IBM

Program Directory for

Open Systems Adapter Support Facility for VM

function level 440

Program Number 5741-A07

for Use with
z/VM version 6 release 2

Document Date: December 2011

GI11-9805-00

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┌─── Note! ──────────────────────────────────────────────────────────────────────────┐
│                                                                                      │
│  Before using this information and the product it supports, be sure to read the general information under "Notices" on page 37. │
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Contents

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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 OSA/SF for 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 program materials and documentation for OSA/SF for VM.

- 3.0, "Program Support" on page 5 describes the IBM support available for OSA/SF for VM.

- 4.0, "Program and Service Level Information" on page 6 lists the APARs (program level) and PTFs (service level) incorporated into OSA/SF for VM.

- 5.0, "Installation Requirements and Considerations" on page 7 identifies the resources and considerations for installing, migrating and using OSA/SF for VM.

- 6.0, "Installation Instructions" on page 12 provides detailed installation instructions for OSA/SF for VM.

- 7.0, "Service Instructions" on page 27 provides detailed servicing instructions for OSA/SF for VM.

- Appendix A, "Moving OSA/SF for VM to SFS Directories and Creating a PPF Override" on page 29 describes how to move OSA/SF for VM into SFS and how to create a Product Parameter File (PPF) override.

Before installing OSA/SF for 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.

1.1 Program Description

Open Systems Adapter Support Facility for VM lets one customize the integrated Open Systems Adapter (OSA) hardware feature for the OSA modes, change the settable OSA port parameters, and obtain status about the OSA.

OSA/SF for VM graphical user interface has changed. It now runs on any platform that supports Java-based applications.

Through the System Authorization Facility (SAF) interface of the system image on which it is running, OSA/SF lets you use the Resource Access Control Facility (RACF®), or equivalent, to authorize or deny access to OSA/SF commands.

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2.0 Program Materials

An IBM program is identified by a program number. The program number for Open Systems Adapter Support Facility for VM, function level 440 is 5741-A07.

The program announcement material describes the features supported by OSA/SF for 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

Open Systems Adapter Support Facility for VM is distributed pre-installed on the z/VM version 6 release 2 System deliverables. Refer to the z/VM version 6 release 2 Software Announcement for information on ordering z/VM version 6 release 2 and its features.

2.2 Optional Machine-Readable Material

There are no optional machine-readable materials for OSA/SF for VM.

2.3 Program Publications

The following sections identify the basic and other publications for OSA/SF for VM.

2.3.1 Basic Program Publications
The following publication is part of your order for OSA/SF for VM but it is only available as softcopy. Refer to 2.3.3, "Softcopy Publications" on page 3 for the World Wide Web URLs that the program directory can be found at.

Figure 1. Basic Material: Unlicensed Publications

Publication Title	Form Number
Program Directory for Open Systems Adapter Support Facility for VM	GI11-9805

2.3.2 Base Program Publications
Figure 2 identifies the program publications for OSA/SF for VM.

Figure 2. Material: Program Publications

Publication Title	Form Number
zEnterprise™ System, System z10™, System z9®, and eServer™ zSeries®: Open Systems Adapter-Express Customer's Guide and Reference	SA22-7935
zEnterprise™ System, System z10™, System z9® and eServer™ zSeries®: Open Systems Adapter-Express3 Integrated Console Controller Dual-Port User's Guide	SA23-2266
System z9 and eServer zSeries 890 and 990: Open Systems Adapter-Express Integrated Console Controller User's Guide	SA22-7990
System z: Open Systems Adapter-Express Integrated Console Controller 3215 Support	SA23-2247

2.3.3 Softcopy Publications

The OSA/SF for VM publications are supplied in softcopy form as part of the *IBM Online Library: z/VM Collection* in BookManager® and Adobe® Portable Document Format (PDF). One copy of the *IBM Online Library: z/VM Collection on DVD* is included when you order the basic materials for z/VM version 6 release 2. OSA/SF for VM publications, with the exception of the Program Directory, are also available in the z/VM Information Center web site site:

   http://publib.boulder.ibm.com/infocenter/zvm/v6r2/index.jsp

The OSA/SF for VM publications, including this program directory, also are available in Adobe Portable Document Format from the z/VM Library pages on the World Wide Web; the URL for this home page is:

   www.vm.ibm.com/library

The z/VM publications can be ordered separately for a fee, 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. Furthermore, a large number of publications are available online in various file formats (e.g. Adobe PDF), which can currently be downloaded free of charge.

2.4 Program Source Materials

No program source materials or viewable program listings are provided for OSA/SF for VM.

2.5 Publications Useful During Installation and Service

The publications listed in Figure 3 might be useful during the installation of OSA/SF for VM.

Figure 3. Publications Useful During Installation / Service on z/VM version 6

Publication Title	Form Number
z/VM: VMSES/E Introduction and Reference	GC24-6243
z/VM: Service Guide	GC24-6247
z/VM: CMS Commands and Utilities Reference	SC24-6166
z/VM: CMS File Pool Planning, Administration, and Operation	SC24-6167
z/VM: Other Components Messages and Codes	GC24-6207
z/VM: CMS and REXX/VM Messages and Codes	GC24-6161
z/VM: CP Messages and Codes	GC24-6177
z/VM: Installation Guide	GC24-6246

Notes:

1. The OSA/SF for VM GUI (graphical user interface) provides online help.

3.0 Program Support

This section describes the IBM support available for OSA/SF for VM.

3.1 Preventive Service Planning

Before installing OSA/SF for 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 4. PSP Upgrade and Subset ID

RETAIN®			
COMPID	**Release**	**Upgrade**	**Subset**
565510400	440	VMOSASF440	OSASF
565510400	440	VMOSASF440	yynnRSU

RSU-BY-LVL information can also be obtained from the z/VM service RSU web site at url:

www.vm.ibm.com/service/rsu

3.2 Statement of Support Procedures

With Open Systems Adapter Support Facility for VM you are entitled to support under the basic warranty for z/VM version 6 release 2. Also, note that the Software Subscription and Support for z/VM version 6 release 2 is *automatically* added to your order. This provides zSeries service to which you are likely accustomed. If you do not want the Software Subscription and Support for z/VM, then you must take specific action to decline it when ordering z/VM.

Report any difficulties you have using this program to your IBM Support Center. If an APAR (Authorized Program Analysis Report) is required, the Support Center will provide the address to which any needed documentation can be sent.

Figure 5 identifies the component ID (COMPID), RETAIN Release and Field Engineering Service Number (FESN) for OSA/SF for VM.

Figure 5. Component IDs

RETAIN			
COMPID	**Release**	**Component Name**	**FESN**
565510400	440	OSA/SF for VM, FL440	0401298

4.0 Program and Service Level Information

This section identifies the program and any relevant service levels of OSA/SF for 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.

Note: If you have access to the IBM Problem Solving Database, APARs/PTFs, (for example through the SIS function in ServiceLink or from the IBM eServer zSeries Support web page) be aware that you need to have your search look in the MVS™ Library or S/390 Operating Systems product. The reason VM OSA/SF is in the MVS library is to allow an OSA/SF APAR to be shared across different platforms.

4.1 Program Level Information

All APAR fixes against the previous release of OSA/SF for VM, FL2.2.0, up to and including, OA01565 have been incorporated into this release.

4.2 Service Level Information

After the installation of the z/VM System, OSA/SF for VM is at Service Level RSU 0902.

Before you install and configure OSA/SF for VM, you should review the the VMOSASF440 PSP (Preventive Service Planning) bucket for updated installation information that you should be aware of, or for information about PTFs that should be installed. Specify upgrade and subset values of **VMOSASF440** and **OSASF**, respectively, when you request or obtain this information.

4.3 Cumulative Service - RSU Information

Cumulative service for OSA/SF for VM function level 440 is available through a periodic preventive service deliverable, the Recommended Service Upgrade (RSU). The RSU is used to provide service updates for multiple z/VM components and features (including OSA/SF for VM) and is often referred to as a *stacked* RSU.

The stacked RSU tape can be obtained by **ordering PTF UM976_n_0;** where _n_ indicates the release of z/VM version 6 you are running.

Check the PSP bucket upgrade VMOSASF440 and subset yynnRSU, where yynn is the level associated with an RSU, for the latest RSU available. For a list of the PTFs included on the RSU, see the service memo from the tape or refer to the RSU-BY-LVL information obtained from the VM service RSU web site at:

www.vm.ibm.com/service/rsu

5.0 Installation Requirements and Considerations

The following sections identify the system requirements for installing and activating OSA/SF for VM.

5.1 Hardware Requirements

Depending on your OSA hardware feature, refer to the appropriate OSA planning or customer's guide and reference manual.

For information on the OSA/SF for VM GUI you need to use publication *zEnterprise System, System z10, System z9 and eServer zSeries: Open Systems Adapter-Express Customer's Guide and Reference* as it supersedes all other OSA related publications that mention the GUI.

5.2 Program Considerations

The following sections list the programming considerations for installing OSA/SF for VM and activating its functions.

5.2.1 Operating System Requirements

OSA/SF for VM supports the following VM operating systems:

- z/VM version 6 release 2 (which includes Language Environment for z/VM V6.2)

5.2.2 Other Program Product Requirements

If the OSA/SF for VM GUI interface is to be used then you also need the following requisites:

- Microsoft® Windows® 98 or higher, Microsoft Windows NT with Service Pack 6a or higher, Microsoft Windows 2000 or XP or higher, or Linux® Kernel 2.4 or higher.
- Java™ Runtime 1.4 or higher, and JavaHelp™ Files 1.1.2 or higher, on the workstation.
- For TCP/IP communication:
  - TCP/IP (Transmission Control Program/Internet Protocol) Feature for z/VM
  - TCP/IP on the workstation

The following product is optional and may be helpful in running OSA/SF for VM:

- RACF Feature for z/VM, version 6

5.2.3 Migration Considerations

5.2.3.1 Customizable Parts

There have been no changes to the supplied UCOMDIR and $SERVER$ files (SAMPNAME) or supplied profile exec files (IOAOSASF, IOAMAINT and IOAADMIN SAMPPROF) for the user ID's associated with OSA/SF for VM; therefore you can migrate your existing OSA/SF versions of these files to this new release.

There have been no changes to the other supplied sample files therefore you can migrate your existing OSA/SF versions to this new release.

If you use the migration procedure, as documented in the *z/VM: Installation Guide*, to migrate OSA/SF for VM, FL440 from a z/VM version 5 or z/VM version 6 release 1 system to z/VM version 6 release 2, then the customizable files will be migrated to the newer z/VM system, where possible. If the customizable files have been serviced on z/VM version 6 release 2 and you have made changes to them on your z/VM version 5 or z/VM version 6 release 1 systems, then you will be told to rework your changes. The OSASF production build disk (default 200) will be migrated therefore any other sample files on that disk that you have renamed and changed will be migrated. The 7F00 disk will not be migrated.

The OSA/SF for VM production build disks are no longer in shared file in z/VM version 6 release 2.

5.2.3.2 OSADMINx CP User ID Directory Change

The OSADMIN*x* user IDs supplied in the CP Directory on z/VM version 6 release 2 have privilege classes of B and G instead of just G.

5.2.3.3 Workstation Graphical Interface (GUI)

The OSA/SF FL2.2.0 GUI, that used Windows or OS/2®, **WILL NOT WORK** with OSA/SF FL4.4. You need to install the new OSA/SF FL4.4 GUI, that is Java based (IOAJAVA BIN file).

5.2.4 Program Installation/Service Considerations

This section describes items that should be considered before you install or service OSA/SF for VM.

- The appropriate OSA planning or customer's guide and reference manual, depending on your hardware setup, should be reviewed before installing OSA/SF for VM.

  For information on the OSA/SF for VM GUI you need to use publication *zEnterprise System, System z10, System z9 and eServer zSeries: Open Systems Adapter-Express Customer's Guide and Reference* as it supersedes all other OSA related publications that mention the GUI.

- OSA/SF for VM is pre-installed on the z/VM version 6 release 2 System deliverables.

- With the packaging changes introduced with z/VM version 6 release 1 to provide support for a z/VM single system image (SSI), note that **all OSA/SF for VM service activity now must be performed using user ID MAINT***vrm* **(e.g. MAINT620).**

- VMSES/E is required to install and service this product.

- If you modify or eliminate any of the IBM-supplied user IDs, minidisk addresses or SFS directory names that are associated with OSA/SF for VM, you **must** create an appropriate PPF override for the **SERVP2P $PPF** file.

  You also must use the **VMFUPDAT SYSSUF** command to update the VM SYSSUF Software Inventory file, so that your PPF override for SERVP2P PPF is used for automated service processing. For more information about PPF overrides, see the *z/VM:VMSES/E Introduction and Reference*.

  Note: The OSA/SF for VM Product Parameter File, 4OSASF40 $PPF, has not been updated to use the new VMSES/E SSI function but the OSA/SF for VM component in the SERVP2P $PPF has been updated.

- If you choose to move OSA/SF for VM from minidisk to SFS after initial z/VM installation, or if you want to change from the default SFS file pool or directories, then you will need to follow the steps in Appendix A, "Moving OSA/SF for VM to SFS Directories and Creating a PPF Override" on page 29. These steps help you create the SFS directories, move the files to the SFS directories and create a PPF override file.

- RSUs will be supplied as necessary. Service between RSUs can be obtained through CORrective service.

5.3 DASD Storage and User ID Requirements

Figure 6 on page 10 lists the user IDs and minidisks that are used to install and service OSA/SF for VM.

Important Installation Notes:

- Important information on setting up the 70cc minidisks for each processor type can be found in the appropriate OSA planning or customer's guide and reference manual. You should review this manual before performing the installation step 6.2, "Review and Allocate OSA/SF for VM Resources" on page 12.

- All user IDs and minidisks are listed here so that you can get an idea of the resources required by OSA/SF for VM. They are already defined and allocated on the z/VM system deliverables, as OSA/SF for VM is pre-installed. The **exception** to this is the OSASF user ID's 70cc minidisks. Those minidisks still need to be defined.

- With the exception of the OSA/SF for VM user ID that owns the service resources (4OSASF40), **all** the OSA/SF for VM server virtual machines are defined by multiconfiguration virtual machine definitions. The 4OSASF40 user ID is defined by a single-configuration virtual machine definition. See *z/VM: CP Planning and Administration* for information on multiconfiguration and single-configuration virtual machine definitions.

- The OSAMAINT user ID **SHOULD NOT** be changed. OSA/SF for VM requires that a user ID of OSAMAINT exist.

- The storage requirements for some minidisks may be revised over time, which may require existing minidisk sizes to be increased. The minidisks changes will be indicated in updated levels of this document by revision characters in the left margin of Figure 6 on page 10.

Some minidisk storage requirement changes will need to be assessed locally, for your specific environment. For example, the capacity of the **DELTA** minidisk (4OSASF40 2D2, by default), periodically may need to be increased, based on the specific preventive and corrective service applied to your system. An updated version of this document will show the size of the minidisk as shipped on the latest z/VM System deliverables.

Figure 6 (Page 1 of 2). DASD Storage Requirements for Target Minidisks

Minidisk owner (user ID)	Default Address	Storage in Cylinders		SFS 4K Blocks	Usage
		DASD	CYLS		Default SFS Directory Name
4OSASF40	2B2	3390	15	2700	Contains all the base code shipped with OSA/SF for VM. **VMPSFS:4OSASF40.OSA.OBJECT**
4OSASF40	2C2	3390	4	720	Contains customization files. This disk also will be used for local modifications. **VMPSFS:4OSASF40.OSA.SAMPLE**
4OSASF40	2D2	3390	150	27000	Contains serviced files. **VMPSFS:4OSASF40.OSA.DELTA**
4OSASF40	2A6	3390	5	900	Contains AUX files and software inventory tables that represent the test service level of OSA/SF for VM. **VMPSFS:4OSASF40.OSA.APPLYALT**
4OSASF40	2A2	3390	5	900	Contains AUX files and software inventory tables that represent the service level of OSA/SF for VM that is currently in production. **VMPSFS:4OSASF40.OSA.APPLYPROD**
4OSASF40	100	3390	15	2700	Test build disk. This disk will be copied to OSA/SF for VM's production code build disk. **VMPSFS:4OSASF40.OSA.TBLDCODE**
4OSASF40	300	3390	23	4140	Test build IMAGE file disk. This disk will be copied to OSA/SF for VM's IMAGE production build disk. **VMPSFS:4OSASF40.OSA.TBLDIMAGE**
4OSASF40	7F00	3390	10	NOSFS	Test build common LPAR disk. This disk will be copied to OSA/SF for VM's common LPAR production build disk. **This disk MUST be address 7F00.**
4OSASF40	191	3390	10	1800	4OSASF40 user ID's 191 minidisk. **VMPSFS:4OSASF40.**
OSASF	200	3390	15	2700	Production build disk. Contains OSA/SF for VM's executable code. **VMPSFS:4OSASF40.OSA.PBLDCODE**
Notes:					
1. Cylinder values defined in this table are based on a 4K block size.					
2. A total 47700 SFS 4K blocks are needed for the addresses that can be defined in SFS for an SFS install.					

| Minidisk owner (user ID) | Default Address | Storage in Cylinders | | SFS 4K Blocks | Usage |
		DASD	CYLS		Default SFS Directory Name
OSASF	400	3390	23	4140	OSA/SF for VM's IMAGE file production build disk. **VMPSFS:4OSASF40.OSA.PBLDIMAGE**
OSASF	70cc	3390	5	NOSFS	Set of minidisks that correspond to each OSA CHPID being used. (ex. cc = OSA CHPID)
OSASF	191	3390	10	NOSFS	OSASF user ID's 191 minidisk.
OSAMAINT	7F00	3390	10	NOSFS	OSA/SF for VM's common LPAR production build disk. **This disk MUST be address 7F00.**
OSAMAINT	191	3390	10	NOSFS	OSAMAINT user ID's 191 minidisk.
OSADMIN1	191	3390	10	NOSFS	OSADMIN1 user ID's 191 minidisk.
OSADMIN2	191	3390	10	NOSFS	OSADMIN2 user ID's 191 minidisk.
OSADMIN3	191	3390	10	NOSFS	OSADMIN3 user ID's 191 minidisk.

Figure 6 (Page 2 of 2). DASD Storage Requirements for Target Minidisks

Notes:

1. Cylinder values defined in this table are based on a 4K block size.

2. A total 47700 SFS 4K blocks are needed for the addresses that can be defined in SFS for an SFS install.

6.0 Installation Instructions

This chapter describes the installation methods and the step-by-step procedures to complete the installation and activation of OSA/SF for VM.

If you plan on using OSA/SF for VM then you **NEED TO FINISH THE INSTALLATION** as documented in this chapter.

OSA/SF for VM is pre-installed, using VMSES/E, on the z/VM System deliverables.

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 OSA/SF for VM, adapt these instructions as needed for your environment.

6.1 Installation Process Overview

The following is a brief description of the main steps to complete the installation of OSA/SF for VM using VMSES/E.

- Review and Allocate Resources

  Some resources still need to be allocated for OSA/SF for VM. Other resources need to be reviewed to see if any changes are needed for your installation.

- Perform Post-installation Tasks

  Information about file tailoring and initial activation of the program is presented in 6.4, "Update PROFILE EXEC and NAMES Files" on page 15 through 6.5, "Installing the GUI for OSA/SF for VM" on page 18.

6.2 Review and Allocate OSA/SF for VM Resources

OSA/SF for VM has been installed as part of the z/VM System deliverables using VMSES/E. This means that several of the VMSES/E installation steps have been performed on your behalf. Among these are the:

- inclusion of the OSA/SF for VM user ID, 4OSASF40, entry in the VM CP system directory
- inclusion of the OSASF, OSAMAINT, OSADMIN1, OSADMIN2, and OSADMIN3 user ID entries in the VM CP system directory

- creation of the 4OSASF40 user ID PROFILE EXEC. This PROFILE EXEC contains the accesses to the VMSES/E code disk, MAINT620 5E5, and the VMSES/E Software Inventory disk, MAINT620 51D.

- allocation of most of the OSA/SF for VM minidisks (or SFS subdirectories)

- loading of the OSA/SF for VM product files to the minidisks (or SFS subdirectories), using VMSES/E commands

- installation of the OSA/SF for VM RSU, if one was available.

There are still some additional resources that need to be defined. There are also some other resources that may need to be changed or defined, depending on your installation environment. The following sections talk about these resources.

6.2.1 Additional Resources

The following resources need to be defined.

1 You **need to** add the appropriate 70cc minidisk addresses to the OSASF user ID.

You need to have a 70cc minidisk address to correspond to each OSA CHPID utilized in the specified processor (ex. cc = OSA CHPID). Refer to Figure 6 on page 10 for the size of the 70cc minidisks.

Notes:

a. Important information on setting up the 70cc minidisks for each processor type can be found in the appropriate OSA planning or customer's guide and reference manual. You should review this manual to help you to set up the 70cc minidisks in this step.

b. If the OSA channel path is defined as being shared among logical partitions, the minidisks should be defined on Cross System Extensions (CSE) DASD.

c. You must format the 70cc minidisks before you continue the installation of OSA/SF for VM.

d. If running in an SSI cluster and you are using DIRECTXA you must run DIRECTXA on every member.

6.2.2 CP User Directory Updates

Depending on your system environment there may be some other CP directory changes that need to be made for the OSA/SF for VM user IDs.

Note: If you make any of the following changes do not forget to place the new CP directory online.

1 If using any security product, that makes use of the RACROUTE interface, e.g. RACF, then you **must** add the following statement to the CP directory for

the OSASF user ID and for any administrator user ID, OSADMINx, that will have a TCP/IP connection.

```
IUCV ANY PRIORITY MSGLIMIT 255
```

If you want to limit the communications authorization to only the security product, e.g. the RACF service virtual machine, replace the 'ANY' operand with the user ID of the security service virtual machine (e.g. RACFVM for RACF).

2 Change the passwords for the 4OSASF40, OSASF, OSAMAINT, OSADMIN1, OSADMIN2 and OSADMIN3 user IDs from the default passwords to a valid password, in accordance with your security guidelines.

3 If you are not going to use the OSA/SF GUI, then you can update the directory entry for user ID 4OSASF40 to remove the LINK statement to the TCP/IP 492 disk.

4 Place the new directory on-line using the DIRECTXA command or an equivalent directory maintenance product, such as DIRMAINT.

Note: If you are running in an SSI cluster and you are using DIRECTXA you must run DIRECTXA on every member.

6.3 (OPTIONAL) Set Up Security, e.g. RACF Permits

OSA/SF for VM communicates with a security product using the RACROUTE interface.

If you are using a security product, e.g. RACF, then you need to continue with this step and set up the permits to the production build disk of OSASF to the administrator (OSADMINx) user IDs.

Notes:

1. If you are not using the RACF security product, but a different product that uses the RACROUTE interface, then refer to that product's documentation to accomplish the equivalent RACF steps below.

2. If you are running in an SSI cluster these steps only need to be done once and they can be done on any member.

If you are not using a security product, continue with section 6.4, "Update PROFILE EXEC and NAMES Files" on page 15.

1 Logon to the OSA server machine ID **OSASF**.

Note: This user ID must be authorized to issue RAC commands.

2 Issue the RACF permit command to give read access to all of the OSADMINx user IDs to OSASF's product production build disk (200).

racfperm   Fill in the panels to give read access to all of the OSADMINx user IDs to 4OSASF40's product production build disk.

3 Define a profile named ICHCONN in class FACILITY (if it does not already exist).

rac rdefine facility ichconn uacc(none)

4 Give UPDATE authority to ICHCONN in the FACILITY class to OSASF.

rac permit ichconn class(facility) id(osasf) access(update)

5 Activate the FACILITY class (if it is not already active).

rac setropts classact(facility)

6.4 Update PROFILE EXEC and NAMES Files

The PROFILE EXEC and NAMES files for each of the OSA/SF for VM server and administration user IDs need to be set up.

Note: If you are running in an SSI cluster these steps need to be done an every member.

1 Logon to the installation user ID **4OSASF40**.

2 Access OSASF's 191 A-disk.

access 291 f

3 Update the PROFILE EXEC on OSASF's 191 A-disk, using the XEDIT command. Make any updates to reflect:

- If you have changed any of the minidisk addresses for the OSA/SF for VM production build disks or are using SFS for those disks, you need to change the addresses in the corresponding 'ACC' or access statements.

- Set up any link and accesses to your own tools disks. If you do not have a MAINT 19A then you need to change or remove that statement.

- Remove command lines or information in command lines for products you are not using. For example if you are not using TCP/IP then remove the 'EXEC VMLINK TCPIP <592 H>' statement and also remove COMMTXT from the GLOBAL TXTLIB command.

- Set up correct location of disks for products that you are using. For example change the information in the 'EXEC VMLINK TCPIP <592 H>' statement or change the whole statement to use LINK and ACCESS, if you do not use VMLINK.

- If a security product, e.g. RACF, is not being used, remove the RPIUCMS INIT command.

4 For the server virtual machine (OSASF), a names file called **$SERVER$ NAMES** is needed. This is needed for APPC communications. The default names file is shipped with the following entry in it. You can update this file to use any nickname, but the nickname you choose also needs to be used on the :tpn. statement in the UCOMDIR NAMES file that is on the A-disks of the administrator user IDs.

```
:nick.IOASERV :list.OSADMIN1
                    OSADMIN2
                    OSADMIN3
             :module.IOACMAIN
```

5 Update the sample PROFILE EXEC and UCOMDIR NAMES files on all the administrator user ID's 191 A-disks.

    a Access the first administrator user ID, OSADMIN1, 191 A-disk.

access 491 f

    b Update the PROFILE EXEC on OSADMIN1's 191 A-disk, using the XEDIT command. Make any updates to reflect:

- If you have changed any of the minidisk addresses for the OSA/SF for VM production build disks or are using SFS for those disks, you need to change the addresses in the corresponding 'ACC' or access statements.

- Set up any links and accesses to your own tools disks. If you do not have a MAINT 19A then you need to change or remove that statement.

- Remove command lines or information in command lines for products you are not using. For example if you are not using TCP/IP then remove the 'EXEC VMLINK TCPIP <592 H>' statement and also remove COMMTXT from the GLOBAL TXTLIB command.

- Set up correct location of disks for products that you are using. For example change the information in the 'EXEC VMLINK TCPIP <592 H>' statement or change the whole statement to use LINK and ACCESS, if you do not use VMLINK.

- If a security product, e.g. RACF, is not being used, remove the RPIUCMS INIT command.

c For the user IDs OSADMIN1 through OSADMIN3, a names file called **UCOMDIR NAMES** is needed. This is needed for APPC communications. The default names file is shipped with the following entry in it. If you changed the nickname in the $SERVER$ NAMES file in a previous step, then you need to update the :tpn. tag in the **UCOMDIR NAMES** file to reflect the change.

```
:nick.IOASERVR :luname.*USERID OSASF
               :tpn.IOASERV
```

Notes:

1) *USERID is a keyword. Type it exactly as shown. Do not substitute a userid in its place. OSASF is a variable and can be changed if you used a User ID other than OSASF.

2) In an ISFC environment, where different OSA devices are installed on individual systems, the OSASF server for each real system needs to be identified uniquely. The OSASF user ID in each CP directory needs to be changed to a unique name. The UCOMDIR NAMES file on each OSADMINx user ID needs to reflect the new user ID for the OSASF server in the :luname field.

```
:nick.IOASERVR :luname.*USERID newname
               :tpn.IOASERV
```

d If you made changes to OSADMIN1's PROFILE EXEC or UCOMDIR NAMES file then copy them to the second, OSADMIN2 and third, OSADMIN3, administration user IDs 191 A-disks.

access 591 k
copyfile profile exec f = = k (olddate replace
copyfile ucomdir names f = = k (olddate replace
access 691 k
copyfile profile exec f = = k (olddate replace
copyfile ucomdir names f = = k (olddate replace

6 Access OSAMAINT's 191 A-disk.

access 391 f

7 Update the PROFILE EXEC on OSAMAINT's 191 A-disk, using the XEDIT command. Make any updates to reflect:

- If you have changed any of the minidisk addresses for the OSA/SF for VM production build disks or are using SFS for those disks, you need to change the addresses in the corresponding 'ACC' or access statements.

- Remove command lines or information in command lines for products you are not using. For example if you are not using TCP/IP then remove the 'EXEC VMLINK TCPIP <592 H>' statement.

- Set up correct location of disks for products that you are using. For example change the information in the 'EXEC VMLINK TCPIP <592 H>' statement or change the whole statement to use LINK and ACCESS, if you do not use VMLINK.

- Set up any links and accesses to your own tools disks. If you do not have a MAINT 19A then you need to change or remove that statement.

8 Logoff of the installation user ID **4OSASF40**.

6.5 Installing the GUI for OSA/SF for VM

If you plan on using the OSA/SF GUI then the OSA/SF for VM GUI file needs to be downloaded and installed on the workstation. The OSA/SF for VM GUI can be used on any workstation platform that supports graphics in a Java 1.4 environment. Only the Microsoft Windows or Linux system platforms will be discussed here.

6.5.1 Setting Up APPC on the VM Host

APPC is used to pass commands from the requestor virtual machine (OSA administrator) to the server virtual machine and to send the results back.

The requestor ID and the server ID must be in the same VM system (logical partition).

The set up for the APPC communications should have been done in previous install steps. They incorporated:

- Having the IUCV ALLOW statement in the CP directory entry for the server virtual machine (default user ID OSASF). This statement is already in the OSASF's directory as shipped on the z/VM System deliverable.

- Having the $SERVER$ NAMES file set up under the server (OSASF) virtual machine. (This should have been done in section 6.4, "Update PROFILE EXEC and NAMES Files" on page 15.)

- Having the UCOMDIR NAMES files set up under the administrator (OSADMINx) user IDs. (This should have been done in section 6.4, "Update PROFILE EXEC and NAMES Files" on page 15.)

6.5.2 Setup the OSA/SF Host TCP/IP Connection

The OSA/SF GUI makes use of TCP/IP as its communication interface to the OSA/SF server on the VM host. Use one of the methods of instructions below to set up the TCP/IP communications between the OSA/SF GUI and OSA/SF on the host.

TCP/IP for z/VM needs to be running on the z/VM host. The instructions in the method that you choose need to be executed on the z/VM host.

Method 1:

1. Determine which user IDs need to be authorized to use the GUI and provide CP Privilege Class B authority for those IDs. For example, if you choose the OSADMINx user ID's then you would have already set them up in section 6.2.2, "CP User Directory Updates" on page 13.

2. Verify that TCPMAINT 592 is accessed as the 'H' disk in the PROFILE EXEC on the user ID you are authorizing.

3. In the PROFILE EXEC for the user ID (OSADMINx) you are authorizing use XEDIT to add **IOAXTSRV 2000** to the end of the PROFILE EXEC. This allows the authorized user IDs to connect to socket 2000.

4. If you do not want to log on to the authorized user ID every time you want to use the OSA/SF GUI, you can have the authorized user ID autologged by your VM System Administrator.

Method 2:

1. Determine which user IDs need to be authorized to use the GUI and provide CP Privilege Class B authority for those IDs. For example, if you choose the OSADMINx user ID's then you would have already set them up in section 6.2.2, "CP User Directory Updates" on page 13.

2. Verify that TCPMAINT 592 is accessed as the 'H' disk in the PROFILE EXEC on the user ID you are authorizing.

3. Verify that REXECD is running on the host by issuing QUERY REXECD command.

   Default value for REXECD is to FORCE OFF the user if no screen activity occurs after 240 seconds. This value can be changed by the TCP/IP administrator by changing the startup profile for the REXECD server.

4. Enter the following from a Windows command prompt or Linux command window to start the server:

```
REXEC <hostname> -L <authorized_userID> -P <password> IOAXTSRV 2000
```

Where you have to supply the hostname, authorized_userID and its VM logon password.

When the command is entered, the ID will be autologged on by VM and receive the IOAXTSRV 2000 command. This makes it ready to accept TCP/IP communications from the workstation.

If the command is successful, the window where the command was entered will appear to be waiting for FORCE or LOGOFF of the ID.

You can use the NETSTAT and PING commands to verify the connection between the host and workstation.

6.5.3 Download and Install the Java Runtime and JavaHelp™ Files

In order to run the OSA/SF for VM GUI you need to install Java 1.4 Runtime and JavaHelp™ Files 1.1.2 or higher on your workstation.

Follow your company installation instructions for downloading the latest Java runtime files and JavaHelp files from the Internet.

After the JAVA installation, you may find and download the java help from https://javahelp.dev.java.net/

The JAVA HELP JavaHelp System Build is near the bottom of this page. This is a zipped file and needs to be extracted into a directory under the JAVA installation direction. For example, the JAVA should be installed in C:\Program Files\Java\jre6\bin\ and the JavaHelp installed (unzipped) in C:\Program Files\Java\jre6\bin\javahelp The CLASSPATH Environmental variable should look like:
```
C:\osajavagui\ioajava.jar;C:\Program Files\Java\jre6\bin\javahelp\lib\j
```

6.5.4 Download the OSA/SF for VM GUI Code

In order to download the OSA/SF for VM GUI you need to create a directory on the workstation and then download the OSA/SF for VM GUI code to it.

Note: Regardless if running in an SSI cluster or not, these steps only need to be done once. In an SSI cluster they can be done on any member.

6.5.4.1 Create a Directory for GUI Code

You need to create a directory on your workstation where you can place the code for the GUI (ioajava.jar). For example, you might create the following directory:
```
mkdir osajavagui
```

For Linux, you can define a subdirectory off of the user directory:
```
mkdir /usr/osajavagui
```

6.5.4.2 Download the OSA/SF GUI

You need to download the OSA/SF GUI file, IOAJAVA BIN, from the VM Host to the workstation.

If you have 3270 emulator support, go to 6.5.4.2.1, "Download the IOAJAVA GUI Code Using Personal Communications Manager/3270" to download using Personal Communications.

If you do not have 3270 emulator support, go to 6.5.4.2.2, "Download the IOAJAVA GUI Code Using FTP" on page 22 to download using FTP.

6.5.4.2.1 Download the IOAJAVA GUI Code Using Personal Communications Manager/3270: The following instructions assume that you have 3270 emulator support from Personal Communications Manager/3270 on you workstation. It also assumes that the VM host system has the IND$FILE MODULE so that you can receive files from the host to the workstation. (If you do not have 3270 emulator support, you can use FTP to transfer the OSA/SF for VM GUI file from VM to your workstation. See 6.5.4.2.2, "Download the IOAJAVA GUI Code Using FTP" on page 22.)

1 Close any current OSA/SF for VM GUI session on your workstation.

2 Establish a 3270 emulator session on the workstation. You might have to start Personal Communications/3270 if no server (host) sessions are started.

To install the emulator on Linux, download the RPM file from the following website:

```
www.rpmfind.net
```

then use the following command to install the RPM:

```
rpm -ivh x3270-3.2.19-1mdk.i586.rpm
```

3 Log on to one of the OSA administration user IDs (OSADMIN1) that can access the OSA/SF product production build disk (200). This disk is where the OSA/SF for VM GUI code, IOAJAVA BIN file, resides.

link OSASF 200 200 rr **acc 200 c**	Link and access the OSA/SF for VM's product code production build disk. If you are using SFS, skip the link and change the access command to access the correct SFS product code production directory (default is VMPSFS:4OSASF40.OSA.PBLDCODE).

4 Make sure the VM user ID has the READY prompt.

5 On the menu bar of the emulator screen, select **Actions** or **Transfer**. (This might vary depending on the level of software you are using. Also make sure that **VM/CMS** is selected as the Host Type.) From the pull down, select **Receive File from Host**. You will get a transfer screen.

6 On the transfer screen, ensure that the following fields are set:

- For **Host File**

  ```
  ioajava bin c
  ```

- Specify the following for **PC File** name depending on whether you are downloading to Windows or Linux.

  Windows:

  ```
  c:\osajavagui\ioajava.jar
  ```

  In the above example the directory is called *osajavagui*. You should specify the name of the directory that you chose in step 6.5.4.1, "Create a Directory for GUI Code" on page 20. This is where the code will reside.

  Linux:

  ```
  /usr/osajavagui/ioajava.jar
  ```

  In the above example the directory is called *usr/osajavagui*. You should specify the name of the directory that you chose in step 6.5.4.1, "Create a Directory for GUI Code" on page 20. This is where the code will reside.

- For **Transfer Type**

  ```
  binary
  ```

7 Click on the **Receive** box to transfer the file to the workstation or Linux system.

6.5.4.2.2 Download the IOAJAVA GUI Code Using FTP: If you are not using Personal Communications Manager/3270 on a workstation, you can use FTP to download the GUI code from VM.

1 Ensure that TCP/IP is active on the VM Host system.

2 From a Windows command prompt or Linux shell, initiate an FTP session to the VM host, by issuing the following command, where you have to supply the *vm_host_ip_address* variable:

```
ftp vm_host_ip_address
```

3 Login using the OSA/SF for VM installation and service user ID, 4OSASF40 and then change the directory to the test build disk (100) or SFS directory name (default SFS directory name is VMPSFS:4OSASF40.OSA.TBLDCODE, which you would use on the CD command below). This is where the OSA/SF

for VM GUI code, IOAJAVA BIN file, resides. You have to supply the,
4OSASF40 user ID to the User prompt and VM logon *password* for this user
ID to the Password prompt and then do the **cd** command as follows:

```
4OSASF40
password
cd 4OSASF40.100
```

4 Change to the directory where you want the place the GUI code, establish a
binary transfer mode, retrieve the IOAJAVA BIN file and then end the ftp
session, after successful transmission. In the following the directory name is
the default used in previous examples for Windows. You need to use the
Windows or Linux directory name that you created in step 6.5.4.1, "Create a
Directory for GUI Code" on page 20. This example is a Windows example.

```
lcd c:\osajavagui
bin
get ioajava.bin ioajava.jar
bye
```

6.5.5 Define CLASSPATH Environment Variable

After you have downloaded the OSA/SF for VM GUI code you need to define the
CLASSPATH environment variable for Windows or Linux.

When doing the OSASF GUI INSTALLATION you need to be aware of the
CLASSPATH changes needed, as documented below. In addition, the
CLASSPATH must be set up correctly for the JAVA HELP as well as the IOAJAVA
and associated files to be found. CLASSPATH changes are in ADDITION to your
CURRENT CLASSPATH settings. The following local BATCH file, called
IOAJAVA.BAT, may help to illustrate where and how the necessary path
statements must be setup for the OSASF GUI only. The c:/osajavagui is an sample
directory name and you should substitute in the name of the directory that you are
using. The following is the sample IOAJAVA.BAT file:

```
set CLASSPATH=C:\osajavagui\ioajava.jar;C:\osajavagui\jh.jar,%CLASSPATH%
cd /D C:\osajavagui
java  ioajava
```

6.5.5.1 Define CLASSPATH Variable for Windows 2000, NT or XP

If you are running Windows then follow one set of the following instructions to
define the CLASSPATH variable. If you want to define the CLASSPATH variable
using the Control panel continue with 6.5.5.1.1, "Define CLASSPATH with Control
panel" on page 24. If you want to define the CLASSPATH variable using a
Window command prompt continue with 6.5.5.1.2, "Define CLASSPATH with
Windows command prompt" on page 24.

If you are running Linux, go to 6.5.5.2, "Define CLASSPATH Environment Variable
for Linux" on page 25 for instructions on doing the define.

6.5.5.1.1 Define CLASSPATH with Control panel

1 Go to the **Control Panel** on the workstation.

For Windows 2000 or NT:

   a. Double click the **System** icon.

   b. Click on the **Advanced** tab.

   c. Click on **Environment Variables**

For Windows XP:

   a. Double click on **Performance and Maintenance**.

   b. Click on **System**.

   c. Click on **Advanced Page**

   d. Click on **Environment Variables**

2 On the **System Variables** window, select the following variable and click **Edit**:

CLASSPATH

If you do not find CLASSPATH listed, click **New** to create it.

3 For CLASSPATH **Variable Value**, specify the directories where you have stored the Java runtime libraries, Java help files and the OSA/SF for VMGUI code that you downloaded.

Note: Java runtime libraries need to be specified in the Windows PATH system environment variable or through the SET PATH command from a Windows command prompt.

For example, you might have the following CLASSPATH definitions for **Variable Value**:

```
C:\ProgramFiles\Java\jh1.1.3\javahelp\lib\jh.jar;C:\osajavagui\ioajava.jar
```

If you are creating CLASSPATH for the first time, you need to specify the name for **Variable Name** in the window.

4 Click **OK** on each open window to save the data and exit.

6.5.5.1.2 Define CLASSPATH with Windows command prompt

1 From a Windows command prompt, type SYSEDIT to display a window that includes CONFIG.SYS. Set the variable in CONFIG.SYS as follows:

CLASSPATH=*directory_path*

where *directory_path* is the location of the JavaHelp files and the ioajava.jar file.

For the runtime Java files, ensure that you have defined the location as follows:

```
PATH=directory_path
```

where *directory_path* is the location of the Java runtime files.

Note: You can also set CLASSPATH and PATH variables through the following Windows commands:

```
SET CLASSPATH=directory_path
SET PATH=directory_path
```

where *directory_path* is the location of the appropriate Java files. You can define or append directories to an existing string.

2 To verify if the variables are set correctly, issue the following commands:

```
echo %CLASSPATH%
echo %PATH%
```

6.5.5.2 Define CLASSPATH Environment Variable for Linux

If you are running Linux then follow these instructions to define the CLASSPATH variables.

1 Issue the export command for CLASSPATH and specify the directories where you have stored the Java runtime libraries (for the PATH statement), the Java help files, and the OSA/SF for VM GUI code that you downloaded. For example, you might issue the following command with these definitions for **Variable Value**:

```
export CLASSPATH=/usr/osajavagui/ioajava.jar:/usr/java/jh1.1.3/javahelp/lib/jh.jar
```

2 To verify if the variable is set correctly, issue the following command:

```
echo $CLASSPATH
```

You can update the .bash_profile so that you do not need to retype the export CLASSPATH command each time that you log on. You update the file depending on how you log on, as follows:

- If you log on as root, update the file in /root

  ```
  /root/.bash_profile
  ```

- If you log on as a user, update the file in the /home/*userid* directory, where *userid* is the id of the user. Edit the .bash_profile file and add the export command to the bottom of the file. (You might need to create the /home/*userid* directory and the .bash_profile file if they do not exist. Update the attributes to make the file executable:

  ```
  chmod +x.bash_profile
  ```

OSA/SF for VM is now installed and built on your system.

Refer to the *zEnterprise System, System z10, System z9 and eServer zSeries: Open Systems Adapter-Express Customer's Guide and Reference* manual for instructions on setting up OSA/SF for VM and using the GUI.

7.0 Service Instructions

7.1 Servicing OSA/SF for VM

Use the service instructions documented in the *z/VM: Service Guide* to receive, apply, build and place
OSA/SF for VM into production.

7.1.1 Additional Place Into Production Tasks

7.1.1.1 Copy the New OSA/SF for VM GUI Serviced Files Into Production
If you received message VMFBLD2250W then the OSA/SF for VM GUI was serviced, IOAJAVA BIN file.
To place the new serviced IOAJAVA BIN file into production follow the instructions in section 6.5.4.2.1,
"Download the IOAJAVA GUI Code Using Personal Communications Manager/3270" on page 21 or
6.5.4.2.2, "Download the IOAJAVA GUI Code Using FTP" on page 22, depending on your environment.

7.1.1.2 Place Serviced Sample Files Into Production

It is possible that an OSA/SF for VM sample file was serviced. If so then you need to perform the
following.

1 If a SAMPPROF or SAMPNAME file has been serviced then you have to
update your copy of the file. You can look in the $VMFBLD $MSGLOG to
see if the file has been serviced.

The new serviced copy of the SAMPPROF or SAMPNAME file will be on the
local/sample disk (2C2) or SFS directory
(VMPSFS:4OSASF40.OSA.SAMPLE). You will need to compare your real
copy of these files, PROFILE EXEC or NAMES files on the different OSA/SF
user ID's (OSASF, OSAMAINT, OSADMINx), to the new copy and update
your copy accordingly.

Note: The OSASF user ID PROFILE EXEC **must** set LDRTBLS to 6 (or
higher). If the LDRTBLS are not set to 6 (or higher) the OSASF user ID will
give an APPC failed message.

2 If a SAMPPROF file has been serviced and you previously have copied those
files to the OSASF's production build disk (200) then you need to refresh the
existing copy with the serviced copy.

Note: If running in an SSI cluster then you need to perform the following step on each member in the cluster.

a If using minidisks

access 2C2 e   The VMFCOPY command will update the VMSES
access 200 f   PARTCAT file on the 200 disk.
vmfcopy * sampprof e = = f (prodid 4OSASF40%OSA olddate replace

b If using shared file system

access vmpsfs:4osasf40.osa.sample e   The VMFCOPY command will update the VMSES
access 200 f   PARTCAT file on the production disk.
vmfcopy * sampprof e = = f (prodid 4OSASF40%OSA olddate replace

If you are not using the default SFS directory names then substitute in your names in the access commands.

You have finished servicing OSA/SF for VM.

Appendix A. Moving OSA/SF for VM to SFS Directories and Creating a PPF Override

By default, Open Systems Adapter Support Facility for VM is installed to minidisks as part of the z/VM System deliverables unless you choose to install OSA/SF for VM to SFS during the initial z/VM installation. If you did not install OSA/SF for VM into SFS directories and want to move it now, you can. Refer to Figure 6 on page 10 to see which minidisks can reside in SFS. You can use either the default file pool, VMPSFS, or a file pool of your choice. If you are running in an SSI cluster then this new file pool needs to be accessible to all members. This can be accomplished by specifying the SSI startup parameter in the file pool server DMSPARMS file.

A summary of the steps that are needed to place OSA/SF for VM into SFS are:

- Allocate space in the user-defined file pool

- Provide the user ID 4OSASF40 and MAINT620 access to the file pool

- Create the necessary OSA/SF for VM subdirectories

- Copy files from the minidisks to the new SFS subdirectories

- Create a PPF override, if not using the default file pool or subdirectory names.

Where to next

You need to do one of the following:

- If you want to place OSA/SF for VM into SFS directories **using the defaults defined in the 4OSASF40 PPF file** and you are running in a non-SSI or a single member SSI environment, you can use the MOVE2SFS command, as documented in the *z/VM: CP Commands and Utilities Reference* manual.

- If you want to place OSA/SF for VM into your **own user-defined file pool or SFS directories** or want to use the default SFS directories and you are running in a multiple SSI environment, continue with the instructions in A.1, "Setup SFS File Pool and Directories" on page 30.

- If you need to **just create a PPF override**, continue with the instructions in A.3, "Create Product Parameter File (PPF) Override" on page 33.

If you were pointed to this appendix from another section and you have completed the steps required (whether provided in this appendix or in the *z/VM CP Commands and Utilities Reference*) you should now return to your original section to continue.

A.1 Setup SFS File Pool and Directories

Notes:

1. The steps that follow help you determine the OSA/SF for VM file pool space requirements, file pool enrollment, and SFS directory definitions. If not all of these steps are required - for example, you are changing only SFS directory or subdirectory names - adapt these instructions as needed for you environment.

2. The steps that follow assume that a user-defined SFS file pool name is being used. If you will be using the VM default file pool name, VMPSFS, substitute it in any place you see the text 'user-defined file pool' or *userfilepool*.

3. For more information about planning for, generating and managing a file pool and server, see *z/VM File Pool Planning, Administration and Operation*.

1 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 OSA/SF for VM SFS directories, the 4K block requirements for each directory are summarized in Figure 6 on page 10.

This information will be used when the 4OSASF40 user ID is enrolled in the user-defined file pool.

2 Enroll user 4OSASF40 in the user-defined file pool using the ENROLL USER command:

ENROLL USER 4OSASF40 *userfilepool*: (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 the user-defined file pool.

3 Make the system maintenance user ID, MAINT620, a file pool administrator for the user-defined file pool so that it can update files on the OSA/SF for VM service directories by adding the MAINT620 user ID to the ADMIN startup parameter in the user-defined file pool DMSPARMS file.

4 Determine if there are enough blocks available in the file pool to install OSA/SF for VM. This information can be obtained from the QUERY FILEPOOL STORGRP command. The output from this command is a list of storage groups and the number of 4K blocks free. If the number of 4K blocks free is smaller than the total 4k blocks needed to install OSA/SF for VM you need to add space to the file pool. See *z/VM CMS File Pool Planning,*

Administration, and Operation manual for information on adding space to a file pool.

5 Create the necessary subdirectories using the CREATE DIRECTORY command.

Note: All of the OSA/SF for VM subdirectories are shown in the create directory commands. If you are not planning on creating them all then just enter the commands for the ones you are planning on creating.

A complete list of default OSA/SF for VM SFS directories is provided in Figure 6 on page 10.

If you have changed any of the default SFS directory names then use your new name in place of the old name in the create directory command.

set filepool *userfilepool***:** If necessary, see the *z/VM CMS Commands and*
create directory *userfilepool***:4OSASF40.osa** *Utilities Reference* manual for more information
create directory *userfilepool***:4OSASF40.osa.object** about the CREATE DIRECTORY command.
create directory *userfilepool***:4OSASF40.osa.applyalt**
create directory *userfilepool***:4OSASF40.osa.applyprod**
create directory *userfilepool***:4OSASF40.osa.delta**
create directory *userfilepool***:4OSASF40.osa.sample**
create directory *userfilepool***:4OSASF40.osa.tbldcode**
create directory *userfilepool***:4OSASF40.osa.tbldimage**
create directory *userfilepool***:4OSASF40.osa.pbldcode**
create directory *userfilepool***:4OSASF40.osa.pbldimage**

6 Give the OSASF and the OSAMAINT user IDs READ and WRITE authority and the administrator user IDs just READ authority to the production code and production image directories, using the GRANT AUTHORITY command.

grant auth *userfilepool***:4OSASF40.osa.PBLDCODE to OSASF (write newwrite**
grant auth *userfilepool***:4OSASF40.osa.PBLDCODE to OSAMAINT (write newwrite**
grant auth *userfilepool***:4OSASF40.osa.PBLDIMAGE to OSASF (write newwrite**
grant auth *userfilepool***:4OSASF40.osa.PBLDIMAGE to OSAMAINT (write newwrite**
grant auth *userfilepool***:4OSASF40.osa.PBLDCODE to** *OSADMINx.* **(read newread**
grant auth *userfilepool***:4OSASF40.osa.PBLDIMAGE to** *OSADMINx.* **(read newread**

If necessary, see the *z/VM CMS Commands and Utilities Reference* manual for more information about the GRANT AUTHORITY command.

7 Give the OSASF user ID READ authority to the test code directory, using the GRANT AUTHORITY command.

grant auth *userfilepool***:4OSASF40.osa.TBLDCODE to OSASF (read newread**

> If necessary, see the *z/VM CMS Commands and Utilities Reference* manual for more information about the GRANT AUTHORITY command.

8 If you intend to use an SFS directory as the work space for the 4OSASF40 user ID, update the following IPL control statement in the 4OSASF40 CP user directory entry to look like:

```
IPL CMS PARM FILEPOOL VMPSFS
```

This will cause CMS to automatically access 4OSASF40's top directory as file mode A. Refer to the *z/VM: CP Planning and Administration* for information on updating the CP user directory.

A.2 Copy Minidisk (or SFS) Files to SFS Directories

1 Copy the files from the OSA/SF for VM minidisks (or from the VMPSFS file pool, if OSA/SF for VM is already installed there) to your new user-defined SFS file pool and directories using the VMFCOPY command.

Note: Repeat the ACCESS and VMFCOPY commands, that follow, for each disk or SFS directory you need to copy. Refer to Figure 6 on page 10 for the default minidisk and SFS directory names for OSA/SF for VM.

access *vdev* **e**
access *dirid* **f**
vmfcopy * * e = = f (prodid 4OSASF40%OSA olddate replace

> Where
>
> - *vdev* is the minidisk you are copying files from. If you are copying from SFS then substitute in the SFS directory name in place of *vdev*.
>
> - *dirid* is the name of the (target) SFS directory that you are copying files to.
>
> - 4OSASF40%OSA is the PRODID defined within the 4OSASF40 PPF file for the minidisk and SFS OSA/SF for VM components.
>
> The VMFCOPY command will update the VMSES PARTCAT file on the target directory.

A.3 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 is how to change the shared file system (SFS) file pool where OSA/SF for VM files reside. Refer to the *VMSES/E Introduction and Reference* for more information on PPF overrides.

Note: Do **not** modify the product supplied 4OSASF40 $PPF, 4OSASF40 PPF, SERVP2P $PPF or SERVP2P PPF files to change the VMPSFS file pool name or any other installation parameters. If the 4OSASF40 $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, "VMPSFS" to "MYPOOL":

1 Create a new $PPF override file or edit an existing override file.

xedit *overname* **$PPF** *fm***2**

overname is the PPF override file name (such as "myosa") 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 MAINT620 51D minidisk).

2 Create (or modify as required) the Variable Declarations (**:DCL.**) section for the OSASFS and OSASFSP2P override area so that it resembles the **:DCL.** section as shown below.

Note: The PPF file used by SERVICE, PUT2PROD and LOCALMOD is SERVP2P $PPF therefore this example shows an override to the SERVP2P $PPF file.

```
:OVERLST. OSASFS OSASFSP2P
*
*===========================================================*
:OSASFS  OSASFS SERVP2P
*===========================================================*
:DCL. UPDATE
 &INST191    DIR MYPOOL:40SASF40.
 &LOCALSAM   DIR MYPOOL:40SASF40.OSA.SAMPLE
 &DELTA      DIR MYPOOL:40SASF40.OSA.DELTA
 &APPLY1     DIR MYPOOL:40SASF40.OSA.APPLYPROD
 &APPLY2     DIR MYPOOL:40SASF40.OSA.APPLYALT
 &BUILD0     DIR MYPOOL:40SASF40.OSA.TBLDCODE
```

```
 &BUILD1     DIR MYPOOL:40SASF40.OSA.PBLDCODE
 &BUILD4     DIR MYPOOL:40SASF40.OSA.TBLDIMAGE
 &BUILD5     DIR MYPOOL:40SASF40.OSA.PBLDIMAGE
 &BASE       DIR MYPOOL:40SASF40.OSA.OBJECT
:EDCL.
:END.
:OSASFSP2P  OSASFSP2P SERVP2P
:DCL. UPDATE
 &INST191    DIR MYPOOL:40SASF40.
 &LOCALSAM   DIR MYPOOL:40SASF40.OSA.SAMPLE
 &DELTA      DIR MYPOOL:40SASF40.OSA.DELTA
 &APPLY1     DIR MYPOOL:40SASF40.OSA.APPLYPROD
 &APPLY2     DIR MYPOOL:40SASF40.OSA.APPLYALT
 &BUILD0     DIR MYPOOL:40SASF40.OSA.TBLDCODE
 &BUILD1     DIR MYPOOL:40SASF40.OSA.PBLDCODE
 &BUILD4     DIR MYPOOL:40SASF40.OSA.TBLDIMAGE
 &BUILD5     DIR MYPOOL:40SASF40.OSA.PBLDIMAGE
 &BASE       DIR MYPOOL:40SASF40.OSA.OBJECT
:EDCL.
:END.
*
```

This override will replace the *:DCL.* section of the OSASFS and OSASFSP2P override area of the SERVP2P $PPF file.

3 If your $PPF override file was created at file mode A, copy it to file mode D—the Software Inventory minidisk (MAINT620 51D).

file
copyfile *overname* **$PPF** *fm* **= = d (olddate**

4 Compile your changes to create the usable *overname* PPF file.

vmfppf *overname* **osasfs**   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 SERVP2P $PPF file you need to make sure that the override name you created is reflected in the PPF tags for OSA/SF for VM 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 4OSASF40 under the 'Prodid' column. Replace the PPF name for INSTPPF, BLDPPF and P2PPPF for 4OSASF40 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 SERVP2P or 4OSASF40 as the PPF name to be used for any VMSES/E commands that require a PPF name.

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```
┌─ RATING SCALE ──────────────────────────────────────────────────────────────┐
│                                                                              │
│        very                                          very        not         │
│      satisfied     <---------------------------->  dissatisfied  applicable  │
│        1           2         3         4             5            N          │
│                                                                              │
└──────────────────────────────────────────────────────────────────────────────┘
```

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

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  - Please specify type: _____

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  □ Yes
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