HP OpenView Smart Plug-ins CD for OpenView Operations for UNIX

Installation Guide

November 2004

For HP-UX and Solaris OpenView Operations Management Servers

Manufacturing Part Number: B7490-90051

Legal Notices

Warranty.

Hewlett-Packard makes no warranty of any kind with regard to this document, including, but not limited to, the implied warranties of merchantability and fitness for a particular purpose. Hewlett-Packard shall not be held liable for errors contained herein or direct, indirect, special, incidental or consequential damages in connection with the furnishing, performance, or use of this material.

A copy of the specific warranty terms applicable to your Hewlett-Packard product can be obtained from your local Sales and Service Office.

Restricted Rights Legend.

Use, duplication or disclosure by the U.S. Government is subject to restrictions as set forth in subparagraph (c)(1)(ii) of the Rights in Technical Data and Computer Software clause in DFARS 252.227-7013.

Hewlett-Packard Company
United States of America

Rights for non-DOD U.S. Government Departments and Agencies are as set forth in FAR 52.227-19(c)(1,2).

Copyright Notices.

Trademark Notices.

Adobe® is a trademark of Adobe Systems Incorporated.

HP-UX Release 10.20 and later and HP-UX Release 11.00 and later (in both 32 and 64-bit configurations) on all HP 9000 computers are Open Group UNIX 95 branded products.

Java ™ is a US trademark of Sun Microsystems, Inc.

Microsoft®, Windows®, and Windows NT® are U.S. registered trademarks of Microsoft Corporation.

Oracle® is a registered U.S. trademark of Oracle Corporation, Redwood City, California.

UNIX® is a registered trademark of The Open Group.

The Smart Plug-ins for OpenView Operations for UNIX CD-ROM: An Introduction

The *HP OpenView Smart Plug-ins CD* set contains a collection of OpenView Smart Plug-ins (SPIs) and OpenView supplementary management applications. These SPIs and applications work with an OpenView Operations management server running on HP-UX or Solaris. The collection offers you the convenience of having all SPIs on a single medium with a single *Software Distributor* depot.

NOTE

HP OpenView Internet Services is included on a separate CD to further supplement OVO's application/web services monitoring. This product simulates end-user experience, integrating its data with other OpenView products. Please see the section that follows for additional information.

For each product you want to install and use (contained on the Smart Plug-ins CD), you must obtain a license from Hewlett-Packard. For license information see "License Requirements" on page 20.

The HP OpenView Smart Plug-ins contained on the CD work with OVO for UNIX to help you manage areas of:

- BEA Tuxedo
- BEA WebLogic
- BEA WebLogic Integration
- Data Network Devices
- IBM WebSphere Application Server
- IBM DB2
- Informix
- Microsoft® Exchange
- Microsoft SQL Server
- Oracle
- PeopleSoft
- Remedy Action Request System (ARS)
- SAP

- Sybase
- TIBCO

The following complimentary products/integrations/technologies are also included on the HP OpenView Smart Plug-ins CD:

- Network Diagnosis Add-On Module
- Data Protector and Omniback II Integrations
- Integration for Sun Management Center
- Service Navigator Report Package
- Self-Healing Services technology
- Smart Plug-in for UNIX OS
  (HP-UX, Solaris, Linux, IBM AIX, and Tru64 operating systems)
- Smart Plug-in for Web Servers
- Smart Plug-in for Microsoft Windows OS
- Smart Plug-in for Storage Area Manager

Product Descriptions

The Smart Plug-in CD set contains the software, documentation, and any applicable *OpenView Reporter* and *OpenView Performance Manager* integration for each Smart Plug-in and OV supplementary management application.

Below is a list of the products included, followed by a brief description of each.

Table 1 Product List

Product Name	Version	CD
HP OpenView Integration for Sun Management Center	A.03.50	Vol. 2
HP OpenView Internet Services	A.05.20	separate CD
HP OpenView Network Diagnosis Add-On Module	A.02.00	Vol. 1
HP OpenView Omniback Integration for OVO	A.01.06	Vol. 1
HP OpenView Service Navigator Report Package	A.03.50	Vol. 1
HP OpenView SPI for BEA Tuxedo	A.02.52	Vol. 1
HP OpenView SPI for BEA WebLogic	A.03.50	Vol. 1
HP OpenView SPI for BEA WebLogic Integration	A.01.00	Vol. 2
HP OpenView SPI for Data Network Devices	A.02.00	Vol. 1
HP OpenView SPI for Databases (Oracle, Microsoft SQL Server, Sybase, and Informix)	A.08.10	Vol. 1
HP OpenView SPI for IBM DB2	A.02.08	Vol. 1
HP OpenView SPI for IBM WebSphere Application Server	A.03.50	Vol. 1
HP OpenView SPI for Microsoft Exchange	A.08.20	Vol. 1
HP OpenView SPI for Microsoft Windows OS	A.08.50	Vol. 1
HP OpenView SPI for PeopleSoft	A.02.05	Vol. 1
HP OpenView SPI for Remedy ARS Integration	A.02.50	Vol. 1
HP OpenView SPI for SAP	A.08.71	Vol. 2
HP OpenView SPI for Storage Area Manager	03.20.10	Vol. 1

Table 1 Product List

Product Name	Version	CD
HP OpenView SPI for TIBCO	A.01.03	Vol. 2
HP OpenView SPI for UNIX OS	A.03.10	Vol. 1
HP OpenView SPI for Web Servers	A.04.22	Vol. 1
HP OpenView Storage Data Protector Integration for OVO	A.05.05	Vol. 2

- **HP OpenView Network Diagnosis Add-On Module**

NOTE Version 2.0 of NDAOM (on the SPI CD) is a functionally new implementation of NDAOM. The necessity for this new implementation is due to architectural differences between the Network Node Manager (NNM) 7.x problem diagnosis (PD) component and the standalone HP OpenView Problem Diagnosis 1.x product. Now that the NNM problem diagnosis component holds all performance data centrally, no need exists for feeding performance data to the OV Performance Agent (OVPA), as was previously the case. Consequently, NDAOM 2.0 delivers only a subset of previous NDAOM functionality: configuration of network paths to be monitored, monitoring routing changes and performance degradation, and service map creation. NDAOM 2.0 does not include performance data logging or reporting, and it does not support standalone versions of HP OpenView Problem Diagnosis.

  - — Integrates Problem Diagnosis component of HP OpenView Network Node Manager and HP Operations
  - — ability to view health information of application relevant network links in the application service context
  - — ability to isolate the root causes of a network problem impacting application services
  - — easy deployment and configuration of Netpath Probes of HP Openview Network Node Manager

- **HP OpenView Integration for Sun Management Center**

  OVO/SunMC integration is an add-on component, offering instrumentation for monitoring the Sun Solaris systems on different levels of operation. It supports the following functionality:

  - — SunMC event forwarding, mapping and synchronization.

— Ability to receive and acknowledge SunMC alarm messages from all objects that belong to a specified SunMC domain; from the OVO console the acknowledgement is forward to the SunMC server, where the alarm state is changed to ACKNOWLEDGED.

— Ability to launch the SunMC console and SunMC details console windows from the OVO Application Bank.

- **HP OpenView Internet Services**

  OpenView Internet Services (OVIS) 60-day trial CD is included in the current OpenView Operations release. Running on a Windows system, OVIS integrates with OVO for UNIX as well as other OpenView products to provide a simulated end-user experience. This product can:

  — measure availability, response time, and other performance metrics of business critical services that rely on protocols such as HTTP, FTP, DNS, and WAP

  — track application response times for products such as Exchange and SAP

  — send alarms to OVO message browser

  — show service level states/violations in the OV Service Navigator

- **HP OpenView Service Navigator Report Package**

  The OV Report package includes reports for the OV Service Navigator. The package features:

  — reports that graph the OV Service Navigator status history

  — support for OV Reporter versions A.02 and A.03

  — support for OVO for UNIX 6.x and OVO for UNIX 7.x

- **HP OpenView Smart Plug-in for BEA Tuxedo**

  The HP OpenView SPI for BEA Tuxedo provides a key to centralized, ready-to-go availability management of distributed BEA Tuxedo applications. A natural extension of the HP OpenView platform, this SPI offers the following features:

  — monitoring all BEA Tuxedo system events

  — interception of all Tuxedo ULOG events

  — health monitoring of Tuxedo application with thresholds on TMIB variables

- automatic association of Tuxedo system error manual to user logs
- managing Tuxedo domains on PARISC/HPUX, IA64/HPUX, Alpha/Tru64, Pentium/Windows and SPARC/Solaris nodes

- **HP OpenView Smart Plug-in for BEA WebLogic**

  The HP OpenView BEA WebLogic SPI integrates BEA WebLogic into the rest of the IT environments managed by the HP OpenView family of products. The WebLogic SPI monitors the following areas:

  - Server performance
  - Transaction rates
  - Servlet executing times, time-outs, request rates
  - Enterprise Java Bean resource utilization
  - JDBC connection status
  - Java Message Service
  - Java Virtual Machine heap utilization
  - Web applications
  - User-Definable Metrics to extend monitoring for the performance of any custom applications that expose MBean management data via JMX

- **HP OpenView Smart Plug-in for BEA WebLogic Integration**

  The SPI for WLI controls and manages business processes that are defined and executed using WLI and keeps these business processes performing optimally. Key features include:

  - Common Resource View: A consolidated resource view of the discovered WLI environment, which is automatically updated at run time. The view can be customized to show only managed resources that are of interest.
  - Service management: Manages the dynamic, distributed WLI application environment. The OVO service discovery populates a service map automatically, which thereafter is kept in sync with deployment changes that occur in a typical dynamic enterprise. Service nodes allow detailed management of the represented resource through use of the Resource Explorer™ plug-in to the OV Service Navigator™. Detailed management includes browsing the service hierarchy, service relationships, attributes, metrics, and invocation of methods exposed by the resource.

- Event Management: Monitors availability and status of WLI applications and provides alerts and notifications. Operators also have the ability to invoke applications manually or automatically when events are received through both an OpenView template, as well as a WSDM channel.
- Performance Monitoring: Monitors critical WLI resources, including Business Process, Adapters, Message Broker, Event Generators, Tasks, etc., and provides out-of-the-box performance and health metrics for many processes:
- Reports: Provide historical reports on important metrics.

- **HP OpenView Smart Plug-in for Data Network Devices**

  The HP OpenView SPI for Data Network Devices (Network SPI) provides a template group with pre-configured message source templates. The OV SPI for Data Network Devices features include the ability to monitor processes and log files for:

  - Cisco network devices such as: AS5xxx Universal Access Server, 3600 Series Router, 7xxx Series Router, 12xxx Series Internet Router, Catalyst 2900 Series Switch, Catalyst 2900 Series XL Switch, Catalyst 5xxx Series Switch, Catalyst 6xxx Series Switch, Catalyst 3500 Series XL Switch, Catalyst 3550 Series Switch, Catalyst 4000 Series Switch, CSS 11000 Content Services Switch, and PIX firewall
  - Nortel Alteon devices
  - Foundry BigIron and ServerIron
  - F5 BIG-IP and 3-DNS
  - Juniper M-series Internet Routers

- **HP OpenView Smart Plug-in for Informix**

  The HP OpenView SPI for Informix Dynamic Server (also referred to as the SPI for Databases) 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

- **HP OpenView Smart Plug-in for IBM DB2**

  The HP OpenView Smart Plug-in for IBM DB2 (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 OpenView Performance graphing tool to graphically represent areas like buffer pools, locks and deadlocks, agents and applications, and connections

  — integration with OpenView Service Navigator to visually represent databases/instances, color-coded to show service availability/performance

  — integration with OpenView Reporter to provide management- ready reports on availability, workload and space utilization

- **HP OpenView Smart Plug-in for IBM WebSphere Application Server**

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

  — server availability and performance and memory usage

  — transaction rates,

  — servlet executing times, time-outs, request rates

  — JDBC connection status

  — Web application processing and exception counts of scheduled WebSphere 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 OpenView Smart Plug-in for Microsoft Exchange**

  The HP OpenView SPI for Microsoft Exchange identifies connectivity delays and excessive e-mail queue lengths before they bring a system to its knees, thus avoiding slow e-mail delivery and unnecessary support calls. Additional features include:

  — event monitoring of MS Exchange entries to MS Windows 2003/2000/NT event log

  — over 50 calculated metrics for performance monitors and thresholds

  — metric areas including MTA, replication, Internet mail service, non-delivery reports

- **HP OpenView Smart Plug-in for Microsoft SQL Server**

  The SPI for MS SQL Server (also known as the SPI for Databases) helps administrators efficiently manage 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 30 pre-defined threshold events and several logfiles conditions

  — specific focus on space management, concurrency problems, and workload metrics

  — interception of hundreds of error log messages such as corruptions and space shortages

- **HP OpenView Smart Plug-in for SAP**

NOTE Please do not install version 8.71 on an OpenView Operations for UNIX 8.x updated system as it is not supported. However, version 9.0, planned to release in December 2004, will support OVO 8.x (for immediate access to the released SPI for SAP 9.0 version, please contact your sales/support representative or channel partner). Version 9.0 will be available both separately (in December) and on the next Smart Plug-ins CD update (in 2005) for HP OpenView Operations for UNIX.

The Smart Plug-in for SAP extends HP OpenView 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 conduction with OVO for UNIX, 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, etc.
- — 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) Monitor: check 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.

• **HP OpenView Smart Plug-in for Oracle**

The HP OpenView SPI for Oracle Database Servers (also known as the SPI for Databases) helps administrators efficiently monitor distributed enterprise-wide Oracle environments from a central, best-in-class console. The key features include:

- — more than 80 pre-defined threshold events and over than 90 logfile conditions
- — specific areas of focus on space management, table/index performance, and rollback segments
- — snapshot reports of database environments when alerts occur
- — thresholds based on ratios and percentages rather than raw data
- — continuos availability monitoring of the Oracle listener - a single point of failure

- **HP OpenView Smart Plug-in for PeopleSoft**

NOTE Please do not install version 2.05 on an OpenView Operations for UNIX 8.x updated system as it is not supported. However, version 2.20, planned to release in December 2004, will support OVO 8.x (for immediate access to the released SPI for PeopleSoft A.02.20 version, please contact your sales/support representative or channel partner). Version 2.20 will be available both separately (in December) and on the next Smart Plug-ins CD update (in 2005) for HP OpenView Operations for UNIX.

The HP OpenView SPI for PeopleSoft is based on standard HP OpenView processes and is an extension of the OpenView 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 OpenView Smart Plug-in for Sybase**

  The HP OpenView SPI for Sybase Adaptive Server (also known as the SPI for Databases) 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, resource hogs

  — interception of over 1,000 error log messages such as corruptions and space shortages

- **HP OpenView Smart Plug-in for TIBCO**

  The Smart Plug-in for TIBCO extends HP OpenView management capabilities to the TIBCO environment. By integrating with TIBCO Enterprise Management Advisor software and using the Web Services Management Framework (WSMF—a Web services-based management standard), the TIBCO SPI allows IT and applications managers to optimize their infrastructure and keep business

applications running efficiently. With the TIBCO SPI, managers can distinguish between routine infrastructure events and events that impact business processes and applications, and respond appropriately.

Key features include:

— Common Resource View: A consolidated resource view of the discovered TIBCO environment, which is automatically updated at run time. The view can be customized to show only managed resources that are of interest.

— Service Management: Manages the dynamic, distributed TIBCO application environment with its multiple software infrastructure components, including packaged and home-grown business applications. The OVO service discovery populates a service map automatically, which thereafter is kept in sync with deployment changes that occur in a typical dynamic enterprise. Service nodes allow detailed management of the represented resource through use of the Resource Explorer™ plug-in to the OV Service Navigator™. Detailed management includes browsing the service hierarchy, service relationships, attributes, metrics and invocation of methods exposed by the resource.

— Event Management: Monitors availability and status of TIBCO applications as well as providing the ability to invoke applications manually or automatically when events are received through both an OpenView template, as well as a WSDM channel.

— Performance Monitoring: Monitors runtime performance by setting thresholds against its performance metrics. For example, a process engine should not take X amount of time to execute a particular type of business process instance. Alerts are generated when performance thresholds are violated. Default performance monitoring templates are provided, which allow threshold setting not only against single metrics but also against tabular data sets.

— Reports: Historical and current reports for important TIBCO software resource metrics, such as Rendezvous packet statistics and BW business processes. Over 25 metrics are collected for historical reporting, performance monitoring, and near real-time graphing. Out of the box Crystal reports are provided for 10 of these metrics.

— Service Effect Analysis: Enables TIBCO and homegrown applications to subscribe and receive relevant, context-sensitive notifications regarding the application and/or infrastructure through a WSDM channel. With this solution, administrators can define composite events that can consist of granular events from a variety of infrastructure components managed by OVO. The customer or administrator can then receive alerts of those events

along with their root cause or impact path, enabling corrective action at the appropriate infrastructure level.

- **HP OpenView Smart Plug-in for UNIX OS**

  The HP OpenView SPI for UNIX Operating systems 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 of operating system, services, and performance monitoring (also supports Veritas Volume Manager and Solstice Disk Suite and Sun Cluster)

  — the ability to configure performance agents with OpenView Operations templates

- **HP OpenView Smart Plug-in for Web Servers**

  The HP OpenView Web Server SPI provides templates and applications specifically designed to integrate with OpenView Operations by providing the capability to monitor processes and log files of the following Web servers:

  — Apache, HP Apache

  — iPlanet Web Server FastTrack Edition

  — iPlanet Web Server Enterprise Edition

  — SunONE Web Server HP OpenView Smart Plug-in for Microsoft Windows OS

  The HP OpenView SPI for Microsoft Windows OS (Windows OS SPI) helps administrators efficiently manage Windows machines on the network and is the OVO 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, Index Server, Message Queue Server, Proxy Server, SNA Server, SQL Server, System Management Server, and Transaction Server)

  — monitoring of events, processes and performance for Microsoft Windows core components (Active Directory Server, Terminal Server, Network Infrastructure and Operating System health)

  — event forwarding from Insight Manager, HP Systems Insight Manager, and Dell OpenManage

— monitoring of events, processes and performance for Microsoft Internet Information Server and Microsoft Site Server

— monitoring events for antivirus applications from McAfee and Norton

— monitoring events for backup and storage applications from `Veritas`

The OVO for UNIX Smart Plug-ins CD contains the following OVO for UNIX Add-on Modules:

- **HP OpenView Storage Data Protector Integration**

  The HP OpenView Storage Data Protector Integration product is provided on the Data Protector product CD as a complimentary product. The Data Protector Integration product monitors and verifies Data Protector Cell Manager health and performance. The Data Protector product works with the following:

  — OVO 6.0 Management Server and Service Navigator 6.0 on HP-UX 11.00, HP-UX 11.11, Solaris 7 and Solaris 8

  — OVO 7.x Management Server and Service Navigator 7.x on HP-UX 11.00, HP-UX 11.11, Solaris 7 and Solaris 8

  The Data Protector Integration interfaces with the Data Protector on the following Systems.

  — Windows 2000 and Windows NT

  — HP-UX 11.00 and HP-UX 11.11

  — Solaris 7 and Solaris 8

  Data Protector builds upon the capabilities of its predecessor, HP OpenView Omniback II, and is fully compatible with existing Omniback II tapes, scripts and procedures.

- **HP OpenView Omniback 4.1 Integration for OVO**

  The HP OpenView Omniback II Integration product is provided on the Omniback II 4.1 product CD as a complimentary product. The Omniback II Integration product monitors and verifies Omniback 4.1 Cell Manager health and performance. The Omniback 4.1 product works with the following:

  — OVO 6.0 Management Server and Service Navigator 6.0 on HP-UX 10.20 and HP-UX 11.00

  — OVO 7.x Management Server and Service Navigator 7.x on HP-UX 11.00; 11.11

  The OmniBack 4.1 Integration interfaces with OmniBack 4.1 Cell Managers on the following operating systems:

— Windows 2000 and Windows NT

— HP-UX 10.20; 11.00; and 11.11

- **HP OpenView Smart Plug-in for Remedy Action Request System Integration**

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

  — the ability to automatically create and track Remedy Action Requests from HP OpenView Operations

  — dynamic updates of HP OpenView Operations events based on Action Request status changes.

- **HP OpenView Smart Plug-in for Storage Area Manager**

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

  — monitoring of HostAgent and OpenDial services on Windows and UNIX nodes

  — service mapping integration with the HP OpenView Service Navigator

  — applications to start/stop the management server, show HostAgent status, and back up the database, all of which provide quick and easy means to complete common Storage Area Manager operating tasks

  — integration with the separately purchased HP OpenView Reporter to automatically collect, sort, consolidate, and display storage network related data in management-ready reports

  — event forwarding to the separately purchased HP OpenView Service Desk, where the eventual closures result in automatic acknowledgements in Storage Area Manager

OVO/UNIX 7.1 Patches and Version Support

Preliminary setup: Please ensure that you have all the latest patches if you use version 7.1 or earlier of the OVO/UNIX management server and the OV agent. The latest OVO/UNIX consolidated server and intermediate patches are required for new/added platforms and also to correct a timeout issue with Service Discovery. Patches are located on the following URL:
http://openview.hp.com/sso/ecare/getsupportdoc?docid=OVO-PATCHES

Table 2 **Solaris Management Server & Managed Node**

OS: Management Server	Patch	Version	Date Released
Solaris	ITOSOL_00320	A.07.22	7/2004

OS: Managed Nodes	Patch	Version	Date Released
AIX	ITOSOL_00297	A.07.23	3/11/2004
HP-UX 11 IA	ITOSOL_00300	A.07.23	3/4/2004
HP-UX 11 PA	ITOSOL_00273	A.07.23	3/24/2004
Linux	ITOSOL_00303	A.07.23.1	3/19/2004
Solaris	ITOSOL_00312	A.07.23.1	4/8/2004
Tru64	ITOSOL_00276	A.07.23	3/11/2004
Windows	ITOSOL_00298	A.07.24	3/4/2004

Table 3 **HP-UX Management Server & Managed Nodes**

OS: Management Server	Patch	Version	Date Released
HP-UX	PHSS_30979	A.07.22	7/2004

OS: Managed Nodes	Patch	Version	Date Released
AIX	PHSS_30466	A.07.23	3/11/2004
HP-UX 11 IA	PHSS_30169	A.07.23	3/4/2004
HP-UX 11 PA	PHSS_30124	A.07.23	3/24/2004
Linux	PHSS_30548	A.07.23.1	3/19/2004

OS: Managed Nodes	Patch	Version	Date Released
Solaris	PHSS_30673	A.07.23.1	4/8/2004
Tru64	PHSS_30203	A.07.23	3/12/2004
Windows	PHSS_30202	A.07.24	2/12/2004

The following table identifies the OVO SPI products and the supported management server versions.

Table 4 Supported OVO for UNIX Management Server Versions

OVO Product Name	7.1	8.0 DCE & HTTPS	8.1 DCE & HTTPS
HP OpenView Integration for Sun Management Center	X	X	X
HP OpenView Internet Services	X	X	X
HP OpenView Network Diagnosis Add-On Module	X	X	X
HP OpenView Omniback 4.1 Integration for OVO	X		X
HP OpenView Service Navigator Report Package	X	X	X
HP OpenView SPI for BEA Tuxedo	X	X	X
HP OpenView SPI for BEA WebLogic	X	X	X
HP OpenView SPI for BEA WebLogic Integration	X		X
HP OpenView SPI for Data Network Devices	X	X	
HP OpenView SPI for IBM DB2	X	X	X
HP OpenView SPI for IBM WebSphere Application Server	X	X	X
HP OpenView SPI for Informix	X		X
HP OpenView SPI for Microsoft Exchange	X		X
HP OpenView SPI for Microsoft SQL Server	X		X
HP OpenView SPI for Microsoft Windows OS	X	X	X
HP OpenView SPI for Oracle	X		X
HP OpenView SPI for PeopleSoft	X		
HP OpenView SPI for Remedy ARS Integration	X	X	X
HP OpenView SPI for SAP	X	*	*
HP OpenView SPI for Storage Area Manager	X		X
HP OpenView SPI for Sybase	X		X
HP OpenView SPI for TIBCO	X	X	X

Table 4 **Supported OVO for UNIX Management Server Versions**

OVO Product Name	7.1	8.0 DCE & HTTPS	8.1 DCE & HTTPS
HP OpenView SPI for UNIX OS	X		X
HP OpenView SPI for Web Servers	X	X	X
HP OpenView Storage Data Protector Integration	X		X

*Please see note for SPI for SAP, version 9.0, planned OVO 8.x support, page 11.

Licenses for the Software on the CD-ROMs

The following table indicates additional licenses required for SPIs and applications included on the Smart Plug-in CD set.

Table 5 **License Requirements for OVO for UNIX Smart Plug-ins**

HP OpenView Product:	License Number	License Description
HP OpenView Smart Plug-in for BEA WebLogic	B9155AA	OV SPI BEA Weblogic Tier 4, LTU
	B9141AA	OV SPI BEA Weblogic Tier 3, LTU
	B9142AA	OV SPI BEA Weblogic Tier 2, LTU
	B9143AA	OV SPI BEA Weblogic Tier 1, LTU
	B9144AA	OV SPI BEA Weblogic Tier 0, LTU
HP OpenView Smart Plug-in for BEA WebLogic Integration	BA160AA	OV SPI BEA WLI Tier 4
	BA161AA	OV SPI BEA WLI Tier 3
	BA162AA	OV SPI BEA WLI Tier 2
	BA163AA	OV SPI BEA WLI Tier 1
	BA164AA	OV SPI BEA WLI Tier 0
HP OpenView Smart Plug-in for BEA Tuxedo	B9152AA	OV SPI BEA Tuxedo Tier 4, LTU
	B7467AA	OV SPI BEA Tuxedo Tier 3, LTU
	B7477AA	OV SPI BEA Tuxedo Tier 2, LTU
	B7478AA	OV SPI BEA Tuxedo Tier 1, LTU
HP OpenView Smart Plug-in for Data Network Devices	B9159AA	OV SPI Data Network Devices, LTU
HP OpenView Smart Plug-in for IBM WebSphere Application Server	B9173AA	OV SPI IBM WebSphere Tier 4, LTU
	B9174AA	OV SPI IBM WebSphere Tier 3, LTU
	B9175AA	OV SPI IBM WebSphere Tier 2, LTU
	B9176AA	OV SPI IBM WebSphere Tier 1, LTU
	B9177AA	OV SPI IBM WebSphere Tier 0, LTU

Table 5 License Requirements for OVO for UNIX Smart Plug-ins

HP OpenView Product:	License Number	License Description
HP OpenView Smart Plug-in for IBM DB2	BA180AA BA181AA BA182AA BA183AA BA184AA	OV SPI IBM DB2 Tier 4, LTU OV SPI IBM DB2 Tier 3, LTU OV SPI IBM DB2 Tier 2, LTU OV SPI IBM DB2 Tier 1, LTU OV SPI IBM DB2 Tier 0, LTU
HP OpenView Smart Plug-in for Informix	B9149AA B7460AA B7461AA B7462AA	OV SPI Informix Tier 4, LTU OV SPI Informix Tier 3, LTU OV SPI Informix Tier 2, LTU OV SPI Informix Tier 1, LTU
HP OpenView Smart Plug-in for Microsoft Exchange Server	B7449AA B7450AA B7451AA	OV SPI MS Exchange Tier 2, LTU OV SPI MS Exchange Tier 1, LTU OV SPI MS Exchange Tier 0, LTU
HP OpenView Smart Plug-in for Microsoft Windows OS	N/A	Licensed with OVO agents
HP OpenView Smart Plug-in for SAP	B9148AA B7456AA B7457AA B7458AA B7459AA	OV SPI SAP Tier 4, LTU OV SPI SAP Tier 3, LTU OV SPI SAP Tier 2, LTU OV SPI SAP Tier 1, LTU OV SPI SAP Tier 0, LTU
HP OpenView Smart Plug-in for Microsoft SQL Server	B7473AA B7474AA B7475AA	OV SPI MS SQL Server Tier 2, LTU OV SPI MS SQL Server Tier 1, LTU OV SPI MS SQL Server Tier 0, LTU
HP OpenView Storage Data Protector Integration for OVO	N/A	Provided out-of-the-box with the Data Protector starter packs: Cell Manager on Windows B6961AA/BA Cell Manager on Solaris B6951DA/CA Cell Manager on HP-UX B6951AA/BA
HP OpenView Omniback 4.1 Integration for OVO for UNIX	N/A	Provided out-of-the-box with the Omniback cell manager starter packs.
HP OpenView Smart Plug-in for Oracle	B9150AA B7464AA B7465AA B7466AA B7467AA	OV SPI Oracle Tier 4, LTU OV SPI Oracle Tier 3, LTU OV SPI Oracle Tier 2, LTU OV SPI Oracle Tier 1, LTU OV SPI Oracle Tier 0, LTU
HP OpenView Smart Plug-in for PeopleSoft	B9147AA B7452AA B7452AA B7452AA	OV SPI PeopleSoft Tier 4, LTU OV SPI PeopleSoft Tier 3, LTU OV SPI PeopleSoft Tier 2, LTU OV SPI PeopleSoft Tier 1, LTU

Table 5 License Requirements for OVO for UNIX Smart Plug-ins

HP OpenView Product:	License Number	License Description
HP OpenView Smart Plug-in for Remedy ARS Integration	B7480AA	OV SPI Remedy, LTU
HP OpenView Smart Plug-in for Storage Area Manager	N/A	Provided out-of-the-box with Storage Area Manager.
HP OpenView Smart Plug-in for Sybase	B9451AA B7468AA B7469AA B7470AA	OV SPI Sybase Tier 4, LTU OV SPI Sybase Tier 3, LTU OV SPI Sybase Tier 2, LTU OV SPI Sybase Tier 1, LTU
HP OpenView Smart Plug-in for TIBCO	BA194AA	N/A
HP OpenView Smart Plug-in for UNIX OS	N/A	Licensed with OVO agents
HP OpenView Smart Plug-in for Web Servers	N/A	Licensed with OVO agents
HP OpenView Add-on Modules:		
HP OpenView Network Diagnosis Add-On Module	N/A	PD Component is licensed with NNM AE.
HP OpenView Service Navigator Report Package	N/A	License included with purchase of Reporter.

CD-ROM Packaging Information

Orders placed for HP-UX Management Server will receive CD-ROMs (2 volumes) containing:

- HP-UX depots and documentation
- OV Reporter integrations and documentation
- OpenView Internet Services product and documentation

Orders placed for SOLARIS Management Server will receive CD-ROMs (2 volumes) containing:

- SOLARIS depots and documentation
- OV Reporter integrations and documentation
- OpenView Internet Services product and documentation

Smart Plug-ins CD-ROM Set Contents and Use

The Smart Plug-in CD-ROM set contents are as follows:

- Two contain the Smart Plug-ins and application management products, which (with license[s]) you can install on the OVO management server.
- Another contains the products' reporting/graphing packages for use with *OpenView Reporter* and *OpenView Performance Manager*.

All CDs contain copies of the documentation.

NOTE An additional CD-ROM contains the Internet Services product, which you can install on a Windows system for a 60-day trial evaluation. See "OpenView Internet Services CD-ROM Contents and Use," on page 34, for details.

The instructions contained in this document apply to all applications and are therefore general. For more exact instructions pertaining to the specific product(s) you plan to install, print a copy of the product's installation instructions. For the name/location of the document(s) you need, see Table 6 on page 26.

NOTE While the CDs contain the complete software for each of the listed products, install only those for which licenses have been obtained.

Smart Plug-in Installation: Follow the instructions for the individual product. At the point in the instructions where you run the swinstall command to install the product software, use the software depot file listed in Table 7 on page 28. When the swinstall is complete, continue with the instructions for the individual product.

Reporting/Graphing Packages Installation: Some products have *OpenView Reporter* and *OpenView Performance Manager* integration. If your product integrates with either OV Reporter or OV Performance Manager, follow the specific

installation instructions in the product's documentation. When you need to run the reporting/graphing programs, mount the OV Reporter Packages CD. You will find the programs in the directories shown in Table 8 below.

WARNING It is important that you follow the product's specific instructions as they contain unique steps that must be completed before and after `swinstall`. These steps enable a successful installation.

Steps for installing from the Smart Plug-ins CD-ROMs

Step 1: Mount the Smart Plug-ins CD-ROM.

Step 2: Print the product's installation instructions.

Step 3: Follow product installation instructions ensuring that the installer depot in the swinstall command is the correct one from Table 7.

Steps for installing from the OpenView Reporter and OpenView Performance Manager Packages CD-ROMs

Step 1: Mount the OV Reporter Packages CD-ROM.

Step 2: If you have not already done so, print the product's installation instructions.

Step 3: Follow Reporter Packages installation instructions using the files from the directories listed in Table 8 on page 30.

To Mount the CD-ROM on HP-UX

1. Log on as user root.
2. Set the user root's umask by entering:

   `umask 027`
3. Create a directory to mount the CD-ROM:

   `mkdir /<mount_point>`

   For example: **`mkdir /cdrom`**

4. Insert the CD-ROM containing the SPI you want to install into the disk drive and mount it as user root by entering:

   `mount -r -F cdfs /dev/<cdrom_drive_name> /<mount_point>`

   For example, for a local CD-ROM, you might enter:

   `mount -r -F cdfs /dev/dsk/c0t2d0 /cdrom`

   You can also run SAM and mount the CD-ROM to a specific path in the `Disks and File Systems` window.

To Mount the CD-ROM on Solaris

Insert the CD-ROM containing the SPI you want to install into the CD-ROM drive. The CD-ROM is automatically mounted (and unmounted) on Sun Solaris systems.

To Mount the CD-ROM on Windows NT/2000

Insert the OVO for UNIX Smart Plug-in CD into the CD-ROM drive. The CD will automatically mount.

Product Documentation Locations on the CD-ROM

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

NOTE

Support for OVO UNIX Management Server on HP-UX 10.20 has been dropped; HP-UX 11.x and Solaris are still supported. Some SPI documentation may not yet reflect this change.

The installation instructions and any applicable release notes for each product on the Smart Plug-ins CD are in the files listed below.

— File names are relative to:
/<*mount_point*>/`OV_DOC`
where
<*mount_point*> is the directory where the Smart Plug-ins CD was mounted.

— Most document files are in Adobe Acrobat (pdf) format. Use Adobe Acrobat to view or print the appropriate files.

Table 6 Product Installation Instructions and Release Notes

Product Name/ HP OpenView:	Installation Instructions Relative to /<mount_point>/OV_DOC
Integration for Sun Management Center	/SunMC_A.03.50/UsersGuide.pdf /SunMC_A.03.50/ReleaseNotes.pdf
Network Diagnosis Add-On Module	/NDAOM_A.02.00/usersguide.pdf /NDAOM_A.02.00/Release_notes.pdf
OmniBack 4.1 Integration for OVO for UNIX	/OmniBack4.1_Integration/OBSPIAdminGuide.pdf /OmniBack4.1_Integration/OBSPIRelNotes.pdf
Service Navigator Report Package	/ServNav_A.03.50/ov_servnav_report_pkg.pdf
SPI for BEA Tuxedo	/TUXEDO_SPI_A.02.52/TUXSPI_InstallGuide.pdf /TUXEDO_SPI_A.02.52/TUXSPI_UserGuide.pdf /TUXEDO_SPI_A.02.52/TUXSPI_ReleaseNotes.txt
SPI for BEA WebLogic	/WEBLOGIC_SPI_A.03.50/ConfigGuide.pdf /WEBLOGIC_SPI_A.03.50/ReleaseNotes.pdf
SPI for BEA WebLogic Integration	/WLISPI_A.01.00/userguide.pdf /WLISPI_A.01.00/release_notes.pdf /WLIOSPI_A.01.00/License/
SPI for Data Network Devices	/NET_SPI_A.02.00/NETSPIAdminGuide.pdf
SPI for Databases	/DB_SPI_A.08.10/users_guide.pdf /DB_SPI_A.08.10/release_notes.pdf
SPI for IBM WebSphere Application Server	/WEBSPHERE_SPI_A.03.50/ConfigGuide.pdf /WEBSPHERE_SPI_A.03.50/ReleaseNotes.pdf
SPI for IBM DB2	/DB2_SPI_A.02.08/UserGuide.pdf /DB2_SPI_A.02.08/ReleaseNotes.pdf
SPI for Microsoft Exchange	/EXCHANGE_SPI_A.08.10/exspi_users_guide.pdf /EXCHANGE_SPI_A.08.10/exspi_ref_guide.pdf /EXCHANGE_SPI_A.08.10/release_notes.txt
SPI for Microsoft Windows OS	/WINOSSPI_A_08.50/WinOSSPI.pdf /WINOSSPI_A_08.50/ReleaseNotes.txt
SPI for SAP	/SAPSPI_A.08.71/sapspi_install.pdf /SAPSPI_A.08.71/release_notes.pdf
SPI for PeopleSoft	/PS_SPI_A.02.05/PSoft_admref.pdf /PS_SPI_A.02.05/relnotes.pdf
SPI for Remedy ARS Integration	/REMEDY_SPI_A.02.50/admin.pdf /REMEDY_SPI_A.02.50/relnotes.pdf

Table 6 Product Installation Instructions and Release Notes

Product Name/ HP OpenView:	Installation Instructions Relative to /<mount_point>/OV_DOC
SPI for Storage Area Manager	/OVSAMSPI_03.20.10/ovsamspidoc_unix.pdf /OVSAMSPI_03.20.10/ovsam_servicedeskdoc.pdf /OVSAMSPI_03.20.10/ovsam_reporterdoc.pdf /OVSAMSPI_03.20.10/releasenotes.txt
SPI for TIBCO	/TIBCOSPI_A.01.03/userguide.pdf /TIBCOSPI_A.01.03/release_notes.pdf /TIBCOSPI_A.01.03/License/
SPI for UNIX OS	/UNIXOS_SPI_A.03.10/OS-SPI_InstallGuide.pdf /UNIXOS_SPI_A.03.10/OS-SPI_AdminRef.pdf /UNIXOS_SPI_A.03.10/OS-SPI_ReleasesNotes.txt
SPI for Web Servers	/WEBSERVER_SPI_A.04.22/WSSPI_UserGuide.pdf /WEBSERVER_SPI_A.04.22/WSSPI_ReleaseNotes.txt
Storage Data Protector Integration	DataProtector_Integration/DP_Reporter_Integ.pdf DataProtector_Integration/DP_ServiceDesk_Integ.pdf DataProtector_Integration/DP_SIP_Integ.pdf DataProtector_Integration/OVO_UNIX_Integ_Guide.pdf DataProtector_Integration /OVO_UNIX_Integ_Release_Notes.pdf

Product Locations on the CD-ROM

The table that follows indicates where on the Smart Plug-ins CD-ROM you can find the depot file for the product you want to install. Depot files differ according to the supported management server platform, which include HP-UX 11 and Solaris.

Substitute management server platform for <*platform*> as:

— 11.0HPUX

— SOLARIS

Use the file to construct the swinstall command. The exact syntax you must use is specified in the individual product's configuration guide, replacing the sdtape file from below. For example, the swinstall command for installing the WebLogic SPI, on an HP-UX 11.0 Management Server, where the CD is mounted on /cdrom would be:

```
swinstall -s /cdrom/OV_DEPOT/11.0HPUX.sdtape WLSSPI
```

Table 7 Product locations

Product Name/ HP OpenView:	Depot file and CD Relative to /<*mount_point*>/OV_DEPOT/	SD Install Name
Network Diagnosis Add-On Module	<*platform*>.sdtape	AOM-ND-OVO-HP (HP-UX) AOM-ND-OVO-SOL (Solaris)
Omniback 4.1 Integration for OVO for UNIX	11.0HPUX.sdtape	SPI-OMNIBACK-OVO
Service Navigator Report Package	None: Uploaded from Windows system to UNIX system	None
Integration for Sun Management Center	<*platform*>.sdtape	OVOSymInt
SPI for BEA Tuxedo	<*platform*>.sdtape	BEASPI
SPI for BEA WebLogic	<*platform*>.sdtape	WLSSPI
SPI for BEA WebLogic Integration	<*platform*>.sdtape	SPIWLI
SPI for Data Network Devices	<*platform*>.sdtape	B9159AA
SPI for Databases	<*platform*>.sdtape	DBSPI (see product documentation to select specific database files; for example, Oracle, MS SQL Server, etc.)
SPI for IBM DB2	11_DB2_SPI_A.02.08.sdtape	DB2SPI
SPI for IBM WebSphere Application Server	<*platform*>.sdtape	WBSSPI
SPI for Microsoft Exchange	<*platform*>.sdtape	SPI-EXCHANGE-OVO
SPI for Microsoft Windows OS	<*platform*>.sdtape	SPI-WIN-OVO
SPI for SAP	<*platform*>.sdtape	SPI-SAP-ITO
SPI for PeopleSoft	<*platform*>.sdtape	SPI-PSoft-HPORA5 SPI-PSoft-SuORA5
SPI for Remedy ARS Integration	<*platform*>.sdtape	SPI-Remedy SPI-RemedyDoc
SPI for Storage Area Manager	<*platform*>.sdtape	HPOVSAMSPI
SPI for TIBCO	<*platform*>.sdtape	SPITIBCO
SPI for UNIX OS	<*platform*>.sdtape	SPI-OSUX-OVO-HP (HP-UX) SPI-OSUX-OVO-SOL (Solaris)
SPI for Web Servers	<*platform*>.sdtape	SPI-WS
Storage Data Protector Integration	<*platform*>.sdtape	SPI-DATAPROTECTOR-OVO

NOTE Please *do not* install the entire depot, but only the components for which you are licensed. Also, be sure to read the individual Release Notes of each component before installing.

Reporting/Graphing Package Locations on the CD-ROM

OpenView Reporter and *OpenView Performance Manager* reporting and graphing packages are installed on the Windows server where the Reporter or Performance Manager server software is installed according to the individual product's documentation.

NOTE 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: **8.1.66** or **8.1.76** or **9.0.13**.

Table 7 indicates where on the Reporting/Graphing Packages CD you can find the program files for installing the packages.

NOTE **Non-English Report packages** (reports): For systems running under other language environments, the following SPIs include special packages: (1) MS SQL Server, (2) Oracle, and (3) Exchange.

In the `OV_REPORTER` directory, you can identify the file language compatibility according to suffix as follows:
`_zh_CN` (Simple Chinese)
`_jp` (Japanese)
`_ko` (Korean)

Please see the table at the end of this document for more information, and install the report package file according to desired language.

Japanese OVPM packages (graphs): For systems running in Japanese environments, the following SPIs have included OVPM packages: (1) MS SQL Server (2) Oracle, (3) Sybase, and (4) Informix. In the `OV_PM` directory, you can identify Japanese packages by the `_jp` suffix.

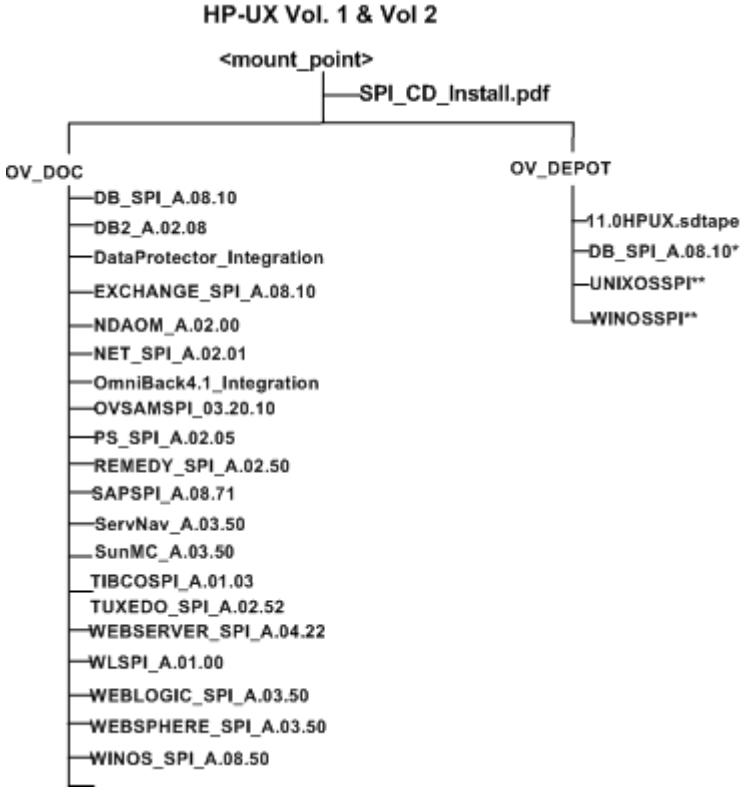
Table 8 **OpenView Reporting & Graphing Package locations**

Product Name/ HP OpenView:	**Directory on CD** Relative to: \<*CD-ROM drive*\>\OV_REPORTER\
Service Navigator Report Package	ServNav_A.03.50\
SPI for BEA WebLogic	WEBLOGIC_SPI_A.03.50\
SPI for BEA WebLogic Integration	WLISPI_A.01.00\
SPI for Databases	DB_SPI_A.08.10\
SPI for IBM DB2	DB2_SPI_A.02.08\
SPI for IBM WebSphere Application Server	WEBSPHERE_SPI_A.03.50\
SPI for Microsoft Exchange	EXCHANGE_SPI_A.08.10\
SPI for SAP	SAPSPI_A.08.71\
SPI for Storage Area Manager (reporting/graphing and Service Desk integrations)	OVSAMSPI_03.20.10\
SPI for TIBCO	TIBSPI_A.01.03\
Storage Data Protector Integration for OVO	Data Protector_Integration\

NOTE Please *do not* install the entire depot, but only the components for which you are licensed. Also, be sure to read the individual Release Notes of each component before installing.

HP-UX Smart Plug-in CD-ROM Contents

Both OVOU November 2004 SPI CDs, Volume 1 and Volume 2 CDs contain all product documentation (`OV_DOC`). For contents of Volume 1 and Volume 2 (`OV_DEPOT`), please see Table 1, page 5. The following diagram shows the locations of the directories on the HP-UX CD-ROM:



*This directory contains language-specific files for the Database SPI; see "Software Support for Non-English Environments"on page 42 for more information.

**These directories contain special installation programs for the UNIX OS and Windows OS Smart Plug-ins. See the individual product documentation for details.

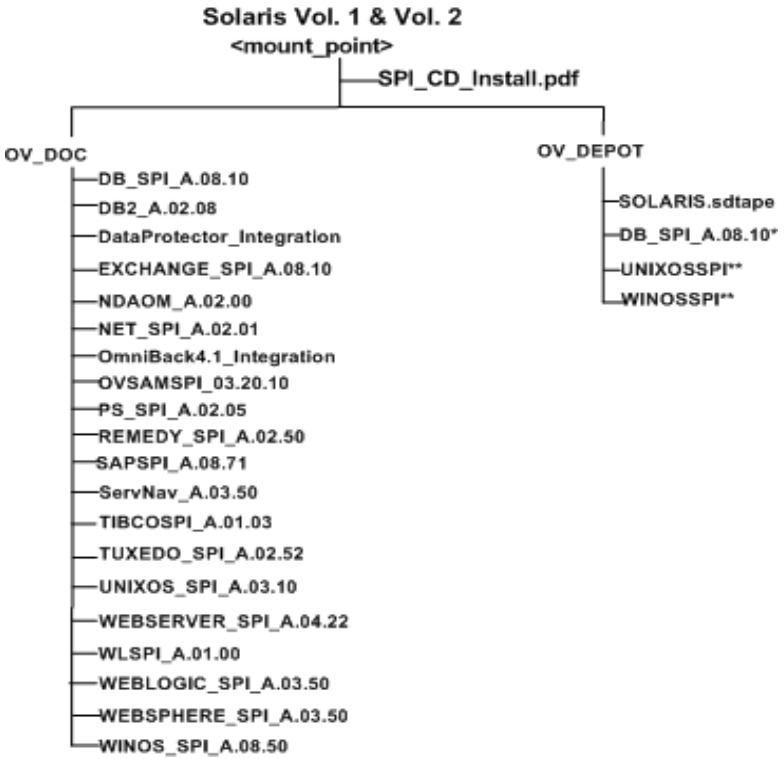
The depot 11.0HPUX.sdtape contains the software bundles and products to install.

NOTE Please *do not* install the entire depot, but only the components for which you are licensed. Also, please read the Release Notes of each component before installing.

SOLARIS Smart Plug-in CD-ROM Contents

Both OVOU November 2004 SPI CDs, Volume 1 and Volume 2 CDs contain all product documentation (`OV_DOC`). For contents of Volume 1 and Volume 2 (`OV_DEPOT`), please see Table 1, page 5.

The following files and directories are on the SOLARIS CD-ROM:



*This directory contains language-specific files for the Database SPI; see "Software Support for Non-English Environments"on page 42 for more information.

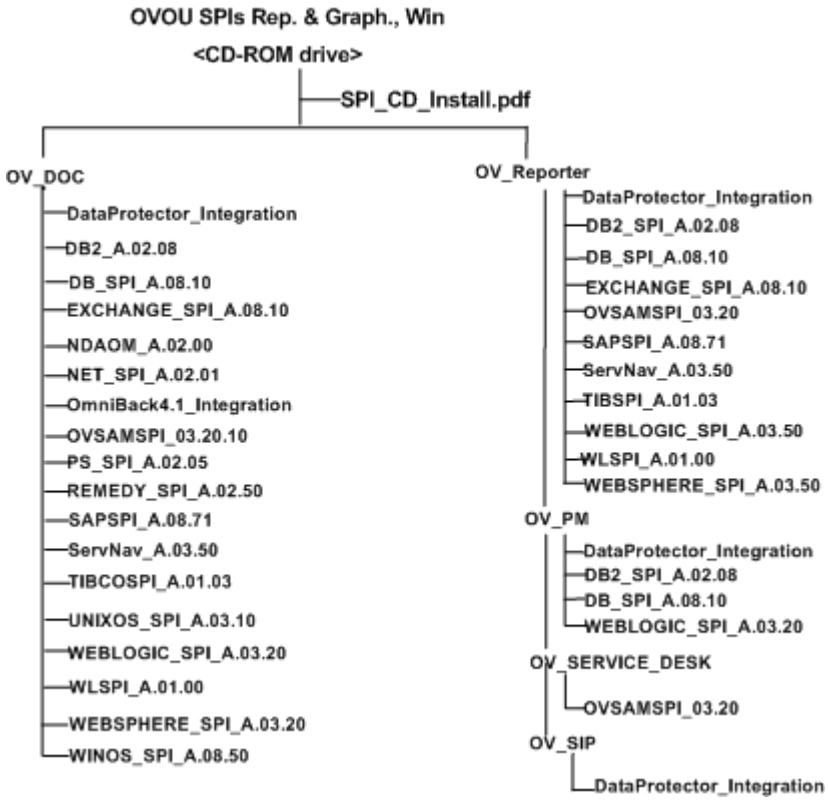
**These directories contain special installation programs for the UNIX OS and Windows OS Smart Plug-ins. See the individual product documentation for details.

The depot SOLARIS.sdtape contains the software bundles and products to install.

NOTE Please *do not* install the entire depot, but only components for which you are licensed. Also, please read the Release Notes of each component before installing.

OV Reporting/Graphing Packages CD-ROM Contents

The following files and directories are on the CD-ROM:



OpenView Internet Services CD-ROM Contents and Use

The OpenView Internet Services (OVIS) 60-day trial CD is included with the current release of OpenView Operations (OVO) for UNIX. While OVO and its Smart Plug-ins (SPIs) look at performance/availability from a back-end (or infrastructure) perspective, OVIS investigates those same issues from the front end. Adding OVIS to OVO and the SPIs, IT operators/administrators get the complete picture, relying on OVIS to detect up-front customer experience issues and OVO and the Smart Plug-ins to drill down to the root cause.

For simulating and measuring the end-user experience, OVIS contains programs known as “probes.” These probes can be deployed to systems accessing services and applications. Once deployed, probes measure the transaction times occurring through the use of protocols like HTTP, FTP, DNS, WAP, as well as application use efficiency for products like Microsoft Exchange Server and SAP. Using a specified probe, OVIS can evaluate the incoming data and generate an alarm when a violation to a service level objective occurs or when conformance to a service level agreement does not.

NOTE OVIS must be installed on a Windows system, but its probes can run on a variety of operating systems: HP-UX, Sun, Linux, and remote Windows systems.

OVIS Integration

OVIS integration with OVO enables OVIS to send alarms to the OVO console. Integration at this level is basic and requires only that you install the product on a Windows system and a template on the OVO management server. The OVIS integration with Service Navigator enables OVIS to send service alerts that appear in the service map. Please see the *HP OpenView Internet Services User’s Guide* for configuring the OVIS integration with OVO and Service Navigator.

OVIS Installation

NOTE For prerequisites and configuration instructions, print and read the OVIS Release Notes and *User’s Guide* located on the HP OpenView Internet Services CD in: `\documents\iopsrefleasenotes.pdf`

`\documents\IS_User_Ref_Guide.pdf`
In addition, please see the HP OpenView Web site for updates and other current information at http://www.openview.hp.com/products/ovis/index.html .

To install OVIS:

1. At a Windows system, insert the OpenView Internet Services CD in the CD-ROM drive.
2. Follow the instructions as they appear online.
   (Be prepared to reboot your system after installation completes.)

Table 9 License Requirements

HP OpenView Product:	License Number	License Description
HP OpenView Internet Services	J4512AA J4513AA J4515AA J4516AA J4512AJ J4513AJ J4515AJ J4516AJ	Base license, 5 pack (English) Additional 5 pack (English) Additional 25 pack (English) Additional 250 pack (English) Base license, 5 pack (Japanese) Additional 5 pack (Japanese) Additional 25 pack (Japanese) Additional 250 pack (Japanese)

Self-Healing Information for Increased Troubleshooting Capabilities

The following Smart Plug-ins and the add-on module now have access to improved SPI troubleshooting capabilities:

- Smart Plug-in for UNIX (complimentary core SPI)
- Smart Plug-in for Webservers (complimentary core SPI)
- Smart Plug-in for BEA Tuxedo
- Smart Plug-in for BEA WebLogic Application Server
- Smart Plug-in for IBM WebSphere
- Smart Plug-in for Databases
- Smart Plug-in for Microsoft Exchange Server
- Network Diagnosis Add-on Module (NDAOM)

Troubleshooting information can be obtained through two separate methods:

- **Self-Healing Services** software and online support: This client software can be downloaded from the HP Software Support Online web site and is included as part of your support contract. The software and its web-linked capabilities allow you to gather relevant troubleshooting data that you can use to independently investigate the problem or submit to the HP secure web site. This web site contains a wealth of information, potentially leading to a quick solution. The Self-Healing Services client software supports managed nodes running on HP-UX, Solaris, and Windows (check the web site in the section that follows for specific, current operating system support).
- **Self-Healing Info** application: This application can be run on any managed node supported by the Smart Plug-in. When run, the application gathers data that you can send to HP support to diagnose the SPI problem.

The Self-Healing Services Client Software

The above-listed SPIs easily integrate with HP OpenView Self-Healing Services client software, an added benefit of your support contract. Self-Healing Services speeds up problem resolution by allowing you to quickly open an incident and send the data straight to a secure HP support site, where it is assimilated into an incident and, if you choose, an incident report. The support site organizes troubleshooting information and makes this information available so that problem resolution can potentially occur faster than was ever before possible.

Download the Self-Healing Services Software

To prepare to use Self-Healing Services, complete the following steps:

1. Install Self-healing Services on all managed nodes running on supported operating systems (as of November 2004, they are HP-UX, Solaris, and Windows).
   For downloading the software, see HP Openview Software Support Online web site at: http://support.openview.hp.com/self_healing.jsp
2. Install all SPI software and configure the SPI according to the individual SPI documentation.
   (When you finish, you will have pushed out Actions/Monitors/Commands, which includes a file set that allows the SPI to integrate with Self-Healing Services.)

Register with Self-Healing Services; Restart the Service

After installing/configuring your SPI software and Self-Healing Services software on each managed node, you must register the SPI for its use:

1. At the management server, from the Window menu select **Application Bank**.
2. Open the **Self-Healing** group to display the **Self-Healing Reg** application.
3. From the Window menu select **Node Bank**, locate the node you want, and drag and drop it onto the **Self-Healing Reg** application.
   (*The Smart Plug-in is now registered with Self-Healing Services*).
4. At the OVO management server, from the Window menu select **Message Source Templates** and select the **Self-Healing** template group.
5. Deploy the **Self-Healing Reg** template on each managed node (for nightly registration with Self-Healing Services).
6. At each managed node, restart Self-Healing Services so that the current SPI is detected and integrated with Self-Healing Services.

Use Self-Healing Services

Whenever you see a problem with the operation of your Smart Plug-in, you can now go to the Self-Healing Services web site and open an incident. To open an incident, you open the Manual Submission page and choose your Smart Plug-in from the drop-down list. Self-Healing Services automatically gathers error-related data for the selected SPI. Please see the Self-Healing Services manuals/online Help for details on its use.

The list below shows how the SPI name appears (in bold) for selection in the Self-Healing Services web page:

— Smart Plug-in for UNIX (complimentary core SPI)
smart plug-in for UNIX os

— Smart Plug-in for Webservers (complimentary core SPI)
smart plug-in for webservers

— Smart Plug-in for BEA WebLogic Application Server
smart plug-in for BEA weblogic application server

— Smart Plug-in for BEA Tuxedo
smart plug-in for BEA tuxedo

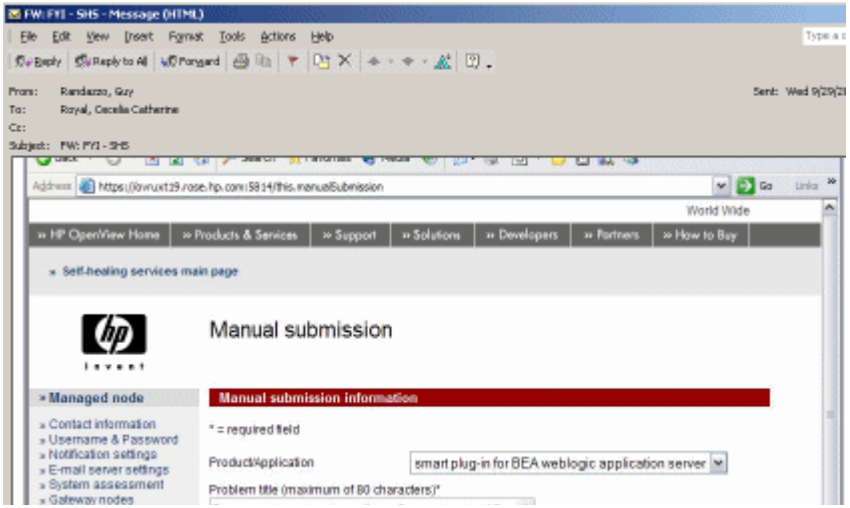
— Smart Plug-in for IBM WebSphere
smart plug-in for Websphere

— Smart Plug-in for Databases
smart plug-in for databases

— Smart Plug-in for Microsoft Exchange Server
smart plug-in for ms exchange

— Network Diagnosis Add-on Module
network diagnosis add-on module

You can choose Manual submission to open an incident in Self-Healing Services.



(As desired) To remove the Self-Healing Services Software:

1 At the management server in a terminal window enter the following to remove the Self-Healing Services application:
```
swremove SPI-SHS-OVO
```

2 Change to the `customer` directory by entering:
```
cd /var/opt/OV/share/databases/OpC/mgd_node/customer
```

3 To find and remove all Self-Healing Services programs enter:
```
find . -name "shs*" -exec rm {} \;
```

4 At the OVO console from the Window menu choose **Application Bank**.

5 Right-click the **Self-Healing** application group and select **Delete**.

6 To remove the template and template group, from the Window menu select **Message Source Templates**.

7 From the groups displayed, select the **Self-Healing** group.

8 In the right pane, highlight the **Self-Healing Reg** template and press the **Delete from all...** button.

9 In the left pane, highlight the **Self-Healing** template group and press the **Delete from all...** button.

The Self-Healing Info Application (individual SPI application)

The Self-Healing Info application included with each Smart Plug-in can be run on the managed node to gather error message-specific and other relevant data. This data is stored in a compressed file that you can send to HP support for assistance. Please see the documentation specific to your Smart Plug-in for the **Self-Healing Info** application location and use.

Known Problems and Workarounds

- **Service Navigator/service discovery settings/potential issues:**

  — **Configuration variable:** During the installation of OpenView Operations 8.0, the `OPC_SVCM_ADD_WARN_IF_EXISTS` config variable is set to `FALSE` and is expected to remain that way for any smart plug-in service discovery to work as expected.

  — **Service discovery timeout:** Service discovery for any smart plug-in is dependent on the **OVDEPLOY** utility, which is provided with OVO 8.0. For this utility the service discovery timeout setting is 10 minutes, stated in *milliseconds* as 60000. As a result, discovery fails if the process takes longer than 10 minutes to complete. If your smart plug-in service discovery process takes longer to complete, increase the timeout by running the following command on the management server:
  `ovconfchg -ns depl -set CMD_TIMEOUT <new_value>`
  as in
  `ovconfchg -ns depl -set CMD_TIMEOUT 120000`

  Note: You can view the current timeout setting by running the command:
  `ovconfget`

  — **Later Service Navigator installation:** Whenever Service Navigator is installed after a SPI is installed, you must manually execute the script stored in `/opt/OV/SPISvcDisc/bin`:
  `svcdisc_upload.sh`

- **Common Components Remaining After De-installation:**

  Any smart plug-in installation, in addition to installing the SPI, also installs programs common to other SPIs. Two such programs are **DSI2DDF** (for data collection purposes) and **SPI-SVCDISC-OVO** (for service discovery purposes).

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

  ```
  swremove DSI2DDF
  swremove SPI-SVCDISC-OVO
  ```

  (I*f any SPI remains*, *do not remove either of the above components.*)

- **SPI-specific issues:**

  See the individual product documentation for more information about known problems and workarounds.

Previous and Current HP OpenView Agents
(no setup required)

HP OpenView Smart Plug-ins can detect whether or not you are using OpenView Performance Agent (also known as MeasureWare Agent). If you are, your new installation will automatically use it as well. As a result, if you use PerfView, your new installation also supports that configuration.

If for any reason you decide that you want to use the new HP OpenView subagent included with OVO 7.0, you can configure your smart plug-in to do so. Note that this configuration does not support PerfView.

To override the use of OpenView Performance Agent, set up an empty file named `nocoda.opt` and store it on the managed node in a specific location. The location will vary according to the managed node operating system as shown below.

Managed Node O/S	File Location
HP-UX, Tru64, and Solaris	`/var/opt/OV/conf/dsi2ddf/nocoda.opt`
AIX	`/var/lpp/OV/conf/dsi2ddf/nocoda.opt`
Windows	`\usr\ov\conf\dsi2ddf\nocoda.opt`

Create the File, Save on the Managed Node

- (If necessary) on the managed node according to the path shown in the preceding table, create the `dsi2ddf` directory.
- Use a text editor to open a new file.
- Save the file as `nocoda.opt` in the managed node's `dsi2ddf` directory.

See the individual product documentation for more information about compatibility information and installation requirements.

Patches and Fixes in This Version

Please see page 18 for important support information about the latest patches. In addition, see the individual product documentation for more information about specific patches and fixes. Patches can be downloaded from the following URL:

http://support.openview.hp.com/cpe/patches/
and http://openview.hp.com/sso/ecare/getsupportdoc?docid=OVO-PATCHES

Software Support for Non-English Environments

Smart Plug-ins for OpenView Operations for UNIX have varying internationalization support levels: Some can be installed, configured, and run on various non-English systems where OVO for UNIX is supported, while others run only under English. Please refer to the table that follows for details.

Table 10 Current Internationalization Support

Smart Plug-in	**Template Support**	**OV Reporter Support** (Report instructions follow this table.)
Data Protector	Supports Japanese OVO for UNIX 6.x and 7.x management servers.	English only environments
DB2	English and various non-English environments where OVO/UNIX is supported	English only environments
Exchange	English and various non-English environments (Asian and European locales) where OVO/UNIX is supported. Version A.08.00 is internaltionalized for Japanese, S-Chinese and Korean locales.	With OV Reporter: for Japanese systems, reports are generated and fully translated; for S-Chinese and Korean systems, special report packages allow successful report generation, but reports themselves are in English.

Table 10 Current Internationalization Support

Smart Plug-in	**Template Support**	**OV Reporter Support** (Report instructions follow this table.)
Note: Exchange SPI A.07.00 was an English only version.		
Informix	English and various non-English environments (Asian and European locales) where OVO/UNIX is supported.	English only environments
NDAOM	English and various non-English environments (Asian and European locales where OVO/UNIX is supported)	English only environments
Omniback	English only environments	N/A - no reports
Oracle	English and various non-English environments (Asian and European locales where OVO/UNIX is supported). Fully translated Japanese templates, which automatically upload in Japanese environments.	With OV Reporter: for Japanese systems, reports are generated and fully translated; for S-Chinese and Korean systems, special report packages allow successful report generation, but reports themselves are in English.
PeopleSoft	English only environments	N/A - no reports
Remedy	English only environments	N/A - no reports

Table 10 Current Internationalization Support

Smart Plug-in	**Template Support**	**OV Reporter Support** (Report instructions follow this table.)
MS SQL	English and various non-English environments (Asian and European locales where OVO/UNIX is supported). Fully translated Japanese templates, which automatically upload in Japanese environments. For S-Chinese and Korean, see **Note** directly below.	With OV Reporter: for Japanese systems, reports are generated and fully translated; for S-Chinese and Korean systems, special report packages allow successful report generation, but reports themselves are in English.
Note: For MS SQL SPI in S-Chinese and Korean environments, see the special `README.ko_CN`, located in the `\OV_DEPOT\DB_SPI_A.08.10\` directory on the main CD, for instructions on uploading Korean or S-Chinese template files.		
SAP	Japanese for templates	English only environments
Note: SPI for SAP documents will be available in Japanese at a later date through an FTP site.		
Sybase	English and various non-English environments where OVO/UNIX is supported, except for the reports.	English only environments
Tuxedo	English and various non-English environments where OVO/UNIX is supported.	N/A - no reports
WebLogic	English and various non-English environments where OVO/UNIX is supported	English only environments
WebMethods	English only environments	English only environments
WebSphere Application Server	English and various non-English environments (Asian and European locales) where OVO/UNIX is supported.	N/A - no reports

Table 10 Current Internationalization Support

Smart Plug-in	**Template Support**	**OV Reporter Support** (Report instructions follow this table.)
WebServer	English and various non-English environments (Asian and European locales) where OVO/UNIX is supported.	N/A - no reports
Windows OS	English and various non-English support where OVO/UNIX is supported. Fully translated Japanese templates, which are automatically uploaded in Japanese environments.	N/A - no reports
Note: Version A.03.01 of the Windows OS-SPI was released in English and localized to Japanese. Version A.08.00 was released in English only.		
UNIX OS & Linux OS	English and various non-English support where OVO/UNIX is supported. Fully translated Japanese templates, which are automatically uploaded in Japanese environments.	N/A - no reports

Reporter Requirements/Known Problems for S-Chinese or Korean Systems

Reporter version requirement: Reporter 3.5 with patch OVR_00008 or higher Reporter version. Only the patched or newer versions of Reporter are able to gather S-Chinese or Korean data using the OpenView Performance subagent.

Reporter database requirement: The Reporter database must have been created on either an S-Chinese or Korean system with the system default set to the locale. When the Reporter database is created on a system with the system locale variable set to S-Chinese or Korean, these settings are detected and the database is automatically set to the correct collating sequence.

Report display inconsistency: Not all reports show data in ISO-8601 or an acceptable format according to locale. In some cases a forward slash (/) is used to separate dates, rather than the standard hyphen (-). Also, some report dates are in mm/dd/yyyy format.

NOTE If available, you can use Microsoft SQL Server Enterprise Manager to check the locale setting for the Reporter database.