HP Operations Smart Plug-ins DVD

for HP Operations Manager for HP-UX® / Solaris 9.0x

Release Notes

Software Release Date: December 2009

This document provides information about the updates in HP Operations Smart Plug-ins DVD for HP Operations Manager (HPOM) for HP-UX 9.0x and Solaris 9.0x. It also covers the licensing information; installation, uninstallation, and upgrade procedures in the standalone and the cluster environments.

What is New In This Version

This release introduces:

- HP Operations Smart Plug-in for JBoss Application Server - 7.00

  The HP Operations Smart Plug-in for JBoss Application Server (JBoss AS SPI) enables you to manage JBoss Application Servers. From the HPOM console, you can monitor the availability, use, and performance of JBoss Application Servers running on the managed nodes. You can integrate JBoss AS SPI with other HP Software products such as HP Performance Manager to get consolidated graphs. The graphs help you analyze trends in server usage, availability, and performance.

- HP Operations Smart Plug-in for BlackBerry® Enterprise Server – 3.10

  The HP Operations Smart Plug-in (SPI) for BlackBerry Enterprise Server (BES) provides you with tools to monitor and manage BES. The SPI is deployed to the BES and provides performance and event information to the HP Operations Manager for UNIX. Support if provides for Windows 2003 and 2008 Servers. With version 3.10 of the SPI also support for BlackBerry Enterprise Server connecting to IBM Lotus Domino messaging servers is supported. Additional enhancement includes:

  — Performance increase for user based metrics

  — Additional metric for component availability

  — Detailed server and user reports for HP Reporter Software

- HP Operations Smart Plug-in for Microsoft Active Directory - 7.00

  The HP Operations Smart Plug-in for Microsoft Active Directory (Microsoft Active Directory SPI) enables you to manage the Microsoft Active Directory from HPOM console. From the HPOM console, you can monitor the Windows Server 2003, Windows Server 2008 Core, and Windows Server 2008 R2 Full Server running on HPOM managed nodes. You can integrate Microsoft Active Directory SPI with other HP Software products such as HP Performance Manager (the product must be purchased separately) to get consolidated graphs. Policies are added to monitor Windows Server 2003 and Windows Server 2008 nodes. Tools are added to facilitate data collection process on Windows Server 2003 and Windows Server 2008 nodes.

- A tool, HP Operations Smart Plug-in Upgrade Toolkit (SPI Upgrade Toolkit) – 2.00

  The SPI Upgrade Toolkit helps you upgrade HP Operations Smart Plug-ins to a higher version while retaining the customizations done on policies. You can use this utility with a browser-based interactive user interface that allows you to select the policy settings of your choice while you upgrade a SPI.

- Support for HP Operations Manager i (HP OMi) 8.10 for Oracle, Microsoft SQL Server, Microsoft Active Directory, Microsoft Exchange Server, IBM WebSphere Application Server, BEA WebLogic Application Server, and BlackBerry Enterprise Server SPIs

  For more information on how the SPIs work with HP OMi, see HP Operations Manager i 8.10 documentation.

What is Updated In This Version

Specific Smart Plug-in updates for this release are summarized as follows. For more complete details, see the release notes for each product.

- HP Operations Smart Plug-in for Databases (Oracle, Microsoft SQL Server, Sybase, and Informix)- 12.00
  — Oracle SPI: Monitors Flash Recovery Area (FRA), Materialized views, and Streams
  — Microsoft SQL Server SPI: New replication policies based on WMI performance counters and enhanced log file monitoring
  — Informix SPI: Support for Informix Extended Parallel Server (XPS) 8.51

- HP Operations Smart Plug-in for Microsoft Exchange Server - 13.00
  — Supports Microsoft Exchange Server 2007 in a SAN environment
  — Monitoring and reporting enhancements in the following areas:

  — Mail Flow Latency

  — Highest Growth Mailboxes

  — Transport Agent and Logs

- — Alignment of Thresholds as per Microsoft recommendations
- — Support dropped for Microsoft Exchange Server 2003

- HP Operations Smart Plug-in for SAP - 12.00

  - — SAP Netweaver 7.1 Java Monitoring
  - — Enhanced security for JMX Configuration using 3DES
  - — Support for SAP Net weaver multiple instance
  - — Service discovery for SAP Net weaver Java stack
  - — Support dropped for SAP 4.6C

- HP Operations Smart Plug-in for IBM WebSphere Application Server - 7.00

  - — Support for distributed network deployer scenario for WebSphere Application Servers 7
  - — Enhanced Log File Monitoring
  - — PMI Counter is not supported for WebSphere Application Server version 6.0 and above
  - — Enhanced error logging
  - — Enhanced discovery and configuration
  - — Introduced golden metrics which monitor the basic functionality of your WebSphere Application Server
  - — New metrics for monitoring the performance of JVM, EJB, ThreadPool, and Connection Pool

- HP Operations Smart Plug-in for Oracle Application Server - 7.00

  - — Enhanced error logging
  - — Enhanced discovery and configuration
  - — Introduced golden metrics which monitor the basic functionality of your WebSphere Application Server

- HP Operations Smart Plug-in for Web Servers - 6.00

- HP Operations Smart Plug-in for BEA WebLogic Application Server - 7.00

  - — Support dropped for WebLogic Server 7.x and 8.1
  - — Support for WebLogic 10.x
  - — Enhanced error logging
  - — Enhanced discovery and configuration
  - — Introduced golden metrics which monitor the basic functionality of your WebLogic Server
  - — New metrics for monitoring JVM, EJBPool, ThreadPool, and Server

- HP Operations Smart Plug-in for BEA Tuxedo - 5.00

  - — Support for Linux SLES 10
  - — Support for Oracle Tuxedo 10.0
  - — Support for Tuxedo for PeopleTools 6.5, 7.1, 8.0, 8.1, 9.0, 9.1, and 10.0

- HP Operations Smart Plug-in for HP Storage Essentials SRM - 2.00

  - — Removed dependency on the SPI for HP System Insight Manager (SIM Integration)

- HP Operations Integration for HP Systems Insight Manager – 2.00

  - — The SPI has been updated only for HP-UX platform.

- HP Operations Smart Plug-in for IBM DB2 – 3.80

  - — Support for Novell SuSE Linux Enterprise Server 11
  - — Support for RedHat Enterprise Linux 5.4
  - — Support for IBM DB2 9.7
  - — Support for remote database monitoring
  - — Enhanced metrics on tablespace states
  - — Enhanced database connection and authentication

- HP Operations Smart Plug-in for PeopleSoft - 3.00

- — Support for PeopleTools 8.50
- — Enhanced Application Server monitoring

- HP Operations Smart Plug-in for Remedy ARS - 4.00

  - — Supports Remedy ARS 7.5
  - — Supports Remedy ARS 7.1 and 7.5 on RHEL 5.1, 5.2, and 5.3
  - — Use of ARS API 7.1 to enhanced efficiency and security

- HP Operations Service Navigator Report Package - 3.80

- HP SPI SHS Component: 3.00

- HP Operations SPI Data Collector : 2.40

- Support for Operations Agent 8.53 and 8.60 (HTTPS)

- Support for Performance Agent 5.00

- Support for Performance Manager 8.20
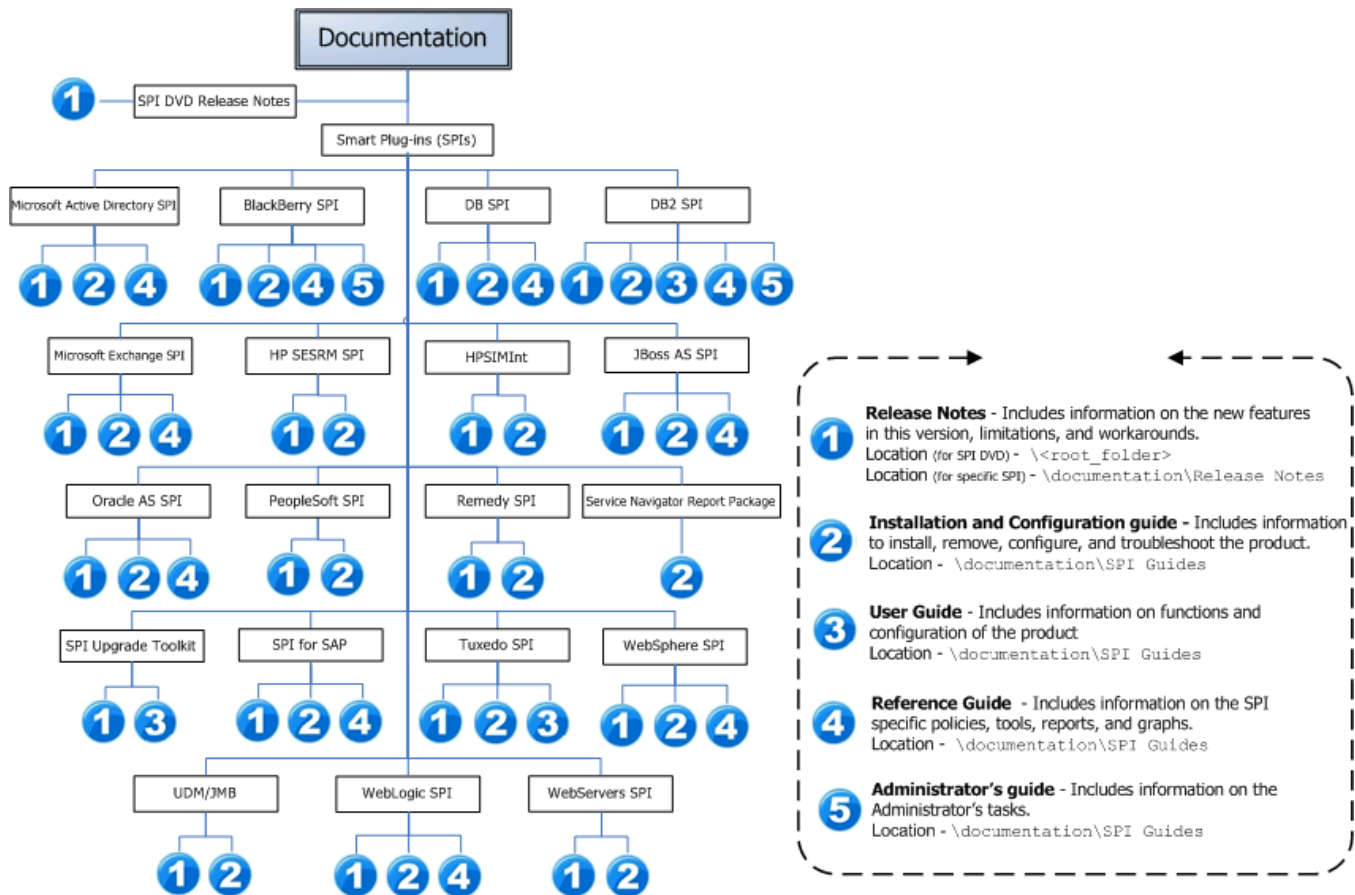
Documentation Updates

The first page of this release notes document contains the publish date, which changes each time the document is updated.

To check for recent updates or to verify that you are using the most recent edition, go to the following web site: **http://h20230.www2.hp.com/selfsolve/manuals**

DVD Structure

The DVD contains the following directories and files:

- *SPIDVD_ReleaseNotes.pdf*

- spi-thirdparty-license-agreements: contains the license details of Open Source/ Third party products used with the SPIs.

- HPUX: contains the .depot file to install SPIs on HP-UX platform **or** SOLARIS: contains .sparc file to install SPIs on Solaris platform.

- WINDOWS: contains the SPI reports and graphs packages. If at any point you configure Oracle as the database for Reporter data, be sure to use one of the supported versions of the Oracle ODBC driver, which include: 9.2.0 to access 9.2.0 database or 10gR2 to access 10gR2 database.

- DOCUMENTATION: contains all SPIs documents. The following documentation map illustrates the documents and the location of documents pertaining to each SPI.

Installation Notes

The installation instructions contained in this chapter apply to all SPIs and are therefore general. For more instructions pertaining to the specific products you plan to install, print a copy of the product's installation instructions. For the name or location of the documents, see the documentation map.

Supported Platforms

For latest support matrix, visit the following web site:
http://support.openview.hp.com/selfsolve/document/KM323488

This site requires that you register for an HP Passport and sign-in. To register for an HP Passport ID, go to:

http://h20229.www2.hp.com/passport-registration.html or click the **New users - please register** link on the HP Passport login page.

To check for the latest Archived Obsolescence Programs, go to the following URL:

http://intranet.hp.com/tsg/WW2/SWObsoMigrations/ObsoArchive/Pages/ArchivedObsoPrograms.a spx

Software and Hardware Requirements

Before installing a Smart Plug-in, make sure that your system meets the following minimum requirements:

- Hardware

  See the HPOM documentation for information on hardware requirements for the management server. See the Support Matrix (SUMA) link **http:// support.openview.hp.com/selfsolve/document/KM323488** for information on hardware requirements for the managed nodes.

- Software

  On Management Server:

  - HPOM for HP-UX or Solaris: 9.0x
  - HP Performance Manager: 8.20 (required if you want to generate graphs)
  - HP Reporter: 3.80 (required if you want to generate web-based reports)
  - HP Operations SPI Data Collector : 2.40
  - HP SPI SHS Component: 3.00
  - HP Operations SPI Upgrade Toolkit: 2.00
  - JMX Component (only applicable for BEA WebLogic Server, Oracle Application Server, IBM WebSphere Application Server, and JBoss Application Server): 7.00

  On Managed Node:

  - HP Performance Agent: 5.00 (required if you want to use HP Performance Agent for data logging)
  - HP Operations Agent (version 8.53 or 8.60) must be installed and configured

Note: On HP-UX platform, the SPI Upgrade Toolkit, the JMX component, the SPI Data Collector, and the SPI SHS components are installed automatically, when you install the first SPI. On Solaris platform, you need to select these components explicitly along with the first SPI you want to install.

Installing SPI on a Local Management Server

To install a SPI on a local management server, perform the following steps:

1 Mount the DVD

   On HP-UX:

   a Log on as user root.

   b Set the user root's umask by entering:

      umask 027

   c Create a directory to mount the DVD:

      mkdir /<mount_point>

      For example: mkdir /dvdrom

   d Insert the DVD into the disk drive and mount it as user root by entering:

      mount /dev/<dvdrom_drive_name> /<mount_point>

      For example, for a local DVD, you might enter:

      mount /dev/dsk/c0t2d0 /dvdrom

   You can also run SAM and mount the DVD to a specific path in the Disks and File Systems window.

On Solaris:

    —   Insert the DVD into the DVD drive. The DVD is automatically mounted (and unmounted) on Sun Solaris systems.

2 Install the SPI on the local management server, HP-UX and Solaris by running the **`swinstall`** and **`pkgadd`** command respectively.

For example,

```
swinstall -s /dvdrom/HPUX/HP_Operations_Smart_Plug-ins_HPUX.depot <install
keyword>
```

```
pkgadd -d /dvdrom/SOLARIS/HP_Operations_Smart_Plug-ins_SOLARIS.sparc <SPI
specific keyword>
```

The following table lists the install keywords for each SPI.

Product Name	HP-UX Keyword	SOLARIS Keyword
HP Operations Smart Plug-in for JBoss Application Server	JBSSPI	HPOvSpiJbs
HP Operations Smart Plug-in for JBoss Application Server - Grapher - Graphing Component Integration	JBSSPI-GRAPHS	HPOvSpiJbsG
HP Operations Smart Plug-in for Microsoft Active Directory	ADSPI	HPOvSpiAd
HP Operations Smart Plug-in for Oracle	ORASPI	HPOvSpiOra
HP Operations Smart Plug-in for Microsoft SQL Server	MSSSPI	HPOvSpiMss
HP Operations Smart Plug-in for Sybase	SYBSPI	HPOvSpiSyb
HP Operations Smart Plug-in for Informix	INFSPI	HPOvSpiInf
HP Operations Smart Plug-in for Microsoft Exchange Server	EXSPI	HPOvSpiEx
HP Operations Smart Plug-in for SAP	SAPSPI	HPOvSpiSap
HP Operations Smart Plug-in for WebSphere Application Server	WBSSPI	HPOvSpiWbs
HP Operations Smart Plug-in for WebSphere Application Server - Grapher - Graphing Component Integration	WBSSPI-GRAPHS	HPOvSpiWbsG
HP Operations Smart Plug-in for Oracle Application Server	OASSPI	HPOvSpiOas
HP Operations Smart Plug-in for Oracle Application Server -	OASSPI-	HPOvSpiOasG

Grapher - Graphing Component Integration	GRAPHS	
HP Operations Smart Plug- BEA WebLogic Server	WLSSPI	HPOvSpiWls
HP Operations Smart Plug- BEA WebLogic Server - Grapher - Graphing Component Integration	WLSSPI-GRAPHS	HPOvSpiWlsG
HP Operations Smart Plug-in for BEA Tuxedo	SPI-Tuxedo	SPI-Tuxedo
HP Operations Smart Plug-in for IBM DB2	DB2SPI	DB2SPI
HP Operations Smart Plug-in for PeopleSoft	SPI-PSoft	SPI-PSoft
HP Operations Smart Plug-in for Remedy ARS	SPI-Remedy	SPI-Remedy
HP Operations Smart Plug-in for HP Storage Essentials SRM	HPSESRMSPI	HPOvSpiSesrm
HP Operations Integration for HP Systems Insight Manager	HPSIMInt	N.A.
HP Operations Smart Plug-in for Web Servers	WSSPI	HPOvSpiWs
HP Operations SPI Upgrade Toolkit	SUTK	HPOvSpiSutk
HP Operations Smart Plug-in SHS Component	SPI-SHS-OVO	HPOvSpiShs
HP Operations Manager Smart Plug-in for BlackBerry	BESPI	BESPI
HP Operations Smart Plug-in for JMX Application Server	JMXSPI	HPOvSpiJmx
HP Operations SPI Data Collector	DSI2DDF	HPOvSpiDsi2ddf
HP Operations Smart Plug-in SHS Component	SPI-SHS-OVO	HPOvSpiShs

Installing SPI in an HPOM Cluster Environment

You must first install the HPOM management server on each system in the cluster. When the management server cluster installations are complete, the setup for the installation of the SPI is ready.

Note: Before beginning, make sure that sufficient disk space (500 MB for each SPI) is available on each management server for the SPI you plan to install. Cancelling the installation process before completion could result in partial installations and require manual removal of the partially installed components.

After installing the HPOM management server, proceed as follows:

For the first installation (Node A) and all remaining installations in the cluster — Follow the standard installation procedure by either making the product choices or typing the name of the SPI component you want to install. Once you complete the installation on Node A, proceed to the next node. Repeat the same procedure proceeding from one node to another until you have completed installing the SPI on each of the nodes in the cluster.

Installing the SPI on the Cluster-Aware Management Server

Complete all the tasks in the section Installing SPI on a Local Management Server and then proceed to the next management server until the installation on every management server in the cluster is complete.

Warning: The HPOM console will not function properly until installations are completed on all nodes in the cluster.

Upgrading a SPI

Be aware of the following points when you plan to install any SPIs from SPI DVD 2009 on a HPOM 9.0x, which has SPIs installed from SPI DVD 2008.

Note: Read HPOM 8.xx as HPOM for HP-UX/Solaris 8.xx and HPOM 9.0x as HPOM for HP-UX/Solaris 9.0x

- You must complete the migration process from HPOM 8.xx to HPOM 9.0x before upgrading a SPI to the new version available in SPI DVD 2009. Once a SPI from SPI DVD 2009 is installed, migrating from HPOM 8.xx is not supported.

- Having SPI version (migrated from HPOM 8.xx) and a new SPI version (newly installed from SPI DVD 2009) on HPOM 9.0x is an intermediate mode and you must move all managed nodes to the new SPI version as soon as possible.

- If you have multiple SPIs deployed on a managed node, the node can be monitored either by SPI DVD 2008 SPIs or SPI DVD 2009 SPIs. Monitoring a node by combination of SPIs from SPI DVD 2008 and SPI DVD 2009 is not supported.

- If you have a SPI DVD 2009 SPI installed on a HPOM 9.0x systems, which also has same SPI from SPI DVD 2008 as well, the following points are true.

    — You must configure newly added managed nodes using the SPI from SPI DVD 2009.
    — No configuration is possible on the existing or old managed nodes monitored by SPI DVD 2008 SPI.

This is because SPI DVD 2008 SPI configuration tools are overwritten by SPI DVD 2009 SPI tools and these tools are incompatible.

- Patches for SPI DVD 2008 SPIs must be installed before you start the HPOM migration process. Once a SPI DVD 2009 SPI is installed, no patches or hot-fixes pertaining to SPI DVD 2008 SPI could be installed on the HPOM server.

- To invoke the GUIs related to SPI DVD 2009 SPIs, you need to have X-windows client software on the machine from which you will launch the HPOM 9.0x server Operator GUI.

- Graph templates cannot be invoked from automatic action or operator initiated action of alerts from the HPOM 9.0x UI.

- After migration from HPOM 8.xx to HPOM 9.0x, when you run license reporting command from HPOM 9.0x, the following errors would be reported. This is an expected behavior. You can ignore this error.

ERROR: (oprel-407) License status for 'SPI Name' is: Error

Can't check license status because of missing ID mapping file.

Please install the missing component and make sure that a sufficient

number of licenses is installed.

Error: '(oprel-130) ID mapping file does not exist: (oprel-129) Can't

find ID mapping file '/opt/OV/misc/EL/registration/<SPIname>.xml' for

plug-in '<SPIname>'. '

ERROR: (oprel-407) License status for 'SPI Name remote' is: Error

Can't check license status because of missing ID mapping file.

Please install the missing component and make sure that a sufficient

number of licenses is installed.

Error: '(oprel-130) ID mapping file does not exist: (oprel-129) Can't

find ID mapping file '/opt/OV/misc/EL/registration/<SPIname>.xml'

for plug-in '<SPIname>'. '

To upgrade the previous version of SPI to the present version of SPI, perform the following tasks:

1   Upgrade the Management Server from HPOM 8.xx to HPOM 9.0x

2   Migrate the SPI DVD 2008 SPI from HPOM 8.xx to HPOM 9.0x

3   Upgrade the SPI DVD 2008 SPI to the SPI DVD 2009 SPI on HPOM 9.0x

Note: You must take the backup of the content in the `/opt/OV/<SPI Name>/bin` directory before upgrading a SPI to the new version available in SPI DVD 2009, in case you want to reuse the old content. When you upgrade the SPI to the new version, the old content in the `/opt/OV/<SPI Name>/bin` directory will be lost permanently.

For the detailed instructions on how to upgrade a SPI, see Chapter 2 of the *Installation and Configuration Guide* of the respective SPIs.

Removing a SPI

To completely remove a SPI, remove the SPI components by following the tasks:

1   Remove the SPI software from the management server, HP-UX and Solaris by running the **swremove** and **pkgrm** command respectively.

    For example,

    /usr/sbin/swremove WBSSPI

    /usr/sbin/pkgrm HPOvSpiWbs

2   Delete the message groups for the SPI.

3   Delete the user profiles for the SPI.

For SPI specific requirements and details, see Chapter 2 of the *Installation and Configuration Guide* of the respective SPIs.

To remove the SPI in an HPOM cluster environment, remove the components of the SPI from each system in the cluster following the steps 1 to 3 in this section.

Any smart plug-in installation, in addition to installing the SPI, also installs the following components common to other SPIs.

DSI2DDF or **HPOvSpiDsi2ddf** (for data collection purposes).
SUTK or HPOvSpiSutk (for SPI upgrade toolkit).
SPI-SHS-OVO or HPOvSpiShs (SPI SHS for troubleshooting SPI problems).

These components are not automatically removed whenever you remove a smart plug-in because they are common components for all SPIs. However, if you are removing all SPIs and want to remove these components, run the following commands on the management server:

```
swremove DSI2DDF


swremove SUTK


swremove SPI-SHS-OVO
```

Note: Use pkgrm command on the Solaris platform. If any SPI remains, do not remove any of the above components.

HPOM 9.0x Patches / Hotfixes

Preliminary setup: Ensure that you have all the latest patches if you use version 9.0x of the HPOM for UNIX management server and the Operations agent 8.53 and 8.60, if applicable.

Patches are located on the following URL:

http://support.openview.hp.com/selfsolve/patches

Hotfixes for HP-UX management server

SPI cumulative hotfix (file name - `QCCR1A90549.tar.Z`).

Cumulative hotfix (file names – OvSvcDiscServer.jar.Z and mof2xml.pl.Z).

Hotfixes for Agents

SPI instrumentation is not getting deployed for AIX 6.1 hotfix (file name – AgentPlatform.zip).

Make HTTPS discovery agent backward compatible to DCE discovery agent (file names – Winx86.zip, winIPF.zip, winx64.zip)

Contact HP Support to get the hotfixes.

Code Signing

SPI DVD on Windows platform is digitally code signed and hence you can verify the integrity and authenticity of the code received before installing the SPIs. Digitally signed code enables you to manage security vulnerability risk.

You may verify the signature for a binary on a need basis. To verify signature for a binary, ensure that you have an active Internet connection on each managed node and perform the following steps:

1   Select the binary. Right-click the selected binary and open the **Properties** window.

2   In the **Properties** window, select the **Digital Signatures** tab. This tab displays the certificate, indicating that the binary is signed. To view details of the certificate, select it and click the **Details** button.

3   To view the certificate, click the **View Certificate** button.

Note: Sometime, the signature verification can take few extra seconds/minutes depending on various factors such as certificate validity interval and Internet connection speed.

To disable the signature verification for any reasons, perform the following steps on each managed node:

1   From the Internet Explorer window, select the **Tools -> Internet Options -> Advanced**

2   Uncheck the option, **Check for publisher's certificate revocation**.

3   Click **OK**.

SPI Licensing

The SPI DVD includes the purchased and complimentary SPIs. Each of the purchased SPIs can be used for 60 days without a license. Within this time period, however, you should get a license or password to ensure continued, uninterrupted use of the SPI you purchase. To use the complimentary SPIs, license is not required.

Types of Licenses

There are two types of licenses available the SPIs:

*   Trial - The trial license is valid for 60 days. The trial period for the SPI license starts the first time you start the SPI.

*   Extended - You have the option of extending your trial license for an additional duration. For instructions to extend trial license, see Steps to get trial license/extended trial license.

*   Permanent - There is no expiration date for SPI with permanent license.

Steps to obtain media

*   Go to the following web site for trial copy of the software:

    https://h10078.www1.hp.com/cda/hpdc/display/main/index.jsp

*   Go to the following web site to download permanent software:

    —   SUM (Software Update Manager)

    http://support.openview.hp.com/software_updates.jsp

    SUM is also accessible through the ITRC (IT Resource Center)

    http://www.itrc.hp.com/

    Visit the tutorial for SUM registration, login, etc.:

    http://support.openview.hp.com/pdf/sso/index.html

    —   BTO Software Download Center

- To get Physical Media

  Contact HP Software sales representative (contract administrators)

Steps to Get License Key

To get a license for the SPI, you can use the Operations Manager Obtain License tool. When you launch the tool, you will see that you can choose from three methods to get the required license or password:

- Method #1 - Retrieve/Install License Key: If you have an Internet connection from the HPOM console, you can directly access license or password key information. In addition, information about the server you are using is automatically detected (unless you are connecting to the Internet through a proxy server, in which case, you will have to enter the proxy server IP address).

- Method #2 - Install/Restore License Key from file: If you do not have an Internet connection from the HPOM console, use this method, where you get the license or password from another system and save in a file on the system on which you are installing the SPI. You store the information gained from the support hot line in a file on the HPOM console and import it during the procedure.

- Method #3: - Request License Key through email/ fax: If you prefer, you can send an email or a fax with your order number and retrieve license or password information in that way.

Retrieving and Installing a License

Note: To invoke the GUI related to the `ovolicense` command, you must install X-Windows client software on the system.

Prerequisite for all methods: The License Entitlement Certificate, included with the purchased Smart Plug-in (the License Entitlement Certificate contains the unique Product Order Number).

For all methods, you can use the ovolicense command. Refer to the HP Operations Manager for UNIX documentation for more details on the command.

When you finish the process, an email confirmation containing the Permanent Password Certificate will be sent to you for your records. (The certificate shows product information as well as the password or license you have been issued.) Depending on the method you use, the password can be automatically installed on your system.

Get License from the Web

Prerequisite: The License Entitlement Certificate, included with the purchased Smart Plug-in (the License Entitlement Certificate contains the unique Product Order Number).

4   Browse to the URL, **https:\\www.webware.hp.com**.

2   Select the **Generate New licenses** button.

3   In the Generate license(s) page, enter the order number for your SPI (as it appears in the License Entitlement Certificate included with the product), in the Order Number text box.

4   Click **Next**.

5   In the page that appears, select the check box next to the appropriate product name and click **Next**.

6   In the page that appears showing your product number, name, version, enter the following information:

   a   Number of LTUs: number of SPI licenses you require.

    b   IP Address: Input the IP address for the machine that will be running the license server.

    c   Platform: Input the operating system that will be running on the computer managing the licenses for your application.

7   Click **Next**.

8   In the member login page enter your mail address, then your existing or first-time password or password verification, and click Sign-in.

9   In the address information page, enter information as required and click **Next**.

10 In the permanent password certificates page above the certificate, click the text: Save password file for `<product_number>`.

Locations for certificates and passwords: The location of a stored certificate is in a file titled .dat.asp. In addition, the Permanent Password Certificate can also be mailed to a mail address. Note that the default location for the installed license key is: `/var/opt/OV/shared/server/OprEl/AutoPass/LicFile.txt.`

Steps to get trial license/extended trial license

Temporary license keys are granted for evaluation purposes only. As a general rule, temporary evaluation license keys cannot be granted for non-evaluation purposes.

1   Obtain an approved product evaluation request from your Sales Representative.

2   Email your approval along with the details below to the email ID based on your region:

Customer name:

Customer contact name:

Product Name:

Product version:

Number of days of trial/extension required:

- For APJ Region: asia_password@cnd.hp.com

- For Americas Region: EvalkeyRequest_AMER@hp.com

- For EMEA Region: europe_password@cnd.hp.com

Individual SPI License Information

With this release of SPI DVD, SPIs follow the new instance-based licensing in place of previously available tier-based licensing. The following types of LTUs are available in the new licensing scheme.

- Application instance advanced (A) software license

- Application instance advanced non production development (A NP DV) software license

- Application instance advanced non production fail over (A NP FO) software license

- Application target connector software license: to monitor remote applications with SPI, you must have a SPI Target Connector LTUs for the nodes.

Note: TIBCO SPI has not been refreshed in SPI DVD 2009, however, it adheres to the new instance-based licensing.

The following table indicates licenses required for individual SPIs.

Product	License Number	License Description
HP Operations Smart Plug-in for JBoss Application Server	TB110AA/TB110AAE	HP Ops SPI JBoss AS Inst A SW LTU/ E-LTU
	TB111AA/TB111AAE	HP Ops SPI JBoss AS Inst A NP FO SW LTU/ E-LTU
	TB112AA/TB112AAE	HP Ops SPI JBoss AS Inst A NP DV SW LTU/ E-LTU
	TB628AA/TB628AAE	HP Ops Target Connector JBoss AS Inst SW LTU/ E-LTU
HP Operations Smart Plug-in for Microsoft Active Directory	TB080AA/TB080AAE	HP Ops SPI Active Dir Inst A SW LTU/ E-LTU
	TB081AA/TB081AAE	HP Ops SPI Active Dr Inst A NP FO SW LTU/ E-LTU
	TB082AA/TB082AAE	HP Ops SPI Active Dr Inst A NP DV SW LTU/ E-LTU
HP Operations Smart Plug-in for Oracle	TB059AA/TB059AAE	HP Ops SPI Oracle DB Inst A SW LTU/ E-LTU
	TB060AA/TB060AAE	HP Ops SPI Oracle DB Inst A NP DV SW LTU/ E-LTU
	TB061AA/TB061AAE	HP Ops SPI Oracle DB Inst A NP FO SW LTU/ E-LTU
	BB169ZA/BB169ZAE	HP Ops Target Connector Oracle DB SW LTU/ E-LTU
HP Operations Smart Plug-in for Microsoft SQL Server	TB062AA/TB059AAE	HP Ops SPI SQL Sv Inst A SW LTU/ E-LTU
	TB063AA/TB060AAE	HP Ops SPI SQL Sv Inst A NP FO SW LTU/ E-LTU
	TB064AA/TB061AAE	HP Ops SPI SQL Sv DB Inst A NP DV SW LTU/ E-LTU
HP Operations Smart Plug-in for Sybase	TB065AA/TB065AAE	HP Ops SPI Sybase Inst A SW LTU/ E-LTU
	TB066AA/TB066AAE	HP Ops SPI Sybase Inst A NP FO SW LTU/ E-LTU
	TB067AA/TB067AAE	HP Ops SPI Sybase Inst A NP DV SW LTU/ E-LTU
	BB170ZA/BB170ZAE	HP Ops Target Connector Sybase DB SW LTU/ E-LTU
HP Operations Smart Plug-in for	TB068AA/TB068AAE	HP Ops SPI Informix Inst A SW

Informix		LTU/ E-LTU
	TB069AA/TB069AAE	HP Ops SPI Informix Inst A NP FO SW LTU/ E-LTU
	TB070AA/TB070AAE	HP Ops SPI Informix Inst A NP DV SW LTU/ E-LTU
	BB171ZA/BB171ZAE	HP Ops Target Connector Informix DB SW LTU/ E-LTU
HP Operations Smart Plug-in for Microsoft Exchange Server	TB083AA/TB083AAE	HP Ops SPI Exchange Inst A SW LTU/ E-LTU
	TB084AA/TB084AAE	HP Ops SPI Exchange Inst A NP FO SW LTU/ E-LTU
	TB085AA/TB085AAE	HP Ops SPI Exchange Inst A NP DV SW LTU/ E-LTU
HP Operations Smart Plug-in for SAP	TB071AA/TB071AAE	HP Ops SPI for SAP Inst A SW LTU/ E-LTU
	TB072AA/TB073AAE	HP Ops SPI for SAP Inst A NP FO SW LTU/ E-LTU
	TB073AA/TB073AAE	HP Ops SPI for SAP Inst A NP DV SW LTU/ E-LTU
	BB176ZA/BB176ZAE	HP Ops Target Connector SAP SW LTU/ E-LTU
HP Operations Smart Plug-in for WebSphere Application Server	TB077AA/TB077AAE	HP Ops SPI WebSphere AS Inst A SW LTU/ E-LTU
	TB078AA/TB078AAE	HP Ops SPI WebSphere Inst A NP FO SW LTU/ E-LTU
	TB079AA/TB079AAE	HP Ops SPI WebSphere Inst A NP DV SW LTU/ E-LTU
	BB173ZA/BB173ZAE	HP Ops Target Connector WebSphere AS SW LTU/ E-LTU
HP Operations Smart Plug-in for Oracle Application Server	TB092AA/TB092AAE	HP Ops SPI Oracle AS Inst A SW LTU/ E-LTU
	TB093AA/TB093AAE	HP Ops SPI Oracle AS Inst A NP FO SW LTU/E-LTU
	TB094AA/TB094AAE	HP Ops SPI Oracle AS Inst A NP DV SW LTU/ E-LTU
	BB174ZA/ B174ZAE	HP Ops Target Connector Oracle AS SW LTU/ E-LTU
HP Operations Smart Plug- BEA WebLogic Server	TB074AA/TB074AAE	HP Ops SPI Weblogic AS Inst A SW LTU/ E-LTU
	TB075AA/TB075AAE	HP Ops SPI Weblogic Inst A NP FO SW LTU/ E-LTU
	TB076AA/TB076AAE	HP Ops SPI Weblogic Inst A NP DV

		SW LTU/ E-LTU
	BB172ZA/BB172ZAE	HP Ops Target Connector Weblogic AS SW LTU/ E-LTU
HP Operations Smart Plug-in for TIBCO	TB086AA/TB086AAE	HP Ops SPI TIBCO Inst A SW LTU/ E-LTU
	TB087AA/TB087AAE	HP Ops SPI TIBCO Inst A NP FO SW LTU/ E-LTU
	TB088AA/TB088AAE	HP Ops SPI TIBCO Inst A NP DV SW LTU/ E-LTU
HP Operations Smart Plug-in for HP Storage Essentials SRM	N/A	Complimentary, no license required
HP Operations Integration for HP Systems Insight Manager	N/A	Complimentary, no license required
HP Operations Smart Plug-in for Web Servers	N/A	Complimentary, no license required
HP OpenView Add-on Modules:		
HP OpenView Service Navigator Report Package	N/A	License included with purchase of Reporter.

The following SPIs adhere to the tier-based licensing till the time this document is written:

HP Operations Smart Plug-in for BEA Tuxedo	B9152AA	HPOM SPI BEA Tuxedo Tier 4, LTU
	B7476AA	HPOM SPI BEA Tuxedo Tier 3, LTU
	B7477AA	HPOM SPI BEA Tuxedo Tier 2, LTU
	B7478AA	HPOM SPI BEA Tuxedo Tier 1, LTU
	B7479AA	HPOM SPI BEA Tuxedo Tier 0, LTU
HP Operations Smart Plug-in for IBM DB2	BA180AA	HPOM SPI IBM DB2 Tier 4, LTU
	BA181AA	HPOM SPI IBM DB2 Tier 3, LTU
	BA182AA	HPOM SPI IBM DB2 Tier 2, LTU
	BA183AA	HPOM SPI IBM DB2 Tier 1, LTU
	BA184AA	HPOM SPI IBM DB2 Tier 0, LTU
HP Operations Smart Plug-in for PeopleSoft	B9147AA	HPOM SPI PeopleSoft Tier 4, LTU
	B7452AA	HPOM SPI PeopleSoft Tier 3, LTU
	B7453AA	HPOM SPI PeopleSoft Tier 2, LTU
	B7454AA	HPOM SPI PeopleSoft Tier 1, LTU

	B7455AA	HPOM SPI PeopleSoft Tier 0, LTU
HP Operations Smart Plug-in for Remedy ARS	B7480AA	HPOM SPI Remedy, LTU

Known Problems, Limitations, and Workarounds

- SPI DVD 2009 SPI does not work as expected if the migration from HPOM 8.xx to HPOM 9.0x is done after installing the SPI DVD 2009 SPI on HPOM 9.0x.

    — You must complete the migration process from HPOM 8.xx to HPOM 9.0x before upgrading a SPI DVD 2008 SPI to SPI DVD 2009 SPI. SPI DVD 2009 SPI does not work as expected if the migration from HPOM 8.xx to HPOM 9.0x is done after installing SPI DVD 2009 SPI on HPOM 9.0x.

Refer to the Upgrading a SPI section to view the limitations before proceeding with the SPI upgrade procedure.

- **Limitation**: The License report for some of the SPIs does not return the correct number of licenses. This does not affect the SPI functionality.

- Instrumentation is not deployed properly on the Microsoft Windows x86, x64, IA 64; Linux x86, x64, IA 64; AIX 6.1 nodes.

    — Perform the following steps to resolve the instrumentation issue.

    1 Apply a hotfix on the HP-UX management server. Refer to the CR, QCCR1A90549 or contact HP Support to get the hotfix.
    2 Run the following command on the management server:
       `ovdeploy -cmd ovodetect -host <node name>`
    3 Additional Agent hotfixes:
        a) **AIX 6.1 nodes**: Additionally, apply an agent hotfix. Refer to the CR, QCCR1A95157 or contact HP Support to get the hotfix.
        b) **Windows IA 64 nodes**: Refer to the CR, QCCR1A99773 and follow the workaround mentioned in the CR to fix the issue.
        c) **Windows x86, x64 and Linux x86, x64 nodes**: No additional hotfix or workaround.
    4 Redeploy the instrumentation.

- SPI-specific issues:
  See the individual product documentation for more information about known problems and workarounds.

Local Language Support

The SPI installers obtain the HPOM for UNIX locale from the ctrl.env namespace before proceeding with the SPI installation. Verify if the namespace has been set using the following command:

```
# /opt/OV/bin/ovconfget ctrl.env LANG
```

If the ctrl.env namespace is not set by the HPOM, run the following command on the HPOM Server before starting the SPI installation:

```
# ovconfchg -ns ctrl.env -set LANG <HPOM locale>
```

where *<HPOM locale>* could be C, ja_JP, ko_KR, or zh_CN

Example: ovconfchg -ns ctrl.env -set LANG ja_JP

Depending on the *<HPOM locale>* value, the LANG variable in the ctrl.env namespace will be set to C.utf8, ja_JP.utf8, ko_KR.utf8, or zh_CN.utf8.

Support

You can visit the HP Software Support web site at:
http://www.hp.com/go/hpsoftwaresupport

This web site provides contact information and details about the products, services, and support that HP offers.

HP Software online software support provides customer self-solve capabilities. It provides a fast and efficient way to access interactive technical support tools needed to manage your business. As a valued support customer, you can benefit by being able to do the following:

- Search for knowledge documents of interest

- Submit and track progress on support cases

- Submit enhancement requests online

- Download software patches

- Manage a support contract

- Look up HP support contacts

- Review information about available services

- Enter discussions with other software customers

- Research and register for software training

NOTE: Most of the support areas require that you register as an HP Passport user and sign in. Many also require an active support contract. To find more information about support access levels, go to the following URL:
http://www.hp.com/managementsoftware/access_level

To register for an HP Passport ID, go to the following URL:
http://www.managementsoftware.hp.com/passport-registration.html

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