HP OpenView Smart Plug-in for UNIX® Operating Systems

Installation Guide

Version: A.03.10

For HP-UX and Solaris OpenView Operations Management Servers

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Please visit the HP OpenView web site at:

`http://www.managementsoftware.hp.com/`

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You can also go directly to the support web site at:

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1 Installing the OSSPI

You can install the Smart Plug-in for UNIX Operating Systems (OSSPI) on HP OpenView Operations (OVO) 7.x and 8.10 management servers. The procedure for upgrading an earlier version of OSSPI, and installing OSSPI on both versions of OVO is described in the following sections.

The management server versions, the managed node operating system versions, and the performance product versions that are supported by OSSPI are listed in the *HP OpenView Smart Plug-in for UNIX Operating Systems Release Notes*. Before you proceed with the installation of OSSPI, make sure that supported versions are installed on your setup.

Upgrading the OSSPI

You can upgrade an earlier version of OSSPI to this version, by uninstalling the previous version and installing the new version. If you have customized any components of the earlier version of OSSPI, and wish to retain it, follow the procedure given below:

1. Make a copy of the customized components with a unique name (for example, add "-" at the end for each name).

2. Uninstall the previous version of OSSPI.

3. Install the new version of OSSPI.

4. Repeat the modification on the components installed with the new version of OSSPI.

Backup the components by copying and downloading the configuration. Refer to *HP OpenView Operations Administrator's Reference Volume I* for more information on copying and downloading configuration. Once you install the new version of OSSPI, you can upload the downloaded data (with changed names) and refer to them for customizing the new components.

Installing the OSSPI

You can choose to install the Smart Plug-in for UNIX Operating Systems either by invoking the installer scripts or by launching the HP-UX SD installer (`swinstall`). See the sections below for installing OSSPI using either of these options.

Using the Installer Scripts

You can choose to install the Smart Plug-in for UNIX Operating Systems software on the OVO 8.10 management server during the OVO installation procedure. You will be prompted to mount the HP OpenView Smart Plug-in CD-ROM. Mount the CD-ROM and follow the instructions.

If you choose to install the Smart Plug-in for UNIX Operating Systems later, do the following:

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

Step 2. Set the LANG variable as appropriate for the environment.

If the database is configured for the Japanese character set, Japanese templates of OSSPI are uploaded on the management server.

Step 3. Mount the HP OpenView Smart Plug-in CD-ROM. Use the CD that contains the OSSPI 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 4. Set the environment variable OSSPI_INSTALLER_HOME to the installables' directory, */<mount_point>/OV_DEPOT*

Step 5. Type the following:
/<mount_point>/OV_DEPOT/UNIXOSSPI/unix_osspi_setup

You will be prompted to select the components you want to install. Installation will proceed based on the options you select.

Unattended Installation

You can configure OSSPI to be installed in the unattended mode, where the install script will not prompt you for input.

To install OSSPI in the unattended mode, follow the procedure, from Step 1 through 4, detailed in "Using the Installer Scripts" on page 10. Then type the following command:

/<*mount_point*>/OV_DEPOT/UNIXOSSPI/unix_osspi_setup -unattended

This command will install the OSSPI sub-products on your system. To selectively install the OSSPI sub-products, edit the configuration file, /var/opt/OV/installation/osspi_install.defaults. You can refer to the sample configuration file, /var/opt/OV/installation/osspi_install.defaults.sample, as illustrated in Example 1-1, for the format of osspi_install.defaults.

Example 1-1   **The osspi_install.defaults.sample file**

```
#########################################################################
#   The contents of the file osspi_install.defaults under /var/opt/ov/installation
#   define what subproducts are installed when you select the unattended mode of
#   installation for UNIX OS SPI. This sample file specifies the format of the file
#   osspi_install.defaults.
#
#   List down the subproducts you want to install in osspi_install.defaults
#   in the directory /var/opt/ov/installation.
#
#   The following rules must be followed while listing the subproducts to be
#   installed:
#
#   1) Either SPI-OSUX-OVO.CORE-OSUX-SOL or SPI-OSUX-OVO.CORE-OSUX-HP must be
#      installed, depending on whether the the management server is on Solaris or
#      HP-UX respectively. Both the subproducts cannot be installed on the same
#      management server
#
#   2) If you are installing the SPI-OSUX-OVO.SCS-OSUX-SOL subproduct,
#      then SPI-OSUX-OVO.AGT-OSUX-SOL must also be installed
#
#   3) If you are installing the SPI-OSUX-OVO.VCS-OSUX-SOL subproduct,
#      then both SPI-OSUX-OVO.AGT-OSUX-SOL and SPI-OSUX-OVO.AGT-OSUX-HP must also
#      be installed
#
#   4) If you are installing the SPI-OSUX-OVO.SG-OSUX-HP subproduct, then the
#      SPI-OSUX-OVO.AGT-OSUX-HP subproduct must also be installed
#########################################################################

SPI-OSUX-OVO.CORE-OSUX-SOL
SPI-OSUX-OVO.CORE-OSUX-HP
SPI-OSUX-OVO.DOC-OSUX-SOL
SPI-OSUX-OVO.DOC-OSUX-HP
SPI-OSUX-OVO.AGT-OSUX-HP
SPI-OSUX-OVO.AGT-OSUX-SOL
SPI-OSUX-OVO.AGT-OSUX-LNX
SPI-OSUX-OVO.AGT-OSUX-AIX
SPI-OSUX-OVO.AGT-OSUX-TRU64
SPI-OSUX-OVO.VCS-OSUX-SOL
SPI-OSUX-OVO.SCS-OSUX-SOL
SPI-OSUX-OVO.SG-OSUX-HP
```

The file osspi_install.defaults is created when OSSPI is first installed on your system. Once created, this file lists all the OSSPI sub-products installed on the OVO management server. To replicate the existing OSSPI setup on other OVO installations, place osspi_install.defaults on the target management server. Place the file in the directory /var/opt/OV/installation/ and run the unix_osspi_setup script with the -unattended option.

For a custom unattended install, remove or add the names of OSSPI subproducts to the subproduct list in the file.

Using the SD Installer

To install the Smart Plug-in for UNIX Operating Systems software bundle on the OVO 7.x management server, do the following:

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

Step 2. Set the LANG variable in the environment.

If the database is configured for the Japanese character set, Japanese templates of OSSPI are uploaded on the management server.

Step 3. 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 4. Use swinstall to install the OSSPI subproducts. 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.

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**

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**

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.SPI-OS-SRV-HP11**

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**

   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.

2 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 17
- "Verifying Installation of the OSSPI Software" on page 19
- "Installed File Locations" on page 22

Software Bundles

The following tables list the bundles, products, and filesets that make up the OSSPI and explain what the contents are. Table 2-1 shows the contents of the Smart Plug-in for UNIX Operating Systems software depot (SD) file set.

Table 2-1   **The OSSPI Software Depot (SD)**

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

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

Table 2-2   **The OSSPI Server and Agent Sub-products**

Sub-product	Contents
AGT-OSUX-AIX	OSSPI agent filesets for AIX
AGT-OSUX-HP	OSSPI agent filesets for HP-UX
AGT-OSUX-LNX	OSSPI agent filesets for Linux
AGT-OSUX-SOL	OSSPI agent filesets for Solaris
AGT-OSUX-TRU64	OSSPI agent filesets for Tru64 UNIX
CORE-OSUX-HP	Core OSSPI agent filesets
DOC-OSUX-HP	OSSPI documentation
SCS-OSUX-SOL	OSSPI filesets for Sun cluster on Solaris
SG-OSUX-HP	OSSPI filesets for MC/ServiceGuard on HP-UX
VCS-OSUX-SOL	OSSPI filesets for VERITAS cluster on HP-UX and Solaris

Table 2-3 describes the contents of the Smart Plug-in for UNIX Operating Systems server and agent filesets.

Table 2-3   **The OSSPI Server and Agent File Sets**

SD File Set	Contents
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 UNIX
SPI-OS-SRV-HP11[a]	OSSPI management server files for HP-UX
SPI-OS-SRV-SOL[b]	OSSPI management server files for Solaris
SPI-OS-DOC	OSSPI documentation
SPI-OS-SCS-SOL	OSSPI Sun cluster files for Solaris
SPI-OS-SG-HP	OSSPI MCSG files for HP-UX
SPI-OS-VCS-SOL	OSSPI VERITAS Cluster Server files for Solaris
SPI-OS-VxVM-HP	OSSPI VERITAS Volume Manager files for HP-UX
SPI-OS-VxVM-SOL	OSSPI VERITAS Volume Manager files for Solaris

a. present only on HP-UX management server
b. present only in Solaris management server

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 A.03.00
   ```

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

Application Groups:	`Unix OS SPI`, containing:
	• `OSSPI Discovery`
	• `OSSPI Supportability`
	• `AIX`
	• `HP-UX`
	• `Linux`
	• `Solaris`
	• `Tru64`
	• `HP Performance Products`
	• `Sun Cluster Applications`
	• `Veritas`
Message Groups:	`OSSPI-FS`
	`OSSPI-Internal`
	`OSSPI-Kernel`
	`OSSPI-Services`
Message-Source Templates:	`Operating System SPIs,` containing:
	• `IBM AIX`
	• `HP UX`

- Linux
- Sun Solaris
- 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

Veritas Admin

Veritas Operator

Sun Cluster Admin

Sun Cluster Operator

Supportability

Performance

Janitor

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

    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 2-4, "OSSPI File Locations on the OVO Management Server," on page 22.

Installed File Locations

The installation process copies the necessary files to the OVO management server. Table 2-4 shows the directories that the installation process creates on the OVO 8.10 management server for the OSSPI server.

Table 2-4   **OSSPI File Locations on the OVO Management Server**

File Type	Directory Location
Binaries	`/opt/OV/lbin/osspi/`
Documentation	`/opt/OV/doc/C/osspi/`
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/opt/OV/share/tmp/OpC_appl/unix_osspi_appl/osspi_AIX`
	`/var/opt/OV/share/tmp/OpC_appl/unix_osspi_appl/osspi_CORE`
	`/var/opt/OV/share/tmp/OpC_appl/unix_osspi_appl/osspi_HPUX`
	`/var/opt/OV/share/tmp/OpC_appl/unix_osspi_appl/osspi_LINUX`
	`/var/opt/OV/share/tmp/OpC_appl/unix_osspi_appl/osspi_SOLARIS`
	`/var/opt/OV/share/tmp/OpC_appl/unix_osspi_appl/osspi_TRU64`
	`/etc/opt/OV/share/symbols/C/OSSPI`

Table 2-5 and Table 2-6 show the directory locations for the installed OSSPI files on an OVO 8.10 managed node. These are the standard locations for OVO commands, actions, and monitors on DCE and HTTPS agents respectively.

Table 2-5   **OSSPI File Locations for the OVO Managed Node on DCE Agents**

File Type	OS	Directory Location
Binaries	AIX	`/var/lpp/OV/OpC/`
	HP-UX, Linux, Solaris, Tru64 UNIX	`/var/opt/OV/bin/OpC/`
Default Configuration	AIX	`/var/lpp/OV/conf/osspi/`
	HP-UX, Linux, Solaris, Tru64 UNIX	`/var/opt/OV/conf/osspi/`
Configuration & Discovery	AIX	`/usr/lpp/OV/conf/osspi/`
	HP-UX, Linux, Solaris, Tru64 UNIX	`/var/opt/OV/conf/osspi/`
Logs	AIX	`/var/lpp/OV/log/osspi/`
	HP-UX, Linux, Solaris, Tru64 UNIX	`/var/opt/OV/log/osspi/`

Table 2-5   **OSSPI File Locations for the OVO Managed Node on DCE Agents**

File Type	OS	Directory Location
Temporary & Runtime	AIX	`/var/lpp/OV/tmp/osspi/`
	HP-UX, Linux, Solaris, Tru64 UNIX	`/var/opt/OV/tmp/osspi/`

Table 2-6   **OSSPI File Locations for the OVO Managed Node on HTTPS Agents**

File Type	OS	Directory Location
Binaries	HP-UX, Linux, Solaris	`/var/opt/OV/bin/instrumentation/`
Default Configuration	HP-UX, Linux, Solaris	`/var/opt/OV/conf/osspi/`
Configuration & Discovery	HP-UX, Linux, Solaris	`/var/opt/OV/conf/osspi/`
Logs	HP-UX, Linux, Solaris	`/var/opt/OV/log/osspi/`
Temporary & Runtime	HP-UX, Linux, Solaris	`/var/opt/OV/tmp/osspi/`

3 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 27
- "Removing the OSSPI from the Management Server" on page 29

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 policies 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 policy OSSPI-alarmdef_write_1 assigned to it.

2. Use the OVO GUI to *distribute* the OSSPI-alarmdef_write_1 policy to the OSSPI-Removal Node Group. This de-activates and removes any remaining OSSPI policy 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 Supportability

   b. In the OSSPI Supportability 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 27 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:

   unix_osspi_remove

2. Remove the OSSPI configuration data from the OVO management server using the OSSPI Clean Server application, which you can find in the OSSPI Supportability application-group window. To run the application, double click the Clean Server 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

   - Policies and Policy Groups

   - Users and User Profiles

NOTE   The unix_osspi_remove script will not remove the service discovery depot (SPI-SVCDISC-OVO) that is needed for the discovery functionality to work, and is installed along with the OSSPI. Before you remove the service discovery depot, make sure that no other programs are using the service discovery framework.