



Program Directory for NTuneMON

Version 3 Release 2

Program Number 5648-D72

for Use with
VM/ESA®

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GI10-6625-00

Note

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

This program directory, dated July 2001, applies to NTuneMON Version 3 Release 2 for VM (NTuneMON V3R2 VM), Program Number 5648-D72.

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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 NTuneMON V3R2 VM. 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 NTuneMON V3R2 VM.
- 3.0, "Program Support" on page 5 describes the IBM support available for NTuneMON V3R2 VM.
- 4.0, "Program and Service Level Information" on page 6 lists the APARs (program level) and PTFs (service level) incorporated into NTuneMON V3R2 VM.
- 5.0, "Installation Requirements and Considerations" on page 7 identifies the resources and considerations for installing and using NTuneMON V3R2 VM.
- 6.0, "Installation Instructions" on page 11 provides detailed installation instructions for NTuneMON V3R2 VM.
- 7.0, "Service Instructions" on page 23 provides detailed servicing instructions for NTuneMON V3R2 VM.
- Appendix A, "Applying an RSU Tape for NTuneMON V3R2 VM" on page 33 provides detailed Recommended Service Upgrade instructions for NTuneMON V3R2 VM.
- Appendix B, "Create Product Parameter File (PPF) Override" on page 40 provides detailed information on overriding the Product Parameter File (PPF).

Before installing NTuneMON V3R2 VM, 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.

Starting with NCP V7R8.1, NTuneNCP (tuning function) is shipped with NCP as well as with NTuneMON. (It is still included with NTuneMON to support previous versions of NCP.) Users of NCP V7R8.1 and above will no longer have to make the NTuneNCP libraries accessible by the generation function. In the NCP generation, the OPTIONS statement is still required, however, the ATF.USGTIER keyword on the BUILD statement is no longer required. See Chapter 5 of the "NTuneMON User's Guide" for additional details.

1.1 Program Description

NTuneMON is a monitor that provides assistance in detecting, resolving, and preventing problems.

2.0 Program Materials

An IBM program is identified by a program number. The program number for NTuneMON Version 3 is 5648-D72.

The program announcement material describes the features supported by NTuneMON V3R2 VM. Ask your IBM marketing representative for this information if you have not already received a copy.

The following sections identify:

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

2.1 Basic Machine-Readable Material

The distribution medium for this program is 9-track magnetic tape (written at 6250 BPI), 3480 cartridge, or 4mm cartridge. The tape or cartridge contains all the programs and data needed for installation. See section 6.0, "Installation Instructions" on page 11 for more information about how to install the program. Figure 1 describes the tape or cartridge. Figure 2 describes the file content of the program tape or cartridge.

Figure 1. Basic Material: Program Tape

Feature Number	Medium	Physical Volume	Tape Content	External Tape Label
5841	6250 tape	1	NTuneMON V3R2 VM	NTuneMON V3R2 VM
5842	3480 cart.	1	NTuneMON V3R2 VM	NTuneMON V3R2 VM
5769	4mm cart	1	NTuneMON V3R2 VM	NTuneMON V3R2 VM

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

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

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

Tape File	Content
7	NTuneMON V3R2 VM Service
8	NTuneMON V3R2 VM Service
9	NTuneMON V3R2 VM Base Code
10	NTuneMON V3R2 VM Executable Code

2.2 Optional Machine-Readable Material

There are no optional machine-readable materials for NTuneMON V3R2 VM.

2.3 Program Publications

The following sections identify the basic and optional publications for NTuneMON V3R2 VM.

2.3.1 Basic Program Publications

One copy of the following publications is included when you order the basic materials for NTuneMON V3R2 VM. For additional copies, contact your IBM representative.

Figure 3. Basic Material: Licensed Publications

Publication Title	Form Number
<i>NTuneMON Licensed Program Specifications</i>	GC31-6267
<i>NTuneMON User's Guide</i>	SC31-6266
<i>NTuneNCP Feature Reference</i>	LY43-0039
<i>NCP & 3745/46 Today</i>	G325-3426

2.3.2 Softcopy Publications

All NTuneMON V3R2 VM manuals, licensed and unlicensed, except for *NTuneMON Licensed Program Specifications*, are offered in displayable softcopy form on the media listed in Figure 4. The first copy is available at no charge to licensees of the basic materials by ordering the 7xxx feature number. Order additional copies using the 8xxx feature number. A fee is charged for additional copies.

An asterisk (*) beside the Form Number indicates that it contains "Restricted Materials of IBM".

Figure 4. Softcopy Publications

Publication Title	Form Number	Feature Number
<i>ACF/NCP, ACF/SSP, EP, NPSI, and NTuneMON Softcopy Collection Kit CD-ROM</i>	LK2T-0414*	7110-8110

2.4 Microfiche Support

There is no microfiche for NTuneMON V3R2 VM.

2.5 Publications Useful During Installation

The publications listed in Figure 5 or Figure 6, depending on your VM/ESA release, may be useful during the installation of NTuneMON V3R2 VM. To order copies, contact your IBM representative.

Figure 5. Publications Useful During Installation / Service on VM/ESA Version 2.2.0

Publication Title	Form Number
<i>VM/ESA: VMSES/E Introduction and Reference</i>	SC24-5747
<i>VM/ESA: Service Guide</i>	SC24-5749
<i>VM/ESA: Planning and Administration</i>	SC24-5750
<i>VM/ESA: CMS Command Reference</i>	SC24-5776
<i>VM/ESA: CMS File Pool Planning, Administration, and Operation</i>	SC24-5751
<i>VM/ESA: System Messages and Codes</i>	SC24-5784

Figure 6. Publications Useful During Installation / Service on VM/ESA Version 2.3.0 or higher

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

3.0 Program Support

This section describes the IBM support available for NTuneMON V3R2 VM.

3.1 Preventive Service Planning

Before installing NTuneMON V3R2 VM, check with your IBM Support Center or use IBMLink™ (ServiceLink) to see whether there is additional Preventive Service Planning (PSP) information. To obtain this information, specify the following UPGRADE and SUBSET values:

Figure 7. PSP Upgrade and Subset ID

Retain			
COMPID	Release	Upgrade	Subset
5648D7201	220	NTM320	220

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 8 identifies the component ID (COMPID), Retain Release and Field Engineering Service Number (FESN) for NTuneMON V3R2 VM.

Figure 8. Component IDs

Retain			
COMPID	Release	Component Name	FESN
5648D7201	220	NTuneMON V3R2 VM	0407179

4.0 Program and Service Level Information

This section identifies the program and any relevant service levels of NTuneMON V3R2 VM. The program level refers to the APAR fixes incorporated into the program. The service level refers to the PTFs shipped with this product. Information about the cumulative service tape is also provided.

4.1 Program Level Information

No APARs have been incorporated into NTuneMON V3R2 VM.

4.2 Service Level Information

The service level refers to the PTFs shipped with NTuneMON V3R2 VM.

Check the NTM320 PSP bucket for any additional PTFs that should be installed or any additional install information.

4.3 Cumulative Service Tape

Cumulative service for NTuneMON V3R2 VM is available through a monthly corrective service tape, Expanded Service Option, ESO.

5.0 Installation Requirements and Considerations

The following sections identify the system requirements for installing and activating NTuneMON V3R2 VM.

5.1 Hardware Requirements

There are no special hardware requirements for NTuneMON V3R2 VM.

5.2 Program Considerations

The following sections list the programming considerations for installing NTuneMON V3R2 VM and activating its functions.

5.2.1 Operating System Requirements

NTuneMON V3R2 VM supports the following VM operating systems for as long as program services are available for the particular version and release.

- VMSES/E on VM/ESA® V2R2 or later. Prior to installing NTuneMON V3R2 VM, one of the following must be installed:
 - RSU 9904 for VM/ESA 2.2.0 with PTF UM29440
 - RSU 9905 for VM/ESA 2.3.0 with PTF UM29441
 - RSU 9904 for VM/ESA 2.4.0 with PTF UM29442

5.2.2 Other Program Product Requirements

A platform-dependent BookManager product is required to display softcopy publications on CD-ROM. Limited function DOS, Windows, and OS/2 versions of these products are available on your CD-ROM. For more information or to order full-function releases of these products, or VM or MVS versions, refer to the IBM BookManager home page at <http://booksrv2.raleigh.ibm.com>.

The following sections contain system considerations for NCP, SSP, and VTAM.

5.2.2.1 NCP and SSP: One of the following versions of NCP is required:

- NCP V7R1 or later
- NCP V6R2
- NCP V5R4
- NCP V4R3.1

The APARs listed in Figure 9 on page 8 are required in order for NTuneMON to utilize the module name search function. lines.

<i>Figure 9. APARs Required to utilize module name search</i>	
Product Name	APAR
NCP V7R8.1 for VM and MVS	IR45560
NCP V7R8.1 for VSE	IR45563

5.2.2.2 VTAM: The VTAM APARs listed in Figure 10 are required to operate NTuneMON in conjunction with NTuneNCP.

<i>Figure 10. VTAM APARs Required to Operate NTuneMON with NTuneNCP</i>	
Product Name	APAR
VTAM V3R4.2 for MVS/ESA	OW01987
VTAM V3R4.1 for MVS/ESA	OW06097
VTAM V3R4.2 for MVS/ESA	OW06755

The VTAM APAR listed in Figure 11 is required if you use spare or redefinable SDLC peripheral lines and want to modify the VTAM USE parameter.

<i>Figure 11. VTAM APAR Required for SDLC Lines to Modify VTAM USE Parameter</i>	
Product Name	APAR
VTAM V4R2 for MVS/ESA	OW06708

5.2.2.3 NetView: NetView V2R3 or later with REXX support is required for NTuneMON.

5.2.3 Program Installation and Service Considerations

This section describes items that should be considered before you install or service NTuneMON V3R2 VM.

- VMSES/E is required to install and service this product.
- If multiple users install and maintain licensed products on your system, there may be a problem getting the necessary access to MAINT's 51D disk. If you find that there is contention for write access to the 51D disk, you can eliminate it by converting the Software Inventory from minidisk to Shared File System (SFS). See the *VMSES/E Introduction and Reference* manual, section "Changing the Software Inventory to an SFS Directory", for information on how to make this change.
- Customers will no longer install and service NTuneMON V3R2 VM strictly using the MAINT user ID, but will use a new user ID--P648D72B. 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 change during the installation procedure 6.2, “Plan Your Installation For NTuneMON V3R2 VM” step 6 on page 13, rather than after you have installed this product.

5.3 DASD Storage and User ID Requirements

Figure 12 lists the user IDs, minidisks and default SFS directory names that are used to install and service NTuneMON V3R2 VM.

Important Installation Notes:

- User ID(s) and minidisks or SFS directories will be defined in 6.2, “Plan Your Installation For NTuneMON V3R2 VM” on page 12 and are listed here so that you can get an idea of the resources that you will need prior to allocating them.
- P648D72B is a default user ID and can be changed. If you choose to change the name of the installation user ID you need to create a Product Parameter Override (PPF) to reflect this change. This can be done in 6.2, “Plan Your Installation For NTuneMON V3R2 VM” step 6 on page 13.
- If you choose to install NTuneMON V3R2 VM on a common user ID the default minidisk addresses for NTuneMON V3R2 VM may already be defined. If any of the default minidisks required by NTuneMON V3R2 VM are already in use you will have to create an override to change the default minidisks for NTuneMON V3R2 VM so they are unique.

Figure 12 (Page 1 of 2). DASD Storage Requirements for Target Minidisks

Minidisk owner (user ID)	Default Address	Storage in Cylinders		FB-512 Blocks	SFS 4K Blocks	Usage
		DASD	CYLS			Default SFS Directory Name
P648D72B	2B2	3390 3380 9345	16 20 20	24000	3000	Contains all the base code shipped with NTuneMON V3R2 VM VMSYS:P648D72B.NTUNEMON.OBJECT
P648D72B	2C2	3390 3380 9345	4 5 4	6000	750	Contains customization files. This disk may also be used for local modifications. VMSYS:P648D72B.NTUNEMON.SAMPLE
P648D72B	2D2	3390 3380 9345	34 40 40	48000	6000	Contains serviced files VMSYS:P648D72B.NTUNEMON.DELTA
P648D72B	2A6	3390 3380 9345	8 10 10	12000	15000	Contains AUX files and software inventory tables that represent the test service level of NTuneMON V3R2 VM VMSYS:P648D72B.NTUNEMON.APPLYALT

Note: Cylinder values defined in this table are based on a 4K block size. FB-512 block and SFS values are derived from the 3380 cylinder values in this table. The FBA blocks are listed as 1/2K but should be CMS formatted at 1K size. 53250 4K blocks are needed for SFS install.

Figure 12 (Page 2 of 2). DASD Storage Requirements for Target Minidisks

Minidisk owner (user ID)	Default Address	Storage in Cylinders		FB-512 Blocks	SFS 4K Blocks	Usage
		DASD	CYLS			Default SFS Directory Name
P648D72B	2A2	3390 3380 9345	8 10 10	12000	15000	Contains AUX files and software inventory tables that represent the service level of NTuneMON V3R2 VM that is currently in production. VMSYS:P648D72B.NTUNEMON.APPLYPROD
P648D72B	400	3390 3380 9345	25 30 30	36000	4500	Test build disk. This code will be copied to a production disk, (e.g. MAINT 19E) so the production disk will also require this amount of free space.
P648D72B	401	3390 3380 9345	25 30 30	36000	4500	Production BUILD disk. Files from the test BUILD disk are copied here for application use.
P648D72B	191	3390 3380 9345	25 30 30	36000	4500	P648D72B user ID's 191 minidisk VMSYS:P648D72B.

Note: Cylinder values defined in this table are based on a 4K block size. FB-512 block and SFS values are derived from the 3380 cylinder values in this table. The FBA blocks are listed as 1/2K but should be CMS formatted at 1K size. 53250 4K blocks are needed for SFS install.

5.4 Special Considerations

Following are special considerations for NTuneMON V3R2 VM:

- The **ATUNELST NCCFLST** file provided with NTuneMON must be installed. It contains the default values for various NTuneMON parameters and threshold values.

You should make a working copy of the ATUNELST file and save the original as backup. Make all your changes to the working copy. If a problem arises, you still have the original ATUNELST file. It is also recommended that you test your changes before making them permanent.

There is a section in ATUNELST that indicates that no changes should be made below a certain point. If you change anything below this point, you might affect the operation of NTuneMON.

ATUNELST allows you to preset the NTuneMON threshold values. For additional information, refer to the *NTuneMON User's Guide*.

- Because NTuneMON uses colors to highlight certain panel fields, you should use a color terminal to take full advantage of the information NTuneMON provides.

In addition, NetView V2R2 users should maximize the amount of virtual memory available to NetView. This may require movement of shared segments. Refer to the *NetView Tuning Guide* for additional guidance on conserving virtual storage for large applications.

6.0 Installation Instructions

This chapter describes the installation methods and the step-by-step procedures to install and activate NTuneMON V3R2 VM.

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

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

Throughout these instructions, the use of IBM-supplied default minidisk addresses and user IDs is assumed. If you use different user IDs, minidisk addresses, or SFS directories to install NTuneMON V3R2 VM, adapt these instructions as needed for your environment.

Note

The sample console output presented throughout these instructions was produced on a VM/ESA 2.2.0 system. If you're installing NTuneMON V3R2 VM on a different VM/ESA system, the results obtained for some commands may differ from those depicted here.

6.1 VMSES/E Installation Process Overview

The following is a brief description of the main steps in installing NTuneMON V3R2 VM using VMSES/E.

- Plan Your Installation

Use the VMFINS command to load several VMSES/E files from the product tape and to obtain NTuneMON V3R2 VM resource requirements.

- Allocate Resources

The information obtained from the previous step is used to allocate the appropriate minidisks (or SFS directories) and user IDs needed to install and use NTuneMON V3R2 VM.

- Install the NTuneMON V3R2 VM Product

Use the VMFINS command to load the NTuneMON V3R2 VM product files from tape to the test BUILD and BASE minidisks/directories. VMFINS is then used to update the VM SYSBLDS file used by VMSES/E for software inventory management.

- Perform Post-installation Tasks

Information about file tailoring and initial activation of the program is presented in 6.5, "Post-Installation Considerations (optional)" on page 21.

- Place NTuneMON V3R2 VM Files into Production

Once the product files have been tailored and the operation of NTuneMON V3R2 VM is satisfactory, the product files are copied from the test BUILD disk(s) to production BUILD disk(s).

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

6.2 Plan Your Installation For NTuneMON V3R2 VM

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

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

To obtain planning information for your environment:

- 1** Log on as NTuneMON V3R2 VM installation planner.
This user ID can be any ID that has read access to MAINT's 5E5 minidisk and write access to the MAINT 51D minidisk.
- 2** Mount the NTuneMON V3R2 VM installation tape and attach it to the user ID at virtual address 181. The VMFINS EXEC requires the tape drive to be at virtual address 181.
- 3** Establish read access to the VMSES/E code.

**link MAINT 5e5 5e5 rr
access 5e5 b**

The 5E5 disk contains the VMSES/E code.

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

**link MAINT 51d 51d mr
access 51d d**

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

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

5 Load the NTuneMON V3R2 VM product control files to the 51D minidisk.

vmfins install info (nomemo)

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

This command will perform the following:

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

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

6 Obtain resource planning information for NTuneMON V3R2 VM.

Notes:

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

vmfins install ppf 5648D72B {NTUNEMON | NTUNEMONSFS} (plan nomemo)

Use **NTUNEMON** for installing on minidisks or **NTUNEMONSFS** for installing in Shared File System directories.

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

You can override any of the following:

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

Notes:

- a. If you change the PPF name, a default user ID, or other parameters via a PPF override, you will need to use your changed values instead of those indicated (when appropriate), throughout the rest of the installation instructions, as well as the instructions for servicing NTuneMON V3R2 VM. For example, you will need to specify your PPF override file name instead of 5648D72B for certain VMSES/E commands.
- b. If you're not familiar with creating PPF overrides using VMFINS, you should review the "Using the Make Override Panel" section in Chapter 3 of the *VMSES/E Introduction and Reference* before you continue.
- c. For more information about changing the VMSYS file pool name refer to Chapter 3 in the *VMSES/E Introduction and Reference*.

```
VMFINS2767I Reading VMFINS DEFAULTS B for additional options
VMFINS2760I VMFINS processing started
VMFINS2601R Do you want to create an override for :PPF 5648D72B NTUNEMON
:PRODID. 5648D72B%NTUNEMON?
Enter 0 (No), 1 (Yes) or 2 (Exit)
0
VMFINS2603I Processing product :PPF 5648D72B NTUNEMON :PRODID
5648D72B%NTUNEMON
VMFREQ1909I 5648D72B PLANINFO created on your A-disk
VMFREQ2805I Product :PPF 5648D72B NTUNEMON :PRODID 5648D72B%NTUNEMON
has passed requisite checking
VMFINT2603I Planning for the installation of product :PPF 5648D72B NTUNEMON
:PRODID 5648D72B%NTUNEMON
VMFRMT2760I VMFRMT processing started
VMFRMT2760I VMFRMT processing completed successfully
VMFINS2760I VMFINS processing completed successfully
```

Note

Complete this step only if you received message VMFREQ2806W.

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

```
VMFREQ2806W The following requisites for product :PPF 5648D72B NTUNEMON
:PRODID 5648D72B%NTUNEMON are not satisfied:
```

Type	Product	Component	PTF
-----	-----	-----	-----
Requisite	&reqprodnumb.		

This message indicates that &reqprodid., product &reqprodname. is a pre-requisite product for NTuneMON V3R2 VM. Since &reqprodid. is not in VMSES/E format it will not be in the system inventory. If you're certain &reqprodid. is installed on your system you will need to update the VMSES/E system inventory before proceeding with the install of NTuneMON V3R2 VM. Update the software inventories by issuing the following commands:

vmfsim modify vm sysrecs d tdata :prodid &reqprodid. :PPF &reqprodid. lib :stat received

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

vmfsim modify vm sysapps d tdata :prodid &reqprodid. :PPF &reqprodid. lib :stat applied

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

vmfsim modify vm sysreqt d tdata :prodid &reqprodid.

VM SYSREQT is the default name of the Requisite table.

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

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

vmfview install

6.3 Allocate Resources for Installing NTuneMON V3R2 VM

Use the planning information in the 5648D72B PLANINFO file, created in the **PLAN** step, to:

- Create the P648D72B user directory for minidisk install

OR

- Create the P648D72B user directory for SFS install

6.3.1 Installing NTuneMON V3R2 VM on Minidisk

- 1** Obtain the user directory from the 5648D72B PLANINFO file.

Note: The user directory entry is located in the resource section of the PLANINFO file, at the bottom; these entries will contain all of the links and privilege classes necessary for the P648D72B user ID. Use the directory entry found in PLANINFO as a model as input to your system directory.

- 2** Add the MDISK statements to the directory entry for P648D72B. Use Figure 12 on page 9 to obtain the minidisk requirements.
- 3** Add the P648D72B directory entry to the system directory. Change the password for P648D72B from xxxxx to a valid password, in accordance with your security guidelines.
- 4** Place the new directories on-line using VM/Directory Maintenance (DIRMAINT) or an equivalent CP directory maintenance method.

Note

All minidisks for the P648D72B user ID must be formatted before installing NTuneMON V3R2 VM.

6.3.2 Installing NTuneMON V3R2 VM in SFS Directories

- 1** Obtain the user directory from the 5648D72B PLANINFO file.

Note: The user directory entry is located in the resource section of the PLANINFO file, at the bottom; these entries will contain all of the links and privilege classes necessary for the P648D72B user ID. Use the directory entry found in PLANINFO as a model as input to your system directory.

- 2** Add the P648D72B directory entry to the system directory. Change the password for P648D72B from xxxxx to a valid password, in accordance with your security guidelines.
- 3** Place the new directories on-line using VM/Directory Maintenance (DIRMAINT) or an equivalent CP directory maintenance method.

4 An SFS installation will also require the following steps:

- a** Determine the number of 4K blocks that are required for SFS directories by adding up the 4K blocks required for each SFS directory you plan to use.

If you intend to use all of the default NTuneMON V3R2 VM SFS directories, the 4K block requirements for the directories are summarized in Figure 12 on page 9.

This information will be used when enrolling the user ID, P648D72B, in the VMSYS filepool.

- b** Enroll user P648D72B in the VMSYS filepool using the ENROLL USER command:

```
ENROLL USER P648D72B VMSYS: (BLOCKS blocks)
```

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

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

- c** Determine if there are enough blocks available in the filepool to install NTuneMON V3R2 VM. This information can be obtained from the QUERY FILEPOOL STATUS command. Near the end of the output from this command is a list of minidisks in the filepool and the number of blocks free. If the number of blocks free is smaller than the total 4K blocks needed to install NTuneMON V3R2 VM you will need to add space to the filepool. See the *VM/ESA SFS and CRR Planning, Administration, and Operation* manual for information on adding space to a filepool.

- d** Create the necessary subdirectories listed in the 5648D72B PLANINFO file using the CREATE DIRECTORY command.

**set filepool vmsys:
create directory *dirid***

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

```
create directory vmsys:P648D72B.NTuneMON  
create directory vmsys:P648D72B.NTuneMON.object  
:
```

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

A complete list of default NTuneMON V3R2 VM SFS directories is provided in Figure 12 on page 9.

- e If you intend to use an SFS directory as the work space for the P648D72B user ID, include the following IPL control statement in the P648D72B directory entry:

```
IPL CMS PARM FILEPOOL VMSYS
```

This will cause CMS to automatically access the P648D72B's top directory as file mode A.

6.4 Install NTuneMON V3R2 VM

The *ppfname* used throughout these installation instructions is **5648D72B**, which assumes you are using the PPF supplied by IBM for NTuneMON V3R2 VM. If you have your own PPF override file for NTuneMON V3R2 VM, you should use your file's *ppfname* instead of **5648D72B**. The *ppfname* you use should be used **throughout** the rest of this procedure.

- 1 Logon to the installation user ID **P648D72B**.
- 2 Create a PROFILE EXEC that will contain the ACCESS commands for MAINT 5E5 and 51D minidisks.

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

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

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

profile

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

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

```
link MAINT 51d 51d mr
access 51d d
```

- 5 Have the NTuneMON V3R2 VM installation tape mounted and attached to P648D72B at virtual address 181. The VMFINS EXEC requires the tape drive to be at virtual address 181.

6 Install NTuneMON V3R2 VM.

Notes:

- a. If you've already created a PPF override file, you should specify your override file name, in place of the default PPF name (5648D72B), after the **PPF** keyword for the following VMFINS command.
- b. You may be prompted for additional information during VMFINS INSTALL processing depending on your installation environment. If you're unsure how to respond to a prompt, refer to the "Installing Products with VMFINS" and "Install Scenarios" chapters in the *VMSES/E Introduction and Reference* to decide how to proceed.

vmfins install ppf 5648D72B {NTUNEMON | NTUNEMONSFS} (nomemo nolink

Use **NTUNEMON** for installing on minidisks or **NTUNEMONSFS** for installing in Shared File System directories.

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

```

VMFINS2767I Reading VMFINS DEFAULTS B for additional options
VMFINS2760I VMFINS processing started
VMFINS2601R Do you want to create an override for :PPF 5648D72B NTUNEMON
:PRODID. 5648D72B%NTUNEMON?
Enter 0 (No), 1 (Yes) or 2 (Exit)

0
VMFINS2603I Processing product :PPF 5648D72B NTUNEMON :PRODID
5648D72B%NTUNEMON
VMFREQ2805I Product :PPF 5648D72B NTUNEMON :PRODID 5648D72B%NTUNEMON
has passed requisite checking
VMFINT2603I Installing product :PPF 5648D72B NTUNEMON :PRODID
5648D72B%NTUNEMON
VMFSET2760I VMFSETUP processing started
VMFUTL2205I Minidisk|Directory Assignments:
String Mode Stat Vdev Label/Directory
VMFUTL2205I LOCALSAM E R/W 2C2 SES2C2
VMFUTL2205I APPLY F R/W 2A6 SES2A6
VMFUTL2205I G R/W 2A2 SES2A2
VMFUTL2205I DELTA H R/W 2D2 SES2D2
VMFUTL2205I BUILD0 I R/W 400 SES400
VMFUTL2205I BASE1 J R/W 2B2 SES2B2
VMFUTL2205I ----- A R/W 191 SES191
VMFUTL2205I ----- B R/O 5E5 MNT5E5
VMFUTL2205I ----- D R/W 51D SES51D
VMFUTL2205I ----- S R/O 190 MNT190
VMFUTL2205I ----- Y/S R/O 19E MNT19E
VMFSET2760I VMFSETUP processing completed successfully
VMFREC2760I VMFREC processing started
VMFREC1852I Volume 1 of 1 of INS TAPE 9400
VMFREC1851I (1 of 6) VMFRCAXL processing AXLIST
VMFRCX2159I Loading 0 part(s) to DELTA 2D2 (H)
VMFREC1851I (2 of 6) VMFRCPTF processing PARTLST
VMFRCP2159I Loading 0 part(s) to DELTA 2D2 (H)
VMFREC1851I (3 of 6) VMFRCCOM processing DELTA
VMFRC2159I Loading 0 part(s) to DELTA 2D2 (H)
VMFREC1851I (4 of 6) VMFRCALL processing APPLY
VMFRC2159I Loading part(s) to APPLY 2A6 (F)
VMFRC2159I Loaded 1 part(s) to APPLY 2A6 (F)
VMFREC1851I (5 of 6) VMFRCALL processing BASE
VMFRC2159I Loading part(s) to BASE1 2B2 (J)
VMFRC2159I Loaded 541 part(s) to BASE1 2B2 (J)
VMFREC1851I (6 of 6) VMFRCALL processing BUILD
VMFRC2159I Loading part(s) to BUILD0 400 (I)
VMFRC2159I Loaded 36 part(s) to BUILD0 400 (I)
VMFREC2760I VMFREC processing completed successfully
VMFINT2603I Product installed
VMFINS2760I VMFINS processing completed successfully

```

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

vmfview install

6.4.1 Update Build Status Table for NTuneMON V3R2 VM

- 1 Update the VM SYSBLDS software inventory file for NTuneMON V3R2 VM.

vmfins build ppf 5648D72B {NTUNEMON | NTUNEMONSFS} (serviced nolink

Use **NTUNEMON** for installing on minidisks or **NTUNEMONSFS** for installing in Shared File System directories.

The **SERVICED** option will build any parts that were not built on the installation tape (if any) and update the Software Inventory build status table showing that the product 5648D72B has been built.

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

vmfview install

6.5 Post-Installation Considerations (optional)

6.6 Place NTuneMON V3R2 VM Into Production

6.6.1 Copy NTuneMON V3R2 VM Files Into Production

- 1 Logon to MAINT if you plan to put NTuneMON V3R2 VM 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 NTuneMON V3R2 VM code.

a If installing using minidisks

access 400 e

access 401 f

vmfcopy * * e = = f2 (prodid 5648D72B%NTUNEMON olddate replace

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

b If installing using Shared File System

access P648D72B.NTUNEMON.tbuid e The VMFCOPY command will update the VMSES
access 19e f PARTCAT file on the &prodbld. disk.
vmfcopy * * e = = f2 (prodid 5648D72B%NTUNEMON olddate replace

2 Logon to MAINT if you plan to put NTuneMON V3R2 VM help files on the system AMENG Help (MAINT's 19D) disk.

a If installing using minidisks

link P648D72B 400 400 rr The VMFCOPY command will update the VMSES
access 400 e PARTCAT file on the AMENG Help (MAINT 19D)
acc 19d f disk.
vmfcopy * * e = = f (prodid 5648D72B%NTUNEMON olddate replace

b If installing using Shared File System

access P648D72B.NTUNEMON.thelp e The VMFCOPY command will update the VMSES
acc 19d f PARTCAT file on the AMENG Help (MAINT 19D)
 disk.
vmfcopy * * e = = f (prodid 5648D72B%NTUNEMON olddate replace

3 Re-save the CMS saved system, to return the Y-disk (product code or MAINT's 19E disk) to 'shared' status. See the "Placing (Serviced) Components into Production" section of the *VM/ESA Service Guide* for detailed information about how to save the CMS saved system.

4 Re-build the CMS HELP logical saved segment, to include NTuneMON V3R2 VM's help files from the AMENG Help (MAINT's 19D) disk. See the "Placing (Serviced) Components into Production" section of the *VM/ESA Service Guide* for detailed information about how these segments should be saved on your system. (Note that you will need to use (**all** instead of (**serviced** on the VMSES/E VMFBLD command when re-building any segments.)

NTuneMON V3R2 VM is now installed and built on your system.

7.0 Service Instructions

This section of the Program Directory contains the procedure to install CORrective service to NTuneMON V3R2 VM. VMSES/E is used to install service for NTuneMON V3R2 VM.

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

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

7.1 VMSES/E Service Process Overview

The following is a brief description of the main steps in servicing NTuneMON V3R2 VM using VMSES/E.

- Setup Environment
Access the software inventory disk. Use VMFSETUP command to establish the correct minidisk access order.
- Merge Service
Use the VMFMRDSK command to clear the alternate apply disk before receiving new service. This allows you to remove the new service if a serious problem is found.
- Receive Service
The VMFREC command receives service from the delivery media and places it on the Delta disk.
- Apply Service
The VMFAPPLY command updates the version vector table (VVT), which identifies the service level of all the serviced parts. In addition, AUX files are generated from the VVT for parts that require them.
- Reapply Local Service (if applicable)
All local service (mods) must be entered into the software inventory to allow VMSES/E to track the changes and build them into the system. Refer to Chapter 7 in the *VM/ESA Service Guide* for this procedure.
- Build New Levels
The build task generates the serviced level of an object and places the new object on a test BUILD disk.
- Place the New Service into Production

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

7.2 Servicing NTuneMON V3R2 VM

7.2.1 Prepare to Receive Service

Electronic Service (envelope file)

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

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

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

The *ppfname* used throughout these servicing instructions is **5648D72B**, which assumes you are using the PPF supplied by IBM for NTuneMON V3R2 VM. If you have your own PPF override file for NTuneMON V3R2 VM, you should use your file's *ppfname* instead of **5648D72B**. The *ppfname* you use should be used **throughout** the rest of this procedure, unless otherwise stated differently.

1 Logon to NTuneMON V3R2 VM service user ID **P648D72B**

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

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

**link MAINT 51d 51d mr
access 51d d**

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

3 Have the NTuneMON V3R2 VM CORrective service tape mounted and attached to **P648D72B**. (If you have a SERVLINK file make sure that it is available on the A-disk.)

4 Establish the correct minidisk access order.

vmfsetup 5648D72B {NTUNEMON | NTUNEMONSFS}

5648D72B is the PPF that was shipped with the product. If you have your own PPF override you should substitute your PPF name for 5648D72B.

Use **NTUNEMON** for installing on minidisks or **NTUNEMONSFS** for installing in Shared File System directories.

5 Receive the documentation.

a If receiving the service from tape

vmfrec info

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

b If receiving the service from an envelope file

vmfrec info (env vlstnum

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

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 on the tape. To do this, use the PF5 key to show all status messages which identify the products on the tape.

7 Read the product memo (5648D72B MEMO) before going on.

8 Setup the correct product access order.

vmfsetup 5648D72B {NTUNEMON | NTUNEMONSFS}

Use **NTUNEMON** for installing on minidisks or **NTUNEMONSFS** 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 5648D72B {NTUNEMON | NTUNEMONSFS} apply

Use **NTUNEMON** for installing on minidisks or **NTUNEMONSFS** 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 *VM/ESA: System Messages and Codes*, or use on-line HELP.

vmfview mrd

7.2.2 Receive the Service

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

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

- 1** Receive the service.

- a** If receiving the service from tape

vmfrec ppf 5648D72B {NTUNEMON | NTUNEMONSFS}

Use **NTUNEMON** for installing on minidisks or **NTUNEMONSFS** for installing in Shared File System directories.

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

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

vmfrec ppf 5648D72B {NTUNEMON | NTUNEMONSFS} (env vptfnum

Use **NTUNEMON** for installing on minidisks or **NTUNEMONSFS** for installing in Shared File System directories.

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

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

vmfview receive

7.2.3 Apply the Service

- 1 Apply the new service.

vmfapply ppf 5648D72B {NTUNEMON | NTUNEMONSFS}

Use **NTUNEMON** for installing on minidisks or **NTUNEMONSFS** for installing in Shared File System directories.

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

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

- 2 Review the apply message log (\$VMFAPP \$MSGLOG). If necessary, correct any problems before going on. For information about handling specific error messages, see *VM/ESA: 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 NTuneMON V3R2 VM. Refer to chapter 7 in the *VM/ESA Service Guide*. Follow the steps that are applicable to your local modification.

The following substitutions need to be made:

- **esalcl** should be **5648D72B**
- **esa** should be **5648D72B**
- *compname* should be **NTUNEMON** or **NTUNEMONSFS** (minidisk or SFS)
- *appid* should be **5648D72B**
- *fm-local* should be the fm of 2C2
- *fm-applyalt* should be the fm of 2A6
- **outmode localmod** should be **outmode localsam**

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

Keep in mind that when you get to the "Return to the Appropriate Section to Build Remaining Objects" or "Rebuild Remaining Objects" step in the *VM/ESA Service Guide*, you should return back to this program directory at 7.2.4, "Update the Build Status Table" on page 28.

7.2.4 Update the Build Status Table

- 1 Update the Build Status Table with serviced parts.

vmfbld ppf 5648D72B {NTUNEMON | NTUNEMONSFS} (status

Use **NTUNEMON** for installing on minidisks or **NTUNEMONSFS** 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 5648D72B \$PPF

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

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

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

0

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

VMFBLD2188I Building 5648D72B \$PPF
on 191 (A) from level \$PFnnnnn

vmfppf 5648D72B *

Note: If you've created your own PPF override then use your PPF name instead of 5648D72B.

**copyfile 5648D72B \$PPF a = = d (olddate replace
erase 5648D72B \$PPF a**

Note: Do not use your own PPF name in place of 5648D72B for the COPYFILE and ERASE commands.

vmfbl d ppf 5648D72B {NTUNEMON | NTUNEMONSFS} (status

1

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

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

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

vmfview build

7.2.5 Build Serviced Objects

- 1 Rebuild NTuneMON V3R2 VM serviced parts.

vmfbld ppf 5648D72B {NTUNEMON | NTUNEMONSFS} (serviced

Use **NTUNEMON** for installing on minidisks or **NTUNEMONSFS** 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 *VM/ESA: System Messages and Codes*, or use on-line HELP.

vmfview build

7.3 Place the New NTuneMON V3R2 VM Service Into Production

7.3.1 Rebuild the Saved Segments

- 1 Prepare to build the segments.

- a IPL CMS to clear the virtual storage

ipl cms parm clear nosprof instseg no

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

access (noprof

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

Bypass the execution of the PROFILE EXEC.

- b Access the VMSES/E code

access 5e5 b

C Establish write access the Software Inventory Disk

```
link MAINT 51d 51d mr
access 51d d
```

2 Re-save the NTuneMON V3R2 VM segments.

```
vmfbld ppf segbld esasegs segbld &SEGNAME1. (serviced
```

Note: If you received the message:

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

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

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

```
vmfview build
```

7.3.2 Copy the New NTuneMON V3R2 VM Serviced Files Into Production

1 Logon to MAINT if you plan to put NTuneMON V3R2 VM 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 NTuneMON V3R2 VM code.

a If installing using minidisks

```
link P648D72B 400 400 rr
access 400 e
access 401 f
```

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

```
vmfcopy * * e = f2 (prodid 5648D72B%NTUNEMON olddate replace
```

b If installing using Shared File System

access P648D72B.NTUNEMON.tbuid e The VMFCOPY command will update the VMSES
access 19e f PARTCAT file on the &prodbld. disk.
vmfcopy * * e = = f2 (prodid 5648D72B%NTUNEMON olddate replace

2 Logon to MAINT if you plan to put NTuneMON V3R2 VM help files on the system AMENG Help (MAINT's 19D) disk.

a If installing using minidisks

link P648D72B 400 400 rr The VMFCOPY command will update the VMSES
access 400 e PARTCAT file on the AMENG Help (MAINT 19D)
acc 19d f disk.

vmfcopy * * e = = f (prodid 5648D72B%NTUNEMON olddate replace

b If installing using Shared File System

access P648D72B.NTUNEMON.thelp e The VMFCOPY command will update the VMSES
acc 19d f PARTCAT file on the AMENG Help (MAINT 19D)
disk.

vmfcopy * * e = = f (prodid 5648D72B%NTUNEMON olddate replace

3 Re-save the CMS saved system, to return the Y-disk (product code or MAINT's 19E disk) to 'shared' status. See the "Placing (Serviced) Components into Production" section of the *VM/ESA Service Guide* for detailed information about how to save the CMS saved system.

4 Re-build the CMS HELP logical saved segment, to include NTuneMON V3R2 VM's help files from the AMENG Help (MAINT's 19D)disk. See the "Placing (Serviced) Components into Production" section of the *VM/ESA Service Guide* for detailed information about how these segments should be saved on your system. (Note that you will need to use (**all** instead of (**serviced** on the VMSES/E VMFBLD command when re-building any segments.)

You have finished servicing NTuneMON V3R2 VM.

Appendix A. Applying an RSU Tape for NTuneMON V3R2 VM

The RSU is structured to install all PTFs included on the tape plus the tape files containing the preapplied service and prebuilt objects. All PTF-related files are loaded to the DELTA disk. The tape file containing the preapplied service, i.e. containing the results of VMFAPPLY, is loaded to the alternate APPLY disk and the contents of the tape files containing prebuilt objects are loaded to the appropriate build disks.

Points to consider about using the Product Service Upgrade procedure are:

- This process will not alter any of your tailored flat files (files serviced full part replacement only) in any way. Local modifiable files you may have updated will have to be re-worked to include any new service to these files.
- Planning must be done (such as determining disk sizes, and determining what service, if any, on your existing system is not contained on the RSU) prior to actually loading the service from the RSU. These tasks will be discussed.

The following outline is an overview of what tasks need to be performed during the Preventive Service procedure (PSU) using the RSU tape:

- **Prepare System**
In this task, you will receive the documentation contained on the RSU and determine the DASD required to install the RSU.
- **Merge Service**
Use the VMFMRDSK command to clear the alternate APPLY disk before receiving the RSU. This allows you to remove the new service if a serious problem is found.
- **Receive Service**
The VMFINS command receives service from the RSU and places it on the DELTA disk.
- **Apply Additional 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. These steps are used to reapply service that was not contained on the RSU tape that was already installed for NTuneMON V3R2 VM.
- **Reapplying Local Modifications (if applicable)**
All local modifications must be entered into the software inventory to allow VMSES/E to track the changes and build them into the system.
- **Building New Levels**
The build tasks generates the serviced level of an object and places the new object on a BUILD disk.
- **Placing the New Service into Production**

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

A.1 Apply NTuneMON V3R2 VM RSU

A.1.1 Prepare Your System for Service Refresh

The *ppfname* used throughout these instructions is **5648D72B**, which assumes you are using the PPF supplied by IBM for NTuneMON V3R2 VM. If you have your own PPF override file for NTuneMON V3R2 VM you should use your file's *ppfname* instead of **5648D72B**. The *ppfname* you use should be used **throughout** the rest of this procedure.

Electronic Service (envelope file)

If you have received the RSU as an envelope file or on CD-ROM, follow the appropriate instructions to retrieve and decompact the envelope file to your A-disk. The decompaction is currently done by using the DETERSE MODULE. The file name of the decompacted file will be of the format *RPTFnum*. The file type must be SERVLINK. You will need to enter the file name on the VMFINS commands.

- 1** Read through the latest RSU information hard copy memo.
- 2** Logon to the NTuneMON service user ID P648D72B
- 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 who has it linked R/W link it as R/O. You then can issue the following commands to obtain write access to it. Do not use *mw* mode.

**link MAINT 51d 51d mr
access 51d d**

The MAINT 51D disk is where the VMSES/E system level software inventory files reside.

- 4** Mount the RSU tape on the tape drive as virtual device 181. You must use 181. (If you have a SERVLINK file make sure that it is available on the A-disk.)
- 5** Receive the documentation
Receive the documentation on the RSU. This step will also load the cumulative Apply Status Table (SRVAPPS) which identifies all preapplied service contained on the tape. These files are loaded to the 51D disk.

a If receiving the RSU from tape

vmfins install info (nomemo

b If receiving the RSU from an envelope file

vmfins install info (nomemo env rptfnum

6 Determine DASD sizes for disks to receive service

In order to receive the service from the RSU, you need to have adequate space available on the alternate APPLY and DELTA disks. The required sizes are identified in the NTuneMON V3R2 VM documentation (5648D72B MEMO D) received in the previous step.

7 Setup the correct minidisk access order

vmfsetup 5648D72B {NTUNEMON | NTUNEMONSFS}

Use **NTUNEMON** for installing on minidisks or **NTUNEMONSFS** for installing in Shared File System directories.

8 Merge the APPLY disks for NTuneMON V3R2 VM

Next, you must prepare your system to receive the service from the RSU. To do this, you must first clear the alternate APPLY disk for receipt of the service from the RSU.

Enter the VMFMRDSK command to merge the alternate apply disk to the APPLY disk. This will clear the alternate APPLY disk.

vmfmrdsk 5648D72B {NTUNEMON | NTUNEMONSFS} apply

Use **NTUNEMON** for installing on minidisks or **NTUNEMONSFS** for installing in Shared File System directories.

9 You can obtain additional information about the service on the RSU and how it will affect your local modifications by invoking the VMFPSU command. This command creates an output file, **appid PSUPLAN**, which you can review. See *VM/ESA Service Guide* for an explanation of this file.

vmfpsu 5648D72B {NTUNEMON | NTUNEMONSFS}

Use **NTUNEMON** for installing on minidisks or **NTUNEMONSFS** for installing in Shared File System directories.

This command produces an output file that contains information about the service on the RSU compared against the service and local modifications on your system. The file name is **appid PSUPLAN**, where **appid** is specified in the PPF file.

A.1.2 Receive the Preapplied, Prebuilt Service

- 1 Refresh the NTuneMON V3R2 VM service disks by loading new service from the RSU.

a If receiving the RSU from tape

vmfins install ppf 5648D72B {NTUNEMON | NTUNEMONSFS} (nomemo link

Use **NTUNEMON** for installing on minidisks or **NTUNEMONSFS** for installing in Shared File System directories.

b If receiving the RSU from an envelope file

vmfins install ppf 5648D72B {NTUNEMON | NTUNEMONSFS} (nomemo link env rptfnum

Use **NTUNEMON** for installing on minidisks or **NTUNEMONSFS** for installing in Shared File System directories.

```

VMFINS2767I Reading VMFINS DEFAULTS B for additional options
VMFINS2760I VMFINS processing started
VMFINS2601R Do you want to create an override for :PPF 5648D72B
           NTUNEMON :PRODID 5648D72B%NTUNEMON?
           Enter 0 (No), 1 (Yes) or 2 (Exit)
0
VMFINS2603I Processing product :PPF 5648D72B NTUNEMON :PRODID
           5648D72B%NTUNEMON
VMFREQ2805I Product :PPF 5648D72B NTUNEMON :PRODID 5648D72B%NTUNEMON
           has passed requisite checking
VMFINT2603I Installing product :PPF 5648D72B NTUNEMON :PRODID
           5648D72B%NTUNEMON
VMFSET2760I VMFSETUP processing started for 5648D72B NTUNEMON
VMFUTL2205I Minidisk|Directory Assignments:
           String   Mode  Stat  Vdev  Label/Directory
VMFUTL2205I LOCALSAM E    R/W  2C2   SES2C2
VMFUTL2205I LOCALMOD F    R/W  2C4   SES2C4
VMFUTL2205I APPLY      G    R/W  2A6   SES2A6
VMFUTL2205I           H    R/W  2A2   SES2A2
VMFUTL2205I DELTA     I    R/W  2D2   SES2D2
VMFUTL2205I BUILD0    J    R/W  49A   SES49A
VMFUTL2205I BUILD2    K    R/W  493   SES493
VMFUTL2205I BUILD4    L    R/W  402   SES402
VMFUTL2205I BASE1     M    R/W  2B2   SES2B2
VMFUTL2205I ----- A    R/W  191   USR191
VMFUTL2205I ----- B    R/O  5E5   MNT5E5
VMFUTL2205I ----- C    R/O  292   ISP192
VMFUTL2205I ----- D    R/W  51D   MNT51D
VMFUTL2205I ----- S    R/O  190   MNT190
VMFUTL2205I ----- Y/S  R/O  19E   MNT19E
VMFSET2760I VMFSETUP processing completed successfully
VMFREC2760I VMFREC processing started
VMFREC1852I Volume 1 of 1 of INS TAPE yynn
:
VMFREC2760I VMFREC processing completed successfully
VMFINT2760I VMFINST processing completed successfully
VMFINS2760I VMFINS processing completed successfully
Ready;

```

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

vmfview install

A.1.3 Process Additional Service

- 1** Apply additional service

The VMFAPPLY command is used to reapply service that was not contained on the refresh tape that was already installed for the component.

Applying service with preapplied, prebuilt service will reapply any reach-ahead service that may be on the system **or** indicate that there are no reach-ahead PTFs to be applied.

vmfapply ppf 5648D72B {NTUNEMON | NTUNEMONSFS}

Use **NTUNEMON** for installing on minidisks or **NTUNEMONSFS** for installing in Shared File System directories.

Messages VMFAPP2122E and VMFAPP2109R will be displayed only if you have reach-ahead service that needs to be reapplied. If you receive these messages, enter **1** in reply to VMFAPP2109R to reapply the reach-ahead service (as shown in the example below).

VMFAPP2122E The set of PTFs in the Apply Status Table (5648D72B SRVAPPS) on the 2A2 (G) disk is not a subset of the PTFs in the highest Level Apply Status Table on the 2A6 (F) disk. This is an inconsistent state.

VMFAPP2109R VMFAPPLY will automatically correct the problem identified by message 2122E by including the missing PTFs in the current Apply List. Enter (1) to continue; (0) to quit.

1 If you receive these messages, enter **1** for VMFAPPLY to reapply the reach-ahead service.

2 Check 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 *VM/ESA: System Messages and Codes*, or use online HELP.

vmfview apply

3 If necessary, rework **local modifications**.

The output from the VMFPSU command (which was run in an earlier step), *appid* **PSUPLAN** file, can be used to indicate what local service or mods are affected by the RSU Tape. If a PTF is applied and it contains service to a part for which you have a local modification, you will need to rework the local modification. Refer to the *VM/ESA Service Guide*.

A.1.4 Build the New Service Level and Place Into Production

To rebuild all objects that were affected by reach-ahead service that was reapplied, local modifications, and saved segments continue with the instructions in 7.2.4, “Update the Build Status Table” on page 28. This will also lead you into the steps to place NTuneMON V3R2 VM into production.

A.1.5 Service Next Component

Refer to the 5648D72B MEMO on the 51D disk, special instructions section, to see if you have another NTuneMON V3R2 VM component on the RSU Tape to service. If so, then continue with A.1.1, “Prepare Your System for Service Refresh” step 7 on page 35.

A.1.6 Place Product Service into Production

After all of the components have been serviced, follow the instructions in section 7.3, “Place the New NTuneMON V3R2 VM Service Into Production” on page 30 to copy test build disks to production build disks.

A.1.7 Determine RSU Service Level

The service contained on each RSU constitutes a new service level. Use this service level when ordering corrective service. The service level is updated in the system inventory when the RSU is installed.

The following command is used to query the current service level of the system.

vmfsim query vm sysrecs tdata :ppf *ppfname* :stat The output from this command is similar to the following console log. The last part of the status line indicates the RSU service level: 9901

```
VMFSIP2408I RESULTS FOR
          TDATA :PPF ppfname :STAT
:PPF ppfname compname
:STAT RECEIVED.mm/dd/yy.hh:mm:ss.userid.RSU-9901
```

Appendix B. 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 NTuneMON V3R2 VM files reside.

Note: Do **not** modify the product supplied 5648D72B \$PPF or 5648D72B PPF files to change the file pool name or any other installation parameters. If the 5648D72B \$PPF file is serviced, the existing \$PPF file will be replaced, and any changes to that file will be lost; by creating your own \$PPF override, your updates will be preserved.

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

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

xedit *overname* \$PPF *fm2*

overname is the PPF override file name (such as 'myNTuneMON') 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 NTuneMONSFS override area, so that it resembles the :DCL. section shown below. This override will be used for the installation of NTuneMON V3R2 VM.

```

:OVERLST. NTUNEMONSFS
*
* ===== *
* Override Section for Initial Installation (Using SFS Directories) *
* ===== *
:NTUNEMONSFS. NTUNEMONSFS 5648D72B
:DCL. REPLACE
&INST191 DIR MYP00L1:P648D72B.
&BASE DIR MYP00L1:P648D72B.NTUNEMON.OBJECT
&LOCALSAM DIR MYP00L1:P648D72B.NTUNEMON.SAMPLE
&DELTA DIR MYP00L1:P648D72B.NTUNEMON.DELTA
&APPLY2 DIR MYP00L1:P648D72B.NTUNEMON.APPLYALT
&APPLY1 DIR MYP00L1:P648D72B.NTUNEMON.APPLYPROD
&BUILD0 LINK P648D72B 400 400 MR
&BUILD2 LINK P648D72B 200 200 MR
&BUILD3 LINK P648D72B 100 100 MR
&P648D72B USER P648D72B
:EDCL.
:END.
*

```

(This override will replace the :DCL. section of the NTuneMONSFS override area of the 5648D72B \$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* **NTUNEMONSFS**

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

Now that the *overname* PPF file has been created, you should specify *overname* instead of 5648D72B as the PPF name to be used for those VMSES/E commands that require a PPF name.

Reader's Comments

NTuneMON Version 3 Release 2 for VM

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**NTuneMON Version 3
VM/ESA®**

Publication No. GI10-6625-00

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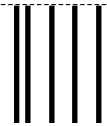
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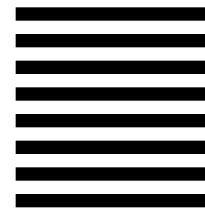
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