

HP Operations Smart Plug-ins DVD

for use with OVO for Windows 7.50 and HPOM for Windows 8.00

Installation and Upgrade Guide

Manufacturing Part Number: B7491-90093

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1 The Smart Plug-ins DVD

The *HP Operations Smart Plug-ins DVD* contains a collection of HP Operations Smart Plug-ins (**SPIs**) and complimentary components. The products on this DVD work in conjunction with OpenView Operations (**OVO**) for Windows 7.50 or HP Operations Manager (**HPOM**) 8.00.

Typical environments for SPI installation

HPOM and OVO provide the scalable feature of monitoring enterprise application servers. SPIs are part of this scalable architecture, allowing for monitoring specific application servers. The *HP Operations Smart Plug-ins DVD* contains all the Smart Plug-ins. Customers can select SPIs from the DVD to install on servers managed by HPOM or OVO.

Standard Installation of SPI components on an OVO 7.50 server

OVPMLite and ReporterLite are installed by default on an OVO 7.50 server, thereby enabling the customer to view graphs and reports. When *HP Operations Smart Plug-Ins DVD* is launched on an OVO 7.50 server, all the components of the SPI are enabled. However, the Reports checkbox for selecting to install the SPI's reporter package, will be enabled only if the Reporter service is running on that machine.

Standard installation of SPI components on an HPOM 8.00 server

An HPOM 8.00 server does not have the OVPMLite and ReporterLite installed by default. Only the full versions of these products are available for install. As a result, through the *HP Operations Smart Plug-Ins DVD* we can select to install only the SPI packages and not the reporter and graphing packages. However, if the full version of Reporter or Performance Manager is installed on the same machine, then the corresponding packages can be installed or uninstalled on the HPOM 8.00 server.

Standard installation on remote consoles

All the Remote Console packages on the SPI DVD are installed at once on to remote consoles. No option is provided to select a particular remote console package.

Standalone HP Reporter or HP Performance Manager (HP PM)

For such a machine only the corresponding package of any SPI is enabled and available for selection from the *HP Operations Smart Plug-Ins DVD*. For example, if a system has only HP Reporter installed then the reporter package of any SPI could be installed on it. The same applies to the graphing package and HP PM.

SPI components

Most of the SPI's have the following four components:

1. SPI Package

This is the core .msi package which contains all the SPI functionality. It must be installed on a server managed by HPOM or OVO. The SPIs comprise of Policies and instrumentation (binaries or scripts) which monitor the application server. Monitoring comprises of alarms related to critical events of the application, and logging important performance metrics of the application server. The metrics that are logged can be used to create graphs and reports.

2. Graphing Package

This package contains the default graphing templates provided by the SPI. Graphs are drawn from metrics that are collected in the datasources created by the SPI.

3. Reporter Package

This package contains the default reporter templates provided by the SPI. These templates are static and cannot be modified unless Crystal Reports 9.0 or later is installed. The Reporter gathers the data from the nodes managed by the SPI through the HPOM or OVO server, stores it in its local database, and then creates .html reports based on the default SPI report templates.

4. Console Package:

This package contains SPI utilities that need to be installed on a server running as Console. To enable a remote console so that users can run *Tools*, SPI utilities must be installed on it.

SPIs and Licensing

The Core SPIs—the Windows OS SPI and the UNIX OS SPI— are required for the collection of system data, so they are installed automatically and are complimentary. Other products on the DVD you can select, install, and evaluate. Permanent use of all but the complimentary SPIs requires you to obtain a license from Hewlett-Packard. For license information see [SPI Licensing and Passwords](#) on page 52.

Which applications can be managed by SPIs

The Smart Plug-ins contained on the DVD work with OVO or HPOM for Windows to help you manage:

- BEA WebLogic Server
- BEA Tuxedo
- IBM DB2
- IBM WebSphere Application Server
- Informix
- JMX Metric Builder
- Microsoft Active Directory
- Microsoft Enterprise Servers
- Microsoft Exchange Server
- Microsoft SQL Server
- Microsoft Virtual Server
- NDAOM
- Oracle
- Oracle Application Server (OAS)
- PeopleSoft
- Remedy
- Storage Area Manager
- SAP
- HP Storage Essentials
- HP Systems Insight Manager
- Insight Management Agents
- Sybase
- Web Servers
- Linux OS, UNIX OS and Windows OS
- HP Operations Manager Reports.

Product Versions

The table below lists each SPI with version number; the section that follows offers a brief description of each SPI.

Table 1 Product List with Versions

Product	Version
HP Operations Smart Plug-in for Microsoft Active Directory	5.10
HP Operations Smart Plug-in for Microsoft Enterprise Servers	6.10
HP Operations Smart Plug-in for Microsoft Exchange Server	11.30
HP Operations Smart Plug-in for Microsoft Virtual Server	1.30
HP Operations Smart Plug-in for BEA Tuxedo	4.10
HP Operations Smart Plug-in for BEA WebLogic Server (including JMX Metric Builder)	5.10
HP Operations Smart Plug-in for Databases (Oracle, Microsoft SQL Server, Sybase, and Informix)	11.10
HP Operations Smart Plug-in for IBM DB2	3.30
HP Operations Smart Plug-in for IBM WebSphere Application Server (including JMX Metric Builder)	5.10
HP Operations Smart Plug-in for Oracle Application Server	5.10
HP Operations Smart Plug-in for PeopleSoft	2.70
HP Operations Smart Plug-in for Remedy	2.90
HP Operations Smart Plug-in for SAP	10.50

Table 1 Product List with Versions

Product	Version
Complimentary modules	
HP Operations Smart Plug-in for Storage Area Manager	3.30
HP Operations Smart Plug-in for HP Storage Essentials	1.30
Integration for HP Systems Insight Manager	1.30
HP Operations Smart Plug-in for Web Servers	5.10
HP Operations Network Diagnosis Add-on Module	2.30
HP Operations Manager Reports for Windows	9.10
Core SPIs (complimentary)	
HP Operations Smart Plug-in for Microsoft Windows OS	9.10
HP Operations Smart Plug-in for UNIX OS	4.10

Product Descriptions

- **HP Operations Smart Plug-in for Microsoft Active Directory (Microsoft Active Directory SPI)**

The Microsoft Active Directory SPI adds master operations, replication, DNS, DIT, and Active Directory response time monitoring capabilities to OVO or HPOM for Windows. The Microsoft Active Directory SPI also includes a tool, the HP Operations Topology Viewer, that generates a map showing replication connections among Active Directory sites or domain controllers. In addition to the map, the Topology Viewer also provides a hierarchical rendering of Active Directory components.

By using the Microsoft Active Directory SPI, you stay informed of Active Directory-related conditions as follows:

- Data is consistent across all domain controllers and replication is completing successfully in a timely manner.
- Systems are able to cope with outages.
- All role masters are running and domain controllers are not contending with over-used CPUs.
- Active Directory is not experiencing capacity and fault-tolerance issues.

- **HP Operations Smart Plug-in for Microsoft Enterprise Servers (Microsoft Enterprise Servers SPI)**

The Microsoft Enterprise Servers SPI provides preconfigured policies for managing the operations and performance of Microsoft enterprise servers on your Windows nodes and offers these features:

- Topology or service mapping
- Service monitoring
- Measurement threshold monitoring
- Event monitoring

The Microsoft Enterprise Servers SPI monitors the following servers:

- Application Center Server
- BizTalk Server
- Commerce Server

- Content Management Server
- Internet Security and Acceleration Server
- SharePoint Portal Server.

- **HP Operations Smart Plug-in for Microsoft Exchange Server (Microsoft Exchange SPI)**

With OVO for Windows 7.50 and HPOM for Windows 8.00, the Microsoft Exchange SPI extends management capability to Microsoft Exchange Server versions 2007, 2003 and 2000.

Management capabilities are also extended to include Exchange 2007, 2003 and 2000 Virtual servers when Exchange is installed into Microsoft Cluster Service. The Microsoft Exchange SPI provides for service level performance monitoring and reporting for all Exchange Server functional areas. The SPI's features include:

- Performance, Usage, and Availability of Information Stores
- Transaction Log monitoring for size and back up
- SLA Message Delivery Monitor and Reporting
- Top Users of Messaging and Storage
- Message Traffic Analysis
- Queue monitoring, delivery time, and usage trends of the Messaging System
- Directory Access and Client Access Performance management
- Process and Service Monitoring, Event Forwarding
- Knowledge filled alarms with trouble-shooting links into Microsoft's knowledge base
- SRS, Virus Scan, Chat, Instant Messaging, and Conferencing Activity.

- **HP Operations Smart Plug-in for Microsoft Virtual Server (Microsoft Virtual Server SPI)**

The Microsoft Virtual Server SPI extends the management scope of HP Operations Manager to include the virtual computer environment of Microsoft Virtual Server 2005. The SPI provides the following features:

- Automatic service discovery and deployment based on discovered services. Virtual resources, such as virtual machines, virtual disks and virtual networks, can be discovered and then monitored.
- Monitoring the CPU utilization and availability of the virtual server service on the host server.
- Monitoring service level performance and reporting that covers all virtual machines in the managed Virtual Server environment. Resource monitoring or reporting includes the following:
 - CPU utilization
 - Disk usage and throughputs
 - Network utilization
 - Memory utilization
- Automatic notification of any change in the state of the power or configuration of the virtual machines.
- Tools to assist administration of the Virtual Server. Host tools assist in configuring the virtual server and guest tools help in the administration of virtual machines.

- **HP Operations Smart Plug-in for BEA Tuxedo (Tuxedo SPI)**

The Tuxedo SPI works in conjunction with OVO or HPOM to provide centralized management of distributed BEA Tuxedo systems and applications.

The SPI provides support for:

- monitoring BEA Tuxedo system events
- monitoring Tuxedo system central event user log (ULOG)
- monitoring critical server performance metrics
- starting and stopping the administration servers in the Tuxedo domain
- starting and stopping the application servers in the Tuxedo domain

- viewing the servers and services in the Tuxedo domain
- viewing the transactions (set of operations that act as a logical unit) in the Tuxedo domain
- viewing the Tuxedo configuration file (TUXCONFIG) for the Tuxedo domain
- compressing or deleting outdated ULOG files
- administering the Tuxedo server.
- **HP Operations Smart Plug-in for BEA WebLogic Server (WebLogic SPI)**

The WebLogic SPI integrates BEA WebLogic Server into any IT environments managed by the HP Operations Manager family of products. The WebLogic SPI monitors the following areas:

- Server performance and availability
- Transaction throughput, rollback
- Servlet response time, time-outs, request rates
- JDBC throughput and connection utilization
- Web application processing and exception counts of scheduled WebLogic Server actions
- Java message service processing
- Cluster processing
- User-definable metrics to extend monitoring for the performance of any custom applications that expose MBean management data via JMX.
- **HP Operations JMX Metric Builder (JMB)**

The JMX Metric Builder (JMB) is included as part of the IBM WebSphere and BEA WebLogic SPI solutions. This application allows you to define your own metrics (User Defined Metrics - UDMs) that gather data from application MBeans registered in a WebLogic or WebSphere MBean server. The UDMs generate data about your applications that is collected and then monitored by OVO or HPOM. Specifically, you can use the JMB for the following:

- to browse MBeans registered in a WebLogic or WebSphere MBean server.

- to create user defined metrics that conform to the metric definitions DTD
- to edit a UDM file by mapping MBeans to UDMs
- to validate metric IDs.
- **DATABASE SPI (DB SPI):**
 - **Smart Plug-in for Informix (Informix SPI)**

The DB SPI helps administrators manage Informix environments of any size, from a single Informix database managed with local tools to a distributed environment of hundreds of databases managed from a central, best-in-class console. Additional features of this SPI include:

More than 45 pre-defined threshold events and over 150 logfile conditions

Areas of focus include space management, transaction management, and memory metrics

Interception of error log messages such as panics, chunk down, and lock table overflow
 - **Smart Plug-in for Microsoft SQL Server (Microsoft SQL Server SPI)**

The DB SPI helps administrators efficiently manage Microsoft SQL Server environments of any size, from a single SQL Server database managed with local tools to a distributed environment of hundreds of databases managed from a central, best-in-class console.

The key features include:

More than 50 pre-defined threshold events and several logfile conditions

Specific focus on space management, concurrency problems, and workload metrics

Interception of hundreds of error log messages such as corruptions and space shortages.
 - **Smart Plug-in for Oracle (Oracle SPI)**

The DB SPI helps administrators efficiently monitor distributed enterprise-wide Oracle environments from a central, best-in-class console. The key features include:

More than 100 pre-defined threshold events and over than 100 logfile conditions

Specific areas of focus on space management, table or index performance, and rollback segments

Snapshot reports of database environments when alerts occur

Thresholds based on ratios and percentages rather than raw data

Continuous availability monitoring of the Oracle listener - a single point of failure

This version of DB SPI can collect messages from Oracle Enterprise Manager 10g.

— **Smart Plug-in for Sybase (Sybase SPI)**

The DB SPI helps administrators efficiently manage Sybase environments of any size, from a single Sybase database managed with local tools to a distributed environment of hundreds of databases managed from a central, best-in-class console. The key features include:

More than 65 predefined threshold events and more than 15 log file conditions

Focus on replication, index tuning, and resource hogs

Interception of over 1,000 error log messages such as corruptions and space shortages.

• **HP Operations Smart Plug-in for IBM DB2 (DB2 SPI)**

The DB2 SPI provides centralized proactive monitoring and management of enterprise-wide DB2 databases from a central best-in-class console. Key features include:

— 100 pre-defined thresholds to monitor key performance and activity areas at application, database, instance, and tablespace levels

— monitoring of db2diag and Administration Notification Log files

— monitoring of database status, tablespace usage, and key DB2 processes

— ability to define metrics as desired

— snapshot reports showing data at drill-down application levels, available as both alert-generated or user-generated

- pre-defined graphs that can be generated with the Operations Manager Performance graphing tool to graphically represent areas like buffer pools, locks and deadlocks, agents and applications, and connections
 - integration with Operations Manager service map to visually represent databases or instances, color-coded to show service availability and performance
 - integration with Operations Manager Reporter to provide management-ready reports on availability, workload and space utilization.
- **HP Operations Smart Plug-in for IBM WebSphere Application Server (WebSphere SPI)**

The WebSphere SPI offers centralized tools that help you monitor and manage systems using IBM WebSphere Application Server. The WebSphere SPI monitors the following areas:

- Server performance, availability and memory usage
- Transaction rates
- Servlet response time, time-outs and request rates
- Enterprise Java Bean resource utilization
- JDBC throughput and connection utilization
- Web applications.

- **HP Operations Smart Plug-in for Oracle Application Server (Oracle AS SPI)**

The Oracle AS SPI offers centralized tools that help you monitor and manage systems using the Oracle Application Server. The Oracle AS SPI monitors:

- Server availability
- Server performance
- JVM memory usage
- EJB client and method wrapper active threads, execution times, and calls processed
- Servlet execution times and threads
- JSP service time and active requests
- Java Message Service connections and messages
- JDBC connection status
- Web application processing and open sessions
- HTTP server active connections and processed data

- **HP Operations Smart Plug-in for PeopleSoft (PeopleSoft SPI)**

The PeopleSoft SPI is based on standard HP Operations Manager processes and is an extension of the Operations Manager platform. It helps IT organizations with PeopleSoft environments to efficiently manage database availability and performance impact of PeopleSoft environments. The key features include:

- Encompassing of PeopleSoft, BEA Tuxedo, database and process scheduler
- Dynamic monitoring of logfiles for the complete environment
- Batch job status information includes failures or delays
- Manages database availability and performance impact on PeopleSoft

- **HP Operations Smart Plug-in for Remedy Action Request System Integration (Remedy SPI)**

The Remedy SPI Action Request System (ARS) provides IT organizations with a pre-configured smart link between Operations Manager and Remedy ARS service desk. Additional SPI for Remedy ARS features include:

- the ability to automatically create and track Remedy Action Requests from HP Operations Manager
- dynamic updates of HP Operations Manager events based on Action Request status changes.

- **HP Operations Smart Plug-in for SAP (SPI for SAP)**

The SPI for SAP extends HP Operations Manager management capabilities to help you manage all IT elements necessary for delivering R/3 services; for example, R/3 programs, application servers, databases and their servers, and operating systems. In addition, the SPI for SAP can help you manage a variety of business-critical applications as well as the overall IT environment. Unlike a product that is specialized for R/3-only management, the SPI for SAP, working in conjunction with OVO or HPOM for Windows, offers a more feature rich set of IT systems management capabilities that include:

- Availability Management: monitors alerts from CCMS, Syslogs, batch jobs, processes, files, R/3 status, amongst others.
- Performance management: a consolidated view of SAP R/3 performance information and overall system-resource characteristics, including: frequency, response, and wait time for Dialog, Update, Batch, and Spool processes
- Remote monitoring: ability to monitor SAP systems running in unsupported environments
- SAP ITS (Internet Transaction Server) monitoring: checks the status and availability of the various components of the ITS server, including; AGate, WGate, and Web Server
- Service Reports: reports that correlate and display long-term data about your IT environment, allowing you to analyze trends.

Complimentary SPIs

- **HP Operations Smart Plug-in for Storage Area Manager (SAM SPI) - *complimentary***

The SAM SPI monitors storage area events, processes and services, and provides features that include the following:

- event forwarding from Storage Area Manager into OVO or HPOM and bi-directional event acknowledgement
- monitoring of Storage Area Manager Management Server, Bridge and Embedded DB services
- monitoring of HostAgent and OpenDial services and processes on Windows and UNIX nodes
- service discovery of Storage Area Manager Services and Storage Links
- applications to start or stop and get the status of the Management Server, Bridge, Embedded DB, HostAgent, OpenDial services or processes. All of these provide a quick and easy means to complete common Storage Area Manager operating tasks.

- **HP Operations Smart Plug-in for HP Storage Essentials (HP Storage Essentials SPI) - *complimentary***

The HP Storage Essentials SPI monitors the Storage Essentials services and provides the following features:

- Service discovery or mapping of the Storage Essentials management server and it's managed hosts
- Monitoring of SE service and processes on both the SE management server and it's managed hosts
- Tools to start or stop or monitor the status of SE management server and host agent processes.

- **Integration for HP Systems Insight Manager (HP SIM Integration) - *complimentary***

The HP SIM Integration provides a smart link between Operations Manager and HP SIM management servers. It also provides extended features for monitoring nodes with Insight Management Agent software (HP ProLiant servers). The integration can be installed in environments consisting of multiple HP SIM management servers and Insight Management Agent nodes, and monitors and manages the functionality of HP SIM and IM hosts in the following ways:

- Autodiscovery of HPSIM Central Management Server and Insight Manager Agents
- Event Forwarding from HPSIM into OVO or HPOM and bi-directional event acknowledgement
- Monitoring of HPSIM services
- Service Map of HPSIM and IM Agents
- Tools to start or stop or monitor the status of HPSIM services, launch IM System Homepage, and many more.
- Operator-Initiated Event Action - in-context launch of HPSIM web gui.

- **HP Operations Smart Plug-in for Web Servers (Web Servers SPI) - *complimentary***

The Web Servers SPI is designed to monitor and manage web servers. It provides preconfigured policies to monitor processes, log files, and performance of web servers. For management capabilities, the SPI provides tools. The following web servers are currently supported by the SPI:

- Apache from Apache Software Foundation (ASF) and HP Apache
- SunONE

- **HP Operations Network Diagnosis Add-On Module (NDAOM) - *complimentary***

NDAOM integrates the business aspect of a distributed application with its networking aspect. It provides detailed information on network performance and how this performance affects the services. NDAOM uses the following sources of data to monitor network performance:

- Problem Diagnosis probe which gathers data about the network link between two nodes. Data is retrieved from the performance port of the probe.
- HP Software Embedded Performance Component.

- **HP Operations Manager Reports for Windows - *complimentary***

The HP Operations Manager Reports for Windows package provides Event and Service reports on systems managed by HPOM for Windows 8.00.

You must install this package on an HPOM 8.00 system with Reporter 3.80, or on a Reporter 3.80 system with the system DSN configured to point to the 'openview' database of the HPOM 8.00 Management Server. During SPI DVD install, if the checkbox is disabled, check your system for the HP Reporter version.

The Reports functionality correlates the data extracted from HPOM for Windows or HP Operations Manager Agent, and generates reports which display short-, medium-, or long-term views of your IT environment. Service Reports supplement the detailed, real-time graphs.

The combination of reports and graphs is a powerful tool for trend analysis, enabling, for example, the following tasks:

- Identify potential bottlenecks in your IT system, so that you can take actions before problems become acute
- Use the information presented in the reports to help you to make accurate predictions for future upgrades
- Collect accurate information to use in measuring service levels.

CORE SPIs:

- **HP Operations Smart Plug-in for Microsoft Windows OS (Windows OS SPI) - *complimentary***

The Windows OS SPI helps administrators efficiently manage Windows machines on the network and is the HPOM extension for a number of Microsoft DNA-based business applications services. It adds value by providing out-of-the-box solutions including:

- Monitoring of events and processes for key Microsoft back office applications (Certificate Server, Cluster Server, Microsoft Indexing service, Message Queue Server, System Management Server, and Microsoft Distributed Transaction Coordinator)
- Monitoring of events, processes and performance for Microsoft Windows core components (Terminal Server, Network Infrastructure and Operating System health)
- Monitoring of events, processes and performance for Microsoft Internet Information Server
- HP Operations Manager for Windows integration with Microsoft Operations Manager.

- **HP Operations Smart Plug-in for UNIX OS (UNIX OS SPI) - *complimentary***

The UNIX OS SPI has capabilities that include:

- Monitoring system health for HP-UX, Sun Solaris, IBM AIX, and Linux (Red Hat, Suse, Debian, TurboLinux), and Tru64 environments
- Providing out-of-the-box monitoring for hardware components, services, and performance monitoring (also supports Veritas Volume Manager and Solstice Disk Suite)
- The ability to configure Performance Agent alarms with Operations Manager policies
- The ability to discover and monitor Sun cluster nodes, shared devices, resource groups, quorum devices, NAFO groups, and private interconnects for the sun cluster nodes
- The ability to monitor Veritas Cluster server resources and events

Software Support for Non-English Environments

Smart Plug-ins for OVO and HPOM for Windows have varying internationalization support levels: some can be installed, configured, and run on various non-English systems where OVO or HPOM for Windows is supported, while others run only under English.

For SPIs with reports, some reports are localized but many are only available in English.

Refer to the table that follows for details.

Internationalization and Native Language Support

Table 2 Internationalization and Native Language Support

Smart Plug-in for	Policy Support	OM Reporter Support
Microsoft Active Directory	<p>English policies for English version. Japanese localized policies for Japanese version.</p> <p>Runs in non-English environments where OVO or HPOM for Windows is supported.</p>	<p>English reports for English version. Japanese localized reports for Japanese version.</p> <p>Reports in English but modified for S-Chinese and Korean systems.</p>
Microsoft Enterprise Servers	<p>English policies only. Runs in non-English environments where OVO or HPOM for Windows is supported.</p>	<p>English reports only</p>
Microsoft Exchange Server	<p>English policies for English version. Japanese localized policies for Japanese version.</p> <p>Runs in non-English environments where OVO or HPOM for Windows is supported.</p>	<p>English reports for English version. Japanese localized reports for Japanese version.</p> <p>Reports in English but modified for S-Chinese and Korean systems.</p>
Microsoft Virtual Server	<p>English policies only. Runs in non-English environments where OVO or HPOM for Windows is supported.</p>	<p>English reports only</p>

Table 2 Internationalization and Native Language Support (cont'd)

Smart Plug-in for	Policy Support	OM Reporter Support
BEA Tuxedo	English policies only. Runs in non-English environments where OVO or HPOM for Windows is supported.	N/A - no reports
BEA WebLogic Server	English policies only. Runs in non-English environments where OVO or HPOM for Windows is supported.	English reports only
Database SPI: Oracle	English policies for English version. Japanese localized policies for Japanese version. Runs in non-English environments where OVO or HPOM for Windows is supported.	English reports for English version. Japanese localized reports for Japanese version. Reports in English but modified for S-Chinese and Korean systems.
Database SPI: Informix	English policies only. Runs in non-English environments where OVO or HPOM for Windows is supported.	English reports only
Database SPI: Microsoft SQL Server	English policies for English version. Japanese localized policies for Japanese version. Runs in non-English environments where OVO or HPOM for Windows is supported.	English reports for English version. Japanese localized reports for Japanese version. Reports in English but modified for S-Chinese and Korean systems.

Table 2 Internationalization and Native Language Support (cont'd)

Smart Plug-in for	Policy Support	OM Reporter Support
Database SPI: Sybase	English policies only. Runs in non-English environments where OVO or HPOM for Windows is supported.	English reports only
IBM DB2	English policies only. Runs in non-English environments where OVO or HPOM for Windows is supported.	English reports only
IBM WebSphere Application Server	English policies only. Runs in non-English environments where OVO or HPOM for Windows is supported.	English reports only
Oracle Application Server	English policies only. Runs in non-English environments where OVO or HPOM for Windows is supported.	English reports only
PeopleSoft	English policies only. Runs in non-English environments where OVO or HPOM for Windows is supported.	English reports only
Remedy	English policies only. Runs in non-English environments where OVO or HPOM for Windows is supported.	N/A - no reports

Table 2 Internationalization and Native Language Support (cont'd)

Smart Plug-in for	Policy Support	OM Reporter Support
SAP	English policies for English version. Japanese localized policies for Japanese version. Runs in non-English environments where OVO or HPOM for Windows is supported.	English reports only
Complimentary SPIs		
HP Storage Essentials	English policies only. Runs in non-English environments where OVO or HPOM for Windows is supported.	N/A - no reports
HP SIM Integration	English policies only. Runs in non-English environments where OVO or HPOM for Windows is supported.	N/A - no reports
Storage Area Manager	English policies only. Runs in non-English environments where OVO or HPOM for Windows is supported.	N/A - no reports
Web Servers	English policies only. Runs in non-English environments where OVO or HPOM for Windows is supported.	N/A - no reports

Table 2 Internationalization and Native Language Support (cont'd)

Smart Plug-in for	Policy Support	OM Reporter Support
Network Diagnosis Add-On Module	English policies only. Runs in non-English environments where OVO or HPOM for Windows is supported.	N/A - no reports
Reports for Windows	n/a	English reports for English version. Localized reports for Japanese, Korean and S-Chinese versions.
Core SPIs		
Windows OS	English policies for English version. Localized policies for Japanese, Korean and S-Chinese versions. Runs in non-English environments where OVO or HPOM for Windows is supported.	English reports for English version. Localized reports for Japanese, Korean and S-Chinese versions.
UNIX OS	English policies for English version. Localized policies for Japanese version. Runs in non-English environments where OVO or HPOM for Windows is supported.	English reports for English version. Localized reports for Japanese version.

2 Smart Plug-ins Upgrade, Installation and Uninstallation

This chapter contains instructions and information on:

- [Upgrading Smart Plug-ins on a Remote Console](#) on page 35
- [Upgrading Smart Plug-ins on a local management server](#) on page 36
- [Installing Smart Plug-ins \(for the first time\)](#) on page 37
- [Uninstalling Smart Plug-ins](#) on page 43
- [Installing Smart Plug-ins in a Cluster Environment](#) on page 46
- [Uninstalling Smart Plug-ins in a Cluster Environment](#) on page 48

The installation instructions contained in this chapter apply to all SPIs and are therefore general. For more exact 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 [Table 4](#) on page 50.



The DVD contains the complete software for each listed product, which can be used for a 60-day evaluation period; after the 60-day period, a license is necessary for continued use.

Before Installation

Verify the installation of HP OpenView for Windows 7.50, or HP Operations Manager 8.00.

Be prepared to print individual Smart Plug-in documentation: Before you complete the installation from the DVD, print and read the instructions as detailed in the individual product's documentation (contained in the `\Documentation\` directory on DVD. It is important that you follow the

product's specific instructions as they contain unique steps that must be completed *after installation from the HP Operations Smart Plug-ins DVD*. These steps enable a successful installation and configuration.

Review DVD contents: Refer to the `SPI_DVD_ReleaseNotes.html` file for the list of SPIs on the HP Operations Smart Plug-ins DVD.



If you need to install the Smart Plug-ins by copying the DVD to a network or local disk instead of directly from the DVD, run `autorun.vbs` and not the HP Operations Smart Plug-ins.msi file directly.

Reports package now available on the SPI DVD

The HP Operations Manager Reports for Windows package provides Event and Service reports on systems managed by HPOM for Windows 8.00. Previously this package was only available from the OVOW 7.5 DVD, but has been included with the SPI DVD to allow these reports to be installed on a Reporter only system (with a remote HPOM server) without the need to copy the msi-file manually.

This package requires Reporter 3.80, and includes report templates that work with Crystal Reports 10 and 11. Because the included reports collect data from an HPOM for Windows server that might be installed on a separate system you might have to configure the systems correspondingly, see the Reporter online-help.

SPI Reports and Graphs now separate installs

The Reports and the Graphs packages for SPIs are no longer installed automatically. During installation you can select to install the Report package for any SPI where there is a separate, enabled, Reports or Graphs checkbox. If the checkboxes are disabled, your system does not have the required versions of HP Reporter and HP Performance Manager installed.

Upgrading Smart Plug-ins on a Remote Console



The **SPI for SAP** console integration package requires a different upgrade procedure from that outlined below. Refer to the *Upgrading the SPI for SAP* section in the *HP Operations Smart Plug-in for SAP Configuration Guide* for information about how to upgrade the SPI for SAP console integration package.

If you are running OVO or HPOM on any remote console, follow the Smart Plug-ins upgrade procedure for console-only systems below:

- 1 At the console-only system, insert the *HP Operations Smart Plug-ins* DVD.
- 2 Follow the instruction screens until a dialog appears saying that a remote console installation has been found.
- 3 Click **Next**.

The upgrade of all previously installed packages now occurs.

Upgrading Smart Plug-ins on a local management server

Verify you have met the prerequisite: On the console or management server, verify that you have installed **OVO 7.50 or HPOM 8.00**.

For Core Smart Plug-ins (Windows OS, UNIX OS): The upgrade of the complimentary Core SPIs requires a few manual steps that are covered in the documentation specific to each SPI. Some steps are necessary to prevent data loss. Perform the actions as outlined in each document:

- For the WINOSSPI, see:
`\Documentation\ReleaseNotes\WinOS_ReleaseNotes.html`
- For the UNIX OS SPI, see:
`\Documentation\ReleaseNotes\UnixOS_ReleaseNotes.html`

After completing specified actions, you can move forward with the upgrade process. Upgrading Core Smart Plug-ins occurs automatically when you start the installation process and select a Smart Plug-in. Any previous installation is detected and the new version is installed over the previous version.

For purchased, evaluation, and complimentary SPIs: Upgrading SPIs that you purchase or are complimentary is the same as a new installation. Before starting, review the SPI documentation which describes in detail any steps required before upgrading SPIs. By completing all required steps, you avoid unnecessary data loss.

Installing Smart Plug-ins (for the first time)

Install OVO 7.50 or HPOM 8.00

The *Smart Plug-ins* must be installed on OVO for Windows 7.50 or HPOM for Windows 8.00.

Before installing OVO or HPOM on the management server, meet the requirements and complete the installation steps contained in its documentation.:

Table 3 Documentation on product DVD

Document	OVO or HPOM for Windows \ <code>Directory\<File name></code>
<i>Release Notes</i>	\ <code>Documentation\Releasenotes\OVOReadme.html</code> or \ <code>HPOM_Read_Me.html</code>
<i>Installation Guide</i>	\ <code>Documentation\Guides\OVOWInstallguide.pdf</code> / \ <code>HPOM_Installation_Guide.pdf</code>
<i>Upgrade Guide</i>	\ <code>Documentation\Guides\OVOWUpgrade.pdf</code> / \ <code>HPOM_Upgrade_Guide.pdf</code>

Smart Plug-ins on the Remote Console System

At a remote console, when you select to install a console-only version of HP Operations Manager for Windows, you automatically install the core Smart Plug-in packages.

You can use the SPI DVD at the remote console to update the SPI packages that were automatically installed, or you can use the SPI DVD to install non-core SPI console packages. To use the SPI DVD to update those packages, refer to [Upgrading Smart Plug-ins on a Remote Console](#) on page 35.

- ▶ The HP Operations **SPI for SAP** console integration package requires a different upgrade procedure from that outlined below. Refer to the *Upgrading the SPI for SAP* section in the *HP Operations Smart Plug-in for SAP Configuration Guide* for information about how to upgrade.

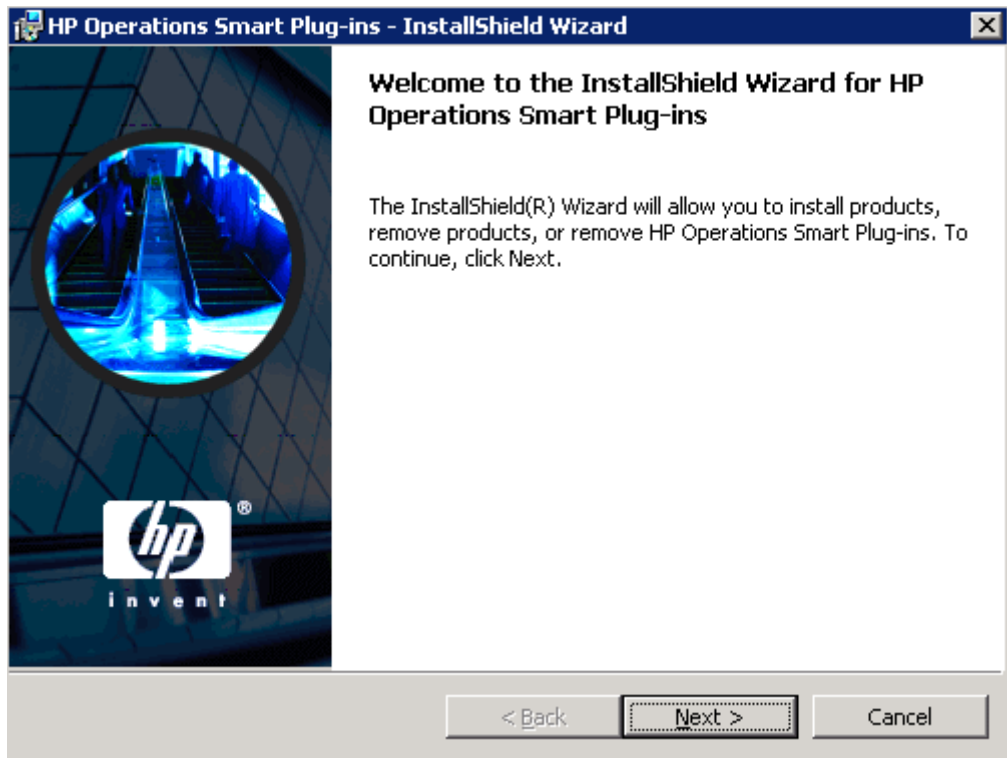
Smart Plug-ins on a management server or console

When you install Smart Plug-ins on a management server or console system, select only those SPIs you want to use.

To install the Smart Plug-ins on the management server or console:

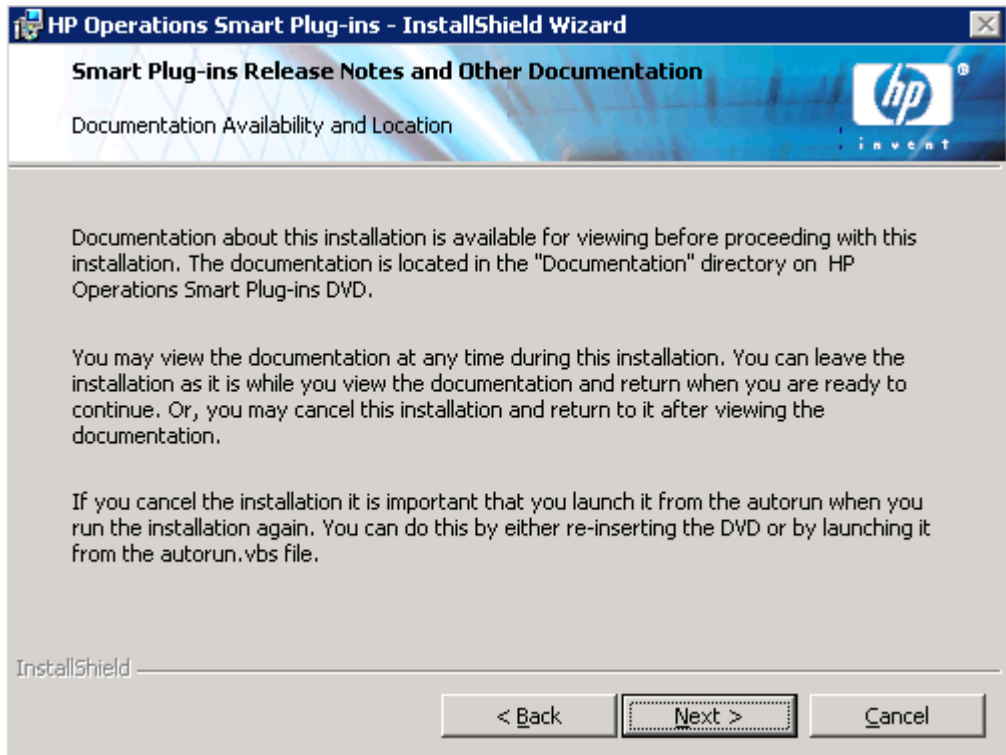
- 1 Insert the *Smart Plug-ins*, DVD into the DVD drive of the management server or console system.

Figure 1 InstallShield Wizard guides you through the installation.



- 2 Click **Next** to continue.

Figure 2 Product manuals and release notes location.



- 3 Click **Next** to proceed.
- 4 In the next dialogs, select those Smart Plug-ins you want to install or upgrade.

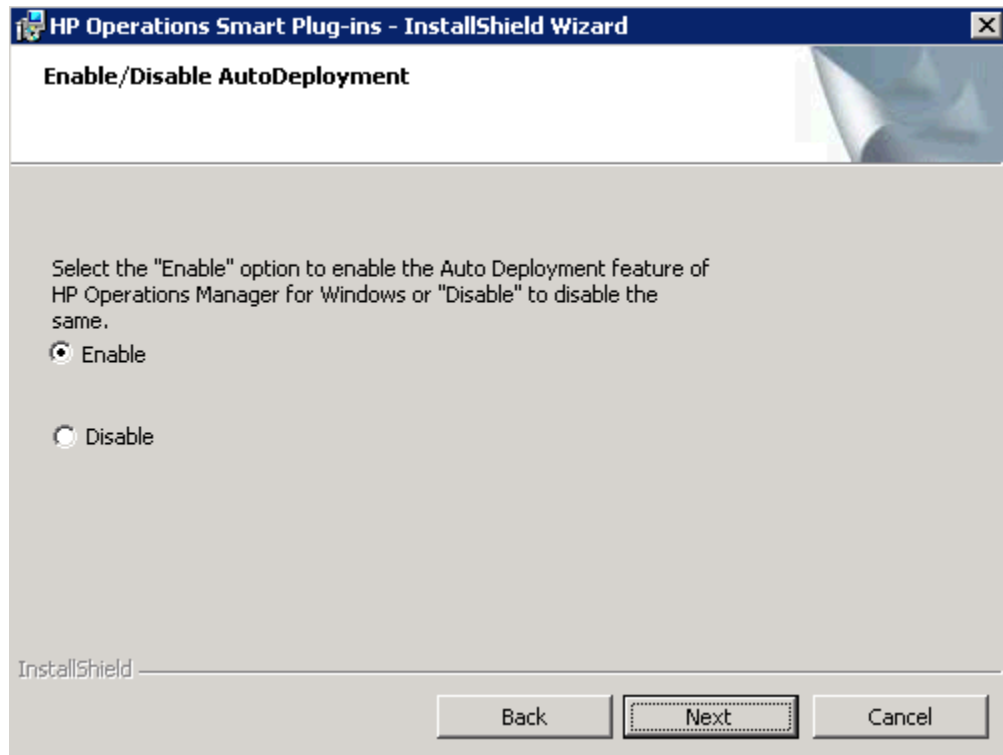


If latest version of SPIs are already installed, SPI checkboxes are disabled. If Reporter and/or Performance Manager are not installed, Reports and/or Graphs checkboxes are disabled.

- 5 When complete with selecting products, click **Next**
- 6 Indicate your acceptance of licensing agreement terms by selecting the **I accept the terms in the license agreement** button.
- 7 Click **Next**.

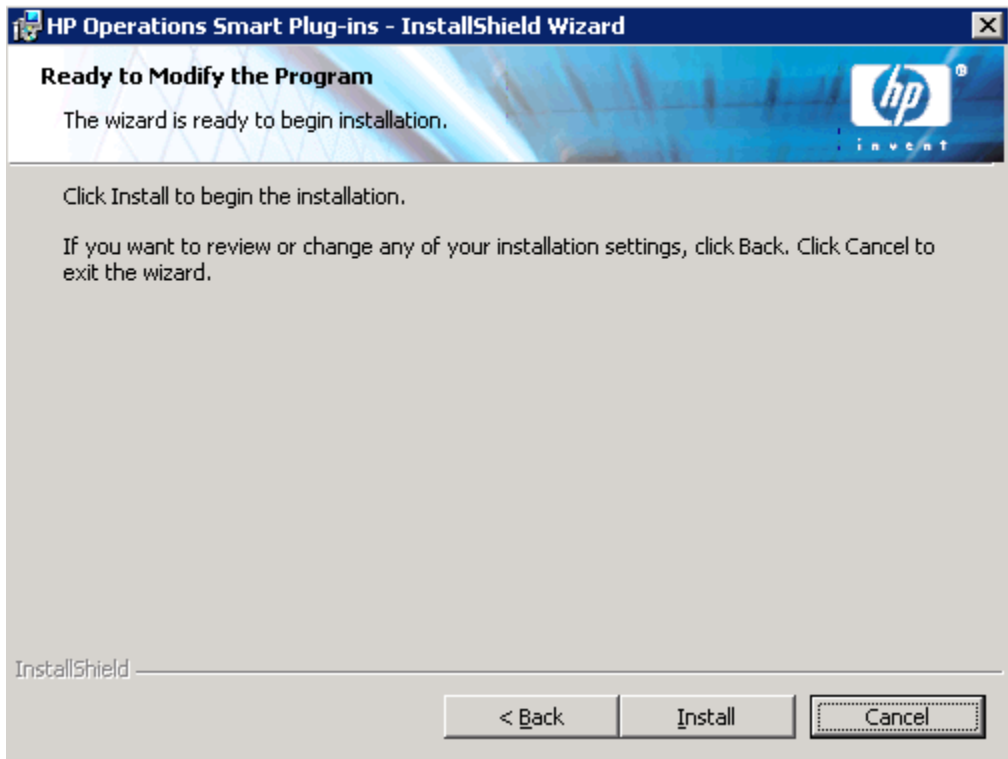
- 8 HP Operations Manager 8.00 deploys policies automatically only when desired. Select to disable or enable the Auto Deployment feature.

Figure 3 Enable or Disable AutoDeployment



- 9 Click **Next**.

Figure 4 Ready to Install



10 Selecting Back allows you to edit previous selections, otherwise, click **Install** to begin the installation.

➤ Selecting the Cancel button after the installation has started does not halt the entire installation process, but only that of the product currently being installed (shown in the Status area); installation of the next selected product then begins.

11 You will see various status dialogs as the install program proceeds. Depending on the speed of your system and the components selected for installation, this process could take several minutes or more.

- 12 Click **Finish** to conclude the installation.
- 13 After you have installed all required SPIs, see each SPI product documentation (see [Documentation for the Smart Plug-ins](#) on page 50 for locations) for configuring your product.

Uninstalling Smart Plug-ins

Two methods are available for removing SPIs:

- 1 Use the DVD -
or
- 2 Use the Windows **Control Panel**→**Add/Remove Programs**.

To specify the Smart Plug-ins you want to remove, use the procedure below or the Microsoft Windows Control Panel, and proceed as you would to uninstall any product using that method.

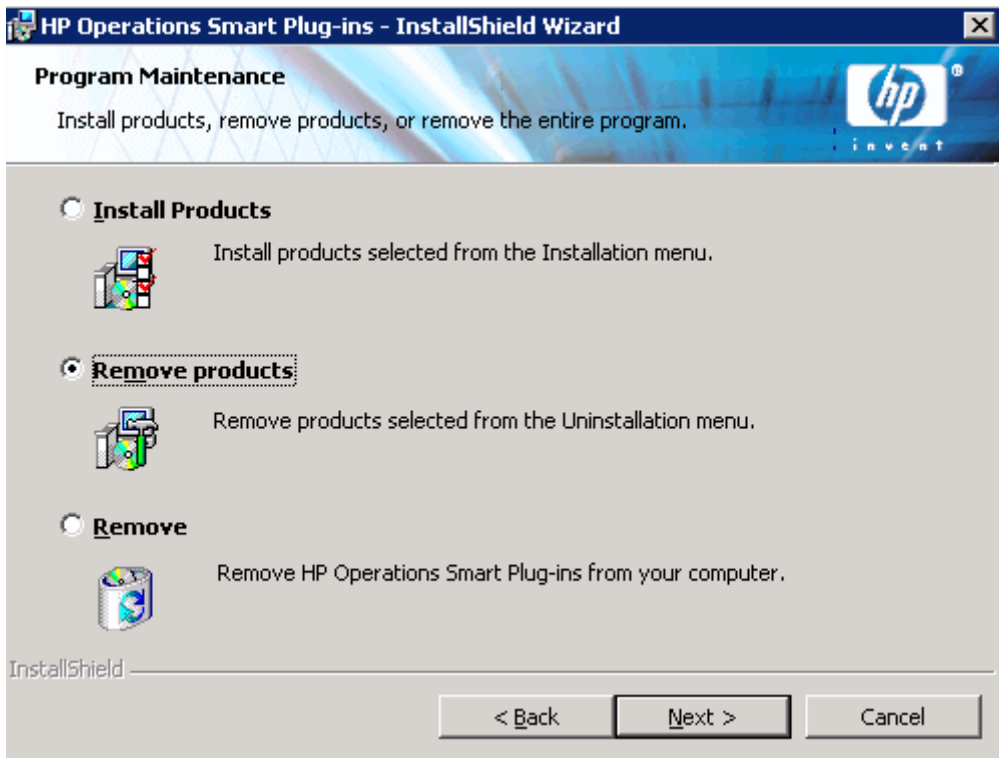


Before removing any Smart Plug-in, see the specific product's documentation for complete removal of its components, such as policies and tools. In most cases, removal of these components require manual steps. After completing those steps, you can proceed to uninstall SPI program files from the management server, using either the DVD or the Add/Remove Programs method from the Windows Control Panel.

Method 1: Uninstall, Using the DVD

- 1 Insert the HP Operations Smart Plug-ins DVD in the DVD drive.
- 2 Select the **Remove products** radio button to proceed to the product selection dialog.

Figure 5 Removing a Smart Plug-in



- 3 In the Product Selection Uninstall dialog, you can check each product you want to remove; then click **Next**.
- 4 Click **Next**.

Follow the instructions as they appear on screen to complete the uninstall.

Method 2: Use the Windows Control Panel – Add/Remove Products

- 1 From the **Start** menu select **Settings**→**Control Panel** and open **Add/Remove Programs**.



Note that when you use the Windows Control Panel to uninstall any SPI, you have two uninstall options: (1) to remove selected SPIs or (2) to remove OVO or HPOM for Windows altogether. If you want to remove both OVO or HPOM and the SPIs you must first remove all Smart Plug-ins from managed nodes then from the management server. You can then remove OVO or HPOM.

- 2 Select **HP Operations Smart Plug-ins** and click the **Change** button.
- 3 On the Welcome screen click **Next**.
- 4 Select **Remove Products** and select the SPI(s) you want to remove.
- 5 Proceed as instructed.

Installing Smart Plug-ins in a Cluster Environment

Prerequisites: First install OVO or HPOM management server 7.50 or 8.00 on each system in the cluster. When the management server cluster installations are complete, you will have created the setup for the Smart Plug-in(s) installation. In addition, be sure that each node in the cluster has sufficient disk space for the Smart Plug-ins you are installing.

Cluster installation overview: Follow the steps in the section that follows to complete the installation as described below:

- *For the first installation (Node A) in the cluster*—you will follow the standard installation procedure, making product choices. After you complete the installation on Node A, you will receive an instruction to proceed to the next system, Node B.
- *For the Node B installation in the cluster*, you follow the same procedure, only you will no longer need to make product choices. The installation detects the cluster configuration and copies all the needed product choices from Node A to Node B.
- *For Node C and all remaining installations in the cluster*, proceed as you did with Node B, where you no longer choose products but allow the installation packages to be copied from Node B (the previously installed system within the cluster) to Node C (the current system within the cluster) until you are finished.

Task 1: At the first cluster-aware management server, select and install Smart Plug-ins.



Before beginning, be sure that sufficient disk space is available on each management server for the SPIs you plan to install. Cancelling the installation process before completion could result in partial installations and require manual removal of the partially installed components.

Complete all tasks shown in the instructions starting beneath the heading [Installing Smart Plug-ins \(for the first time\)](#) on page 37, then proceed to the next management server.

Task 2: At the next cluster-aware management server, install pre-selected Smart Plug-ins.

The task that follows is repeated on each management server in the cluster and prompts you to continue to every management server (as was defined in the HP Operations Manager cluster installation) until you are finished.

- 1 Insert the HP Operations Smart Plug-ins DVD in the DVD drive of the management server and follow instructions as they appear.
- 2 After the installation is complete, proceed as directed to the next management server until the installation on every management server in the cluster is complete.



Note that the OVO or HPOM console will not function properly until installations are completed on all nodes in the cluster.

Uninstalling Smart Plug-ins in a Cluster Environment

Task 1: Remove Smart Plug-in components from managed nodes.

See the documentation of the Smart Plug-in you are removing. Follow the uninstallation instructions specific to the Smart Plug-in to remove deployed SPI components from all managed nodes.

Task 2: Uninstall Smart Plug-in(s) from the cluster-aware management servers.

Simply uninstall the product from each system in the cluster as described below.

- 1 At the management console, select **Start**→**Settings**→**Add or Remove Programs** and select **HP Operations Smart Plug-ins** and select **Change**.

or

Insert the HP Operations Smart Plug-ins DVD in the DVD drive.

- 2 Whether using the Smart Plug-ins DVD or the Control Panel, proceed to product selection and select all Smart Plug-ins installed on the cluster-aware management server.
- 3 Click **Next**.
- 4 Click **Remove**.



Be certain you want to follow through on an uninstallation before beginning. To cancel an uninstallation in a cluster after it has begun could result in the need to manually remove program components later.

- 5 When you have finished the uninstallation on one management server, proceed to the next management server in the cluster. (You can choose any management server in the cluster to begin the uninstallation; when the first uninstallation completes, you are prompted to proceed to each subsequent management server until you reach the last.)
- 6 After selecting Smart Plug-ins to remove from the first node in the cluster and completing the uninstallation on that node, you are prompted to proceed to the next node. Your initial selections on the first node are used for removing the identical Smart Plug-ins from the second.
- 7 You are notified the Uninstall is complete.

3 Documentation, Licensing, and Troubleshooting

This chapter contains information and instructions on:

- [Documentation for the Smart Plug-ins](#) on page 50
- [SPI Licensing and Passwords](#) on page 52
- [Troubleshooting](#) on page 59

For details on configuring the specific product(s) you have installed, print the product's manual. Find their locations in [Table 4](#) on page 50, or from the [SPI_docs_index.htm](#).

Documentation for the Smart Plug-ins

Each Smart Plug-in has its own procedures that must be followed for a successful installation and configuration. View or print the installation documentation and release notes for each product you plan to install.

Table 4 Product Installation Instructions and Release Notes

Product	SPI Guides & Release Notes: \Documentation\index.htm (includes links)
HP Operations Smart Plug-in for BEA Tuxedo	See online Help for configuring instructions. \ReleaseNotes\Tuxedo_ReleaseNotes.html
HP Operations Smart Plug-in for BEA WebLogic Server	\SPI Guides\WebLogic_AppServer_ConfigGuide.pdf \Releasenotes\WebLogic_AppServer_ReleaseNotes.html
HP Operations Smart Plug-in for Databases (Informix, Microsoft SQL Server, Oracle, and Sybase)	\SPI Guides\Databases_Config.pdf \Releasenotes\Databases_ReleaseNotes.html
HP Operations Smart Plug-in for IBM DB2	\SPI Guides\DB2_Config.pdf \Releasenotes\DB2_ReleaseNotes.html
HP Operations Smart Plug-in for IBM WebSphere Application Server	\SPI Guides\WebSphere_AppServer_Config.pdf \Releasenotes\WebSphere_AppServer_ReleaseNotes.html
HP Operations Smart Plug-in for Microsoft Active Directory	\SPI Guides\ActiveDirectory_Config.pdf \Releasenotes\ActiveDirectory_ReleaseNotes.html
HP Operations Smart Plug-in for Microsoft Enterprise Servers	See online Help for configuring instructions. \Releasenotes\EnterpriseServers_ReleaseNotes.html
HP Operations Smart Plug-in for Microsoft Exchange Server	\SPI Guides\Exchange_Config.pdf \Releasenotes\Exchange_ReleaseNotes.html
HP Operations Smart Plug-in for Microsoft Virtual Server	\Releasenotes\VirtualServer_ReleaseNotes.html
HP Operations Smart Plug-in for Microsoft Windows OS	\Releasenotes\WindowsOS_ReleaseNotes.html

Table 4 Product Installation Instructions and Release Notes (cont'd)

Product	SPI Guides & Release Notes: \Documentation\index.htm (includes links)
HP Operations Network Diagnosis Add-On Module	\ReleaseNotes\ NDAOM_ReleaseNotes.html
HP Operations Smart Plug-in for PeopleSoft	\SPI Guides\PeopleSoft_Config.pdf \Releasenotes\PeopleSoft_ReleaseNotes.html
HP Operations Smart Plug-in for Oracle Application Server	\SPI Guides\Oracle_AppServer_Config.pdf \Releasenotes\Oracle_AppServer_ReleaseNotes.html
HP Operations Smart Plug-in for Remedy	\SPI Guides\Remedy_Config.pdf \Releasenotes\Remedy_ReleaseNotes.html
HP Operations Smart Plug-in for SAP	\SPI Guides\SAP_Config.pdf \Releasenotes\SAP_ReleaseNotes.html
HP Operations Smart Plug-in for HP Storage Essentials	\SPI Guides\HPSE_Config.pdf \Releasenotes\HPSE_ReleaseNotes.html
HP Operations Integration for HP SIM	\SPI Guides\HPSIM_Config.pdf \Releasenotes\HPSIM_ReleaseNotes.html
HP Operations Smart Plug-in for Storage Area Manager	\SPI Guides\SAM_Config.pdf \Releasenotes\SAM_ReleaseNotes.html
HP Operations Smart Plug-in for UNIX OS	\Releasenotes\UnixOS_ReleaseNotes.html
HP Operations Smart Plug-in for Web Server	\Releasenotes\WebServers_ReleaseNotes.html
JMX Metric Builder	\Releasenotes\JMX_Metric_Builder_ReleaseNotes.html

SPI Licensing and Passwords

Included with the DVD are a number of complimentary SPIs for which no license is required, see the table [Licensing Information](#) on page 56 for details. Each of the purchased SPIs can be used for 60 days without a license. Within this time period, however, you should obtain a license or password to ensure continued, uninterrupted use of the SPI you purchase.



The terms “license” and “password” are used interchangeably and mean essentially the same thing: a license key that allows permanent use of the Smart Plug-in.

To obtain a license or password 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 obtain the required license or password:

- **Method #1 — retrieve license or password from a direct Internet connection (on the system):** If you have an Internet connection from the OVO or 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 — retrieve license or password saved in a file:** If you do not have an Internet connection from the OVO or HPOM console, use this method, where you obtain 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 OVO or HPOM console and import it during the procedure.
- **Method #3: — retrieve license or password through email or fax connection:** 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 Key

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 use the Obtain License Tool, as explained in the procedure that follows:

- 1 At the OVO or HPOM console select **Tools**→**OpenView Tools** (or *HPOM Tools*) →**Licensing** and double-click **Obtain License**.
- 2 In the Obtain License dialog, select your *<product_name>* and click **OK**.

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.

Obtain 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*).

- 1 At a system with Internet access, launch your Internet browser, and in the Address text box enter **https:\\www.webware.hp.com**

Figure 6 Accessing the HP web site for licensing information.

» HP OpenView Home » Products & Services » Support » Solutions » Developers

» Contact HP Software Search:

HP License Key Delivery Service

License keys delivered through the web

Welcome

Welcome to Hewlett-Packard's software licensing center, HP's world-wide license key
Click [here](#) to see if this site is applicable for your product.

» **Generate**
New licenses

» **Manage**
Licenses

Support

» Contact license delivery center
» License key FAQs
» Webware User Guide

Related Links

» HP SW Support
» SW License H

- 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:
 - **Number of LTUs:** number of SPI licenses you require.
 - **IP Address:** Input the IP address for the machine that will be running the license server.
 - **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 `<product_number>.dat.asp`. In addition, the Permanent Password Certificate can also be mailed to an mail address. Note that the default location for the installed license key is:

```
\Program Files\Common  
Files\Hewlett-Packard\HPOvLIC\data\LicFile.txt.
```

Individual SPI License Information

The following table indicates licenses required for individual SPIs and applications.

Table 5 Licensing Information

HP Operations Manager Product:	License Number	License Description
HP Operations Smart Plug-in for BEA WebLogic Server	B9155AA B9141AA B9142AA B9143AA B9144AA BB172ZA BB172ZAE	HPOM SPI BEA Weblogic Tier 4, LTU HPOM BEA Weblogic Tier 3, LTU HPOM I BEA Weblogic Tier 2, LTU HPOM I BEA Weblogic Tier 1, LTU HPOM SPI BEA Weblogic Tier 0, LTU HP Ops Target Connector Weblogic AS SW LTU HP Ops Target Connector Weblogic AS SW E-LTU
HP Operations Smart Plug-in for BEA Tuxedo	B9152AA B7476AA B7477AA B7478AA B7479AA	HPOM SPI BEA Tuxedo Tier 4, LTU HPOM SPI BEA Tuxedo Tier 3, LTU HPOM SPI BEA Tuxedo Tier 2, LTU HPOM SPI BEA Tuxedo Tier 1, LTU HPOM SPI BEA Tuxedo Tier 0, LTU
HP Operations Smart Plug-in for IBM DB2	BA184AA BA183AA BA182AA BA181AA BA180AA	HPOM SPI IBM DB2 Tier 4, LTU HPOM SPI IBM DB2 Tier 3, LTU HPOM SPI IBM DB2 Tier 2, LTU HPOM SPI IBM DB2 Tier 1, LTU HPOM SPI IBM DB2 Tier 0, LTU
HP Operations Smart Plug-in for IBM WebSphere	B9173AA B9174AA B9175AA B9176AA B9177AA BB173ZA BB173ZAE	HPOM SPI IBM WebSphere Tier 4, LTU HPOM SPI IBM WebSphere Tier 3, LTU HPOM SPI IBM WebSphere Tier 2, LTU HPOM SPI IBM WebSphere Tier 1, LTU HPOM SPI IBM WebSphere Tier 0, LTU HP Ops Target Connector WebSphere AS SW LTU HP Ops Target Connector WebSphere AS SW E-LTU
HP Operations Smart Plug-in for Informix	B9149AA B7460AA B7461AA B7462AA BB171ZA BB171ZAE	HPOM SPI Informix Tier 4, LTU HPOM SPI Informix Tier 3, LTU HPOM SPI Informix Tier 2, LTU HPOM SPI Informix Tier 1, LTU HP Ops Target Connector Informix DB SW LTU HP Ops Target Connector Informix DB SW E-LTU

Table 5 Licensing Information (cont'd)

HP Operations Manager Product:	License Number	License Description
HP Operations Smart Plug-in for Microsoft SQL Server	B7472AA B7473AA B7474AA B7475AA	HPOM SPI MS SQL Server Tier 3, LTU HPOM SPI MS SQL Server Tier 2, LTU HPOM SPI MS SQL Server Tier 1, LTU HPOM SPI MS SQL Server Tier 0, LTU
HP Operations Smart Plug-in for Microsoft Active Directory	B9169AA B9170AA B9171AA B9172AA	HPOM SPI Active Directory Tier 3, LTU HPOM SPI Active Directory Tier 2, LTU HPOM SPI Active Directory Tier 1, LTU HPOM SPI Active Directory Tier 0, LTU
HP Operations Smart Plug-in for Microsoft Enterprise Servers	BA226AAB 9160AA B9161AA B9162AA	HPOM SPI MS Enterprise Servers Tier 3, LTU HPOM SPI MS Enterprise Servers Tier 2, LTU HPOM SPI MS Enterprise Servers Tier 1, LTU HPOM SPI MS Enterprise Servers Tier 0, LTU
HP Operations Smart Plug-in for Microsoft Exchange Server	B7448AA B7449AA B7450AA B7451AA	HPOM SPI MS ExchangeTier 3, LTU HPOM SPI MS ExchangeTier 2, LTU HPOM SPI MS ExchangeTier 1, LTU HPOM SPI MS ExchangeTier 0, LTU
HP Operations Smart Plug-in for Microsoft Virtual Server	BA156AA BA157AA BA158AA	HPOM SPI MS Virtual Server, Tier 2 LTU HPOM SPI MS Virtual Server, Tier 1 LTU HPOM SPI MS Virtual Server, Tier 0 LTU
HP Operations Smart Plug-in for Oracle	B9150AA B7464AA B7465AA B7466AA B7467AA BB169ZA BB169ZAE	HPOM SPI Oracle Tier 4, LTU HPOM SPI Oracle Tier 3, LTU HPOM SPI Oracle Tier 2, LTU HPOM SPI Oracle Tier 1, LTU HPOM SPI Oracle Tier 0, LTU HP Ops Target Connector Oracle DB SW LTU HP Ops Target Connector Oracle DB SW E-LTU
HP Operations Smart Plug-in for Oracle Application Server	BA 221AA BA 222AA BA 223AA BA 224AA BA 225AA BB174ZA BB174ZAE	HPOM SPI for Oracle AS Tier 4, LTU HPOM SPI for Oracle AS Tier 3, LTU HPOM SPI for Oracle AS Tier 2, LTU HPOM SPI for Oracle AS Tier 1, LTU HPOM SPI for Oracle AS Tier 0, LTU HP Ops Target Connector Oracle AS SW LTU HP Ops Target Connector Oracle AS SW E-LTU

Table 5 Licensing Information (cont'd)

HP Operations Manager Product:	License Number	License Description
HP Operations Smart Plug-in for PeopleSoft	B9147AA B7452AA B7453AA B7454AA B7455AA	HPOM SPI PeopleSoft Tier 4, LTU HPOM SPI PeopleSoft Tier 3, LTU HPOM SPI PeopleSoft Tier 2, LTU HPOM SPI PeopleSoft Tier 1, LTU HPOM SPI PeopleSoft Tier 0, LTU
HP Operations Smart Plug-in for Remedy	B7480AA	HPOM SPI Remedy Tier 0, LTU
HP Operations Smart Plug-in for SAP	B9148AA B7456AA B7457AA B7458AA B7459AA BB176ZA BB176ZAE	HPOM SPI SAP Tier 4, LTU HPOM SPI SAP Tier 3, LTU HPOM SPI SAP Tier 2, LTU HPOM SPI SAP Tier 1, LTU HPOM SPI SAP Tier 0, LTU HP Ops Target Connector SAP SW LTU HP Ops Target Connector SAP SW E-LTU
HP Operations Smart Plug-in for Sybase	B9151AA B7468AA B7469AA B7470AA BB170ZA BB170ZAE	HPOM SPI Sybase Tier 4, LTU HPOM SPI Sybase Tier 3, LTU HPOM SPI Sybase Tier 2, LTU HPOM SPI Sybase Tier 1, LTU HP Ops Target Connector Sybase DB SW LTU HP Ops Target Connector Sybase DB SW E-LTU
HP Operations Smart Plug-in for Storage Area Manger	N/A	Complimentary, no license required
HP Operations Smart Plug-in for HP Storage Essentials	N/A	Complimentary, no license required
HP Operations Integration for HP SIM	N/A	Complimentary, no license required
HP Operations Smart Plug-in for Web Servers	N/A	Complimentary, no license required
HP Operations Smart Plug-in for UNIX OS	N/A	Complimentary, no license required
HP Operations Smart Plug-in for Windows OS	N/A	Complimentary, no license required

Troubleshooting

Self-Healing Info tool

This tool can be run on any managed node managed by the Smart Plug-in. When run, the tool gathers data that you can send to HP support to diagnose the SPI problem.

This tool is bundled along with each Smart Plug-in and is installed automatically in the Smart Plug-in **Tools** group. Refer to the specific Smart Plug-in documentation for further information. The tool has the capability of gathering troubleshooting data. After you run the tool and save the data to a file, you must contact HP support and email the file to them according to their instructions.

To deploy SPI - SHS Instrumentation (as needed):

- 1 At the OVO or HPOM console, select, then right-click the node(s) on which you want to run the tool.
- 2 From the drop-down menu select **All Tasks**→**Deploy instrumentation**.
- 3 Select **SPI for <product>**
and
SHS Data Collector.
- 4 Click **OK**.

To use the tool:

- 1 At the OVO or HPOM console, select **Tools**→**SPI for <product>**.
- 2 Locate the **Self-Healing Info** tool (see SPI documentation), right-click it and select **All Tasks**→**Launch Tool...**
- 3 Select the node on which to deploy the tool and click **Launch...**
- 4 In the message that appears, note the file name and location where the gathered data is saved; then contact support for instructions on where to email it.

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