

HP OpenView

Smart Plug-in for PeopleSoft Administrator's Reference

Version A.02.30 December 2005

Legal Notices

Hewlett-Packard makes no warranty of any kind with regard to this manual, 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.



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

Restricted Rights Legend. All rights are reserved. No part of this document may be photocopied, reproduced, or translated to another language without the prior written consent of Hewlett-Packard Company. The information contained in this document is subject to change without notice.

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 at DFARS 252.227-7013 for DOD agencies, and subparagraphs (c) (1) and (c) (2) of the Commercial Computer Software Restricted Rights clause at FAR 52.227-19 for other agencies.

HEWLETT-PACKARD COMPANY 3404 E. Harmony Road Fort Collins,
CO 80525 U.S.A.

Use of this manual and flexible disk(s), tape cartridge(s), or CD-ROM(s) supplied for this pack is restricted to this product only. Additional copies of the programs may be made for security and back-up purposes only. Resale of the programs in their present form or with alterations, is expressly prohibited.

Copyright Notices. ©copyright 1983-97 Hewlett-Packard Company, all rights reserved.

Reproduction, adaptation, or translation of this document without prior written permission is prohibited, except as allowed under the copyright laws.

©copyright 1979, 1980, 1983, 1985-93 Regents of the University of California

This software is based in part on the Fourth Berkeley Software Distribution under license from the Regents of the University of California.

©copyright 1986-1992 Sun Microsystems, Inc.

©copyright 1985-86, 1988 Massachusetts Institute of Technology.

©copyright 1989-93 The Open Software Foundation, Inc.

©copyright 1986-1997 FTP Software, Inc. All rights reserved

©copyright 1986 Digital Equipment Corporation.

©copyright 1990 Motorola, Inc.

©copyright 1990, 1991, 1992 Cornell University

©copyright 1989-1991 The University of Maryland

©copyright 1988 Carnegie Mellon University

Trademark Notices. UNIX® is a registered trademark in the United States and other countries, licensed exclusively through X/Open Company Limited.

X Window System is a trademark of the Massachusetts Institute of Technology.

OSF/Motif is a trademark of the Open Software Foundation, Inc. in the U.S. and other countries.

Windows NT™ is a U.S. trademark of Microsoft Corporation. Windows® and MS Windows® are U.S. registered trademarks of Microsoft Corp.

Oracle®, SQL*Net®, and SQL*Plus® are registered U.S. trademarks of Oracle Corporation, Redwood City, California. Oracle Reports™, Oracle7™, and Oracle7 Server™ are trademarks of Oracle Corporation, Redwood City, California.

Java™ is a U.S. trademark of Sun Microsystems, Inc.

Netscape Commerce Server and Netscape Communications Server are

U.S. trademarks of Netscape Communications Corporation.

OpenView® is a registered U.S. trademark of Hewlett-Packard Company.

Printing History

The manual printing date and part number indicate its current edition. The printing date will change when a new edition is printed. Minor changes may be made at reprint without changing the printing date. The manual part number will change when extensive changes are made.

Manual updates may be issued between editions to correct errors or document product changes. To ensure that you receive the updated or new editions, you should subscribe to the appropriate product support service. See your HP sales representative for details.

First Edition: August 1999 Version A.01.50: February 2000 Version A.01.60: April 2001 Version A.02.00: August 2003
Version A.02.05: June 2004 Version A.02.20: December 2004 Version A.02.30: December 2005

Conventions

The following typographical conventions are used in this manual.

Table 1 Typographical Conventions

| Font Type | What the Font Type Represents | Example |
|----------------------|--|--|
| <i>Italic</i> | Book or manual titles, and man page names | Refer to the <i>HP OpenView IT/Operations Administrator's Reference</i> and the <i>opc(1M)</i> manpage for more information. |
| | Provides emphasis | You <i>must</i> follow these steps. |
| | Specifies a variable that you must supply when entering a command | At the prompt type: rlogin <i>your_name</i> where you supply your login name. |
| | Parameters to a function | The <i>oper_name</i> parameter returns an integer response. |
| Bold | New terms | The monitor agent observes... |
| Computer | Text and items on the computer screen | The system replies: Press Enter |
| | Command names | Use the grep command ... |
| | Function names | Use the opc_connect () function to connect ... |
| | File and directory names | /opt/OV/bin/OpC/ |
| | Process names | Check to see if opcmoma is running. |
| | Window/dialog box names | In the Add Logfile window... |
| Computer Bold | Text that you must enter | At the prompt, type: ls -l |
| Keycap | Keyboard keys | Press Return . |
| [Button] | Buttons on the user interface. | Click [Operator]. Click the [Apply] button. |
| Menu Items | A menu name followed by a colon (:) means that you select the menu, then the item. When the item is followed by an arrow (->), a cascading menu follows. | Select Actions:Utilities->Reports... |

The HP OpenView Smart Plug-in for PeopleSoft Documentation Map

This section illustrates what information is available and where you can find it. The following manuals are available in PDF format:

- *HP OpenView Smart Plug-in for PeopleSoft Administrator's Reference*
- *HP OpenView Smart Plug-in for PeopleSoft Software Release Notes*

NOTE The SPI documentation is no longer installed together with the SPI package but is available in a separate folder on the HP OpenView SPI-CD.

In addition to this documentation, the related OpenView products also provide a comprehensive set of manuals, which aim to assist you in using the products and improving your understanding of the underlying concepts.

Table 2 Documentation Roadmap

| HP OpenView Product Name | Manual Title |
|---------------------------------------|---|
| OV Operations for Unix | <ul style="list-style-type: none"> Concepts Guide Installation Guide for the Management Server Administrator's Reference Administrators Task Guide Error Message Reference Scalability and Distribution Guide Network and Platform Functions Software Release Notes |
| OpenView Performance | Dictionary of Operating System Performance Metrics |
| OpenView Performance Agent | <ul style="list-style-type: none"> Installation and Configuration Guide Data Source Integration Guide Tracking your Transactions Users Manual |
| OpenView Performance Manager | <ul style="list-style-type: none"> Command Line Reference (HP-UX) Installation Guide |
| Smart Plug-in for Oracle | <ul style="list-style-type: none"> DB-SPI Oracle Reference DB-SPI Release Notes DB-SPI User's Guide |
| Smart Plug-in for BEA Tuxedo | <ul style="list-style-type: none"> BEASPI Installation Guide BEASPI User's Guide BEASPI Release Notes |
| Smart Plug-in for BEA WebLogic Server | <ul style="list-style-type: none"> WebLogic SPI Configuration Guide WebLogic SPI Release Notes WebLogic SPI Reference |
| Smart Plug-in for DB2 | <ul style="list-style-type: none"> DB2SPI Users Guide DB2SPI Release Notes |

Introducing the HP OpenView Smart Plug-in for PeopleSoft

This section describes the HP OpenView Smart Plug-in for PeopleSoft (PeopleSoft SPI) and explains how the various components fit together and work. In this section you will find information concerning:

- What is PeopleSoft?
- What Is the PeopleSoft SPI?
- What does the PeopleSoft SPI Do?
- How does the PeopleSoft SPI Work?

What is PeopleSoft?

PeopleSoft is a leading application software suite in the ERP (Enterprise Resource Planning) area and primarily known for its human resource components.

PeopleSoft is a distributed software application. Two types of configuration are common:

- 2-tier
- 3-tier

A basic 2-tier installation consists of a GUI station and a database server, where the database server can also run background batch processes. This configuration allows direct access to the database.

For larger environments or environments handling a large number of transactions, PeopleSoft supports a 3-tier configuration which includes an intermediate application-server layer. This improves performance and scalability by distributing the processing and caching data. Servers can (but do not have to) reside on separate machines. Figure 1 illustrates a typical 3-tier PeopleSoft environment.

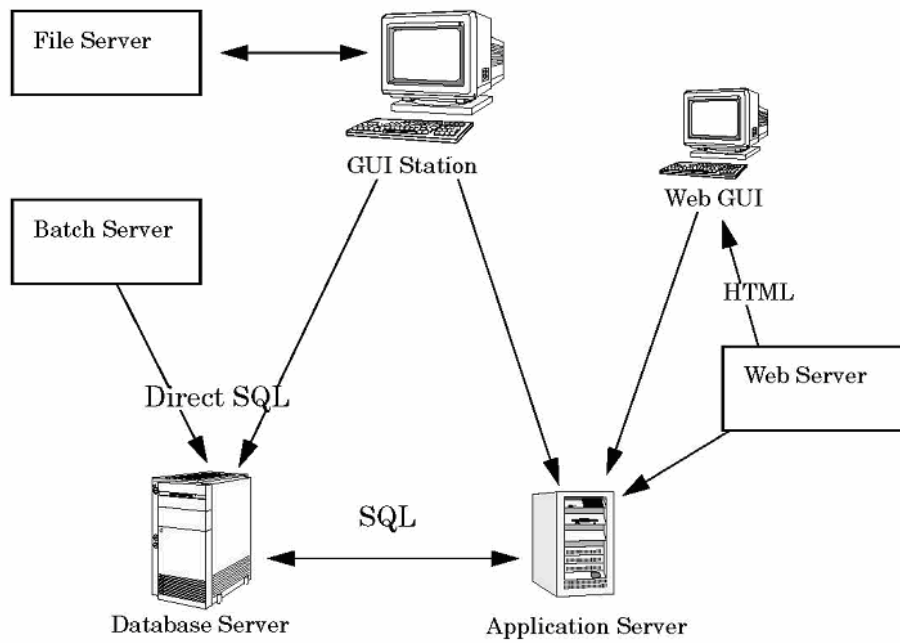
Additional servers may be found in a PeopleSoft environment and provide dedicated services:

File server provides PeopleSoft GUI software for the client systems

Batch server hosts the execution of batch jobs

Web Server provides access to web client software based on Java/HTML

Figure 1 Typical 3-tier PeopleSoft environment



What Is the PeopleSoft SPI?

HP OpenView Smart Plug-Ins are fully integrated solutions which "plug into" HP OpenView solutions and extend the managed domain to industry leading business, Internet, middleware, database and management applications. An extension of the HP OpenView platform, SMART Plug-Ins are tightly integrated modules which leverage the familiarity, security, and scalability of HP OpenView solutions, while eliminating redundant infrastructure and processes.

The HP OpenView Smart Plug-in for PeopleSoft, in particular, provides IT organizations with a pre-configured management solution for PeopleSoft environments based on HP OpenView OV Operations for Unix, the industry-leading enterprise-availability and automation solution. With HP OpenView OV Operations for Unix and the PeopleSoft SPI, you can centrally manage and administer the many different layers that impact the performance and availability of the PeopleSoft environment: the network, systems, Tuxedo, databases and the PeopleSoft application itself.

The PeopleSoft SPI is mainly intended for enterprise customers with a need for a PeopleSoft management solution: it allows the customer to manage distributed PeopleSoft environments. A PeopleSoft environment may consist of one or more PeopleSoft servers (e.g. application server, batch server), which can (but do not have to) reside on different systems.

Furthermore, there are a number of different client systems. PeopleSoft client and server components are supported on specific platforms. For more information see "Supported Platforms and Versions". The PeopleSoft SPI itself can be installed in a distributed management environment consisting of one or more OVO/Unix servers, one or more OV Operations for Unix or VantagePoint Performance Agents, and HP OpenView VantagePoint Performance Manager consoles.

Although each of these OpenView components is supported on a number of different platforms, the PeopleSoft SPI is only guaranteed to work correctly in specific, supported environments. The PeopleSoft SPI comprises several components some of which are directly assigned to specific PeopleSoft components.

What does the PeopleSoft SPI Do?

The PeopleSoft SPI is a product that complies with HP OpenView standards and provides availability and performance monitoring of a typical PeopleSoft environment. As with all SPIs, the idea is to provide a pre-configured integration that works out-of-the-box in most situations but, if necessary, is also easily adaptable to your specific environment.

The PeopleSoft SPI provides complete integration with the standard OVO/Unix monitoring facility (templates), the OVO/Unix GUI (message groups, applications, and so on), and the Service Navigator as well as with HP OpenView VantagePoint Performance. Each integration capability is independent in order to guarantee that those people who do not have all of these OV products are still able to install and use the SPI - always assuming that OVO/Unix is already present. Note that integrations with VantagePoint Performance and the ServiceNavigator are optional.

The HP OpenView Smart Plug-in for PeopleSoft delivers monitoring and management capabilities specifically targeted at common PeopleSoft management issues. For example:

- monitoring batch job status and detecting failed or delayed jobs and malfunctioning components (such as the process scheduler) allows faster problem resolution.
- dynamic log file monitoring so that important event data registered by the various distributed error logs from PeopleSoft, Tuxedo, and log files are available if and when needed. Consolidating and filtering this data into a centralized event system leads to more rapid identification of the root cause of problems.
- pre-configured actions, such as starting the PeopleSoft application, are provided for specific events and implemented automatically in order to ensure the most rapid recovery from any crash or failure
- pre-defined reports providing information about user or batch job activity so that operators can quickly analyze and prevent performance bottlenecks.
- status information on all components of the PeopleSoft environment is constantly provided. The SMART Plug-In monitors the PeopleSoft application, any subsystems such as Tuxedo, and the DBMS and server processes. Monitoring is effected via scripts or programs that are executed at defined intervals: templates interpret the collected metrics for rapid problem resolution.

In addition, and assuming the appropriate OpenView products are already installed and configured, data may also be fed to VantagePoint Performance to allow a graphical presentation and reporting. Further integration with the Service Navigator allows a graphical representation of the PeopleSoft components and their dependencies. Note that those components of the PeopleSoft environment not specifically covered by the HP OpenView Smart Plug-in for PeopleSoft (file server, web server) can nonetheless be monitored with standard OV Operations for Unix features.

How does the PeopleSoft SPI Work?

The PeopleSoft SPI monitors the database server, the application server, and the batch server in the PeopleSoft environment and provides information through messages, graphs, and reports that show the current state of the environment. The SPI provides the following features and functionality:

- monitor:
 - PeopleSoft and Tuxedo log files (including the handling of dynamic log file names)
 - the high-level status of Tuxedo
 - critical OS resources (IPC, disk space)
 - processes (e.g. PeopleSoft process scheduler)
 - batch job status
 - business metrics that are relevant to the management of PeopleSoft
 - the key resources of the PeopleSoft DB (via the specific HP OpenView Database SPI)
 - the load on the PeopleSoft application server
- integrate:
 - the Service Navigator model specifically for a PeopleSoft environment
 - standard PeopleSoft administration tools
- provide:
 - applications to execute PeopleSoft-related operating tasks (start/stop Tuxedo domains, PS process scheduler, etc.)
 - applications to generate status or configuration reports
 - applications to generate user activity report

¹ Not every feature may be available on all platforms.

Installing and Configuring the PeopleSoft SPI

This section describes how to install and configure the HP OpenView Smart Plug-in for PeopleSoft. In this section you will find information concerning:

- System Pre-Requisites
- Supported Platforms and Versions
- Installing the PeopleSoft SPI on the Management Server
- Using optional Smart Plug-ins
- Configuring the PeopleSoft SPI to Manage PeopleSoft Systems
- Setting up PeopleSoft Users
- De-installing the PeopleSoft SPI

System Pre-Requisites

OV Operations (OVO) management server must be installed and configured on the machine on which you want to install and use the PeopleSoft SPI. For more information on which versions of OV Operations are supported, see “Supported Versions: OVO Server”. In addition, the OVO agent must be running on the OVO management server. Note also that the `opcmsg` template must be assigned and distributed to the OVO management server in order to ensure that messages appear in the OVO GUI on the management server. Otherwise, the messages will simply be logged in a log-file.

For more information on platform and version support, see “Supported Platforms and Versions”.

Hardware Requirements

Table 3 lists the hardware requirements for the machines on which you intend to install the PeopleSoft SPI.

Table 3 PeopleSoft SPI

| Hardware Requirements | Additional Disk Space | Additional RAM |
|------------------------|-----------------------|----------------|
| OVO Server | 20MB | n/a |
| OVO Agent HP-UX | 10MB | n/a |
| OVO Agent AIX | 10MB | n/a |
| OVO Agent Solaris | 10MB | n/a |
| OVO/Unix Agent Linux | 10MB | n/a |
| OVO/Unix Agent Windows | 10MB | n/a |

NOTE Additional space is required for run-time data such as trace data, error logs, and data collected by the discovery application. The amount required depends on the configuration of the PeopleSoft SPI.

Software Requirements

Since the various software requirements for the PeopleSoft SPI such as DCE runtime and so on have already been verified by OVO, they are not checked by the PeopleSoft SPI either before or during installation.

No changes of operating system kernel parameters are required for the HP OpenView Smart Plug-in for PeopleSoft on the OVO management server and on the OVO managed nodes.

The following software product are either required or recommended for the PeopleSoft SPI.

Table 4 PeopleSoft SPI Software Requirements

| Product | Required | Recommended | Remarks |
|---|----------|------------------|--|
| Smart Plug-in for Oracle or/and Smart Plug-in for DB2 or/and Smart Plug-in for Microsoft SQL Server | Yes | - | Needed for database access. The type of the required SPI depends on the type of the PeopleSoft databases(s) used on the managed nodes. |
| Smart Plug-in for BEA Tuxedo | No | Yes ^a | Used for detailed Tuxedo monitoring (not available on all platforms) |
| Smart Plug-in for BEA WebLogic Server | No | Yes ^b | Used for detailed WebLogic monitoring (not available on all platforms) |
| Smart Plug-ins DSI-to-DDF wrapper utilities | Yes | - | Needed for collecting performance data with OVPA or OV Performance subagent |

^a The version A.02.50 of the BEA SPI for Tuxedo is not able to manage the Tuxedo layer bundled with the PeopleSoft software.

^b Version A.02.06 or higher recommended. But see installation tips.

Supported Platforms and Versions

The following sections indicate which platforms and which product versions are supported by the HP OpenView Smart Plug-in for PeopleSoft and its various components.

NOTE If a PeopleSoft server system fulfills multiple roles, for example; database server and batch server at the same time, then the corresponding PeopleSoft SPI components may be used in parallel providing the system fulfills the specifications listed for both components. See the appropriate sections below for more detail.

Supported Versions: PeopleSoft

The PeopleSoft SPI is designed to run on all versions of PeopleSoft based on PeopleTools 7 and 8, running with Tuxedo 6.5 or 8.1, which comes bundled with PeopleTools. These are the PeopleTools releases 7.05 and 7.5 and releases 8.1 and 8.40 - 8.46.

Supported Versions: OVO Server

The PeopleSoft SPI runs on the following software versions of the HP-UX OVO management server:

- OVO A.07.10 or later
- OVO A.08.00 /A.08.10/A.08.20

The PeopleSoft SPI runs on the following software versions of the Sun OVO management server:

- OVO A.07.10 or later
- OVO A.08.00/A.08.10/A.08.20

The PeopleSoft SPI also contains components that allow integration with HP OpenView VantagePoint Performance. If this product is *not* installed, the PeopleSoft SPI will nonetheless work with the other installed components, but the features related to the missing OpenView products are not available.

Supported Platforms: Batch-Server Components

The batch-server components of the PeopleSoft SPI are supported for the following platforms and software versions:

Table 5 Supported Platforms for the Batch-Server Components

| Platform | OS Version | OVO/Unix Agent | OOPA Agent (MeasureWare) |
|---|--|--------------------------------------|--------------------------|
| HP Technical Workstations Business Servers | HP-UX 11.00 HP-UX 11.11 | OVO/Unix 7.1 OVO/Unix 8.0/8.1/8.2 | C.02.00 |
| Sun SPARC | Solaris 7 Solaris 8 Solaris 9 ^{1,2} | OVO/Unix 7.1 OVO/Unix 8.0/8.1/8.2 | C.02.00 |
| IBM RS6000 | AIX 4.3 ^{1,2} AIX 5.1 ^{1,2} AIX 5.2 ^{1,2} | OVO/Unix 7.1 OVO/Unix 8.0/8.1/8.2 | C.02.00 |
| Intel x86 or compat. | Windows 2000 Windows 2003 | OVO/Unix 7.1 OVO/Unix 8.0/8.1/8.2 | C.02.00 |
| Intel x86 or compat. | Linux 2.4 | OVO/Unix 7.1 OVO/Unix 8.0/8.1/8.2 | C.02.00 |

No other platforms are supported with the PeopleSoft SPI A.02.20. Note that not every combination may be possible due to restrictions of PeopleTools or OVO/Unix. ¹ HP OpenView Smart Plug-in for BEA Tuxedo A.02.00 not available ² HP OpenView Smart Plug-in for BEA WebLogic Server A.02.04 not available

Supported Platforms: Database-Server Components

The database-server components of the PeopleSoft SPI are supported for the following platforms and software versions:

Table 6 Supported Platforms for the Database-Server Components

| Platform | OS Version | OVO/Unix Agent | OOPA Agent (MW) | DBMS |
|---|-------------------------------------|--------------------------------------|-----------------|----------------------|
| HP Technical Workstations Business Servers | HP-UX 11.00 HP-UX 11.11 | OVO/Unix 7.1 OVO/Unix 8.0/8.1/8.2 | C.02.00 | Oracle DB2 |
| Sun SPARC | Solaris 7 Solaris 8 Solaris 9 | OVO/Unix 7.1 OVO/Unix 8.0/8.1/8.2 | C.02.00 | Oracle DB2 |
| IBM RS6000 | AIX 4.3 AIX 5.1 AIX 5.2 | OVO/Unix 7.1 OVO/Unix 8.0/8.1/8.2 | C.02.00 | Oracle DB2 |
| Intel x86 or compat. | Windows 2000 Windows 2003 | OVO/Unix 7.1 OVO/Unix 8.0/8.1/8.2 | C.02.00 | Oracle DB2 MSS |
| Intel x86 or compat. | Linux 2.4 | OVO/Unix 7.1 OVO/Unix | C.02.00 | Oracle DB2 |

| | | | | |
|--|--|-------------|--|--|
| | | 8.0/8.1/8.2 | | |
|--|--|-------------|--|--|

No other platforms are supported with the PeopleSoft SPI A.02.30.

Note that the supported databases and their versions on the agent platforms depend on the installed PeopleTools versions and the databases supported by them, as well as on the DBSPI/DB2SPI used on the managed node.

Note that not every combination may be possible due to restrictions of PeopleTools or OVO/Unix or the DBSPI/DB2SPI.

Supported Platforms: Application-Server Components

The application-server components of the PeopleSoft SPI are supported for the following platforms and software versions:

Table 7 Supported Platforms for the Application-Server Components

| Platform | OS Version | OVO/Unix Agent | OVPA Agent |
|--|--|--------------------------------------|------------|
| HP Technical Workstations Business Servers | HP-UX 11.00 HP-UX 11.11 | OVO/Unix 7.1 OVO/Unix 8.0/8.1/8.2 | C.02.00 |
| Sun SPARC | Solaris 7 Solaris 8 Solaris 9 ¹ | OVO/Unix 7.1 OVO/Unix 8.0/8.1/8.2 | C.02.00 |
| IBM RS6000 | AIX 4.3 ¹ AIX 5.1 ¹ AIX 5.2 ¹ | OVO/Unix 7.1 OVO/Unix 8.0/8.1/8.2 | C.02.00 |
| Intel x86 or compat. | Windows 2000 Windows 2003 | OVO/Unix 7.1 OVO/Unix 8.0/8.1/8.2 | C.02.00 |
| Intel x86 or compat. | Linux 2.4 | OVO/Unix 7.1 OVO/Unix 8.0/8.1/8.2 | C.02.00 |

No other platforms are supported with the PeopleSoft SPI A.02.20. Note that not every combination may be possible due to restrictions of PeopleTools or OVO/Unix or the Smart Plugin for BEA WebLogic. ¹ HP OpenView Smart Plug-in for BEA Tuxedo A.02.00 not available

Supported Platforms: Web-Server Components

The web-server components of the PeopleSoft SPI are supported for the following platforms and software versions:

Table 8 Supported Platforms for the Web-Server Components

| Platform | OS Version | OVO/Unix Agent | OVPA Agent | BEA WebLogic |
|--|--|--------------------------------------|------------|--------------|
| HP Technical Workstations Business Servers | HP-UX 11.00 HP-UX 11.11 | OVO/Unix 7.1 OVO/Unix 8.0/8.1/8.2 | C.02.00 | 6.1 SP2 |
| Sun SPARC | Solaris 7 Solaris 8 Solaris 9 ¹ | OVO/Unix 7.1 OVO/Unix 8.0/8.1/8.2 | C.02.00 | 6.1 SP2 |

| | | | | |
|----------------------|---|---|---------|-----|
| IBM RS6000 | AIX 4.3 ¹ AIX 5L ¹ | OVO/Unix 7.1 OVO/Unix 8.0/8.1/8.2 | C.02.00 | n/a |
| Intel x86 or compat. | Windows 2000 Windows 2003 | OVO/Unix 7.1 OVO/Unix 8.0/8.1/8.2 | C.02.00 | |
| Intel x86 or compat. | Linux 2.4 | OVO/Unix 7.1 OVO/Unix 8.0/8.1/8.2 | C.02.00 | |

No other platforms are supported with the PeopleSoft SPI A.02.30.

¹ HP OpenView Smart Plug-in for BEA WebLogic Server A.02.04 not available ² Monitored via HP OpenView Smart Plug-in for BEA WebLogic Server

The Apache web server which is bundled with PeopleTools, is monitored via the PeopleSoft SPI on Unix platforms.

Installing the PeopleSoft SPI on the Management Server

There are a number of simple steps which you need to carry out in order to install the HP OpenView Smart Plug-in for PeopleSoft software. In general terms, the process requires:

- Preparing the OVO Management Server for `swinstall(1M)`
- Installing the PeopleSoft SPI
- Verifying the Software Installation

Table 9 shows the software bundles present in the HP OpenView Smart Plug-in for PeopleSoft product bundle. For more detailed information concerning the contents of the various software bundles, see "Product Bundles and Filesets".

Table 9 PeopleSoft SPI Software Bundles

| SD Bundle | Product | Description |
|------------------|------------------------|--------------------|
| SPI-PSoft | SPI-PSoft . SPI-PS-CFG | SPI Software. |

Preparing the ovo Management Server for `swinstall(1M)`

The HP OpenView Smart Plug-in for PeopleSoft is available on the HP OpenView Operations for Unix SPI CD-ROM.

There are three CDs in the Applications CD-ROM set: The first and the second contain the product's management server install packages. The third contains the *OpenView Reporter and OpenView Performance Manager integrations* for the applications. For the HP OpenView Smart Plug-in for PeopleSoft, use the first or second CD, depending on the platform of the management server. Note that if you are installing other HP OpenView SPI's, it may be necessary to use the third CD, too, in order to install the OV Reporter integrations of these SPI's.

Prepare the OVO management server environment for `swinstall(1M)` as follows:

1. Login as user root. Please make sure that the environment variables needed for the ORACLE database are set in the profiles of users *root* and *oracle*.
2. Set the user root's umask, enter:
umask 027
3. Add the following two lines to the file `~root/.profile` (only needed for the SPI for BEA Tuxedo)

```
LANG=C
```

```
export LANG
```

4. If not already present, create a directory to mount the CD-ROM:

```
mkdir /<mount_point>
```

For example: `mkdir /cdrom`

5. Insert the product CD in the CD-ROM drive

6. Mount the CD-ROM as user root, enter:

```
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`

On HP-UX, you can also run SAM and mount the CD-ROM to a specific path in the Disks and File Systems window.

If you intend to install one of the Database SPI, DB2SPI, SPI for BEA WebLogic Server or SPI for BEA Tuxedo, then please consult the installation guide of this SPI for further pre-installation requirements.

Installing the PeopleSoft SPI

To install the HP OpenView Smart Plug-in for PeopleSoft product bundles using the `swinstall (1M)` command on the command line, perform the following steps:

1. Install the software bundles

- DSI2DDF (if not already installed)
- DBSPIOracleAll (if not already installed and if you want to monitor PeopleSoft databases running on Oracle)
- DBSPIMSSAll (if not already installed and if you want to monitor PeopleSoft databases running on Windows MSS)
- DB2SPI (if not already installed and if you want to monitor PeopleSoft databases running on DB2)
- BEASPI (if needed and supported and not already installed)
- SPIWebLogicAll (if needed and supported and not already installed)
- SPI-PSoft with the command:

For a HP-UX 11.x management server, enter:

```
swinstall -s /CDROM/OV_DEPOT/11.0HPUX.sdtape \  
DSI2DDF \  
DBSPIOracleAll \  
BEASPI \  
SPIWebLogicAll \  
SPI-PSoft
```

For a Solaris management server, enter:

```
swinstall -s /CDROM/OV_DEPOT/SOLARIS.sdtape \  
DSI2DDF \  
DBSPIOracleAll \  
BEASPI \  
SPIWebLogicAll \  
SPI-PSoft
```

If any errors occur during the software installation, check the logfile `/var/adm/sw/swagent.log` for

more information, correct the problems, and run `swinstall` again.

NOTE The `opccfgupld` command does not by default replace existing files, which can lead to a combination of error messages such as; “Object already exists in database” and “Cannot open file [...] File exists (OpC20-63)”. For more information, see the `opccfgupld(1M)` man page.

2. Install OV Reporter integrations

If you have installed one or more of the SPI for Oracle, DB2SPI, SPI for MSS, SPI for BEA WebLogic Server, SPI for BEA Tuxedo, you may install the OV Reporter integrations provided by these SPI's.

See the installation guide of the SPI for details on how to install these integrations.

Verifying the Software Installation

You can verify that the software has installed successfully by carrying out the following simple steps:

1. Verify `swagent.log` for SD installation errors and fix any problems that appear.
2. Check for any re-install errors and then make sure that the following new elements are present in the OVO GUI after the installation of the HP OpenView Smart Plug-in for PeopleSoft product bundles has completed

- New node groups in the Node Groups window:

- PS ORA DB Server
- PS DB2 DB Server
- PS App Server
- PS Batch Server
- PS Win MSS DB Server
- PS Web Server

This node group is meant for the web servers Apache which are bundled with PeopleTools 8.1. It is not meant as a container for the BEA WebLogic or the IBM WebSphere server systems.

- New application groups in the Application Groups window:

- PSSPI

- New message groups in the Message Groups window:

- PSoft-Fault
- PSoft-Perf
- PSSPI

- New users in the OVO Users window:

- psoft_op
- psoft_adm

- New template groups in the Message Source Templates window:

- SPI for PeopleSoft

3. If the new PeopleSoft SPI elements are not visible in the OVO GUI, try stopping and restarting the OVO administrator's GUI.

4. If you installed one of the DBSPI, DB2SPI, SPI for BEA WebLogic Server or SPI for BEA Tuxedo, then please consult the installation guide of this SPI for further verification checks.

For more information on the various new elements see the appropriate sections in Chapter 3, “Using the PeopleSoft

← --- **Formatiert:** Einzug: Links: 72 pt, Aufgezählt + Ebene: 1 + Ausgerichtet an: 36 pt + Tabstopp nach: 72 pt + Einzug bei: 72 pt, Tabstopps: Nicht an 72 pt

SPI,” or Appendix B, “PeopleSoft SPI Components.” For information on more serious problems, see Chapter 5, “Troubleshooting the PeopleSoft SPI”.

Using optional Smart Plug-ins

This section contains some notes for the usage of optional Smart Plug-ins together with the PeopleSoft SPI.

- HP OpenView Smart Plug-in for BEA Weblogic Server

If the BEA Weblogic Server 6.1.2 is installed and should be monitored with the Weblogic SPI A.02.04, then the following configuration line has been shown to be necessary in the Weblogic SPI configuration file:
`SERVER<N>_VERSION = 6.1 2`

This line will not be necessary with Weblogic SPI version A.02.06 or higher.

- HP OpenView Smart Plug-in for BEA Tuxedo

The current versions of the BEA SPI for Tuxedo are not able to manage the Tuxedo layer bundled with the PeopleSoft software. Tuxedo SPI support for this version of Tuxedo is on HP’s roadmap for 2007.

Configuring the PeopleSoft SPI to Manage PeopleSoft Systems

Since several parts of a PeopleSoft installation such as the database name, directory locations, or user IDs vary from one environment to another, it is not possible to pre-configure the complete PeopleSoft SPI integration to work out-of-the-box in your environment. Consequently, assuming you have not already done so as part of the standard OVO installation, you will need to perform the following high-level steps to adapt the PeopleSoft SPI to the specific requirements of your environment:

- Setting up PeopleSoft Systems as OVO Managed Nodes
- Distributing the OVO Agent to the PeopleSoft Systems
- Distributing PeopleSoft SPI Actions, Commands, and Monitors
- Discovering PeopleSoft Components on the Managed Nodes
- Assigning Nodes to Node Groups
- Distributing PeopleSoft SPI Templates
- Activating the Configuration on the PeopleSoft Nodes
- Configuring the PeopleSoft SPI to Monitor the Database

Setting up PeopleSoft Systems as OVO Managed Nodes

If not already present, add to the `Node Bank` window those PeopleSoft systems in your environment, which you want to monitor with the HP OpenView Smart Plug-in for PeopleSoft. To add a system to the `Node Bank`, either:

1. open the `Node Bank` window and use the following menu sequence:

`Actions-> Node-> Add...`

or

2. select the required systems in the IP map, drag and drop them into the `Node Bank` window.

Distributing the OVO Agent to the PeopleSoft Systems

Check that the correct version of the OVO agent software is installed and running on the PeopleSoft node you want to set up and monitor with the PeopleSoft SPI. If no OVO agent is present, install the OVO agent software on the PeopleSoft systems by using the standard OVO agent distribution method. Open the `Node Bank` window, select the PeopleSoft systems, and use the following menu sequence:

Actions-> Agents-> Install Update sw & Config...

Distributing PeopleSoft SPI Actions, Commands, and Monitors

To distribute the PeopleSoft actions, commands, and monitors to the PeopleSoft systems which you want the PeopleSoft SPI to monitor, open the `Node Bank` window and use the following menu sequence:

Actions-> Agents-> Install/Update SW & Config...

Note that distributing the actions, commands, and monitors to the PeopleSoft managed nodes should be done using the `-force` option.

NOTE Please note that this step has to be performed prior to the discovery.

Configuring the PeopleSoft SPI to Monitor the Database

If you want the PeopleSoft SPI to monitor the PeopleSoft database, you have to configure the according SPI for Databases (DB2SPI, SPI for Oracle, SPI for MSS). This process applies to the PeopleSoft database servers and Process Scheduler servers and is the same as the process used by the OVO Smart Plug-in for Databases. For more information, see the product-specific documentation supplied with the HP OpenView Operations for Unix Smart Plug-in for Databases.

NOTE You should configure DBSPI *before* PSSPI discovering PeopleSoft components.

NOTE This configuration has to be performed using the tools which are installed via the SPI for Databases.

NOTE If the database server for a process scheduler does not reside on the local (batch-server) system, you have to configure the database components on the batch server as well. For more details, see "The PSSPI-Batch_Server Template Group".

To configure the PeopleSoft SPI to monitor the PeopleSoft database. A given example is for Oracle database. Configuration steps for other databases (DB2, MSSQL) can be found in appropriate SPI User's Guides.

1. Select the PeopleSoft database servers in the `Node Bank` window (or `Database Node Group` window) and execute the OVO application `DBSPI Config`. You will need to provide the user/password to be used by the OVO monitors when accessing the database. This user must be granted the appropriate rights for database access.
2. A window running an editor for the DB-SPI Configuration File is displayed. The default editor for the configuration file is the UNIX vi editor. However, another editor can be selected using the `EDITOR` environment variable in the root user setup.

NOTE When DBSPI Config is launched for the first time on a node, examples for setting keywords are provided. All lines containing # are treated as comments.

3. Prepare a list of all RDBMS instances that you want to monitor on the PeopleSoft system.
4. Prepare a list with the following information, which you will need during the configuration process.
 - `ORACLE_HOME`
 - `ORACLE_SID`
 - settings on the target node that should be monitored by DB-SPI.
 - Oracle user name and password.
5. In the Oracle section of the editor screen set the following variables to the values specified:
 - `HOME` - to the current value of `$ORACLE_HOME` (use quotation marks)
 - `DATABASE` - to the current value of `$ORACLE_SID` (use the instance name)
 - `CONNECT` - to the Oracle user/password used to connect to the databases (use quotation marks)

The database user specified in the *CONNECT* clause must be granted certain capabilities in order to be able view the system tables in the database. You should apply grants directly to the user. Do not use Oracle Roles: they do not work well with grants. For example, use the following command to apply grants:

```
grant create session to dbspi_user 1
grant select on PS_EMPLOYEES to dbspi_user 1
grant select on V$SESSION to dbspi_user 1
grant select on V$PROCESS to dbspi_user 1
grant select on PSWORKLIST to dbspi_user 1
grant select on PSPRCRQST to dbspi_user 1, 2
grant create any view to dbspi_user 1, 3
grant alter session to dbspi_user 1, 4
```

¹. *dbspi_user* is only a suggested database user name. ² More grants may be necessary if the DB-SPI metrics are used to monitor the database. In this case, the DB-SPI documentation describes the appropriate steps which have to be performed. ³ **Grant create any view** is used only for the report for DB-SPI metric 6. A view is temporarily created for the report. ⁴ **Grant alter session** is necessary only if DB-SPI tracing is turned on.

6. If there is more than one Oracle instance on the node, list all instances using additional *HOME*, *DATABASE*, and *CONNECT* entries.
7. Apply the changes to a node by accepting the default [Yes] at the following prompt:
Save configuration to /var/opt/OV/dbspi/local.cfg? [yes]
If you wish to undo the changes rather than apply them, press **N** (o), followed by **Enter** at the prompt.

Discovering PeopleSoft Components on the Managed Nodes

Once the PS Discovery application is started it tries to discover the following information:

- PeopleSoft Installation
- PeopleSoft Application Server
- Process Schedulers

PeopleSoft Installation

The script tries to discover the following information:

- PeopleSoft home directory (PS_HOME)
- Database Type (DB_TYPE)
- PeopleTools version (PS_VER)
- Tuxedo Installation (TUXDIR, TUXVER)
- PeopleSoft database name (PS_DBNAME)
- Database home (DB_HOME)
- Database name (DB_NAME)
- PeopleSoft database owner (PS_DBOWNER)
- Database server hostname (DB_SERVER)

PeopleSoft home directory (PS_HOME)

During the discovery phase, the SPI first tries to determine the directories of installed PeopleSoft components (the PeopleSoft Home directories; in short: PS_HOME).

This is done in multiple steps:

1. User specified locations

If the user has specified some installation directories using the Customized Startup of the PS Discovery OVO application (-p[ath] *home1* -p[ath] *home2* ...) take these as PS_HOME candidates.

2. Check environment variable PS_HOME (Unix)

3. Check running PeopleSoft processes and “well-known places” (Unix)

If there is no PS_HOME candidate, fetch the owner of running PeopleSoft processes; extract the home directory of this user and take this directory as a candidate for a PS_HOME. Also take the directories /psoft, /opt/psoft and /usr/psoft as candidates.
4. Look all first level local directories.
5. If the option -f[ind] specified, then all subfolders of the folders from 1.-4. will be checked.

For each PS_HOME candidate, check whether a psconfig.sh, pstools.ini or peopletools.properties or appserv/psadmin(.exe) file exists.

Database Type (DB_TYPE)

The database type can be ORACLE, MSSQL, and DB2. Although no error is generated for other database types, there is no monitoring available for them.

PeopleTools version (PS_VER)

The PeopleSoft version is discovered in multiple steps:

1. User specified version

If the user has specified PeopleSoft version using the Customized Startup of the PS Discovery OVO application (-ver version) take these as PS_VER variable. Please do not mix PeopleTools version with PeopleTools application version.
2. Switch user to PS_USER and run 'psadmin -v' (Unix)

If PS_USER has interactive login, then use option -ver version to specify PeopleTools version.
3. Extract version from peopletools.properties file.

Although this file is not required for correct work of PeopleSoft, it is recommended (by PeopleSoft) not to delete it.
4. Takes 8.44 as a default version, if all previous steps failed.

Tuxedo Installation (TUXDIR, TUXVER)

On Unix, the search is done only in the following files:

- <PS_HOME>/psconfig.sh
- <PS_HOME>/install/psdb.sh
- <PS_HOME>/setup/psdb.sh

On Windows, the SPI tries to determine the value for the variable TUXDIR from environment.

PeopleSoft database name (PS_DBNAME)

The psspi_disc.pl retrieves the database name using psappsrv.cfg or psprcs.cfg files. You can also use option -psdb database_name to specify database name. It can be useful for database server that does not have installed application server or batch server on it.

Database home (DB_HOME)

For Oracle database the following files are searched for ORACLE_HOME variable.

Database name (DB_NAME)

For Oracle database server the file tnsnames.ora is analyzed for Oracle SID value.

PeopleSoft database owner (PS_DBOWNER)

Use DBSPI UDM feature to extract OWNERID from PS.PSDBOWNER table for DBNAME = PS_DBNAME. DBSPI must be configured for this step.

Database server hostname (DB_SERVER)

For Oracle database server the file tnsnames.ora is analyzed for Oracle server hostname value.

For DB2 the commands 'db2 list database directory' and 'db2 list node directory' executed.

For MSSQL the registry key ODBC.INI is analyzed.

PeopleSoft Application Servers

Next, the SPI tries to determine the values for all Application Servers of the current PeopleSoft installation.

All directories <PS_HOME>/appserv/<Domain> are searched for a file psappsrv.cfg. If this directory and file are found, the SPI extracts the variable Domain Id from the Application Server configuration file.

Process Schedulers

Next, the SPI determines the values for all Process Schedulers of the current PeopleSoft installation.

All directories

- <PS_HOME>/appserv/prcs/<DB> for PS 7.5, PS8
- <PS_HOME>/prcs/<DB> for PS7

are searched for a file psprcs.cfg. If this directory and file are found, the SPI extracts the variables

- PrcsServerName
- Log/Output Directory

from the Process Scheduler configuration file.

General Discovery Strategy and Prerequisites

The information found during this discovery phase is written to the psspi.disc file on the OVO agent.

After editing and verifying the changes using the PSSPI-Admin:Verify PS Cfg application, the PSSPI-Admin:PS Activate application must be used to activate the edited file. Please note that this file is copied back automatically to the OVO management server only during the activation step. If you edited the file ps.cfg manually, you will have to copy it manually to the file /var/opt/OV/share/psspi/disc/<nodename> on the management server (where <nodename> is the name of the OVO agent system). This may easily be done using the OVO application PSSPI-Admin:Get PS Cfg.

NOTE See the "The psspi.disc Configuration File" for detailed information regarding the file syntax.

Rules for variable assignments in configuration files

The SPI is only able to process variable assignments in configuration files if they conform to the following rules:

- Only white space allowed before the variable name.

- There must be no case tag or other shell code before the variable name in the assignment. However, the word export is tolerated.
- The value of the variable is taken as all text after the equal sign and up to the end of the line, a comment char (#), a semicolon (;), white space or a backquote, whichever comes first.
- Trailing white space is stripped from the value. Thus, no embedded functions are allowed to compute the values.
- Conditional assignments are not supported.
- All assignments conforming to the other rules are processed, no matter if they are located in a conditional path (if/else).
- Only explicit assignments are supported.
- The values must not use other variables (\$variable) for their definition. However, if a variable is recursively defined (VAR=\$VAR:new1), this is tolerated.

Performing the Discovery

Once all the PeopleSoft systems have been added to the Node Bank Window and you have ensured the OVO agent is running on the PeopleSoft systems, you can proceed with the semi automatic discovery of the PeopleSoft systems by performing the steps described in this section. Note, however, that although the discovery process works even if the database and/or Tuxedo application servers are down when you execute the PS Discovery application, the discovery file contains the value "UNKNOWN" for the database owner. To fix this, you can either:

- add the database owner to the discovery file manually, or
- configure the SPI for Databases on the PeopleSoft database servers before you execute the PS Discovery application

To start the discovery process on managed nodes.

1. Deploy Actions, Commands and Monitors to the managed nodes.
2. Select all the PeopleSoft systems in OVO Node Bank window that are a PeopleSoft database, PeopleSoft application, or PeopleSoft batch server.

Double-click the PSSPI-Admin:PS Discovery icon. Alternatively, right click the icon and select the Execute item in the drop-down menu. The PS Discovery application executes a script on the managed nodes.

Assigning Nodes to Node Groups

Follow the instructions generated by the PS Discovery application and use the information displayed to put the PeopleSoft nodes into the node groups suggested. For example, PeopleSoft batch servers go into the PS Batch Server node group.

Since the appropriate PeopleSoft templates and template groups are assigned by default to the respective PeopleSoft node groups, dragging and dropping the PeopleSoft nodes to the PeopleSoft node groups recommended by the PS Discovery application automatically assigns the correct templates in turn to the PeopleSoft nodes you are add in this step. However, you still have to *distribute* the templates to the PeopleSoft nodes. For more information, see "Distributing PeopleSoft SPI Templates".

NOTE Webservers other than the server Apache bundled with PeopleTools 8.1 should not be assigned to the PeopleSoft SPI PS Web Server node group. Those webserver systems should be assigned to the node groups which are installed via the Smart Plug-in monitoring this webserver (e.g. Smart Plug-in for BEA WebLogic server, Smart Plug-in for IBM WebSphere server).

Distributing PeopleSoft SPI Templates

The PeopleSoft SPI templates are organized into specific template groups according to system type: PeopleSoft database, application, or batch-server systems. Dragging and dropping the PeopleSoft nodes to the PeopleSoft node groups recommended by the PS Discovery application automatically assigns the appropriate PeopleSoft SPI templates: the PeopleSoft template groups and, by implication, their contents, are assigned by default to the PeopleSoft node groups. However, the PeopleSoft templates still need to be distributed to the PeopleSoft server systems (now OVO managed nodes) using the standard OVO distribution mechanism.

To distribute the PeopleSoft templates to the PeopleSoft systems which you want the PeopleSoft SPI to monitor, open the `Node Bank` window and use the following menu sequence:

Actions-> Agents-> Install/Update SW & Config...

NOTE Messages intercepted by the PSSPI-DBSPI-Messages template supplied with the PeopleSoft SPI duplicate messages intercepted by the DBSPI. If the DBSPI is already installed (and the DBSPI templates already assigned and distributed) and you want to avoid duplicate messages arriving from the database server, you should disable the PSSPI-DBSPI-Messages template by deleting it from the PSSPI-DB_Server template group before distributing the PeopleSoft SPI templates.

Activating the Configuration on the PeopleSoft Nodes

Activate the configuration for the discovered components using the `PS Activate` application.

The `PS Activate` application performs the following steps:

- Copies `psspi.disc` file to `ps.cfg`
- Creates log file links (for Application and Batch servers)
- Prepares UDM files
- Creates DSI integration files for CODA/MWA.
- Activates application definitions for PerfView (only Unix)
- Sends configuration file `ps.cfg` to OVO mgmt server.

Setting up PeopleSoft Users

The HP OpenView Smart Plug-in for PeopleSoft comes with two, new, pre-configured OVO users covering operational and administrative roles in the PeopleSoft environment. These new users are responsible for a set of pre-configured PeopleSoft-specific node and message groups and have the following default names:

Table 10 Default PeopleSoft SPI Users

| User Name | Password | Description |
|------------------------|------------------------|--------------------------------------|
| <code>psoft_adm</code> | <code>Psoft_adm</code> | PeopleSoft environment administrator |
| <code>psoft_op</code> | <code>Psoft_op</code> | PeopleSoft environment operator |

Each of these two users has a set of pre-configured applications assigned. The pre-configured users themselves as well as their default configuration can be used either “as is” or as a basis for a model user in your working environment. In addition, the following pre-defined **User Profiles** for this purpose:

- `psoft_adm_prf`
- `psoft_op_prf`

User Profiles simplify user management by allowing you to create a hierarchical set of abstract users each with a default configuration, which you can assign at any time to any of the real operators you are setting up. To configure a new user profile, open the `Add User Profile Hierarchy` window and enter the appropriate information in the fields provided. Saved user profiles appear as symbols in the `OVO/Unix User Profile Bank`. To assign a user profile to a specific user, open the `Add User` window, click the `[Profiles...]` button, and drag and drop the appropriate user profile from the `User Profile Bank` into the `Profiles of User: <user>` window of the operator you are configuring. This automatically assigns all the responsibilities, applications, application groups, and other profiles that are part of the configured profile to the user you have specified. For more information on User Profiles, see the HP OpenView OV Operations A.08.10 product documentation.

Table 11 lists the application groups assigned by default to the PeopleSoft administrator and operator within OVO.

Table 11 Default PeopleSoft Application Group Assignment

| Application Group | PeopleSoft Administrator | PeopleSoft Operator |
|-------------------|--------------------------|---------------------|
| PSSPI-Admin | ✓ | |
| PSoft-Reports | ✓ | ✓ |
| PSoft-Admin | ✓ | |
| PSoft-Oper | ✓ | ✓ |

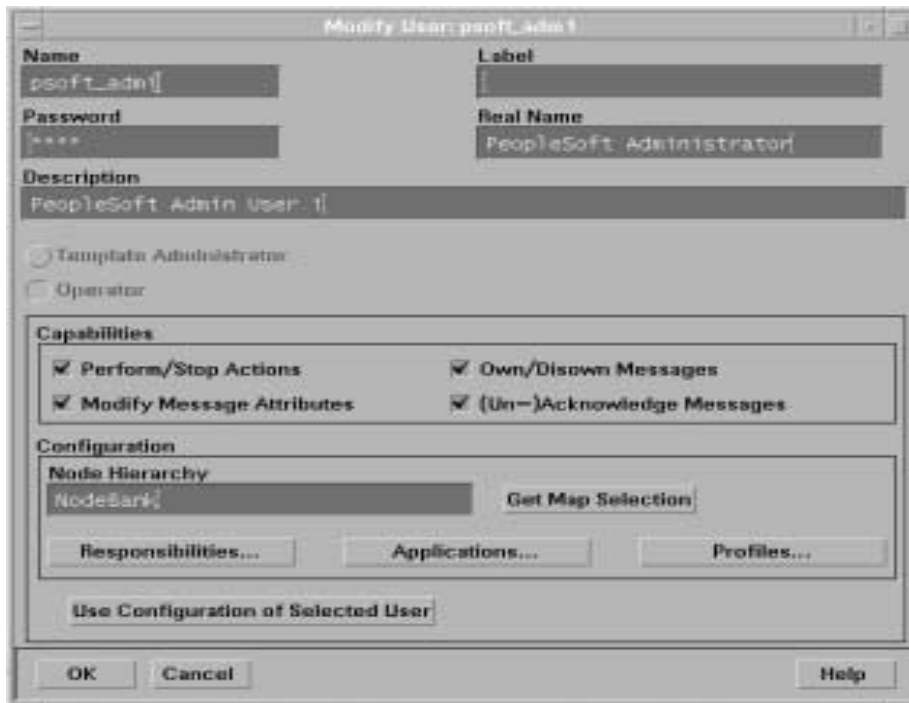
The PeopleSoft Message groups listed in Table 12 are associated by default with the PeopleSoft node groups.

Table 12 Default PeopleSoft Message Group Assignment

| Message Group | PeopleSoft Administrator | PeopleSoft Operator |
|---------------|--------------------------|---------------------|
| PSoft-Fault | ✓ | ✓ |
| PSoft-Perf | ✓ | ✓ |
| PSSPI | ✓ | ✓ |

To add or modify an OVO user, open the Users Bank window and select Add... or Modify... from the Actions:User pull-down menu. This opens the Responsibility Matrix window illustrated in Figure 2.

Figure 2 Modify User



Non-root agent support

After agent was switched to non-root user by `opswitchuser` or `ovswitchuser` commands, some additional steps must be performed on OVO managed node. The same steps are required if PeopleSoft SPI is installed on OVO managed node with agent already running under non-root user.

Note For OVO managed nodes with agent already running under non-root user, you should perform these steps instead of discovery steps described in section “Discovering PeopleSoft Components”. The script `psspi_root.pl` starts discovery process itself. All options specified for `psspi_root.pl` will be redirected to `psspi_disc.pl`. So you can specify all options described in section “Discovering PeopleSoft Components”.

Steps:

1. Login on OVO managed node as user ‘root’.
2. Run the command `OVO_CMDS/psspi_perl psspi_root.pl`

The script `psspi_root.pl` creates `psspi` directory structure on OVO managed node and changes group and permissions for `psspi` directories and files. Group becomes the agent group, permissions – 0660 for files and 02770 for folders. The `psspi_root.pl` copies the file `psspi_sudo` from `OVO_CMDS` to `psspi_sudo_user` `PSSPI_BIN_DIR` (`/var/opt/OV/psspi/bin` on HP-UX) and sets owner `user` for this binary and `suid` bit 04750. It means that any user from agent group can execute any commands as PeopleSoft user.

De-installing the PeopleSoft SPI

The HP OpenView Smart Plug-in for PeopleSoft can be de-installed by carrying out the following high-level steps:

1. Remove the PeopleSoft SPI components from the PeopleSoft systems (OVO managed nodes) and clean the system up
2. Remove the PeopleSoft SPI software from the OVO management server

NOTE The OVO GUI integration has to be removed manually (OVO does not support automatic removal from the command line) and the distributed components have to be removed from the OVO managed nodes.

De-installing from Managed PeopleSoft Systems

To remove the HP OpenView Smart Plug-in for PeopleSoft components from the OVO managed nodes:

1. De-assign the PeopleSoft SPI templates from the PeopleSoft systems:
 - a. In the `Node Bank` window or the appropriate PeopleSoft SPI node group, remove any PeopleSoft systems from the `PSSPI` node groups.
Distribute the *empty* template-assignment list to the selected PeopleSoft systems using the following menu sequence:
`Actions-> Agents-> Install/Update SW & Config...`
2. Execute the application `PSSPI Cleanup` (in the `PSSPI-Admin` application group) on the managed node where you want to de-install the PeopleSoft SPI. The `PSSPI Cleanup` application removes the local SPI components from the selected managed nodes. The de-installation script `psspi_clean.pl` can also be called manually (with the `-q` option) on the OVO managed node. Note that this has to be done before removing the OVO application desktop items themselves.
3. Cleanup the `DBSPI` components, if appropriate, using the `DBSPI Cleanup` application in the `DBSPI-Admin` application group.

NOTE This step should be performed only if the `DBSPI` is not required.

Formatiert: Tabstops: 89,85 pt, Listentabulator + Nicht an 18 pt

Formatiert: Nummerierung und Aufzählungszeichen

De-installing from the OVO Management Server

To remove the HP OpenView Smart Plug-in for PeopleSoft components from the OVO management server and complete the general clean up process:

1. Remove the PeopleSoft SPI software from the OVO management server by using the `swremove` command. On the OVO management server, enter:
`swremove SPI-PSoft`
2. Distribute the actions, command, and monitors to *all* PeopleSoft managed nodes: this removes all PeopleSoft SPI components.
3. Cleanup the GUI by removing the PeopleSoft-specific elements, such as:
 - Node Groups
 - Applications and Application Groups
 - Message Groups
 - Templates
 - User and User Profiles
4. Remove PeopleSoft Services. On the OVO management server, enter:
`opcservice -remove -services PSSPI`

Using the PeopleSoft SPI

This section describes what you get with the HP OpenView Smart Plug-in for PeopleSoft and how to start using it. In this section you will find an introduction as well as information concerning:

- The New OVO Managed Node Groups
- The New OVO Message Groups
- The New OVO Application Groups
- The New OVO Users
- The New OVO/Unix Templates and Monitors

Introduction

If you are already familiar with OV Operations, you will notice that the installation and configuration of the HP OpenView Smart Plug-in for PeopleSoft has added a number of new pre-configured components to the GUI, specifically to the `Node Group` and `Message Group` windows, as well as to the `User Bank` and `Application Bank`.

A set of new, pre-configured node groups allow you to organize your PeopleSoft systems within OVO according to their function; that is, Application Server, Batch Server, or Database Server. When you start to configure the new OVO users to suit the demands of your working environment, you will see these new PeopleSoft-specific node groups are automatically assigned to the new PeopleSoft-specific OVO users, who are added to the `User Bank` during the installation of the PeopleSoft SPI. For more information on the new node groups and the new users, see “The New OVO Managed Node Groups” and “The New OVO Users”.

The PeopleSoft SPI also provides a large number of applications that are conveniently organized into groups and specifically designed to help you take advantage of the powerful problem-solving capabilities of OVO to automate the control and management of problems arising in the PeopleSoft environment. For more information on which new applications are available in the HP OpenView Smart Plug-in for PeopleSoft, see “The New OVO Application Groups”.

However, perhaps the most important component of the HP OpenView Operation HP OpenView Smart Plug-in for PeopleSoft is the new PeopleSoft-specific templates. These templates are aimed at helping you extract the most useful information as easily as possible and, as a result, allowing you to concentrate resources on the monitoring of those critical aspects of the PeopleSoft systems that are necessary to keep the systems up and running. For more information on which new templates are available, see “The New OVO/Unix Templates and Monitors”.

The New OVO Managed Node Groups

The following OVO node groups are installed as part of the PeopleSoft SPI. Initially they are empty (i.e. no nodes are assigned to the new node groups):

- PS App Server
- PS Batch Server
- PS ORA DB Server
- PS DB2 DB Server
- PS Win MSS DB Server
- PS Web Server

All pre-defined PeopleSoft node groups are assigned by default to the pre-defined PeopleSoft users, which are delivered with the PeopleSoft SPI. The different template groups specific to the PeopleSoft SPI are also assigned by default to the corresponding PeopleSoft node groups.

NOTE The node group PS Web Server is only meant for the web servers bundled with PeopleSoft, e.g. Apache. This node group must not be used for BEA WebLogic or IBM WebSphere servers.

The New OVO Message Groups

Four new OVO message groups appear in the `Message Group` window after the successful installation of the HP

OpenView Smart Plug-in for PeopleSoft. Figure 3 illustrates these new message groups, which are designed to help you better organize the messages generated by the PeopleSoft systems you are monitoring.

Figure 3 PSSPI Message Groups



Table 13 describes which types of messages generated by the PeopleSoft systems go into which PeopleSoft message groups. You can assign these message groups to the OVO users using the standard OVO method so that the users responsible for PeopleSoft problems see only those messages they need to be able to do their job.

Table 13 PeopleSoft-Specific Message Groups

| Message Group Name | Description |
|--------------------|---|
| PSoft-Fault | All OVO messages related to faults within the PeopleSoft environment |
| PSoft-Perf | All OVO messages related to PeopleSoft performance problems |
| PSSPI | All OVO messages related to problems within the PeopleSoft SPI itself |

OVO messages relating to PeopleSoft problems which do *not* fall into one of the categories in Table 13 go by default into the message group PSoft-Fault.

The New OVO Application Groups

After the successful installation of the HP OpenView Smart Plug-in for PeopleSoft, a number of new OVO application groups appear in the Application Group window.

Different application groups and applications are provided for Windows managed nodes and Unix managed nodes. The following text describes only one of the pair.

Please use the appropriate application depending on the platform of the target node where the application should run on.

The following list describes in general terms what the scope of the new PeopleSoft application groups are:

- PSSPI-Admin containing applications intended for OVO administrators that are working on PeopleSoft SPI administration.
- PSoft-Admin containing applications intended for OVO users working in administrative mode in the PeopleSoft environment.
- PSoft-Oper containing applications intended for OVO users working in operational mode in the PeopleSoft environment.
- PSoft-Reports containing applications intended for OVO users working in information retrieval mode.

The sections that follow describe the individual PeopleSoft application groups in more detail, list the applications that the groups contain, and explain what the various applications do. Note that the applications listed will only work in the manner described if the HP OpenView Smart Plug-in for PeopleSoft has been successfully installed and correctly configured on *both* the OVO management server *and* the PeopleSoft systems you want the PeopleSoft SPI to monitor.

The PSSPI-Admin Application Group

The PSSPI-Admin application group contains applications intended for OVO administrators who are working specifically on PeopleSoft SPI administration. The applications are started as Unix user root and either can or must be used when installing, configuring, operating, and troubleshooting the PeopleSoft SPI. For more information on which utilities are called by the individual applications, see “Applications and Application Groups” in Appendix B, “PeopleSoft SPI Components”.

Table 14 lists in alphabetical order the various applications in the PSSPI-Admin application group, describes briefly how the individual applications work, and indicates which function is called by each application and which PeopleSoft interface is used.

Table 14 PSSPI-Admin Applications

| Application Name | Description |
|----------------------|---|
| Activate PS Services | Activates the generated ServiceNavigator model for the default OVO users, psoft_adm and psoft_op. Use the -user option with “Customized Start” to assign the model to alternative users. |
| Build PS Services | Builds a ServiceNavigator model for PeopleSoft environment from discovered information. Note that if a discovery file was manually edited on the managed node, the file has to be transferred back to the OVO management server (see application Get PS Cfg). |
| Get PS Cfg | Retrieves the discovery file from the selected managed nodes and stores them on the OVO management server. Use this application if you have modified the discovery file manually on the managed node. |
| Edit PSSPI Cfg | Starts a text editor (vi) ¹ and opens the PSSPI configuration file psspi.cfg, which contains control options for the PeopleSoft SPI Not for Windows managed nodes. |
| PS Activate | Activates the discovered PeopleSoft components and creates a ps.cfg file on the selected system |
| PS Discovery | Discovers PeopleSoft components on the nodes you have selected |

| | |
|-------------------|---|
| PSSPI Cleanup | Removes all files and persistent information pertaining to the PeopleSoft SPI on the selected node |
| PSSPI Off | Switches <i>OFF</i> the monitoring components of the PSSPI on the selected node |
| PSSPI On | Switches <i>ON</i> the monitoring components of the PSSPI on the selected node |
| PSSPI Trace Off | Switches <i>OFF</i> the generation of trace information from the PSSPI components (except database metrics) on the selected node |
| PSSPI Trace On | Switches <i>ON</i> the generation of trace information from the PSSPI components (except database metrics) for the selected node |
| Self-Healing Info | Collects the troubleshooting data. |
| Verify PS Cfg | Verifies that the configuration of the managed PeopleSoft components in the ps.cfg file reflects the PeopleSoft environment on the node, and uses the findings to generate a report for the selected node |
| Verify PSSPI Com | Verifies that the communication between managed node and management server is working correctly for PeopleSoft messages, and generates a report about the results for the selected node |
| Verify Node Inst | Checks the installation of the PSSPI on the OVO <i>managed node</i> is correct and uses the findings to generate a report for the selected node |
| Verify Svr Inst | Verifies that the installation of the PSSPI on the OVO <i>management server</i> is correct then uses the findings to generate a report |
| View PSSPI Cfg | Displays the PSSPI configuration file psspi.cfg, which contains settings for tracing for the selected node |
| View PS Cfg | Displays the PeopleSoft configuration file psspi.disc, which lists the managed PeopleSoft components for the selected node |
| View PSSPI Error | Displays the contents of the PSSPI error log file on the selected node |
| View PSSPI Trace | Displays the contents of the PSSPI trace file on the selected node |

¹ Use the *EDITOR* variable to change this setting. Note that, for security reasons, the editor process runs as agent user.

The PSoft-Admin Application Group

This group contains applications intended for OVO users working in administrative mode. These users are allowed to configure or tune the PeopleSoft environment. The applications can also be used to perform administrative tasks in the PeopleSoft environment.

Table 15 lists in alphabetical order the various applications in the PSoft-Admin application group, describes briefly how the individual applications work, and indicates which function is called by each application and which PeopleSoft interface is used

Table 15 PSoft-Admin Applications

| Application Name | Description |
|------------------|--|
| psadmin | Starts the PeopleSoft command line tool <code>psadmin</code> in a new terminal window. Valid options for <code>psadmin</code> can be used for customization purposes. You can use option <code>-p PS_HOME</code> for multi PeopleSoft environment. Not for Windows managed nodes. |
| tmadmin | Starts the Tuxedo command line tool <code>tmadmin</code> in a new terminal window. If necessary, you can specify <code>-d domain_name</code> option to start application for this PeopleSoft domain only. All valid options for <code>tmadmin</code> can be used for customization (before <code>-d</code> option). Not for Windows managed nodes. |
| tmconfig | Starts the Tuxedo command line tool <code>tmconfig</code> in a new terminal window. If necessary, you can specify <code>-d domain_name</code> option to start application for this PeopleSoft domain only. All valid options for <code>tmadmin</code> can be used for customization (before <code>-d</code> option). Not for Windows managed nodes. |
| Unload TX Conf | Displays the current Tuxedo configuration for a PeopleSoft domain. If necessary, you can specify <code>-d domain_name</code> option to start application for this PeopleSoft domain only. |
| View PRCS Config | Displays the contents of the PeopleSoft process scheduler configuration file. If necessary, you can specify <code>-d db_name</code> option to start application for this PeopleSoft database only. |

The PSoft-Oper Application Group

This group contains applications intended for OVO users working in operational mode. These users are responsible for resolving problems that occur within the PeopleSoft environment and are reported by OVO messages. The applications can be used to perform operational tasks on the PeopleSoft environment (e.g. restart servers).

Table 16 lists in alphabetical order the various applications in the PSoft-Oper application group, describes briefly how the individual applications work, and indicates which function is called by each application and which PeopleSoft interface is used.

Table 16 PSoft-Oper Applications

| Application Name | Description |
|------------------|---|
| Boot Adm Servers | Boot PS administration servers (i.e. Tuxedo infrastructure processes like BBL). Specify the PeopleSoft domain using "Customize |

| | |
|--------------------|---|
| | Startup”. |
| Boot Appl Servers | <p>Boot PS application servers (e.g. PeopleSoft- specific server processes like PSAPPSRV, PSQCKSRV).</p> <p>Specify the PeopleSoft domain using “Customize Startup”</p> |
| Boot PS Domain | <p>Boots a PS domain (both administration and application servers).</p> <p>Specify the PeopleSoft domain using “Customize Startup”</p> |
| File Systems | Displays statistics on file systems and their usage. |
| IPC Cleanup | <p>Purges the current IPC resources for a specific PeopleSoft installation</p> <p>Not for Windows managed nodes.</p> |
| IPC Current | <p>Displays the current IPC resource statistics.</p> <p>Not for Windows managed nodes.</p> |
| IPC Needed | <p>Displays the IPC resources needed to boot an additional PS domain.</p> <p>Not for Windows managed nodes.</p> |
| PS App Server | Starts the PerfView user interface with pre-defined graphs illustrating PeopleSoft application server metrics. |
| PS Proc Sched | Starts the PerfView user interface with pre-defined graphs illustrating Process-scheduler metrics. |
| PS All Procs | Starts the PerfView user interface with pre-defined graphs showing all processes. |
| Restart PS Domain | <p>Shuts down and reboots a PS domain (both administration and application servers).</p> <p>Specify the PeopleSoft domain using “Customize Startup”</p> |
| Shutd. PS Domain | <p>Shuts down a PS domain.</p> <p>Specify the PeopleSoft domain using “Customize Startup”</p> |
| Shutd. Adm Servers | <p>Shuts down the PS administration servers.</p> <p>Specify the PeopleSoft domain using “Customize Startup”</p> |

| | |
|---------------------|---|
| Shutd. Appl Servers | Shuts down PS application servers. Specify the PeopleSoft domain using "Customize Startup" |
| Start Proc Sched | Starts a process scheduler process. Specify the PeopleSoft domain using "Customize Startup" |
| Stop Proc Sched | Stops a process scheduler process and accepts the same options as Start Proc Sched. |
| System Metrics | Starts the PerfView user interface with pre-defined graphs illustrating the most important system metrics. |
| View APPSRV.LOG | Displays the contents of the APPSRV.LOG logfile of a PS domain. Where necessary, you are prompted to select a PeopleSoft domain, for which the logfile will be viewed. |
| View TUXLOG | Displays the contents of the latest Tuxedo logfile of a PS domain. Where necessary, you are prompted to select a PeopleSoft domain, whose Tuxedo logfile you want to view. |
| View PRCS Log | Displays the contents of the latest process-scheduler logfile. Where necessary, you are prompted to select a PeopleSoft database, whose process scheduler logfile you wish to view. |

The PSoft-Reports Application Group

This PSoft-Reports application group contains applications intended for OVO users working in information-retrieval mode. The applications are granted read-only rights and may be used to create reports on the PeopleSoft environment.

Table 17 lists in alphabetical order the various applications in the PSoft-Reports application group, describes briefly how the individual applications work, and indicates which function is called by each application and which PeopleSoft interface is used.

Table 17 PSoft-Reports Applications

| Application Name | Description |
|------------------|---|
| PS Status | This application generates a status report on all PeopleSoft components on the selected node. |
| PS 2-Tier Conn | Generates a report on the number and origin of 2-tier connections to the PeopleSoft database. |

| | |
|--------------------|---|
| Proc Sched Status | Generates a status report on the PeopleSoft process scheduler. Where necessary, you are prompted to select a PeopleSoft database, whose process-scheduler status you want to see. All valid options for the <code>pspt</code> command may be used. |
| PS Job Status | Generates a report on the status of all PeopleSoft batch jobs on the selected node. |
| PS/TX Versions | Generates a report on the PeopleSoft/Tuxedo software version on the selected node. |
| PS Worklist Status | Generates a report on the status of the entries in the PeopleSoft worklist table. |
| Tblspace Files | List data files for all table spaces of the PS database |
| Tblspace Fragmnt | Generate a report on tablespace fragmentation |
| Tblspace Free | List free tablespace |
| Tblspace Status | Lists the status of table space |
| TX Client Status | Generates a report with information on the current PeopleSoft user activity. You can specify a domain, whose client status you want to see. Valid options for <code>tadmin</code> may be used for customization. Output, as from <code>tadmin</code> , with the command <code>pclt</code> . |
| TX Server Status | Generates a status report on the current PeopleSoft servers. You can specify a domain, whose server status you want to display. All valid options for <code>tadmin</code> can be used. Output, as from <code>tadmin</code> , with the command <code>psr</code> . |
| TX Queue Status | Generates a status report on the current PeopleSoft queues. You can specify a domain, whose queue status you want to display. Valid options for <code>tadmin</code> can be used. Output, as from <code>tadmin</code> , with command <code>pq</code> . |

Note that there is an additional report available to the OVO administrator which generates a report listing the number of managed nodes that require a licence for the HP OpenView Smart Plug-in for PeopleSoft and indicating the total number of licenses needed. To access this report from any top-level window in the OVO administrator's GUI, use the following menu sequence:

Actions-> Utilities-> Reports-> PSSPI Licence Report

The New OVO Users

After the successful installation of the HP OpenView Smart Plug-in for PeopleSoft, two new OVO users appear in the User Bank window. Figure 4 shows these new users.

Figure 4 PSSPI users



The following list describes in general terms what the scopes of the new users are:

`psoft-admin` is responsible for the administrative aspects of the PeopleSoft environment

`psoft-op` is responsible for monitoring the operational aspects of the PeopleSoft environment

Table 18 shows at a glance which new components of the HP OpenView Smart Plug-in for PeopleSoft are assigned by default to which new user. These assignments can easily be reviewed and, where necessary, modified in the Responsibility Matrix window, which you can see by opening the User Bank window, right-clicking the user you want to modify, and selecting the `Modify...` item in the pop-up menu that appears.

Table 18 Default User Assignments

| New Component | | <code>psoft_admin</code> | <code>psoft_op</code> |
|-------------------|--------------------|--------------------------|-----------------------|
| Node Group | All PS Node Groups | ✓ | ✓ |
| Message Group | PSoft-Fault | ✓ | ✓ |
| | PSoft-Perf | ✓ | ✓ |
| | PSSPI | ✓ | ✓ |
| Application Group | PSSPI-Admin | ✓ | |
| | PSoft-Admin | ✓ | |
| | PSoft-Oper | ✓ | ✓ |
| | PSoft-Reports | ✓ | ✓ |

Alternatively, you can review and modify one of the two default **User Profiles** provided with the HP OpenView Smart

Plug-in for PeopleSoft products SPI-PSOft-HPORA and SPI-PSOft-SuORA and which appear in the OVO User Profile Bank window:

- psoft_adm_prf
- psoft_op_prf

For more information on setting up users and using User Profiles in the PeopleSoft SPI, see “Setting up PeopleSoft Users”. For more information on User Profiles in general, see the OVO A.08.00 documentation and specifically the section on User Profiles in the *HP OpenView IT/Operations Concepts Guide*.

The New OVO Templates and Monitors

The HP OpenView Smart Plug-in for PeopleSoft installs a number of new template groups which contain all the templates and monitors you need to manage the PeopleSoft environment. For example, the PeopleSoft server processes can be monitored using a pre-defined process monitor provided as part of the PeopleSoft SPI. In addition the PeopleSoft server log files can be monitored with log-file templates. The templates and template groups have to be distributed using the standard OVO mechanisms. For more information on assigning and distributing templates in OVO, see “Distributing PeopleSoft SPI Actions, Commands, and Monitors”.

The template groups installed by the PeopleSoft SPI are:

- SPI for PeopleSoft
- PSSPI-App_Server
- PSSPI-Batch_Server
- PSSPI-Oradb_Server
- PSSPI-Web_Server
- PSSPI-DB2DB_Server
- PSSPI-MSSDB_Server

The main template groups which you may assign to the appropriate PeopleSoft nodes or node groups are explained in greater detail in the individual sections that follow. For more information on the scripts which the templates and PeopleSoft SPI monitors use, see Templates and Monitors in Appendix B , “PeopleSoft SPI Components.”

The PSSPI-App_Server Template Group

Table 19 lists the templates in the PSSPI-App_Server template group, indicates each template’s type, and gives a brief description of what is monitored and how.

Table 19 PSSPI-App_Server Templates

| Template Type | Template Name | Description |
|---------------|---------------------|---|
| Monitor | PSSPI-AppSrvLogSize | Monitors the application-server log directory for the amount of disk space consumed by the APPSRV.LOG and TUXLOG.<date> files |
| | PSSPI-FileSys | Monitors file-system space - checks all local file systems |
| | PSSPI-IPC | Monitors the PeopleSoft UNIX IPC, including kernel table usage for semaphores, message queues, and shared memory Does not work on Windows systems. |

| | | |
|---------|-------------------------------------|---|
| | PSSPI-TMIB-001_1 | Monitors the status of the Tuxedo domains of a PeopleSoft application server (T_DOMAIN). |
| | PSSPI-TMIB-002_1 | Monitors the status of the Tuxedo machine of a PeopleSoft application server (T_MACHINE). |
| | PSSPI-TMIB-003_1 | Monitors the status of the Tuxedo application group of a PeopleSoft application server (T_GROUP). |
| | PSSPI-TMIB-004_1 | Monitors the status of the Tuxedo base group of a PeopleSoft application server (T_BASE). |
| | PSSPI-TMIB-005_1 | Monitors the actual number of APPSRV server processes and compares the it with TA_MIN |
| | PSSPI-TMIB-006_1 | Monitors the actual number of APPSRV server processes and compares it with TA_MAX |
| | PSSPI-TMIB-007_1 | Monitors the generation number TA_MAXGEN - TA_GENERATION |
| | PSSPI-TMIB-008_1 | Monitors the actual (absolute) number of APPSRV processes. |
| | PSSPI-TMIB-010_1 | Monitors the number of 3-Tier connections |
| | PSSPI-TMIB-Col-05min_1 ¹ | Runs the TMIB collector process to gather DB metrics every <intv> minutes. In this case intv = 5 mins. Note that there may be multiple templates with different <intv>. Actual data processing is done in monitors TMIB-<metric>. In addition, this collector checks for Tuxedo domains which are currently down. |
| | PSSPI-TMIB-Col-05min_2 ¹ | This TMIB collector checks for Tuxedo domains which are currently up. |
| Logfile | PSSPI-AppSrvCfgFiles | Monitors changes to the application-server configuration file, psappsrv.cfg |
| | PSSPI-AppSrvLogFiles | Monitors the application-server log file, APPSRV.LOG, for each PS domain Please note that messages not currently recognized by a SPI Template Condition are send |

| | | |
|---------|----------------------|---|
| | | directly to the history log of the VPO server as “unrecognized messages”. To change this, you may deactivate the according flag in the last condition of this template. |
| | PSSPI-TUXLogDirs | Monitors the PeopleSoft domain log directories for new TUXLOG files. |
| | PSSPI-TUXLogFiles | Monitors the TUXLOG.<date> log files for each PeopleSoft domain Please note that messages not currently recognized by a SPI Template Condition are send directly to the history log of the VPO server as “unrecognized messages”. To change this, you may deactivate the according flag in the last condition of this template. |
| Message | PSSPI-PSSPI-Messages | Intercepts messages from the PeopleSoft SPI programs |

¹ If you want to split the collector monitor into multiple monitors each of which is configured to run at different intervals, make sure that only *one* of the monitors is configured to feed the MeasureWare agent. For more information, see “Monitor Scripts”.

The PSSPI-Batch_Server Template Group

Table 20 lists the templates in the `PSSPI-Batch_Server` template group, indicates each template’s type, and gives a brief description of what is monitored and how.

If the database server for a process scheduler does *not* reside on the local (batch-server) system, you have to configure the database components on the batch server as well (and in the same way) as the database server as described in “Configuring the PeopleSoft SPI to Monitor the Database”, with the exception of the `CONNECT` string. In order to take account of the remote database, the `CONNECT` string on the batch server should take the following format:

```
CONNECT "<name>/<passwd>@<db_alias>"
```

where `db_alias` is the name of the PeopleSoft database.

Table 20 PSSPI-Batch_Server Templates

| Template Type | Template Name | Description |
|---------------|----------------------|---|
| Message | PSSPI-PSSPI-Messages | Intercepts messages from the PeopleSoft SPI programs |
| Logfile | PSSPI-PrclsLogDirs | Monitors the PeopleSoft, process-scheduler log directories. Checks for new log files and switches the actual log file |
| | PSSPI-PrclsLogFiles | Monitors the PeopleSoft process-scheduler log files: <code>PTPUPRCS_*.log</code> Please note that messages not currently recognized by a SPI Template Condition are send directly to the history log of the VPO server as |

| | | |
|---------|--------------------------|---|
| | | “unrecognized messages”. To change this, you may deactivate the according flag in the last condition of this template. |
| | PSSPI-PrCsAppSrvLogFiles | Monitors the PeopleSoft process-scheduler log files: APPSRV_*.log Please note that messages not currently recognized by a SPI Template Condition are send directly to the history log of the VPO server as “unrecognized messages”. To change this, you may deactivate the according flag in the last condition of this template. |
| Monitor | PSSPI-FileSys | Monitors file-system space - checks all local file systems |
| | PSSPI-PrCsLogSize | Monitors the size of the process-scheduler log directory and the disk space consumed by the PTPUPRCS_*.log files |
| | PSSPI-PrCsJobTab | Checks the process-scheduler table and the job-table entries |
| | PSSPI-PrCsMon | Monitors the existence of the process scheduler process: PTPUPRCS |
| | PSSPI-PrCsMon-STAT | Monitors the existence of additional process scheduler processes: PSDSTSRV |

The PSSPI-DB2DB_Server Template Group

Table 21 lists the templates in the PSSPI-DB2DB_Server template group, indicates each template’s type, and gives a brief description of what is monitored and how.

This template group serves as a container for future PeopleSoft specific templates for monitoring DB2 PeopleSoft database servers.

Table 21 PSSPI-DB2DB_Server Templates

| Template Type | Template Name | Description |
|---------------|----------------------|--|
| Message | PSSPI-PSSPI-Messages | Intercepts messages from the PeopleSoft SPI programs |
| | PSSPI-FileSys | Monitors file-system space - checks all local file systems |

The PSSPI-MSSDB_Server Template Group

Table 22 lists the templates in the PSSPI-MSSDB_Server template group, indicates each template’s type, and gives a brief description of what is monitored and how.

NOTE Messages intercepted by the PSSPI-DBSPI-Messages template supplied with the PeopleSoft SPI duplicate messages intercepted by the SPI for MSS templates. If the SPI for MSS is already installed (and the SPI templates already assigned and distributed) and you want to avoid duplicate messages arriving from the database server, you should disable the PSSPI-DBSPI-Messages template by deleting it from the PSSPI-MSSDB_Server template group before distributing the PeopleSoft SPI templates.

NOTE If the same database metrics as listed in Table are to be computed using the original DBSPI templates, it may happen that more than one DBSPI collector is accessing a PeopleSoft database at the same time. Per default, such overlapping metrics are detected by the DBSPI collectors and a warning message is written to the DBSPI log file - and shown in the OVO message browser. To avoid these messages - and to avoid the additional load on the managed node - you may want to disable these multiply defined metrics in one of the SPI's, whether the DBSPI or the PeopleSoft SPI. This may be done by removing the appropriate metric number from the collector templates. For the PeopleSoft SPI, this collector template is PSSPI-MSSDB-Col-05Min_1. For the DBSPI, this collector template is DBSPI-MSS-05min, DBSPI-MSS-05min-Favorites

Table 22 PSSPI-MSSDB_Server Templates

| Template Type | Template Name | Description |
|---------------|-----------------------|---|
| Message | PSSPI-PSSPI-Messages | Intercepts messages from the PeopleSoft SPI programs |
| Monitor | PSSPI-DBSPI_3791 | Monitors number of employess. |
| | PSSPI-DBSPI_3792 | Number of queued jobs |
| | PSSPI-DBSPI_3793 | Number of 2-Tier connections |
| | PSSPI-FileSys | PeopleSoft filesystem space usage |
| | PSSPI-MSSQL-Col-05min | Runs the MSS collector process for DB metrics every 5 minutes |

The PSSPI-OraDB_Server Template Group

Table 23 lists the templates in the PSSPI-OraDB_Server template group, indicates each template's type, and gives a brief description of what is monitored and how.

NOTE Messages intercepted by the PSSPI-DBSPI-Messages template supplied with the PeopleSoft SPI duplicate messages intercepted by the SPI for Oracle templates. If the SPI for Oracle is already installed (and the SPI templates already assigned and distributed) and you want to avoid duplicate messages arriving from the database server, you should disable the PSSPI-DBSPI-Messages template by deleting it from the PSSPI-DB_Server template group before distributing the PeopleSoft SPI templates.

NOTE If the same database metrics as listed in Table 23 are to be computed using the original DBSPI templates, it may happen that more than one DBSPI collector is accessing a PeopleSoft database at the same time. Per default, such overlapping metrics are detected by the DBSPI collectors and a warning message is written to the DBSPI log file - and shown in the OVO message browser. To avoid these messages - and to avoid the additional load on the managed

node - you may want to disable these multiply defined metrics in one of the SPI's, whether the DBSPI or the PeopleSoft SPI. This may be done by removing the appropriate metric number from the collector templates. For the PeopleSoft SPI, this collector template is PSSPI-DB-Col-05Min_1. For the DBSPI, this collector template is DBSPI-Ora-05min, DBSPI-Ora-05min-Favorites or DBSPI-Ora-05minSQLNet.

Table 23 PSSPI-OraDB_Server Templates

| Template Type | Template Name | Description |
|---------------|------------------------|--|
| Message | PSSPI-DBSPI-Messages | Intercepts messages from the DBSPI programs |
| | PSSPI-PSSPI-Messages | Intercepts messages from the PeopleSoft SPI programs |
| Monitor | PSSPI-ORACLE-Col-05Min | Runs the collector process to gather DB metrics every 5 minutes |
| | PSSPI-DBSPI-0001 | Monitors the database status (DBInstanceStatus) |
| | PSSPI-DBSPI-0002 | Monitors the database process (ProcessStatus) |
| | PSSPI-DBSPI-0006 | Monitors the number of table spaces with low free space (TblSpaceFreePctCnt) |
| | PSSPI-DBSPI-00011 | Monitors the number of fragmented table spaces (TblSpaceFragmentCnt) |
| | PSSPI-DBSPI-0023 | Current buffer cache hit percentage (CurrBuffCacheHitPct) |
| | PSSPI-DBSPI-0792 | Number of queue jobs |
| | PSSPI-DBSPI-0793 | Number of 2-tier client connections: i.e. the number of clients working in 2-tier mode |
| | PSSPI-FileSys | Monitors the PeopleSoft file-system space |
| | PSSPI-WorkList | Checks the PeopleSoft work-list table |

The PSSPI-Web_Server Template Group

Table 24 lists the templates in the PSSPI-Web_Server template group, indicates each template's type, and gives a brief description of what is monitored and how.

This template group contains templates for monitoring PeopleSoft web servers equipped with the bundled Apache web

server on Unix nodes.

Table 24 PSSPI-Web_Server Templates

| Template Type | Template Name | Description |
|---------------|----------------------|--|
| Message | PSSPI-PSSPI-Messages | Intercepts messages from the PeopleSoft SPI programs |
| Logfile | PSSPI-WebLogFiles | Monitors the log file of the bundled Apache web server (PeopleTools 8.1) |
| Monitor | PSSPI-WebMon | Monitors the existence of the Apache web server (PeopleSoft 8.1) |

Template and Monitors on MC/ServiceGuard Nodes

The PeopleSoft SPI templates and monitors continue to generate messages and send them to the OVO management server irrespective of whether the MC/ServiceGuard package for PeopleSoft is running on that node or not. This can lead to a situation where, after a package switch from node A to node B, unnecessary messages appear in the Message Browser window on the OVO management server informing you that the PeopleSoft processes are no longer running on node A. The messages are unnecessary because they are notifying you of behavior that is expected.

To allow or prevent the collection and sending of such messages from PeopleSoft systems in an MC/ServiceGuard environment, you need to disable the PeopleSoft SPI on those nodes, where the PeopleSoft components are down intentionally and to reactivate the PeopleSoft SPI where the PeopleSoft components are up again.

To deactivate the PeopleSoft SPI, add the following lines to the script which is called when the OVO package is switched off on the managed node:

```
opctemplate -d PSSPI-AppSrvLogFiles
opctemplate -d PSSPI-AppSrvCfgFiles
opctemplate -d PSSPI-AppSrvLogSize
opctemplate -d PSSPI-TUXLogDirs
opctemplate -d PSSPI-TUXLogFiles
opctemplate -d PSSPI-FileSys
opctemplate -d PSSPI-IPC
opctemplate -d PSSPI-TMIB-Col-05min_1
opctemplate -d PSSPI-TMIB-Col-05min_2
opctemplate -d PSSPI-PrsLogDirs
opctemplate -d PSSPI-PrsLogFiles
opctemplate -d PSSPI-PrsLogSize
opctemplate -d PSSPI-PrsMon
opctemplate -d PSSPI-PrsJobTab
opctemplate -d PSSPI-DB-Col-05min
opctemplate -d PSSPI-WorkList
opctemplate -d PSSPI-WebLogFiles
opctemplate -d PSSPI-WebMon
```

To activate the PeopleSoft SPI, add the following lines to the script which is called when the OVO package is switched on:

```
opctemplate -e PSSPI-AppSrvLogFiles
opctemplate -e PSSPI-AppSrvCfgFiles
opctemplate -e PSSPI-AppSrvLogSize
opctemplate -e PSSPI-TUXLogDirs
opctemplate -e PSSPI-TUXLogFiles
opctemplate -e PSSPI-FileSys
opctemplate -e PSSPI-IPC
opctemplate -e PSSPI-TMIB-Col-05min_1
opctemplate -e PSSPI-TMIB-Col-05min_2
opctemplate -e PSSPI-PrsLogDirs
```

```
opctemplate -e PSSPI-PrclsLogFiles
opctemplate -e PSSPI-PrclsLogSize
opctemplate -e PSSPI-PrclsMon
opctemplate -e PSSPI-PrclsJobTab
opctemplate -e PSSPI-DB-Col-05min
opctemplate -e PSSPI-WorkList
opctemplate -e PSSPI-WebLogFiles
opctemplate -e PSSPI-WebMon
```

Alternatively, you can use the command `psspi_perl psspi_spicl.pl setcfg COLLECTION FALSE` to disable monitoring and `psspi_perl psspi_spicl.pl setcfg COLLECTION TRUE` to enable it.

Using Service Views

This section describes how to take advantage of the HP OpenView Smart Plug-in for PeopleSoft integration with HP OpenView ServiceNavigator. In this section you will find information concerning:

- . • Service Views with the PeopleSoft SPI
- . • The System View
- . • The Instance View
- . • Resources and Processes
- . • Service Discovery, Activation, and Assignment

Service Views with the PeopleSoft SPI

If you are using the HP OpenView Smart Plug-in for PeopleSoft with OV Operations for Unix, you can make use of the HP OpenView ServiceNavigator which allows you to display a logical view of all the monitored components in your user environment.

NOTE The Navigator is a *separate* product: it is not included either with the HP OpenView Smart Plug-in for PeopleSoft or OV Operations for Unix.

From a PeopleSoft perspective, the PeopleSoft SPI uses the Navigator to display all PeopleSoft components (database, application, and batch servers) and any dependencies both in terms of the systems on which the PeopleSoft components are running, that is; a *system* view and, if necessary, the logical view of each installed PeopleSoft instance, the *instance* view. For more information on the system view, see “The System View”. For more information on the instance view, see “The Instance View”.

The System View

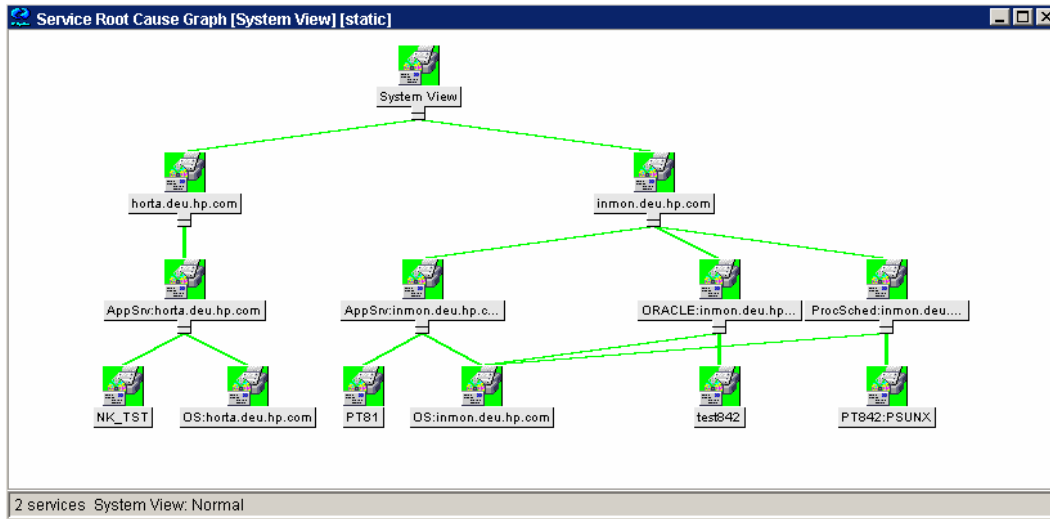
The PeopleSoft SPI uses the Navigator to display all PeopleSoft components such as database, application, and batch servers as well as any dependencies in terms of the systems on which the PeopleSoft components are running. It is important to recognize that the idea is *not* to display the status of any particular PeopleSoft functionality: rather, it is to indicate which systems are configured in which PeopleSoft role.

The system view contains system hostnames, which contain in its turn up to three different system types each represented by a service icon:

- database servers
- application servers
- batch servers

The figure 5 illustrates system view for 2 systems: horta and inmon. Horta has only Application server. Inmon has Application server, Database server (Oracle) and Process Schedule server.

Figure 5 System View

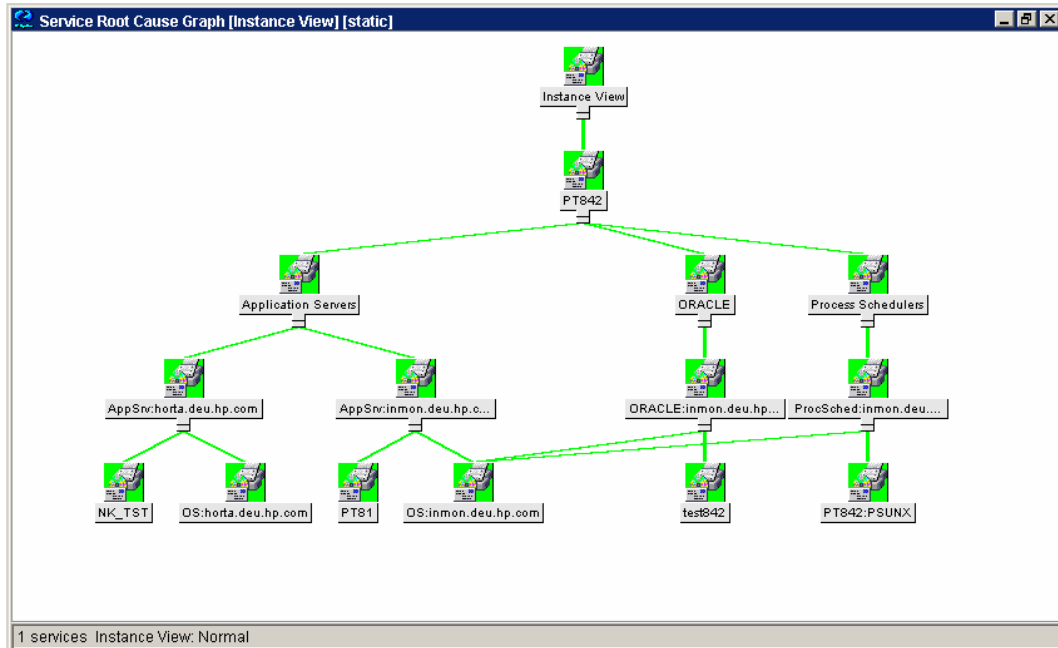


The Instance View

The PeopleSoft SPI can also use the Navigator to display all PeopleSoft components (database, application, and batch servers) in terms of the PeopleSoft instances running, that is; an *instance* view. The top level of a instance view is one icon for each installed PeopleSoft instance such as PeopleSoft Databases like **HR** (Human Resources) and **Finance**. Figure 6 illustrates an example of just such an instance view, where PT842 is an instance name.

Each top-level PeopleSoft instance, such as HR or Finance, depends on a logical component like Application servers, Process Schedulers, Database type, which in turn have a dependency on databases, application servers and the process-scheduler subsystems. Note that there can be multiple process schedulers on different systems each represented in the Navigator by a single system icon. The application server depends on one or more Tuxedo domains, which in turn can reside on different systems. On figure 6 there are 2 Tuxedo domains: PT81 on inmon and NK_TST on horta.

Figure 6 Instance View



Resources and Processes

The HP OpenView Smart Plug-in for PeopleSoft monitors low-level resources and reports any failure by sending a message to the OVO/Unix management server. The propagation rules that determine which high level services are affected by the failure of low-level processes and resources is built into the service-tree definition.

The low-level component names contain intermediate instance names which provide uniqueness within the service definition. For example the process *PSAUTH* may show up in multiple locations (at least once for each PeopleSoft *domain*). Consequently, the name of the service representing *PSAUTH* contains the name of the particular PeopleSoft domain.

The following are examples of service names:

```

PS_SPI:inmon.deu.hp.com:OS
PS_SPI:inmon.deu.hp.com:AppSrv
PS_SPI:inmon.deu.hp.com:AppSrv:PT81
PS_SPI:inmon.deu.hp.com:ProcSched
PS_SPI:inmon.deu.hp.com:ProcSched:PT842:PSUNIX
PS_SPI:inmon.deu.hp.com:ORACLE:test842

```

where:

PS_SPI is the name space

inmon.deu.hp.com is the host name

AppSrv, OS, is the sub-group
ProcSched, OS,
Database type
(ORACLE, MSSQL,
DB2)

PT81 is the Tuxedo domain

PT842 PeopleSoft database name

PSUNX Process Scheduler name

test842 Oracle SID

Note that the OVO/Unix templates provided with the PeopleSoft SPI use *exactly* the same format in their service field in order to be able to identify the affected service when sending an OVO/Unix message.

Service Discovery, Activation, and Assignment

Once you have all the necessary HP OpenView components installed and running, you can use the pre-defined applications provided with the PeopleSoft SPI to discover the services present in the PeopleSoft domain, build a Navigator model, activate and assign it to the appropriate users. In addition to OV Operations for Unix A.08.00 and the HP OpenView Smart Plug-in for PeopleSoft, you also need to install and configure, if you have not already done so, the HP OpenView Navigator.

To build the PeopleSoft service model, activate and assign it:

1. Open the PSSPI-Admin application group in the Application Bank window.
2. Double click the Build PS Services application to build a Navigator model for the PeopleSoft environment. The Build PS Services application uses the information stored in the node-specific configuration files residing in the directories created by the PS Discovery application:
`/var/opt/OV/share/psspi/disc/<node_name>`.
3. Double click the Activate PS Services application to activate the newly built Navigator model for the PeopleSoft environment and assign it to the default PeopleSoft users:
 - a. psoft_adm
 - b. psoft_op

Note that, if necessary, you can modify the Activate PS Services application to assign the PeopleSoft Navigator model to other users of your choice. To do this, use the Application Parameters field in the Application Customized Startup window to specify the new users for the Activate PS Services application: `-user opc_adm -user opc_op`.

Troubleshooting the PeopleSoft SPI

This section describes how to go about troubleshooting the HP OpenView Smart Plug-in for PeopleSoft. In this section you will find information concerning:

- General Troubleshooting Notes
- Determining the PeopleSoft SPI Version
- PeopleSoft SPI Verification Scripts
- PeopleSoft SPI Error Logging
- PeopleSoft SPI Tracing
- Self-Healing integration

General Troubleshooting Notes

There are a number of tools and tips to help you troubleshoot problems with the HP OpenView Smart Plug-in for PeopleSoft. The following list describes the most important points to remember:

1. Establish what version of the HP OpenView Smart Plug-in for PeopleSoft is installed and running. For more information, see “Determining the PeopleSoft SPI Version”.
2. Use the “verification” applications such as `Verify PS Cfg` and `Verify PSSPI Com` in the Application Group `PSSPI Admin`. These applications, as the names suggest, allow you to verify specific aspects of the configuration and installation of the PeopleSoft SPI. For more information, see “PeopleSoft SPI Verification Scripts”.
3. Have a look at the standard PeopleSoft SPI error log files, which can often contain information that is crucial to understanding and resolving problems. For more information, see “PeopleSoft SPI Error Logging”.
4. Generate information on the working of the PeopleSoft SPI, enable tracing by running the `PSSPI Trace On` application in the `PSSPI-Admin` application group. For more information, see “PeopleSoft SPI Tracing”.
5. Collects troubleshooting data on a managed node. The collected data can then be sent to your HP support representative to help quickly resolve the SPI issue. For more information, see “Self-Healing integration”

Determining the PeopleSoft SPI Version

It is essential that you know which version of the PeopleSoft SPI software is installed and running on the system that is proving troublesome in order to be able to understand how to proceed. To establish which version of the software is present, carry out the following steps:

1. Use the `swlist` command on the selected system to determine which product bundle(s) have been installed. For example:

```
swlist SPI-PSoft
```
2. Use applications such as `Verify Node Inst` and `Verify Srv Inst` to establish the version number of the PeopleSoft SPI files installed on the management server and the managed nodes.
3. Run the application `PS/TX Versions` which resides in the application group `PSOft-Reports` to establish which version of PeopleSoft and/or Tuxedo is present.

PeopleSoft SPI Verification Scripts

The HP OpenView Smart Plug-in for PeopleSoft provides a number of applications such as `Verify PS Cfg` and `Verify PSSPI Com` which reside in the Application Group `PSSPI Admin` and allow you to run checks to establish whether or not various aspects of the installation and configuration have completed successfully. For more information on which applications are available to assist in the verification procedure, see “The PSOft-Admin

Application Group”.

PeopleSoft SPI Error Logging

The HP OpenView Smart Plug-in for PeopleSoft logs error information in a number of standard files. These PeopleSoft SPI error log files which can often contain information that is crucial to understanding and resolving problems reside in the following locations:

OVO Server `/var/opt/OV/share/psspi/log/psspi_srv.log`

OVO Mgd Node `/var/opt/OV/psspi/log/psspi.log` (`/var/lpp/OV/psspi/log/psspi.log` on AIX) `/var/opt/OV/psspi/log/ULOG.<date>` (`/var/lpp/OV/psspi/log/ULOG.<date>` on AIX) The OVO managed node in this context is the PeopleSoft system you are managing with the PeopleSoft SPI. It is also useful to check the standard OVO error-log file for information:

`/var/opt/OV/log/OpC/opccerror` (`/var/lpp/OV/log/OpC/opccerror` on AIX)

PeopleSoft SPI Tracing

The HP OpenView VantagePoint HP OpenView Smart Plug-in for PeopleSoft uses shell scripts for monitors and application startup. All perl scripts create trace information if this is configured in the PeopleSoft SPI configuration file. By default, the tracing is switched *off* by the HP OpenView Smart Plug-in for PeopleSoft.

All OVO Server perl scripts always create a trace file `script_name.trc`, but they rewrite it every time.

OVO Server `/var/opt/OV/share/psspi/log/script_name.trc`

To generate information on the working of the PeopleSoft SPI, enable tracing by running the `PSSPI Trace On` application in the `PSSPI-Admin` application group.

Note OVO MgdNode PS Discovery and PS Activation applications always generate a trace.

OVO Mgd Node `/var/opt/OV/psspi/log/psspi.trc` (`/var/lpp/OV/psspi/log/psspi.trc` on AIX)

The OVO managed node in this context is the PeopleSoft system you are managing with the PeopleSoft SPI.

Once you have configured what you want to appear in the trace file, you can switch the tracing on or off using the `PSSPI Trace On` and `PSSPI Trace Off` applications in the `PSSPI-Admin` application group.

The following trace-related variables can be defined in the configuration file:

Table 25 Trace Variables

| Variable Name | Permitted Values | Description |
|---------------|------------------|---|
| TRACE_LEVEL | 0-9 | Determines the amount of trace information written. The higher the level, the more trace information is generated. Default is: 0 (tracing off). Note that zero and non-zero are the <i>only</i> values that are currently supported. |

| | | |
|-----------|--|--|
| TRACE_OBJ | <i><names of all programs delivered with the PeopleSoft SPI></i> | Defines the programs for which trace information will be generated. You can specify multiple program names, which must be separated by commas. |
|-----------|--|--|

Entries in the trace file, `psspi.trc`, appear in the following format: `<mm/dd/yyyy> <hh:mm:ss> PSSPI(<program name>-<pid>): <text>`

Table 26 lists and describes the various fields.

Table 26 Trace-File Fields

| Field Name | Description |
|-----------------------------------|--|
| <code><mm/dd/yyyy></code> | Date when the entry is created |
| <code><hh:mm:ss></code> | Time when the entry is created |
| <code><program name></code> | Name of program (script, executable) responsible for the entry |
| <code><pid></code> | PID of program responsible for the entry |
| <code><text></code> | Detailed information on action |

Self-Healing integration

To collect troubleshooting data for HP support you can use the application Self-Healing Info from PSSPI-Admin application group. The application starts self-healing collector in standalone mode. The output will be written in `/tmp/spi_ps` on Unix, or in `%TEMP%/spi_ps` on Windows.

A File Names

This section describes which files are installed by the HP OpenView Smart Plug-in for PeopleSoft and where exactly they are located after the installation and configuration of the product has been completed successfully. In this section you will find information concerning:

- Product Bundles and Filesets
- Files on the Management Server
- Files on the Managed Nodes
- PeopleSoft Configuration Files

Product Bundles and Filesets

Table 27 shows which products are present in the HP OpenView Smart Plug-in for PeopleSoft software bundles.

Table 27 Products in the PeopleSoft SPI Software Bundle

| SD Bundle | Fileset | Description |
|-----------|---------------|---------------|
| SPI-PSoft | SPI-PS-CONFIG | SPI Software. |

Files on the Management Server

The PeopleSoft SPI exists as an SD bundle and must be installed on the OVO management server. SD control scripts perform a number of customization procedures during installation and, in addition, create the directories listed in Table 28:

Table 28 PeopleSoft SPI File Locations on the OVO Management Server

| Description | Location |
|---|--------------------------------------|
| SPI binary files | /opt/OV/psspi/bin |
| SPI temporary and runtime files | /var/opt/OV/share/psspi/tmp |
| SPI log and trace files | /var/opt/OV/share/psspi/log |
| SPI discovery files | /var/opt/OV/share/psspi/disc/ |
| OVO integration files in uploadable format: | /var/opt/OV/share/tmp/opC_appl/psspi |

The OVO upload packages residing in the directory `.../opC_appl/psspi` are loaded into the OVO database. These packages are loaded using the following command:

```
# opccfgupld -replace <package>
```

Files on the Managed Nodes

After installing the HP OpenView Smart Plug-in for PeopleSoft on the OVO Management Server and distributing the required components to the PeopleSoft systems (which become, as a result, OVO managed nodes), the components

listed in Table 29 will reside on the managed node:

Table 29 PeopleSoft SPI File Locations on the OVO Managed Nodes

| Description | Location | Created By |
|---------------------------------|--|------------|
| SPI scripts and binary files | OVOAGT_CMDDIR, OVOAGT_MONDIR | Agent |
| Non-root sudo files | /var/opt/OV/psspi/bin AIX:/usr/lpp/OV/psspi/bin | SPI |
| SPI temporary and runtime files | /var/opt/OV/psspi/tmp AIX:/usr/lpp/OV/psspi/tmp | SPI |
| SPI log and trace files | /var/opt/OV/psspi/log AIX:/usr/lpp/OV/psspi/log | SPI |
| SPI configuration files | /var/opt/OV/psspi/conf AIX: /usr/lpp/OV/psspi/conf | SPI |

PeopleSoft Configuration Files

This section describes three important PeopleSoft SPI configuration files, namely:

- . • psspi.cfg
- . • psspi.disc
- . • ps.cfg

Each of these three configuration files is described in greater detail in the following sections.

The psspi.cfg Configuration File

The configuration file `/var/opt/OV/psspi/conf/psspi.cfg` can be used to control the overall behavior of PeopleSoft SPI components on the PeopleSoft system that is managed by OVO. The following example illustrates the contents of the `ps.cfg` file:

```
# The trace is ON
TRACE_LEVEL 2

COLLECTION TRUE
```

Each line consists of a key value pair separated by white spaces. The value consists of everything following the first white space(s) until the end of the line. Quoting is neither necessary nor allowed since quotes are used as part of the value itself. However, empty lines are allowed. Lines starting with a hash (#) sign are treated as comments. Table 30 shows which keys are supported in the `psspi.cfg` file:

Table 30 Supported Keys in the psspi.cfg

| File Key | Type | Value Range | Default Setting | Description |
|----------|------|-------------|-----------------|-------------|
| | | | | |

| | | | | |
|-------------|---------|----------------|------|--|
| TRACE_LEVEL | integer | 0 - 9 | 0 | Trace level controls the amount of runtime tracing written by SPI processes. Current options are: • zero • <i>non</i> zero |
| TRACE_OBJ | string | any | "" | Program/Script name(s) to be traced. List items separated by commas |
| COLLECTION | boolean | TRUE/ FALSE | TRUE | Enables/ disables the entire PeopleSoft SPI |

The psspi.disc Configuration File

The PS Discovery application writes its findings to the file `/var/opt/OV/psspi/conf/psspi.disc`.

The format of the `psspi.disc` file allows for convenient manual editing: such an action might be necessary if, for example, the discovery application fails for any reason and the database coordinates need to be entered separately, or if more than one database instance is discovered and not all the instances need to be monitored.

On the OVO management server, individual discovery files are stored for each node in the following location:

```
/var/opt/OV/share/psspi/disc/<node_name>
```

The example below shows what kind of information is written to the `psspi.disc` file and what the format of the file contents is:

```
#####
#
# File:                psspi.disc
# Description:         PeopleSoft SPI information base - filled by SPI discovery
# Language:            Config
# Package:             HP OpenView Smart Plug-In for PeopleSoft
#
# (c)Copyright 1999-2005 Hewlett-Packard Company., All Rights Reserved.
#
#####

#-----
# Global PeopleSoft specific entries for this host.
#-----
OS_VERS;HP-UX B.11.11
#-----
# List of PeopleSoft installations as defined by PS_HOME. Each entry is
# represented by a single line having the following format:
# PS_HOME;PS_USER;PS_VER;PS_DBNAME;DB_TYPE;DB_NAME;DB_SERVER;DB_HOME;
# PS_DBOWNER;TUXDIR;TUXVER
#-----

PS_DB
/opt/PT8.42;psoft;8.42;PT842;ORACLE;test842;inmon.deu.hp.com;/opt/oracle/p
roduct/8.1.7;SYSADM;/opt/tuxedo/6.5;6.5
END

#-----
# List of Application Servers (Tuxedo Domains) used by PeopleSoft.
# Each entry has the following format:
# PS_HOME;DOMAIN
```

```

#-----
APPSRV
/opt/PT8.42;PT81
END

#-----
# List of PeopleSoft Process Schedulers. Each entry has the following format:
# PS_HOME;PRCS_NAME;LOGS
#-----

PRCS
/opt/PT8.42;PSUNX;/opt/PT8.42/appserv/prcs/PT842/LOGS
END

#-----
# List of PeopleSoft bundled web servers as defined by PS_HOME. Each entry
# is represented by a single line having the following format:
# -TYPE is one of (APACHE)
# PS_HOME;WEB_HOME;WEB_TYPE
#-----

WEBSRV
END

#-----
# List of File systems. Each entry has the following format:
# Mount-point;...
#-----
FILESYS
/stand;/u02;/
END
#####
# End of psspi.disc
#####

```

NOTE If the discovery mechanism is restarted, the previously stored information base is backed up to the file `psspi.disc.bak.<PID>` and then the `psspi.disc` is overwritten.

PeopleSoft allows the creation of multiple independent installations on one system - for example, different versions for testing purposes. However, this results in multiple `PS_HOME` residing in directories adhering to a standard PeopleSoft structure but which typically are not associated with separate user accounts. Although, the discovery mechanism and the configuration-file syntax within the PeopleSoft SPI both support the existence of multiple PeopleSoft installations on one system (i.e. multiple `PS_HOME` directories or users), the normal discovery mechanism will not always be able to find them automatically.

To enable the discovery of multiple `PS_HOMES` as well as any other PeopleSoft components in such environments, the PS Discovery application accepts additional options which allow you to narrow the search down to those places where a PeopleSoft installation might usually be found. These options can be specified using the Application Parameters field in the OVO Customized Startup window. For more details about options see the chapter "Discovering PeopleSoft Components on the Managed Nodes".

The ps.cfg Configuration File

The PS Activate application reads the `psspi.disc` and copies its contents to the file `ps.cfg`, which is evaluated on the managed node by the OVO template and monitor scripts and, in addition, sent back to the OVO management server to be converted into the OVO service hierarchy. The format of the `ps.cfg` file is the same as the `psspi.disc` file.

NOTE After you have activated the configuration, you can run the `Verify PS Cfg` application in the `PSSPI Admin` application group to make sure that the configuration is consistent and reflects the instance or instances present on the PeopleSoft server.

B PeopleSoft SPI Components

This section describes which components are installed by the HP OpenView Smart Plug-in for PeopleSoft and provides detailed reference material, which aims to help you understand how the various components work and interact with each other. In this section you will find information concerning:

- Templates and Monitors
- Applications and Application Groups

Templates and Monitors

All templates have the *prefix* PSSPI-. Consequently, the name of the template APPSRV appears in the GUI as PSSPI-APPSRV. The same rule applies to all template conditions, too. However, template conditions have a suffix which indicates both the version number *and* the condition number. For example, PSSPI-TMIB-002.1.1 for version one of the first condition in the template PSSPI-TMIB-002.

Many log-file and monitor templates operate by default on multiple PeopleSoft or Tuxedo instances, which are all found during the discovery process. However, it is possible to limit the operational scope of a given template by passing the list of instances which are of interest to you to the script, which the template executes. If you do not explicitly declare any instances, the script assumes it has to monitor all discovered instances. To modify the PSSPI-TMIB-Col-05min_1 template to monitor one domain, the monitor script should be changed to look like the following example, where *<domain_name>* is the name of the domain you want to monitor:

```
psspi_perl psspi_tmib.pl PSSPI-TMIB-Col-05min_1 1-10 <domain name>
```

The following sections list the scripts used by the templates and monitors available in the HP OpenView Smart Plug-in for PeopleSoft

NOTE Most of the PeopleSoft commands executed by the PeopleSoft SPI are operated under the special PeopleSoft owner Unix account (e.g. psoft). If the OVO standard templates Su (AIX), Su (10.x/11.x HP-UX) or Su (Solaris) are assigned and deployed to a managed node running a PeopleSoft SPI component, then message like "Succeeded switch user to psoft by root" will appear in the message browser. To avoid such messages, you may add an appropriate suppress condition to this template.

Log-File Discovery Scripts

Since TUXEDO and the PeopleSoft process scheduler periodically switch to new log-file instances, it is not possible to create a log-file template with a static log file path. Consequently, the log-file discovery feature is used to execute a discovery script at start up and configuration of the OVO log-file encapsulator. The log-file discovery feature returns a list of actual log-file paths. Table 32 lists the scripts used by the log-file discovery feature.

Table 31 Log-File Discovery Scripts

| Script Name | Used by... | Description |
|-----------------|-------------|--|
| psspi_swlog.pl | TuxLogDirs | Creates key files which contain the actual application-server log files. Returns PeopleSoft log directories as monitored objects to allow the detection of new log files by the OVO log-file encapsulator. |
| psspi_psswlg.pl | PrcsLogDirs | Same as psspi_swlog above, but for the process-scheduler log files |

| | | |
|-----------------|------------------------------------|---|
| psspi_appsv.pl | APPSRV | Returns the names application-server log files (APPSRV.<date>). |
| psspi_tuxlg.pl | TuxLogFiles | Returns the names of application-server log files (TUXLOG.<date>) |
| psspi_pslogs.pl | PrCsLogFiles PrCsAppSrvLogFiles | Returns the names of process-scheduler log files (PROCS* and APPSRV*): |
| psspi_websrv.pl | WebLogFiles | Returns the names of log files for configured Apache web servers (PeopleSoft 8) |

Monitor Scripts

OVO process monitors require perl scripts or programs in order to perform the desired monitoring. The scripts are installed in the customer branch of the OVO databases directory. Table 33 lists the scripts used by the PeopleSoft SPI monitors.

The PeopleSoft SPI monitor scripts (in conjunction with the corresponding OVO monitor templates) use the object-monitoring feature. This means that the information pertaining to which objects (file systems, IPC parameters, etc.) are to be monitored resides in the scripts themselves. By default, there is only *one* template condition for *all* instances. If a finer granularity is desired, you can create conditions for single instances.

If you want to split the collector monitor into multiple monitors each of which is configured to run at different intervals, make sure that only one of the monitors is configured to feed the MeasureWare agent. By default, the VantagePoint Performance DSI integration is configured to run the collection every 5 minutes: if you change the interval (or the DSI configuration) make sure the value of the modified interval matches the value declared in the DSI specification. In addition, all other collector templates should specify the `-no_dsi` option as an argument to the `psspi_tmib.pl` collector script.

Table 32 Monitor Scripts

| Script Name | Used by... | Description |
|-----------------|------------|---|
| psspi_fsmon.pl | FileSys | Monitors actual usage of local file systems and passes values to the OVO monitor agent. |
| psspi_ipcmon.pl | IPC | Monitors actual usage of IPC tables and passes values to the OVO monitor agent. |

| | | |
|-------------------------------|-------------------|---|
| psspi_pmon.pl | PracsMon | Monitors all process-scheduler processes and passes the values to the OVO monitor agent and, if configured, to MeasureWare via DSI. This script checks the existence of additional process scheduler processes, currently PSDSTSRV. |
| psspi_webmon.pl | WebMon | Monitors the existence of the bundled Apache web server for PeopleSoft 8. |
| psspi_pracs.pl | PracsJobTable | Monitors the process schedulers job table |
| psspi_tmib.pl psspi_tuxcoa | TMIB-Col-<intv> | TMIB Collector: called with metric IDs in parameter list to evaluate the metrics of TMIB objects. |
| psspi_dbcax.pl | DBTYPE-Col-<intv> | DB Collector: called with metric IDs in parameter list to evaluate the metrics of DBMS and PeopleSoft-specific DBs. |
| psspi_wrklst.pl | Worklist | Monitors the worklist tables. |

Using OpenView Performance Agent

The OVO monitors provided with the HP OpenView Smart Plug-in for PeopleSoft can feed the data they collect directly into OpenView Performance Agent or OpenView Performance subagent using the Data Source Integration. The PeopleSoft SPI has a pre-defined DSI-specification file, which is activated using the `PS Activate` application. Running the `PS Activate` application registers the parameters defined in the specification file with the MeasureWare agent (if installed) and, in the process, creates a DSI registration file. If the OVO monitors detect that the DSI command file `ddflog` is present and executable, they automatically attempt to feed the collected data to the DSI.

NOTE If the name of a Tuxedo domain contains any special characters other than letters, numbers, and the underscore (`_`), the DSI integration will fail.

Applications and Application Groups

This section provides more detailed information concerning how the PeopleSoft SPI applications work. The tables in the sections that follow show which utilities are called by the various applications. Every perl script is run by wrapper `psspi_perl`, which sets path to perl and run it with `'-S'` option.

The PSSPI-Admin Application Group

Table 34 lists in alphabetical order the various applications in the PSSPI-Admin application groups and indicates which function is called by each application.

Table 33 PSSPI-Admin Application Calls

| Application Name | Function Called |
|----------------------|----------------------|
| Activate PS Services | psspi_actsvc_ovou.pl |

| | |
|-------------------|---|
| Build PS Services | psspi_bldsvc_ovou.pl |
| Edit PSSPI Cfg | psspi_spicl.pl spicfg -e (not available for Windows nodes) |
| Get PS Cfg | psspi_spicl.pl getps |
| PS Activate | psspi_act.pl |
| PS Discovery | psspi_disc.pl |
| PSSPI Cleanup | psspi_cleanup.pl |
| PSSPI Off | psspi_spicl.pl setcfg COLLECTION FALSE |
| PSSPI On | psspi_spicl.pl setcfg COLLECTION TRUE |
| PSSPI Trace Off | psspi_spicl.pl setcfg TRACE_LEVEL 0 |
| PSSPI Trace On | psspi_spicl.pl setcfg TRACE_LEVEL 2 |
| Verify PS Cfg | psspi_verify.pl -d |
| Verify PS Com | psspi_verify.pl -c |
| Verify PS Node | psspi_verify.pl -n |
| Verify PS Srv | psspi_verify.pl -s |
| View PSSPI Cfg | psspi_spicl.pl spicfg -d |
| View PS Cfg | psspi_spicl.pl pscfg -d |
| View PSSPI Error | psspi_spicl.pl spilog |
| View PSSPI Trace | psspi_spicl.pl spitrc |
| Self-Healing Info | psspi_shs.pl -standalone |

The PSoft-Admin Application Group

Table 35 lists in alphabetical order the various applications in the PSoft-Admin application group, indicates which function is called by each application, and shows and which PeopleSoft interface is used

Table 34 PSoft-Admin Application Calls

| Application Name | Function Called | PeopleSoft (PS) Interface |
|------------------|---|---------------------------|
| Psadmin | psspi_inst.pl psadmin (not available for Windows nodes) | psadmin |
| Tmadmin | psspi_tmcl.pl tmadmin (not available for Windows nodes) | tmadmin |
| Tmconfig | psspi_tmcl.pl tmconfig (not available for Windows nodes) | tmconfig |
| Unload TX Conf | psspi_tmcl.pl tmunloadcf | tmunloadcf |
| View PRCS Config | psspi_pspt.pl viewcfg | n/a |

The PSoft-Oper Application Group

Table 36 lists in alphabetical order the various applications in the PSoft-Oper application group, describes briefly how the individual applications work, and indicates which function is called by each application and which PeopleSoft interface is used.

Table 35 PSoft-Oper Application Calls

| Application Name | Function Called | PeopleSoft (PS) Interface |
|---------------------|--|--|
| Boot Adm Servers | psspi_tmcl.pl tmboot -A | tmboot -A |
| Boot Appl Servers | psspi_tmcl.pl tmboot -S | tmboot -S |
| Boot PS Domain | psspi_tmcl.pl tmboot | tmboot |
| File Systems | psspi_df.pl | n/a |
| IPC Cleanup | psspi_ipcs.pl -d (not available for Windows nodes) | n/a |
| IPC Current | psspi_ipcs.pl (not available for Windows nodes) | n/a |
| IPC Needed | psspi_tmcl.pl tmboot -c (not available for Windows nodes) | n/a |
| PS App Server | psspi_pv.pl App | n/a |
| PS Proc Sched | psspi_pv.pl Proc | n/a |
| PS All Procs | psspi_pv.pl All | n/a |
| Shutd. PS Domain | psspi_tmcl.pl tmshutdown | tmshutdown |
| Shutd. Adm Servers | psspi_tmcl.pl tmshutdown -A | tmshutdown -A |
| Shutd. Appl Servers | psspi_tmcl.pl tmshutdown -S | tmshutdown -S |
| Start Proc Sched | psspi_pspt.pl start | pspt -start (7.0) or psadmin (7.5 and higher) |
| Stop Proc Sched | psspi_pspt.pl stop | pspt -stop (PS 7.5) or -kill (PS 7) or psadmin (7.5 and higher) |
| System Metrics | psspi_pv.pl Sys (not available for Windows nodes) | n/a |
| View APPSRV.LOG | psspi_tmcl.pl viewlog -p | n/a |

| | | |
|---------------|--------------------------|-----|
| View TUXLOG | psspi_tmcl.pl viewlog -t | n/a |
| View PRCS Log | psspi_pspt.pl viewlog | n/a |

The PSoft-Reports Application Group

Table 37 lists in alphabetical order the various applications in the PSoft-Reports application group, indicates which function is called by each application, and shows which PeopleSoft interface is used.

Table 36 PSoft-Reports Applications

| Application Name | Function Called | PS Interface |
|--------------------|---|---|
| PS Status | psspi_inst.pl status | <multiple> |
| PS 2-Tier Conn | psspi_dbcax.pl - report_on_all_DB -r 1 -m 703 | <multiple> |
| Proc Sched Status | psspi_pspt.pl status | pspt -status (7.0) or psadmin (7.5 and higher) |
| PS Job Status | psspi_dbcax.pl - report_on_all_DB -r 2 -m 792 | <multiple> |
| PS Worklist Status | psspi_dbcax.pl - report_on_all_DB -r 2 -m 795 | <multiple> |
| TX Client Status | psspi_tmcl.pl tmadmin -I pclt | tmadmin |
| TX Server Status | psspi_tmcl.pl tmadmin -I psr | tmadmin |
| TX Queue Status | psspi_tmcl.pl tmadmin -I pq | tmadmin |