HP OpenView Smart Plug-in for PeopleSoft

Administrator's Reference

Version B.02.15 June 2004

Legal Notices

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



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

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

Use, duplication or disclosure by the U.S. Government is subject to restrictions as set forth in subparagraph (c) (1) (ii) of the Rights in Technical Data and Computer Software clause at DFARS 252.227-7013 for DOD agencies, and subparagraphs (c) (1) and (c) (2) of the Commercial Computer Software Restricted Rights clause at FAR 52.227-19 for other agencies.

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

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

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

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

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

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

©copyright 1986-1992 Sun Microsystems, Inc.

 ${\tt @copyright~1985-86,~1988~Massachusetts~Institute~of~Technology.}$

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

 $\hbox{${\mathbb Q}$ copyright 1986-1997 FTP Software, Inc. All rights reserved}$

©copyright 1986 Digital Equipment Corporation.

©copyright 1990 Motorola, Inc.

©copyright 1990, 1991, 1992 Cornell University

©copyright 1989-1991 The University of Maryland

©copyright 1988 Carnegie Mellon University

Trademark Notices. UNIX® is a registered trademark in the United

States and other countries, licensed exclusively through X/Open Company Limited.

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

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

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

Oracle®, SQL*Net®, and SQL*Plus® are registered U.S. trademarks of Oracle Corporation, Redwood City, California. Oracle ReportsTM, Oracle7TM, and Oracle7 ServerTM are trademarks of Oracle Corporation, Redwood City, California.

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

Netscape Commerce Server and Netscape Communications Server are U.S. trademarks of Netscape Communications Corporation.

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

1.	Introducing the PeopleSoft SPI	
	What is PeopleSoft?	17
	What Is the PeopleSoft SPI?	19
	What does the PeopleSoft SPI Do?	20
	How does the PeopleSoft SPI Work?	22
2.	Installing and Configuring the PeopleSoft SPI	
	System Pre-Requisites	25
	Hardware Requirements	25
	Software Requirements	25
	Supported Platforms and Versions	27
	Supported Versions: PeopleSoft	27
	Supported Versions: OVOW Server	
	Supported Platforms: Batch-Server Components	
	Supported Platforms: Database-Server Components	
	Supported Platforms: Application-Server Components	
	Installing the PeopleSoft SPI on the Management Server	
	Preparing the OVOW Management Server	
	Verifying the Software Installation	
	Using optional Smart Plug-ins	
	Configuring the PeopleSoft SPI to Manage PeopleSoft Systems	
	Setting up PeopleSoft Systems as OVOW Nodes	
	Distributing the OVOW Agent to the PeopleSoft Systems	
	Assigning Nodes to special Node Group	
	Distributing PeopleSoft SPI instrumentation	36
	Configuring the PeopleSoft SPI to Monitor the Database	37
	Discovering PeopleSoft Components on the Managed Nodes \ldots	38

	Assigning Nodes to Node Groups	14
	De-installing the PeopleSoft SPI	46
3.	Using the PeopleSoft SPI	
	Introduction	51
	The New OVOW Managed Node Groups	52
	The New OVOW Tool Groups	53 55 56
	The New OVOW User Roles	3 0
	The New OVOW Policies6The PSSPI-Win_App_Server Policy Group6The PSSPI-Win_Batch_Server Policy Group6The PSSPI-Win_OraDB_Server Policy Group6The PSSPI-Win_MSSDB_Server Policy Group6	62 64 65
	The PSSPI-Win_Web_Server Policy Group	39
	Policies on Cluster Nodes.	70
4.	Using Service Views	
	Service Views with the PeopleSoft SPI	75
	The System View	76
	The Instance View	78

	Resources and Processes
	Service Discovery, Activation, and Assignment82
5.	Troubleshooting the PeopleSoft SPI
	General Troubleshooting Notes
	Determining the PeopleSoft SPI Version
	PeopleSoft SPI Verification Scripts
	PeopleSoft SPI Error Logging88
	PeopleSoft SPI Tracing
A.	File Names
	Files on the Management Server
	Files on the Managed Nodes
	PeopleSoft Configuration Files.95The psspi.cfg Configuration File.95The psspi.disc Configuration File.96The ps.cfg Configuration File.101
В.	PeopleSoft SPI Components
	Policies
	Tools and Tool Groups112The PSSPI-Admin Tool Group112The PSoft-Admin Tool Group113The PSoft-Oper Tool Group113

	The PSoft-Reports Tool Group	114
c.	PeopleSoft SPI Commands	
	The psspi_tmcl.pl Command	119
	The psspi_pspt.pl Command	120
	The psspi_spicl.pl Command	121
	The psspi_inst_pl Command	122

Printing History

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

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

First Edition: August 1999

Version A.01.50: February 2000

Version A.01.60: April 2001

Version A.02.00: August 2003

Version B.02.10: March 2004

Version B.02.15: June 2004

Conventions

The following typographical conventions are used in this manual.

Table 1 Typographical Conventions

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

Table 1 Typographical Conventions

Font Type	What the Font Type Represents	Example
Menu Items	A menu name followed by a colon (:) means that you select the menu, then the item. When the item is followed by an arrow (->), a cascading menu follows.	Select Actions: Utilities-> Reports

The HP OpenView Smart Plug-In for PeopleSoft Documentation Map

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

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

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

Table 2 Documentation Roadmap

HP OpenView Product Name	Manual Title
OpenView Operations for Windows	Concepts Guide Installation Guide for the Management Server Administrator's Reference Administrators Task Guide Software Release Notes Online Help
OpenView Performance	Dictionary of Operating System Performance Metrics
OpenView Performance Agent	Installation and Configuration Guide Data Source Integration Guide Tracking your Transactions Users Manual
OpenView Performance Manager	Command Line Reference (HP-UX) Installation Guide
Smart Plug-in for Oracle	DB-SPI Oracle Reference DB-SPI Release Notes DB-SPI User's Guide

 Table 2
 Documentation Roadmap

HP OpenView Product Name	Manual Title
Smart Plug-In for Microsoft SQL Server	DB-SPI MSSQL Reference DB-SPI Release Notes DB-SPI Users Guide
Smart Plug-in for BEA Tuxedo	BEASPI Installation Guide BEASPI User's Guide BEASPI Release Notes
Smart Plug-in for BEA WebLogic Server	WebLogic SPI Configuration Guide WebLogic SPI Release Notes WebLogic SPI Reference



This section describes the HP OpenView 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 1-1 on page 18 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

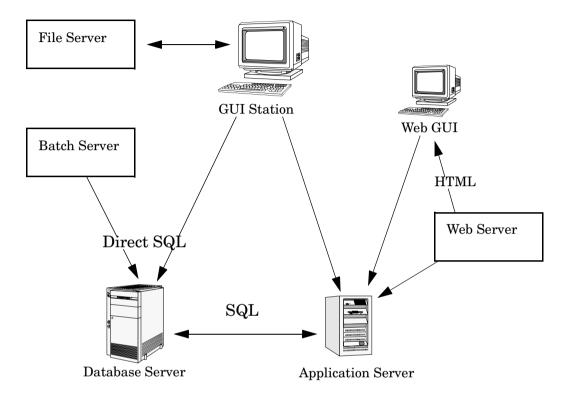
Batch server hosts the execution of batch jobs

Web Server provides access to web client software based on

Java/HTML

Chapter 1 17

Figure 1-1 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 HP OpenView Smart Plug-In for PeopleSoft in particular, provides IT organizations with a pre-configured management solution for PeopleSoft environments based on HP OpenView OpenView Operations for Windows, the industry-leading enterprise-availability and automation solution. With HP OpenView OpenView Operations for Windows 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 27. The PeopleSoft SPI itself can be installed in a distributed management environment consisting of one or more OVOW servers, one or more OpenView Operations for Windows agents, and HP OpenView VantagePoint Performance Manager consoles.

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

Chapter 1 19

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 OVOW monitoring facility (policies) and the OVOW GUI (tools, 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 OVOW is already present. Note that integrations with VantagePoint Performance 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.

Introducing the PeopleSoft SPI What does the PeopleSoft SPI Do?

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 for Windows features.

Chapter 1 21

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

Installing and Configuring the PeopleSoft SPI

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

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

System Pre-Requisites

The OpenView Operations for Windows (OVOW) management server must be installed and configured on the machine on which you want to install and use the PeopleSoft SPI. For more information on which versions of OpenView Operations for Windows are supported, see "Supported Versions: OVOW Server" on page 27. In addition, the OVOW agent must be running on the OVOW management server. Note also that the opense policy must be assigned and distributed to the OVOW management server in order to ensure that messages appear in the OVOW GUI on the management server. Otherwise, the messages will simply be logged in a log-file.

For more information on platform and version support, see "Supported Platforms and Versions" on page 27.

Hardware Requirements

Table 2-2 on page 30 lists the hardware requirements for the machines on which you intend to install the PeopleSoft SPI.

Table 2-1 PeopleSoft SPI Hardware Requirements

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

NOTE

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

Software Requirements

No changes of operating system kernel parameters are required for the

Chapter 2 25

Installing and Configuring the PeopleSoft SPI **System Pre-Requisites**

HP OpenView Smart Plug-In for PeopleSoft on the OVOW management server and on the OVOW managed nodes.

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

Table 2-2 PeopleSoft SPI Software Requirements

Product	Required	Recommended	Remarks
Smart Plug-in for Oracle or MS SQL Server	Yes	-	Needed for database access and database related metrics of the PeopleSoft SPI
Smart Plug-in for BEA Tuxedo	No	Yes ^a	Used for detailed Tuxedo monitoring (not available on all platforms)
Smart Plug-in for BEAWebLogic Server	No	Yes ^b	Used for detailed WebLogic monitoring (not available on all platforms)
Smart Plug-ins DSI-to-DDF wrapper utilities	Yes	-	Needed for collecting performance data with OVPA or OV Performance subagent

a. The current version A.02.00 of the BEA SPI for Tuxedo is not able to manage the Tuxedo layer bundled with the PeopleSoft software.

b. Version A.02.06 recommened. But see installation tips.

Supported Platforms and Versions

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

NOTE

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

Supported Versions: PeopleSoft

The PeopleSoft SPI is designed to run on all versions of PeopleSoft based on PeopleTools 7 and 8, running with Tuxedo 6.5, which comes bundled with PeopleTools. These are the PeopleTools releases 7.05 and 7.5 and releases 8.1 and 8.4 (including all corresponding minor releases).

Supported Versions: OVOW Server

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

- OVOW B.07.10
- OVOW B.07.20

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

Supported Platforms: Batch-Server Components

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

Chapter 2 27

Table 2-3 Supported Platforms for the Batch-Server Components

	Microsoft	
Platform	Intel x86	
OS Version	Windows 2000 Windows 2003	
OVOW Agent	OVOW 7.1 / 7.2	
OVPA Agent (MeasureWare)	C.02.00	

No other platforms are supported with the PeopleSoft SPI B.02.15.

Note that not every combination may be possible due to restrictions of PeopleTools or OVOW.

Supported Platforms: Database-Server Components

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

Table 2-4 Supported Platforms for the Database-Server Components

	Microsoft	
Platform	Intel x86	
OS Version	Windows 2000 Windows 2003	
OVOW Agent	OVOW 7.1 / 7.2	
OVPA Agent (MeasureWare)	C.02.00	
DBMS Version	Oracle 8i/9i SQL Server 2000	

No other platforms are supported with the PeopleSoft SPI B.02.15.

Note that the supported databases on the agent platforms depend on the installed PeopleTools versions and the databases supported by them.

Note that not every combination may be possible due to restrictions of PeopleTools or OVOW or the Smart Plugin for Oracle.

Note that the support databases on the agent platforms depend on the version supported by the DB-SPI (SPI for Oracle, SPI for MS SQL Server).

Supported Platforms: Application-Server Components

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

Table 2-5 Supported Platforms for the Application-Server Components

	Microsoft	
Platform	Intel x86	
OS Version	Windows 2000 Windows 2003	
OVOW Agent	OVOW 7.1 / 7.2	
OVPA Agent	C.02.00	

No other platforms are supported with the PeopleSoft SPI B.02.15.

Note that not every combination may be possible due to restrictions of PeopleTools or OVOW or the Smart Plugin for BEA WebLogic.

Supported Platforms: Web-Server Components

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

Chapter 2 29

Table 2-6 Supported Platforms for the Web-Server Components

	Microsoft	
Platform	Intel x86	
OS Version	Windows 2000 Windows 2003	
OVOW Agent	OVOW 7.1 / 7.2	
OVPA Agent	C.02.00	
BEA WebLogic ¹	6.1, SP 2 (as bundled with PeopleSoft)	
Apache Webserver ²	As Bundled with PeopleSoft	

No other platforms are supported with the PeopleSoft SPI B.02.15.

Note that not every combination may be possible due to restrictions of PeopleTools or OVOW or the Smart Plugin for BEA WebLogic.

1 Monitored via HP OpenView Smart Plug-in for BEA WebLogic Server

 $^{^2}$ Monitored via HP OpenView Smart Plug-in for PeopleSoft

Installing the PeopleSoft SPI on the Management Server

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

- Preparing the OVOW Management Server
- Installing the PeopleSoft SPI
- Verifying the Software Installation

Preparing the OVOW Management Server

The HP OpenView Smart Plug-In for PeopleSoft is available on the HP OpenView Operations for Windows SPI CD-ROM or as a separate installation package PSSPI-B.02.10.msi.

The available SPIs are splitted on two CDs in the CD-ROM set: For the HP OpenView Smart Plug-In for PeopleSoft, use the second CD. Note that if you are installing other HP OpenView SPI's, it may be necessary to use the first CD, too.

Prepare the OVOW management server environment as follows:

- 1. Login as a user with administrative rights to install software.
- 2. Insert the product CD in the CD-ROM drive (or have the install package PSSPI-B.02.10.msi ready on a local drive).
- 3. Follow the directions of the setup program which is started automatically and select the PeopleSoft SPI for installation (or double-click on the install package PSSPI-B.02.10.msi).
- 4. If you intend to install one of the SPI for Oracle/MS SQL Server, SPI for BEA WebLogic Server or SPI for BEA Tuxedo, then please consult the installation guide of this SPI for further pre-installation requirements.

Installing the PeopleSoft SPI

1. Install the software bundles

Chapter 2 31

Installing and Configuring the PeopleSoft SPI

Installing the PeopleSoft SPI on the Management Server

- DSI2DDF (if not already installed)
- SPI for Oracle or SPI for MS SQL Server(if not already installed)
- BEASPI (if needed and supported and not already installed)
- SPIWebLogicAll (if needed and supported and not already installed)
- SPI for PeopleSoft
- 2. Install OV Reporter integrations

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

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

Verifying the Software Installation

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

- Check for any install errors and then make sure that the following new elements are present in the OVOW GUI after the installation of the HP OpenView Smart Plug-In for PeopleSoft product has completed
 - New node groups:
 - PS All Server
 - PS DB Server
 - PS App Server
 - PS Batch Server
 - PS Web Server

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

• New tool groups:

- PSoft-Oper

- PSoft-Admin
- PSoft-Reports
- PSSPI-Admin
- New policy groups :
 - SPI for PeopleSoft
 - PSSPI-App_server
 - PSSPI-Batch_Server
 - PSSPI-DB_server
 - PSSPI-Web server
 - PSSPI-All server
- 2. If the new PeopleSoft SPI elements are not visible in the OVOW GUI, try stopping and restarting the OVOW GUI.
- 3. If you installed one of the SPI for Oracle/MS SQL Server, SPI for BEA WebLogic Server or SPI for BEA Tuxedo, then please consult the installation guide of this SPI for further verification checks.

For more information on the various new elements see the appropriate sections in Chapter 3, "Using the PeopleSoft SPI," or Appendix B, "PeopleSoft SPI Components,". For information on more serious problems, see Chapter 4, "Using Service Views," on page 73.

Using optional Smart Plug-ins

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

• HP OpenView Smart Plug-in for BEA Weblogic Server

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

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

• HP OpenView Smart Plug-in for BEA Tuxedo

Version A.02.00 of the Tuxedo SPI does not support Tuxedo 6.5 bundled with the PeopleSoft software. This issue will be addressed

Chapter 2 33

Installing and Configuring the PeopleSoft SPI Installing the PeopleSoft SPI on the Management Server

with a future version of the Tuxedo SPI.

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 OVOW 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 OVOW Nodes
- Distributing the OVOW Agent to the PeopleSoft Systems
- Assigning Nodes to special Node Group
- Distributing PeopleSoft SPI instrumentation
- Configuring the PeopleSoft SPI to Monitor the Database
- Discovering PeopleSoft Components on the Managed Nodes
- Activating the Configuration on the PeopleSoft Nodes
- Assigning Nodes to Node Groups
- Distributing PeopleSoft SPI Policies

Setting up PeopleSoft Systems as OVOW Nodes

If not already present, add those PeopleSoft systems in your environment as OVOW nodes, which you want to monitor with the HP OpenView Smart Plug-In for PeopleSoft. To add a system, consult the appropriate OVOW help system if necessary

Distributing the OVOW Agent to the PeopleSoft Systems

Check that the correct version of the OVOW agent software is installed and running on the PeopleSoft node you want to set up and monitor with the PeopleSoft SPI. If no OVOW agent is present, install the OVOW

Chapter 2 35

Installing and Configuring the PeopleSoft SPI

Configuring the PeopleSoft SPI to Manage PeopleSoft Systems

agent software on the PeopleSoft systems by using the standard OVOW agent distribution method. For details, please consult the OVOW help system.

Assigning Nodes to special Node Group

All PeopleSoft systems which are to be monitored by the PeopleSoft SPI must be made a member of the node group PS All Server, which is introduced by the SPI. This assures that all PeopleSoft servers receive the set of policies which are common to all PeopleSoft managed nodes.

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 automatically assigns the correct templates in turn to the PeopleSoft nodes. Since the PeopleSoft SPI policies are configured as *auto deploy* policies, there is no need to deploy manually.

NOTE

Note that the OVOW management server has to be assigned to this special node group, too.

Distributing PeopleSoft SPI instrumentation

To distribute the PeopleSoft SPI instrumentation to the PeopleSoft systems which you want the PeopleSoft SPI to monitor, follow the OVOW instructions to deploy an instrumentation and select the following instrumentation packages:

- SPI for PeopleSoft
- SPI Data Collector
- Microsoft Windows

This package has to be deployed to all nodes assigned to the SPI node group PS All Server (you assigned all PeopleSoft servers which are to be monitored to this node group in the last step).

Configuring the PeopleSoft SPI to Monitor the Database

If you want the PeopleSoft SPI to monitor the PeopleSoft database and to be able to gather database related metrics, you have to configure the database monitoring component of the PeopleSoft SPI before the discovery step is executed. This process applies *only* to the PeopleSoft database servers and is the same as the process used by the OVOW Smart Plug-in for Databases. For more information, see the product-specific documentation supplied with the HP OpenView Smart Plug-in for Databases.

This configuration has to be performed using the tools which are installed via the Smart Plug-in for Databases.

NOTE

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

- The name of the PeopleSoft databases are configured as TNS names in the tnsnames.orafile. You may check this using the Oracle tool tnspingwith the PeopleSoft database 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.

NOTE

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

- Each PeopleSoft database name must appear as an ODBC datasource name. The name of the actual MSSQL database - which is configured in this ODBC datasource - 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

Chapter 2 37

information to connect to the database server.

Special installation notes for the SPI for Databases (DBSPI)

IMPORTANT

The next paragraph is important if you use the *Microsoft SQL Server* on the Peoplesoft database servers.

The current versions (6/7) 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 <code>isql.exe/osql.exe</code> programs which are used to evaluate the special PeopleSoft SPI database metrics.

Workaround (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

The next paragraph is important if you have to enable the trace mode of the *SPI for Microsoft SQL Server* on the Peoplesoft database servers.

The current version (6/7) of the *SPI for Microsoft SQL Server* cannot trace metrics 3792 of the PeopleSoft SPI. This is due to a limitation in the trace buffer of the DBSPI.

There is no workaround besides 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 Discoveryon all nodes in node group PS All Server.

Note that in order to be able to perform this discovery step, the SPI instrumentation must have been deployed to the PeopleSoft nodes.

PeopleSoft Installation (PS_HOME)

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

This is done in multiple steps:

1. User specified locations

If the user has specified some installation directories 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).

Oracle Installation (ORACLE HOME)

If the PeopleSoft installation uses Oracle as the database and once a valid PS_HOME has been found, the SPI tries to determine the value of the environment variable ORACLE HOME for this installation.

This search for this variable is done in the following sequence:

- Environment variable ORACLE HOME
- Windows registry entries for Oracle

If the Oracle installation cannot be found, then the missing information has to be entered manually into the discovery file.

Tuxedo Installation (TUXDIR)

Next, the SPI tries to determine the value for the environment variable TUXDIR.

The search is done using in the steps:

• Environment variable TUXDIR. Note that this variable must be configured as a system environment variable according to the Peoplesoft Installation Guide.

Chapter 2 39

PeopleSoft Application Servers

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

All directories

• <PS_HOME>/appserv/<Domain>

are searched for a file psappsrv.cfq.

If this directory and file are found, the SPI extracts the variables

- DBName
- DBType

from the Application Server configuration file.

Please note that these variables must start in column 1.

Process Schedulers

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

All directories

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

are searched for a file psprcs.cfg.

If this directory and file are found, the SPI extracts the variables

- DBType
- PrcsServerName

from the Process Scheduler configuration file.

Please note that these variables must start in column 1.

General Discovery Strategy and Prerequisites

The information found during this discovery phase is written to the psspi.disc file on the OVOW 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 and verifying the changes using the PSSPI-Admin: Verify PS Cfg

application, the PSSPI-Admin:PS Activate application must be used to activate the edited file. Please note that the discovery file is copied back automatically to the OVOW management server only after the activation step.

Please note that before you may 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 96 for detailed information regarding the file syntax.

Performing the Discovery

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

- 1. add the database owner to the discovery file manually, or
- 2. ensure the databases which are referenced by any PeopleSoft databases are running when you execute the PS Discovery application

NOTE

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. For more information on how to help the PS Discovery application to find multiple PS_HOME instances, see "Searching for Multiple PS_HOME Directories" on page 128.

To start the discovery process:

1. Start he PS Discovery tool in the tool group, PS SPI Admin and select the node group PS All Server. The PS Discovery tool

Chapter 2 41

Installing and Configuring the PeopleSoft SPI

Configuring the PeopleSoft SPI to Manage PeopleSoft Systems

executes a script on the OVOW managed nodes.

The discovery program checks the node-specific PeopleSoft configuration, generates information concerning the installed PeopleSoft components, and then writes the findings to the file

<OVOAgentInstallDir>/psspi/conf/psspi.disc on the managed
node. This file is subsequently transferred back to the OVOW
management server, where it is stored in

<OVOServerInstallDir>/psspi/disc/<node_name>, and the contents
displayed along with instructions for the user.



Figure 2-1 PS Discovery Application Example Output

Chapter 2 43

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. In the example illustrated in Figure 2-1, one machine, called siamon, is database, batch, and application server. 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 application may take some time to complete.

Assigning Nodes to Node Groups

Follow the instructions generated by the PS Discovery application and use the information displayed to put the PeopleSoft nodes into the node groups suggested. For example, PeopleSoft batch servers go into the PS Batch Server node group. Figure 2-1 on page 43 gives a sample of the PS Discovery application output.

Since the appropriate PeopleSoft policies and policiy groups are assigned by default to the respective PeopleSoft node groups, dragging and dropping the PeopleSoft nodes to the PeopleSoft node groups recommended by the PS Discovery application automatically assigns the correct policies in turn to the PeopleSoft nodes you are add in this step. However, you still have to *deploy* the policies to the PeopleSoft nodes. For more information, see "Distributing PeopleSoft SPI Policies" on page 44.

NOTE

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

Distributing PeopleSoft SPI Policies

The PeopleSoft SPI policies are organized into specific policy groups according to system type: 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 policies: the PeopleSoft policy groups and, by implication, their contents, are assigned by default to the PeopleSoft node groups.

Since the PeopleSoft policy groups are configured as *auto deploy*, there is no need to manually deploy the policies.

Note that deploying the policies to the PeopleSoft managed nodes automatically activates the PeopleSoft SPI monitoring on those nodes.

NOTE

Messages intercepted by the PSSPI-DBSPI-Messages policy supplied with the PeopleSoft SPI duplicate messages intercepted by the DBSPI. If the DBSPI is already installed (and the DBSPI policies already assigned and deployed) and you want to avoid duplicate messages arriving from the database server, you should disable the PSSPI-DBSPI-Messages policy using the standard OVOW means.

Chapter 2 45

De-installing the PeopleSoft SPI

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

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

NOTE

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

De-installing from Managed PeopleSoft Systems

To remove the HP OpenView Smart Plug-In for PeopleSoft components from the OVOW managed nodes:

- 1. De-assign the PeopleSoft SPI policies from the PeopleSoft systems:
 - a. Remove the appropriate PeopleSoft systems from the appropriate PeopleSoft SPI node group.
 - b. Remove the policies from the selected PeopleSoft systems.
- Execute the tool PSSPI Cleanup (in the PSSPI-Admin tool group) on the managed node where you want to de-install the PeopleSoft SPI. The PSSPI Cleanup tool removes the local SPI components from the selected managed nodes.
 - The de-installation script psspi_clean can also be called manually (with the -n(ode) option) on the OVOW managed node.
- 3. Cleanup the DBSPI components, if appropriate, using the DBSPI Cleanup.

NOTE

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

De-installing from the OVOW Management Server

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

- 1. Remove the PeopleSoft SPI software from the OVOW management server by using standard Windows mechanism to remove installed software.
- 2. Deploy the instrumentation needed for other SPIs to *all* PeopleSoft managed nodes and mark the checkbox "Remove existing instrumentation ...": this removes all PeopleSoft SPI components.
- 3. Cleanup the GUI by removing the PeopleSoft-specific elements, such as:
 - Node Groups
 - Tools and Tool Groups
 - Policy Groups
 - Services
 - User Roles

Chapter 2 47

Installing and Configuring the PeopleSoft SPI

De-installing the PeopleSoft SPI

3 Using the PeopleSoft SPI

This section describes what you get with the HP OpenView VantagePoint 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 OVOW Managed Node Groups"
- "The New OVOW Tool Groups"
- "The New OVOW User Roles"
- "The New OVOW Policies"

Introduction

If you are already familiar with OpenView Operations for Windows, you will notice that the installation and configuration of the HP OpenView Smart Plug-In for PeopleSoft has added a number of new pre-configured components to the GUI, specifically to the Nodes section, as well as to the Policy Management, Tools, Services and User Roles section.

A set of new, pre-configured node groups allow you to organize your PeopleSoft systems within OVOW 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 OVOW Managed Node Groups" on page 52 and "The New OVOW User Roles" on page 60.

The PeopleSoft SPI also provides a large number of tools that are conveniently organized into groups and specifically designed to help you take advantage of the powerful problem-solving capabilities of OVOW 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 OVOW Tool Groups" on page 53.

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 OVOW Policies" on page 61.

The New OVOW Managed Node Groups

The following OVOW 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 All Server
- PS App Server
- PS Batch Server
- PS DB Server
- PS Web 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 policy groups specific to the PeopleSoft SPI are also assigned by default to the corresponding PeopleSoft node groups.

NOTE

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

The New OVOW Tool Groups

After the successful installation of the HP OpenView Smart Plug-In for PeopleSoft, a number of new OVOW tool groups appear in the Tools.

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

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

The sections that follow describe the individual PeopleSoft tool groups in more detail, list the tools that the groups contain, and explain what the various tools do. Note that the tools 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 OVOW management server *and* the PeopleSoft systems you want the PeopleSoft SPI to monitor.

The PSSPI-Admin Tool Group

The PSSPI-Admin tool group contains tools intended for OVOW administrators who are working specifically on PeopleSoft SPI administration. The tools are started as Windows user Administrator and either can or must be used when installing, configuring, operating, and troubleshooting the PeopleSoft SPI. For more information on which utilities are called by the individual tools, see "Tools and Tool Groups" on page 112 in Appendix B , "PeopleSoft SPI Components,".

Table 3-1 on page 54 lists in alphabetical order the various tools in the PSSPI-Admin application group, describes briefly how the individual tools work, and indicates which function is called by each tool and which

Using the PeopleSoft SPI The New OVOW Tool Groups

PeopleSoft interface is used.

Table 3-1 PSSPI-Admin Tools

Tool Name	Description	
Activate PS Services	Activates the generated service model for the default OVOW user roles PeopleSoft Admin and PeopleSoft User.	
Build PS Services	Builds a service model for PeopleSoft environment from discovered information.	
PS Activate	Activates the discovered PeopleSoft components and creates a ps.cfg file on the selected system	
	This action copies the discovery information from the managed node to the management server.	
PS Analyze	Analyzes the PeopleSoft components discovered by PS Discovery on all PeopleSoft systems	
PS Discovery	Discovers PeopleSoft components on the nodes you have selected	
PSSPI Cleanup	Removes all files and persistent information pertaining to the PeopleSoft SPI on the selected node	
PSSPI Off	Switches <i>OFF</i> the monitoring components of the PSSPI (except database metrics) on the selected node	
PSSPI On	Switches <i>ON</i> the monitoring components of the PSSPI (except database metrics) on the selected node	
PSSPI Trace Off	Switches <i>OFF</i> the generation of trace information from the PSSPI components (except database metrics) on the selected node	
PSSPI Trace On	Switches <i>ON</i> the generation of trace information from the PSSPI components (except database metrics) for the selected node	
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	

Table 3-1 PSSPI-Admin Tools

Tool Name	Description
Verify PSSPI Com	Verifies that the communication between managed node and management server is working correctly for PeopleSoft messages, and generates a report about the results for the selected node
Verify Node Inst	Checks the installation of the PSSPI on the OVOW managed node is correct and uses the findings to generate a report for the selected node
Verify Svr Inst	Verifies that the installation of the PSSPI on the OVOW management server is correct then uses the findings to generate a report
View PSSPI Cfg	Displays the PSSPI configuration file psspi.cfg, which contains settings for tracing for the selected node
View PS Cfg	Displays the PeopleSoft configuration file psspi.disc, which lists the managed PeopleSoft components for the selected node
View PSSPI Error	Displays the contents of the PSSPI error log file on the selected node
View PSSPI Trace	Displays the contents of the PSSPI trace file on the selected node

The PSoft-Admin Tool Group

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

Note that all tools in the PSoft-Admin tool group are started as Windows user Administrator. For more information on which utilities are called by the individual tools, see "Tools and Tool Groups" on page 112 in Appendix B, "PeopleSoft SPI Components,".

Table 3-2 on page 56 lists in alphabetical order the various tools in the PSoft-Admin tool group, describes briefly how the individual tools work, and indicates which function is called by each tool and which PeopleSoft

interface is used

Table 3-2 PSoft-Admin Applications

Tool Name	Description	
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.	
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 Tool Group

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

Note that all tools in the PSoft-Oper application group are started as Windows user Administrator. For more information on which utilities are called by the individual applications, see "Tools and Tool Groups" on page 112 in Appendix B, "PeopleSoft SPI Components,".

Table 3-3 on page 57 lists in alphabetical order the various tools in the PSoft-Oper tool group, describes briefly how the individual tools work, and indicates which function is called by each tool and which PeopleSoft

interface is used.

Table 3-3 PSoft-Oper Applications

Tool 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 All PS Domains	Boots all the PS domains (both administration and application servers), which are listed in ps.cfg	
Boot PS Domain	Boots a PS domain (both administration and application servers).	
	Domain must be specified via additional arguments using -d domain	
File Systems	Displays statistics on file systems and their usage.	
Restart All PS Domains	Shuts down and reboots all the PS domains (both administration and application servers), which are listed in ps.cfg	
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. All PS Domains	Shuts down all the PS domains listed in the file ps.cfg	
Shutd. Adm Servers	Shuts down all the PS administration servers.	
Shutd. Appl Servers	Shuts down all the PS application servers.	

Table 3-3 PSoft-Oper Applications

Tool Name	Description	
Start Proc Sched	Starts a process scheduler process.	
	Database must be specified via additional arguments using -d <i>DB</i>	
Start All Proc Scheds	Starts <i>all</i> the process scheduler processes, which are listed in ps.cfg (PeopleSoft 7.5 and higher <i>only</i>).	
Stop All Proc Scheds	Stops <i>all</i> the process scheduler processes, which are listed in ps.cfg (PeopleSoft 7.5 and higher <i>only</i>).	
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 logfile of a PS domain.	
View TUXLOG	Displays the contents of the latest Tuxedo logfile of a PS domain.	
View PRCS Log	Displays the contents of the latest process-scheduler logfile.	

The PSoft-Reports Tool Group

This PSoft-Reports tool group contains tools intended for OVOW users working in information-retrieval mode. The tools are granted read-only rights and may be used to create reports on the PeopleSoft environment. All tools are started as Windows user Administrator. For more information on which utilities are called by the individual applications, see "Tools and Tool Groups" on page 112 in Appendix B , "PeopleSoft SPI Components,".

Table 3-4 on page 59 lists in alphabetical order the various tools in the PSoft-Reports tool group, describes briefly how the individual tools work, and indicates which function is called by each tool and which PeopleSoft interface is used.

Table 3-4 PSoft-Reports Tools

Tool Name	Description
PS Status	This application generates a status report on all PeopleSoft components on the selected node.
PS 2-Tier Conn	Generates a report on the number and origin of 2-tier connections to the PeopleSoft database.
Proc Sched Status	Generates a status report on the PeopleSoft process scheduler. All valid options for the pspt command may be used.
PS Job Status	Generates a report on the status of all PeopleSoft batch jobs on the selected node.
PS/TX Versions	Generates a report on the PeopleSoft/Tuxedo software version on the selected node.
PS Worklist Status	Generates a report on the status of the entries in the PeopleSoft worklist table.
Tblspace Files	List data files for all table spaces of the PS database
Tblspace Fragmnt	Generate a report on tablespace fragmentation
Tblspace Free	List free tablespace
Tblspace Status	Lists the status of table space
TX Client Status	Generates a report with information on the current PeopleSoft user activity.
TX Server Status	Generates a status report on the current PeopleSoft servers
TX Queue Status	Generates a status report on the current PeopleSoft queues.

The New OVOW User Roles

After the successful installation of the HP OpenView Smart Plug-In for PeopleSoft, two new OVOW user roles are available for assignment to real OVOW users. For details on how to assign user roles to users, please consult the OVOW help system.

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

PeopleSoft Admin is responsible for the administrative aspects of the PeopleSoft environment

PeopleSoft User is responsible for monitoring the operational aspects of the PeopleSoft environment

Table 3-5 on page 60 shows at a glance which new components of the HP OpenView Smart Plug-In for PeopleSoft are assigned by default to which new user role. These assignments can easily be reviewed and, where necessary, modified using standard OVOW means.

Table 3-5 Default User Role Assignments

New Component		PeopleSoft Admin	PeopleSoft User
Node Group	PS App Server	√	✓
	PS Batch Server	✓	✓
	PS DB Server	✓	1
	PS Web Server	✓	✓
Tool Group	PSSPI-Admin	✓	
	PSoft-Admin	✓	
	PSoft-Oper	✓	✓
	PSoft-Reports	✓	✓

The New OVOW Policies

The HP OpenView Smart Plug-In for PeopleSoft installs a number of new policy groups which contain all the policies you need to manage the PeopleSoft environment. For example, the PeopleSoft server processes can be monitored using a pre-defined process monitor provided as part of the PeopleSoft SPI. In addition the PeopleSoft server log files can be monitored with log-file policy. The policies and policy groups have to be deployed using the standard OVOW mechanisms. For more information on assigning and deploying templates in OVOW, see "Distributing PeopleSoft SPI instrumentation" on page 36.

The policy groups installed by the PeopleSoft SPI are:

- SPI for PeopleSoft
- PSSPI-Win All Server
- PSSPI-Win_App_Server
- PSSPI-Win Batch Server
- PSSPI-Win MSSDB Server
- PSSPI-Win OraDB Server
- PSSPI-Win Web Server

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

The four main policy groups which you may assign to the appropriate PeopleSoft nodes or node groups are explained in greater detail in the individual sections that follow. For more information on the scripts which the policy and PeopleSoft SPI monitors use, see "Policies" in Appendix B, "PeopleSoft SPI Components."

NOTE

Note that the OVOW Management Server has to be assigned to the PeopleSoft SPI node group PSSPI-Win All Server, too.

In addition, all the PeopleSoft servers which should be monitored by the SPI should be assigned to this group.

NOTE

Note that only one the policy groups PSSPI-Win_MSSDB_Server and PSSPI-Win_OraDB_Server may 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-Win_App_Server Policy Group

Table 3-6 on page 63 lists the policies in the PSSPI-Win_App_Server policy group, indicates each policys type, and gives a brief description of

what is monitored and how.

Table 3-6 PSSPI-Win_App_Server Policies

Policy Type	Policy Name	Description
Monitor	PSSPI-Win_AppSrvLogSize	Monitors the application-server log directory for the amount of disk space consumed by the APPSRV.LOG and TUXLOG. <date> files</date>
	PSSPI-Win_FileSys	Monitors UNIX file-system space - checks all local file systems
	PSSPI-Win_TMIB-001_1	Monitors the status of the Tuxedo domains of a PeopleSoft application server
	PSSPI-Win_TMIB-005_1	Monitors the actual number of APPSRV server processes and compares the it with TA_MIN
	PSSPI-Win_TMIB-006_1	Monitors the actual number of APPSRV server processes and compares it with TA_MAX
	PSSPI-Win_TMIB-007_1	Monitors the generation number TA_MAXGEN - TA_GENERATION
	PSSPI-Win_TMIB-008_1	Monitors the actual (absolute) number of APPSRV processes.
	PSSPI-Win_TMIB-010_1	Monitors the number of GUI clients
	PSSPI-Win_TMIB-Col-05min_1 a	Runs the TMIB collector process to gather DB metrics every <intv> minutes. In this case intv = 5 mins. Note that there may be multiple templates with different <intv>. Actual data processing is done in monitors TMIB-<metric>. In addition, this collector checks for Tuxedo domains which are currently down.</metric></intv></intv>
	PSSPI-Win_TMIB-Col-05min_2	This TMIB collector checks for Tuxedo domains which are currently up.

Using the PeopleSoft SPI The New OVOW Policies

Table 3-6 PSSPI-Win_App_Server Policies

Policy Type	Policy Name	Description
Logfile	PSSPI-Win_AppSrvCfgFiles	Monitors changes to the application-server configuration file, psappsrv.cfg
	PSSPI-Win_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.
	PSSPI-Win_TUXLogDirs	Monitors the PeopleSoft domain log directories for new TUXLOG files.
	PSSPI-Win_TUXLogFiles	Monitors the TUXLOG. <date> log files for each PeopleSoft domain</date>
		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-Win_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 109.

The PSSPI-Win_Batch_Server Policy Group

Table 3-7 on page 65 lists the policies in the PSSPI-Win_Batch_Server policy group, indicates each policys type, and gives a brief description of

what is monitored and how.

Table 3-7 PSSPI-Win_Batch_Server_1 Policies

Policy Type	Policy Name	Description
Message	PSSPI-Win_PSSPI-Messag es	Intercepts messages from the PeopleSoft SPI programs
Logfile	PSSPI-Win_PrcsLogDirs	Monitors the PeopleSoft, process-scheduler log directories. Checks for new log files and switches the actual log file
	PSSPI-Win_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-Win_PrcsLogSize	Monitors the size of the process scheduler log directory and the disk space consumed by the process scheduler log files files
	PSSPI-Win_PrcsJobTab	Checks the process scheduler table and the job-table entries
	PSSPI-Win_PrcsMon	Monitors the existence of the process scheduler process.

The PSSPI-Win_OraDB_Server Policy Group

Table 3-9 on page 68 lists the policies in the PSSPI-Win_OraDB_Server policy group, indicates each policys type, and gives a brief description of what is monitored and how.

NOTE

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

NOTE

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

NOTE

If the same database metrics as listed in Table 3-8 are to be computed using the original DBSPI policies, it may happen that more than one DBSPI collector is accessing a PeopleSoft database at the same time.

Per default, such overlapping metrics are detected by the DBSPI collectors and a warning message is written to the DBSPI log file - and shown in the OVOW message browser.

To avoid these messages - and to avoid the additional load on the managed node - you may want to disable these multiply defined metrics in one of the SPI's, whether the DBSPI or the PeopleSoft SPI.

This may be done by removing the appropriate metric number from the collector policy. For the PeopleSoft SPI, this collector policy is PSSPI-Win_OraDB-Col-05Min_1. For the DBSPI, this collector template is DBSPI-Ora-05min, DBSPI-Ora-05min-Favorites or DBSPI-Ora-05minSQLNet.,

Table 3-8 PSSPI-Win_OraDB_Server Policies

Policy Type	Policy Name	Description
Message	PSSPI-Win_DBSPI-Messages	Intercepts messages from the DBSPI programs
	PSSPI-Win_PSSPI-Messages	Intercepts messages from the PeopleSoft SPI programs
Monitor	PSSPI-Win_OraDB-Col-05Min	Runs the collector process to gather DB metrics every 5 minutes
	PSSPI-Win_DBSPI-0006	Monitors the number of table spaces with low free space (TblSpaceFreePctCnt)

Table 3-8 PSSPI-Win_OraDB_Server Policies

Policy Type	Policy Name	Description
	PSSPI-Win_DBSPI-00011	Monitors the number of fragmented table spaces (TblSpaceFragmentCnt)
	PSSPI-Win_DBSPI-0791	Number of employees
	PSSPI-Win_DBSPI-0792	Number of queue jobs
	PSSPI-Win_DBSPI-0793	Number of 2-tier client connections: i.e. the number of clients working in 2-tier mode
	PSSPI-Win_FileSys	Monitors the PeopleSoft file-system space
	PSSPI-Win_WorkList	Checks the PeopleSoft work-list table

The PSSPI-Win_MSSDB_Server Policy Group

Table 3-9 on page 68 lists the policies in the PSSPI-Win_MSSDB_Server policy group, indicates each policys type, and gives a brief description of what is monitored and how.

NOTE

This policy group is meant for PeopleSoft database servers operated by the Microsoft SQL Server 2000 RDBMS.

NOTE

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

NOTE

If the same database metrics as listed in Table 3-9are to be computed using the original DBSPI policies, it may happen that more than one DBSPI collector is accessing a PeopleSoft database at the same time.

Using the PeopleSoft SPI The New OVOW Policies

Per default, such overlapping metrics are detected by the DBSPI

Per default, such overlapping metrics are detected by the DBSPI collectors and a warning message is written to the DBSPI log file - and shown in the OVOW message browser.

To avoid these messages - and to avoid the additional load on the managed node - you may want to disable these multiply defined metrics in one of the SPI's, whether the DBSPI or the PeopleSoft SPI.

This may be done by removing the appropriate metric number from the collector policy. For the PeopleSoft SPI, this collector policy is PSSPI-Win_MSSDB-Col-05Min_1. For the DBSPI, this collector template is DBSPI-MSS-05min, DBSPI-MSS-05min-Favorites.

Table 3-9 PSSPI-MSSDB_Server Policies

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

The PSSPI-Win_Web_Server Policy Group

Table 3-7 on page 65 lists the templates in the PSSPI-Win_Web_Server policy group, indicates each policys type, and gives a brief description of what is monitored and how.

Table 3-10 PSSPI-Win_Web_Server Policies

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

Policies on Cluster Nodes

The PeopleSoft SPI policies continue to generate messages and send them to the OVOW 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 OVOW 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 OVOW resource group is switched off on the managed node:

```
opctemplate -d PSSPI-Win_AppSrvLogFiles
opctemplate -d PSSPI-Win_AppSrvCfqFiles
opctemplate -d PSSPI-Win AppSrvLogSize
opctemplate -d PSSPI-Win_TUXLogDirs
opctemplate -d PSSPI-Win_TUXLOgFiles
opctemplate -d PSSPI-Win FileSys
opctemplate -d PSSPI-Win_TMIB-Col-05min_1
opctemplate -d PSSPI-Win_TMIB-Col-05min_2
ocptemplate -d PSSPI-Win PrcsLogDirs
opctemplate -d PSSPI-Win_PrcsLogFiles
opctemplate -d PSSPI-Win_PrcsLogSize
opctemplate -d PSSPI-Win PrcsMon
opctemplate -d PSSPI-Win_PrcsJobTab
opctemplate -d PSSPI-Win_OraDB-Col-05min
opctemplate -d PSSPI-Win MSSDB-Col-05min
opctemplate -d PSSPI-Win_WorkList
opctemplate -d PSSPI-Win_WebLogFiles
opctemplate -d PSSPI-Win_WebMon
```

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

```
opctemplate -e PSSPI-Win_AppSrvLogFiles
```

Using the PeopleSoft SPI Policies on Cluster Nodes

```
opctemplate -e PSSPI-WinAppSrvCfgFiles
opctemplate -e PSSPI-WinAppSrvLogSize
opctemplate -e PSSPI-Win_TUXLogDirs
opctemplate -e PSSPI-Win_TUXLOgFiles
opctemplate -e PSSPI-Win_FileSys
opctemplate -e PSSPI-Win_TMIB-Col-05min_1
opctemplate -e PSSPI-Win_TMIB-Col-05min_2
ocptemplate -e PSSPI-Win_PrcsLogDirs
opctemplate -e PSSPI-Win_PrcsLogFiles
opctemplate -e PSSPI-Win_PrcsLogSize
opctemplate -e PSSPI-Win_PrcsMon
opctemplate -e PSSPI-Win_PrcsJobTab
opctemplate -e PSSPI-Win_OraDB-Col-05min
opctemplate -e PSSPI-Win_MSSDB-Col-05min
opctemplate -e PSSPI-Win_WorkList
opctemplate -e PSSPI-Win_WebLogFiles
opctemplate -e PSSPI-Win_WebMon
```

Using the PeopleSoft SPI Policies on Cluster Nodes

4 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 you will find information concerning:

- Service Views with the PeopleSoft SPI
- The System View
- The Instance View
- Resources and Processes
- Pre-defined Tools
- 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 Windows, you can make use of the service model which allows you to display a logical view of all the monitored components in your user environment.

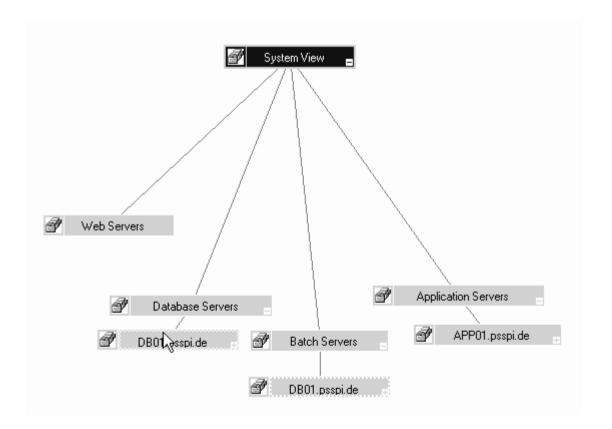
From a PeopleSoft perspective, the PeopleSoft SPI uses the service model to display all PeopleSoft components (database, application, web and batch servers) and any dependencies both in terms of the systems on which the PeopleSoft components are running, that is; a *system* view and, if necessary, the logical view of each installed PeopleSoft instance, the *instance* view. For more information on the system view, see "The System View" on page 76. For more information on the instance view, see "The Instance View" on page 78.

Chapter 4 75

The System View

The PeopleSoft SPI uses the service model 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 4-1 on page 76 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.

Figure 4-1 A System View of the PeopleSoft Environment

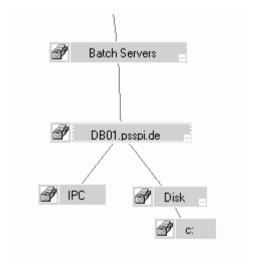


There are four different system types each represented by a service icon:

- database servers
- application servers
- batch servers
- web servers (only servers bundled with PT 8.1, i.e. Apache)

Note that any one system can be linked to more than one system-type icon (e.g. a database server can also be an application server) and each of the system icons has a dependency on a *real* system icon in the OS (operating system) name space.

More detailed information is available or each system listen in the system view:

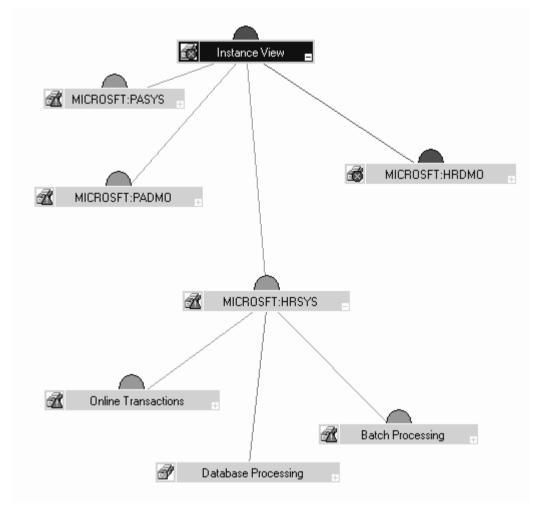


Chapter 4 77

The Instance View

The PeopleSoft SPI can also use the service model 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 such as PeopleSoft Databases like **HR** (Human Resources) and **Finance**. Figure 4-2 on page 79 illustrates an example of just such an instance view, where PTDMO and HR700 are instance names.

Figure 4-2 An Instance View of the PeopleSoft Environment

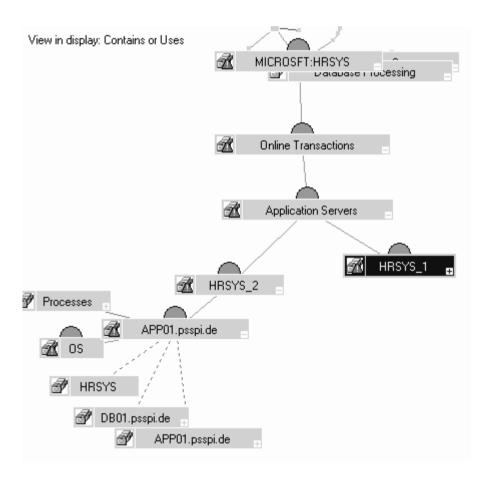


Each top-level PeopleSoft instance, such as HR or Finance, depends on a logical component like Batch Processing or Online Transactions, which in turn have a dependency on the *real* database, the application server, and the process scheduler subsystem. Note that there can be multiple process schedulers on different systems each represented in the service model by a single system icon. The application server depends on one or more Tuxedo domains, which in turn can reside on different systems.

Chapter 4 79

The Instance View

Each system has dependencies on relevant components in the OS name space, and this might affect the availability of the service. For example, the application server depends on all IPC resources but only on specific file systems on this system.



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 OVOW management server. The propagation rules that determine which high level services are affected by the failure of low-level processes and resources is built into the service-tree definition. The low-level component names contain intermediate instance names which provide uniqueness within the service definition. For example the process PSAUTH may show up in multiple locations (at least once for each PeopleSoft domain). Consequently, the name of the service representing PSAUTH contains the name of the particular PeopleSoft domain.

The following is an example of a service name:

PS SPI: ramses.bbn.hp.com:AppSrv:pt700ora:PSAUTH

where:

PS_SPI is the name space ramses.bbn... is the host name

AppSrv is the sub-group (necessary, in this case, to avoid the

situation in which a real DB has the same name as a

Tuxedo domain)

pt700ora is the Tuxedo domain
PSAUTH is the process name

Note that the OVOW policies 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 OVOW message.

Chapter 4 81

Service Discovery, Activation, and Assignment

Once you have all the necessary HP OpenView components installed and running, you can use the pre-defined tools provided with the PeopleSoft SPI to discover the services present in the PeopleSoft domain, build a service model, activate it, and finally assign it to the appropriate user roles.

To build the PeopleSoft service model and activate it:

- 1. Open the PSSPI-Admin tool group.
- 2. Launch the Build PS Services tool to build a service model for the PeopleSoft environment. The Build PS Services tool uses the information stored in the node-specific configuration files residing in the directories created by the PS Activation tool:

 OVOServerInstalllDir>/psspi/conf/<node_name>.
- 3. Launch Activate PS Services tool to activate the newly built service model for the PeopleSoft environment.

Troubleshooting the PeopleSoft SPI

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

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

General Troubleshooting Notes

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

- 1. Establish what version of the HP OpenView Smart Plug-In for PeopleSoft is installed and running. For more information, see "Determining the PeopleSoft SPI Version" on page 86.
- 2. Use the "verification" tools such as Verify PS Cfg and Verify PSSPI Com in the Application Group PSSPI Admin. These tools, 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 87.
- 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 88.
- 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 89.

Chapter 5 85

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 tools 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 tool 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 tools such as Verify PS Cfg and Verify PSSPI Comwhich reside in the Tool 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 tools are available to assist in the verification procedure, see "The PSoft-Admin Tool Group" on page 55.

Chapter 5 87

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:

OVOW Server <OVOServerInstallDir>/psspi/log/psspi.log

OVOW Mgd Node <OVOAgentInstallDir>/psspi/log/psspi.log

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

It is also useful to check the standard OVOW error-log file for information:

<OVOAgentInstallDir>/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, provided 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.

To generate information on the working of the PeopleSoft SPI, enable tracing by running the PSSPI Trace On tool in the PSSPI-Admin tool group. Tracing output is written to the following files:

OVOW Server <OVOServerInstallDir>/psspi/log/psspi.trc

OVOW Mgd Node <OVOAgentInstallDir/psspi/log/psspi.trc

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

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

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.

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

Table 5-1 Trace Variables

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

Chapter 5 89

Troubleshooting the PeopleSoft SPI

PeopleSoft SPI Tracing

Entries in the trace file, psspi.trc, appear in the following format: <mm/dd/yyyy> <hh:mm:ss> PSSPI(cprogram name>-<pid>): <text>
Table 5-2 on page 90 lists and describes the various fields.

Table 5-2 Trace-File Fields

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

A File Names

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

- Files on the Management Server
- Files on the Managed Nodes
- PeopleSoft Configuration Files

Files on the Management Server

The PeopleSoft SPI exists as an MSI bundle and must be installed on the OVOW management server. Note that this is usually done with the HP OpenView SPI Installer program. Control scripts perform a number of customization procedures during installation and, in addition, create the directories listed in Table A-1 on page 93:

Table A-1 PeopleSoft SPI File Locations on the OVOW Management Server

Description	Location All files relative to the OVOW Server Installation directory!
SPI binary files	./psspi/bin
SPI temporary and runtime files	./psspi/tmp
SPI log files	./psspi/log
SPI configuration files	./psspi/conf
OVOW policies	./install/psspi
Instrumentation packages for managed nodes	./Instrumentation/Windows 2000/5.0/PSSPI ./Instrumentation/Windows Server 2003/5.2/PSSPI

Files on the Managed Nodes

After installing the HP OpenView Smart Plug-In for PeopleSoft on the OVOW Management Server and deploying the instrumentation to the PeopleSoft systems (which become, as a result, OVOW managed nodes), the components listed in Table A-2 on page 94 will reside on the managed node:

Table A-2 PeopleSoft SPI File Locations on the OVOW Managed Nodes

Description	Location All files relative to the OVOW agent installation directory!	Created By
SPI binary files	./bin/instrumentation	OVOW agent
SPI temporary and runtime files	./psspi/tmp	SPI
SPI log files	./psspi/log	SPI
SPI configuration files	./psspi/conf	SPI

PeopleSoft Configuration Files

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

- psspi.cfg
- psspi.disc
- ps.cfq

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

The psspi.cfg Configuration File

The configuration file <OVOAgentInstallDir>/psspi/conf/psspi.cfg can be used to control the overall behavior of PeopleSoft SPI components on the PeopleSoft system that is managed by OVOW. The following example illustrates the contents of the psspi.cfg file:

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

PeopleSoft Configuration Files

starting with a hash (#) sign are treated as comments. Table A-3 on page 96 show which keys are supported in the psspi.cfg file:

Table A-3 Supported Keys in the psspi.cfg File

Key	Туре	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 tool writes its findings to the file <OVAgentInstallDir>/psspi/conf/psspi.disc, which is sent back to the OVOW management server by the tool PS Activate to be converted into the OVOW service model.

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 tool PS Activate.

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

<OVServerInstallDir>/psspi/disc/<node name>

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

```
# File: psspi.disc
# Description: PeopleSoft SPI information base. Automatically
# generated by discovery process.
# Language: Config
# Package: HP OpenView VantagePoint SmartPlug-In for PeopleSoft
# (c)Copyright 2003 Hewlett-Packard Company., All Rights Reserved.
# Global PeopleSoft-specific entries for this host.
# NOTE: These entries must correspond to the actual number of Tuxedo domains,
       PeopleSoft process schedulers, bundled web servers, PeopleSoft
       databases, PeopleSoft instances and file systems.
# OS_VERS ... name of operating system and its version
# NUM DOMAINS ... number of entries in the section 'DOMAIN'
# NUM PRCS ... number of entries in the section 'PROC SCHED'
# NUM_WEB_SRV ... number of entries in the section 'WEB_SRV'
# NUM PS DBS ... number of entries in the section 'PS DB'
# NUM PS INST ... number of entries in the section 'PS INST'
# NUM_FS ... number of entries in the section 'FILE_SYS'
OS_VERS HP-UX B.11.00
NUM_DOMAINS; 2
NUM_PRCS;1
NUM WEB SRV; 0
NUM_PS_DBS; 2
NUM_PS_INST;1
NUM FS;4
#-----
# List of Tuxedo Domains used by PeopleSoft. Each entry has the following format:
# - Domain-Name PSoft-Database PSoft-DB-Type
# Domain-Name ... name of the Tuxedo domain, i.e. the name of the directory
                   in $PS_HOME/appserv for this domain
# PSoft-Database ... name of the PeopleSoft database for this domain
# PSoft-DB-Type ... type of the database (e.g. ORACLE, MICROSFT)
# NOTE: The 'PSoft-Database', i.e. the name of the PeopleSoft database is used
       in section 'PS_DB' again. Thus, each 'PSoft-Database' listed in this
       section 'DOMAIN' must correspond to an entry in section 'PS_DB'.
```

File Names

DOMATN

PeopleSoft Configuration Files

```
tm1tux; TM1PSDMO; MICROSFT;
pt700ora;PTDMO;MICROSFT;
END
#-----
# List of PeopleSoft Process Schedulers. Each entry has the following format:
# - Scheduler-Name PSoft-Database PSoft-DB-Type Log-Dir
# Scheduler-Name ... name of the process scheduler as listed for key
                   'PrcsServerName' in scheduler configuration file
# PSoft-Database ... name of the PeopleSoft database for this scheduler
# PSoft-DB-Type ... type of the database (e.g. ORACLE, MICROSFT)
# Log-Dir ... Log directory for this process scheduler
                   This is not the directory configured in the scheduler
#
                   configuration file, but the directory really used for the
#
                   scheduler logs (e.g. TUXLOG_<date>, SCHDLR_<date>.LOG).
# NOTE: The 'PSoft-Database', i.e. the name of the PeopleSoft database is used
       in section 'PS_DB' again. Thus, each 'PSoft-Database' listed in this
       section 'PROC_SCHED' must correspond to an entry in section 'PS_DB'.
PROC SCHED
PSUNX; TM1PSDMO; MICROSFT; C:\PT842\appserv\prcs\TM1PSDMO\LOGS;
PSUNX; PTDMO; MICROSFT; C:\PT842\appserv\prcs\PTDMO\LOGS;
END
#-----
# List of PeopleSoft Databases. Each entry has the following format:
# - PSoft-Database PSoft-DB-Type PS_HOME PSoft-DB-Owner Ora-DB-Server
# PSoft-Database ... name of the PeopleSoft database referenced from entries
                     in sections 'PROC_SCHED' and 'DOMAIN'
# PSoft-DB-Type
                 ... type of the database (e.g. ORACLE, MICROSFT)
                 ... home/installation directory for the PeopleSoft
# PS_HOME
                     installation this database belongs to
# PSoft-DB-Owner ... the owner of the PeopleTools tables in the database
# Ora-DB-Server ... the name of the system where this Oracle DB is located
#
# NOTE: The 'PS_HOME' entry is used in section 'PS_INST' again. Thus, each
       'PS_HOME' listed in this section 'PS_DB' must correspond to an entry
      in section 'PS_INST'.
TM1PSDMO; MICROSFT; C:\PT842; SYSADM; ramses.bbn.hp.com;
PTDMO; MICROSFT; C:\PT842; SYSADM; ramses.bbn.hp.com;
```

END

```
#-----
# 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 TUXDIR PS VERSION
# PS HOME
         ... home/installation directory for this PeopleSoft installation
# PS USER
          ... installation user for this PeopleSoft installation
              (this Unix id is used to execute the PeopleSoft/Tuxedo
              supplied commands and scripts)
# TUXDIR
          ... the Tuxedo installation directory
# PS_VERSION ... the PeopleTools version of this PeopleSoft installation
PS INST
C:\PT842;psoft;C:\tuxedo;8.42;
END
#-----
# List of PeopleSoft bundled web servers as defined by PS HOME. Each entry is
# represented by a single line having the following format:
# - WEBSRV_HOME TYPE
# - where TYPE is one of { APACHE }
# WEBSRV_HOME ... the home/installation directory of this web server
# TYPE ... may only be 'APACHE'
# NOTE: Only the web servers bundled with PeopleTools are supported in this
      section, i.e. Apache for PT 8.1. Other web application servers have
      to be addressed with optional SPI's.
WEB SRV
END
# List of File systems. The only entry has the following format:
# Mount-point ...
FILE_SYS
C: D:
END
```

Multiple process schedulers accessing the *same* PeopleSoft database are *not* recognized: multiple process schedulers accessing *different* databases are supported.

PeopleSoft Configuration Files

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 Parameters field in the OVOW tool launch window.

In the example below, the discovery is instructed to evaluate all directories matching the pattern "C:\ps*" and "D:\ps*". Alternatively, you can instruct the discovery script to use a recursive *find* to search through one or more specified directories.

For example:

-o "-find c:\ps*" <node name>"

Other options include:

-h(elp), -? Display some help instructions

The PS Analyze tool which resides in the PSSPI-Admin tool group uses a command to analyze the components discovered on the PeopleSoft system. The same command is called automatically after the successful completion of the discovery mechanism and shows which role a PeopleSoft system plays and which OVOW monitoring components need to be assigned.

The ps.cfg Configuration File

The PS Activate tool reads the psspi.disc and copies its contents to the file <*OVAgentInstallDir*>/psspi/conf/ps.cfg, which is evaluated on the managed node by the OVOW policy and tool scripts and, in addition, sent back to the OVOW management server to be converted into the OVOW 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:

<OVAgentInstallDir>/sspi/conf/ps.cfg.<PID>

NOTE

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

File Names

PeopleSoft Configuration Files

B PeopleSoft SPI Components

PeopleSoft SPI Components

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

- Policies
- Tools and Tool Groups
- Service Tools

Policies

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

Many log-file and monitor policies 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 policy executes. If you do not explicitly declare any instances, the script assumes it has to monitor all discovered instances. To modify the PSSPI-Win_TMIB-Col-05min_1 policy 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:

perl -S psspi_tmib.pl PSSPI-Win_TMIB-Col-05min_1 1-10 <domain
name>

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

The Policy repository

Table B-1 on page 105 lists *all* the policies provided with the HP OpenView Smart Plug-In for PeopleSoft in alphabetical order.

Table B-1 All PSSPI Policies

Policy Name	Policy Type	Description
PSSPI-Win_AppSrvLogSize	Monitor	Monitors the application-server log directory for the amount of disk space consumed by the APPSRV.LOG and TUXLOG. <date> files</date>
PSSPI-Win_AppSrvCfgFiles	Logfile	Monitors changes to the application-server configuration file, psappsrv.cfg

Table B-1 All PSSPI Policies

Policy Name	Policy Type	Description
PSSPI-Win_AppSrvLogFiles	Logfile	Monitors the application-server log file, APPSRV.LOG, for each PS domain
PSSPI-Win_DBSPI-Messages	Message	Intercepts messages from the DBSPI programs
PSSPI-Win_OraDB-Col-05min PSSPI-Win_MSSDB-Col-05min	Monitor	Runs the DBSPI collector process (via psspi_dbcax) 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-Win_DBSPI-<metric></metric></intv></intv>
PSSPI-Win_DBSPI-0006	Monitor	Monitors the number of table spaces with low free space (TblSpaceFreePctCnt) (Oracle only)
PSSPI-Win_DBSPI-0011	Monitor	Monitors the number of fragmented table spaces (TblSpaceFragmentCnt) (Oracle only)
PSSPI-Win_DBSPI-0791 PSSPI-Win_DBSPI-3791	Monitor	Number of employees in the PeopleSoft database
PSSPI-Win_DBSPI-0792 PSSPI-Win_DBSPI-3792	Monitor	Number of queue jobs
PSSPI-Win_DBSPI-0793	Monitor	Number of 2-tier client connections: i.e. the number of clients working in 2-tier mode (Oracle only)
PSSPI-Win_DBSPI-3793	Monitor	Number of database connections. (MSS only)
PSSPI-Win_FileSys	Monitor	Monitors the PeopleSoft file-system space
PSSPI-Win_PrcsJobTab	Monitor	Checks the process-scheduler table and the job-table entries

Table B-1 All PSSPI Policies

Policy Name	Policy Type	Description
PSSPI-Win_PrcsLogDirs	Logfile	Monitors the PeopleSoft, process-scheduler log directories. Checks for new log files and switches the actual log file
PSSPI-Win_PrcsLogFiles	Logfile	Monitors the PeopleSoft process-scheduler log files.
PSSPI-Win_PrcsLogSize	Monitor	Monitors the size of the process-scheduler log directory and the disk space consumed by the process scheduler log files.
PSSPI-WinPrcsMon	Monitor	Monitors the existence of the process-scheduler process.
PSSPI-Win_WebLogFile	Logfile	Monitors the Apache log file (for PeopleSoft 8)
PSSPI-Win_WebMon	Monitor	Monitors the existence of the main Apache web server (for PeopleSoft 8)
PSSPI-Win_PSSPI-Messages	Message	Intercepts messages from the PeopleSoft SPI programs
PSSPI-Win_TMIB-001_1	Monitor	Monitors the status of the Tuxedo domains of a PeopleSoft application server
PSSPI-Win_TMIB-002_1	Monitor	Monitors the status of the Tuxedo machine
PSSPI-Win_TMIB-003_1	Monitor	Monitors the status of the Tuxedo server group: APPSRV
PSSPI-Win_TMIB-004_1	Monitor	Monitors the status of the Tuxedo server group: BASE
PSSPI-Win_TMIB-005_1	Monitor	Monitors the actual number of APPSRV server processes and compares the it with TA_MIN
PSSPI-Win_TMIB-006_1	Monitor	Monitors the actual number of APPSRV server processes and compares it with TA_MAX
PSSPI-Win_TMIB-007_1	Monitor	Monitors the generation number TA_MAXGEN - TA_GENERATION

Table B-1 All PSSPI Policies

Policy Name	Policy Type	Description
PSSPI-Win_TMIB-008_1	Monitor	Monitors the actual (absolute) number of APPSRV processes.
PSSPI-Win_TMIB-Col-05min_1 a PSSPI-Win_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.</metric></intv></intv>
PSSPI-Win_TUXLogDirs	Logfile	Monitors the PeopleSoft domain log directories for new TUXLOG files.
PSSPI-Win_TUXLogFiles	Logfile	Monitors the TUXLOG. < date > log files for each PeopleSoft domain
PSSPI-Win_WorkList	Monitor	Checks the PeopleSoft work-list table

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 109.

Log-File Discovery Scripts

Since TUXEDO and the PeopleSoft process scheduler periodically switch to new log-file instances, it is not possible to create a log-file policy 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 OVOW log-file encapsulator. The log-file discovery feature returns a list of actual log-file paths. Table B-2 on page 109 lists the scripts used by the log-file discovery feature.

Table B-2 Log-File Discovery Scripts

Script Name	Used by	Description
psspi_swlog.pl	TuxLogDirs	Returns PeopleSoft log directories as monitored objects to allow the detection of new log files by the OVOW log-file encapsulator.
psspi_psswlg.pl	PrcsLogDirs	Same as psspi_swlog.pl above, but for the process-scheduler log files
psspi_appsv.pl	APPSRV	Returns the names of symbolically linked application-server log files (APPSRV. <date>): two for each domain, linked as /APPSRV.[01]/<domain>.</domain></date>
psspi_tuxlg.pl	TuxLogFiles	Returns the names of symbolically linked application-server log files (TUXLOG. <date>): two for each domain, linked as /TUXLOG.[01]/<domain>.</domain></date>
psspi_pslogs.pl	PrcsLogFiles	Returns the names of symbolically linked process-scheduler log files (PROCS*): two for each PeopleSoft database, linked as /PROCS.[0 1]/ <ps-db>)</ps-db>
psspi_webmon.pl	WebLogFiles	Returns the names of log files for configured Apache web servers (PeopleSoft 8)

Monitor Scripts

OVOW process monitors require shell scripts or programs in order to perform the desired monitoring. Table B-3 on page 110 lists the scripts used by the PeopleSoft SPI monitors.

The PeopleSoft SPI monitor scripts (in conjunction with the corresponding OVOW monitor policies) 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* policy condition for *all* instances. If a finer granularity is desired, you can create conditions for single instances.

Policies

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 <code>-no_dsi</code> option as an argument to the <code>psspi_tmib.pl</code> collector script.

Table B-3 Monitor Scripts

Script Name	Used by	Description
psspi_fsmon.pl	FileSys	Monitors actual usage of local file systems and passes values to the OVOW monitor agent and, if configured, to Performance agent.
psspi_pmon.pl	PrcsMon	Monitors all process-scheduler processes and passes the values to the OVOW monitor agent and, if configured, to Performance agent .
psspi_webmon.pl	WebMon	Monitors the existence of the bundled Apache web server for PeopleSoft 8.
psspi_prcs.pl	PrcsJobTable	Monitors the process schedulers job table
psspi_tmib.pl psspi_tuxcoa.pl	TMIB-Col- <intv></intv>	TMIB Collector: called with metric IDs in parameter list to evaluate the metrics of TMIB objects.
psspi_dbcax.pl	DB-Col- <intv></intv>	DB Collector: called with metric IDs in parameter list to evaluate the metrics of DBMS and PeopleSoft-specific DBs.
psspi_wrklst.pl	Worklist	Monitors the worklist tables.

Using OpenView Performance Agent

The OVOW 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 OVOW 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. NOTE Graphs which show the performance data collected by the PeopleSoft SPI may be specified manually using the embedded graphing component of the OVOW console.

Tools and Tool Groups

This section provides more detailed information concerning how the PeopleSoft SPI tools work. The tables in the sections that follow show which utilities are called by the various tools.

For a command reference of the functions used by the PeopleSoft SPI tools, see Appendix C, "PeopleSoft SPI Commands," on page 117. Note that the commands psspi_spicl.pl, psspi_tmcl.pl, and psspi_pspt.pl accept an optional parameter, -q, in the application call. The -q is ignored in this version of the SPI.

The PSSPI-Admin Tool Group

Table B-4 on page 112 lists in alphabetical order the various applications in the PSSPI-Admin tool group and indicates which function is called by each application.

Table B-4 PSSPI-Admin Tool Calls

Tool Name	Function Called
Activate PS Services	psspi_actsvc.pl
Build PS Services	psspi_bldsvc.pl
PS Activate	psspi_act.pl
PS Analyze	psspi_ana.pl
PS Discovery	psspi_disc.pl
PSSPI Cleanup	psspi_cleanup.pl
PSSPI Off	psspi_spicl.pl setcfg COLLECTION FALSE
PSSPI On	psspi_spicl.pl setcfg COLLECTION TRUE
PSSPI Trace Off	psspi_spicl.pl setcfg TRACE_LEVEL 0
PSSPI Trace On	psspi_spicl.pl setcfg TRACE_LEVEL 2
Verify PS Cfg	psspi_verify.pl -d

Table B-4 PSSPI-Admin Tool Calls

Tool Name	Function Called
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 Tool Group

Table B-5 on page 113 lists in alphabetical order the various applications in the PSoft-Admin tool group, indicates which function is called by each tool, and shows and which PeopleSoft interface is used

Table B-5 PSoft-Admin Tool Calls

Tool Name	Function Called	PeopleSoft (PS) Interface
Unload TX Conf	psspi_tmcl.pl tmunloadc -f	tmunloadcf
View PRCS Config	psspi_pspt.pl viewcfg	n/a

The PSoft-Oper Tool Group

Table B-6 on page 114 lists in alphabetical order the various tools in the PSoft-Oper tool group, describes briefly how the individual tool works, and indicates which function is called by each tool and which PeopleSoft

PeopleSoft SPI Components **Tools and Tool Groups**

interface is used.

Table B-6 PSoft-Oper Tool Calls

Tool Name	Function Called	PeopleSoft (PS) Interface
Boot Adm Servers	psspi_tmcl.pl tmboot -a -A	tmboot -A
Boot Appl Servers	psspi_tmcl.pl tmboot -a -S	tmboot -S
Boot All PS Domains	psspi_tmcl.pl tmboot -a	tmboot
Boot PS Domain	psspi_tmcl.pl tmboot	tmboot
File Systems	psspi_df.pl	n/a
Shutd. PS Domain	psspi_tmcl.pl tmshutdown	tmshutdown
Shutd. All PS	psspi_tmcl tmshutdown.pl -a	tmshutdown
Shutd. Adm Servers	psspi_tmcl.pl tmshutdown -a -A	tmshutdown -A
Shutd. Appl Servers	psspi_tmcl.pl tmshutdown -a -S	tmshutdown -S
Start Proc Sched	psspi_pspt.pl start	pspt -start
Start All Proc Scheds	psspi_pspt.pl start -a	pspt -start (PS 7.5)
Stop Proc Sched	psspi_pspt.pl stop	pspt -stop(PS 7.5) or -kill(PS 7)
Stop All Proc Scheds	psspi_pspt.pl stop -a	pspt -stop (PS 7.5) or -kill (PS 7
View APPSRV.LOG	psspi_tmcl.pl viewlog -p	n/a
View TUXLOG	psspi_tmcl.pl viewlog -t	n/a
View PRCS Log	psspi_pspt.pl viewlog	n/a

The PSoft-Reports Tool Group

Table B-7 on page $\,$ 115 lists in alphabetical order the various applications in the PSoft-Reports tool group, indicates which function

is called by each tool, and shows which PeopleSoft interface is used.

Table B-7 PSoft-Reports Tools

Tool Name	Function Called	PS Interface
PS Status	psspi_tmcl.pl status -q	<multiple></multiple>
PS 2-Tier Conn	psspi_dbspicax -r 1 -m 703	<database></database>
Proc Sched Status	psspi_pspt.pl -status	pspt -status
PS Job Status	psspi_dbcax.pl -report_on_all_DB -r 2 -m 792	<multiple></multiple>
PS Worklist Status	psspi_dbcax.pl -report_on_all_DB -r 2 -m 795	<multiple></multiple>
Tblspace Files	psspi_dbcax.pl -r 1 -m 8	<database></database>
Tblspace Fragmnt	psspi_dbcax.pl -r 1 -m 11	
Tblspace Free	psspi_dbcax.pl -r 1 -m 6	
Tblspace Status	psspi_dbcax.pl -r 1 -m 7	
TX Client Status	psspi_tmcl.pl tmadmin -I pclt	tmadmin
TX Server Status	psspi_tmcl.pl tmadmin -I psr	tmadmin
TX Queue Status	psspi_tmcl tmadmin.pl -I pq	tmadmin

PeopleSoft SPI Components

Tools and Tool Groups

C PeopleSoft SPI Commands

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 tool calls. You can use these functions to create customized OVOW tools. In this section you will find information concerning:

- psspi_tmcl
- psspi_pspt
- psspi_spicl
- psspi_inst

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 [-a |-d domain1,domain2] [parameters]
psspi_tmcl.pl command [-h |-?]

DESCRIPTION

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

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

All necessary environment variables are set before the function invokes the tasks defined in *command*. All of the commands require domain. Domains can either be selected by users by means of entries in the Parameters field of a tool or they can be specified by means of a command-line option: -a(11) or -d(omain) domain1, domain2. Specified domains must be valid PeopleSoft domains. The -h option displays usage information and lists the options available with the function. Consequently, psspi tmcl.pl can only be used in batch mode.

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_pspt.pl Command

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

NAME

```
psspi_pspt.pl
```

SYNOPSIS

```
psspi_pspt.pl command [-a | -d PSDB1,PSDB2]
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
- viewcfq
- viewlog

All necessary environment variables are set before the script invokes *command. All* of the commands *require* PSDB, the PeopleSoft database name. The PeopleSoft database name can either be selected by users by means of entries in the Parameters field of a tool or specified by means of a command-line option: -a(11) or -d(omain) PSDB1, PSDB2. Specified databases must be valid PeopleSoft databases.

The -h option displays usage information and lists the options available with the function. Consequently, psspi_pspt .pl can only be used in batch mode.

EXIT VALUES

If an error occurs, the utility returns a non-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:

- spitrc
- spilog
- pscfg -d(isplay)
- spicfg -d(isplay)
- setcfg <LABEL> <VALUE>

The -h option displays usage information and lists the options available with the function. Consequently, psspi_pspt.pl can only be used in batch mode.

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 [-a |-p PSinstallation1,
PSinstallation2] [parameters]
psspi_inst.pl command [-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
- ptcfq
- 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 a tool or specified with a command-line option:

-a(ll) or -p(PeopleSoft installation)

psinstallation1, psinstallation2. Specified installations must be valid PeopleSoft installations.

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. Consequently, psspi_pspt.pl can only be used in batch mode.

EXIT VALUES

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

F	L	service
file locations	log files	activation, 82
managed nodes, 94	new	assignment, 82
management server, 93	PSSPI-AppSrvCfgFiles_1,	building, 82
File systems, 57, 114	64, 105	discovery, 82
files	PSSPI-AppSrvLogFiles_1,	monitor scripts, 109
PeopleSoft SPI configuration,	64, 106	monitors
95	PSSPI-PrcsLogDirs_1, 65,	discovery scripts, 109
ps.cfg, 101	107	DSI integration, 110
psspi.cfg, 95	PSSPI-PrcsLogFiles_1, 65,	new
psspi.disc, 96	107	PSSPI-AppSrvLogSize_1,63,
	PSSPI-TUXLogDirs_1, 64,	105
\mathbf{G}	108	PSSPI-DBSPI-00011, 67
getting started, 51	PSSPI-TUXLogFiles_1, 64,	PSSPI-DBSPI-0006, 66
groups	108	PSSPI-DBSPI-0791, 106
new application, 53	log-file	PSSPI-DBSPI-0792, 67, 68, 106
PSoft-Admin, 53, 55, 60	discovery scripts, 108	PSSPI-DBSPI-0793, 67, 68,
PSoft-Oper, 53, 56, 60	logical service views, 78	106
PSoft-Reports, 53, 58, 60		PSSPI-FileSys_1, 63, 67, 68,
PSSPI-Admin, 53, 60	M	106
new nodes, 52	managed node	PSSPI-PrcsJobTab_1, 65,
policies, 61	de-install PeopleSoft SPI, 46,	106
templates	47	PSSPI-PrcsLogSize_1, 65,
PSSPI-App_Server_1, 62	managed nodes	107
PSSPI-Batch_Server_1, 64,	file locations, 94	PSSPI-PrcsMon_1, 65, 107
69	managed PeopleSoft system	PSSPI-TMIB-001_1, 63, 107
PSSPI-DB_Server_1, 65, 67	de-installing the PeopleSoft	PSSPI-TMIB-002_1, 107
	SPI, 46	PSSPI-TMIB-003_1, 107
H	management server	PSSPI-TMIB-004_1, 107
hardware requirements, 25	de-installing the PeopleSoft	PSSPI-TMIB-005_1, 63, 107
•	SPI, 47	PSSPI-TMIB-006_1, 63, 107
I	file locations, 93	PSSPI-TMIB-007_1, 63, 107
installation, 31	message templates	PSSPI-TMIB-008_1, 63, 108
pre-requisites, 25	new	PSSPI-TMIB-010_1, 63
supported platforms, 27	PSSPI-DBSPI-Messages_1,	PSSPI-TMIB-Col-05Min_1,
installing ITO	66, 106 PSSPI-PSSPI-Messages_1,	63, 66, 68, 108
preparing the management		PSSPI-WorkList_1, 67, 68,
server, 31	64, 65, 66, 68, 69, 107	108
instrumentation	messages generation on ServiceGuard	
distribution, 36	nodes, 70	N
,	model	new

repository template, 105 requirements hardware, 25 Restart All PS Domains, 57 Restart PS Domain, 57 S scripts log-file discovery, 108 monitors, 109 templates, 105 trace variables, 89 trace-variable fields, 90 tracing, 89 service views activation, 82 assignment, 82 build, 82 discovery, 82 service discovery, 82 service name, 81 service views, 75 logical, 78 name, 81 physical, 76 processes, 81 host name, 81 name, 81 name, 81 name, 81 name, 81 name space, 81 sub group, 81 resources, 81 ServiceGuard nodes message generation, 70	SPI configuration files PeopleSoft, 95 ps.cfg, 101 psspi.cfg, 95 psspi.disc, 96 Start All Proc Scheds, 58, 114 Start Proc Sched, 58, 114 Stop All Proc Scheds, 58, 114 Stop Proc Sched, 58, 114 supported platforms, 27 T Tblspace Files, 59, 115 Tblspace Fragmnt, 59, 115 Tblspace Fragmnt, 59, 115 Tblspace Status, 59, 115 template distribution, 44 templates groups PSSPI-App_Server_1, 62 PSSPI-Batch_Server_1, 64, 69 PSSPI-DB_Server_1, 65, 67 monitors DSI integration, 110 repository, 105 scripts, 105 log-file discovery, 108 monitors, 109 trace variables, 89 trace-variable fields, 90 tracing, 89 ServiceGuard Nodes, 70 trace variables, 89 fields, 90 TRACE_LEVEL, 89 TRACE_OBJ, 89	introduction, 85 PeopleSoft error logs, 88 PeopleSoft tracing, 89 PeopleSoft verification scripts, 87 PeopleSoft version, 86 tuxedo domain name DSI integration, 111 restrictions, 111 TX Client Status, 59, 115 TX Queue Status, 59, 115 TX Server Status, 59, 115 U Unload TX Conf, 56, 113 users new, 60 psoft-adm, 60 psoft-op, 60 V variables trace, 89 trace-file fields, 90 Verify PS Cfg, 54, 112 Verify PS Com, 113 Verify PS Node, 55, 113 Verify PS Server, 55, 113 Verify PSSPI Com, 55 version support ITO, 27 PeopleSoft, 27 platforms application server, 29 batch server, 27 database server, 28
sub group, 81 resources, 81 ServiceGuard	trace variables, 89 fields, 90 TRACE_LEVEL, 89	PeopleSoft, 27 platforms application server, 29

```
batch server, 27
   database server, 28
View APPSRV.LOG, 58, 114
View PRCS Config, 56, 113
View PRCS log, 58, 114
View PS Config, 55, 113
View PSSPI Cfg, 55, 113
View PSSPI Error, 55
View PSSPI Trace, 55, 113
View TUXLOG, 58, 114
views
 service, 75
   instance, 78
   processes, 81
   resources, 81
   system, 76
```