN** step, to:

- Create the 5697J10F user directory for minidisk install. Refer to 6.4.1, "Installing Operations Manager on Minidisk" for detailed instructions.

  OR

- Create the 5697J10F user directory for SFS install. Refer to 6.4.2, "Installing Operations Manager in SFS Directories" on page 25 for detailed instructions.

6.4.1 Installing Operations Manager on Minidisk

1 Obtain the sample user directory entry for 5697J10F from the 5697J10F PLANINFO file.

  Note: The user directory entry for 5697J10F is located in the resource section of the PLANINFO file, at the bottom; this entry contains all of the links and privilege classes necessary for the 5697J10F user ID. Use the directory entry found in PLANINFO as a model as input to your system directory.

2 Add the 5697J10F directory entry to the system directory.

  The resource planning information provided in 5697J10F PLANINFO assumes you are installing on **z/VM V6.4 or later** and reflects the recommendation that 5697J10F be defined as single configuration user.

3 Change the password for 5697J10F from xxxxxxxx to a valid password, in accordance with your security guidelines.

4 Add the MDISK statements to the directory entry for 5697J10F. Use Figure 7 on page 9 to obtain the minidisk requirements.

5 Place the new directory online using the DIRECTXA command or an equivalent CP directory maintenance method, such as DIRMAINT.

  If you are installing Operations Manager in a z/VM Single System Image cluster and using DIRECTXA, place the directory online on **each member** of the cluster.

6 Format all minidisks for the 5697J10F user ID.

For each minidisk, perform the following:

link 5697J10F *devaddr1 devaddr2* **mr**
format *devaddr2 filemode*
1
label
rel *devaddr2* **(det**

devaddr1 is the virtual device address to be formatted for 5697J10F.

devaddr2 is an available virtual device address.

filemode is an available filemode.

label is the minidisk label.

7 Continue with 6.5, “Install the Operations Manager Code” on page 27.

6.4.2 Installing Operations Manager in SFS Directories

1 Obtain the sample user directory entry for 5697J10F from the 5697J10F PLANINFO file.

Note: The user directory entry for 5697J10F is located in the resource section of the PLANINFO file, at the bottom; this entry contains all of the links and privilege classes necessary for the 5697J10F user ID. Use the directory entry found in PLANINFO as a model as input to your system directory.

2 Add the 5697J10F directory entry to the system directory.

The resource planning information provided in 5697J10F PLANINFO assumes you are installing on **z/VM V6.4 or later** and reflects the recommendation that 5697J10F be defined as a single configuration user.

3 Change the passwords for 5697J10F from xxxxxxxx to a valid password, in accordance with your security guidelines.

4 If you intend to use an SFS directory as the work space for the 5697J10F user ID, include the following IPL control statement in its directory entry:

```
IPL CMS PARM FILEPOOL filepool
```

where *filepool* is the name of the file pool you specified for installation of Operations Manager in SFS. Refer to Figure 7 on page 9.

5 Place the new directory online using the DIRECTXA command or an equivalent CP directory maintenance method, such as DIRMAINT.

If you are installing Operations Manager in a z/VM Single System Image cluster and using DIRECTXA, place the directory online on **each member** of the cluster.

6 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, for each user ID, you plan to use.

If you intend to use all of the default Operations Manager SFS directories, the 4K block requirements for the directories are summarized in Figure 7 on page 9.

This information will be used when enrolling the 5697J10F user ID in the VMPSFS file pool or the local file pool you have specified in the PPF override.

b Enroll user 5697J10F in the appropriate file pool using the ENROLL USER command:

ENROLL USER 5697J10F *filepool*: (BLOCKS *blocks*

where *blocks* is the number of 4K blocks that you calculated in the previous step for this user ID only.

where *filepool* is the name of the file pool. The default is VMPSFS.

Note: This must be done from a user ID that is an administrator for the specified file pool.

c Determine if there are enough blocks available in the file pool to install Operations Manager. This information can be obtained from the QUERY FILEPOOL STORGRP command. If the number of blocks free is smaller than the total 4K blocks needed to install Operations Manager, you will need to add space to the file pool. See the *CMS File Pool Planning, Administration, and Operation* manual for information on adding space to a file pool.

d Create the necessary subdirectories listed in the 5697J10F PLANINFO file for user ID 5697J10F using the CREATE DIRECTORY command.

set filepool *filepool:*
create directory *dirid*

dirid is the name of the SFS directory you're creating.

filepool is the name of the file pool.

Refer to Figure 7 on page 9 for more information on directory and file pool names.

An example of the create command is:

```
create directory VMPSFS:5697J10F.OPMGR.BASE
create directory VMPSFS:5697J10F.OPMGR.SAMPLE
  :
```

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

6.5 Install the Operations Manager Code

The *ppfname* used throughout these installation instructions is **5697J10F**, which assumes you are using the PPF supplied by IBM for Operations Manager. If you have your own PPF override file for Operations Manager, you should use your file's *ppfname* instead of **5697J10F**. The *ppfname* you use should be used **throughout** the rest of this procedure.

1 Logon to the installation user ID **5697J10F**.

2 Create a PROFILE EXEC that will contain the ACCESS commands for MAINT 5E5 and 51D minidisks and define RETRIEVE keys.

xedit profile exec a

Add the following lines to the PROFILE EXEC:

```
/**/
'ACCESS 5E5 B'
'ACCESS 51D D'
'CP SET PF11 RETRIEVE FORWARD'
'CP SET PF12 RETRIEVE BACKWARD'
```

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

In this example, you can now use PF11 and PF12 to find, modify, and execute previously executed commands.

file

Save your changes and close the file.

3 Run the profile to access MAINT's minidisks and activate the RETRIEVE keys.

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 command to obtain R/W access to it.

vmlink MAINT 51D <51D D M>

5 Provide the installation user ID access to the code.

vmlink MAINT*vrm* **500 <* C RR>**

6 Install Operations Manager.

Note:

- If you have already created a PPF override file, you should specify your override file name, in place of the default PPF name (5697J10F), after the **PPF** keyword for the following VMFINS command.
- 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 5697J10F {OPMGR | OPMGRSFS} (nomemo nolink env *envfilename*

envfilename is the file name of the product envelope file. The file type must be SERVLINK.

Use **OPMGR** if you are installing the product on minidisks.

Use **OPMGRSFS** if you are installing the product 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.

```
VMFUTL2767I Reading VMFINS DEFAULTS B for additional options
VMFINS2760I VMFINS processing started
VMFINS2601R Do you want to create an override for :PPF 5697J10F OPMGR :PRODID
            5697J10F%OPMGR?
            Enter 0 (No), 1 (Yes) or 2 (Exit)
0
VMFINS2603I Processing product :PPF 5697J10F OPMGR :PRODID 5697J10F%OPMGR
VMFREQ2805I Product :PPF 5697J10F OPMGR :PRODID 5697J10F%OPMGR has passed
            requisite checking
VMFINT2603I Installing product :PPF 5697J10F OPMGR :PRODID 5697J10F%OPMGR
VMFSET2760I VMFSETUP processing started for 5697J10F OPMGR
VMFUTL2205I Minidisk|Directory Assignments:
            String    Mode  Stat  Vdev  Label/Directory
VMFUTL2205I LOCALMOD  E      R/W  2C4   J10C24
VMFUTL2205I LOCALSAM  F      R/W  2C2   J102C2
VMFUTL2205I APPLY     G      R/W  2A6   J102A6
VMFUTL2205I           H      R/W  2A2   J102A2
VMFUTL2205I DELTA     I      R/W  2D2   J102D2
VMFUTL2205I BUILD0    J      R/W  300   J10300
VMFUTL2205I BUILD2    K      R/W  310   J10310
VMFUTL2205I BASE1     L      R/W  2B2   J102B2
VMFUTL2205I --------  A      R/W  191   J10191
VMFUTL2205I --------  B      R/O  5E5   MNT5E5
VMFUTL2205I --------  C      R/O  500   MNT500
VMFUTL2205I --------  D      R/W  51D   MNT51D
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 ENVELOPE 1600
VMFREC1851I (1 of 8) VMFRCAXL processing AXLIST
VMFRCX2159I Loading 0 part(s) to DELTA 2D2 (I)
VMFREC1851I (2 of 8) VMFRCPTF processing PARTLST
VMFRCP2159I Loading 0 part(s) to DELTA 2D2 (I)
VMFREC1851I (3 of 8) VMFRCALL processing APPLY
VMFRCA2159I Loading part(s) to APPLY 2A6 (G)
VMFRCA2159I Loaded 1 part(s) to APPLY 2A6 (G)
VMFREC1851I (4 of 8) VMFRCCOM processing DELTA
VMFRCC2159I Loading 0 part(s) to DELTA 2D2 (I)
VMFREC1851I (5 of 8) VMFRCALL processing SERVER
VMFRCA2159I Loading part(s) to BUILD0 300 (J)
VMFRCA2159I Loaded 10 part(s) to BUILD0 300 (J)
VMFREC1851I (6 of 8) VMFRCALL processing USER
VMFRCA2159I Loading part(s) to BUILD2 310 (K)
VMFRCA2159I Loaded 64 part(s) to BUILD2 310 (K)
VMFREC1851I (7 of 8) VMFRCALL processing SAMPLE
VMFRCA2159I Loading part(s) to LOCALSAM 2C2 (F)
VMFRCA2159I Loaded 45 part(s) to LOCALSAM 2C2 (F)
VMFREC1851I (8 of 8) VMFRCALL processing BASE
VMFRCA2159I Loading part(s) to BASE1 2B2 (L)
VMFRCA2159I Loaded 120 part(s) to BASE1 2B2 (L)
VMFREC2760I VMFREC processing completed successfully
VMFINT2603I Product installed
VMFINS2760I VMFINS processing completed successfully
Ready; T=0.89/0.96 11:53:05
```

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

vmfview install

6.5.1 Update Build Status Table for Operations Manager

1 Update the VM SYSBLDS software inventory file for Operations Manager.

vmfins build ppf 5697J10F {OPMGR | OPMGRSFS} (serviced nolink

Use **OPMGR** if you are installing the product on minidisks.

Use **OPMGRSFS** if you are installing the product in Shared File System directories.

The SERVICED option will build any parts that were not built on the installation envelope (if any) and update the Software Inventory build status table showing that the product 5697J10F 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 the appropriate *z/VM: System Messages and Codes,* or use online HELP.

vmfview install

3 Logoff user ID 5697J10F.

6.5.2 Prepare Operations Manager for Service

In preparation for installing service for Operations Manager in the future, perform the following steps. These steps only need to be done once after the initial installation of Operations Manager V1.6.0. They do not need to be repeated when installing service.

1 Logon to the Operations Manager service user ID **MAINT***vrm*

2 Add Operations Manager into the VM SYSSUF inventory table.

vmfsuftb

3 Use the VMFUPDAT command to add an appropriate entry to the VM SYSPINV file, to reflect installation of Operations Manager. Specify the system identifier of each SSI member system (as applicable) on the command:

vmfupdat syspinv PROD 5697J10F *systemid1 {systemid2 {systemid3} {systemid4}}}*

6.6 Install Service for Operations Manager

Follow the instructions in 7.2, “Servicing Operations Manager” on page 47 to apply any available PTFs for Operations Manager. You must then continue with the steps below in 6.7, “Allocate Resources for Configuring and Running Operations Manager” to continue with the installation of Operations Manager.

6.7 Allocate Resources for Configuring and Running Operations Manager

Note

If you are installing in a Single System Image (SSI) cluster, there are several considerations. Refer to the following web site for more information:
http://www.ibm.com/support/search.wss?q=SSI&tc=SSMR76

Use the sample directory entries provided on the 5697J10F 2C2 minidisk or associated SFS directory:

- Create the service virtual machine user directories for minidisk install. Refer to 6.7.1, “Configuring and Running Operations Manager on Minidisk” for detailed instructions.

  OR

- Create the service virtual machine user directories for SFS install. Refer to 6.7.2, “Configuring and Running Operations Manager in SFS Directories” on page 33 for detailed instructions.

6.7.1 Configuring and Running Operations Manager on Minidisk

1 Logon to MAINT*vrm*

If you are installing on a system that has a previous release of Operations Manager installed, skip to step 7 on page 32.

2 If you are installing Operations Manager for the first time, obtain the sample user directory entries from 5697J10F 2C2 minidisk.

Note: The user directory entries have a filetype of SAMPDIR; these entries will contain all of the links, privilege classes, and minidisks necessary for the service virtual machine user IDs. Use these sample directory entries as a model as input to your system directory.

Both IDENTITY and SUBCONFIG samples exist. Use both types to fully define the user IDs. All SUBCONFIG samples have a number at the end of the filename.

3 Add the service virtual machine directory entries to the system directory.

The samples assume you are installing on **z/VM V6.4 or later** and reflect the following recommendations:

Unless otherwise noted, IBM recommends all of the following user IDs be defined as multiconfiguration users (IDENTITY IDs) with minidisks in the SUBCONFIG section of the directory entry:

- OPMGRM1 - the 198 disk should be in the IDENTITY section of the directory entry so it can be shared across the cluster.
- OPMGRS1
- OPMGRS2
- OPMGRS3
- OPMGRS4

4 Change the passwords for all the user IDs you are adding from xxxxxxxx to valid passwords, in accordance with your security guidelines.

5 If you are using the directory maintenance product DIRMAINT, remove the BUILD ON statements from the sample IDENTITY entries.

6 Place the new directory online using the DIRECTXA command or an equivalent CP directory maintenance method, such as DIRMAINT.

If you are installing Operations Manager in a z/VM Single System Image cluster and using DIRECTXA, place the directory online on **each member** of the cluster.

7 If you are installing Operations Manager for the first time, format all minidisks for the service virtual machine user IDs.

If you are installing on a system that has a previous release of Operations Manager installed, format all new minidisks for the service virtual machine user IDs.

If you are installing Operations Manager in a z/VM Single System Image cluster, format the appropriate disks on **each member** of the cluster.

For each minidisk, perform the following:

link *userid devaddr1 devaddr2* **mr**
format *devaddr2 filemode*
1
label
rel *devaddr2* **(det**

userid is the user ID that owns the disk you are formatting (for example, one of the Operations Manager service virtual machine user IDs.)

devaddr1 is the virtual device address to be formatted for specified user ID.

devaddr2 is an available virtual device address.

filemode is an available filemode.

label is the minidisk label.

8 Continue with 6.8, “Place Operations Manager Into Production” on page 36.

6.7.2 Configuring and Running Operations Manager in SFS Directories

1 Logon to MAINT*vrm*

If you are installing on a system that has a previous release of Operations Manager installed, skip to step 7d on page 35.

2 If you are installing Operations Manager for the first time, obtain the sample user directory entries from the samples directory: VMPSFS:5697J10F.OPMGRM1.SAMPLE

Note: The user directory entries have a filetype of SAMPDIR; these entries will contain all of the links and privilege classes necessary for the service virtual machine user IDs. Use these sample directory entries as a model as input to your system directory.

3 Add the service virtual machine directory entries to the system directory.

The samples assume you are installing on **z/VM V6.4 or later** and reflect the following recommendations:

- IBM recommends the following user IDs be defined as multiconfiguration users:
  - OPMGRM1
  - OPMGRS1
  - OPMGRS2
  - OPMGRS3
  - OPMGRS4

4. Change the passwords for all the user IDs you are adding from xxxxxxxx to valid passwords, in accordance with your security guidelines.

5. If you intend to use an SFS directory as the work space for the 5697J10F user ID or any of the service virtual machine user IDs you will use, include the following IPL control statement in their directory entry:

   ```
   IPL CMS PARM FILEPOOL filepool
   ```

   where *filepool* is the name of the file pool you specified for installation of Operations Manager in SFS. Refer to Figure 7 on page 9.

6. Place the new directory online using the DIRECTXA command or an equivalent CP directory maintenance method, such as DIRMAINT.

   If you are installing Operations Manager in a z/VM Single System Image cluster and using DIRECTXA, place the directory online on **each member** of the cluster.

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, for each user ID, you plan to use.

      If you intend to use all of the default Operations Manager SFS directories, the 4K block requirements for the directories are summarized in Figure 7 on page 9.

      This information will be used when enrolling the service virtual machine user IDs in the VMSYS file pool or the local file pool you have specified in the PPF override.

   b. Enroll the service virtual machines in the appropriate file pool using the ENROLL USER command. You need to issue the ENROLL USER command for each service machine user ID.

      ```
      ENROLL USER svmID filepool: (BLOCKS blocks
      ```

      where *svmID* is the service virtual machine user ID.

      where *filepool* is the name of the file pool. The default is VMSYS for all releases of z/VM.

      where *blocks* is the number of 4K blocks that you calculated in the previous step for the SVM user ID you are enrolling.

      Note: This must be done from a user ID that is an administrator for the specified file pool.

   c. Determine if there are enough blocks available in the file pool to install Operations Manager. This information can be obtained from the

QUERY FILEPOOL STORGRP command. If the number of blocks free is smaller than the total 4K blocks needed to install Operations Manager you will need to add space to the file pool. See the *CMS File Pool Planning, Administration, and Operation* manual for information on adding space to a file pool.

d If you are installing Operations Manager for the first time, create all required subdirectories for the service virtual machine user IDs.

If you are installing on a system that has a previous release of Operations Manager installed, create the new subdirectories for the service virtual machines user IDs.

set filepool *filepool:*
create directory *dirid*

dirid is the name of the SFS directory you're creating.

filepool is the name of the file pool.

Refer to Figure 7 on page 9 for more information on directory and file pool names.

An example of the create command is:

```
create directory VMSYS:OPMGRM1.OPMGR.TESTUSER
create directory VMSYS:OPMGRS1.
   :
```

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

e If you plan to place Operations Manager general use code on the MAINT 19E disk then you need to give the **MAINT** user ID READ authority to the general-use test build directory, using the GRANT AUTHORITY command. Refer to step 4 on page 37 for more information on placing general use code on MAINT 19E disk.

grant auth *filepool*:**5697J10F.opmgr.testuser to MAINT***vrm* **(read newread**

where MAINT*vrm* is the installation and maintenance user ID for the release of z/VM you are using.

where *filepool* is the name of the file pool. IBM recommends using VMPSFS.

6.8 Place Operations Manager Into Production

If you are installing on minidisks, follow the steps in 6.8.1, “Copy Operations Manager Files Into Production Using Minidisks” and then go to 6.9, “Post-Installation Considerations” on page 38.

If you are installing in Shared File System, follow the steps in 6.8.2, “Copy Operations Manager Files Into Production Using Shared File System” on page 37 and then go to 6.9, “Post-Installation Considerations” on page 38.

6.8.1 Copy Operations Manager Files Into Production Using Minidisks

Perform all of the following steps on **each member** of an SSI cluster.

1. Logon to MAINT*vrm*

2. Move the Operations Manager service machine executables to the production disk.

vmlink 5697J10F 300 <* F RR> The VMFCOPY command will update the VMSES
vmlink OPMGRM1 400 <* G M> PARTCAT file on the 400 disk.
vmfcopy * * f = = g (prodid 5697J10F%OPMGR olddate replace

3. Move the general use code and help files to the production disk.

vmlink 5697J10F 310 <* F RR> The VMFCOPY command will update the VMSES
vmlink OPMGRM1 410 <* G M> PARTCAT file on the 410 disk.
vmfcopy * * f = = g (prodid 5697J10F%OPMGR olddate replace

4. Logon to MAINT*vrm* if you plan to put Operations Manager general use code on the 'Y' disk (product code or MAINT's 19E disk). Or logon to the owner of the disk that will contain the 'production' level of the Operations Manager code.

vmlink 5697J10F 310 <* F RR> The VMFCOPY command will update the VMSES
vmlink MAINT 19E <* G M> PARTCAT file on the 19E disk.
vmfcopy * module f = = g2 (prodid 5697J10F%OPMGR olddate replace
vmfcopy * text f = = g2 (prodid 5697J10F%OPMGR olddate replace
vmfcopy * exec f = = g2 (prodid 5697J10F%OPMGR olddate replace

5. Logon to MAINT*vrm* if you plan to put Operations Manager help files on the system AMENG Help (MAINT's 19D) disk.

vmlink 5697J10F 310 <* F RR>
vmlink MAINT 19D <* G M>

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

```
vmfcopy * helpagom f = = g2 (prodid 5697J10F%OPMGR olddate replace
vmfcopy agom* helpmenu f = = g2 (prodid 5697J10F%OPMGR olddate replace
```

6. If the MAINT 19E disk was updated, rebuild the CMS saved system, to return the Y-disk (product code or MAINT's 19E disk) to 'shared' status.

```
put2prod savecms
```

7. Continue with 6.9, “Post-Installation Considerations” on page 38.

6.8.2 Copy Operations Manager Files Into Production Using Shared File System

Perform all of the following steps on **each member** of an SSI cluster.

1. Logon to MAINT*vrm*
2. Move the Operations Manager service machine executables to the production disk.

access 5697J10F.OPMGR.TESTSRVR f
vmlink OPMGRM1 400 <* G M>

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

```
vmfcopy * * f = = g (prodid 5697J10F%OPMGR olddate replace
```

Note that although you are installing in SFS, you should **not** use OPMGRSFS in this command. OPMGR is required.

3. Move the general use code and help files to the production disk.

access 5697J10F.OPMGR.TESTUSER f
vmlink OPMGRM1 410 <* G M>

The VMFCOPY command will update the VMSES PARTCAT file on the 410 disk.

```
vmfcopy * * f = = g (prodid 5697J10F%OPMGR olddate replace
```

Note that although you are installing in SFS, you should **not** use OPMGRSFS in this command. OPMGR is required.

4. Logon to MAINT*vrm* if you plan to put Operations Manager general use code on the 'Y' disk (product code or MAINT's 19E disk). Or logon to the owner of

the disk that will contain the 'production' level of the Operations Manager code.

access 5697J10F.OPMGR.TESTUSER f
vmlink MAINT 19E <* G M>

The VMFCOPY command will update the VMSES PARTCAT file on the 19E disk.

```
vmfcopy * module f = = g2 (prodid 5697J10F%OPMGR olddate replace
vmfcopy * text f = = g2 (prodid 5697J10F%OPMGR olddate replace
vmfcopy * exec f = = g2 (prodid 5697J10F%OPMGR olddate replace
```

Note that although you are installing in SFS, you should **not** use OPMGRSFS in this command. OPMGR is required.

5 Logon to MAINT*vrm* if you plan to put Operations Manager help files on the system AMENG Help (MAINT's 19D) disk.

access 5697J10F.OPMGR.TESTUSER f
vmlink MAINT 19D <* G M>

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

```
vmfcopy * helpagom f = = g2 (prodid 5697J10F%OPMGR olddate replace
vmfcopy agom* helpmenu f = = g2 (prodid 5697J10F%OPMGR olddate replace
```

Note that although you are installing in SFS, you should **not** use OPMGRSFS in this command. OPMGR is required.

6 If the MAINT 19E disk was updated, rebuild the CMS saved system, to return the Y-disk (product code or MAINT's 19E disk) to 'shared' status.

```
put2prod savecms
```

7 Continue with 6.9, “Post-Installation Considerations.”

6.9 Post-Installation Considerations

For new installations of Operations Manager, post-installation information is contained in the Operations Manager Administration Guide (SC18-9347). In order to use Operations Manager, perform the steps required for file tailoring and initial activation of the program, as described in the Administration Guide.

If you are installing Operations Manager V1.6.0 over a previous release of Operations Manager, complete the appropriate post-installation migration steps.

6.9.1 Migrating from Operations Manager V1.5.0

The following changes are required to a system running Operations Manager V1.5.0 in order to run V1.6.0:

1. The commands DEFTCPA, DELTCPA, and CMDTCPA are replaced with DEFIPCS, DELIPCS, and CMDIPCS respectively. Refer to the Aministration Guide or command help for details.

   If your installation of Operations Manager uses an External Security Manager (ESM) such as RACF, and you have implemented command-level authorization, you must also:

   - Create FACILITY class profiles for the new commands DEFIPCS, DELIPCS, CMDIPCS, and DELACTQ
   - Remove FACILITY class profiles for the old commands DEFTCPA, DELTCPA, and CMDTCPA

2. The USER operand is no longer supported on the DEFGROUP and DELGROUP commands. Use the MEMBER operand instead. Refer to the Aministration Guide or command help for details.
3. The structure and operands for defining user authorization using the AUTH and REVOKE commands are not backward compatible. Refer to the Aministration Guide or command help for information on the new structure and syntax.
4. The substitution variable &S is no longer supported. Use &SYSNAME instead. Refer to the DEFACTN statement in the Aministration Guide or helps for details.
5. On the DEFACTN statement, the INPUT and OUTPUT operands no longer support obsolete values. This includes the LOG option on INPUT and colors, audio, highlighting, holding, logging, and suppression on OUTPUT. Refer to the DEFACTN statement in the Aministration Guide or helps for details.
6. The filename of the Operations Manager log files on the OPMGRM1 194 disk have changed from MASALOG to the name of the z/VM system. The filetype remains unchanged (the date of the log file.) GOMCLG EXEC, located on 5697J10F 300 and OPMGRM1 400 disks, has been updated to erase log files based on this new naming convention.

   To have GOMCLG EXEC erase log files generated by Operations Manager V1.5.0 and earlier, you must rename them to comply with the new naming convention. Alternatively, you can archive or delete existing log files manually.

7. The sample PROFILE EXEC for OPMGRM1 has been updated for improved usability. When exiting the Operations Manager code, OPMGRM1 will remain logged on if the the virtual console is connected, or will logoff if the virtual console is disconnected.
8. The substitution variables available for actions associated with DEFPMON and DEFSMON have changed.

   In Operations Manager V1.5.0:

   - DEFPMON - &6 was unassigned
   - DEFSMON - &8 was unassigned

   In Operations Manager V1.6.0:

   - DEFPMON - &6 contains the interval of the page space monitor

- DEFSMON - &8 contains the interval of the spool space monitor

9. If you have previously used any of the following sample files, consider replacing them with the updated samples on the V1.6.0 samples disk (5697J10F 2C2 in a minidisk install):

   - VIEWCON EXEC
   - VIEWLOG EXEC
   - VIEWSPL EXEC
   - OMRELOAD EXEC

   You should review the contents of the new files to determine if they will work in your environment. Specifically, you **must** update OMRELOAD EXEC to reflect the member names in your environment.

10. Operations Manager V1.6.0 includes a new built-in action named NULL. The NULL action is equivalent to specifying DEFACTN NAME NULL and indicates that no action is to be performed. If you have defined an action with the name NULL, you must delete or rename it.

11. Once all migration steps are complete, you must stop and restart the Operations Manager service machines.

12. When you are ready to remove Operations Manager V1.5.0 from your system, delete the user ID 5697J10E and all of its minidisks.

6.9.2 Migrating from Operations Manager V1.4.0

The following changes are required to a system running Operations Manager V1.4.0 in order to run V1.6.0:

1. The commands DEFTCPA and DELTCPA are replaced with DEFIPCS and DELIPCS respectively. Refer to the Aministration Guide or command help for details.

2. The USER operand is no longer supported on the DEFGROUP and DELGROUP commands. Use the MEMBER operand instead. Refer to the Aministration Guide or command help for details.

3. The structure and operands for defining user authorization using the AUTH and REVOKE commands are not backward compatible. Refer to the Aministration Guide or command help for information on the new structure and syntax.

4. The substitution variable &S is no longer supported. Use &SYSNAME instead. Refer to the DEFACTN statement in the Aministration Guide or helps for details.

5. On the DEFACTN statement, the INPUT and OUTPUT operands no longer support obsolete values. This includes the LOG option on INPUT and colors, audio, highlighting, holding, logging, and suppression on OUTPUT. Refer to the DEFACTN statement in the Aministration Guide or helps for details.

6. The filename of the Operations Manager log files on the OPMGRM1 194 disk have changed from MASALOG to the name of the z/VM system. The filetype remains unchanged (the date of the log file.) GOMCLG EXEC, located on 5697J10F 300 and OPMGRM1 400 disks, has been updated to erase log files based on this new naming convention.

To have GOMCLG EXEC erase log files generated by Operations Manager V1.4.0 and earlier, you must rename them to comply with the new naming convention. Alternatively, you can archive or delete existing log files manually.

7. The sample PROFILE EXEC for OPMGRM1 has been updated for improved usability. When exiting the Operations Manager code, OPMGRM1 will remain logged on if the the virtual console is connected, or will logoff if the virtual console is disconnected.
8. The substitution variables available for actions associated with DEFPMON and DEFSMON have changed.

   In Operations Manager V1.5.0:

   - DEFPMON - &6 was unassigned
   - DEFSMON - &8 was unassigned

   In Operations Manager V1.6.0:

   - DEFPMON - &6 contains the interval of the page space monitor
   - DEFSMON - &8 contains the interval of the spool space monitor
9. The substitution variables available for actions associated with DEFEMON have changed.

   In Operations Manager V1.4.0:

   - &5 - &n contained any additional information passed by the *VMEVENT system service for a particular event class/type.

   In Operations Manager V1.6.0:

   - &5 contains the event class
   - &6 - &n contain any additional information passed by the *VMEVENT system service for a particular event class/type.
10. In V1.6.0, the date format displayed in the output of the VIEWSPL, VIEWCON, and VIEWLOG commands will now follow the CP DATEFORMAT setting for the user issuing the command. If the MODE(RDR) option is used, the date format provided in the output will now follow the CP DATEFORMAT setting for the Operations Manager server (OPMGRM1). If you have tools that process the output of these commands, be aware that the date format may now be different than what was provided in V1.4.0.
11. Once all migration steps are complete, you must stop and restart the Operations Manager service machines.

6.9.3 Migrating from Operations Manager V1.3.0

The following changes are required to a system running Operations Manager V1.3.0 in order to run V1.6.0:

1. The commands DEFTCPA and DELTCPA are replaced with DEFIPCS and DELIPCS respectively. Refer to the Aministration Guide or command help for details.
2. The USER operand is no longer supported on the DEFGROUP and DELGROUP commands. Use the MEMBER operand instead. Refer to the Aministration Guide or command help for details.

3. The structure and operands for defining user authorization using the AUTH and REVOKE commands are not backward compatible. Refer to the Aministration Guide or command help for information on the new structure and syntax.
4. On the DEFACTN statement, the INPUT and OUTPUT operands no longer support obsolete values. This includes the LOG option on INPUT and colors, audio, highlighting, holding, logging, and suppression on OUTPUT. Refer to the DEFACTN statement in the Aministration Guide or helps for details.
5. The filename of the Operations Manager log files on the OPMGRM1 194 disk have changed from MASALOG to the name of the z/VM system. The filetype remains unchanged (the date of the log file.) GOMCLG EXEC, located on 5697J10F 300 and OPMGRM1 400 disks, has been updated to erase log files based on this new naming convention.

   To have GOMCLG EXEC erase log files generated by Operations Manager V1.3.0 and earlier, you must rename them to comply with the new naming convention. Alternatively, you can archive or delete existing log files manually.
6. The sample PROFILE EXEC for OPMGRM1 has been updated for improved usability. When exiting the Operations Manager code, OPMGRM1 will remain logged on if the the virtual console is connected, or will logoff if the virtual console is disconnected.
7. The substitution variables available for actions associated with DEFSMON have changed.

   In Operations Manager V1.5.0:

   - DEFSMON - &8 was unassigned

   In Operations Manager V1.6.0:

   - DEFSMON - &8 contains the interval of the spool space monitor
8. The substitution variables available for actions associated with DEFEMON have changed.

   In Operations Manager V1.3.0:

   - &5 - &n contained any additional information passed by the *VMEVENT system service for a particular event class/type.

   In Operations Manager V1.6.0:

   - &5 contains the event class
   - &6 - &n contain any additional information passed by the *VMEVENT system service for a particular event class/type.
9. In V1.6.0, the date format displayed in the output of the VIEWSPL, VIEWCON, and VIEWLOG commands will now follow the CP DATEFORMAT setting for the user issuing the command. If the MODE(RDR) option is used, the date format provided in the output will now follow the CP DATEFORMAT setting for the Operations Manager server (OPMGRM1). If you have tools that process the output of these commands, be aware that the date format may now be different than what was provided in V1.3.0.
10. Once all migration steps are complete, you must stop and restart the Operations Manager service machines.

6.9.4 Migrating from Operations Manager V1.2.0

The following changes are required to a system running Operations Manager V1.2.0 in order to run V1.6.0:

1. The USER operand is no longer supported on the DEFGROUP and DELGROUP commands. Use the MEMBER operand instead. Refer to the Aministration Guide or command help for details.
2. The structure and operands for defining user authorization using the AUTH and REVOKE commands are not backward compatible. Refer to the Aministration Guide or command help for information on the new structure and syntax.
3. On the DEFACTN statement, the INPUT and OUTPUT operands no longer support obsolete values. This includes the LOG option on INPUT and colors, audio, highlighting, holding, logging, and suppression on OUTPUT. Refer to the DEFACTN statement in the Aministration Guide or helps for details.
4. The filename of the Operations Manager log files on the OPMGRM1 194 disk have changed from MASALOG to the name of the z/VM system. The filetype remains unchanged (the date of the log file.) GOMCLG EXEC, located on 5697J10F 300 and OPMGRM1 400 disks, has been updated to erase log files based on this new naming convention.

   To have GOMCLG EXEC erase log files generated by Operations Manager V1.2.0 and earlier, you must rename them to comply with the new naming convention. Alternatively, you can archive or delete existing log files manually.
5. The sample PROFILE EXEC for OPMGRM1 has been updated for improved usability. When exiting the Operations Manager code, OPMGRM1 will remain logged on if the the virtual console is connected, or will logoff if the virtual console is disconnected.
6. In V1.6.0, the date format displayed in the output of the VIEWSPL, VIEWCON, and VIEWLOG commands will now follow the CP DATEFORMAT setting for the user issuing the command. If the MODE(RDR) option is used, the date format provided in the output will now follow the CP DATEFORMAT setting for the Operations Manager server (OPMGRM1). If you have tools that process the output of these commands, be aware that the date format may now be different than what was provided in V1.2.0.
7. The sample GOMDGD4 command is no longer recommended to set or reset the CP alternate user ID for an action processing server. The ALTUSER operand on the DEFACTN statement should be used instead.
8. The TIMER function is no longer supported in V1.6.0. It was previously replaced by a scheduling function: DEFSCHD and DELSCHD. Therefore, the following files should be removed from your Operations Manager installation:

   - All files with filename DEFTIMR
   - All files with filename DELTIMR

   These files are typically on the 5697J10B 310 and 2B2 minidisks and only need to be removed if you are still using these disks for V1.6.0. Copies of the files may also exist on the MAINT 19D minidisk or any other shared disk on your system if you copied the help files to another disk during installation.

9. Any references to the MONITOR operand on the CONFIG, STATUS, SUSPEND, and RESUME commands must be changed to MACHINE. This operand has been changed to more easily distinguish between monitors for virtual machines, monitors for spool space, and monitors for *VMEVENT. The DEFMMON and DELMMON statements remain unchanged.
10. The format of accounting and monitor collection records has changed. Details are provided in the Operations Manager Administration Guide.
11. You must make your Operations Manager configuration file(s) available to user ID OPMGRM1 and any users who require access. All configuration files should now be maintained on the OPMGRM1 198 minidisk or in the *filepool*:OPMGRM1.CONFIGURATION directory.
12. If you have updated GOMCLG EXEC (for log file management on user ID OPMGRM1), move your customized version from the OPMGRM1 191 disk to the OPMGRM1 198 disk.
13. Once all migration steps are complete, you must stop and restart the Operations Manager service machines.

6.9.5 Migrating from Operations Manager V1.1.0

The following changes are required to a system running Operations Manager V1.1.0 in order to run V1.6.0:

1. The structure and operands for defining user authorization using the AUTH and REVOKE commands are not backward compatible. Refer to the Aministration Guide or command help for information on the new structure and syntax.
2. On the DEFACTN statement, the INPUT and OUTPUT operands no longer support obsolete values. This includes the LOG option on INPUT and colors, audio, highlighting, holding, logging, and suppression on OUTPUT. Refer to the DEFACTN statement in the Aministration Guide or helps for details.
3. The filename of the Operations Manager log files on the OPMGRM1 194 disk have changed from MASALOG to the name of the z/VM system. The filetype remains unchanged (the date of the log file.) GOMCLG EXEC, located on 5697J10F 300 and OPMGRM1 400 disks, has been updated to erase log files based on this new naming convention.

   To have GOMCLG EXEC erase log files generated by Operations Manager V1.1.0, you must rename them to comply with the new naming convention. Alternatively, you can archive or delete existing log files manually.
4. The sample PROFILE EXEC for OPMGRM1 has been updated for improved usability. When exiting the Operations Manager code, OPMGRM1 will remain logged on if the the virtual console is connected, or will logoff if the virtual console is disconnected.
5. In V1.6.0, the date format displayed in the output of the VIEWSPL, VIEWCON, and VIEWLOG commands will now follow the CP DATEFORMAT setting for the user issuing the command. If the MODE(RDR) option is used, the date format provided in the output will now follow the CP DATEFORMAT setting for the Operations Manager server (OPMGRM1). If you have tools that process the output of these commands, be aware that the date format may now be different than what was provided in V1.2.0.

6. The TIMER function is no longer supported in V1.6.0. It was previously replaced by a scheduling function: DEFSCHD and DELSCHD. Therefore, the following files should be removed from your Operations Manager installation.

   - All files with filename DEFTIMR
   - All files with filename DELTIMR

   These files are typically on the 5697J10A 310 and 2B2 disks and only need to be removed if you are still using these disks for V1.6.0. Copies of the files may also exist on the MAINT 19D minidisk or any other shared disk on your system if you copied the help files to another disk during installation.

7. Any references to the MONITOR operand on the CONFIG and STATUS commands must be changed to MACHINE. This operand has been changed to more easily distinguish between monitors for virtual machines, monitors for spool space, and monitors for *VMEVENT. The DEFMMON and DELMMON statements remain unchanged.

8. You must make your Operations Manager configuration file(s) available to user ID OPMGRM1 and any users who require access. All configuration files should now be maintained on the OPMGRM1 198 minidisk or in the *filepool*:OPMGRM1.CONFIGURATION directory.

9. Once all migration steps are complete, you must stop and restart the Operations Manager service machines.

Operations Manager is now installed, built, and customized on your system.

7.0 Service Instructions

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

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 service 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 Operations Manager using VMSES/E.

- Setup Environment

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

- Merge Service

  The VMFMRDSK command clears 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 Operations Manager

Electronic Service (envelope file)

If you have received the service electronically or on DVD, follow the appropriate instructions to retrieve and decompress the envelope files to the MAINT*vrm* 500 minidisk. The decompression is currently done by using the DETERSE MODULE (shipped with VMSES/E).

For more information on retrieving and decompressing service received as envelope files from Shopz, visit

http://www.vm.ibm.com/install/servinst.html

The documentation envelope and the service (PTF) envelope must have a file type of SERVLINK. Make note of the file names that you are using as you will need to enter them in place of the variable *docenvfn* and *envfilename* in the VMSES/E service commands that follow.

The preferred method for installing service to z/VM products is to use the automated SERVICE command. The SERVICE command automates issuing the VMFREC, VMFAPPLY and VMFBLD commands. It can be used for Operations Manager after the product information for Operations Manager has been added to the VMSES/E Service Update Facility software inventory table (VM SYSSUF).

To use the automated SERVICE command to install your CORrective PTF service follow the instructions in 7.2.1, “Automated Service Commands.” Otherwise follow the instructions in Appendix B, “Traditional Service Commands” on page 55.

7.2.1 Automated Service Commands

1 Logon to the Operations Manager service user ID **MAINT***vrm*

2 As a precaution, create a backup copy of the current Operations Manager disks or SFS directories. Save this copy of Operations Manager until you have completed installing the service and you are confident that the service runs correctly.

3 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 command to obtain R/W access to it.

vmlink MAINT 51D <51D D M>

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

4 Provide the service user ID access to the code.

vmlink MAINT*vrm* **500 <* C RR>**

5 Receive any memos from the documentation envelope file and review them.

service {5697J10F%opmgr | 5697J10F%opmgrsfs} *docenvfn*
vmfupdat sysmemo

docenvfn is the file name of the documentation envelope (SERVLINK) file.

Use **opmgr** if you are installing the product on minidisks.

Use **opmgrsfs** if you are installing the product in Shared File System directories.

6 Receive, Apply and Build the service

service {5697J10F%opmgr | 5697J10F%opmgrsfs} *envfilename*

envfilename is the file name of the COR (PTF) service envelope (SERVLINK) file.

Use **opmgr** if you are installing the product on minidisks.

Use **opmgrsfs** if you are installing the product in Shared File System directories.

7 Check the service message log ($VMFSRV $MSGLOG) for warning and error messages. Take appropriate action based on any warning messages received. Correct all errors reported and restart by issuing the SERVICE command as displayed in message VMFSRV2310W.

vmfview service

8 Use the VMFUPDAT SYSMEMO command to review any additional memos that were received with the service.

vmfupdat sysmemo

9 If you are installing V1.6.0 of Operations Manager for the first time (including over a previous release of Operations Manager) go to 6.7, “Allocate

Resources for Configuring and Running Operations Manager" on page 31 to continue with the installation of Operations Manager V1.6.0.

If you have installed service only (and not a new release) continue with 7.3, "Place the New Operations Manager Service Into Production" to copy the new serviced files into production.

7.3 Place the New Operations Manager Service Into Production

Note

If you are installing Operations Manager V1.6.0 for the first time, you must return to 6.7, "Allocate Resources for Configuring and Running Operations Manager" on page 31 to continue with the installation of Operations Manager version 1.

The steps below are only to be used when installing service after Operations Manager has been placed into production the first time.

If you installed the product on minidisks, follow the steps in 7.3.1, "Copy the New Operations Manager Serviced Files Into Production Using Minidisks."

If you installed the product in Shared File System, follow the steps in 7.3.2, "Copy the New Operations Manager Serviced Files Into Production Using Shared File System" on page 50.

7.3.1 Copy the New Operations Manager Serviced Files Into Production Using Minidisks

Perform all of the following steps on **each member** of an SSI cluster.

1 Logon to MAINT*vrm* to move the updated code to the production disks.

put2prod OPMGR

The PUT2PROD command will copy the service machine executables to the production 400 disk and will copy the general use code and help files to the production 410 disk. The VMSES PARTCAT file on each of the production disks will be updated.

2 Logon to MAINT*vrm* if you plan to put Operations Manager general use code on the 'Y' disk (product code or MAINT's 19E disk). Or logon to the owner of the disk that will contain the 'production' level of the Operations Manager code.

vmlink 5697J10F 310 <* F RR>
vmlink MAINT 19E <* G M>

The VMFCOPY command will update the VMSES PARTCAT file on the 19E disk.

```
vmfcopy * module f = = g2 (prodid 5697J10F%OPMGR olddate replace
vmfcopy * text f = = g2 (prodid 5697J10F%OPMGR olddate replace
vmfcopy * exec f = = g2 (prodid 5697J10F%OPMGR olddate replace
```

3 Logon to MAINT*vrm* if you plan to put Operations Manager help files on the system AMENG Help (MAINT's 19D) disk.

vmlink 5697J10F 310 <* F RR>
vmlink MAINT 19D <* G M>

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

```
vmfcopy * helpagom f = = g2 (prodid 5697J10F%OPMGR olddate replace
vmfcopy agom* helpmenu f = = g2 (prodid 5697J10F%OPMGR olddate replace
```

4 If the MAINT 19E disk was updated, rebuild the CMS saved system, to return the Y-disk (product code or MAINT's 19E disk) to 'shared' status.

```
put2prod savecms
```

You have finished servicing Operations Manager.

7.3.2 Copy the New Operations Manager Serviced Files Into Production Using Shared File System

Perform all of the following steps on **each member** of an SSI cluster.

1 Logon to MAINT*vrm* to move the updated code to the production disks.

put2prod OPMGRSFS

The PUT2PROD command will copy the service machine executables to the production 400 disk and will copy the general use code and help files to the production 410 disk. The VMSES PARTCAT file on each of the production disks will be updated.

2 Logon to MAINT*vrm* if you plan to put Operations Manager general use code on the 'Y' disk (product code or MAINT's 19E disk). Or logon to the owner of the disk that will contain the 'production' level of the Operations Manager code.

access 5697J10F.OPMGR.TESTUSER f
vmlink MAINT 19E <* G M>

The VMFCOPY command will update the VMSES PARTCAT file on the 19E disk.

```
vmfcopy * module f = = g2 (prodid 5697J10F%OPMGR olddate replace
vmfcopy * text f = = g2 (prodid 5697J10F%OPMGR olddate replace
vmfcopy * exec f = = g2 (prodid 5697J10F%OPMGR olddate replace
```

Note that although you are installing in SFS, you should **not** use OPMGRSFS in this command. OPMGR is required.

3 Logon to MAINT*vrm* if you plan to put Operations Manager help files on the system AMENG Help (MAINT's 19D) disk.

access 5697J10F.OPMGR.TESTUSER f
vmlink MAINT 19D <* G M>

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

```
vmfcopy * helpagom f = = g2 (prodid 5697J10F%OPMGR olddate replace
vmfcopy agom* helpmenu f = = g2 (prodid 5697J10F%OPMGR olddate replace
```

Note that although you are installing in SFS, you should **not** use OPMGRSFS in this command. OPMGR is required.

4 If the MAINT 19E disk was updated, rebuild the CMS saved system, to return the Y-disk (product code or MAINT's 19E disk) to 'shared' status.

put2prod savecms

You have finished servicing Operations Manager.

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 a shared file system (SFS) file pool where Operations Manager files reside.

Note: Do **not** modify the product supplied 5697J10F $PPF or 5697J10F PPF files to change the file pool name or any other installation parameters. If the 5697J10F $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 is an example. It describes how to change the default file pool name, VMSYS, to MYPOOL1 if you are installing in Share File System directories.

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 'myopmgrsfs') 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 opmgrsfs override area, so that it resembles the :DCL. section shown below. This override will be used for the installation of Operations Manager. Modifications needed are denoted in **bold** print.

```
:OVERLST. OPMGRSFS
*
* ================================================================== *
* Override Section for Initial Installation (Using SFS Directories)  *
* ================================================================== *
:OPMGRSFS. OPMGRSFS 5697J10F
:DCL. UPDATE
&191     DIR VMPSFS:5697J10F.
&BAS1Z   DIR VMPSFS:5697J10F.OPMGR.BASE
&SAMPZ   DIR VMPSFS:5697J10F.OPMGR.SAMPLE
&LMODZ   DIR VMPSFS:5697J10F.OPMGR.LOCALMOD
&DELTZ   DIR VMPSFS:5697J10F.OPMGR.DELTA
&APPLX   DIR VMPSFS:5697J10F.OPMGR.TESTAPPLY
&APPLZ   DIR VMPSFS:5697J10F.OPMGR.PRODAPPLY
&BLD0Z   DIR VMPSFS:5697J10F.OPMGR.TESTSRVR
&BLD2Z   DIR VMPSFS:5697J10F.OPMGR.TESTUSER
&GMM191P DIR MYPOOL1:OPMGRM1.
&GMM194P DIR MYPOOL1:OPMGRM1.LOGS
&GS1191P DIR MYPOOL1:OPMGRS1.
&GS2191P DIR MYPOOL1:OPMGRS2.
&GS3191P DIR MYPOOL1:OPMGRS3.
&GS4191P DIR MYPOOL1:OPMGRS4.
:EDCL.
:END.
*
```

(This override will replace the :DCL. section of the opmgrsfs override area of the 5697J10F $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* **OPMGRSFS**

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

5 Update the VM SYSSUF Software Inventory table. Since you created a PPF override to the 5697J10F $PPF file you need to make sure that the override name you created is reflected in the PPF tags for Operations Manager in the VM SYSSUF table. Type in the command VMFUPDAT SYSSUF. This will bring up a panel so that you can change the PPF names stored in the VM SYSSUF file. Locate 5697J10F under the 'Prodid' column. Replace the PPF name for INSTPPF, BLDPPF and P2PPPF for 5697J10F with your new PPF override file name. Use PF5 to process your changes.

Now that the *overname* PPF file has been created, you should specify *overname* instead of 5697J10F as the PPF name to be used for those VMSES/E commands that require a PPF name.

Appendix B. Traditional Service Commands

B.1.1.1 Prepare to Receive Service

Electronic Service (envelope file)

If you have received the service electronically or on DVD, follow the appropriate instructions to retrieve and decompress the envelope files to the MAINT*vrm* 500 minidisk. The decompression is currently done by using the DETERSE MODULE (shipped with VMSES/E).

The documentation envelope and the service (PTF) envelope must have a file type of SERVLINK. Make note of the file names that you are using as you will need to enter them in place of the variable *docenvfn* and *envfilename* in the VMSES/E service commands that follow.

The *ppfname* used throughout these servicing instructions is **5697J10F**, which assumes you are using the PPF supplied by IBM for Operations Manager. If you have your own PPF override file for Operations Manager, you should use your file's *ppfname* instead of **5697J10F**. The *ppfname* you use should be used **throughout** the rest of this procedure, unless otherwise stated differently.

1 Logon to the Operations Manager service user ID **MAINT***vrm*

2 As a precaution, create a backup copy of the current Operations Manager disks or SFS directories. Save this copy of Operations Manager until you have completed installing the service and you are confident that the service runs correctly.

3 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 command to obtain R/W access to it.

vmlink MAINT 51D <51D D M>

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

4 Add Operations Manager into the VM SYSSUF inventory table. This step only needs to be done once. It can be skipped the next time you apply service.

vmfsuftb

5 Use the VMFUPDAT command to add an appropriate entry to the VM SYSPI file, to reflect installation of Operations Manager. Specify each SSI member system (as applicable) on the command:

This step only needs to be done once. It can be skipped the next time you apply service.

vmfupdat syspinv PROD 5697J10F *membername1 {membername2 {membername3} {membername4}}}*

6 Give the service user ID access to the code.

vmlink MAINT*vrm* **500 <* C RR>**

7 Receive the documentation.

vmfrec info (env *docenvfn*

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

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

vmfview receive

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

9 Read the product memo (5697J10F MEMO) before going on.

10 Setup the correct product access order.

vmfsetup 5697J10F {OPMGR | OPMGRSFS}

Use **OPMGR** if you are installing the product on minidisks.

Use **OPMGRSFS** if you are installing the product in Shared File System directories.

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

vmfmrdsk 5697J10F {OPMGR | OPMGRSFS} apply

Use **OPMGR** if you are installing the product on minidisks.

Use **OPMGRSFS** if you are installing the product in Shared File System directories.

This command clears the alternate APPLY disk.

12 Review the merge message log ($VMFMRD $MSGLOG). If necessary, correct any problems before going on. For information about handling specific error messages, see the appropriate *z/VM: System Messages and Codes*, or use online HELP.

vmfview mrd

B.1.1.2 Receive the Service

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

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

1 Receive the service.

vmfrec ppf 5697J10F {OPMGR | OPMGRSFS} (env *envfilename*

Use **OPMGR** if you are installing the product on minidisks.

Use **OPMGRSFS** if you are installing the product 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 the appropriate *z/VM: System Messages and Codes*, or use online HELP.

vmfview receive

B.1.1.3 Apply the Service

1 Apply the new service.

vmfapply ppf 5697J10F {OPMGR | OPMGRSFS}

Use **OPMGR** if you are installing the product on minidisks.

Use **OPMGRSFS** if you are installing the product 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 the appropriate *z/VM: System Messages and Codes*, or use online HELP.

vmfview apply

Note

If you get the message VMFAPP2120W, then re-apply any local modifications before building the new Operations Manager. Refer to chapter 3 in the *Service Guide*. Follow the steps that are applicable to your local modification.

The following substitutions need to be made:

- *compname* should be **OPMGR** or **OPMGRSFS**
- *partfn* and *partft* should be the file name and file type of source part that needs to be reworked

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 B.1.1.4, “Update the Build Status Table.”

B.1.1.4 Update the Build Status Table

1 Update the Build Status Table with serviced parts.

vmfbld ppf 5697J10F {OPMGR | OPMGRSFS} (status

Use **OPMGR** if you are installing the product on minidisks.

Use **OPMGRSFS** if you are installing the product 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 5697J10F $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 latest level of the source product
            parameter files copied to your A-disk and exit VMFBLD so
            you can recompile your product parameter files with VMFPPF.
            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 5697J10F $PPF on 191 (A) from level $PFnnnnn
```

vmfppf 5697J10F *	**Note:** If you have created your own PPF override then use your PPF name instead of 5697J10F.
copy 5697J10F $PPF a = = d (olddate replace **erase 5697J10F $PPF a**	**Note: Do not** use your own PPF name in place of 5697J10F for the COPYFILE and ERASE commands.
vmfbld ppf 5697J10F {OPMGR | OPMGRSFS} (status	
1	Re-issue VMFBLD to complete updating the build status table. If you have your own PPF name then you should use it on the VMFBLD command. Use **OPMGR** if you are installing the product on minidisks. Use **OPMGRSFS** if you are installing the product 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

B.1.1.5 Build Serviced Objects

1 Rebuild Operations Manager serviced parts.

vmfbld ppf 5697J10F {OPMGR | OPMGRSFS} (serviced

Use **OPMGR** if you are installing the product on minidisks.

Use **OPMGRSFS** if you are installing the product 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.

2 Review the build message log ($VMFBLD $MSGLOG). If necessary, correct any problems before going on. For information about handling specific error messages, see the appropriate *z/VM: System Messages and Codes*, or use online HELP.

vmfview build

3 If you are installing V1.6.0 of Operations Manager for the first time (including over a previous release of Operations Manager) go to 6.7, “Allocate Resources for Configuring and Running Operations Manager” on page 31 to continue with the installation of Operations Manager V1.6.0.

If you have installed service only (and not a new release) continue with 7.3, “Place the New Operations Manager Service Into Production” on page 49 to copy the new serviced files into production.

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Operations Manager for z/VM version 1 release 6

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RATING SCALE

very satisfied				very dissatisfied	not applicable
1	2	3	4	5	N

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

- Did you order this product as an independent product or as part of a package?
  - □ Independent
  - □ Package

    What type of package was ordered?
    - □ System Delivery Offering (SDO)
    - □ Other - Please specify type: _____

- Is this the first time your organization has installed this product?
  - □ Yes
  - □ No
- Were the people who did the installation experienced with the installation of VM products using VMSES/E?
  - □ Yes

    How many years of experience do they have? _____
  - □ No
- How long did it take to install this product? _____
- If you have any comments to make about your ratings above, or any other aspect of the product installation, please list them below:

  _____

  _____

  _____

  _____

  _____

  _____

  _____

  _____

Please provide the following contact information:

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