



Program Directory for Backup and Restore Manager for z/VM

version 1 release 3.0

Program Number 5697-J06

for Use with
z/VM version 6 release 4
z/VM version 7 release 1
z/VM version 7 release 2

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GI10-8662-15

Note

Before using this information and the product it supports, be sure to read the general information under “Notices” on page 54.

This program directory, dated January 2021, applies to Backup and Restore Manager for z/VM version 1 release 3.0 (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 8 identifies the resources and considerations for installing and using Backup and Restore Manager.
- 6.0, “Installation Instructions” on page 15 provides detailed installation instructions for Backup and Restore Manager.
- 7.0, “Service Instructions” on page 39 provides detailed servicing instructions for Backup and Restore Manager.
- Appendix A, “Create Product Parameter File (PPF) Override” on page 45 provides detailed information on overriding the Product Parameter File (PPF).
- Appendix B, “Traditional Service Commands” on page 48 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 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 15 for more information about how to install the program. Figure 1 describes the electronic envelope. 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	Backup and Restore Manager v1.3.0	Backup/Restore V1.3

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 DVD: File Content

File	Content
1	Header
2	Header
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

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

File	Content
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 Publicatons

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

<https://www.ibm.com/products/backup-and-restore-manager-for-zvm>

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 6

Publication Title	Form Number
<i>z/VM: VMSES/E Introduction and Reference</i>	GC24-6243
<i>z/VM: Service Guide</i>	GC24-6247
<i>z/VM: CMS Commands and Utilities Reference</i>	SC24-6166
<i>z/VM: CMS File Pool Planning, Administration, and Operation</i>	SC24-6167
<i>z/VM: Other Components Messages and Codes</i>	GC24-6207
<i>z/VM: CMS and REXX/VM Messages and Codes</i>	GC24-6161
<i>z/VM: CP Messages and Codes</i>	GC24-6177
<i>z/VM: CP Planning and Administration</i>	SC24-6178
<i>z/VM: Saved Segments Planning and Administration</i>	SC24-6229
<i>Backup and Restore Manager for z/VM Administration Guide</i>	SC18-9346

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	130	BACKUPZVM130	BACKUP130

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

Retain			
COMPID	Release	Component Name	FESN
5697J0600	130	Backup and Restore Manager v1.3.0	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 is also provided.

4.1 Program Level Information

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

UK18212
UK19969
UK23333
UK27376
UK31492
UK36189
UK36894
UK48379
UK50255
UK54431
UK58638
UK58841
UK62770
UK66530
UK72432
UK75998
UK80784
UK82483
UK83944
UK94428
UI19628

The following APARs/PTFs against V1.3.0 of Backup and Restore Manager have also been incorporated:

UI27046
UI30046
UI32646
UI35152
UI37670
UI40471
UI43168
UI44395

UI45123
UI49442
UI52003
UI54313
UI58924
UI60669
UI63896
UI66016
UI70973

Check the BACKUPZVM130 PSP bucket for any PTFs that should be installed or any additional install information.

4.2 Cumulative Service

Cumulative service for Backup and Restore Manager V1.3.0 is available through a monthly corrective service envelope, Expanded Service Option, ESO. You need to specify the product ID, 5697J06C, 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 V1.3.0 will operate on any hardware that supports the prerequisite software. In addition, Backup and Restore Manager V1.3.0 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 6 release 4
- z/VM version 7 release 1
- z/VM version 7 release 2

Note: The PTF for VM65685 is recommended for all customers. It is required for any system where both of the following are true:

- Byte File System is active on the system
- Any Backup and Restore Manager worker service machine (BKRWRKnn) is defined with a Shared File System (SFS) DIRCONTROL directory for its required scratch or temporary file space, which the worker accesses as filemode D during startup. By default, this temporary file space is defined as an SFS FILECONTROL directory.

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 is available as a free download. For more information, visit <https://www.ibm.com/products/compiler-and-library-for-rexx-on-ibm-z/resources>

If you are using Backup and Restore Manager V1.3.0 with IBM Tape Manager for z/VM, you must apply PTF UI24163 to Tape Manager V1.3.0 before running Backup and Restore Manager V1.3.0.

5.2.3 Migration Considerations

5.2.4 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 Backup and Restore Manager strictly using the MAINT user ID, but will use a new user ID--5697J06C. 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 Backup and Restore Manager" step 6 on page 19, rather than after you have installed this product.

- There are several considerations for Single System Image (SSI). Refer to the following web site for more information:
<http://www.ibm.com/support/docview.wss?uid=swg21615651>
- If you are using an External Security Manager (such as IBM RACF Security Server), the following must be permitted:
 - From user ID 5697J06C, LINK MAINT 51D in MR mode
 - From user ID 5697J06C, LINK MAINT 5E5 in RR mode
 - If you plan to place Backup and Restore Manager general use code on MAINT's 19E disk (the 'Y' 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 or MAINTvrm, LINK 5697J06C 492 in RR mode
 - From user ID MAINT or MAINTvrm, ACCESS 5697J06C.BKUPMGR.TESTUSER

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 10 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 5697J06C 592 minidisk. 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 *filepool: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 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 6.3, “Plan Your Installation For Backup and Restore Manager” on page 18 and are listed here so that you can get an idea of the resources that you will need prior to allocating them.
- Unless otherwise noted (see Note 2 on page 14), all minidisks for IDENTITY users should be defined on each member in the SUBCONFIG directory entry.
- 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.
- The default SFS file pool is VMSYS. IBM recommends creating a PPF override to use:
 - VMPSFS for all directories that will be shared across the cluster. These are noted as *filepool1* in the table.
 - A unique SFS file pool for all directories that should be unique on each member of the cluster. These are noted as *filepool2* in the table. For this unique file pool, you can use VMSYS (provided by IBM) or you can create a new unique file pool such as MYPOOL1.
- 5697J06C 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 Backup and Restore Manager” step 6 on page 19.
- 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 (user ID)	Default Address	Storage in Cylinders		FB-512 Blocks	SFS 4K Blocks	Usage
		DASD	CYLS			Default SFS Directory Name
5697J06C	191	3390	10	14400	1800	5697J06C user ID's 191 minidisk <i>filepool1:5697J06C.</i>
5697J06C	2B2	3390	10	14400	1800	Contains all the base code shipped with Backup and Restore Manager <i>filepool1:5697J06C.BKUPMGR.BASE</i>
5697J06C	2C2	3390	5	7200	900	Contains sample files. <i>filepool1:5697J06C.BKUPMGR.SAMPLES</i>
5697J06C	2D2	3390	50	72000	9000	Contains serviced files <i>filepool1:5697J06C.BKUPMGR.DELTA</i>
5697J06C	2A6	3390	5	7200	900	Contains AUX files and software inventory tables that represent the test service level of Backup and Restore Manager <i>filepool1:5697J06C.BKUPMGR.APPLYALT</i>
5697J06C	2A2	3390	5	7200	900	Contains AUX files and software inventory tables that represent the service level of Backup and Restore Manager that is currently in production. <i>filepool1:5697J06C.BKUPMGR.APPLYPROD</i>
5697J06C	491	3390	20	28800	3600	Test build disk for server code. <i>filepool1:5697J06C.BKUPMGR.TESTRUNTIME</i>
5697J06C	492	3390	10	14400	1800	Test build disk for user code. <i>filepool1:5697J06C.BKUPMGR.TESTCLIENT</i>

Notes:

1. It is recommended that the MDISK entries for the BKRKBUP 591 and 592 disks in the CP directory specify the disk as RR. BRKBKUP will then link the disk RR, allowing other authorized users to link the disk MR and apply service while BKRKBUP is running. Once the service is applied, BKRKBUP and other Backup and Restore Manager service machines can be restarted.
2. IBM recommends that the MDISK entries for the BKRKBUP 198 and 199 disks be specified in the IDENTITY directory entry for BKRKBUP, rather than the SUBCONFIG entries. The MDISK entries should also specify the disks as RR, since it will be shared by multiple service machines across the SSI cluster. This allows you to have one set of Backup and Restore Manager configuration data and one set of job templates that are shared by all Backup and Restore Manager instances across the cluster. It also allows authorized users to link the disks MR and make changes to the configuration data and job templates while Backup and Restore Manager is running.

More advanced customers who choose to have unique configuration data and/or job templates on each member of a cluster will need to put the MDISK statements in each SUBCONFIG entry for BKRKBUP instead.

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
5697J06C	49D	3390	5	7200	900	AMENG HELP files on test system. This code will be copied to a production disk, (e.g. 5697J06C 29D) so the production disk will also require this amount of free space. <i>filepool1:5697J06C.BKUPMGR.TESTHELP</i>
5697J06C Totals		3390	120	172,800	21,600	Total DASD storage required for user ID 5697J06C. Use the SFS total for 5697J06C in step 6 on page 23.
BKRAADMIN	191	3390	5	7200	900	A-disk for BKRAADMIN. Use the SFS value for BKRAADMIN in step 6 on page 23. <i>filepool1:BKRAADMIN.</i>
BKRCATLG	191	3390	1	1440	180	A-disk for BKRCATLG server. Use the SFS value for BKRCATLG in step 6 on page 23. <i>filepool2:BKRCATLG.</i>
BKRBKUP	191	3390	1	1440	180	A-disk for BKRBKUP server. Use the SFS value for BKRBKUP in step 6 on page 23. <i>filepool2:BKRBKUP.</i>
BKRBKUP	591 (1*)	3390	20	28800	3600	Production build disk for server code.

Notes:

1. It is recommended that the MDISK entries for the BKRBKUP 591 and 592 disks in the CP directory specify the disk as RR. BKRBKUP will then link the disk RR, allowing other authorized users to link the disk MR and apply service while BKRBKUP is running. Once the service is applied, BKRBKUP and other Backup and Restore Manager service machines can be restarted.
2. IBM recommends that the MDISK entries for the BKRBKUP 198 and 199 disks be specified in the IDENTITY directory entry for BKRBKUP, rather than the SUBCONFIG entries. The MDISK entries should also specify the disks as RR, since it will be shared by multiple service machines across the SSI cluster. This allows you to have one set of Backup and Restore Manager configuration data and one set of job templates that are shared by all Backup and Restore Manager instances across the cluster. It also allows authorized users to link the disks MR and make changes to the configuration data and job templates while Backup and Restore Manager is running.

More advanced customers who choose to have unique configuration data and/or job templates on each member of a cluster will need to put the MDISK statements in each SUBCONFIG entry for BKRBKUP instead.

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
BKRBKUP	592 (1*)	3390	10	14400	1800	Production build disk for user code.
BKRBKUP	198 (2*)	3390	5	7200	900	Installation-defined configuration files on production system, based on samples provided on the 2C2 minidisk or in the .SAMPLES directory. <i>filepool2: BKRBKUP.CONFIGURATION</i>
BKRBKUP	199 (2*)	3390	5	7200	900	Installation-defined job templates on production system, based on samples provided on the 2C2 minidisk or in the .SAMPLES directory. <i>filepool2: BKRBKUP.JOBDEFS</i>
BKRWRK01	191	3390	1	1440	180	A-disk for BKRWRK01 server, a worker service virtual machine which processes backup jobs and restore requests. Use the SFS value for BKRWRK01 in step 6 on page 23. 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. <i>filepool2: BKRWRK01.</i>

Notes:

1. It is recommended that the MDISK entries for the BKRBKUP 591 and 592 disks in the CP directory specify the disk as RR. BKRBKUP will then link the disk RR, allowing other authorized users to link the disk MR and apply service while BKRBKUP is running. Once the service is applied, BKRBKUP and other Backup and Restore Manager service machines can be restarted.
2. IBM recommends that the MDISK entries for the BKRBKUP 198 and 199 disks be specified in the IDENTITY directory entry for BKRBKUP, rather than the SUBCONFIG entries. The MDISK entries should also specify the disks as RR, since it will be shared by multiple service machines across the SSI cluster. This allows you to have one set of Backup and Restore Manager configuration data and one set of job templates that are shared by all Backup and Restore Manager instances across the cluster. It also allows authorized users to link the disks MR and make changes to the configuration data and job templates while Backup and Restore Manager is running.

More advanced customers who choose to have unique configuration data and/or job templates on each member of a cluster will need to put the MDISK statements in each SUBCONFIG entry for BKRBKUP instead.

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
BKRWRK02	191	3390	1	1440	180	A-disk for BKRWRK02 server, a worker service virtual machine which processes backup jobs and restore requests. Use the SFS value for BKRWRK02 in step 6 on page 23. <i>filepool2:BKRWRK02.</i>
BKRWRK03	191	3390	1	1440	180	A-disk for BKRWRK03 server, a worker service virtual machine which processes backup jobs and restore requests. Use the SFS value for BKRWRK03 in step 6 on page 23. <i>filepool2:BKRWRK03.</i>
BKRWRK04	191	3390	1	1440	180	A-disk for BKRWRK04 server, a worker service virtual machine which processes backup jobs and restore requests. Use the SFS value for BKRWRK04 in step 6 on page 23. <i>filepool2:BKRWRK04.</i>
All user IDs Totals		3390	171	246,240	30,780	Total DASD storage required for all Backup and Restore Manager user IDs.

Notes:

1. It is recommended that the MDISK entries for the BKRBKUP 591 and 592 disks in the CP directory specify the disk as RR. BRKBKUP will then link the disk RR, allowing other authorized users to link the disk MR and apply service while BKRBKUP is running. Once the service is applied, BKRBKUP and other Backup and Restore Manager service machines can be restarted.
2. IBM recommends that the MDISK entries for the BKRBKUP 198 and 199 disks be specified in the IDENTITY directory entry for BKRBKUP, rather than the SUBCONFIG entries. The MDISK entries should also specify the disks as RR, since it will be shared by multiple service machines across the SSI cluster. This allows you to have one set of Backup and Restore Manager configuration data and one set of job templates that are shared by all Backup and Restore Manager instances across the cluster. It also allows authorized users to link the disks MR and make changes to the configuration data and job templates while Backup and Restore Manager is running.

More advanced customers who choose to have unique configuration data and/or job templates on each member of a cluster will need to put the MDISK statements in each SUBCONFIG entry for BKRBKUP instead.

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 V7.2 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.

- 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 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 ID needed to install 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 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 Backup and Restore Manager

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

- Place Backup and Restore Manager Files into Production

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

- Perform Post-installation Tasks

If you are installing Backup and Restore Manager V1.3.0 over a previous release of Backup and Restore Manager, complete the appropriate post-installation migration steps.

For new installations of Backup and Restore Manager, information about file tailoring and initial activation of the program is provided 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 Complete Migration Steps, If Necessary

If you are installing Backup and Restore Manager V1.3.0 over a previous release of Backup and Restore Manager, complete the appropriate migration steps before installing V1.3.0. Additional migration steps will be required after installation and will be discussed later.

If you are installing Backup and Restore Manager for the first time, continue with 6.3, "Plan Your Installation For Backup and Restore Manager" on page 18.

6.2.1.1 Migrating from Backup and Restore Manager V1.2.0

The following changes are required to a system running Backup and Restore Manager V1.2.0 before installing the V1.3.0 code:

1. The production code for Backup and Restore Manager V1.3.0 has moved from the installation user ID's 591 and 592 minidisks (or SFS directories) to the BKRBKUP 591 and 592 minidisks. SFS directories for production disks are no longer recommended.

In addition, the configuration files and backup job templates have moved from the installation user ID's 198 and 199 minidisks (or SFS directories) to the BKRBKUP 198 and 199 minidisks (or SFS directories.)

This requires the following changes:

- Update the CP directory entries for the following user IDs to change any existing LINKs for 5697J06B 591, 592, 198, and 199 minidisks to LINKs for BKRBKUP 591, 592, 198, and 199 minidisks:
 - BKRADMIN
 - BKRCATLG

- All BKRWRKnn user IDs
 - Update the CP directory entry for BKRBKUP to remove any existing LINKs for 5697J06B 591, 592, 198, and 199 minidisks
 - Define and format new 591 and 592 minidisks for BKRBKUP. For details on minidisk definitions refer to 5.3, “DASD Storage and User ID Requirements” on page 10.
 - If installing on minidisk
 - Define and format new 198 and 199 minidisks for BKRBKUP. For details on minidisk definitions refer to 5.3, “DASD Storage and User ID Requirements” on page 10.
 - Copy all files from the existing 5697J06B 198 and 199 minidisks to the new BKRBKUP 198 and 199 minidisks
 - If installing in SFS
 - Create new SFS directories for the configuration files and job templates. For details on SFS directory definitions refer to 5.3, “DASD Storage and User ID Requirements” on page 10.
 - Copy all files from the existing SFS directories containing configuration files and job templates to the new SFS directories
 - Update the PROFILE EXECs for the following user IDs to access the new SFS directories for configuration files and job templates
 - BKRBKUP
 - BKRCATLG
 - All BKRWRKnn user IDs
 - Update the directory entries and/or PROFILE EXECs for all users and administrators linking and/or accessing the 5697J06B 591, 592, 198 or 199 minidisks or SFS directories
2. Update the directory entries for the following user IDs:
- BKRBKUP
 - Add **POSIXINFO UID 0 GNAME system** if not already specified. The statement is case sensitive.
 - Remove privilege class E if it is specified
 - Remove OPTION DEVMAINT if it is specified. OPTION LNKNOPAS is still required.
 - BKRCATLG
 - Add privilege class E if it is not already specified
 - Add OPTION LNKNOPAS if it is not already specified
 - Add **POSIXINFO UID 0 GNAME system** if not already specified. The statement is case sensitive.
 - All BKRWRKnn user IDs
 - Add privilege class A if it is not already specified
 - Remove privilege class E if it is specified
 - Add **OPTION LNKNOPAS DEVINFO DEVMAINT** if it is not already specified

- Add **POSIXINFO UID 0 GNAME system** if not already specified. The statement is case sensitive.
- BKRADMIN
 - Remove privilege class A if it is specified
 - Remove OPTION DEVMAINT if it is specified. OPTION LNKNOPAS is still required.

6.3 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 installation files
- generate a 'PLANINFO' file listing
 - all user ID and mdisks/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`vr`m 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 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. IBM suggests using MAINT`vr`m.

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

vmlink MAINT`vr`m 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 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.

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.
- The default SFS file pool is VMSYS. IBM recommends
 - Using VMPSFS for all directories that will be shared across the cluster

- Using a unique SFS file pool on each member of the cluster for the directories which should be unique on each member. These include production directories and all directories for multipconfiguration users. For this unique file pool, you can use VMSYS (provided by IBM) or you can create a new unique file pool such as MYPOOL1.

You will need to create a PPF override to use these file pools.

- 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 5697J06C 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 5697J06C {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.

Use **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 5697J06C BKUPMGR
:PRODID 5697J06C%BKUPMGR?
Enter 0 (No), 1 (Yes) or 2 (Exit)
0
VMFINS2603I Processing product :PPF 5697J06C BKUPMGR :PRODID
5697J06C%BKUPMGR
VMFREQ1909I 5697J06C PLANINFO created on your A-disk
VMFREQ2805I Product :PPF 5697J06C BKUPMGR :PRODID 5697J06C%BKUPMGR
has passed requisite checking
VMFINT2603I Planning for the installation of product :PPF 5697J06C BKUPMGR
:PRODID 5697J06C%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

- 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 Backup and Restore Manager Code

Use the planning information in the 5697J06C PLANINFO file, created in the **PLAN** step, to:

- Create the 5697J06C user directory for minidisk install. Refer to 6.4.1, “Installing Backup and Restore Manager on Minidisk” for detailed instructions.

OR

- Create the 5697J06C user directory for SFS install. Refer to 6.4.2, “Installing Backup and Restore Manager in SFS Directories” on page 22 for detailed instructions.

6.4.1 Installing Backup and Restore Manager on Minidisk

- 1 Obtain the sample user directory entry for 5697J06C from the 5697J06C PLANINFO file.

Note: The user directory entry for 5697J06C 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 5697J06C user ID. Use the directory entry found in PLANINFO as a model as input to your system directory.

- 2 Add the 5697J06C directory entry to the system directory.

The resource planning information provided in 5697J06C PLANINFO assumes you are installing on **z/VM V6.4 or later** and reflects the recommendation that 5697J06C be defined as single configuration user.

- 3 Change the password for 5697J06C from xxxxxxxx to a valid password, in accordance with your security guidelines.

- 4 Add the MDISK statements to the directory entry for 5697J06C.\ Use Figure 7 on page 10 to obtain the minidisk requirements.

- 5 Place the new directory online using the DIRECTXA command or an equivalent CP directory maintenance method, such as IBM® DirMaint™.

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

- 6 Format all minidisks for the 5697J06C user ID.

For each minidisk, perform the following:

```
link 5697J06C devaddr1 devaddr2 mr
format devaddr2 filemode
1
label
rel devaddr2 (det
```

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.

- 7 Continue with 6.5, "Install Backup and Restore Manager" on page 26.

6.4.2 Installing Backup and Restore Manager in SFS Directories

- 1 Obtain the sample user directory entry for 5697J06C from the 5697J06C PLANINFO file.

Note: The user directory entry for 5697J06C 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 5697J06C user ID. Use the directory entry found in PLANINFO as a model as input to your system directory.

- 2 Add the 5697J06C directory entry to the system directory.

The resource planning information provided in 5697J06C PLANINFO assumes you are installing on **z/VM V6.4 or later** and reflects the recommendation that 5697J06C be defined as a single configuration user.

- 3 Change the password for 5697J06C from xxxxx to valid passwords, in accordance with your security guidelines.

- 4 If you intend to use an SFS directory as the work space for the 5697J06C user ID, 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 Backup and Restore Manager in SFS. Refer to Figure 7 on page 10.

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

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

If you are installing Backup and Restore Manager in a z/VM Single System Image cluster, 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 Backup and Restore Manager SFS directories, the 4K block requirements for the directories are summarized in Figure 7 on page 10.

This information will be used when enrolling the 5697J06C and service virtual machine user IDs in the VMSYS and VMPSFS file pools or the local file pools you have specified in the PPF override.

- b Enroll user 5697J06C in the appropriate file pools using the ENROLL USER command:

ENROLL USER 5697J06C *filepool*: (BLOCKS *blocks*)

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

where *filepool* is the name of the file pool. IBM recommends using a unique file pool. For this unique file pool, you can use VMSYS (provided by IBM) or you can create a new unique file pool such as MYPOOL1.

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

- C** Enroll any of the service virtual machines, that you are going to use, in the appropriate file pool using the ENROLL USER command. You need to issue the ENROLL USER command for each service machine user ID you plan on using.

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.

- d** 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.
- e** Create the necessary subdirectories listed in the 5697J06C PLANINFO file 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.

An example of the create command is:

```
create directory VMPSFS:5697J06C.bkupmgr
create directory VMSYS:BKRBKUP.
:
```

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 10.

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

grant auth *filepool2:bkrbkup.configuration* to *userID* (**read newread**)

where *userID* is each of the SVM user IDs and end user IDs.

where *filepool2* is the name of the file pool.

Repeat the GRANT AUTHORITY 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 *filepool2:bkrbkup.jobdefs* to *BKRBKUP* (**read newread**)

where *BKRBKUP* is the Primary Backup SVM user ID.

where *filepool2* is the name of the file pool.

grant auth *filepool2:bkrbkup.jobdefs* to *BKADMIN* (**write newwrite**)

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

where *filepool2* is the name of the file pool.

- g** If you plan to place Backup and Restore Manager general use code on MAINT's or MAINT*vrn*'s 19E disk then you need to give the **MAINT** or

MAINT*vr*m user ID READ authority to the general-use test build directory, using the GRANT AUTHORITY command. Refer to step 4 on page 36 for more information on placing general use code on MAINT 19E disk.

grant auth *filepool:5697J06C.bkupmgr.testclient* to **MAINT***vr*m (**read newread**

where **MAINT***vr*m 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.

6.5 Install Backup and Restore Manager

The *ppfname* used throughout these installation instructions is **5697J06C**, 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 **5697J06C**. The *ppfname* you use should be used **throughout** the rest of this procedure.

- 1** Logon to the installation user ID **5697J06C**.
- 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

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.

```
vmfins link MAINT 51D <51D D M>
```

- 5 Provide the installation user ID access to the code.

```
vmfins link MAINTvrm 500 <* C RR>
```

- 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 (5697J06C), 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 5697J06C {BKUPMGR | BKUPMGRSFS} (nomemo nolink env envfilename)
```

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

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

Use **BKUPMGRSFS** 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 5697J06C BKUPMGR
:PROPID 5697J06C%BKUPMGR?
Enter 0 (No), 1 (Yes) or 2 (Exit)
0
VMFINS2603I Processing product :PPF 5697J06C BKUPMGR :PROPID
5697J06C%BKUPMGR
VMFREQ2805I Product :PPF 5697J06C BKUPMGR :PROPID 5697J06C%BKUPMGR has
passed requisite checking
VMFINT2603I Installing product :PPF 5697J06C BKUPMGR :PROPID
5697J06C%BKUPMGR
VMFSET2760I VMFSETUP processing started for 5697J06C BKUPMGR
VMFUTL2205I Minidisk|Directory Assignments:
String      Mode Stat Vdev Label (OwnerID Odev : Cyl/%Used)
           -or- SFS Directory Name
VMFUTL2205I LOCALSAM E R/W 2C2 06C2C2 (5697J06C 02C2 : 5/01)
VMFUTL2205I APPLY F R/W 2A6 06C2A6 (5697J06C 02A6 : 5/01)
VMFUTL2205I G R/W 2A2 06C2A2 (5697J06C 02A2 : 5/01)
VMFUTL2205I DELTA H R/W 2D2 06C2D2 (5697J06C 02D2 : 50/00)
VMFUTL2205I BUILD1 I R/W 491 06C491 (5697J06C 0491 : 10/00)
VMFUTL2205I BUILD2 J R/W 492 06C492 (5697J06C 0492 : 5/01)
VMFUTL2205I BUILD3 K R/W 49D 06C49D (5697J06C 049D : 5/01)
VMFUTL2205I BASE0 L R/W 2B2 06C2B2 (5697J06C 02B2 : 10/00)
VMFUTL2205I ----- A R/W 191 J6C191 (5697J06C 0191 : 10/01)
VMFUTL2205I ----- B R/O 5E5 MNT5E5 (MAINT710 05E5 : 18/40)
VMFUTL2205I ----- C R/O 71FF ZVM710 (5697J06C 71FF : 32767/26)
VMFUTL2205I ----- D R/W 51D MNT51D (MAINT710 051D : 26/24)
VMFUTL2205I ----- S R/O 190 MNT190 (MAINT 0190 : 207/51)
VMFUTL2205I ----- Y/S R/O 19E MNT19E (MAINT 019E : 500/40)
VMFSET2760I VMFSETUP processing completed successfully
VMFREC2760I VMFREC processing started
VMFREC1852I Volume 1 of 1 of INS ENVELOPE 1500
VMFREC1851I (1 of 9) VMFRCAXL processing AXLIST
VMFRCX2159I Loading 2 part(s) to DELTA 2D2 (H)
VMFREC1851I (2 of 9) VMFRCPTF processing PARTLST
VMFRCP2159I Loading 17 part(s) to DELTA 2D2 (H)
VMFREC1851I (3 of 9) VMFRCCOM processing DELTA
VMFRCC2159I Loading 321 part(s) to DELTA 2D2 (H)
VMFREC1851I (4 of 9) VMFRCALL processing APPLY
VMFRCAX2159I Loading part(s) to APPLY 2A6 (F)
VMFRCAX2159I Loaded 1 part(s) to APPLY 2A6 (F)
VMFREC1851I (5 of 9) VMFRCALL processing BASE
VMFRCAX2159I Loading part(s) to BASE0 2B2 (L)
VMFRCAX2159I Loaded 141 part(s) to BASE0 2B2 (L)
VMFREC1851I (6 of 9) VMFRCALL processing CLIENT
VMFRCAX2159I Loading part(s) to BUILD2 492 (J)
VMFRCAX2159I Loaded 27 part(s) to BUILD2 492 (J)
VMFREC1851I (7 of 9) VMFRCALL processing HELP
VMFRCAX2159I Loading part(s) to BUILD3 49D (K)
VMFRCAX2159I Loaded 26 part(s) to BUILD3 49D (K)
VMFREC1851I (8 of 9) VMFRCALL processing SAMPLES
VMFRCAX2159I Loading part(s) to LOCALSAM 2C2 (E)
VMFRCAX2159I Loaded 70 part(s) to LOCALSAM 2C2 (E)
VMFREC1851I (9 of 9) VMFRCALL processing SVM
VMFRCAX2159I Loading part(s) to BUILD1 491 (I)
VMFRCAX2159I Loaded 62 part(s) to BUILD1 491 (I)
VMFREC2189I Updating Requisite table 5697J06C SRVREQT, Description table
5697J06C SRVDESCT and Receive Status table 5697J06C SRVRECS with
17 new PTFs from INS 1500
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

- 8 Logoff 5697J06C

6.5.1 Update VVT and Build Status Table for Backup and Restore Manager

- 1 Logon to MAINT`vr`m
- 2 Set up the service environment for Backup and Restore Manager.

vmfsetup 5697J06C {BKUPMGR | BKUPMGRSFS}

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

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

- 3 Update the version vector table (VVT) information for all pre-received service included in the product envelope file. This information identifies the service level of all the serviced parts.

vmfapply ppf 5697J06C {BKUPMGR | BKUPMGRSFS}

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

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

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

vmfview apply

5 Update the VM SYSBLDS software inventory file.

vmfins build ppf 5697J06C {BKUPMGR | BKUPMGRSFS} (serviced

Use **BKUPMGR** for installing on minidisks.

Use **BKUPMGRSFS** for installing in Shared File System directories

6 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

7 Logoff MAINT`vr`m

6.5.2 Prepare Backup and Restore Manager for Service

In preparation for installing service for Backup and Restore Manager in the future, perform the following steps. These steps only need to be done once after the initial installation of Backup and Restore Manager V1.3.0. They do not need to be repeated when installing service.

1 Logon to the Backup and Restore Manager service user ID: **MAINT**`vr`m

2 Add Backup and Restore 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 Backup and Restore Manager. Specify the system identifier of each SSI member system (as applicable) on the command:

vmfupdat syspinv PROD 5697J06C *systemid1* {*systemid2* {*systemid3* {*systemid4*}}

6.6 Install Service for Backup and Restore Manager

Follow the instructions in 7.2, “Servicing Backup and Restore Manager” on page 40 to apply any available PTFs for Backup and Restore Manager.

Note: If you downloaded the Backup and Restore Manager V1.3.0 product envelope file after November 13, 2020, the envelope contains all service through PTF UI70973.

After you have installed any available service, you must then continue with the steps below in 6.7, “Allocate Resources for Configuring and Running Backup and Restore Manager” to complete the installation of Backup and Restore Manager.

6.7 Allocate Resources for Configuring and Running Backup and Restore Manager

Note

There are several considerations for Single System Image (SSI). Refer to the following web site for more information:

<http://www.ibm.com/support/search.wss?q=SSI&tc=SSMR4R>

Use the sample directory entries provided on the 5697J06C 2C2 minidisk or associated SFS directory:

- Create the service virtual machine user directories for minidisk install. Refer to 6.7.1, “Configuring and Running Backup and Restore 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 Backup and Restore Manager in SFS Directories” on page 33 for detailed instructions.

6.7.1 Configuring and Running Backup and Restore Manager on Minidisk

1 Logon to MAINT vrm

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

2 If you are installing Backup and Restore Manager for the first time, obtain the sample user directory entries from 5697J06C 2C2 minidisk.

Note: You must have PTF UI63896 (or later) installed to find the sample user directory entries. 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:

- BKRAADMIN should be defined as a single configuration user
- 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:
 - BKRBKUP - the 198 and 199 disks should be in the IDENTITY section of the directory entry so they can be shared across the cluster.
 - BKRCATLG
 - BKRWRK01
 - BKRWRK02
 - BKRWRK03
 - BKRWRK04

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 Backup and Restore 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 Backup and Restore 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 Backup and Restore Manager installed, format all new minidisks for the service virtual machine user IDs.

If you are installing Backup and Restore Manager in a z/VM Single System Image cluster, format the appropriate disks (those in the SUBCONFIG section of the directory entry) 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 Backup and Restore 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 Backup and Restore Manager Into Production” on page 34.

6.7.2 Configuring and Running Backup and Restore Manager in SFS Directories

- 1 Logon to MAINT`vrm`

If you are installing on a system that has a previous release of Backup and Restore Manager installed, skip to 6.8, “Place Backup and Restore Manager Into Production” on page 34.

- 2 If you are installing Backup and Restore Manager for the first time, obtain the sample user directory entries from the samples directory:
VMPSFS:5697J06C.BKUPMGR.SAMPLES

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:

- BKRAADMIN should be defined as a single configuration user

- 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:
 - BKRBKUP - the 198 and 199 disks should be in the IDENTITY section of the directory entry so they can be shared across the cluster.
 - BKRCATLG
 - BKRWRK01
 - BKRWRK02
 - BKRWRK03
 - BKRWRK04
- 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 5697J06C 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 Backup and Restore Manager in SFS. Refer to Figure 7 on page 10.
 - 6 Place the new directory online using the DIRECTXA command or an equivalent CP directory maintenance method, such as DIRMAINT.

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

6.8 Place Backup and Restore Manager Into Production

If you are installing on minidisks, follow the steps in 6.8.1, “Copy Backup and Restore Manager Files Into Production Using Minidisks” and then go to 6.9, “Post-Installation Considerations” on page 37.

If you are installing using Shared File System, follow the steps in 6.8.2, “Copy Backup and Restore Manager Files Into Production Using Shared File System” on page 36 and then go to 6.9, “Post-Installation Considerations” on page 37.

6.8.1 Copy Backup and Restore Manager Files Into Production Using Minidisks

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

- 1 Logon to MAINT`vr`m

2 Move the Backup and Restore Manager Service Machine executables to the production disk.

```
vmlink 5697J06C 491 <* F RR>          The VMFCOPY command will update the VMSES
vmlink BKRBKUP 591 <* G M>          PARTCAT file on the 591 disk.
vmfcopy * * f = = g (prodid 5697J06C%BKUPMGR olddate replace
```

3 Move the client code to the production disk.

```
vmlink 5697J06C 492 <* F RR>          The VMFCOPY command will update the VMSES
vmlink BKRBKUP 592 <* G M>          PARTCAT file on the 592 disk.
vmfcopy * * f = = g (prodid 5697J06C%BKUPMGR olddate replace
```

4 Logon to MAINT`vr`m if you plan to put Backup and Restore 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 Backup and Restore Manager code.

```
vmlink 5697J06C 492 <* F RR>          The VMFCOPY command will update the VMSES
vmlink MAINTvr 19E <* G M>          PARTCAT file on the 19E disk.
vmfcopy * * f = = g2 (prodid 5697J06C%BKUPMGR olddate replace
```

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

```
vmlink 5697J06C 49D <* F RR>          The VMFCOPY command will update the VMSES
vmlink MAINTvr 19D <* G M>          PARTCAT file on the AMENG Help (MAINT 19D)
                                     disk.
vmfcopy * helpabkr f = = g2 (prodid 5697J06C%BKUPMGR olddate replace
vmfcopy abkr helpmenu f = = g2 (prodid 5697J06C%BKUPMGR olddate replace
```

6 If the MAINT`vr`m 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 37.

6.8.2 Copy Backup and Restore 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 Backup and Restore Manager Service Machine executables to the production disk.

access 5697J06C.BKUPMGR.TESTRUNTIME f The VMFCOPY command will update the VMSES
vmlink BKRBKUP 591 <* G M> PARTCAT file on the 591 disk.
vmfcopy * * f = = g (prodid 5697J06C%BKUPMGR olddate replace

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

- 3** Move the client code to the production disk.

access 5697J06C.BKUPMGR.TESTCLIENT f The VMFCOPY command will update the VMSES
vmlink BKRBKUP 592 <* G M> PARTCAT file on the 592 disk.
vmfcopy * * f = = g (prodid 5697J06C%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 $_{vrm}$ if you plan to put Backup and Restore 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 Backup and Restore Manager code.

access 5697J06C.BKUPMGR.TESTCLIENT f The VMFCOPY command will update the VMSES
vmlink MAINT $_{vrm}$ 19E <* G M> PARTCAT file on the 19E disk.
vmfcopy * * f = = g2 (prodid 5697J06C%BKUPMGR olddate replace

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

- 5** Logon to MAINT $_{vrm}$ if you plan to put Backup and Restore Manager help files on the system AMENG Help (MAINT's 19D) disk.

access 5697J06C.BKUPMGR.TESTHELP f
vmlink MAINT_{vrm} 19D <* G M>

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

vmfcopy * helpabkr f = = g2 (prodid 5697J06C%BKUPMGR olddate replace
vmfcopy abkr helpmenu f = = g2 (prodid 5697J06C%BKUPMGR olddate replace

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

- 6** If the MAINT_{vrm} 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 Backup and Restore Manager, 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.

If you are installing Backup and Restore Manager V1.3.0 over a previous release of Backup and Restore Manager, complete the appropriate post-installation migration steps.

6.9.1 Migrating from Backup and Restore Manager V1.2.0

The following changes are required (or recommended) to a system running Backup and Restore Manager V1.2.0 in order to run V1.3.0:

1. Several changes have been made to the sample PROFILE EXECs provided for each Backup and Restore Manager service machine. IBM recommends you replace your current PROFILE EXECs on all Backup and Restore Manager service machines with the new samples provided on 5697J06C 2C2 disk (or SAMPLES SFS directory.) Then reapply any customizations.

Alternatively, the minimum change required to your existing PROFILE EXECs on the Backup and Restore Manager service machines is described below:

- RVB\$CPRT EXEC has been removed in Backup and Restore Manager V1.3.0. BKR\$CPRT EXEC remains as a component. PROFILE EXECs for the following user IDs must be modified to invoke BKR\$CPRT EXEC instead of RVB\$CPRT EXEC.
 - BKRADMIN
 - BKRBKUP
 - BKRCATLG

– All BKRWRKnn user IDs

2. The file BKRSYSTEM CONFIG contains release-specific information. In order for Backup and Restore Manager service machines to reflect the correct release level, you must update this file on the BKRBKUP 198 minidisk or corresponding SFS directory. Do one of the following:

- Use the new BKRSYSTEM CONFSAMP file on 5697J06C 2C2 disk (or SAMPLES SFS directory) as a base and apply configuration settings from your existing BKRSYSTEM CONFIG file. IBM recommends this approach since the BKRSYSTEM CONFSAMP file shipped with Backup and Restore Manager V1.3.0 has been reorganized into customer tailorable and non-tailorable sections.
- Update the following line in your existing BKRSYSTEM CONFIG to reflect V1.3.0:

```
BKR_Global_Product_Version = 1.2.0
```

If you previously copied BKRSYSTEM CONFIG to any shared disk location (such as MAINT 19E), copy the updated file to this location as well.

3. All messages with the prefix **BKRRVB** in V1.2.0 have been changed. In V1.3.0, they use the prefix **BKRJOB**.

4. In order to back up and restore BFS data, BKRBKUP and all BKRWRKnn user IDs require SFS ADMIN authority to the VMSYS: filepool.

5. The default operands on the BKRLIST command have changed in the PTF for APAR PI38415 from:

```
BKRLIST * * * *
```

to

```
BKRLIST * * * userid
```

where *userid* is the user ID on which BKRLIST is executed. This will result in improved performance due to a smaller catalog search when the user ID parameter is not explicitly specified on the BKRLIST command.

Any explicitly specified operands on the BKRLIST command still override the corresponding default operands and can impact performance.

**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 DVD, follow the appropriate instructions to retrieve and decompress the envelope files to the MAINTvrm 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 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 48.

7.2.1 Automated Service Commands

- 1** Logon to the Backup and Restore Manager service user ID: **MAINTvrm**
- 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 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.

acc 500 c

- 4** Receive any memos from the documentation envelope file and review them.

service {5697J06C%bkupmgr | 5697J06C%bkupmgrsfs} docenvfn
vmfupdat sysmemo

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

Use **bkupmgr** if you installed the product on minidisks

Use **bkupmgrsfs** if you installed the product in Shared File System directories.

- 5** Receive, Apply and Build the service

service {5697J06C%bkupmgr | 5697J06C%bkupmgrsfs} envfilename

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

Use **bkupmgr** if you installed the product on minidisks

Use **bkupmgrsfs** if you installed the product in Shared File System directories.

- 6** 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

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

vmfupdat sysmemo

- 8 If you are installing V1.3.0 of Backup and Restore Manager for the first time (including over a previous release of Backup and Restore Manager) go to 6.7, “Allocate Resources for Configuring and Running Backup and Restore Manager” on page 31 to continue with the installation of Backup and Restore Manager V1.3.0.

If you have installed service only (and not a new release) 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

Note

If you are installing Backup and Restore Manager V1.3.0 for the first time, you must return to 6.7, “Allocate Resources for Configuring and Running Backup and Restore Manager” on page 31 to continue with the installation of Backup and Restore Manager version 1.

The steps below are only to be used when installing service after Backup and Restore 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 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 43.

7.3.1 Copy the New Backup and Restore 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 BKUPMGR

The PUT2PROD command will copy the service machine executables to the production 591 disk and will copy the general use code and help files to the production 592 disk. The VMSES PARTCAT file on each of the production disks will be updated.

- 2 Logon to MAINT*vrm* if you plan to put Backup and Restore 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 Backup and Restore Manager code.

vmfcopy * * f = = g2 (prodid 5697J06C%BKUPMGR olddate replace
The VMFCOPY command will update the VMSES PARTCAT file on the 19E disk.

- 3 Logon to MAINT_{vr}m if you plan to put Backup and Restore Manager help files on the system AMENG Help (MAINT's 19D) disk.

vmfcopy * helpabkr f = = g2 (prodid 5697J06C%BKUPMGR olddate replace
The VMFCOPY command will update the VMSES PARTCAT file on the AMENG Help (MAINT 19D) disk.

vmfcopy abkr helpmenu f = = g2 (prodid 5697J06C%BKUPMGR olddate replace

- 4 If the MAINT_{vr}m 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 Backup and Restore Manager.

7.3.2 Copy the New Backup and Restore 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_{vr}m to move the updated code to the production disks.

put2prod BKUPMGRSFS

The PUT2PROD command will copy the service machine executables to the production 591 disk and will copy the general use code and help files to the production 592 disk. The VMSES PARTCAT file on each of the production disks will be updated.

- 2 Logon to MAINT_{vr}m if you plan to put Backup and Restore 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 Backup and Restore Manager code.

access 5697J06C.BKUPMGR.TESTCLIENT f
vmlink MAINT_{vr}m 19E <* G M>
vmfcopy * * f = = g2 (prodid 5697J06C%BKUPMGR olddate replace

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

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

- 3** Logon to MAINT_{vr}m if you plan to put Backup and Restore Manager help files on the system AMENG Help (MAINT's 19D) disk.

access 5697J06C.BKUPMGR.TESTHELP f
vmlink MAINT_{vr}m 19D <* G M>

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

vmfcopy * helpabkr f = = g2 (prodid 5697J06C%BKUPMGR olddate replace
vmfcopy abkr helpmenu f = = g2 (prodid 5697J06C%BKUPMGR olddate replace

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

- 4** If the MAINT_{vr}m 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 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 5697J06C \$PPF or 5697J06C PPF files to change the file pool name or any other installation parameters. If the 5697J06C \$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. The example describes how to change the default file pool name, VMSYS, to

- VMPSFS for all SFS directories that will be shared across a z/VM SSI cluster
- MYPOOL1 for all SFS directories that should be unique on each member of a z/VM SSI cluster. You can also choose to specify VMSYS as the file pool for these SFS 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 '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 5697J06C
: DCL. UPDATE
&191 DIR VMPSFS:5697J06C.
&CONFIG DIR VMPSFS:5697J06C.BKUPMGR.CONFIGURATION
&SVM0 DIR VMPSFS:5697J06C.BKUPMGR.RUNTIME
&JOBS DIR VMPSFS:5697J06C.BKUPMGR.JOBDEFS
&SAMPZ DIR VMPSFS:5697J06C.BKUPMGR.SAMPLES
&CLIO DIR VMPSFS:5697J06C.BKUPMGR.CLIENT
&BLD1 DIR VMPSFS:5697J06C.BKUPMGR.TESTRUNTIME
&CLI1 DIR VMPSFS:5697J06C.BKUPMGR.TESTCLIENT
&HLP1 DIR VMPSFS:5697J06C.BKUPMGR.TESTHELP
&BAS0 DIR VMPSFS:5697J06C.BKUPMGR.BASE
&DELTZ DIR VMPSFS:5697J06C.BKUPMGR.DELTA
&APPLX DIR VMPSFS:5697J06C.BKUPMGR.APPLYALT
&APPLZ DIR VMPSFS:5697J06C.BKUPMGR.APPLYPROD
&ADMIN DIR VMPSFS:BKRADMIN.
&CATLG DIR MYPOOL1:BKRCATLG.
&MASTR DIR MYPOOL1:BKRBKUP.
&WRK01 DIR MYPOOL1:BKRWRK01.
&WRK02 DIR MYPOOL1:BKRWRK02.
&WRK03 DIR MYPOOL1:BKRWRK03.
&WRK04 DIR MYPOOL1:BKRWRK04.
: EDCL.
: END.
*

```

(This override will replace the :DCL. section of the bkupmgrsfs override area of the 5697J06C \$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.

5 Update the VM SYSSUF Software Inventory table. Since you created a PPF override to the 5697J06C \$PPF file you need to make sure that the override name you created is reflected in the PPF tags for Backup and Restore 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 5697J06C under the 'Prodid' column. Replace the PPF name for INSTPPF, BLDPPF and P2PPPF for 5697J06C 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 5697J06C 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_{vr}m 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 **5697J06C**, 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 **5697J06C**. The *ppfname* you use should be used **throughout** the rest of this procedure, unless otherwise stated differently.

- 1** Logon to the Backup and Restore Manager service user ID: **MAINT_{vr}m**
- 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 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 envelope:

vmlink MAINT_{vr}m 500 <* C RR>

- 5** 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.

- 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 (5697J06C MEMO) before going on.
- 8 Setup the correct product access order.

vmfsetup 5697J06C {BKUPMGR | BKUPMGRSFS}

Use **BKUPMGR** for installing on minidisks.

Use **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 5697J06C {BKUPMGR | BKUPMGRSFS} apply

Use **BKUPMGR** for installing on minidisks.

Use **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 envelope files, you can receive all of the service for this prodid before applying and building it.

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

- 1 Receive the service.

vmfrec ppf 5697J06C {BKUPMGR | BKUPMGRSFS} (env envfilename

Use **BKUPMGR** for installing on minidisks.

Use **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 5697J06C {BKUPMGR | BKUPMGRSFS}

Use **BKUPMGR** for installing on minidisks.

Use **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

Note

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 **5697J06C**
- *compname* should be **BKUPMGR** or **BKUPMGRSFS** (minidisk or SFS)
- *appid* should be **5697J06C**
- *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 5697J06C {BKUPMGR | BKUPMGRSFS} (status

Use **BKUPMGR** for installing on minidisks.

Use **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 5697J06C $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 5697J06C $PPF
on 191 (A) from level $PFnnnnn
```

vmfppf 5697J06C *

Note: If you have created your own PPF override then use your PPF name instead of 5697J06C.

**copy 5697J06C \$PPF a = = d (olddate replace
erase 5697J06C \$PPF a**

Note: Do not use your own PPF name in place of 5697J06C for the COPYFILE and ERASE commands.

vmfbl d ppf 5697J06C {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.

Use **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 5697J06C {BKUPMGR | BKUPMGRSFS} (serviced

Use **BKUPMGR** for installing on minidisks.

Use **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 If you are installing V1.3.0 of Backup and Restore Manager for the first time (including over a previous release of Backup and Restore Manager) go to 6.7, “Allocate Resources for Configuring and Running Backup and Restore Manager” on page 31 to continue with the installation of Backup and Restore Manager V1.3.0.

If you have installed service only (and not a new release) continue with 7.3, “Place the New Backup and Restore Manager Service Into Production” on page 42 to copy the new serviced files into production.

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Ease of product installation	1	2	3	4	5	N
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Contents of program directory	1	2	3	4	5	N
Readability and organization of program directory tasks	1	2	3	4	5	N
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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

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