HP OpenView Smart Plug-in for UNIX® Operating Systems

Installation Guide

Version: A.02.50

For HP-UX and Solaris OpenView Operations Management Servers

Manufacturing Part Number: None

September 2003

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Support

Please visit the HP OpenView web site at:

```
http://openview.hp.com/
```

There you will find contact information and details about the products, services, and support that HP OpenView offers.

The support area of the HP OpenView web site includes:

- Downloadable documentation
- Troubleshooting information
- Patches and updates
- Problem reporting
- Training information
- Support program information

1 OSSPI Requirements

This chapter lists the software and hardware prerequisites that you must fulfil for the management server and managed nodes, before you install the Smart Plug-in for UNIX Operating Systems, A.02.50.

Supported Software

The OSSPI integrates with existing OVO installations and consists of components for the OVO management server and the OVO managed nodes (agents). Table 1-1, Supported OVO Management Server Software, shows which OVO management server platforms and which operating systems are supported by the OSSPI. Please ensure that you install the OSSPI software *only* on systems running those versions of the operating system and the OVO software indicated.

Table 1-1   Supported OVO Management Server Software

Platform	Operating System	OVO 6.00	OVO 7.10
HP-UX	10.20	✓	✓
	11.00	✓	✓
	11.11	✓	✓
Solaris	2.6	✓	✓
	7.0	✓	✓
	8.0	✓	✓

Table 1-2, Supported OVO Agent Software, shows which versions of the OVO managed-node platforms and which operating systems are supported by the OSSPI.

Table 1-2   Supported OVO Agent Software

Platform	Operating System	OVO 6.00	OVO 7.10
AIX [a]	4.3.x	✓	✓
	5.1 5L	✓	✓
	5.2	✓	✓

Table 1-2   **Supported OVO Agent Software (Continued)**

Platform	Operating System	OVO 6.00	OVO 7.10
Debian Linux	2.2 (Kernel 2.2)	✓	✓
	3.0 (Kernel 2.2)	✓	✓
	3.0 R 1(Kernel 2.4)	✓	✓
HP-UX	10.20	✓	✓
	11.00	✓	✓
	11i [b]	✓	✓
	11.22	—	✓
Red Hat Linux	7.0 [c]	✓	✓
	7.1 (Kernel 2.4)	✓	✓
	7.1 (Kernel 2.4)	✓	✓
	7.3 (Kernel 2.4)	✓	✓
	8.0 (Kernel 2.4)	✓	✓
SuSE Linux	6.4 (Kernel 2.2)	✓	✓
	7.0 (Kernel 2.2)	✓	✓
	7.1 (Kernel 2.4)	✓	✓
	7.2 (Kernel 2.4)	✓	✓
	7.3 (Kernel 2.4)	✓	✓
	8.0 (Kernel 2.4)	✓	✓
	8.1 (Kernel 2.4)	✓	✓

Table 1-2   **Supported OVO Agent Software (Continued)**

Platform	Operating System	OVO 6.00	OVO 7.10
Solaris	2.6	✓	✓
	7.0	✓	✓
	8.0	✓	✓
	9.0	✓	✓
Tru64	4.0F	✓	✓
	4.0G	✓	✓
	5.0A	✓	✓
	5.1	✓	✓
	5.1 A	✓	✓
Turbo Linux	6.5 (Japanese only)	✓	✓
	7.0 (Japanese only)	✓	✓

a. 32 and 64 bit
b. Although it is planned to use HP-UX 11i to describe a whole family of HP-UX 11.x releases, today HP-UX 11i is commonly used as a synonym for HP-UX 11.11
c. Kernel 2.2

Performance Tools

Table 1-3 **Supported OV Performance Tools**

Platform	Performance Tools			
	Coda [a]	OVPA [b]	GlancePlus [c]	NP [d]
AIX	✓	C.3.80	C.3.80	✓
HP-UX	✓	C.3.70	C.3.70	✓
Linux	✓	C.4.0	C.4.0	✓
Solaris	✓	C.3.75	C.3.75	✓
Tru64	✓	C.3.60	C.3.60	✓

a. OVO Embedded Performance Component
b. OpenView Performance (formerly MeasureWare)
c. HP OpenView GlancePlus
d. No Performance Tool

Disk-Space Requirements

Table 1-4 lists the disk space requirements for the both the installation of the OSSPI software and the OSSPI's run-time files on the OVO management server.

Table 1-4   Disk-Space Requirements: OVO Management Server

OVO Version	Operating System	Files (MB)	
		Install [a]	Runtime
6.00	HP-UX 10.20, 11.00	17	2
	Solaris 2.6, 7, 8	17	2
7.00 and 7.10	HP-UX 10.20, 11.00 11i [b]	17	2
	Solaris 7, 8	17	2

a. Does not include documentation (+5MB)
b. Although it is planned to use HP-UX 11i to describe a whole family of HP-UX 11.x releases, today HP-UX 11i is commonly used as a synonym for HP-UX 11.11

Table 1-5 lists the disk space requirements for the both the installation of the OSSPI software and the OSSPI's run-time files on the OVO managed nodes.

Table 1-5   Disk-Space Requirements: OVO Managed Node

Operating System	Files (MB)	
	Install	Runtime
AIX 4.3.x, 5.1	n/a	1
HP-UX 11.11	n/a	1
Linux	n/a	1

Table 1-5   **Disk-Space Requirements: OVO Managed Node (Continued)**

Operating System	Files (MB)	
	Install	Runtime
Solaris	n/a	1
Tru64	n/a	1

2 Upgrading the OSSPI

You can use three scenarios to upgrade the OSSPI :

1. If you do not wish to remove the previous versions of the OSSPI templates, you can simply install the latest version of the OSSPI. However, to avoid duplication of messages, you may want to remove the old template groups since the new template groups may contain some of the templates which are present in the old template groups.

   To install the latest version of the templates and OSSPI software without removing the previous version of the templates, refer to "Installing the OSSPI" on page 23.

2. If you wish to remove the previous versions of the templates before installing the new version of the OSSPI, do the following:

   a. Remove the existing templates. Refer to "Removing the Existing OSSPI Templates" on page 19.

   b. Install the latest templates and OSSPI software. Refer to "Installing the OSSPI" on page 23.

3. If you have customized any of the OSSPI templates and want to customize the new templates in the same fashion, do the following:

   a. Copy the existing OSSPI templates. Refer to "Copying Your Customized OSSPI Templates" on page 17.

   b. Download the existing OSSPI templates. Refer to "Downloading Your Customized OSSPI Templates" on page 18.

   c. Remove the existing OSSPI templates. Refer to "Removing the Existing OSSPI Templates" on page 19.

   d. Upload the existing OSSPI templates. Refer to "Uploading Your Customized Templates" on page 21.

   e. Install the latest templates and OSSPI software. Refer to "Installing the OSSPI" on page 23.

   f. Reference the uploaded templates to customize the new templates.

Copying Your Customized OSSPI Templates

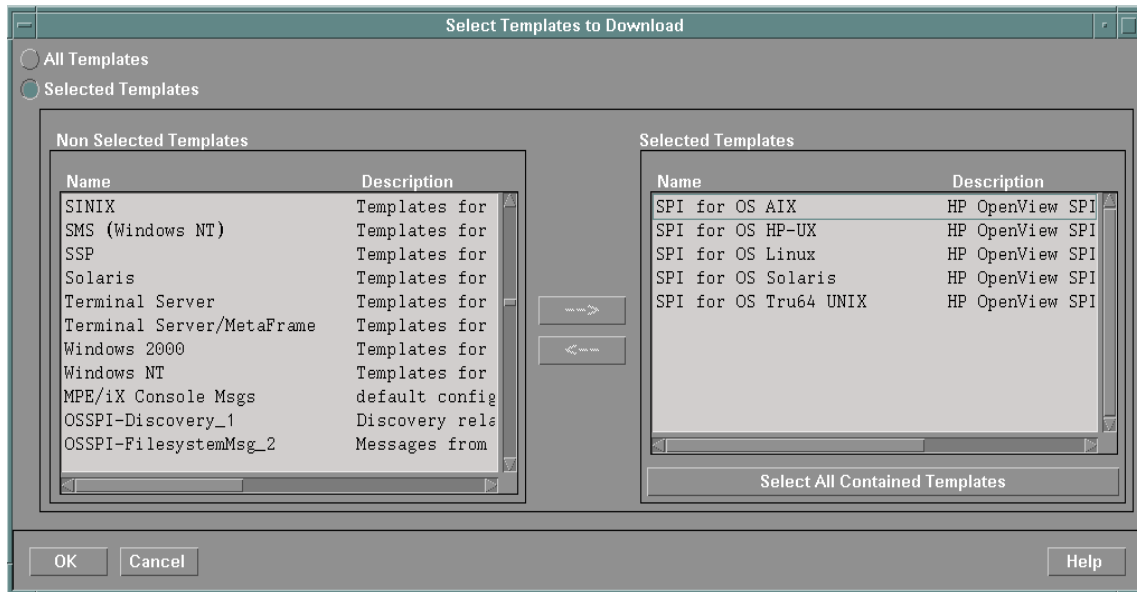Use the OVO GUI to copy your customized OSSPI templates:

Step **1.** Open the `Message Source Templates` window.

Step **2.** Select the template or template group that has been customized and click **copy**.

Step **3.** Modify the template or template group name. Be sure you choose a unique name (for example, append "_existing" to the end of each name).

Step **4.** Click **OK**.

Downloading Your Customized OSSPI Templates

Use the OVO GUI to download your customized OSSPI templates:

Step 1. Select `Actions:Server > Download Configuration` from the menu bar.

Step 2. Modify the `Download Path/Name` to `/tmp` or another directory name. This directory name is used when you upload the templates.

Step 3. Select **Templates**.

Step 4. In the left-hand pane of the `Select Templates to Download` window shown in Figure 2-1, select the templates or template groups you want to download and click `[->]` to move them to the right-hand pane. If you are downloading a template group, click `[Select All Contained Templates]`.

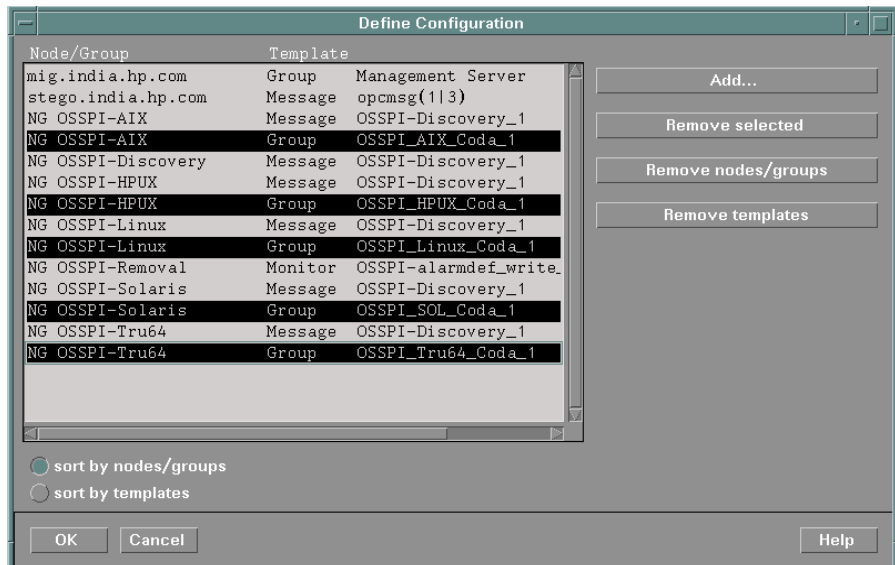**Figure 2-1**   **Select Templates to Download**

Step 5. Click `[OK]`.

Removing the Existing OSSPI Templates

To remove the previous versions of the OSSPI templates before installing the new version of the OSSPI, do the following:

Step 1. From the OVO GUI, *de-assign* the old OSSPI templates from *all* of the OSSPI managed node groups containing nodes that you want to upgrade. To de-assign templates from a managed node group, remove the old OSSPI templates from the template-assignment list and re-distribute the templates. Select Actions: Agents -> Assign Templates.

Figure 2-2   De-assigning Templates

Step 2. Remove the OSSPI templates from the managed nodes and OVO management server.

Step 3. To remove the OSSPI templates, select Remove Selected

Step 4. Remove the OSSPI template groups.

Step 5. Run the Clean Node application on the managed nodes.

Step 6. Run the Clean Server application on the OVO management server.

Step 7. Remove the old version of the OSSPI software from the management server. Enter:

`swremove SPI-OSUX-OVO-HP` *or* (HP-UX management server)

`swremove SPI-OSUX-OVO-SOL` (Solaris management server)

Step 8. Install the new version of the OSSPI as described in "Installing the OSSPI" on page 23.

Step 9. Please refer to Chapter 2, Getting Started of the *HP OpenView Smart Plug-in for UNIX Operating Systems: Administrator's Reference* for information on how to distribute the templates.

Uploading Your Customized Templates

To upload your customized templates, do the following:

Step 1. From the command line, type:

```
opccfgupld -add -subentity /tmp
```

where /tmp is the name of the directory you chose in step 2 from "Downloading Your Customized OSSPI Templates" on page 18.

3 Installing the OSSPI

To install the Smart Plug-in for UNIX Operating Systems software bundle on the OVO management server, do the following:

Step 1. Log on to the OVO management server as **root** user.

Step 2. Mount the HP OpenView Smart Plug-in CD-ROM. Use the CD that contains the management server installation packages (HP OpenView Smart Plug-ins for OVO/*UNIX*). Refer to the *HP OpenView Smart Plug-ins for OVO/UNIX Release Notes* for more information.

Step 3. Use `swinstall` to install the OSSPI fileset. Refer to the *HP OpenViewSmart Plug-ins for OVO/UNIX Release Notes* for more information about product locations and valid platform names.

HP-UX (*not* part of an MC/ServiceGuard cluster)

On an HP-UX system, use the `swinstall` graphical user interface:

1. Type the following: **/usr/sbin/swinstall -s\ /<*mount_point*>/OV_DEPOT/<*platform*>.sdtape**

   The `SD Install - Software Selection` window appears.

2. Highlight `SPI-OSUX-OVO-HP`.

3. Select `Actions: Mark for Install` from the menu bar.

4. Select `Actions: Install (Analysis)` from the menu bar.

5. Verify that the analysis phase of the installation completes without errors by clicking on **Logfile**. This displays the `/var/adm/sw/swagent.log` log file. Correct any errors that appear.

6. Click on **OK** to continue with the installation.

7. Exit `swinstall` after the installation completes.

Or on an HP-UX system, use the command line:

1. Type the following: **/usr/sbin/swinstall -s\ /<*mount_point*>/OV_DEPOT/<*platform*>.sdtape SPI-OSUX-OVO-HP**

2. Check the `/var/adm/sw/swagent.log` log file and correct any errors that appear.

HP-UX (part of an MC/ServiceGuard cluster)

On the *active* node in the MC/ServiceGuard Cluster (the node on which the OVO management server is running), use the command line:

1. Type the following: **/usr/sbin/swinstall -s\
   /<mount_point>/OV_DEPOT/<platform>.sdtape**
   SPI-OSUX-OVO-HP

2. Check the /var/adm/sw/swagent.log log file for any errors.

On each of the *inactive* nodes in the MC/ServiceGuard Cluster (the nodes on which the OVO management server is *not* running), use the command line:

1. Type the following: **/usr/sbin/swinstall -s\
   /<mount_point>/OV_DEPOT/<platform>.sdtape\s
   SPI-OSUX-OVO-HP.SPI-OS-SRV-HP**

2. Check the /var/adm/sw/swagent.log log file and correct any errors that appear.

Please refer to Appendix A, About MC/ServiceGuard of the *HP OpenView VantagePoint Operations Administrator's Reference* for information on MC/ServiceGuard.

Solaris

On a Solaris system, use the command line:

1. Type the following: **/usr/sbin/swinstall -s\
   /<mount_point>/OV_DEPOT/SOLARIS.sdtape SPI-OSUX-OVO-SOL**

   The swinstall application is installed with OVO (swinstall is also referred to as SD or Software Distributor).

2. Check the /var/adm/sw/swagent.log log file for any errors.

4 Verifying Installation of the OSSPI

This chapter provides information that is designed to help you verify the installation of the OSSPI software. You can find information on the

following topics:

- "Software Bundles" on page 29
- "Verifying Installation of the OSSPI Software" on page 31
- "Installed File Locations" on page 33

Software Bundles

The following tables list the bundles, products, and filesets that make up the OSSPI and explain what the contents are. Table 4-1 shows the contents of the Smart Plug-in for UNIX Operating Systems software depot (SD) file set.

Table 4-1   **The OSSPI Software Depot (SD)**

Software Depot	Description
`SPI-OSUX-OVO-HP`	OSSPI server software – contains everything necessary to run the OSSPI for HPUX (executables, shell scripts, etc.)
`SPI-OSUX-OVO-SOL`	OSSPI server software – contains everything necessary to run the OSSPI for Solaris (executables, shell scripts, etc.)

Table 4-2 describes the contents of the Smart Plug-in for UNIX Operating Systems server and agent filesets.

Table 4-2   **The OSSPI Server and Agent File Sets**

SD File Set	Description
`SPI-OS-AGT-AIX`	OSSPI agent files for AIX
`SPI-OS-CORE`	Core OSSPI agent files
`SPI-OS-AGT-HP`	OSSPI agent files for HP-UX
`SPI-OS-AGT-LNX`	OSSPI agent files for Linux
`SPI-OS-AGT-SOL`	OSSPI agent files for Solaris
`SPI-OS-AGT-Tru64`	OSSPI agent files for Tru64
`SPI-OS-SRV-HP`[a]	OSSPI management server files for HP-UX
`SPI-OS-SRV-SOL`[b]	OSSPI management server files for Solaris
`SPI-OS-DOC`	OSSPI documentation

    a. present only in OS HP-UX package (SPI-OSUX-OVO-HP)

    b. present only in OS Solaris package (SPI-OSUX-OVO-SOL)

Verifying Installation of the OSSPI Software

To verify that the installation of the Smart Plug-in for UNIX Operating Systems completed successfully on the OVO management server, carry out the steps in the following list:

1. On the command line, enter: **swlist**, and look for one of the following entries in the output displayed

   SPI-OSUX-OVO-HP A.02.50 *or*

   SPI-OSUX-OVO-SOL A.02.50

2. In the OVO GUI, check that the following elements have been added to the respective windows:

Application Groups:	OSSPI, containing:
	• OSSPI_Admin
	• UN*X_Admin
	• UN*X_Oper
Message Groups:	OSSPI-FS
	OSSPI-Internal
	OSSPI-Kernel
	OSSPI-Services
Message-Source Templates:	SPI for OS AIX
	SPI for OS HPUX
	SPI for OS Linux
	SPI for OS Solaris
	SPI for OS Tru64 Unix
Node Groups:	OSSPI-AIX
	OSSPI-Discovery
	OSSPI-HPUX
	OSSPI-Linux
	OSSPI-Removal

	`OSSPI-Solaris`
	`OSSPI-Tru64`
User Profiles:	`AIX-admin`
	`AIX-operator`
	`HPUX-admin`
	`HPUX-operator`
	`Linux-admin`
	`Linux-operator`
	`Solaris-admin`
	`Solaris-operator`
	`Tru64-admin`
	`Tru64-operator`

3. If any of these steps fails to produce the desired results, use the `swverify` command to ensure that all rules and dependencies were applied during the installation of the OSSPI software. Enter:

   `swverify -x autoselect_dependencies=false SPI-OSUX-OVO-HP`

   a. Check the following log files for more specific information relating to installation problems:

      • `/var/adm/sw/swagent.log`

      • `/var/adm/sw/swinstall.log`

   b. Check your installation with the details in Table 4-3, "OSSPI File Locations on the OVO Management Server," on page 33.

Installed File Locations

The installation process copies the necessary files to the OVO management server. Table 4-3 shows the directories that the installation process creates on the OVO management server for the OSSPI server.

Table 4-3   **OSSPI File Locations on the OVO Management Server**

File Type	Directory Location
Binaries	`/opt/OV/osspi/bin/`
Documentation	`/opt/OV/osspi/doc/`
Log files	`/var/opt/OV/share/osspi/log/`
Temporary and Runtime	`/var/opt/OV/share/osspi/tmp/`

OVO integration
- AIX:
- Core:
- HP-UX:
- Linux:
- Solaris:
- Tru64:
- Bitmaps:
	`/var/opt/OV/share/tmp/OpC_appl/`
	`/var/lpp/OV/share/tmp/OpC_appl/osspi_AIX`
	`/var/opt/OV/share/tmp/OpC_appl/osspi_CORE`
	`/var/opt/OV/share/tmp/OpC_appl/osspi_HPUX`
	`/var/opt/OV/share/tmp/OpC_appl/osspi_LINUX`
	`/var/opt/OV/share/tmp/OpC_appl/osspi_SOLARIS`
	`/var/opt/OV/share/tmp/OpC_appl/osspi_TRU64`
	`/etc/opt/OV/share/symbols/C/OSSPI`

Table 4-4 on page 33 shows the directory locations for the installed OSSPI files on an OVO managed node. These are the standard locations for OVO commands, actions, and monitors.

Table 4-4   **OSSPI File Locations for the OVO Managed Node**

File Type	Operating System	Directory Location
Binaries	AIX	`/usr/lpp/OV/bin/OpC/`
	HP-UX, Linux, Solaris, Tru64	`/var/opt/OV/bin/OpC/`

Table 4-4   **OSSPI File Locations for the OVO Managed Node (Continued)**

File Type	Operating System	Directory Location
Default Configuration	AIX	`/etc/lpp/OV/osspi/conf/`
	HP-UX, Linux, Solaris, Tru64	`/etc/opt/OV/osspi/conf/`
Configuration & Discovery	AIX	`/usr/lpp/OV/osspi/conf/`
	HP-UX, Linux, Solaris, Tru64	`/var/opt/OV/osspi/conf/`
Logs	AIX	`/var/lpp/OV/osspi/log/`
	HP-UX, Linux, Solaris, Tru64	`/var/opt/OV/osspi/log/`
Temporary & Runtime	AIX	`/var/lpp/OV/osspi/tmp/`
	HP-UX, Linux, Solaris, Tru64	`/var/opt/OV/osspi/tmp/`

5 Uninstalling the OSSPI

This chapter describes how to remove the OSSPI software from the OVO managed node and the OVO management server.

In this Section

This section describes how to remove the OSSPI software quickly and cleanly. The information provided in this section covers the following areas:

- "Removing the OSSPI from the Managed Node" on page 37

- "Removing the OSSPI from the Management Server" on page 39

Removing the OSSPI from the Managed Node

To remove the OSSPI software from the OVO managed node, you should carry out the following steps in the order specified:

1. In the OVO GUI, *de-assign* the OSSPI templates from *all* those OSSPI managed nodes from which you want to uninstall the OSSPI software by moving the nodes (not copying them) from the OSSPI-AIX, OSSPI-HPUX, OSSPI-Linux, OSSPI-Solaris, or OSSPI-Tru64 Node Group in which they reside to the OSSPI-Removal Node Group. This includes the OVO management server if it is also a managed node and you want to uninstall the OSSPI software.

   The OSSPI-Removal Node Group has only the monitor template OSSPI-alarmdef_write_1 assigned to it.

2. Use the OVO GUI to *distribute* the OSSPI-alarmdef_write_1 template to the OSSPI-Removal Node Group. This de-activates and removes any remaining OSSPI template definitions from the managed nodes present in the OSSPI-Removal Node Group and, in addition, de-activates any alarm definitions.

NOTE   This step should be carried out regardless of whether OV Performance or GlancePlus is running on the managed nodes.

3. Remove any OSSPI configuration data from the managed nodes by running the OSSPI's Clean Node application on the managed nodes in the OSSPI-Removal Node Group:

   a. In the OVO Application Bank window, open the OSSPI application group OSSPI_Admin

   b. In the OSSPI_Admin application-group window, select the Clean Node application, drag it across to the OVO Node Bank window, and drop it onto the OSSPI-Removal node group icon. The application prompts you to confirm the activation of the clean-up operation:

      ```
      Are you sure you want to delete the OSSPI from the
      Node [Yes/No]
      ```

To remove configuration data used by the OSSPI enter: **Yes**

4. Remove the managed nodes manually from the `OSSPI-Removal` Node Group using the following menu option:

`Actions > Node > Remove from this group`

Removing the OSSPI from the Management Server

To remove the OSSPI software completely, you should first carry out the steps described in "Removing the OSSPI from the Managed Node" on page 37 and then remove the OSSPI components from the OVO management server, as follows:

1. Remove the OSSPI software from the OVO management server by using the following command in a shell on the OVO management server itself:

   swremove SPI-OSUX-OVO-HP

   or

   swremove SPI-OSUX-OVO-SOL

2. Remove the OSSPI configuration data from the OVO management server using the OSSPI Clean Server application, which you can find in the OSSPI_Admin application-group window:

   a. In the OVO Node Bank window, select the OVO management server icon and drag it across to the OSSPI_Admin application-group window

   b. Drop it onto the OSSPI Clean Server application icon

3. Remove any remaining OSSPI-specific actions, commands, and monitors by distributing the actions, commands, and monitors to *all* managed nodes.

4. Remove all OSSPI components manually from the OVO GUI, for example:

   • Node Groups

   • Application Groups

   • Message Groups

   • Templates and Template Groups

   • Users and User Profiles