

Program Directory for Backup and Restore Manager for z/VM

version 1 release 2.0
Program Number 5697-J06

for Use with z/VM version 5 release 2 z/VM version 5 release 3 z/VM version 5 release 4

Document Date: July 2008

GI10-8662-03

| Note — |
|--|
| Before using this information and the product it supports, be sure to read the general information under "Notices" on page 46. |
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| This program directory, dated July 2008, applies to Backup and Restore Manager for z/VM version 1 release 2.0 (Backup and Restore Manager), Program Number 5697-J06. |
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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 Backup and Restore 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 Backup and Restore Manager.
- 3.0, "Program Support" on page 5 describes the IBM support available for Backup and Restore Manager.
- 4.0, "Program and Service Level Information" on page 6 lists the APARs (program level) and PTFs (service level) incorporated into Backup and Restore Manager.
- 5.0, "Installation Requirements and Considerations" on page 7 identifies the resources and considerations for installing and using Backup and Restore Manager.
- 6.0, "Installation Instructions" on page 13 provides detailed installation instructions for Backup and Restore Manager.
- 7.0, "Service Instructions" on page 29 provides detailed servicing instructions for Backup and Restore Manager.
- Appendix A, "Create Product Parameter File (PPF) Override" on page 36 provides detailed information on overriding the Product Parameter File (PPF).
- Appendix B, "Traditional Service Commands" on page 39 provides alternative instructions for servicing Backup and Restore Manager.

Before installing Backup and Restore 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

Backup and Restore Manager provides z/VM system administrators and operators the ability to efficiently and effectively backup and restore files and data on z/VM systems. Source files and data can be CMS and non-CMS format and the target media can be DASD or tape. Backup and Restore Manager's full flexibility is apparent in its ability to do full physical and logical backup and restore operations with support for inclusion and exclusion of files, user IDs, and so on.

2.0 Program Materials

An IBM program is identified by a program number. The program number for Backup and Restore Manager for z/VM version 1 is 5697-J06.

The program announcement material describes the features supported by Backup and Restore 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 z/VM SDO on 3480, 3590, or 3592 tape cartridge. With the SDO for z/VM V5.4, only 3590 and 3592 tape cartridges are available. 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 tape cartridge or electronic envelope contains all the programs and data needed for installation. See section 6.0, "Installation Instructions" on page 13 for more information about how to install the program. Figure 1 describes the tape cartridge. Figure 2 describes the file content of the program tape cartridge or product envelope.

Figure 1. Basic Material: Program Tape

| Feature Number | Medium | Physical Volume | Tape Content | External Tape Label |
|-------------------|---------------|--------------------|-----------------------------------|---------------------|
| 5802 | 3480 cart. | 1 | Backup and Restore Manager v1.2.0 | Backup/Restore V1.2 |
| 5802 | 3590 cart. | 1 | Backup and Restore Manager v1.2.0 | Backup/Restore V1.2 |
| 5802 | 3592 cart. | 1 | Backup and Restore Manager v1.2.0 | Backup/Restore V1.2 |

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 Tape: File Content

| Tape File | Content | | | | |
|--------------|-------------|--|--|--|--|
| 1 | Tape Header | | | | |
| 2 | Tape Header | | | | |

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

| Таре | |
|------|---|
| File | Content |
| 3 | Product Header |
| 4 | Product Memo |
| 5 | Service Apply Lists |
| 6 | PTFPARTs |
| 7 | Backup and Restore Manager Service |
| 8 | Backup and Restore Manager Aux Files |
| 9 | Backup and Restore Manager Base Files |
| 10 | Backup and Restore Manager Client Executable Code |
| 11 | Backup and Restore Manager Help Files |
| 12 | Backup and Restore Manager Sample/Customization Files |
| 13 | Backup and Restore Manager Runtime Executable Code |

2.2 Optional Machine-Readable Material

There are no optional machine-readable materials for Backup and Restore Manager.

2.3 Program Publications

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

2.3.1 Base Program Publications

Figure 3 identifies the program publications for Backup and Restore Manager.

Figure 3. Material: Program Publications

| Publication Title | Form Number |
|--|-------------|
| Backup and Restore Manager for z/VM Administration Guide | SC18-9346 |
| Backup and Restore Manager for z/VM User's Guide | SC18-9523 |

2.3.2 Softcopy Publications

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

www.ibm.com/software/stormgmt/zvm/backup/library.html

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 Backup and Restore Manager.

2.5 Publications Useful During Installation

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

Figure 4. Publications Useful During Installation / Service on z/VM version 5

| Publication Title | Form Number |
|---|-------------|
| z/VM: VMSES/E Introduction and Reference | GC24-6130 |
| z/VM: Service Guide | GC24-6117 |
| z/VM: CMS Commands and Utilities Reference | SC24-6073 |
| z/VM: CMS File Pool Planning, Administration, and Operation | SC24-6074 |
| z/VM: CP Planning and Administration | SC24-6083 |
| z/VM: Saved Segments Planning and Administration | SC24-6116 |
| Backup and Restore Manager for z/VM Administration Guide | SC18-9347 |
| z/VM: Other Components Messages and Codes | GC24-6120 |
| z/VM: CMS and REXX/VM Messages and Codes | GC24-6118 |
| z/VM: CP Messages and Codes | GC24-6119 |
| z/VM: Guide for Automated Installation and Service | GC24-6099 |

3.0 Program Support

This section describes the IBM support available for Backup and Restore Manager.

3.1 Preventive Service Planning

Before installing Backup and Restore 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 |
| 5697J0600 | 120 | BACKUPZVM120 | BACKUP120 |

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 Backup and Restore Manager.

Figure 6. Component IDs

| Ret | ain | | |
|----------------|-----|-----------------------------------|---------|
| COMPID Release | | Component Name | FESN |
| 5697J0600 | 120 | Backup and Restore Manager v1.2.0 | 0400006 |

4.0 Program and Service Level Information

This section identifies the program and any relevant service levels of Backup and Restore 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 tape is also provided.

4.1 Program Level Information

The following APAR fixes against the previous release of Backup and Restore Manager have been incorporated into this release:

PK11754 PK25098 PK24853

4.2 Service Level Information

No PTFs have been incorporated into Backup and Restore Manager.

Check the BACKUPZVM120 PSP bucket for any additional PTFs that should be installed or any additional install information.

4.3 Cumulative Service Tape

Cumulative service for Backup and Restore Manager V1.2.0 is available through a monthly corrective service tape, Expanded Service Option, ESO. You need to specify the product ID, 5697J06B, when ordering the ESO.

5.0 Installation Requirements and Considerations

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

5.1 Hardware Requirements

Backup and Restore Manager V1.2.0 will operate on any hardware that supports the prerequisite software. In addition, Backup and Restore Manager V1.2.0 supports backup to any tape device supported by CMS that handles a block size of 65,535 bytes.

5.2 Program Considerations

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

5.2.1 Operating System Requirements

Backup and Restore Manager supports the following VM operating systems:

- z/VM version 5 release 2
- z/VM version 5 release 3
- z/VM version 5 release 4

5.2.2 Other Program Product Requirements

In addition, Backup and Restore Manager requires:

- Shared File System (included in z/VM) as the repository for the backup catalog
- · One of the following
 - IBM Library for REXX on zSeries® R4 (5695-014)
 - IBM Alternate Library for REXX on zSeries. IBM recommends you acquire the latest available version. It's available as a free download from http://www.ibm.com/software/awdtools/rexx/rexxzseries/index.html

5.2.3 Program Installation and Service Considerations

This section describes items that should be considered before you install or service Backup and Restore 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 and service Backup and Restore Manager strictly using the MAINT user ID, but will use a new user ID--5697J06B. This is the IBM suggested user ID name. You are free to change this to any user ID name you wish; however, a PPF override must be created.

Note: It may be easier to make the above PPF override change during the installation procedure 6.2, "Plan Your Installation For Backup and Restore Manager" step 6 on page 15, rather than after you have installed this product.

- If you are using an External Security Manager (such as IBM RACF Security Server), the following must be permitted:
 - From user ID 5697J06B, LINK MAINT 51D in MR mode
 - From user ID 5697J06B, LINK MAINT 5E5 in RR mode
 - If you plan to put the Backup and Restore Manager general use code on the 'Y' disk (MAINT's 19E disk) or the Backup and Restore Manager help files on the system AMENG Help (MAINT's 19D) disk, then one of the following is required:
 - From user ID MAINT, LINK 5697J06B 492 in RR mode
 - From user ID MAINT, ACCESS 5697J06B.BKUPMGR.TESTCLIENT

The access required depends on whether you are installing Backup and Restore Manager on minidisk or in SFS.

- All LINK statements specified in the sample directory entries for the Backup and Restore Manager user IDs. Refer to 5.3, "DASD Storage and User ID Requirements" on page 9 for a list of Backup and Restore Manager user IDs.
- Read access to the Backup and Restore Manager user code for all user IDs that will issue Backup and Restore Manager commands. By default, this code is on the 5697J06B 592 minidisk or in the SFS directory VMSYS:5697J06B.BKUPMGR.CLIENT. During product installation you may copy this code to MAINT 19D and MAINT 19E and let users access it from there.
- If you are using Tape Manager for z/VM, all worker service machines (BKRWKRnn) must have read access to the Tape Manager user code. This is on the 5697J08x 592 minidisk or in the SFS directory VMSYS:5697J08x.TAPEMGR.PRODUSER. Replace x with the appropriate letter for your Tape Manager installation ID.

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 Backup and Restore Manager.

Important Installation Notes:

- User ID(s) and minidisks or SFS directories will be defined in 6.2, "Plan Your Installation For Backup and Restore Manager" on page 14 and are listed here so that you can get an idea of the resources that you will need prior to allocating them.
- 5697J06B is a default user ID and can be changed. If you choose to change the name of the installation user ID you need to create a Product Parameter Override (PPF) to reflect this change. This can be done in 6.2, "Plan Your Installation For Backup and Restore Manager" step 6 on page 15.
- If you choose to install Backup and Restore Manager on a common user ID the default minidisk addresses for Backup and Restore Manager may already be defined. If any of the default minidisks required by Backup and Restore Manager are already in use you will have to create an override to change the default minidisks for Backup and Restore Manager so they are unique.

| Figure 7 (Page 1 of 4). DASD Storage Requirements for Target Minidisks | | | | | | | |
|--|---------|----------------|----------|--------|-----------|---|--|
| Minidisk owner | Default | Stora Cylin | _ | FB-512 | SFS 4K | Usage | |
| (user ID) | Address | DASD | CYLS | Blocks | Blocks | Default SFS Directory Name | |
| 5697J06B | 2B2 | 3390 9345 | 5 6 | 7200 | 900 | Contains all the base code shipped with Backup and Restore Manager VMSYS:5697J06B.BKUPMGR.BASE | |
| 5697J06B | 2C2 | 3390 9345 | 2 3 | 2880 | 360 | Contains sample files. VMSYS:5697J06B.BKUPMGR.SAMPLES | |
| 5697J06B | 2D2 | 3390 9345 | 10 12 | 14400 | 1800 | Contains serviced files VMSYS:5697J06B.BKUPMGR.DELTA | |
| 5697J06B | 2A6 | 3390 9345 | 1 2 | 1440 | 180 | Contains AUX files and software inventory tables that represent the test service level of Backup and Restore Manager VMSYS:5697J06B.BKUPMGR.APPLYALT | |
| 5697J06B | 2A2 | 3390 9345 | 1 2 | 1440 | 180 | Contains AUX files and software inventory tables that represent the service level of Backup and Restore Manager that is currently in production. VMSYS:5697J06B.BKUPMGR.APPLYPROD | |

Note: 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.

| Minidisk owner | Default | Stora Cylin | | FB-512 | FB-512 | SFS 4K | | Usage |
|--------------------|---------|----------------|----------|--------|----------|--|--|-------|
| | Address | DASD | CYLS | Blocks | s Blocks | Default SFS Directory Name | | |
| 5697J06B | 491 | 3390 9345 | 5 6 | 7200 | 900 | Test build disk for server code. VMSYS:5697J06B.BKUPMGR.TESTRUNTIME | | |
| 5697J06B | 591 | 3390 9345 | 5 6 | 7200 | 900 | Production build disk for server code. VMSYS:5697J06B.BKUPMGR.RUNTIME | | |
| 5697J06B | 492 | 3390 9345 | 5 6 | 7200 | 900 | Test build disk for user code. VMSYS:5697J06B.BKUPMGR.TESTCLIENT | | |
| 5697J06B | 592 | 3390 9345 | 5 6 | 7200 | 900 | Production build disk for user code. VMSYS:5697J06B.BKUPMGR.CLIENT | | |
| 5697J06B | 191 | 3390 9345 | 10 12 | 14400 | 1800 | 5697J06B user ID's 191 minidisk VMSYS:5697J06B. | | |
| 5697J06B | 198 | 3390 9345 | 2 | 2880 | 360 | Installation-defined configuration files on production system, based on samples provided on the 2C2 minidisk or in the .SAMPLES directory. VMSYS:5697J06B.BKUPMGR.CONFIGURATION | | |
| 5697J06B | 199 | 3390 9345 | 5 | 7200 | 900 | Installation-defined job templates on production system, based on samples provided on the 2C2 minidisk or in the .SAMPLES directory. | | |
| 5697J06B | 49D | 3390 9345 | 5 | 7200 | 900 | VMSYS:5697J06B.BKUPMGR.JOBDEFS AMENG HELP files on test system. This code will be copied to a production disk, (e.g. 5697J06B 29D) so the production disk will also require this amount of free space. VMSYS:5697J06B.BKUPMGR.TESTHELP | | |
| 5697J06B Totals | | 3390 9345 | 61 76 | 87,840 | 10,980 | Total DASD storage required for user ID 5697J06B. Use the SFS total for 5697J06B in step 5 on page 19. | | |
| BKRADMIN | 191 | 3390 9345 | 5 6 | 7200 | 900 | A-disk for BKRADMIN. Use the SFS value for BKRADMIN in step 5 on page 19. | | |
| | | | | | | VMSYS:BKRADMIN. | | |

Note: 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.

| Figure 7 (Page 3 of 4). DASD Storage Requirements for Target Minidisks | | | | | | | | | |
|--|--------------------|------------------------|-----|------------------|---------------------|--|--|--|--|
| Minidisk owner (user ID) | Default Address | Stora Cylin DASD | | FB-512 Blocks | SFS 4K Blocks | Usage Default SFS Directory Name | | | |
| BKRCATLG | 191 | 3390 9345 | 1 2 | 1440 | 180 | A-disk for BKRCATLG server. Use the SFS value for BKRCATLG in step 5 on page 19. | | | |
| BKRBKUP | 191 | 3390 9345 | 1 2 | 1440 | 180 | VMSYS:BKRCATLG. A-disk for BKRBKUP server. Use the SFS value for BKRBKUP in step 5 on page 19. VMSYS:BKRBKUP. | | | |
| BKRWRK01 | 191 | 3390 9345 | 1 2 | 1440 | 180 | A-disk for BKRWRK01 server, a worker service virtual machine which processes backup jobs and restore requests. Use the SFS value for BKRWKR01 in step 5 on page 19. Up to 16 workers can be defined. As a default, 4 are defined here. See the Backup and Restore Manager for z/VM Administration Guide for further details. VMSYS:BKRWRK01. | | | |
| BKRWRK02 | 191 | 3390 9345 | 1 2 | 1440 | 180 | A-disk for BKRWRK02 server, a worker service virtual machine which processes backup jobs and restore requests. Use the SFS value for BKRWKR02 in step 5 on page 19. VMSYS:BKRWRK02. | | | |
| BKRWRK03 | 191 | 3390 9345 | 1 2 | 1440 | 180 | A-disk for BKRWRK03 server, a worker service virtual machine which processes backup jobs and restore requests. Use the SFS value for BKRWKR03 in step 5 on page 19. VMSYS:BKRWRK03. | | | |

Note: 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.

| Figure 7 (Page 4 of 4). DASD Storage Requirements for Target Minidisks | | | | | | | | | |
|--|--------------------|----------------------|----------|---------|-----------|---|--|--|--|
| Minidisk owner (user ID) | Default Address | Storage in Cylinders | | FB-512 | SFS 4K | Usage | | | |
| | | DASD | CYLS | Blocks | Blocks | Default SFS Directory Name | | | |
| BKRWRK04 | 191 | 3390 9345 | 1 2 | 1440 | 180 | A-disk for BKRWRK04 server, a worker service virtual machine which processes backup jobs and restore requests. Use the SFS value for BKRWKR04 in step 5 on page 19. VMSYS:BKRWRK04. | | | |
| All user IDs Totals | | 3390 9345 | 72 94 | 103,680 | 12,960 | Total DASD storage required for all Backup and Restore Manager user IDs. | | | |

Note: 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.

6.0 Installation Instructions

This chapter describes the installation methods and the step-by-step procedures to install and activate Backup and Restore 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 and user IDs is assumed. If you use different user IDs, minidisk addresses, or SFS directories to install Backup and Restore Manager, adapt these instructions as needed for your environment.

Note -

The sample console output presented throughout these instructions was produced on a z/VM 5.3.0 system. If you're installing Backup and Restore 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 Backup and Restore Manager using VMSES/E.

· Plan Your Installation

Use the VMFINS command to load several VMSES/E files from the product tape and to obtain Backup and Restore Manager resource requirements.

Allocate Resources

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

Install the Backup and Restore Manager Product

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

Place Backup and Restore Manager Files into Production

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

· Perform Post-installation Tasks

Information about file tailoring and initial activation of the program is presented in the Backup and Restore Manager Administration Guide (SC18-9346).

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

6.2 Plan Your Installation For Backup and Restore Manager

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

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

To obtain planning information for your environment:

- 1 Log on as Backup and Restore 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.
- 2 Mount the Backup and Restore Manager installation tape and attach it to the user ID at virtual address 181. The VMFINS EXEC requires the tape drive to be at virtual address 181. If you have a product envelope SERVLINK file make sure it is available on the A-disk or any work disk accessed as file mode C.
- 3 Establish read access to the VMSES/E code.

link MAINT 5e5 5e5 rr access 5e5 b

The 5E5 disk contains the VMSES/E code.

4 Establish write access to the Software Inventory disk.

link MAINT 51d 51d mr access 51d d

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

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

continue with these procedures until a R/W link is established to the 51D minidisk.

5 Load the Backup and Restore 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.

a If installing from tape

vmfins install info (nomemo

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

b If installing from a product **envelope** file

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.

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

6 Obtain resource planning information for Backup and Restore Manager.

Note:

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

- · 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 Backup and Restore Manager. For example, you will need to specify your PPF override file name instead of 5697J06B 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.

a If installing from tape

vmfins install ppf 5697J06B {BKUPMGR | BKUPMGRSFS} (plan nomemo

Use **BKUPMGR** for installing on minidisks or **BKUPMGRSFS** for installing in Shared File System directories.

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

You can override any of the following:

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

b If installing from a product **envelope** file

vmfins install ppf 5697J06B {BKUPMGR | BKUPMGRSFS} (plan nomemo env envfilename

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

Use **BKUPMGR** for installing on minidisks or **BKUPMGRSFS** for installing in Shared File System directories.

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

You can override any of the following:

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

```
VMFINS2767I Reading VMFINS DEFAULTS B for additional options
VMFINS2760I VMFINS processing started
VMFINS2601R Do you want to create an override for :PPF 5697J06B BKUPMGR
            :PRODID 5697J06B%BKUPMGR?
           Enter 0 (No), 1 (Yes) or 2 (Exit)
VMFINS2603I Processing product :PPF 5697J06B BKUPMGR :PRODID
            5697J06B%BKUPMGR
VMFREQ1909I 5697J06B PLANINFO created on your A-disk
VMFREQ2805I Product :PPF 5697J06B BKUPMGR :PRODID 5697J06B%BKUPMGR
           has passed requisite checking
VMFINT2603I Planning for the installation of product :PPF 5697J06B BKUPMGR
            :PRODID 5697J06B%BKUPMGR
VMFRMT2760I VMFRMT processing started
VMFRMT2760I VMFRMT processing completed successfully
VMFINS2760I VMFINS processing completed successfully
```

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

vmfview install

6.3 Allocate Resources for Installing Backup and Restore Manager

Use the planning information in the 5697J06B PLANINFO file, created in the PLAN step, to:

• Create the 5697J06B and service virtual machine user directories for minidisk install. Refer to 6.3.1, "Installing Backup and Restore Manager on Minidisk" for detailed instructions.

OR

 Create the 5697J06B and service virtual machine user directories for SFS install. Refer to 6.3.2, "Installing Backup and Restore Manager in SFS Directories" for detailed instructions.

6.3.1 Installing Backup and Restore Manager on Minidisk

1 Obtain the user directory from the 5697J06B PLANINFO file.

Note: The user directory entry is located in the resource section of the PLANINFO file, at the bottom; these entries will contain all of the links and privilege classes necessary for the 5697J06B and service virtual machine user IDs. Use the directory entry found in PLANINFO as a model as input to your system directory.

- **2** Add the MDISK statements to the directory entry for 5697J06B and any service virtual machine you will be using. Use Figure 7 on page 9 to obtain the minidisk requirements.
- **3** Add the 5697J06B and service virtual machine directory entries to the system directory. Change the passwords for all the user IDs you are adding from xxxxx to valid passwords, in accordance with your security guidelines.
- **4** Place the new directory on-line using the DIRECTXA command or an equivalent CP directory maintenance method, such as DIRMAINT.

- Note

All minidisks for the 5697J06B user ID and the service virtual machine user IDs must be CMS formatted before installing Backup and Restore Manager.

5 Continue with 6.4, "Install Backup and Restore Manager" on page 22.

6.3.2 Installing Backup and Restore Manager in SFS Directories

1 Obtain the user directory from the 5697J06B PLANINFO file.

Note: The user directory entries are located in the resource section of the PLANINFO file, at the bottom; these entries will contain all of the links and privilege classes necessary for the 5697J06B and service virtual machine

user IDs. Use the directory entries found in PLANINFO as a model as input to your system directory.

- 2 Add the 5697J06B and service virtual machine directory entries to the system directory. Change the passwords for all the user IDs you are adding from xxxxx to valid passwords, in accordance with your security guidelines.
- **3** If you intend to use an SFS directory as the work space for the 5697J06B 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 VMSYS

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

- **4** Place the new directory on-line using the DIRECTXA command or an equivalent CP directory maintenance method, such as DIRMAINT.
- **5** 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 Backup and Restore 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 5697J06B and service virtual machine user IDs in the VMSYS filepool.

- **b** Logon to a user ID that is authorized to enroll users and create subdirectories for VMSYS: filepool. This is typically an administrator for VMSYS: filepool.
- C Enroll user 5697J06B in the VMSYS filepool using the ENROLL USER command:

ENROLL USER 5697J06B VMSYS: (BLOCKS blocks

where blocks is the number of 4K blocks required for this user ID only.

d Enroll any of the service virtual machines, that you are going to use, in the VMSYS filepool using the ENROLL USER command. You need to issue an enroll user for each SVM user ID you plan on using.

ENROLL USER symID VMSYS: (BLOCKS blocks

where symID is the service virtual machine user ID.

where blocks is the number of 4K blocks required for the SVM user ID you are enrolling.

- **e** Determine if there are enough blocks available in the filepool to install Backup and Restore 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 Backup and Restore Manager you will need to add space to the filepool. See the CMS File Pool Planning, Administration, and Operation manual for information on adding space to a filepool.
- **f** Create the necessary subdirectories listed in the 5697J06B PLANINFO file using the CREATE DIRECTORY command.

set filepool vmsys: create directory dirid

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

create directory vmsys:5697J06B.bkupmgr create directory vmsys:5697J06B.bkupmgr.base

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

A complete list of default Backup and Restore Manager SFS directories is provided in Figure 7 on page 9.

Give the administrator user ID, end users, and the service virtual machine user IDs that you will be using, access to the necessary production build, configuration, and job definition directories, using the GRANT AUTHORITY command.

grant auth vmsys:5697J06B.bkupmgr.runtime to svm/D (read newread

where svmID is the service virtual machine user ID. Repeat the grant auth command for each SVM you are going to be using.

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

grant auth vmsys:5697J06B.bkupmgr.configuration to userID (read newread

where userID is each of the SVM user IDs and end user IDs. Repeat the grant auth command for each SVM you are going to be using and each user that will be requesting backup or restore functions. Alternatively, you can make this directory PUBLIC.

grant auth vmsys:5697J06B.bkupmgr.jobdefs to BKRBKUP (read newread

where BKRBKUP is the master backup SVM user ID.

grant auth vmsys:5697J06B.bkupmgr.jobdefs to BKRADMIN (write newwrite

where BKRADMIN is the administrator user ID defined for Backup and Restore Manager.

h Give the administrator user ID and any end users that will be using the panel interface to generate restore requests access to the necessary production directory for the client code, using the GRANT AUTHORITY command.

grant auth vmsys:5697J06B.bkupmgr.client to userID (read newread

where userID is the administrator user ID (BKRADMIN) and end user IDs. Repeat the grant auth command for each user that will be using the panel interface to generate restore requests.

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

i If you are going to place Backup and Restore Manager client code on MAINT's 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 3 on page 27 for more information on placing client code on MAINT 19E disk.

grant auth vmsys:5697J06B.bkupmgr.testclient to MAINT (read newread

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

6.4 Install Backup and Restore Manager

The ppfname used throughout these installation instructions is 5697J06B, which assumes you are using the PPF supplied by IBM for Backup and Restore Manager. If you have your own PPF override file for Backup and Restore Manager, you should use your file's ppfname instead of 5697J06B. The ppfname you use should be used **throughout** the rest of this procedure.

- 1 Logon to the installation user ID **5697J06B**.
- **2** Create a PROFILE EXEC that will contain the ACCESS commands for MAINT 5E5 and 51D minidisks and define a RETRIEVE key.

xedit profile exec a ===> input /**/ ===> input 'access 5e5 b' ===> input 'access 51d d' ===> input 'CP SET PF12 RETRIEVE' ===> file

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 PF12 to find, modify, and execute previously executed commands.

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

profile

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

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

link MAINT 51d 51d mr access 51d d

- 5 Have the Backup and Restore Manager installation tape mounted and attached to 5697J06B at virtual address 181. The VMFINS EXEC requires the tape drive to be at virtual address 181. If you have a product envelope SERVLINK file make sure it is available on the A-disk or any work disk accessed as file mode C.
- 6 Install Backup and Restore 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 (5697J06B), 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.

a If installing from tape

vmfins install ppf 5697J06B {BKUPMGR | BKUPMGRSFS} (nomemo nolink

Use **BKUPMGR** for installing on minidisks or **BKUPMGRSFS** for installing in Shared File System directories.

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

b If installing from a product **envelope**

vmfins install ppf 5697J06B {BKUPMGR | BKUPMGRSFS} (nomemo nolink env envfilename

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

Use **BKUPMGR** for installing on minidisks or **BKUPMGRSFS** for installing in Shared File System directories.

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

```
VMFINS2767I Reading VMFINS DEFAULTS B for additional options
VMFINS2760I VMFINS processing started
VMFINS2601R Do you want to create an override for :PPF 5697J06B BKUPMGR
             :PRODID 5697J06B%BKUPMGR?
             Enter 0 (No), 1 (Yes) or 2 (Exit)
VMFINS2603I Processing product :PPF 5697J06B BKUPMGR :PRODID
             5697J06B%BKUPMGR
VMFREQ2805I Product :PPF 5697J06B BKUPMGR :PRODID 5697J06B%BKUPMGR
             has passed requisite checking
VMFINT2603I Installing product :PPF 5697J06B BKUPMGR :PRODID
             5697J06B%BKUPMGR
VMFSET2760I VMFSETUP processing started for 5697J06B BKUPMGR
VMFUTL2205I Minidisk Directory Assignments:
                       Mode Stat Vdev Label/Directory
             String
VMFUTL2205I LOCALSAM E
                                R/W 2C2
                                            BKR2C2
VMFUTL2205I LOCALCFG F
                                R/W
                                     198
                                            BKR198
VMFUTL2205I APPLY
                                R/W
                                             BKR2A6
                                     2A6
VMFUTL2205I
                        Н
                                R/W
                                     2A2
                                             BKR2A2
VMFUTL2205I DELTA
                                R/W
                                     2D2
                                            BKR2D2
                        Ι
VMFUTL2205I BUILD1
                                R/W
                                     491
                                             BKR491
VMFUTL2205I BUILD2
                        Κ
                                R/W
                                     492
                                            BKR492
VMFUTL2205I BUILD3
                                      49D
                                             BKR49D
                                R/W
VMFUTL2205I BASE0
                        М
                                R/W
                                     2B2
                                             BKR2B2
VMFUTI 22051 ----- A
                                R/W
                                     191
                                             SFS191
VMFUTL2205I -----
                        R
                                R/0
                                     5E5
                                            MNT5E5
VMFUTL2205I -----
                                R/W
                                     500
                                            MNT500
VMFUTL2205I -----
                                R/W
                                     51D
                                            MNT51D
VMFUTL2205I ----- S
                                R/0
                                     190
                                            CMS21
VMFUTL2205I ----- Y/S
                                R/O 19E
                                            YDISK
VMFSET2760I VMFSETUP processing completed successfully
VMFREC2760I VMFREC processing started
VMFREC1852I Volume 1 of 1 of INS TAPE 0500
VMFREC1851I (1 of 9) VMFRCAXL processing AXLIST VMFRCX2159I Loading 0 part(s) to DELTA 2D2 (I)
VMFREC1851I (2 of 9) VMFRCPTF processing PARTLST
VMFRCP2159I Loading 0 part(s) to DELTA 2D2 (I)
VMFREC1851I (3 of 9) VMFRCCOM processing DELTA
VMFRCC2159I Loading 0 part(s) to DELTA 2D2 (I)
VMFREC1851I (4 of 9) VMFRCALL processing APPLY
VMFRCA2159I Loading part(s) to APPLY 2A6 (G) VER
VMFRCA2159I Loaded 1 part(s) to APPLY 2A6 (G) VMFREC1851I (5 of 9) VMFRCALL processing BASE
VMFRCA2159I Loading part(s) to BASE0 2B2 (M)
VMFRCA2159I Loaded 123 part(s) to BASE0 2B2 (M)
VMFREC1851I (6 of 9) VMFRCALL processing CLIENT
VMFRCA2159I Loading part(s) to BUILD2 492 (K) VMFRCA2159I Loaded 22 part(s) to BUILD2 492 (K)
VMFREC1851I (7 of 9) VMFRCALL processing HELP
VMFRCA2159I Loading part(s) to BUILD3 49D (L)
VMFRCA2159I Loaded 23 part(s) to BUILD3 49D (L)
VMFREC1851I (8 of 9) VMFRCALL processing SAMPLES
VMFRCA2159I Loading part(s) to LOCALSAM 2C2 (E)
VMFRCA2159I Loaded 33 part(s) to LOCALSAM 2C2 (E) VMFREC1851I (9 of 9) VMFRCALL processing SVM
VMFRCA2159I Loading part(s) to BUILD1 491 (J)
VMFRCA2159I Loaded 43 part(s) to BUILD1 491 (J)
VMFREC2760I VMFREC processing completed successfully
VMFINT2603I Product installed
VMFINS2760I VMFINS processing completed successfully
```

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

vmfview install

6.4.1 Update Build Status Table for Backup and Restore Manager

1 Update the VM SYSBLDS software inventory file for Backup and Restore Manager.

vmfins build ppf 5697J06B {BKUPMGR | BKUPMGRSFS} (serviced nolink

Use **BKUPMGR** for installing on minidisks or **BKUPMGRSFS** for installing in Shared File System directories.

The SERVICED option will build any parts that were not built on the installation tape (if any) and update the Software Inventory build status table showing that the product 5697J06B 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 on-line HELP.

vmfview install

6.5 Place Backup and Restore Manager Into Production

If you are installing using minidisks, follow the steps in 6.5.1, "Copy Backup and Restore Manager Files Into Production Using Minidisks" on page 26 and then go to 6.6, "Post-Installation Considerations" on page 28.

If you are installing using Shared File System, follow the steps in 6.5.2, "Copy Backup and Restore Manager Files Into Production Using Shared File System" on page 27 and then go to 6.6, "Post-Installation Considerations" on page 28.

6.5.1 Copy Backup and Restore Manager Files Into Production Using **Minidisks**

1 Logon to 5697J06B and move the Backup and Restore Manager Service Machine executables to the production disk.

The VMFCOPY command will update the VMSES access 491 e PARTCAT file on the 591 disk. access 591 f

vmfcopy * * e = = f (prodid 5697J06B%BKUPMGR olddate replace

2 Logon to 5697J06B and move the client code to the production disk.

The VMFCOPY command will update the VMSES access 492 e PARTCAT file on the 592 disk. access 592 f

vmfcopy * * e = = f (prodid 5697J06B%BKUPMGR olddate replace

3 Logon to MAINT if you plan to put Backup and Restore Manager client 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 Backup and Restore Manager code.

link 5697J06B 492 492 rr access 492 e access 19e f

The VMFCOPY command will update the VMSES

PARTCAT file on the 19E disk.

vmfcopy * * e = = f2 (prodid 5697J06B%BKUPMGR olddate replace

4 Logon to MAINT if you plan to put Backup and Restore Manager help files on the system AMENG Help (MAINT's 19D) disk.

link 5697J06B 49D 49D rr access 49D e access 19d f

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

vmfcopy * helpabkr e = = f2 (prodid 5697J06B%BKUPMGR olddate replace vmfcopy abkr helpmenu e = = f2 (prodid 5697J06B%BKUPMGR olddate replace

- 5 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. See the "Placing (Serviced) Components into Production" section of the Service Guide for detailed information about how to save the CMS saved system.
- 6 If the MAINT 19D disk was updated, rebuild the CMS HELP logical saved segment, to include Backup and Restore Manager's help files from the

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

7 Continue with 6.6, "Post-Installation Considerations" on page 28.

6.5.2 Copy Backup and Restore Manager Files Into Production Using **Shared File System**

1 Logon to 5697J06B and move the Backup and Restore Manager Service Machine executables to the production disk.

access 5697J06B.BKUPMGR.TESTRUNTIME e access 5697J06B.BKUPMGR.RUNTIME f vmfcopy * * e = = f (prodid 5697J06B%BKUPMGR olddate replace

The VMFCOPY command will update the VMSES PARTCAT file in the RUNTIME directory.

Note that although you are installing in SFS, you should not use BKUPMGRSFS in this command. BKUPMGR is required.

2 Logon to 5697J06B and move the client code to the production disk.

access 5697J06B.BKUPMGR.TESTCLIENT e access 5697J06B.BKUPMGR.CLIENT f vmfcopy * * e = = f (prodid 5697J06B%BKUPMGR olddate replace

The VMFCOPY command will update the VMSES PARTCAT file in the CLIENT directory.

Note that although you are installing in SFS, you should not use BKUPMGRSFS in this command. BKUPMGR is required.

3 Logon to MAINT if you plan to put Backup and Restore Manager client 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 Backup and Restore Manager code.

access 5697J06B.BKUPMGR.TESTCLIENT e access 19e f

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

vmfcopy * * e = = f2 (prodid 5697J06B%BKUPMGR olddate replace

Note that although you are installing in SFS, you should not use BKUPMGRSFS in this command. BKUPMGR is required.

f 4 Logon to MAINT if you plan to put Backup and Restore Manager help files on the system AMENG Help (MAINT's 19D) disk.

access 5697J06B.BKUPMGR.TESTHELP e access 19d f

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

vmfcopy * helpabkr e = = f2 (prodid 5697J06B%BKUPMGR olddate replace vmfcopy abkr helpmenu e = = f2 (prodid 5697J06B%BKUPMGR olddate replace

> Note that although you are installing in SFS, you should not use BKUPMGRSFS in this command. BKUPMGR is required.

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

6.6 Post-Installation Considerations

Post-installation information is contained in the Backup and Restore Manager Administration Guide (SC18-9346). Perform the steps required for file tailoring and initial activation of the program, as described in the Administration Guide, before continuing.

Backup and Restore 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 Backup and Restore Manager. VMSES/E is used to install service for Backup and Restore 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 Backup and Restore 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 Backup and Restore Manager

Electronic Service (envelope file) -

If you have received the service electronically or on CD-ROM, follow the appropriate instructions to retrieve and decompress the envelope files to your A-disk. 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 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 Backup and Restore Manager after the product information for Backup and Restore 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 39.

7.2.1 Automated Service Commands

- 1 Logon to Backup and Restore Manager service user ID 5697J06B
- **2** As a precaution, create a backup copy of the current Backup and Restore Manager disks or SFS directories. Save this copy of Backup and Restore 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 commands to obtain R/W access to it.

link MAINT 51d 51d mr access 51d d

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

4 Add Backup and Restore 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** Have the Backup and Restore Manager CORrective service tape mounted and attached to 5697J06B as 181. If you have an envelope (SERVLINK) file make sure it is available on the A-disk or any minidisk or SFS directory accessed as file mode C.
- **6** If you are servicing from an envelope file you need to receive any memos from the documentation envelope file and review them. You skip this step if you have a service tape as the memos will be loaded down during SERVICE execution against the tape.

service {5697J06B%bkupmgr | 5697J06B%bkupmgrsfs} docenvfn vmfupdat sysmemo

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

Use **bkupmgr** if you installed the product on minidisks or bkupmgrsfs if you installed the product in Shared File System directories.

7 Receive, Apply and Build the service

a If servicing from tape

service {5697J06B%bkupmgr | 5697J06B%bkupmgrsfs}

Use **bkupmgr** if you installed the product on minidisks or bkupmgrsfs if you installed the product in Shared File System directories.

b If servicing from an envelope file

service {5697J06B%bkupmgr | 5697J06B%bkupmgrsfs} envfilename

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

Use **bkupmgr** if you installed the product on minidisks or bkupmgrsfs if you installed the product in Shared File System directories.

8 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

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

vmfupdat sysmemo

10 Continue with 7.3, "Place the New Backup and Restore Manager Service Into Production" to copy the new serviced files into production.

7.3 Place the New Backup and Restore Manager Service Into **Production**

If you installed the product using minidisks, follow the steps in 7.3.1, "Copy the New Backup and Restore Manager Serviced Files Into Production Using Minidisks."

If you installed the product using Shared File System, follow the steps in 7.3.2, "Copy the New Backup and Restore Manager Serviced Files Into Production Using Shared File System" on page 33.

7.3.1 Copy the New Backup and Restore Manager Serviced Files Into **Production Using Minidisks**

1 Logon to 5697J06B to move the Backup and Restore Manager Service Machine executables to the production disk.

access 491 e The VMFCOPY command will update the VMSES PARTCAT file on the 591 disk. access 591 f vmfcopy * * e = = f (prodid 5697J06B%BKUPMGR olddate replace

2 Logon to 5697J06B to move the client code to the production disk.

access 492 e The VMFCOPY command will update the VMSES access 592 f PARTCAT file on the 592 disk. vmfcopy * * e = = f (prodid 5697J06B%BKUPMGR olddate replace

3 Logon to MAINT if you plan to put Backup and Restore Manager client 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 Backup and Restore Manager code.

link 5697J06B 492 492 rr access 492 e access 19e f

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

vmfcopy * * e = = f2 (prodid 5697J06B%BKUPMGR olddate replace

4 Logon to MAINT if you plan to put Backup and Restore Manager help files on the system AMENG Help (MAINT's 19D) disk.

link 5697J06B 49D 49D rr access 49D e access 19d f

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

vmfcopy * helpabkr e = = f2 (prodid 5697J06B%BKUPMGR olddate replace vmfcopy abkr helpmenu e = = f2 (prodid 5697J06B%BKUPMGR olddate replace

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

You have finished servicing Backup and Restore Manager.

7.3.2 Copy the New Backup and Restore Manager Serviced Files Into **Production Using Shared File System**

1 Logon to 5697J06B to move the Backup and Restore Manager Service Machine executables to the production disk.

access 5697J06B.BKUPMGR.TESTRUNTIME e access 5697J06B.BKUPMGR.RUNTIME f

The VMFCOPY command will update the VMSES PARTCAT file in the RUNTIME directory.

vmfcopy * * e = = f (prodid 5697J06B%BKUPMGR olddate replace

Note that although you are installing in SFS, you should not use BKUPMGRSFS in this command. BKUPMGR is required.

2 Logon to 5697J06B to move the client code to the production disk.

access 5697J06B.BKUPMGR.TESTCLIENT e access 5697J06B.BKUPMGR.CLIENT f

The VMFCOPY command will update the VMSES PARTCAT file in the CLIENT directory.

vmfcopy * * e = = f (prodid 5697J06B%BKUPMGR olddate replace

Note that although you are installing in SFS, you should not use BKUPMGRSFS in this command. BKUPMGR is required.

3 Logon to MAINT if you plan to put Backup and Restore Manager client 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 Backup and Restore Manager code.

access 5697J06B.BKUPMGR.TESTCLIENT e access 19e f

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

vmfcopy * * e = = f2 (prodid 5697J06B%BKUPMGR olddate replace

Note that although you are installing in SFS, you should not use BKUPMGRSFS in this command. BKUPMGR is required.

4 Logon to MAINT if you plan to put Backup and Restore Manager help files on the system AMENG Help (MAINT's 19D) disk.

access 5697J06B.BKUPMGR.TESTHELP e access 19d f

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

vmfcopy * helpabkr e = = f2 (prodid 5697J06B%BKUPMGR olddate replace vmfcopy abkr helpmenu e = = f2 (prodid 5697J06B%BKUPMGR olddate replace

> Note that although you are installing in SFS, you should not use BKUPMGRSFS in this command. BKUPMGR is required.

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

You have finished servicing Backup and Restore 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 the shared file system (SFS) file pool where Backup and Restore Manager files reside.

Note: Do **not** modify the product supplied 5697J06B \$PPF or 5697J06B PPF files to change the file pool name or any other installation parameters. If the 5697J06B \$PPF file is serviced, the existing \$PPF file will be replaced, and any changes to that file will be lost; by creating your own \$PPF override, your updates will be preserved.

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

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

xedit overname \$PPF fm2

overname is the PPF override file name (such as 'mybkupmgr') 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 bkupmgrsfs override area, so that it resembles the :DCL. section shown below. This override will be used for the installation of Backup and Restore Manager. Modifications needed are denoted in **bold** print.

```
:OVERLST. BKUPMGRSFS
* Override Section for Initial Installation (Using SFS Directories)
* =============== * *
:BKUPMGRSFS. BKUPMGRSFS 5697J06B
:DCL. UPDATE
&191
        DIR MYP00L1:5697J06B.
        DIR MYPOOL1:5697J06B.BKUPMGR.CONFIGURATION
&CONFG
&SVM0
        DIR MYPOOL1:5697J06B.BKUPMGR.RUNTIME
&JOBS
        DIR MYPOOL1:5697J06B.BKUPMGR.JOBDEFS
        DIR MYPOOL1:5697J06B.BKUPMGR.SAMPLES
&SAMPZ
        DIR MYPOOL1:5697J06B.BKUPMGR.CLIENT
&CLI0
&BLD1
        DIR MYPOOL1:5697J06B.BKUPMGR.TESTRUNTIME
&CLI1
        DIR MYPOOL1:5697J06B.BKUPMGR.TESTCLIENT
&HLP1
        DIR MYPOOL1:5697J06B.BKUPMGR.TESTHELP
&BAS0
        DIR MYPOOL1:5697J06B.BKUPMGR.BASE
&DELTZ
        DIR MYPOOL1:5697J06B.BKUPMGR.DELTA
&APPLX
        DIR MYPOOL1:5697J06B.BKUPMGR.APPLYALT
        DIR MYPOOL1:5697J06B.BKUPMGR.APPLYPROD
&APPLZ
&ADMIN
        DIR MYPOOL1: BKRADMIN.
        DIR MYPOOL1: BKRCATLG.
&CATLG
&MASTR
        DIR MYPOOL1: BKRBKUP.
&WRK01
        DIR MYPOOL1:BKRWRK01.
&WRK02
        DIR MYPOOL1:BKRWRK02.
&WRK03
        DIR MYPOOL1:BKRWRK03.
        DIR MYPOOL1:BKRWRK04.
&WRK04
:EDCL.
:END.
```

(This override will replace the :DCL. section of the bkupmgrsfs override area of the 5697J06B \$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 BKUPMGRSFS

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

Now that the overname PPF file has been created, you should specify overname instead of 5697J06B 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

The *ppfname* used throughout these servicing instructions is **5697J06B**, which assumes you are using the PPF supplied by IBM for Backup and Restore Manager. If you have your own PPF override file for Backup and Restore Manager, you should use your file's *ppfname* instead of **5697J06B**. The *ppfname* you use should be used **throughout** the rest of this procedure, unless otherwise stated differently.

- 1 Logon to Backup and Restore Manager service user ID 5697J06B
- **2** As a precaution, create a backup copy of the current Backup and Restore Manager disks or SFS directories. Save this copy of Backup and Restore 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 commands to obtain R/W access to it.

link MAINT 51d 51d mr access 51d d

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

- **4** Have the Backup and Restore Manager CORrective service tape mounted and attached to **5697J06B** as 181. If you have an envelope (SERVLINK) file file make sure that it is available on the A-disk or any minidisk or SFS directory accessed as file mode C.
- **5** Receive the documentation.

a If receiving the service from tape

vmfrec info

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

b If receiving the service from an envelope file

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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.

6 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.

- 7 Read the product memo (5697J06B MEMO) before going on.
- **8** Setup the correct product access order.

vmfsetup 5697J06B {BKUPMGR | BKUPMGRSFS}

Use **BKUPMGR** for installing on minidisks or **BKUPMGRSFS** for installing in Shared File System directories.

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

vmfmrdsk 5697J06B {BKUPMGR | BKUPMGRSFS} apply

Use **BKUPMGR** for installing on minidisks or **BKUPMGRSFS** for installing in Shared File System directories.

This command clears the alternate APPLY disk.

10 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 on-line HELP.

vmfview mrd

B.1.1.2 Receive the Service

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

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

1 Receive the service.

a If receiving the service from tape

vmfrec ppf 5697J06B {BKUPMGR | BKUPMGRSFS}

Use **BKUPMGR** for installing on minidisks or **BKUPMGRSFS** for installing in Shared File System directories.

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

b If receiving the service from the PTF envelope file

vmfrec ppf 5697J06B {BKUPMGR | BKUPMGRSFS} (env envfilename

Use **BKUPMGR** for installing on minidisks or **BKUPMGRSFS** for installing in Shared File System directories.

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

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

vmfview receive

B.1.1.3 Apply the Service

1 Apply the new service.

vmfapply ppf 5697J06B {BKUPMGR | BKUPMGRSFS}

Use **BKUPMGR** for installing on minidisks or **BKUPMGRSFS** for installing in Shared File System directories.

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

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

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

vmfview apply

If you get the message VMFAPP2120W then re-apply any local modifications before building the new Backup and Restore Manager. Refer to chapter 7 in the Service Guide. Follow the steps that are applicable to your local modification.

The following substitutions need to be made:

- zvm should be 5697J06B
- compname should be **BKUPMGR** or **BKUPMGRSFS** (minidisk or SFS)
- appid should be 5697J06B
- fm-local should be the fm of 2C4
- fm-applyalt should be the fm of 2A6

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 5697J06B {BKUPMGR | BKUPMGRSFS} (status

Use **BKUPMGR** for installing on minidisks or **BKUPMGRSFS** for installing in Shared File System directories.

This command updates the Build Status Table.

Note -

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

VMFBLD2185R The following source product parameter files have been

serviced:

VMFBLD2185R 5697J06B \$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.

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

VMFBLD2188I Building 5697J06B \$PPF on 191 (A) from level \$PFnnnnn

vmfppf 5697J06B *

Note: If you have created your own PPF override then use your PPF name instead of 5697J06B.

erase 5697J06B \$PPF a

copy 5697J06B \$PPF a = = d (olddate replace Note: Do not use your own PPF name in place of 5697J06B for the COPYFILE and ERASE commands.

vmfbld ppf 5697J06B {BKUPMGR | BKUPMGRSFS} (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 **BKUPMGR** for installing on minidisks or **BKUPMGRSFS** for installing in Shared File System directories. When you receive the prompt that was previously displayed, enter a

1 to continue.

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

vmfview build

B.1.1.5 Build Serviced Objects

1 Rebuild Backup and Restore Manager serviced parts.

vmfbld ppf 5697J06B {BKUPMGR | BKUPMGRSFS} (serviced

Use **BKUPMGR** for installing on minidisks or **BKUPMGRSFS** for installing in Shared File System directories.

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

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 on-line HELP.

vmfview build

3 Continue with 7.3, "Place the New Backup and Restore Manager Service Into Production" on page 32 to copy the new serviced files into production.

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| RATING SCALE | | | | | | |
|----------------|---|---|---|----------------------|-------------------|--|
| very satisf | • | | | 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 | Ν | |
| Contents of program directory | 1 | 2 | 3 | 4 | 5 | Ν | |
| 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 | Ν | |
| 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 | Ν | |

| • [| Did vou | order this | product | as an | independent | product of | 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: |
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| |
| Please provide the following contact information: |
| Name and Job Title |
| Organization |
| |
| Address |
| Telephone |

Thank you for your participation.

Please send the completed form to the following address, or give to your IBM representative who will forward it to the Backup and Restore Manager for z/VM Development group:

Silicon Valley Lab 555 Bailey Av. San Jose, CA 95141

IEM

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