HP OpenView Operations Smart Plug-in for PeopleSoft

Administrator's Reference

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1 Smart Plug-in for PeopleSoft

This section describes what the online Help for the PeopleSoft SPI.

In this Section

The HP OpenView Smart Plug-In for PeopleSoft on-line Help provides all the information you need to install and use the PeopleSoft SPI to manage and monitor your PeopleSoft environment from a central location. In the on-line Help, you will find information about the following topics:

- "Introducing the PeopleSoft SPI"

  This section describes the HP OpenView Smart Plug-In for PeopleSoft (PeopleSoft SPI) and explains how the various components fit together and work.

- "Installing and Configuring the PeopleSoft SPI"

  This section describes how to install and configure the HP OpenView Smart Plug-In for PeopleSoft.

- "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.

- "Using Service Views"

  This section describes how to take advantage of the service model of the PeopleSoft environment built by the HP OpenView Smart Plug-In for PeopleSoft.

- "Troubleshooting the PeopleSoft SPI"

  This section describes how to go about troubleshooting the HP OpenView Smart Plug-In for PeopleSoft.

- "PeopleSoft SPI 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.

- "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.

- “PeopleSoft SPI Commands”

  In this section you can find information relating to the functions used by the HP OpenView Smart Plug-In for PeopleSoft in application calls. You can use these functions to create customized OVO applications.

In this Section

2 Introducing the PeopleSoft SPI

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

This section describes the HP OpenView Smart Plug-In for PeopleSoft (PeopleSoft SPI) and explain 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 2-1 on page 16 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

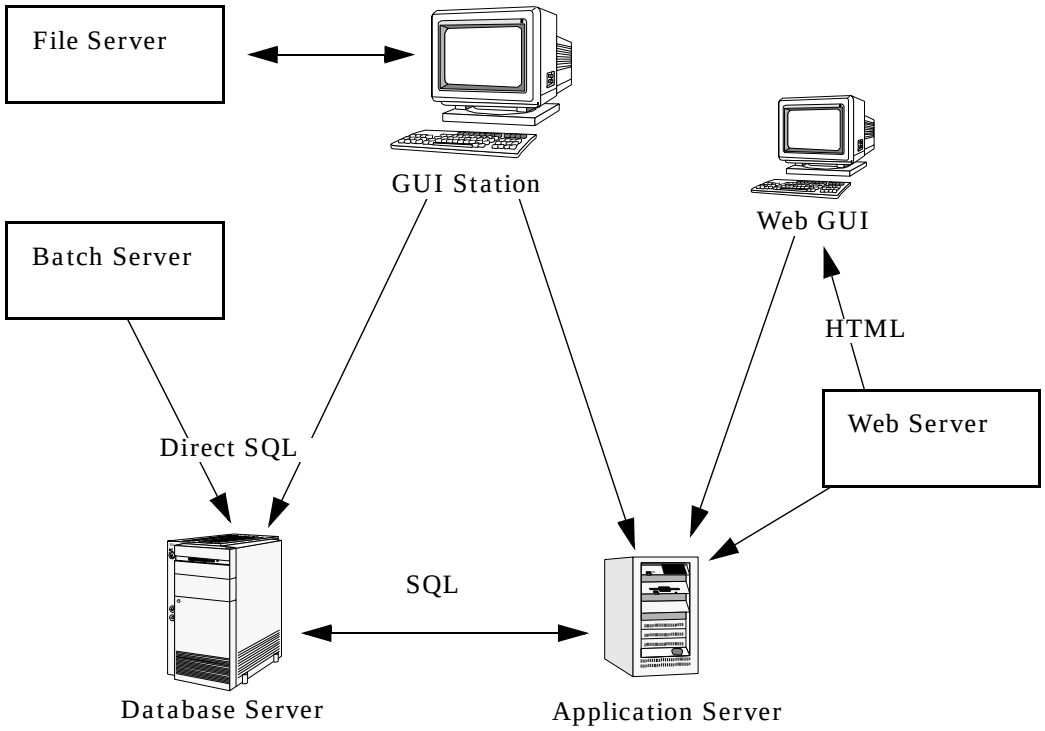
- Batch server

  hosts the execution of batch jobs

- Web Server

  provides access to web client software based on Java/HTML

Figure 2-1 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 OpenView Operations, the industry-leading enterprise-availability and automation solution. With OpenView Operations 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 informations see “Supported Platforms and Versions” on page 25. The PeopleSoft SPI itself can be installed in a distributed management environment consisting of one or more OVO servers, one or more OpenView Operations agents, and HP OpenView 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 monitoring facility (policies) and the OVO GUI (applications, nodes, services, etc.). 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 is already present. Note that integrations with OpenView Performance Manager is 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: policies 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 the OpenView Performance Agent 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) can nonetheless be monitored with standard OpenView Operations 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
  - — the high-level status of the DBMS
  - — 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
  - — the load on the PeopleSoft application server
- integrate:
  - — the Service 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

3 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

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”
- “Configuring the PeopleSoft SPI to Manage PeopleSoft Systems”
- “De-installing the PeopleSoft SPI”

System Pre-Requisites

The OpenView Operations (OVO) management server must be installed and configured on the machine on which you want to install and use the PeopleSoft SPI. In this section, you can find information about the following topics:

- "Hardware Requirements" on page 23
- "Software Requirements" on page 24

For more information on which versions of OpenView Operations are supported, see "Supported Versions: OVO Server" on page 26. In addition, the OVO agent must be running on the OVO management server.

For more information on platform and version support, see "Supported Platforms and Versions" on page 25.

Hardware Requirements

Table 3-1 on page 23 lists the hardware requirements for the machines on which you intend to install the PeopleSoft SPI.

Table 3-1 PeopleSoft SPI Hardware Requirements

	Additional Disk Space	Additional RAM
OVO Server	20MB	n/a
OVO Agent Windows 2000	10MB	n/a
OVO Agent Windows 2003	10MB	n/a
OVO Agent Unix	10MB	n/a

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

Trace and error logs are stored in the OVO agent installation directory on Windows and in the `/var/opt/OV/psspi` directory on Unix systems.

Software Requirements

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 products are either required or recommended for the PeopleSoft SPI.

Table 3-2 PeopleSoft SPI Software Requirements

Product	Status	Remarks
Smart Plug-in for Oracle, MS SQL Server or DB2	Required[a]	Needed for database access and database related metrics of the PeopleSoft SPI
Smart Plug-in for BEA WebLogic Server	Recommended[b]	Used for detailed WebLogic monitoring (not available on all platforms)
Smart Plug-ins DSI-to-DDF wrapper utilities	Required[c]	Needed for collecting performance data with OVPA or OV Performance subagent
Smart Plug-ins for Windows	Required[d]	Needed for discovering process on Windows nodes and filesystem monitoring

a. Version 6.0 or higher is required for DBSPI. Version A.03.20 or higher is required for DB2SPI.
b. See the installation tips for the Smart Plug-in for BEA WebLogic Server in this SPI's documentation.
c. This product is selected automatically during the installation process.
d. Only for OVO 8.x Windows nodes.

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. The information in this section includes the following topics:

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 and 8.1, which comes bundled with PeopleTools. These are the PeopleTools releases 7.05, 7.5*, 8.1*, 8.40 - 8.48.

The PeopleSoft SPI assumes the following combinations - which are the default for a PeopleSoft installation:

- `Tuxedo 6.5 with PeopleTools 7.05` up to `8.43`
- `Tuxedo 8.1` with `PeopleTools 8.44 up to 8.48`

Supported Versions: OVO Server

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

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

Supported Platforms: Batch-Server Components

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

No other platforms are supported with the PeopleSoft SPI 02.60.

Note that not every combination may be possible due to restrictions of PeopleTools or OVO for Unix or requirements by other SPIs.

Supported Platforms: Database-Server Components

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

Table 3-3 Supported Platforms for the Database-Server Components

Platform	OS Version	OVO/Unix Agent	DBMS Version
Intel x86	Windows 2000 Windows 2003	7.1/8.0/8.1/8.2	Oracle 9i/10g MSSQL 7.x/2000 DB2 8.1/8.2
	Linux 2.4	7.1/8.0/8.1/8.2	Oracle 9i/10g DB2 8.1/8.2
HP PA-RISC	HP-UX 11.00 HP-UX 11.11	7.1/8.0/8.1/8.2	Oracle 9i/10g DB2 8.1/8.2
Sun SPARC	Solaris 7/8/9	7.1/8.0/8.1/8.2	Oracle 9i/10g DB2 8.1/8.2
IBM RS6000	AIX 4.3/5.1/5.2	7.1/8.0/8.1/8.2	Oracle 9i/10g DB2 8.1/8.2

No other platforms are supported with the PeopleSoft SPI 02.60.

Note that the supported databases on the agent platforms depend on the installed PeopleTools versions and the databases supported by them. Not every combination may be possible due to restrictions of PeopleTools or OVO or the Smart Plug-in for Databases.

The supported databases on the agent platforms depend on the version supported by the DB-SPI (SPI for Oracle, SPI for MS SQL Server) and the DB2SPI (SPI for DB2).

For all platforms, OpenView Performance Agent C.02.00 (and above) and the OVO embedded component (OV Performance subagent) is supported.

Supported Platforms: Application-Server Components

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

Table 3-4 Supported Platforms for the Application-Server Components

Platform	OS Version	OVO/Unix Agent	OVPA Agent (MeasureWare)
Intel x86	Windows 2000 Windows 2003	7.1/8.0/8.1/8.2	C.02.00 and higher
	Linux 2.4	7.1/8.0/8.1/8.2	C.02.00 and higher
HP PA-RISC	HP-UX 11.00 HP-UX 11.11	7.1/8.0/8.1/8.2	C.02.00 and higher
Sun SPARC	Solaris 7/8/9	7.1/8.0/8.1/8.2	C.02.00 and higher
IBM RS6000	AIX 4.3/5.1/5.2	7.1/8.0/8.1/8.2	C.02.00 and higher

No other platforms are supported with the PeopleSoft SPI 02.60.

Note that not every combination may be possible due to restrictions of PeopleTools or OVO or the Smart Plug-in for BEA WebLogic.

For all platforms, OpenView Performance Agent C.02.00 (and above) and the OVO embedded component (OV Performance subagent) is supported.

Supported Platforms: Web-Server Components

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

Table 3-5 Supported Platforms for the Web-Server Components

Platform	OS Version	OVO/Unix Agent	Web Server
Intel x86	Windows 2000 Windows 2003	7.1/8.0/8.1/8.2	Apache Webserver (as bundled with PeopleSoft) BEA WebLogic (as bundled with PeopleSoft)
	Linux 2.4	7.1/8.0/8.1/8.2	Apache Webserver (as bundled with PeopleSoft) BEA WebLogic (as bundled with PeopleSoft)
HP PA-RISC	HP-UX 11.00 HP-UX 11.11	7.1/8.0/8.1/8.2	Apache Webserver (as bundled with PeopleSoft) BEA WebLogic (as bundled with PeopleSoft)

Table 3-5 Supported Platforms for the Web-Server Components

Platform	OS Version	OVO/Unix Agent	Web Server
Sun SPARC	Solaris 7/8/9	7.1/8.0/8.1/8.2	Apache Webserver (as bundled with PeopleSoft) BEA WebLogic (as bundled with PeopleSoft)
IBM RS6000	AIX 4.3/5.1/5.2	7.1/8.0/8.1/8.2	Apache Webserver (as bundled with PeopleSoft) BEA WebLogic (as bundled with PeopleSoft)

No other platforms are supported with the PeopleSoft SPI 02.60.

Note that not every combination may be possible due to restrictions of PeopleTools or OVO or the Smart Plug-in for BEA WebLogic.

For all platforms, OpenView Performance Agent C.02.00 (and above) and the OVO embedded component (OV Performance subagent) is supported.

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:

- "Removing the old versions of PeopleSoft SPI from the OVO managed nodes and the OVO Management Server" on page 30
- "Preparing the OVO Management Server for swinstall(1M)" on page 30
- "Installing the PeopleSoft SPI" on page 31
- "Verifying the Software Installation" on page 33
- "Update remactconf.xml File (OVO 8.x only)" on page 34

Removing the old versions of PeopleSoft SPI from the OVO managed nodes and the OVO Management Server

The old versions of HP OpenView Smart Plug-in for PeopleSoft must be removed from the OVO managed nodes and the OVO Management Server prior to installing the new version. For versions A.02.20 and earlier see the corresponding chapter in the Administation Reference for that release. For the PeopleSoft SPI A.02.30 use the chapter "De-installing the PeopleSoft SPI" on page 48.

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.

The Applications DVD-ROM contains the product's management server install packages, the OpenView Reporter and OpenView Performance Manager integrations for the applications.

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

1. Login as user root.
2. Set the user root's umask, enter:

   ```
   umask 027
   ```

3. If not already present, create a directory to mount the DVD-ROM:

   ```
   mkdir /<mount_point>
   ```

   For example:

   ```
   mkdir /dvdrom
   ```

4. Insert the product DVD in the DVD-ROM drive
5. Mount the DVD-ROM as user root, enter:

   ```
   mount -r -F dvdfs /dev/<dvdrom_drive_name> /<mount_point>
   ```

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

   ```
   mount -r -F dvdfs /dev/dsk/c0t2d0 /dvdrom
   ```

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

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)

- SPIWebLogicAll (if needed and supported and not already installed)
- SPI-WIN-OVO (if not already installed and if you want to monitor OVO Windows nodes)
- SPI-PSoft

with the command:

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

```
swinstall -s /dvdrom/HPUX/OV_DEPOT/11.0HPUX.sdtape \
DSI2DDF \
DBSPIOracleAll \
SPIWebLogicAll \
SPI-WIN-OVO \
SPI-PSoft
```

For a Solaris management server, enter:

```
swinstall -s /dvdrom/SOLARIS/OV_DEPOT/SOLARIS.sdtape \
DSI2DDF \
DBSPIOracleAll \
SPIWebLogicAll \
SPI-WIN-OVO \
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, 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 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 has completed.
   - New node groups:
     - `PS App Server`
     - `PS Batch Server`
     - `PS Web Server`
     - `PS DB2 Server`
     - `PS ORA Server`
     - `PS Win MSS Server`
   - New application groups:
     - `PSSPI-Admin`
     - `PSoft-Admin`
     - `PSoft-Oper`
     - `PSoft-Reports`
   - New template groups:
     - `PSSPI-App_server`
     - `PSSPI-Batch_Server`
     - `PSSPI-DB2DB_server`

  - — PSSPI-OraDB_server
  - — PSSPI-MSSDB_Server
  - — PSSPI-Web_server
- New users in the OVO Users window:
  - — psoft_adm
  - — psoft_op
- New profiles in the OVO Profiles window:
  - — psoft_adm_prf
  - — psoft_op_prf

3. If the new PeopleSoft SPI elements are not visible in the OVO GUI, try stopping and restarting the OVO GUI.
4. If you installed one of the SPI for Database, SPI for BEA WebLogic Server or SPI for DB2, 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 4, Using the PeopleSoft SPI or Appendix B, PeopleSoft SPI Components.

Update remactconf.xml File (OVO 8.x only)

If you are running DCE-based agents on your managed nodes, the activation process can not start automatic actions on the management server without additional configuration steps.

- Create a new node group DCE.
- Assign the managed nodes with DCE type agents to this node group (you may only use the nodes which are relevant to the PeopleSoft SPI).
- On the management server, edit the file `/etc/opt/OV/share/conf/OpC/mgmt_sv/remactconf.xml` and add a new rule:

```
<rule>
<doc>Target node MgmtSrv OK if sender in DCE node group
and uncertified</doc>
<if>
```

```
<target><mgmtsrv/></target>
<source><nodegroup>DCE</nodegroup></source>
<certified>false</certified>
</if>
<allow/>
</rule>
```

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

Setting up PeopleSoft Systems as OVO 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

1. `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...
```

NOTE On Windows managed nodes OVO agent user must be a PeopleSoft Administrator. It means the user should be able to start/shutdown Tuxedo domains and Process Schedulers using the psadmin tool.

NOTE If on Windows managed nodes OVO agent is configured to run under LocalSystem account, then the ability to start/shutdown Tuxedo domains and Process Schedulers cannot be tested using psadmin. In most of cases the LocalSystem user has appropriate rights. Otherwise reconfigure OVO agent to be run as PeopleSoft Administrator.

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.

Configuring the PeopleSoft SPI to Monitor the Database

If you want the PeopleSoft SPI to monitor the PeopleSoft database server and gather database-related metrics, configure the database monitoring component for the PeopleSoft database server node and the PeopleSoft Process Scheduler node. The configuration must be performed before discovery step.

NOTE This configuration has to be performed using the applications which are installed via the Smart Plug-in for Databases. For more information, see the product-specific documentation supplied with the HP OpenView Smart Plug-in for Databases.

If Oracle is used as the PeopleSoft database, then the following rules apply for the configuration of the SPI for Oracle:

- The names of the PeopleSoft databases are configured as TNS names in the `tnsnames.ora` file. You can check this using the Oracle tool `tnsping` with the PeopleSoft database name as an argument. This applies to the database server, too. Note that this rule is required by the PeopleSoft Installation Guide.
- In the SPI for Oracle configuration, use the name of the PeopleSoft database as both the `DATABASE` and the `ALIAS` entry.

If MS SQL Server 2000 is used as the PeopleSoft database management system, then the following rules apply for the configuration of the SPI for MS SQL Server:

- Each PeopleSoft database name must appear as an ODBC data-source name. The name of the actual MSSQL database - which is configured in this ODBC data source - must be identical to the PeopleSoft database name. Note that this is required by the PeopleSoft Installation Guide.
- In the SPI for MSSQL Server configuration, use the name of the PeopleSoft database server as the only target description. Since the PeopleSoft databases are installed in the *default instance* of the MSSQL Server, the SPI for MSSQL Server does not need any further information to connect to the database server.

Special installation notes for the SPI for Databases (DBSPI)

If you use the *Microsoft SQL Server* on the Peoplesoft database servers, note that versions 6, 7, and 8 of the *SPI for Microsoft SQL Server* have a problem if the MSSQL installation directory contains blank characters. If this is the case, the DBSPI cannot correctly locate the path to the `isql.exe`/`osql.exe` programs which are used to evaluate the special PeopleSoft SPI database metrics.

To work around this problem on the PeopleSoft database servers, compute the 8.3 name of the MSSQL installation directory and replace the registry key `HKLM\Software\Microsoft\Microsoft SQL Server\80\Tools\ClientSetup\SQLPath` with the new value.

IMPORTANT If you have to enable the trace mode of the *SPI for Microsoft SQL Server* on the PeopleSoft database servers, note that versions 6, 7, and 8 of the *SPI for Microsoft SQL Server* cannot trace metric 3792 of the PeopleSoft SPI. This is due to a limitation in the trace buffer of the DBSPI. There is no work around except to not trace metric 3792.

Discovering PeopleSoft Components on the Managed Nodes

The PeopleSoft components installed on the PeopleSoft servers are discovered by starting the SPI tool `PS Discovery` on all PeopleSoft nodes.

NOTE To perform this discovery step, the SPI instrumentation must be available on the PeopleSoft nodes.

NOTE On Windows managed nodes (OVO 8.x only), the WINOSSPI has to be installed and configured or else the discovery process will not be able to find all drives and `PSSPI-FileSys` monitor will fail.

Once the `PS Discovery` tool is started it tries to discover information about the following areas:

- "PeopleSoft Installation"
- "PeopleSoft Application Servers"
- "PeopleSoft Batch Servers"
- "PeopleSoft Web Server"

PeopleSoft Installation

The `PS Discovery` tool tries to discover the following information concerning the Peoplesoft installation:

- "PeopleSoft Installation (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 Installation (`PS_HOME`) During the discovery phase, the SPI first tries to determine the directories of installed PeopleSoft components (the PeopleSoft Home directories defined in `PS_HOME`). Ekwueme1This is done in multiple steps:

1. User specified locations

   If the user has specified some installation directories by supplying arguments to the tool `PS Discovery`. take these as `PS_HOME` candidates.

2. Look in "often used places"

   If there is no `PS_HOME` candidate, take the 1st and 2nd level directories of all fixed drives found on the system as candidates.

   For each `PS_HOME` candidate, check whether a `peoplesoft.properties` exists.

   If it does, take the candidate as the installation directory (`PS_HOME`).

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 parameters string (-ver *version*) assume this value for the PS_VER variable. It is important not to confuse the PeopleTools version with the PeopleTools application version.

2. Switch user to PS_USER and run '`psadmin -v`' (Unix)

   If PS_USER has an interactive login, use option -ver *version* to specify the PeopleTools version.

3. Extract version information from the `peopletools.properties` file.

   Although PeopleSoft does not require this file to function correctly, it is not recommended to delete it.

4. If all previous steps failed to determine the version of PeopleSoft installed on the managed node, assume 8.44 as the default version.

Tuxedo Installation (TUXDIR, TUXVER) On Unix operating systems, the PeopleSoft SPI determines the value of the TUXDIR variable by searching the following files:

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

On Microsoft Windows operating systems, the PeopleSoft SPI tries to determine the value for the variable TUXDIR automatically, from the environment.

PeopleSoft database name (PS_DBNAME) The `psspi_disc.pl` retrieves the database name from either the `psappsrv.cfg` or the `psprcs.cfg` file.

Database home (DB_HOME) For Oracle database the following files are searched for ORACLE_HOME variable:

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

Database name (DB_NAME) For Oracle database server the file tnsnames.ora is analyzed for Oracle SID value.

PeopleSoft database owner (PS_DBOWNER) DBSPI UDM feature is used to extract the OWNERID from the PS.PSDBOWNER table for DBNAME=PS_DBNAME. Note that the DBSPI must be configured for this step.

Database server hostname (DB_SERVER) For Oracle database servers, the file tnsnames.ora is used to determine the value of the Oracle server hostname.

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

For MSSQL, the registry key ODBC.INI is analyzed.

PeopleSoft Application Servers

The PS Discovery tool tries to determine values for all application servers running in the PeopleSoft installation you want to monitor with the PeopleSoft SPI.

All directories <*PS_HOME*>/appserv/<*Domain*> are searched for a file psappsrv.cfg. If this directory and file are found, the PeopleSoft SPI extracts the variables Domain ID and Log Directory from the application-server configuration file.

PeopleSoft Batch Servers

The PS Discovery tool tries to determine values for all process schedulers in the PeopleSoft installation you want to monitor with the PeopleSoft SPI. The discovery tool searches the following directories for the process-scheduler configuration file psprcs.cfg:

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

If the directory and file are found, the SPI extracts the following variables from the process-scheduler configuration file:

- `PrcsServerName`
- `Log/Output Directory`

PeopleSoft Web Server

The `PS Discovery` tool tries to determine values for all Web Servers in the PeopleSoft installation you want to monitor with the PeopleSoft SPI. The `psspi_disc.pl` script supports only bundled Apache web server (Unix) and Weblogic web server. It analyzes the directory `<PS_HOME>/webserv` and determines the type of web server and the domain name.

General Discovery Strategy and Prerequisites

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

You may use a text editor on the managed node to edit this file if not all PeopleSoft components could be discovered automatically. After editing the file, verify the changes using the `PSSPI-Admin:Verify PS Cfg` application.

Please note that before you use any of the PSSPI tools, you will have to distribute the SPI instrumentation to the managed node.

NOTE See the “The psspi.disc Configuration File” on page 101 for detailed information regarding the file syntax.

Assigning Nodes to Node Groups

Follow the instructions generated by the `PS Discovery` tool 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 policies and policy 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` tool automatically deploy the correct policies in turn to the PeopleSoft nodes you are add in this step.

NOTE Web servers other than Appache and Bea WebLogic which are bundled with PeopleTools 8 should not be assigned to the PeopleSoft SPI `PS Web Server` node group. Those web-server systems should be assigned to the node groups which are installed via the Smart Plug-in monitoring this webserver, for example: Smart Plug-in for IBM WebSphere server.

Distributing PeopleSoft SPI Templates

The PeopleSoft SPI templates are organized into specific template groups according to system role: PeopleSoft database, application, web or batch-server systems. Dragging and dropping the PeopleSoft nodes to the PeopleSoft node groups recommended by the `PS Discovery` tool 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 deployed) and you want to avoid duplicate messages arriving from the database server, you should disable the `PSSPI-DBSPI-Messages` template using the standard OVO tools.

Activating the Configuration on the PeopleSoft Nodes

Verify that the discovered information is correct and, if so, activate the configuration for the discovered components using the `PS Activate` application. The `PS Activate` application activates the information discovered by the `PS Discovery` application and stored in the file `psspi.disc` on the PeopleSoft system by copying it to `<OVOAgentInstallDir>/psspi/conf/ps.cfg` and making it available to the SPI instrumentation scripts. Note that this operation may take some time to complete.

The PS Activate application also performs the following steps:

- 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 3-6 Default PeopleSoft SPI users

User name	Password	Description
psoft_adm	PsofT_adm	PeopleSoft environment administrator
psoft_op	PsofT_op	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_adm_op

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. For more information on User Profiles, see the HP OpenView OV Operations A.08.10 product documentation.

Table 3-7 lists the application groups assigned by default to the PeopleSoft administrator and operator within OVO.

Table 3-7 Default PeopleSoft Application Group Assignment

Application Group	PeopleSoft Administrator	PeopleSoft Operator
PSSPI-Admin	X	
PSoft-Admin	X	
PSoft-Oper	X	X
PSoft-Reports	X	X

The PeopleSoft Message groups listed in Table 3-8 are associated by default with the PeopleSoft node groups.

Table 3-8 Default PeopleSoft Application Group Assignment

Message Group	PeopleSoft Administrator	PeopleSoft Operator
PSoft-Fault	X	X
PSoft-Perf	X	X
PSSPI	X	X

Non-root agent support

After agent was switched to non-root user by opcswitchuser 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 the section “Discovering PeopleSoft Components on the Managed Nodes” on page 39. The script psspi_root.pl starts discovery process itself. All options spesified for psspi_root.pl will be redirected to psspi_disc.pl. So you can specify all options described in the section “Discovering PeopleSoft Components on the Managed Nodes” on page 39.

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. "De-installing from Managed PeopleSoft Systems"

   Remove the PeopleSoft SPI components from the PeopleSoft systems (OVO managed nodes) and clean the system.

2. "De-installing from the OVO Management Server"

   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 deployed 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 policies 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.

   b. 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_cleanup.pl` can also be called manually on the OVO managed node.

3. Cleanup the SPI for Database components, if appropriate, using the `DBSPI Cleanup`.

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

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 remove all PeopleSoft SPI components.
3. Cleanup the GUI by removing the PeopleSoft-specific elements, such as:
   - Node Groups
   - Applications and Appliation Groups
   - Message Groups
   - Templates
   - User and User Profiles
4. Remove PeopleSoft Services. On the OVO management server, enter:
   `opcservice -remove -services PS_SPI`

4 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

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 Application Groups”
- “The New OVO Users”
- “The New OVO Templates”

Introduction

If you are already familiar with OpenView Operations, you will notice that the installation and configuration of the HP OpenView Smart Plug-In for PeopleSoft adds a number of new pre-configured components to the GUI, specifically to the `Node Group` and `Message Group` windows, as well as 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, Web Server or Database Server. For more information on the new node groups and the new users, see "The New OVO Managed Node Groups" on page 54 and "The New OVO Users" on page 64.

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" on page 55.

However, perhaps the most important component of the HP OpenView Smart Plug-In for PeopleSoft are the new PeopleSoft-specific policies. These policies 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 Templates" on page 66.

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 DB2 Server
- PS ORA Server
- PS Web Server
- PS Win MSS Server

All pre-defined PeopleSoft node groups s are assigned by default to the pre-defined PeopleSoft user roles, 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.

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 PSSPI application group.

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

- "The PSSPI-Admin Application Group"

  `PSSPI-Admin` contains applications intended for OVO administrators that are working on PeopleSoft SPI administration.

- "The PSoft-Admin Application Group"

  `PSoft-Admin` contains applications intended for OVO users working in administrative mode in the PeopleSoft environment.

- "The PSoft-Oper Application Group"

  `PSoft-Oper` contains tools applications intended for OVO users working in operational mode in the PeopleSoft environment.

- "The PSoft-Reports Application Group"

  `PSoft-Reports` contains 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 agent user and either can or must be used when installing, configuring, operating, and troubleshooting the PeopleSoft SPI. For more information about which

utilities are called by the individual applications, see “Applications and Application Groups” on page 116 in Appendix B, PeopleSoft SPI Components,.

Table 4-1 on page 56 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.

Table 4-1 PSSPI-Admin Applications

Application Name	Description
Activate PS Services	Activates the generated service model for the default OVO user roles PeopleSoft Admin and PeopleSoft User.
Build PS Services	Builds a service model for PeopleSoft environment from discovered information.
Edit PS Cfg	Starts a text editor (set by EDITOR variable or vi if the variable is not set) and opens the PeopleSoft configuration file ps.cfg. Not for Windows managed nodes.
Edit PSSPI Cfg	Starts a text editor (set by EDITOR variable or vi if the variable is not set) and opens the PSSPI configuration file psspi.cfg, which contains control options for the PeopleSoft SPI. Not for Windows managed nodes.
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.
PS Activate	Activates the discovered PeopleSoft components and creates a ps.cfg file on the selected system This action also copies the discovery information from the managed node to the management server.
PS Discovery	Discovers PeopleSoft components on the nodes you have selected.

Table 4-1 PSSPI-Admin Applications (Continued)

Application Name	Description
PSSPI Cleanup	Removes all files and persistent information pertaining to the PeopleSoft SPI on the selected node.
PSSPI Off	Switches *OFF* the monitoring components of the PSSPI on the selected node.
PSSPI On	Switches *ON* the monitoring components of the PSSPI on the selected node.
PSSPI Trace Off	Switches *OFF* the generation of trace information from the PSSPI components (except database metrics) on the selected node.
PSSPI Trace On	Switches *ON* the generation of trace information from the PSSPI components (except database metrics) for the selected node.
Self-Healing Info	Collects troubleshooting data.
Verify Node Inst	Checks the installation of the PSSPI on the OVO *managed node* is correct and uses the findings to generate a report for the selected node.
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 Svr Inst	Verifies that the installation of the PSSPI on the OVO *management server* is correct then uses the findings to generate a report.

Table 4-1 PSSPI-Admin Applications (Continued)

Application Name	Description
View PS Cfg	Displays the PeopleSoft configuration file psspi.disc, which lists the managed PeopleSoft components for the selected node.
View PSSPI Cfg	Displays the PSSPI configuration file psspi.cfg, which contains settings for tracing 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.

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.

Note that all applications in the PSoft-Admin application group are started as agent user. For more information about which utilities are called by the individual tools, see "Applications and Application Groups" on page 116 in Appendix B, PeopleSoft SPI Components,.

Table 4-2 on page 59 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 tool application and which PeopleSoft interface is used

Table 4-2 PSoft-Admin Applications

Application Name	Description
`psadmin`	Starts the PeopleSoft command line tool psadmin in a new terminal window. Valid options for psadmin can be used for customization purposes. You can use option `-p` *`PS_HOME`* for multi PeopleSoft environment. Not for Windows managed nodes.
`tmadmin`	Starts the Tuxedo command line tool tmadmin in a new terminal window. If necessary, you can specify `-d` *`domain_name`* option to start application for this PeopleSoft domain only. All valid options for tmadmin can be used for customization (before -d option). Not for Windows managed nodes.
tmconfig	Starts the Tuxedo command line tool tmconfig in a new terminal window. If necessary, you can specify `-d` *`domain_name`* option to start application for this PeopleSoft domain only. All valid options for tmadmin can be used for customization (before -d option). Not for Windows managed nodes.
`Unload TX Conf`	Displays the current Tuxedo configuration for a PeopleSoft domain. If necessary, users are prompted to select a PeopleSoft domain, for which the configuration will be displayed Using additional argument `-a` will work on all domains, whereas additional argument `-d` *`domain`* will work on the specified domain only.

Table 4-2 PSoft-Admin Applications (Continued)

Application Name	Description
View PRCS Config	Displays the contents of the PeopleSoft process scheduler configuration file. The function accepts the same options for the selection of the process scheduler as Start Proc Sched in the PSoft-Oper tool group.

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).

Note that all applications in the PSoft-Oper application group are started as agent user. For more information on which utilities are called by the individual applications, see "Applications and Application Groups" on page 116 in Appendix B, PeopleSoft SPI Components,.

Table 4-3 on page 60 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 4-3 PSoft-Oper Applications

Application Name	Description
Boot Adm Servers	Boot PS administration servers for all domains (i.e. Tuxedo infrastructure processes like BBL).
Boot Appl Servers	Boot PS application servers for all domains (e.g. PeopleSoft- specific server processes like PSAPPSRV, PSQCKSRV).
Boot PS Domain	Boots a PS domain (both administration and application servers). Domain must be specified via additional arguments using -d *domain*

Table 4-3 PSoft-Oper Applications (Continued)

Application Name	Description
File Systems	Displays statistics on file systems and their usage.
IPC Cleanup	Purges the current IPC resources for a specific PeopleSoft installation. (Only Unix).
IPC Current	Displays the current IPC resource statistics. (Only Unix).
IPC Needed	Displays the IPC resources needed to boot an additional PS domain. (Only Unix).
Restart PS Domain	Shuts down and reboots a PS domain (both administration and application servers). Domain must be specified via additional arguments using -d *domain*
Shutd. PS Domain	Shuts down a PS domain. Domain must be specified via additional arguments using -d *domain*
Shutd. Adm Servers	Shuts down all the PS administration servers.
Shutd. Appl Servers	Shuts down all the PS application servers.
Start Proc Sched	Starts a process scheduler process. By default - all process schedulers. Database can be specified via additional arguments using -d *DB*
Stop Proc Sched	Stops a process scheduler process and accepts the same options as Start Proc Sched.
View APPSRV.LOG	Displays the contents of the APPSRV.LOG log file of a PS domain.

Table 4-3 PSoft-Oper Applications (Continued)

Application Name	Description
View PRCS Log	Displays the contents of the latest process-scheduler log file.
View TUXLOG	Displays the contents of the latest Tuxedo log file of a PS domain.

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. All applications are started as agent user. For more information on which utilities are called by the individual applications, see "Applications and Application Groups" on page 116 in Appendix B, PeopleSoft SPI Components,.

Table 4-4 on page 62 lists 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.

Table 4-4 PSoft-Reports Applications

Application Name	Description
PS 2-Tier Conn	Generates a report on the number and origin of 2-tier connections to the PeopleSoft database.
PS Act. Conn.	Lists the currently active connections to the PS database.
PS Job Status	Generates a report on the status of all PeopleSoft batch jobs on the selected node.
PS Status	Generates a status report on all PeopleSoft components on the selected node.
PS Worklist Status	Generates a report on the status of the entries in the PeopleSoft worklist table.

Table 4-4 PSoft-Reports Applications (Continued)

Application Name	Description
PS/TX Versions	Generates a report on the PeopleSoft/Tuxedo software version on the selected node.
Proc Sched Status	Generates a status report on the PeopleSoft process scheduler. All valid options for the pspt command may be used.
TX Client Status	Generates a report with information on the current PeopleSoft user activity.
TX Queue Status	Generates a status report on the current PeopleSoft queues.
TX Server Status	Generates a status report on the current PeopleSoft servers.
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

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.

The following list describes in general terms what the scope of the new user roles are:

- `psoft_adm` is responsible for the administrative aspects of the PeopleSoft environment
- `psoft_op` is responsible for monitoring the operational aspects of the PeopleSoft environment

Table 4-5 on page 64 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 using standard OVO tools.

Table 4-5 Default User Assignments

New Component		psoft_adm	psoft_op
Node Group	PS App Server	✓	✓
	PS Batch Server	✓	✓
	PS DB2 Server PS ORA Server PS Win MSS Server	✓	✓
	PS Web Server	✓	✓
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` 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 documentation and specifically the section on User Profiles in the HP OpenView IT/Operations Concepts Guide.

The New OVO Templates

The HP OpenView Smart Plug-In for PeopleSoft installs a number of new template groups which contain all the templates you need to manage the PeopleSoft environment. The following template groups are installed by the PeopleSoft SPI and are explained in greater detail in the individual sections that follow:

- "The PSSPI-App_Server Template Group" on page 67
- "The PSSPI-Batch_Server Template Group" on page 69
- "The PSSPI-OraDB_Server Template Group" on page 70
- "The PSSPI-MSSDB_Server Template Group" on page 71
- "The PSSPI-DB2DB_Server Template Group" on page 73
- "The PSSPI-Web_Server Template Group" on page 73

For more information on the scripts which the templates and PeopleSoft SPI monitors use, see "Templates and Monitors" in Appendix B, "PeopleSoft SPI Components."

CAUTION

The top-level `SPI for PeopleSoft` template group must *not* be assigned to a node or node group: it is a top-level template group that is a container for the other PeopleSoft-specific template groups.

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 logfile template. The templates and template groups have to be deployed using the standard OVO mechanisms. For more information on assigning and deploying templates in OVO, see "Distributing PeopleSoft SPI Actions, Commands, and Monitors" on page 37.

NOTE Note that only one of either the template group PSSPI-MSSDB_Server, PSSPI-DB2DB or PSSPI-OraDB_Server can be assigned to a single node. Which policy group is to be used depends on the database server used on this system for the PeopleSoft databases.

The PSSPI-App_Server Template Group

Table 4-6 on page 67 lists the templates in the PSSPI-App_Server template group, indicates each template type, and gives a brief description of what is monitored and how.

NOTE On Windows managed nodes PeopleSoft SPI can monitor Tuxedo domain (Application server) only if the OVO agent user has administrative rights for the Tuxedo domain. To check the rights for the user (except LocalSystem), use the psadmin tool. The OVO agent user must be able to start/shutdown the Tuxedo domain using this tool.

Table 4-6 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 UNIX file-system space - checks all local file systems
	PSSPI-TMIB-001_1	Monitors the status of the Tuxedo domains of a PeopleSoft application server
	PSSPI-TMIB-005_1	Monitors the actual number of APPSRV server processes and compares the it with TA_MIN

Table 4-6 PSSPI-App_Server Templates (Continued)

Template Type	Template Name	Description
	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-MIB-010_1	Monitors the number of GUI clients
	PSSPI-TMIB-Col-05min_1 [a]	Runs the TMIB collector process to gather DB metrics every <*intv*> minutes. In this case *intv* = 5 minutes. 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	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 Policy Condition are sent directly to the history log of the OVO server as “unrecognized messages”. To change this, you may deactivate the according flag in the last condition of this policy.

Table 4-6 PSSPI-App_Server Templates (Continued)

Template Type	Template Name	Description
	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

a. 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” on page 113.

The PSSPI-Batch_Server Template Group

Table 4-7 on page 69 lists the templates in the PSSPI-Batch_Server policy template group, indicates each template type, and gives a brief description of what is monitored and how.

Table 4-7 PSSPI-Batch_Server Templates

Template Type	Template Name	Description
Message	PSSPI-PSSPI-Messages	Intercepts messages from the PeopleSoft SPI programs

Table 4-7 PSSPI-Batch_Server Templates (Continued)

Template Type	Template Name	Description
Logfile	PSSPI-PrcsLogDirs	Monitors the PeopleSoft, process-scheduler log directories. Checks for new log files and switches the actual log file
	PSSPI-PrcsLogFiles	Monitors the PeopleSoft process-scheduler log files. Please note that messages not currently recognized by a SPI Policy Condition are sent directly to the history log of the OVO server as “unrecognized messages”. To change this, you may deactivate the according flag in the last condition of this policy.
Monitor	PSSPI-PrcsLogSize	Monitors the size of the process scheduler log directory and the disk space consumed by the process scheduler log files
	PSSPI-PrcsJobTab	Checks the process scheduler table and the job-table entries
	PSSPI-PrcsMon	Monitors the existence of the process scheduler process.

The PSSPI-OraDB_Server Template Group

Table 4-8 on page 71 lists the templates in the PSSPI-OraDB_Server template group, indicates each template type, and gives a brief description of what is monitored and how.

NOTE This template group is meant for PeopleSoft database servers operated by the Oracle RDBMS.

Messages intercepted by the PSSPI-DBSPI-Messages template supplied with the PeopleSoft SPI duplicate messages intercepted by the DPSPI templates. If the DBSPI is already installed (and the DBSPI templates already assigned and deployed) and you want to avoid duplicate messages arriving from the database server, you should disable the PSSPI-DBSPI-Messages template using OVO tools.

Table 4-8 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-OraDB-Col-05Min	Runs the collector process to gather DB metrics every 5 minutes
	PSSPI-DBSPI-0791	Number of employees
	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-MSSDB_Server Template Group

Table 4-9 on page 72 lists the templates in the PSSPI-MSSDB_Server template group, indicates each template type, and gives a brief description of what is monitored and how.

NOTE This template group is meant for PeopleSoft database servers operated by the Microsoft SQL Server RDBMS.

Messages intercepted by the PSSPI-DBSPI-Messages template supplied with the PeopleSoft SPI duplicate messages intercepted by the DPSPI templates. If the DBSPI is already installed (and the DBSPI templates already assigned and deployed) and you want to avoid duplicate messages arriving from the database server, you should disable the PSSPI-DBSPI-Messages template using OVO tools.

Table 4-9 PSSPI-MSSDB_Server Templates

Template Type	Template Name	Description
Message	PSSPI-PSSPI-Messages	Intercepts messages from the PeopleSoft SPI programs
	PSSPI-DBSPI-Messages	Intercepts messages from the DBSPI programs
Monitor	PSSPI-MSSDB-Col-05Min	Runs the collector process to gather DB metrics every 5 minutes
	PSSPI-DBSPI-3791	Number of employees
	PSSPI-DBSPI-3792	Number of queue jobs
	PSSPI-DBSPI-3793	Number of database connections
	PSSPI-FileSys	Monitors the PeopleSoft file-system space
	PSSPI-WorkList	Checks the PeopleSoft work-list table

The PSSPI-DB2DB_Server Template Group

Table 4-10 on page 73 lists the policies templates in the PSSPI-DB2DB_Server template group, indicates each template type, and gives a brief description of what is monitored and how.

Table 4-10 PSSPI-DB2DB_Server Templates

Template Type	Template Name	Description
Message	PSSPI-PSSPI-Messages	Intercepts messages from the PeopleSoft SPI programs
	PSSPI-DBSPI-Messages	Intercepts messages from the DBSPI programs
Monitor	PSSPI-DB2DB-Col-05Min	Runs the collector process to gather DB metrics every 5 minutes
	PSSPI-DB2SPI-4792	Number of queue jobs
	PSSPI-DB2SPI-4793	Number of database connections
	PSSPI-FileSys	Monitors the PeopleSoft file-system space
	PSSPI-WorkList	Checks the PeopleSoft work-list table

The PSSPI-Web_Server Template Group

Table 4-11 on page 73 lists the templates in the PSSPI-Web_Server template group, indicates each template type, and gives a brief description of what is monitored and how.

Table 4-11 PSSPI-Web_Server Policies

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)

Table 4-11 PSSPI-Web_Server Policies (Continued)

Template Type	Template Name	Description
Monitor	PSSPI-WebMon	Monitors the existence of the Apache web server (PeopleSoft 8.1) or WebLogic web server

Templates on Cluster Nodes

The PeopleSoft SPI templates continue to generate messages and send them to the OVO management server irrespective of whether the resource group for PeopleSoft is running on that node or not. This can lead to a situation where, after a resource group 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 cluster 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 resource group is switched off on the managed node:

The following lines are to be executed on managed nodes.

```
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-TMIB-Col-05min_1
opctemplate -d PSSPI-TMIB-Col-05min_2
ocptemplate -d PSSPI-PrcsLogDirs
opctemplate -d PSSPI-PrcsLogFiles
opctemplate -d PSSPI-PrcsLogSize
opctemplate -d PSSPI-PrcsMon
opctemplate -d PSSPI-PrcsJobTab
opctemplate -d PSSPI-DB2DB-Col-05min
opctemplate -d PSSPI-OraDB-Col-05min
opctemplate -d PSSPI-MSSDB-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:

The following lines are to be executed on managed nodes:

```
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-TMIB-Col-05min_1
opctemplate -e PSSPI-TMIB-Col-05min_2
ocptemplate -e PSSPI-PrcsLogDirs
opctemplate -e PSSPI-PrcsLogFiles
opctemplate -e PSSPI-PrcsLogSize
opctemplate -e PSSPI-PrcsMon
opctemplate -e PSSPI-PrcsJobTab
opctemplate -e PSSPI-DB2DB-Col-05min
opctemplate -e PSSPI-OraDB-Col-05min
opctemplate -e PSSPI-MSSDB-Col-05min
opctemplate -e PSSPI-WorkList
opctemplate -e PSSPI-WebLogFiles
opctemplate -e PSSPI-WebMon
```

5 Using Service Views

This section describes how to take advantage of the service model of the PeopleSoft environment built by the HP OpenView Smart Plug-In for PeopleSoft.

In this Section

This section describes how to take advantage of the service model of the PeopleSoft environment built by the HP OpenView Smart Plug-In for PeopleSoft. 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 OpenView Operations for Unix, you can make use of the HP OpenView Service Navigator which allows you to display a logical view of all the monitored components in your user environment.

From a PeopleSoft perspective, the PeopleSoft SPI uses the Service Navigator to display all PeopleSoft components (database, application, web 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” on page 80. For more information on the instance view, see “The Instance View” on page 81.

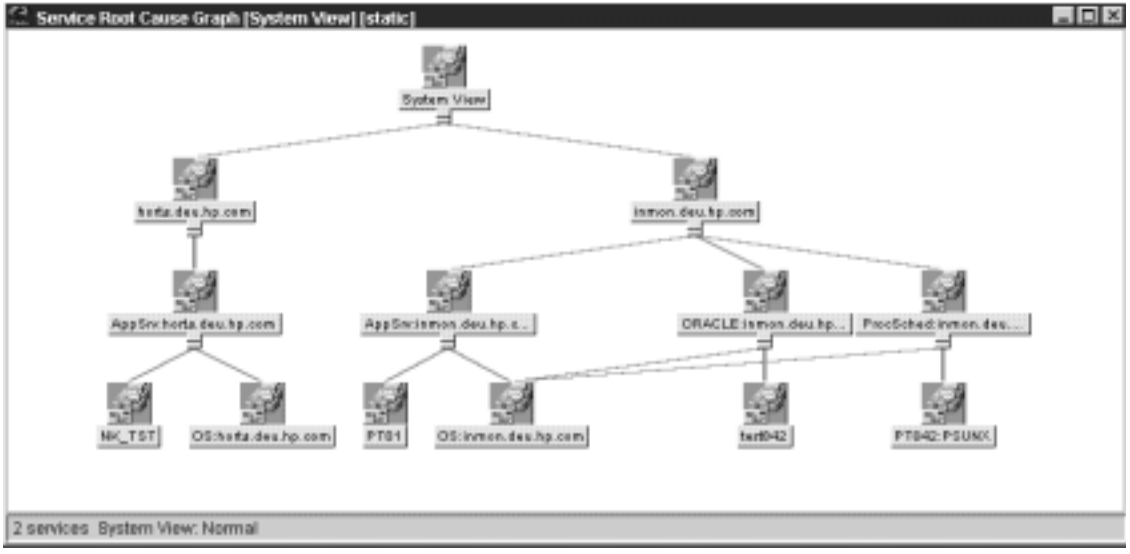
The System View

The PeopleSoft SPI uses the Service Navigator to display all PeopleSoft components such as database, application, web, and batch servers as well as any dependencies in terms of the systems on which the PeopleSoft components are running. Figure 5-1 on page 80 illustrates an example representation of a “system” view. 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.

There are four different system types each represented by a service icon:

- database servers
- application servers
- batch servers
- web servers (only Apache servers bundled with PT 8.1, or WebLogic servers bundled with PT 8.44 and higher)

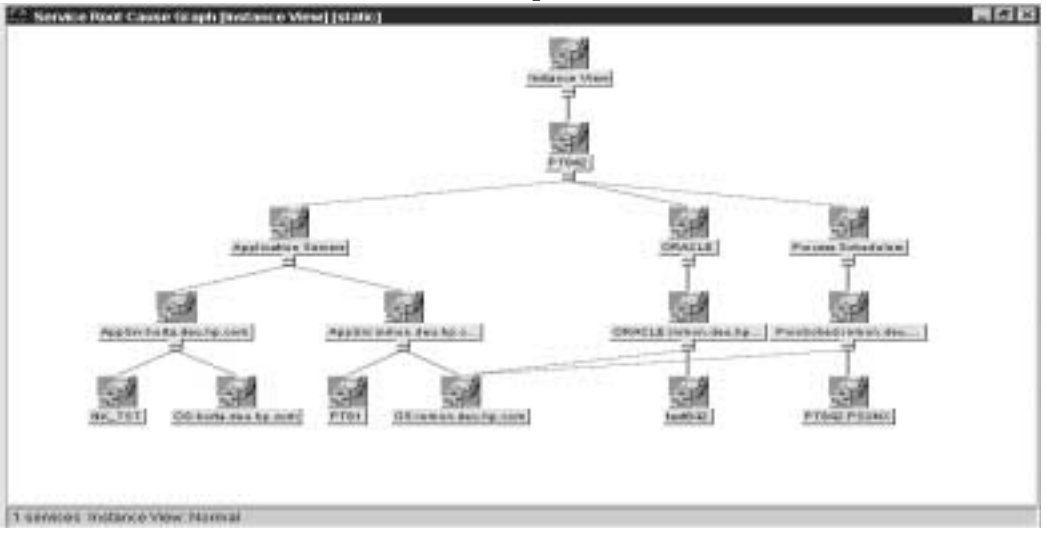
Figure 5-1 A *System* View of the PeopleSoft Environment



The Instance View

The PeopleSoft SPI can also use the Service Navigator to display all PeopleSoft components (database, application, web 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 . Figure 5-2 on page 81 illustrates an example of an instance view, where PT842 is an instance name.

Figure 5-2 An *Instance* View of the PeopleSoft Environment



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 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.

The following are examples of a service name:

```
PS_SPI:ramses.deu.hp.com:OS
```

```
PS_SPI:ramses.deu.hp.com:AppSrv
```

```
PS_SPI:ramses.deu.hp.com:AppSrv:PT81
```

```
PS_SPI:ramses.deu.hp.com:ProcSched
```

```
PS_SPI:ramses.deu.hp.com:ProcSched:PT842:PSUNIX
```

```
PS_SPI:ramses.deu.hp.com:ORACLE:test842
```

where:

- PS_SPI

  is the name space
- ramses.deu.hp.com.

  is the host name
- AppSrv, ProcSched, OS, Database type (ORACLE, MSSQL, DB2)

  is the sub-group
- PT81

  is the Tuxedo domain
- PT842

  is the PeopleSoft database name
- PSUNIX

  is the Process Scheduler name
- test842

is the Oracle SID

Note that the OVO 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 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 Service Navigator model, activate and assign it to the appropriate users..

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

1. Open the `PSSPI-Admin` application group in the `Application Bank` window.
2. Launch the `Build PS Services` application to build a Service 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 Activation` application:

   `/var/opt/OV/share/psspi/disc/<`*`node_name`*`>`
3. Launch `Activate PS Services` application to activate the newly built service model for the PeopleSoft environment and assign it to the default PeopleSoft SPI users:

   - psoft_adm
   - psoft_op

   Note that, if necessary, you can modify the `Activate PS Services` application to assign the PeopleSoft Service 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`.

NOTE

If you want to assign PeopleSoft Service Navigator model to other users without reactivating services, then you can use OVO command `opcservice -assign` *`user`* `PS_SPI`

6 Troubleshooting the PeopleSoft SPI

This section describes how to go about troubleshooting the HP OpenView Smart Plug-In for PeopleSoft.

In this Section

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 applications 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" on page 88.
2. Use the "verification" applications such as `Verify PS Cfg` and `Verify PSSPI Com` in the `PSSPI-Admin` application group. 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" on page 89.
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" on page 90.
4. Generate information on the working of the PeopleSoft SPI, enable tracing by running the `PSSPI Trace On` application in the `PSSPI-Admin` tool group. For more information, see "PeopleSoft SPI Tracing" on page 91.
5. Collect 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" on page 93.

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 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.
2. 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" on page 58.

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

  `<OVO_DATADIR>/psspi/log/psspi.log`

  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:

`<OVO_DATADIR>/log/OpC/opcerror`

PeopleSoft SPI Tracing

The HP OpenView Smart Plug-In for PeopleSoft uses perl 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.

You can switch the tracing on or off using the `PSSPI Trace On` and `PSSPI Trace Off` aplications in the `PSSPI-Admin` application group. Tracing output is written to the following files:

- OVO Mgd Node

  `<OVO_DATADIR>/psspi/log/psspi.trc`

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

- OVO Server

  `/var/opt/OV/share/psspi/log/`*`script_name`*`.trc`

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

NOTE If tracing has been enabled but the name of the trace file cannot be determined for some reason, then the SPI uses a panic log file `/PSSPI_Panic.log`.

Entries in the trace file, `psspi.trc`, appear in the following format:

`<`*`mm/dd/yyyy`*`> <`*`hh:mm:ss`*`> PSSPI(<`*`program name`*`>-<`*`pid`*`>): <`*`text`*`>`

Table 6-1 on page 92 lists and describes the various fields.

Table 6-1 Trace-File Fields

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

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 PeopleSoft SPI 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

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 A-1 on page 97 shows which products are present in the HP OpenView Smart Plug-in for PeopleSoft software bundles:

Table A-1 Products in the PeopleSoft SPI Software BundleOVO

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 directrories listed in Table A-2 on page 98:

Table A-2 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 files	`/var/opt/OV/share/psspi/log`
SPI configuration files	`/var/opt/OV/share/psspi/conf`
OVO integration files in uploadable format[a]	`/var/opt/OV/share/tmp/OpC_appl/psspi`

a. The OVO upload packages residing in the directory `.../OpC_appl/psspi` are loaded into the OVO database 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 commands and monitors to the PeopleSoft systems (which become, as a result, OVO managed nodes), the components listed in Table A-3 on page 99 will reside on the managed node:

Table A-3 PeopleSoft SPI File Locations on the OVO Managed Nodes

Description	Location [a]	Created By
SPI scripts and binary files	*<OVOAGT_CMDDIR>* *<OVOAGT_MONDIR>*	OVO agent
Non-root sudo files	*<OVO_DATADIR>*/psspi/bin	PeopleSoft SPI
SPI temporary and runtime files	*<OVO_DATADIR>*/psspi/tmp	PeopleSoft SPI
SPI log files	*<OVO_DATADIR>*/psspi/log	PeopleSoft SPI
SPI configuration files	*<OVO_DATADIR>*/psspi/conf	PeopleSoft SPI

a. All variables (like *OVO_DATADIR*) can be found by executing the command
`opcagt -type -verbose`

PeopleSoft Configuration Files

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

- "The psspi.cfg Configuration File" on page 100
- "The psspi.disc Configuration File" on page 101
- "The ps.cfg Configuration File" on page 104

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

The psspi.cfg Configuration File

The configuration file *<OVO_DATADIR>*/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 psspi.cfg file:

Example A-1 The psspi.cfg File on OVO Managed Nodes

```
#################################################################
# File: psspi.cfg
# Description: PeopleSoft SPI configuration file.
#################################################################

TRACE_LEVEL 2

#################################################################
```

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 A-4 on page 101 show which keys are supported in the `psspi.cfg` file:

Table A-4 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 • *non* zero
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 `<OVO_DATADIR>/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 that one database instance is discovered and not all the instances need to be monitored.

Note that if you modify the contents of the `psspi.disc` file on the managed node, you also have to activate the file again using the application `PS Activate`.

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 on a managed node and what the format of the file contents is.

Example A-2 The psspi.disc File on Managed Nodes

```
################################################################################
#
# File:            psspi.disc
# Description:     PeopleSoft SPI information base - filled by SPI discovery
# Language:        Config
# Package:         HP OpenView Smart Plug-In for PeopleSoft
#
# (c)Copyright 1999-2006 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/product
/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;APPLOGS
#-------------------------------------------------------------------------

APPSRV
/opt/PT8.42;PT81;/opt/PT8.42/appserv/PT81/LOGS
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:
# PS_HOME;WEB_HOME;WEB_TYPE;WEB_DOMAIN
#-----------------------------------------------------------------------------

WEBSRV
/opt/PT8.42;/opt/PT8.42/webserv;WEBLOGIC;peoplesoft
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_HOME*s 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 in the `Application`

Parameters field in the OVO Customized Startup window. For more details about discovery options see the chapter "Discovering PeopleSoft Components on the Managed Nodes" on page 39.

The ps.cfg Configuration File

The PS Activate application reads the psspi.disc and copies its contents to the file *<OVO_DATADIR>*/psspi/conf/ps.cfg, which is evaluated on the managed node by the OVO template and application scripts and, in addition, sent back to the OVO management server to be converted into the OVO service model. The format of the ps.cfg file is the same as the psspi.disc file. If the PS Activate tool is run subsequently, the old configuration is backed up to the file:

<OVO_DATADIR>/psspi/conf/ps.cfg.*<PID>*

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

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-`. The same rule applies to all template conditions, too.

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:

```
pspsi_perl psspi_tmib.pl min PSSPI-Win_TMIB-Col-05min_1 1-10 \
<domain name>
```

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

- "The Template repository" on page 107
- "Log-File Scripts" on page 111
- "Monitor Scripts" on page 113
- "Using OpenView Performance Agent" on page 115

The Template repository

Table B-1 on page 107 lists *all* the templates provided with the HP OpenView Smart Plug-In for PeopleSoft in alphabetical order.

Table B-1 All PSSPI Templates

Template Name	Type	Description
`PSSPI-AppSrvCfgFiles`	Monitor	Monitors changes to the application-server configuration file, `psappsrv.cfg` Script: `psspi_tuxcfg.pl`

Table B-1 All PSSPI Templates (Continued)

Template Name	Type	Description
PSSPI-AppSrvLogFiles	Logfile	Monitors the application-server log file, APPSRV.LOG, for each PS domain Script: psspi_appsv.pl
PSSPI-AppSrvLogSize	Monitor	Monitors the application-server log directory for the amount of disk space consumed by the APPSRV.LOG and TUXLOG.<*date*> files Script: psspi_logsiz.pl
PSSPI-DB2-Col-05min PSSPI-ORACLE-Col-05min PSSPI-MSSQL-Col-05min	Monitor	Runs the DBSPI 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 PSSPI-DBSPI-<*metric*> Script: psspi_dbcax.pl
PSSPI-DBSPI-0791 PSSPI-DBSPI-3791	External Monitor	Number of employees in the PeopleSoft database. Metric 0791 is for Oracle, 3791 for MSS DB.
PSSPI-DBSPI-0792 PSSPI-DBSPI-3792 PSSPI-DB2SPI-4792	External Monitor	Number of queue jobs. Metric 0792 is for Oracle, 3792 for MSS DB, 4792 for DB2.
PSSPI-DB2SPI-4793	External Monitor	Number of database connections. (DB2 only)
PSSPI-DBSPI-0793	External Monitor	Number of 2-tier client connections: i.e. the number of clients working in 2-tier mode (Oracle only)
PSSPI-DBSPI-3793	External Monitor	Number of database connections. (MSS only)
PSSPI-DBSPI-Messages	Message	Intercepts messages from the DBSPI programs

Table B-1 All PSSPI Templates (Continued)

Template Name	Type	Description
PSSPI-FileSys	Monitor	Monitors the PeopleSoft file-system space Script: psspi_fsmon.pl
PSSPI-IPC	Monitor	Monitors kernel parameters for Tuxedo domains. (Unix only) Script: psspi_ipcmon.pl
PSSPI-PSSPI-Messages	Message	Intercepts messages from the PeopleSoft SPI programs
PSSPI-PrcsAppSrvLogFiles	Logfile	Monitors the log file APPSRV_<*DATE*>.LOG for each Process Scheduler Script: psspi_pslogs.pl
PSSPI-PrcsJobTab	Monitor	Checks the process-scheduler table and the job-table entries Script: psspi_prcs.pl
PSSPI-PrcsLogDirs	Logfile	Monitors the PeopleSoft, process-scheduler log directories. Checks for new log files and switches the actual log file Script: psspi_psswlg.pl
PSSPI-PrcsLogFiles	Logfile	Monitors the PeopleSoft process-scheduler log files. Script: psspi_pslogs.pl
PSSPI-PrcsLogSize	Monitor	Monitors the size of the process-scheduler log directory and the disk space consumed by the process scheduler log files. Script: psspi_logsiz.pl
PSSPI-PrcsMon	Monitor	Monitors the existence of the process-scheduler process. Script: psspi_pmon.pl
PSSPI-PrcsMon-STAT	Monitor	Monitors the existence of the additional process-scheduler process PSDSTSRV. (Unix only) Script: psspi_pmon.pl

Table B-1 All PSSPI Templates (Continued)

Template Name	Type	Description
PSSPI-TMIB-001_1	External Monitor	Monitors the status of the Tuxedo domains of a PeopleSoft application server
PSSPI-TMIB-002_1	External Monitor	Monitors the status of the Tuxedo machine
PSSPI-TMIB-003_1	External Monitor	Monitors the status of the Tuxedo server group: APPSRV
PSSPI-TMIB-004_1	External Monitor	Monitors the status of the Tuxedo server group: BASE
PSSPI-TMIB-005_1	External Monitor	Monitors the actual number of APPSRV server processes and compares the it with TA_MIN
PSSPI-TMIB-006_1	External Monitor	Monitors the actual number of APPSRV server processes and compares it with TA_MAX
PSSPI-TMIB-007_1	External Monitor	Monitors the generation number TA_MAXGEN - TA_GENERATION
PSSPI-TMIB-008_1	External Monitor	Monitors the actual (absolute) number of APPSRV processes.
PSSPI-TMIB-010_1	External Monitor	Monitors the number of 3-tier connections.
PSSPI-TMIB-Col-05min_1 [a] PSSPI-TMIB-Col-05min_2	Monitor	Runs the TMIB collector process to gather Tuxedo 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*>. The first monitor checks additionally for Tuxedo domains currently down, the second monitor checks for Tuxedo domains currently up. Script: psspi_tmib.pl

Table B-1 All PSSPI Templates (Continued)

Template Name	Type	Description
PSSPI-TUXLogDirs	Logfile	Monitors the PeopleSoft domain log directories for new TUXLOG files. Script: psspi_swlog.pl
PSSPI-TUXLogFiles	Logfile	Monitors the TUXLOG.<*date*> log files for each PeopleSoft domain Script: psspi_tuxlg.pl
PSSPI-WebLogFiles	Logfile	Monitors the Apache log file (for PeopleSoft 8) Script: psspi_websrv.pl
PSSPI-WebMon	Monitor	Monitors the existence of the main Apache/WebLogic web server (bundled with PeopleSoft) Script: psspi_websrv.pl
PSSPI-WorkList	Monitor	Checks the PeopleSoft work-list table Script: psspi_wrklst.pl

a. 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 Performance agent. For more information, see "Monitor Scripts" on page 113.

Log-File Scripts

Table B-2 on page 111 lists the scripts used by the log-file templates.

Table B-2 Log-File Scripts

Script Name	Description
psspi_appsv.pl	Returns the names of symbolically linked application-server log files (APPSRV.<date>): two for each domain, linked as /APPSRV.[01]/<*domain*>. Used by PSSPI-AppSrvLogFiles Synopsis: psspi_appsv.pl

Table B-2 Log-File Scripts (Continued)

Script Name	Description
psspi_pslogs.pl	Returns the names of symbolically linked process-scheduler log files (PROCS*): two for each PeopleSoft database, linked as /PROCS.[0|1]/<*PS-DB*>). Used by PSSPI-PrcsAppSrvLogFiles, PSSPI-PrcsLogFiles Usage: psspi_perl psspi_pslogs.pl [*LOGTYPE*] where *LOGTYPE* is SCHDLR for PrcsLogFiles, and APPSRV for PrcsAppSrvLogFiles
psspi_psswlg.pl	Returns PeopleSoft Process Scheduler log directories as monitored objects to allow the detection of new log files by the OVO log-file encapsulator. Used by PSSPI-PrcsLogDirs Usage: psspi_perl psspi_psswlg.pl [-p] [*OUTFILE*] where -p prints discovered directories, *OUTFILE* - the file where discovered log-file names are stored.
psspi_swlog.pl	Returns PeopleSoft log directories as monitored objects to allow the detection of new log files by the OVO log-file encapsulator. Used by PSSPI-TUXLogDirs Usage: psspi_perl psspi_swlog.pl [-p] [*OUTFILE*] where -p prints discovered directories, *OUTFILE* - the file where discovered log-file names are stored.
psspi_tuxlg.pl	Returns the names of symbolically linked application-server log files (TUXLOG.<*date*>): two for each domain, linked as /TUXLOG.[01]/<*domain*>. Used by PSSPI-TUXLogFiles Usage: psspi_perl psspi_tuxlg.pl
psspi_websrv.pl	Returns the names of log files for configured Apache web servers (bundled with PeopleSoft 8). Used by PSSPI-WebLogFiles Usage: psspi_perl psspi_websrv.pl -l

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.

Monitor Scripts

OVO process monitors require perl scripts or programs in order to perform the desired monitoring. Table B-3 on page 113 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, 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 Performance agent. By default, the Performance agent integration is configured to run the collection every 5 minutes: if you change the interval make sure the value of the modified interval matches the value declared in the DDF specification. In addition, all other collector templates should specify the `-no_dsi` option as an argument to the `psspi_tmib.pl` collector script.

Table B-3 Monitor Scripts

Script Name	Description
`psspi_dbcax.pl`	DB Collector: called with metric IDs in parameter list to evaluate the metrics of DBMS and PeopleSoft-specific DBs. Used by `PSSPI-`*`DB`*`-Col-<`*`intv`*`>` Usage (monitoring): `psspi_perl psspi_dbcax.pl <`*`MONITOR`*`> <`*`METRICS`*`> [`*`DBNAME`*`...]` where *`MONITOR`* is a monitor name, *`METRICS`* - metrics, *`DBNAME`* - database name (e.g. ORACLE_SID for Oracle)

Table B-3 Monitor Scripts (Continued)

Script Name	Description
psspi_fsmon.pl	Monitors actual usage of local file systems and passes values to the OVO agent. Used by PSSPI-FileSys Usage: psspi_perl psspi_fsmon.pl <*MONITOR*> [*FS* ...] where *MONITOR* is a monitor name, *FS* - file system. If the file system is not specified all file systems from ps.cfg are monitored.
psspi_ipcmon.pl	Monitors actual usage of IPC tables and passes values to OVO agent. Used by PSSPI-IPC Usage: psspi_perl psspi_ipcmon.pl <*MONITOR*> [*DOMAIN* ...] where *MONITOR* is a monitor name, *DOMAIN* - Tuxedo domain name. If the file system is not specified all domains from ps.cfg are monitored. (Unix only)
psspi_logsiz.pl	Monitors the size of the process-scheduler log directory and the disk space consumed by the process scheduler log files.. Used by PSSPI-PrcsLogSize, AppSrvLogSize
psspi_pmon.pl	Monitors all process-scheduler processes and passes the values to the OVO monitor agent and, if configured, to Performance agent. Used by PSSPI-PrcsMon, PSSPI-PrcsMon-STAT
psspi_prcs.pl	Monitors the process schedulers job table. Used by PSSPI-PrcsJobTable
psspi_tmib.pl psspi_tuxcoa.65 psspi_tuxcoa.81 psspi_tuxcoa.65.exe psspi_tuxcoa.81.exe	TMIB Collector: called with metric IDs in parameter list to evaluate the metrics of TMIB objects. Used by PSSPI-TMIB-Col-<*intv*> The programs with extension .81/.81.exe are meant for Tuxedo 8.1, the programs with extension .65/.65.exe are meant for Tuxedo 6.5.
psspi_websrv.pl	Monitors the existence of the Apache or WebLogic web server bundled with PeopleSoft 8. Used by PSSPI-WebMon

Table B-3 Monitor Scripts (Continued)

Script Name	Description
`psspi_wrklst.pl`	Monitors the worklist tables. Used by `PSSPI-WorkList`

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 Performance 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. You can find information about the following applications:

- "The PSSPI-Admin Application Group" on page 116
- "The PSoft-Admin Application Group" on page 117
- "The PSoft-Oper Application Group" on page 118
- "The PSoft-Reports Application Group" on page 119

For a command reference of the functions used by the PeopleSoft SPI applications, see Appendix C, "PeopleSoft SPI Commands," on page 121.

The PSSPI-Admin Application Group

Table B-4 on page 116 lists in alphabetical order the various applications in the `PSSPI-Admin` application group and indicates which function is called by each application.

Table B-4 PSSPI-Admin Application Calls

Application Name	Function Called
Activate PS Services	psspi_actsvc_ovou.pl
Build PS Services	psspi_bldsvc_ovou.pl
Edit PS Cfg	psspi_spicl.pl pscfg -e (Unix node only)
Edit PSSPI Cfg	psspi_spicl.pl spicfg -e (Unix node only)
Get PS Cfg	psspi_spicl.pl getps
PS Activate	psspi_act.pl
PS Discovery	psspi_disc.pl

Table B-4 PSSPI-Admin Application Calls (Continued)

Application Name	Function Called
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
Self-Healing Info	psspi_shs.pl -standalone
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

The PSoft-Admin Application Group

Table B-5 on page 117 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 B-5 PSoft-Admin Application Calls

Application Name	Function Called	PeopleSoft (PS) Interface
Unload TX Conf	psspi_tmcl.pl tmunloadc -f	tmunloadcf

Table B-5 PSoft-Admin Application Calls (Continued)

Application Name	Function Called	PeopleSoft (PS) Interface
View PRCS Config	psspi_pspt.pl viewcfg	n/a
psadmin (Only Unix)	psspi_inst.pl psadmin	psadmin
tmadmin (Only Unix)	psspi_tmcl.pl tmadmin	tmadmin
tmconfig (Only Unix)	psspi_tmcl.pl tmconfig	tmconfig

The PSoft-Oper Application Group

Table B-6 on page 118 lists in alphabetical order the various applications in the PSoft-Oper application group, describes briefly how the individual application works, and indicates which function is called by each application and which PeopleSoft interface is used.

Table B-6 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 (Only Unix)	psspi_ipcs.pl -d	n/a
IPC Current (Only Unix)	psspi_ipcs.pl	n/a
IPC Needed (Only Unix)	psspi_tmcl.pl tmboot -c	tmboot -c

Table B-6 PSoft-Oper Application Calls (Continued)

Application Name	Function Called	PeopleSoft (PS) Interface
Restart PS Domain	psspi_tmcl.pl domrestart	tmshutdown, tmboot
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
Stop Proc Sched	psspi_pspt.pl stop	pspt -stop (PS 7.5) or -kill (PS 7)
View APPSRV.LOG	psspi_tmcl.pl viewlog -p	n/a
View PRCS Log	psspi_pspt.pl viewlog	n/a
View TUXLOG	psspi_tmcl.pl viewlog -t	n/a

The PSoft-Reports Application Group

Table B-7 on page 119 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 B-7 PSoft-Reports Applications

Tool Name	Function Called	PS Interface
Proc Sched Status	psspi_pspt.pl status	pspt status
PS Job Status	psspi_dbcax.pl -report_on_all_DB -r 2 -m 792	<*database*>
PS Status	psspi_inst.pl status	<*multiple*>
PS Worklist Status	psspi_dbcax.pl -report_on_all_DB -r 2 -m 795	<*database*>

Table B-7 PSoft-Reports Applications (Continued)

Tool Name	Function Called	PS Interface
PS/TX Versions	psspi_inst.pl version -q -a	n/a
TX Client Status	psspi_tmcl.pl tmadmin -I pclt	tmadmin
TX Queue Status	psspi_tmcl tmadmin.pl -I pq	tmadmin
TX Server Status	psspi_tmcl.pl tmadmin -I psr	tmadmin
Oracle/PS 2-Tier Conn	psspi_dbcax.pl -report_on_all_DB -r 1 -m 793	<*database*>
Oracle/Tblspace Files	psspi_dbcax.pl -report_on_all_DB -r 1 -m 8 (Only Oracle)	<*database*>
Oracle/Tblspace Fragmnt	psspi_dbcax.pl -report_on_all_DB -r 1 -m 11 (Only Oracle)	<*database*>
Oracle/Tblspace Free	psspi_dbcax.pl -report_on_all_DB -r 1 -m 6 (Only Oracle)	<*database*>
Oracle/Tblspace Status	psspi_dbcax.pl -report_on_all_DB -r 1 -m 7 (Only Oracle)	<*database*>
MSSQL/PS Act. Con.	psspi_dbcax.pl -report_on_all_DB -r 1 -m 3793 (Only MSSQL)	

C PeopleSoft SPI Commands

In this section you can find information relating to the functions used by the HP OpenView Smart Plug-In for PeopleSoft in application calls. You can use these functions to create customized OVO applications.

In this Section

In this section you can find information relating to the functions used by the HP OpenView Smart Plug-In for PeopleSoft in application calls. You can use these functions to create customized OVO applications. In this section you will find information concerning:

The psspi_act.pl Command

Performs activation PSSPI on managed node.

NAME `psspi_act.pl`

SYNOPSIS `psspi_act.pl`

DESCRIPTION The command `psspi_act.pl` is used by the `PS Activate` application. More details can be found in the chapter "Activating the Configuration on the PeopleSoft Nodes" on page 45.

EXIT VALUES If an error occurs, the utility returns a non-zero return code.

The psspi_actsvc_ovou.pl Command

Activates the PeopleSoft service model and assign it to users. The command runs on OVO management server.

NAME

`psspi_actsvc_ovou.pl`

SYNOPSIS

`psspi_actsvc_ovou.pl [-u[ser]` *`OVOUserName1`* `-u[ser]` *`OVOUserName2`* `...]`

`psspi_inst.pl [-h[elp] | -?]`

DESCRIPTION

The command `psspi_actsvc_ovou.pl` activates the PeopleSoft service model and assign it to the specified users. If no users are given then the PeopleSoft service model is assigned:

- `psoft_adm`
- `psoft_op`

More details can be found in the chapter “Service Discovery, Activation, and Assignment” on page 84.

EXIT VALUES

If an error occurs, the utility returns a non-zero return code.

The psspi_bldsvc_ovou.pl Command

Builds the PeopleSoft service model. It is started on OVO management server.

NAME `psspi_bldsvc_ovou.pl`

SYNOPSIS `psspi_bldsvc_ovou.pl`

DESCRIPTION The command `psspi_bldsvc_ovou.pl` builds the PeopleSoft service model. More details can be found in the chapter “Service Discovery, Activation, and Assignment” on page 84.

EXIT VALUES If an error occurs, the utility returns a non-zero return code.

The psspi_cleanup.pl Command

Removes all files and persistent information pertaining to the PeopleSoft SPI on the node.

NAME `psspi_cleanup.pl`

SYNOPSIS `psspi_cleanup.pl [-y]`

DESCRIPTION The command `psspi_cleanup.pl` with option `-y` removes all files and persistent information pertaining to the PeopleSoft SPI on the selected node. Without the option prints a warning message only.

EXIT VALUES If an error occurs, the utility returns a non-zero return code.

The psspi_dbcax.pl Command

Starts reports for the PeopleSoft databases.

NAME

`psspi_dbcax.pl`

SYNOPSIS

`psspi_dbcax.pl -report_on_all_DB [`*`arguments`*`]`

`psspi_dbcax.pl -report_on_one_DB `*`instance`*` [`*`arguments`*`]`

DESCRIPTION

The command `psspi_dbcax.pl` invokes a DBSPI or DB2SPI scripts depending on database type (ORACLE, MSSQL or DB2). With the option `-report_on_all_DB` the report will be started on all configured instances. For the option `-report_on_one_DB` the *`instance`* must be given. The *`arguments`* will be forwarded to external script without parsing. They must contain metric and report number. Note that DBSPI and DB2SPI must be installed and configured on the managed node.

EXIT VALUES

If an error occurs, the utility returns a non-zero return code.

The psspi_df.pl Command

Displays statistics on file systems and their usage.

NAME `psspi_df.pl`

SYNOPSIS `psspi_df.pl` *`[fs1 fs2 ...]`*

DESCRIPTION The command `psspi_df.pl` Displays statistics on file systems *`fs1, fs2`* and their usage.

EXIT VALUES Returns the exit values from external commands (e.g. `itodiag.exe`, `df`).

The psspi_disc.pl Command

Discovers the PeopleSoft components installed on the PeopleSoft servers.

NAME

`psspi_disc.pl`

SYNOPSIS

psspi_disc.pl [-path *ps_home*] [-find] [-ver *ps_ver*]

`psspi_disc.pl [-h[elp] | -?]`

DESCRIPTION

The command psspi_disc.pl discovers the PeopleSoft components on the managed node automatically. But in some cases come options can be specified to help the script:
`-find` cause the discovery to test all directories under the specified directory or a self-found directories
`-path` use this path as a PS_HOME for discovery; *ps_home* must be *one* single parameter, i.e. must be quoted if containing spaces. There can be several parameters `-path` *ps_home*, if the command is intended for several servers.
`-ver` can be use to set the PeopleTools version (do no mix with PS Application version!), if the script fails to discover version for any reason (e.g. the psadmin user has interactive login).
More details about how the script works can be found in the chapter "Discovering PeopleSoft Components on the Managed Nodes" on page 39.

EXIT VALUES

If an error occurs, the utility returns a non-zero return code.

The psspi_inst.pl Command

Starts tasks related to the PeopleSoft installation (defined by *PS_HOME*) for PeopleSoft environments.

NAME

psspi_inst.pl

SYNOPSIS

psspi_inst.pl *command* [-p *PShome1, PShome2*] [*parameters*]

psspi_inst.pl [-h | -?]

DESCRIPTION

The command psspi_inst.pl invokes a command line tool or generates information related to the PeopleSoft installation specified in *command*. Valid options for *command* are:

- psadmin
- version
- status

All necessary environment variables are set before the function is executed. *All* of the commands require *PSinstallation*. PeopleSoft installations can either be selected by users by means of entries in the Parameters field of an application or specified with a command-line option: -p pshome1,pshome2.

Additional, optional parameters can be passed to the started command-line tool using *parameters*. However, these parameters are not checked by psspi_inst.pl; they are passed by *command* as is. The -h option displays usage information and lists the options available with the function. When the command is run from OVO Management Server on Windows nodes the command can be used only in a batch mode (no input from user is possible).

EXIT VALUES

If an error occurs, the utility returns a non-zero return code.

The psspi_ipcs.pl Command

Displays the current IPC resource statistics or purges the current IPC resources for a specific PeopleSoft installation. Only for Unix managed node.

NAME

`psspi_ipcs.pl`

SYNOPSIS

`psspi_ipcs.pl [`*`parameters`*`]`

`psspi_ipcs.pl -`*`d`* `[-a |-p` *`PShome1,PShome2`*`] [-y]`

DESCRIPTION

The command `psspi_ipcs.pl` without options invokes a command line tool `ipcs` and passes *`parameters`* to it without parsing. Usually it is used to display the current IPC resource statistics.
If the option `-d` is specified, then the command purges the current IPC resources for specified PS_HOMEs. You do not need to specify PS_HOME, if there is only one PeopleSoft installation on managed node. With the option `-a` the script run the command for all PS_HOMEs. Note that only if the option `-y` is specified the resources will be purged, otherwise only the list of commands will be printed for review.

EXIT VALUES

If an error occurs, the utility returns a non-zero return code.

The psspi_pspt.pl Command

Shell script to start tasks related to the PeopleSoft process-scheduler process.

NAME

`psspi_pspt.pl`

SYNOPSIS

`psspi_pspt.pl` *`command`* `[-d` *`DB_NAME1[:PRCS_NAME],DBNAME2`*`]`

`psspi_pspt.pl [-h | -?]`

DESCRIPTION

The command executes tasks related to the PeopleSoft process scheduler process according to command parameter. Valid values for *`command`* are:

- `start`
- `stop`
- `status`
- `viewcfg`
- `viewlog`

All necessary environment variables are set before the script invokes *`command`*. With the option `-d` of the PeopleSoft database name can be set. If no PeopleSoft database name is specified, then the *`command`* is executed for all Process Schedulers. If there are several Process Schedulers for the PeopleSoft database, then the Process Scheduler can be specified by format `DB_NAME:PRCS_NAME`, where `DB_NAME` is PeopleSoft database name, and `PRCS_NAME` is a Process Scheduler name.
The `-h` option displays usage information and lists the options available with the function.

EXIT VALUES

If an error occurs, the utility returns a non-zero return code.

The psspi_shs.pl Command

Starts Self-Healing collector to collector troubleshooting data.

NAME `psspi_shs.pl`

SYNOPSIS `psspi_shs.pl [`*`parameters`*`]`

DESCRIPTION The command `psspi_shs.pl` invokes the Self-Healing collector.

Additional, optional parameters can be passed to the started command-line tool using *`parameters`*. However, these parameters are not checked by `psspi_shs`.pl; they are passed to the collector as is.

EXIT VALUES The utility always returns a zero return code.

The psspi_spicl.pl Command

Shell script to start tasks related to the PeopleSoft SPI.

NAME

`psspi_spicl.pl`

SYNOPSIS

`psspi_spicl.pl` *`command [parameters]`*

`psspi_spicl.pl [-h | -?]`

DESCRIPTION

The command `psspi_spicl.pl` executes tasks related to the PeopleSoft SPI as specified in *command*. Valid options for *command* are:

- `getps`
- `pscfg -d(isplay)`
- `pscfg -e(dit)` (Only for Unix managed node)
- `setcfg <`*`LABEL`*`> <`*`VALUE`*`>`
- `spicfg -d(isplay)`
- `spicfg -e(dit)` (Only for Unix managed node)
- `spilog`
- `spitrc`

The `-h` option displays usage information and lists the options available with the function.

EXIT VALUES

If an error occurs, the utility returns a non-zero return code.

The psspi_tmcl.pl Command

Starts domain-related command-line tools or domain-related tasks for PeopleSoft environments.

NAME

`psspi_tmcl.pl`

SYNOPSIS

`psspi_tmcl.pl` *`command`* `[`*`parameters`*`] [-d` *`domain1,domain2`*`]`

`psspi_tmcl.pl` *`command`* `[-h |-?]`

DESCRIPTION

The command `psspi_tmcl.pl` executes a domain-related Tuxedo command-line tool or other domain-related tasks as specified in *`command`*. Valid options for *`command`* are:

- `domrestart`
- `tmadmin`
- `tmboot`
- `tmconfig`
- `tmshutdown`
- `tmunloadcf`
- `viewlog`

All necessary environment variables are set before the function invokes the tasks defined in *`command`*. If domain name is not specified, then the command is executed for all domains.
The `-h` option displays usage information and lists the options available with the function.

Additional optional parameters can be passed to the started Tuxedo command using *`parameters`*. However, these parameters are not checked by `psspi_tmcl.pl`; they are passed by *`command`* as is.

EXIT VALUES

If an error occurs, the utility returns a non-zero return code.

The psspi_verify.pl Command

Shell script to start tasks related to the PeopleSoft SPI.

NAME

`psspi_verify.pl`

SYNOPSIS

`psspi_verify.pl [-c|-d|-n|-s]`

DESCRIPTION

The command `psspi_verify.pl` checks the installation of the PSSPI on the OVO managed node is correct (`-n`), verifies that the configuration of the managed PeopleSoft components in the `ps.cfg` file reflects the PeopleSoft environment on the node (`-d`), verifies that the communication between managed node and management server is working correctly for PeopleSoft messages (`-c`), verifies that the installation of the PSSPI on the OVO management server is correct (`-s`).

EXIT VALUES

If an error occurs, the utility returns a non-zero return code.

N

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