# HP OpenView Service Navigator Value Pack

# Service Configuration for Service Navigator Installation Guide

**Software Version: 9.0** 

for the HP-UX, Microsoft Windows, and Sun Solaris Operating Systems



Manufacturing Part Number: None Document Release Date: November 2006 Software Release Date: November 2006

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# **Documentation Updates**

This manual's title page contains the following identifying information:

- Version number, which indicates the software version.
- Document release date, which changes each time the document is updated.
- Software release date, which indicates the release date of this version of the software.

To check for recent updates or to verify that you are using the most recent edition, visit the following URL:

#### http://ovweb.external.hp.com/lpe/doc\_serv/

You will also receive updated or new editions if you subscribe to the appropriate product support service. Contact your HP sales representative for details.

#### NOTE

The *Service Configuration Installation Guide* for software version 9.0 is completely changed because new installation procedures are introduced, which also affected all accompanying information in the manual.

# **Support**

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#### http://www.hp.com/managementsoftware/support

This web site provides contact information and details about the products, services, and support that HP OpenView offers.

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#### http://www.hp.com/managementsoftware/access level

To register for an HP Passport ID, go to:

http://www.managementsoftware.hp.com/ \passport-registration.html

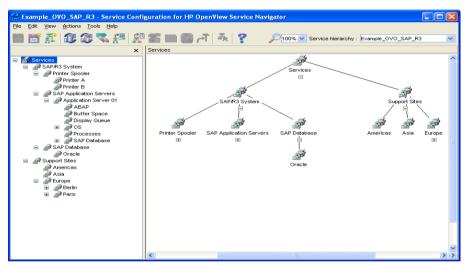
1 Introducing HP OpenView Service Configuration for Service Navigator

This chapter describes the architecture and installation process of HP OpenView Service Configuration for Service Navigator.

## **About Service Configuration**

Service Configuration is an add-on component of HP OpenView Service Navigator. It provides a graphical user interface for configuring Service Navigator service views which makes it easier to create and maintain the Service Navigator XML configuration files.

Figure 1-1 The Service Configuration Main Console



# **About Service Configuration and Service Desk**

Service Configuration is built on Service Desk technology and requires a Service Desk module, the Service Desk application server for operation. This module is installed silently when you install Service Configuration. There is no need for a Service Desk license. You can easily upgrade to the full Service Desk product at a later date if you want to take advantage of the full Service Desk capabilities.

If you are already operating Service Navigator in a Service Desk environment, you can install Service Configuration on Service Desk and take advantage of the integrated architecture of the two products. Service Configuration and Service Desk share a data repository which means that you can access Service Desk objects from within the Service Configuration application.

#### NOTE

If you install Service Configuration on top of Service Desk, you cannot upgrade Service Desk to a version which is not yet supported by Service Configuration.

# **About Service Configuration and Service Pages**

If you are installing Service Configuration in a Service Desk environment and you are using Service Pages, you can take advantage of a special integration between Service Configuration and Service Pages.

With the Service Pages integration installed, operators using the Service Navigator operator console can browse Service Desk calls or incidents related to a particular service. The Service Pages application is integrated directly into the shortcut menu of services in Service Navigator.

See Chapter 9, "Installing the Service Pages Integration," on page 207 for more information about the installation process.

## **About the Service Configuration Architecture**

Service Configuration has a three-tier architecture, which means that Service Configuration is structured into three layers:

#### □ Database server

Service Configuration requires an Oracle database or a Microsoft SQL Server to store its configurational and operational data.

Service Configuration automatically uses an existing Oracle database or a Microsoft SQL Server installation from Service Desk, otherwise you can either install the database as described by the database vendor, or use an Oracle database from OVO (including an independent Oracle database).

#### □ Application server (UI server)

The application server, also called UI server, is an integral part of a Service Configuration installation. It processes requests from the clients and sends them to the database server. When data is available for the clients, it sends the data to the clients.

The application server is a Service Desk component that Service Configuration installs and uses. If you are already using Service Desk in your environment, you only need to install the Service Configuration.

#### **IMPORTANT**

Application server  $must\ not$  be installed on the same system as OVO management server.

#### □ Clients

The client provides the graphical user interface (GUI) of Service Configuration. You use the client to create and configure your service models.

#### ☐ Service Navigator adapter (seadapter)

Service Navigator adapter (seadapter) is a Service Configuration component installed on an OVO management server which enables synchronization between Service Engine and Service Configuration repositories. It also enables automatic hierarchy deployment from Service Configuration to the OVO management server.

The supported versions for all Service Configuration components are listed in the "Software Requirements" on page 31.

#### NOTE

For the most recent information on supported platforms and the coexistence information for each of the Service Configuration components, refer to the *Supported Platforms* document, accessible through these links:

http://partners.openview.hp.com/ovcw/pricing/ \
config\_matrix.jsp
http://support.openview.hp.com/sc/support\_matrices.jsp

To access these links you need HP Passport.

### **Installation Overview**

#### NOTE

Upgrading Service Configuration from version 8.0 to 9.0 is described in the *Service Configuration Upgrade Guide*.

Regardless of whether you are installing Service Configuration in a Service Navigator only or a Service Navigator and Service Desk environment, you need to complete the following high-level installation steps:

#### 1. Prerequisites.

Ensure that your environment meets all prerequisites listed in Chapter 2, "Preparing for Installation," on page 27.

In particular, ensure that an Oracle database or a Microsoft SQL Server installation is available.

Service Configuration automatically uses an existing Oracle database or a Microsoft SQL Server installation from Service Desk, otherwise you can either install the database as described by the database vendor, or use an Oracle database from OVO (including an independent Oracle database).

You also need to ensure that the OVO management server is prepared for the Service Configuration installation. You need to install OVO server patches and the Service Navigator adapter (seadapter) to update OVO with software files required for Service Configuration.

#### 2. Application server.

Install the Service Desk application server. The necessary steps vary depending on whether Service Desk is already installed or not. If Service Desk is not installed, you must install the application server, and then install Service Configuration. If Service Desk is installed, you only need to install the Service Configuration.

Decide whether to install the typical features or to customize your installation. In both cases, the wizard installs the standard set of features installed with this application, that includes common and the application server components.

Custom installation type enables you to choose also the client, the demonstration data, the documentation, the SHS Data Collector components, and the Service Pages Integration components (if Service Desk is installed).

#### **CAUTION**

Installing the application server on the OVO Management Server is not currently supported, so although it is possible to select also the Service Navigator Adapter (seadapter) components to be installed during the Custom installation of the application server, it does not make sense.

See "Installing Service Navigator Adapter (seadapter)" on page 47 for information about installing the seadapter.

#### **IMPORTANT**

If you plan to install client on the same system with the application server, choose Custom installation type for the application server installation and install both client and the server simultaneously. You can, nevertheless, install the client (as well as any other Service Configuration component, or Service Pages integration) later by selecting Modify and then Server installation.

Make sure that you select all already installed components in the Feature Selection dialog box in addition to the component that you have chosen to install at the moment. If you fail to do so, these components will be uninstalled. See "Modifying Single SNVP Components" on page 141 for the installation details.

See Chapter 3, "Installing Service Configuration," on page 51 for installation details.

#### 3. Clients.

Install the Service Configuration GUI client software. See Chapter 5, "Installing the Service Configuration Client," on page 107.

#### 4. Post-installation steps.

Perform the post-installation steps to activate Service Configuration on the OVO management server. See Chapter 6, "Post-installation Tasks," on page 119.

#### 5. Service Pages integration.

If you are already operating in a Service Desk environment and use Service Pages, you may want to install a special Service Pages integration. See Chapter 9, "Installing the Service Pages Integration," on page 207.

#### TIP

To successfully install Service Configuration, you must complete a number of steps on different systems. To help you keep track of the installation, it is strongly recommended that you use an installation checklist. Checklists are available for each major installation scenario (installation without and with Service Desk) and for each major platform (Windows, HP-UX, and Sun Solaris).

To use a checklist, open SvcConfigInstallChecklist.pdf in the root directory of the installation CD-ROM.

#### **Installation Overview 1 (without Service Desk)**

Figure 1-2 on page 24 illustrates the installation and configuration of components when installing Service Configuration in an environment without a Service Desk installation:

- 1. Verify that all systems meet the hardware and software prerequisites. See Chapter 2, "Preparing for Installation," on page 27.
- 2. If not already using an Oracle or a Microsoft SQL Server database from Service Desk, install an Oracle database or a Microsoft SQL Server and create a new database instance for Service Configuration. See "Setting up the Database" on page 36. Alternatively, you can also use the existing OVO "openview" instance for Service Configuration.
- 3. Install the required OVO patches on the OVO management server (and update the OVO Java GUI) to prepare OVO for the Service Configuration installation. See "Installing Patches on the OVO 8 Management Server" on page 46.
- 4. Install the Service Navigator adapter (seadapter) on the OVO management server system. See "Installing Service Navigator Adapter (seadapter)" on page 47.
- 5. Start the HP OpenView Installer wizard and choose the application server installation, then select options according to your preferences, such as Client, DataCollector and so on. For more information about the SNVP installation process, see Chapter 3, "Installing Service Configuration," on page 51.
- 6. Configure the application server. This establishes a connection between the application server and the database server. See "Configuring the Application Server" on page 91
- 7. Configure the OVO management server in Service Configuration and import data from that server. See "Configuring an OVO Management Server" on page 122.

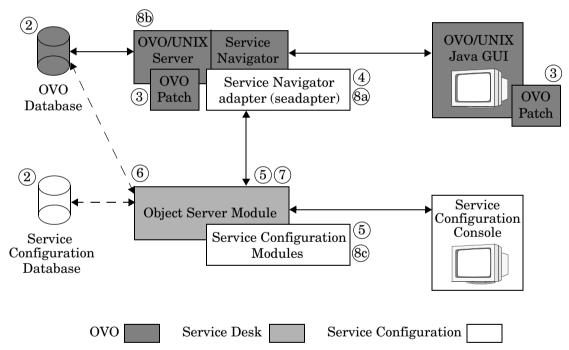
Configure a default service hierarchy where discovered and migrated objects will be stored. See "Configuring the Default Service Hierarchy" on page 125.

#### 8. Post-installation steps:

- a. Configure the Service Navigator adapter (seadapter).
- b. Activate Service Configuration on the OVO management server.
- c. Migrate existing Service Navigator data to Service Configuration.

See Chapter 6, "Post-installation Tasks," on page 119.

Figure 1-2 Installing Service Configuration (without Service Desk)



#### **Installation Overview 2 (with Service Desk)**

Figure 1-3 on page 26 illustrates the installation and configuration of components when installing Service Configuration on an existing Service Desk installation:

- 1. Verify that all systems meet the hardware and software prerequisites. See Chapter 2, "Preparing for Installation," on page 27.
- 2. Install the required OVO patches on the OVO management server (and update the OVO Java GUI) to prepare OVO for the Service Configuration installation. See "Installing Patches on the OVO 8 Management Server" on page 46.
- 3. Install the Service Navigator adapter (seadapter) on the OVO management server system. See "Installing Service Navigator Adapter (seadapter)" on page 47.
- 4. Start the HP OpenView Installer wizard and choose the application server installation, then select options according to your preferences, such as Client, DataCollector and so on. For more information about the SNVP installation process, see "Installing Service Configuration" on page 51.
- 5. Configure the OVO management server in Service Configuration and import data from that server. See "Configuring an OVO Management Server" on page 122.
  - Configure a default service hierarchy where discovered and migrated objects will be stored. See "Configuring the Default Service Hierarchy" on page 125.
- 6. Post-installation steps:
  - a. Configure the Service Navigator adapter (seadapter) on OVO.
  - b. Activate Service Configuration on the OVO management server.
  - c. Migrate existing Service Navigator data to Service Configuration.

See Chapter 6, "Post-installation Tasks," on page 119.

OVO

**6b** OVO/UNIX OVO/UNIX Service Java GUI Server Navigator (2)OVO Service Navigator OVOOVO Patch adapter (seadapter) Database Patch Object Server Module (4)Service Service Desk Service Configuration Desk Application Module Console Service Desk Database (5)Service Service Pages Service Pages Configuration Web Server Web Client Console Service Configuration Module (6c)

Service Configuration

Figure 1-3 **Installing Service Configuration on Service Desk** 

Service Desk

**Preparing for Installation** 

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### Preparing for Installation

This chapter suggests how to plan an installation. Also explained is how to find information about the system requirements and supported platforms.

# Planning your Installation of Service Configuration

There are a number of issues, both technical and procedural, that you are advised to plan out carefully before installing Service Configuration. Planning should ideally be done with the assistance of an implementation consultant, but if this is not possible, we recommend that the following issues are planned and potential problems resolved prior to going ahead with the installation of Service Configuration.

## What is the planned infrastructure size?

You will likely know how many clients you need to install, but you will also need to take into account the number of parallel application servers that should be installed to provide optimum performance. It is recommended to start with one (1) application server if you are in the early phases of a project.

# Does the planned infrastructure meet the minimum requirements?

See "Hardware Requirements" on page 34 for more information.

# Is there enough free memory on the application server systems?

See "Hardware Requirements" on page 34 for more information.

### Is there enough free memory on the client computers?

See "Hardware Requirements" on page 34 for more information.

# Is the database large enough for the anticipated amount of data?

Before you configure the database you should consider what size database you require.

Chapter 2 29

# Which Service Pages server is to be used for the Service Pages integration?

If you are using Service Pages in your Service Desk environment, you should consider installing the Service Pages integration which allows OVO Java GUI users to directly access Service Desk services and configuration items relevant to the currently selected service. In this case you need to know the application server where the Service Pages web server is currently installed.

# Does the user installing the software have administrator access rights?

There are a number of methods by which the Service Configuration client software can be installed. These include methods that enable the client users to install the software themselves from a shared folder. For the client users to install the software, they must have administrator rights on the machines where the software is to be installed. See Chapter 5, "Installing the Service Configuration Client," on page 107 for more information.

## **Software Requirements**

#### **NOTE**

Version 9.0 of the Service Navigator Value Pack software has been tested and verified in the environments described in this section. HP currently does not support any other set of platforms or platform combinations apart from those listed in this section. Support for additional platforms may be added as testing progresses. Please contact your HP representative if you would like more information.

#### NOTE

For the most recent information on supported platforms and the coexistence information, refer to the Supported Platforms document, accessible through these links:

http://partners.openview.hp.com/ovcw/pricing/ \ config matrix.jsp

http://support.openview.hp.com/sc/support matrices.jsp

To access these links you need HP Passport.

The supported operating systems as well as other software requirements for each Service Configuration component are listed below.

**Table 2-1 HP OpenView Operations for UNIX** management server and the OVO adapter

OVO for UNIX	Version A.08.1x or higher
Operating system	• HP-UX 11.11 and 11.23 (for OVO 8.1x PA-RISC)
	HP-UX 11.23 (for OVO 8.2x Itanium)     NOTE: A separate depot is necessary. It can be downloaded from the patch site. Check     SNVP 9.0     Release Notes for more information.
	• Sun Solaris 8, 9, or 10

Table 2-2 Application Server

Service Desk integration (optional)	Service Desk 5
Operating system	HP-UX 11.11 (updated with the latest patch bundle) or 11.23 (PA-RISC)
	HP-UX 11.23 (Itanium)     NOTE: A separate depot is necessary. It can be downloaded from the patch site.     Check SNVP 9.0     Release Notes for more information.
	Sun Solaris 9 or 10 (updated with the latest patch cluster)
	Windows® 2000 (updated with Service Pack 4), Windows XP (Service Pack 2), Windows 2003

## Table 2-3 Console (GUI)

Operating system	Windows 2000 (Service Pack 4)
	Windows XP (Service Pack 2)
	• Windows 2003

### Table 2-4 Database Server

Database	Oracle 9.2.x and 10, Microsoft SQL Server 2000
Operating system	• HP-UX 11.11 or 11.23 (PA-RISC only)
	Sun Solaris 9 or 10
	Windows 2000 (Service Pack 4), Windows XP SP2, Windows 2003

### **Supported Platform Combinations**

The following combinations of platforms are supported with this release of Service Configuration:

#### □ OVO with Service Navigator on HP-UX

Application server on Sun Solaris

Client on Windows

Oracle database (or a Microsoft SQL Server) on HP-UX, Sun Solaris, or Windows

Application server on Windows

Client on Windows

Oracle database (or a Microsoft SQL Server) on HP-UX, Sun Solaris, or Windows

#### □ OVO with Service Navigator on Sun Solaris

• Application server on HP-UX

Client on Windows

Oracle database (or a Microsoft SQL Server) on HP-UX, Sun Solaris, or Windows

• Application server on Windows

Client on Windows

Oracle database (or a Microsoft SQL Server) on HP-UX, Sun Solaris, or Windows

#### **IMPORTANT**

Application server  $must\ not$  be installed on the same system as OVO management server.

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## **Hardware Requirements**

The minimum hardware requirements for each Service Configuration component are listed below.

Table 2-5 HP OpenView Operations for UNIX management server and the OVO adapter

Memory	512 MB RAM in addition to what is required for OVO.
	This is sufficient to process 10,000 objects in one hour. Objects are processed when migrating existing configurations to Service Configuration using the OvSnvpExport(1M) tool or through discovery processes.
Disk space	100 MB in addition to what is required for OVO.
Network connection	TCP/IP 100 MB/s.

Table 2-6 Application Server on HPUX

Processor	HP PA-RISC machine 800 MHz
Memory	512 MB RAM
Disk space	5 GB
Network connection	TCP/IP 100 MB/s or higher

### Table 2-7 Application Server on Sun Solaris

Processor	SPARC IIi 650 MHz
Memory	512 MB RAM
Disk space	5 GB
Network connection	TCP/IP 100 MB/s or higher

Table 2-8 Application Server on Windows

Processor	Intel Xeon 2.8 GHz or higher
Memory	2 GB RAM
Disk space	2 GB
Network connection	TCP/IP 100 MB/s or higher

## Table 2-9 Console (GUI)

Processor	Intel Pentium 4, 1.4 GHz
Memory	512 MB RAM
Disk space	2 GB
Network connection	TCP/IP 100 MB/s or higher
Display	800 x 600 resolution, 256 colors (1024 x 768 resolution, high color or higher recommended)

### Table 2-10 Database Server

Network	TCP/IP 1 GB/s
connection	

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## Setting up the Database

Service Configuration requires the Oracle database or the Microsoft SQL Server instance. If not using already existing Oracle database or a Microsoft SQL Server from Service Desk (which is automatically chosen by Service Configuration), you can use either a new, empty instance or an instance that is used by other applications. For example, you can use the Oracle database instance used by OVO. (The default SID for the OVO database instance is openview.) To create a new instance, consult the database vendor documentation.

Using an existing database instance has the advantage of requiring less maintenance and fewer service handlers but also introduces more dependencies between the database and its users. In addition, should you decide to upgrade your Service Configuration installation to a full Service Desk environment, all of the Service Desk data will also be stored in the Service Configuration instance as data migration from one instance to another is not supported.

# **Recommended Settings for the Oracle Database Instance**

The following settings are recommended for the Oracle database instance to be used with Service Configuration.

## **□** Database parameters

The database instance must meet the following minimum requirements for Service Configuration. If using an existing OVO Oracle database instance, add the required values for processes and dml locks to the existing values.

Table 2-11 Oracle Database Settings (Minimum)

Setting	Oracle 9.2	Oracle 10g
db_files	50	50
db_block_size	8 KB	8 KB
db_block_buffers	10000	
shared_pool_size	128 MB	
sga_target		128 MB
log_checkpoint_interval	99999	99999
db_file_multiblock_read_count	16	16
processes	50	200
dml_locks	100	100
log_buffer	65536	65536
max_dump_file_size	10240	10240
compatible a	9.2.0.0.0	9.2.0.0.0

a. OVO 8 sets the compatibility level to 9.2.0.0.0. It is not possible to set the compatibility to a lower level if a higher level is already used.

See also "Setting Database Parameters for Oracle Database" on page 39.

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### **Setting up the Database**

## □ Tablespaces

If using an existing Oracle database instance, make sure to create new tablespaces for Service Configuration. Create the tablespaces either manually or automatically using the database configuration wizard. The available space in the tablespaces must be at least 50 MB.

#### ☐ Users

Create the database user. The names of database users are not case-sensitive.

## ☐ Euro symbol

If you want to use the Euro symbol with a Western character set in your database instance, the server and the clients must use the same code page. The database character set must be WESISO8859P15. Not all versions of Oracle support the Euro symbol; for more information, consult your Oracle documentation.

# ☐ Non-Western Languages

If you intend to use Service Configuration with multiple languages, or to use a non-Western character set, you should set your Oracle database instance to use the Unicode UTF-8 character set. UTF-8 also supports the Euro symbol.

#### □ Rule-based optimization

Oracle should run with rule-based optimization. This will normally be the case with a standard installation of Oracle. However, if you have configured your Oracle database to gather statistics (and therefore it is not rule-based), some functions of Service Configuration may take 20 to 50 times longer than normal. See your Oracle documentation for information about setting rule-based optimization.

# **Setting Database Parameters for Oracle Database**

On Oracle databases 9i and 10g, parameters can be controlled by the Server Parameter file (spfile). Parameters in an spfile are set from within the SQL\*Plus interface, where you should log in under the DBA account. Use the following syntax:

```
ALTER SYSTEM SET ALTER SYSTEM SET parameter name> = <value>
[ SCOPE = SPFILE | MEMORY | BOTH ];
```

SCOPE determines what will actually be changed:

Server Parameter file SPFILE running instance

**MEMORY** 

both the Server Parameter file and the running BOTH

instance

The default value for SCOPE depends on whether the instance was started from a spfile or not. If that was the case, the default is BOTH, if not, it is MEMORY.

The syntax for removing an entry from the spfile is:

```
ALTER SYSTEM RESET cparameter name>
[ SCOPE = SPFILE | MEMORY | BOTH ]
[SID = \langle sid \rangle]:
```

<sid> is a placeholder for the SID of your database, for example openview.

It may be necessary to restart Oracle after changing a parameter value.

# **Database Instance Created by OVO**

If you are using a database instance created by OVO, modify the init<*sid*>.ora file (instead of the spfile) to configure the parameters:

```
$ORACLE HOME/dbs/init<sid>.ora
```

<sid> is a placeholder for the SID (instance name) of your database, for example \$ORACLE HOME/dbs/initopenview.ora.

Remember to restart Oracle after changing a parameter value.

# Microsoft SQL Server 2000 Database Settings

To install Microsoft SQL Server, refer to your Microsoft SQL Server documentation.

#### NOTE

Configure Microsoft SQL Server to accept non-Windows user names and passwords. To do this, display the SQL Server Properties configuration screen, and click the Authentication to SQL Server and Windows checkbox.

After you have installed Microsoft SQL Server, configure the database during the Service Desk Management Server installation procedure: you are prompted to create a new database user account or use an existing user account.

Consider the following:

- When the database is created using the installer, Microsoft SQL Server is set up with nvarchar data type, which supports non-western character sets.
- If you choose to manually create an SQL Server database, you will require at least 500 MB free space in the file system where the SQL Server is located.
- For Euro symbol support in SQL Server Engine, select one of the following code pages: 1252/iso (default); cp1250; cp1251; cp1253; cp1254; cp1255; cp1256; cp1257.

#### NOTE

All versions of Microsoft SQL Server have sort order definitions that include the Euro symbol. For more information refer to your Microsoft SQL Server documentation.

# **Before Installing Service Configuration**

Once a database is installed on a Windows operating system, the system must be rebooted before Service Configuration can be installed.

Chapter 2 41

# **Third-party Software**

All required third-part software is automatically installed during the Service Configuration installation process. See Chapter 3, "Installing Service Configuration," on page 51 for installation instructions.

# **Preparing for non-English Installations**

The Service Configuration software is internationalized. This means that Service Configuration will install and run in most language environments. It has been certified for the following languages:

- → English
- Japanese

## NOTE

Service Configuration is currently only available in the English language. A localized version for the Japanese language is planned for a future release.

A localization pack for Service Desk 5 is available from http://support.openview.hp.com/patches/patch index.jsp

To install Service Configuration in non-English environments, install the software as described in this installation guide. When configuring the database, be aware of the following important settings:

#### Oracle database character set

By default, the Oracle Database Configuration Assistant chooses a database character set that corresponds to the locale of your operating system. For example, for English operating systems, the database character set is WESISO8859P1. (Choose WESISO8859P15 if you want to use the Euro symbol.)

#### NOTE

If you intend to use Service Configuration with multiple languages, or to use a non-Western character set, you should set your Oracle database to use the Unicode UTF-8 character set. UTF-8 also supports the Euro symbol.

Chapter 2 43

#### ☐ Size of Oracle database fields

If you use UTF-8 as the character set of the Oracle database, non-Latin characters use three time more space in the database than the Latin character. To compensate for this, the database fields can be extended. There is an absolute limit of 1333 characters. See Chapter 4, "Configuring the Database," on page 99 for more information.

See "Recommended Settings for the Oracle Database Instance" on page 37 for more information.

See also "Microsoft SQL Server 2000 Database Settings" on page 40 for details about the Microsoft SQL Server 2000 settings.

## **Restrictions in International Environments**

When running the Service Configuration software in non-English environments be aware of the following restrictions:

#### □ Non-standard ASCII characters

You cannot use the full length of text fields when using non-standard ASCII characters, for example a German umlaut.

# Preparing the OVO Management Server for Installation

Before Service Configuration can be installed and activated, the OVO 8 management server must be updated with OVO patches and the Service Navigator adapter (seadapter) must be installed:

## Patch installation

Install the OVO 8 patches as described in "Installing Patches on the OVO 8 Management Server" on page 46.

# ☐ Service Navigator adapter (seadapter) installation

Install the Service Navigator adapter (seadapter) as described in "Installing Service Navigator Adapter (seadapter)" on page 47.

Chapter 2 45

# **Installing Patches on the OVO 8 Management Server**

It is recommended to update the OVO 8 management server with the required server and Java GUI patches. These patches are cumulative patches that include enhancements and problem solutions for OVO 8.

The OVO installation utility ovoinstall checks the OS patches that are currently installed on the OVO management server and lists patches that should still be installed.

#### NOTE

Before installing the patches, read the patch descriptions carefully to familiarize yourself with the patch prerequisites and with the software changes included in these patches.

A list of required patches and software is available in the OVO information text files on the OVO CD-ROMs.

Also check the latest edition of the *OVO Software Release Notes* for last-minute documentation about the required patches. This document can be downloaded from the website:

http://ovweb.external.hp.com/lpe/doc serv/

At the time of installation, these documented patches may be superseded. Use the latest patches from the http://www.hp.com website. Here you will find further information about the patches that you need.

# **Installing Service Navigator Adapter (seadapter)**

Service Navigator adapter (seadapter), or Service Configuration connector for OVO, is a special package that comes with Service Configuration. This package is available on the Service Configuration installation CD-ROMs for HP-UX or Sun Solaris platforms.

#### NOTE

Seadapter must be installed and activated on the OVO management server to enable automatic hirearchy deployment from Service Configuration to OVO management server.

This section describes how to install Service Navigator adapter on the OVO management server running on the HP-UX or Sun Solaris platform. After having installed the Service Navigator adapter, configure it as described in "Configuring Service Navigator Adapter (seadapter)" on page 127.

Chapter 2 47

## To Install Service Navigator Adapter Components

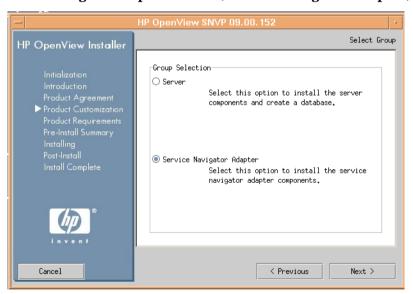
If you have chosen to install the service navigator adapter components, follow these steps:

1. When installing Service Configuration on UNIX systems, the wizard offers the option to install the application server components and create a database or to install the Service Navigator adapter components. For this design prototype, select the **Service Navigator adapter** installation, as shown in the Figure 2-1 on page 48.

#### **CAUTION**

Installing the application server on the OVO Management Server is not currently supported, so although it is possible to select also the Service Navigator Adapter (seadapter) components to be installed during the Custom installation of the application server, it does not make sense.

Figure 2-1 Performing a Group Selection (Service Navigator adapter)

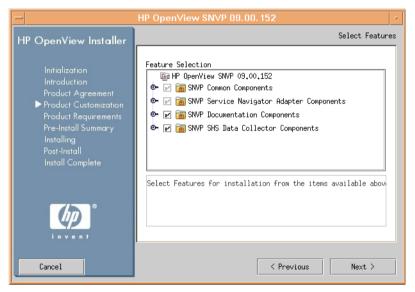


2. Decide whether to install the typical features or to customize your installation. In both cases, the wizard installs the standard set of features installed with this application, that includes common and Service Navigator adapter components.

Custom installation type enables you to choose also the documentation components and the SHS Data Collector components.

Figure 2-2 on page 49 shows the custom selection of features for Service Navigator adapter installation.





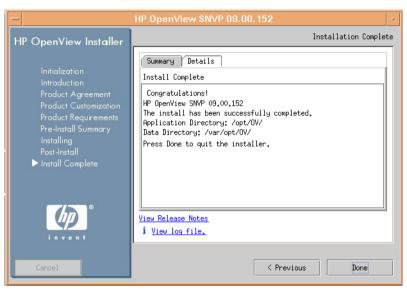
3. The HP OpenView Installer will perform the install checks and then display the pre-install summary. Click **Install** to proceed with installation.

Chapter 2 49

# **Preparing the OVO Management Server for Installation**

When the installation finishes, the wizard informs you whether the installation succeded and offers you to view the details about the eventual errors.

# Figure 2-3 Installation Complete



**Installing Service Configuration** 

This chapter describes the tasks required to install Service Configuration on all supported platforms. The main task involves installing or updating the HP OpenView Service Desk application server which is an integral part of the Service Configuration software.

The following steps constitute the installation process:

# ☐ Installing Service Configuration (no Service Desk installed)

If you are installing Service Configuration in an *OVO/Service Navigator only* environment, start the HP OpenView Installer wizard and follow the steps in accordance with your preferences. See "Installing Service Configuration Without Service Desk Installed" on page 55.

## ☐ Installing Service Configuration on Service Desk

If you are installing Service Configuration on an existing Service Desk 5 installation, you must also install the required Service Desk patches in addition to performing the installation steps offered by the HP OpenView Installer wizard. See "Installing Service Configuration on an Existing Service Desk Installation" on page 77.

Before installing Service Configuration, do the following:

#### □ Check the Release Notes

Check the SvcConfigReleaseNotes.html file on the relevant Service Configuration installation CD-ROM for any issues regarding the installation procedures that may have arisen after this documentation was completed.

#### □ Database installed

Make sure a database is already installed, either on the system where you want to install the application server, or on another accessible machine. See "Setting up the Database" on page 36.

## □ Check the prerequisites.

Make sure all prerequisites are met as described in Chapter 2, "Preparing for Installation," on page 27. Before installing Service Configuration on UNIX systems, see the section "Optimizing the Kernel Parameters (on HP-UX Systems)" on page 54.

After installing Service Configuration, perform the following steps:

# □ Configure the application server.

Configure the application server as described in "Configuring the Application Server" on page 91.

## $\Box$ Run the application server.

See "Starting the Application Server" on page 106 for details on how to start and stop the application server processes.

Although the application server software is the same on each supported platform, the installation software for the different platforms varies. Service Configuration is therefore distributed on three CD-ROMs, one each for Microsoft Windows, HP-UX, and Sun Solaris. Unless otherwise stated, wherever CD-ROM is mentioned in this guide, the CD-ROM referred to is the relevant one for the platform being described.

# **Optimizing the Kernel Parameters (on HP-UX Systems)**

Generally, the HP-UX operating system is not installed in an optimal setup for running (large) Java applications. The main (kernel) parameters that prevent Java from running smoothly if not sized properly have been identified and some tools have been written that help when correcting these parameters.

#### CAUTION

Changing kernel parameters involves a kernel rebuild and an operation system reboot. In general, this is something that should only be done by qualified staff (system administrators), up-to-date with local operating procedures.

The tool providing most insight is HPjconfig. When run on an HP-UX system this shows the current settings for the most important kernel parameters, the formulas used in obtaining these settings, and the proposed improved settings. This identifies which parameters should be changed.

When running in super user mode, a link to the SAM utility is also part of HPjconfig. From there, the proposed parameter changes can be applied. Alternatively, parameters can be adjusted manually using the information provided by HPjconfig. The actual kernel rebuild can then be performed by SAM. Also, the maximum number of incoming tcp connections (network parameter tcp\_conn\_req\_max) can be adjusted when running in super user mode.

A second tool, Java Out-of-box for HP-UX, installs startup (RC) scripts, modifies kernel parameters, rebuilds the kernel, and reboots the system. During this process, system tuneables are modified, thus providing true out-of-the-box behavior for Java.

# Installing Service Configuration Without Service Desk Installed

This section describes how to install Service Configuration on OVO and Service Navigator in a Windows and UNIX (HP-UX and Sun Solaris) environments.

The installation is wizard based. The HP OpenView Installer wizard guides you through all the steps and requests information from you when necessary. Before you start the wizard, you might find it useful to plan your decisions and gather the information you will need.

## **NOTE**

After you provide all the information that the HP OpenView Installer wizard requests, the installation process begins. This process can take up to an hour to complete.

The following sections describe the platform-dependent procedures for installation of Service Configuration:

- ☐ Installing Service Configuration on Windows Systems (without Service Desk)
- ☐ Installing Service Configuration on UNIX Systems (without Service Desk)

# **Installing Service Configuration on Windows Systems** (without Service Desk)

To start the installation, insert the HP OpenView Service Configuration for Service Navigator CD-ROM into your CD-ROM drive.

Start the HP OpenView Installer wizard with the following command:

\<mountpoint>\<platform>\snvp 09.00.<nnn> setup.exe

Where *<nnn>* presents a product build version.

The HP OpenView Installer start screen appears. Click **Next** to continue, or **Cancel** to abort the installation.

When installing Service Configuration on Windows systems, the wizard offers the option to install the application server components and create a database or to install only client components. Figure 3-1 shows the selected **Server** option, where **Server** stands for the application server you are installing.

Figure 3-1 Performing a Group Selection (application server)



## **To Install Application Server Components**

If you have chosen to install the application server components, follow these steps:

 Decide whether to install the typical features or to customize your installation. In both cases, the wizard installs the standard set of features installed with this application, that includes common and the application server components.

Custom installation type enables you to choose also the client, the demonstration data, the documentation, the SHS Data Collector components, and the Service Pages Integration components.

#### **IMPORTANT**

If you plan to install client on the same system with the application server, choose Custom installation type for the application server installation and install both client and the server simultaneously. You can, nevertheless, install the client (as well as any other Service Configuration component, or Service Pages integration) later by selecting Modify and then Server installation.

Make sure that you select all already installed components in the Feature Selection dialog box in addition to the component that you have chosen to install at the moment. If you fail to do so, these components will be uninstalled. See "Modifying Single SNVP Components" on page 141 for the installation details.

#### NOTE

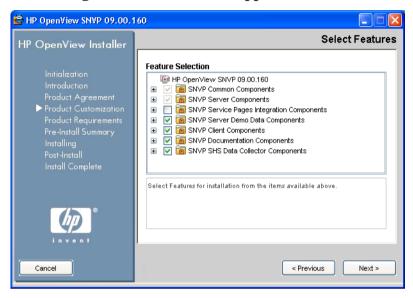
Before you install ServicePages Integration make sure you have previously installed and configured ServiceDesk and ServicePages. Refer to Service Desk documentation for more information.

#### NOTE

If you changed your mind regarding the installation of any particular SNVP component after the SVNP installation process is already completed, it is possible to install (or uninstall) these components at a later time. See "Modifying Single SNVP Components" on page 141 for more information.

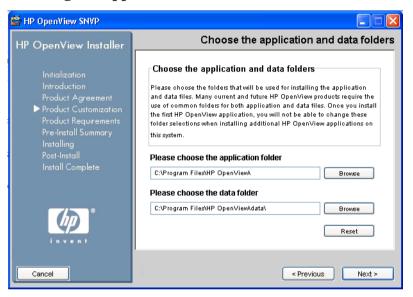
Figure 3-2 shows the custom selection of features for the application server installation.

Figure 3-2 Performing a Feature Selection (application server)



2. Choose the folders that will be used for installing application and data files. You can enter the path in the text fields provided, or use the **Browse** buttons to choose the appropriate folders, as shown in the Figure 3-3.

Figure 3-3 Choosing the Application and Data Folders



3. Select the database type. You can choose between Oracle database, as shown in the Figure 3-4, and Microsoft SQL Server.

Figure 3-4 Choosing a Database Type



#### NOTE

For Microsoft SQL Server support, you should have the software package version 09.00.160 installed, which is not available on the product CD-ROM. It is accessible for download from the following location:

http://support.openview.hp.com/patches/snvp/snvp.jsp

4. The wizard offers the option to create a new database user, or to use an existing database user. In this design prototype, choose **Create New Database User** (see Figure 3-5).

Figure 3-5 Creating a New Database User

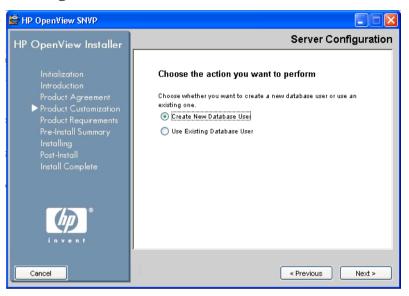
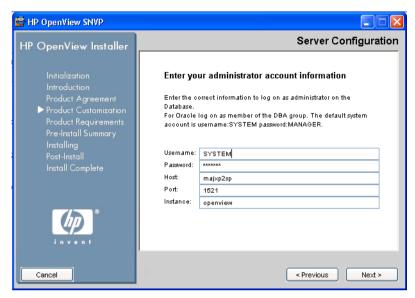


Figure 3-6 Specifying the Administrator Account Information



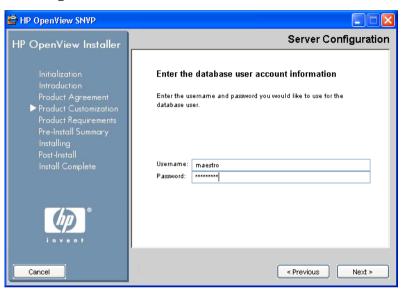
5. Enter the appropriate information to log on as administrator of the database (see Figure 3-6 on page 62 for presentation).

If you have choosen the Oracle database to use, the details of the Oracle database instance are as follows:

- System username: SYSTEM
- System user password: MANAGER
- Hostname of the system the database is running on: <localhost>
- Port on which the database is listening for network connections. (By default, the installation wizard assumes port 1521. You can change this only if you select a custom installation.)
- The database server instance identifier (SID).

6. Decide the username and password for a new database user, which will be used for connection to the database instance.

Figure 3-7 Creating a New Database User



7. Choose your expected environment size. In this design prototype, select the environment size **Small environment** (see Figure 3-8).

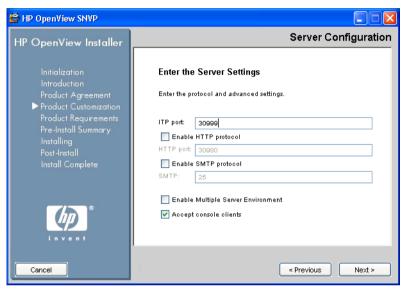
Figure 3-8 Choosing the Environment Size



- 8. If you choose the custom installation, you may also see wizard screens for table extents. For this design prototype, accept the default settings.
- 9. If you choose the custom installation, you may also see wizard screens for tablespaces. For this design prototype, accept the default settings.

10. Enter the protocol and advanced application server settings, as shown in the Figure 3-9.

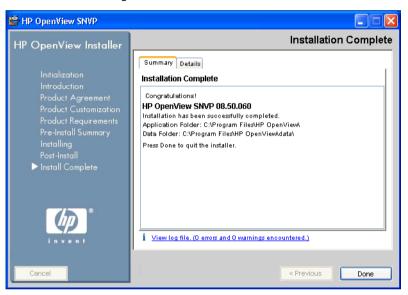
Figure 3-9 Protocol and Advanced Application Server Settings



11. The HP OpenView Installer will perform the install checks and then display the pre-install summary. Click **Install** to proceed with installation.

When the installation finishes, the wizard informs you whether the installation succeded and offers you to view the details about the eventual errors.

Figure 3-10 Installation Complete



# **Installing Service Configuration on UNIX Systems** (without Service Desk)

To start the installation, insert the HP OpenView Service Configuration for Service Navigator CD-ROM into your CD-ROM drive.

Start the HP OpenView Installer wizard with the following command:

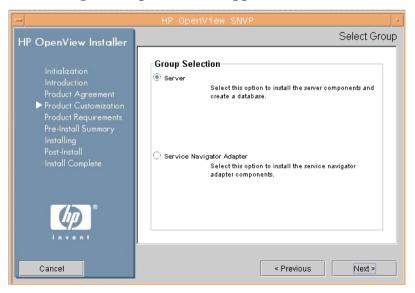
/<mountpoint>/<platform>/snvp 09.00.<nnn> setup.bin

Where *<nnn>* presents a product build version.

The HP OpenView Installer start screen appears. Click **Next** to continue, or **Cancel** to abort the installation.

When installing Service Configuration on UNIX systems, the wizard offers the option to install the application server components and create a database or to install the Service Navigator adapter components. For this design prototype, choose the **Server** installation, as shown in the Figure 3-11. **Server** stands for the application server you are installing.

Figure 3-11 Performing a Group Selection (application server)



## **To Install Application Server Components**

If you have chosen to install the application server components, follow these steps:

1. Decide whether to install the typical features or to customize your installation. In both cases, the wizard installs the standard set of features installed with this application, that includes common and the application server components.

Custom installation type enables you to choose also the Service Pages Integration components, demonstration data, the documentation and the SHS Data Collector components.

#### CAUTION

Installing the application server on the OVO Management Server is not currently supported, so although it is possible to select also the Service Navigator Adapter (seadapter) components to be installed during the Custom installation of the application server, it does not make sense.

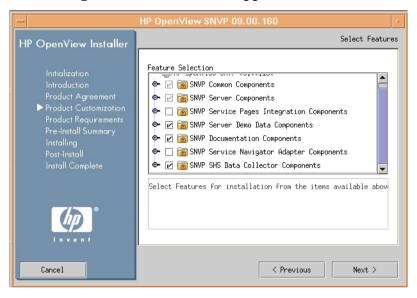
See "Installing Service Navigator Adapter (seadapter)" on page 47 for information about installing the seadapter.

#### NOTE

Before you install ServicePages Integration make sure you have previously installed and configured ServiceDesk and ServicePages. Refer to Service Desk documentation for more information.

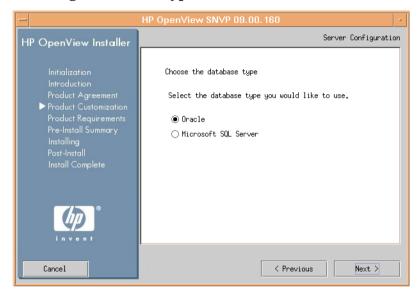
Figure 3-12 shows the custom selection of features for the application server installation.

Figure 3-12 Performing a Feature Selection (application server)



2. Select the database type. You can choose between Oracle database, as shown in the Figure 3-13, and Microsoft SQL Server.

Figure 3-13 Choosing a Database Type



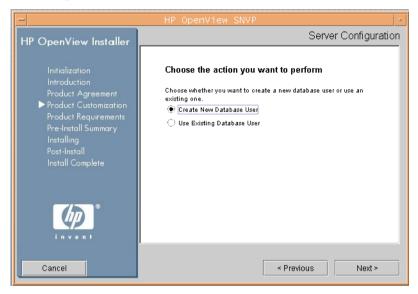
## **NOTE**

For Microsoft SQL Server support, you should have the software package version 09.00.160 installed, which is not available on the product CD-ROM. It is accessible for download from the following location:

http://support.openview.hp.com/patches/snvp/snvp.jsp

3. The wizard offers the option to create a new database user, or to use an existing database user. In this design prototype, choose **Create New Database User**.

Figure 3-14 Creating a New Database User



4. Enter the appropriate information to log on as administrator of the database (see Figure 3-15 on page 72 for presentation).

If you have choosen the Oracle database to use, the details of the Oracle database instance are as follows:

- System username: SYSTEM
- System user password: MANAGER
- Hostname of the system the database is running on: <localhost>
- Port on which the database is listening for network connections. (By default, the installation wizard assumes port 1521. You can change this only if you select a custom installation.)

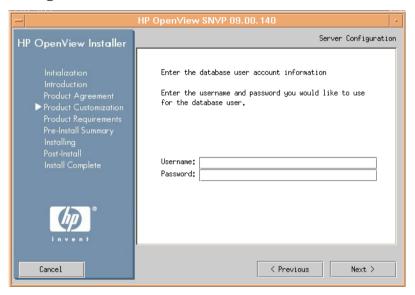
• The database server instance identifier (SID).

Figure 3-15 Specifying the Administrator Account Information



5. Decide the username and password for a new database user, which will be used for connection to the database instance, as presented in the Figure 3-16.

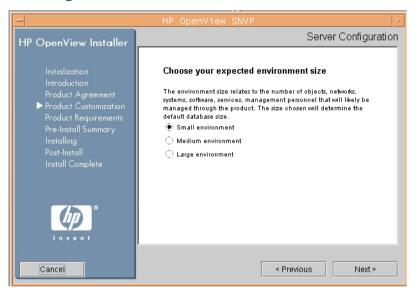
Figure 3-16 Filling the Database User Account Information



6. If you choose the custom installation, you may also see wizard screens for tablespaces. For this design prototype, accept the default settings.

7. Choose your expected environment size. In this design prototype, select the environment size **Small environment** (see Figure 3-17).

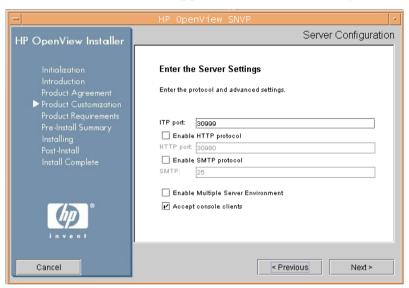
Figure 3-17 Choosing the Environment Size



8. If you choose the custom installation, you may also see wizard screens for table extents. For this design prototype, accept the default settings.

9. Enter the protocol and advanced application server settings, as shown in the Figure 3-18.

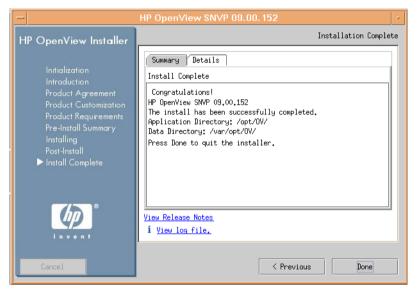
Figure 3-18 Protocol and Advanced Application Server Settings



10. The HP OpenView Installer will perform the install checks and then display the pre-install summary. Click **Install** to proceed with installation.

When the installation finishes, the wizard informs you whether the installation succeded and offers you to view the details about the eventual errors.

Figure 3-19 Installation Complete



# Installing Service Configuration on an Existing Service Desk Installation

This section describes how to install Service Configuration on an existing Service Desk installation. If you are installing Service Configuration on Service Desk, you do not need to install the application server. All you need to do is update it with the Service Desk service pack and install the Service Configuration module.

The installation is wizard based. The HP OpenView Installer wizard guides you through all the steps and requests information from you when necessary. Before you start the wizard, you might find it useful to plan your decisions and gather the information you will need.

#### NOTE

After you provide all the information that the HP OpenView Installer wizard requests, the installation process begins. This process can take up to an hour to complete.

The following sections describe the platform-dependent procedures for installation of Service Configuration:

- ☐ Installing Service Configuration on Windows Systems (with Service Desk)
- ☐ Installing Service Configuration on UNIX Systems (with Service Desk)

# **Installing Service Configuration on Windows Systems** (with Service Desk)

To start the installation, insert the HP OpenView Service Configuration for Service Navigator CD-ROM into your CD-ROM drive.

Start the HP OpenView Installer wizard with the following command:

\<mountpoint>\<platform>\snvp 09.00.<nnn> setup.exe

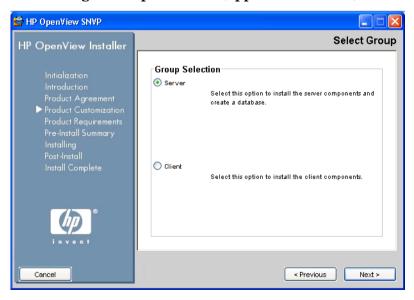
Where *<nnn>* presents a product build version.

The HP OpenView Installer start screen appears. Click **Next** to continue, or **Cancel** to abort the installation.

When installing Service Configuration on Windows systems, the wizard offers the option to install the application server components or to install only client components.

Figure 3-1 shows the selected **Server** option, where **Server** stands for the application server you are installing.

Figure 3-20 Performing a Group Selection (application server)



## **To Install Application Server Components**

If you have chosen to install the application server components, follow these steps:

 Decide whether to install the typical features or to customize your installation. In both cases, the wizard installs the standard set of features installed with this application, that includes common and application server components.

Custom installation type enables you to choose also the client, the demonstration data, the documentation, the SHS Data Collector components, and the Service Pages Integration components.

#### **IMPORTANT**

If you plan to install client on the same system with the application server, choose Custom installation type for the application server installation and install both client and the server simultaneously. You can, nevertheless, install the client (as well as any other Service Configuration component, or Service Pages integration) later by selecting Modify and then Server installation.

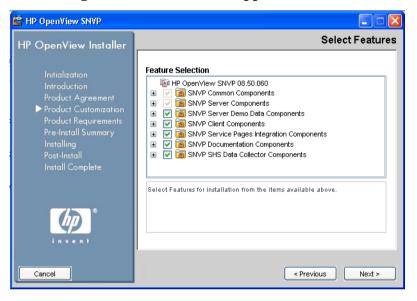
Make sure that you select all already installed components in the Feature Selection dialog box in addition to the component that you have chosen to install at the moment. If you fail to do so, these components will be uninstalled. See "Modifying Single SNVP Components" on page 141 for the installation details.

#### NOTE

It is possible to install ServicePages Integration only if you have previously installed and configured ServiceDesk and ServicePages. Refer to Service Desk documentation for more information.

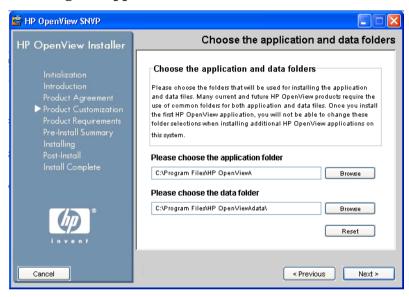
Figure 3-2 shows the custom selection of features for the application server installation.

Figure 3-21 Performing a Feature Selection (application server)



2. Choose the folders that will be used for installing application and data files. You can enter the path in the text fields provided, or use the **Browse** buttons to choose the appropriate folders, as shown in the Figure 3-22.

Figure 3-22 Choosing the Application and Data Folders

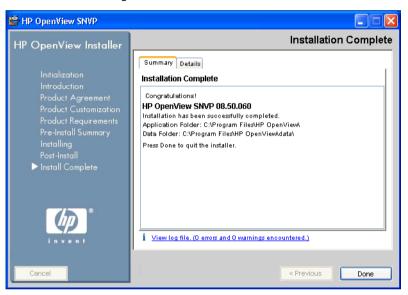


3. The HP OpenView Installer will perform the install checks and then display the pre-install summary. Click **Install** to proceed with installation.

# Installing Service Configuration on an Existing Service Desk Installation

When the installation finishes, the wizard informs you whether the installation succeded and offers you to view the details about the eventual errors.

Figure 3-23 Installation Complete



# Installing Service Configuration on UNIX Systems (with Service Desk)

Insert the HP OpenView Service Configuration for Service Navigator CD-ROM into your CD-ROM drive.

Start the HP OpenView Installer wizard with the following command:

/<mountpoint>/<platform>/snvp 09.00.<nnn> setup.bin

Where *<nnn>* presents a product build version.

The HP OpenView Installer start screen appears. Click **Next** to continue, or **Cancel** to abort the installation.

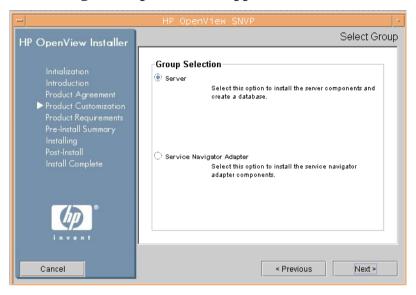
#### NOTE

It is possible to install ServicePages Integration only if you have previously installed and configured ServiceDesk and ServicePages. Refer to Service Desk documentation for more information.

When installing Service Configuration on UNIX systems, the wizard offers the option to install the application server components and create a database or to install the Service Navigator adapter components.

For this design prototype, choose the **Server** installation, as shown in the Figure 3-11. **Server** stands for the application server you are installing.

Figure 3-24 Performing a Group Selection (application server)



## **To Install Application Server Components**

If you have chosen to install the application server components, follow these steps:

1. Decide whether to install the typical features or to customize your installation. In both cases, the wizard installs the standard set of features installed with this application, that includes common and the application server components.

Custom installation type enables you to choose also the Service Pages Integration components, demonstration data, the documentation, and the SHS Data Collector components.

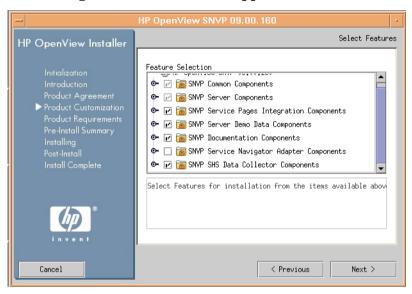
#### CAUTION

Installing the application server on the OVO Management Server is not currently supported, so although it is possible to select also the Service Navigator Adapter (seadapter) components to be installed during the Custom installation of the application server, it does not make sense.

See "Installing Service Navigator Adapter (seadapter)" on page 47 for information about installing the seadapter.

Figure 3-12 shows the custom selection of features for the application server installation.

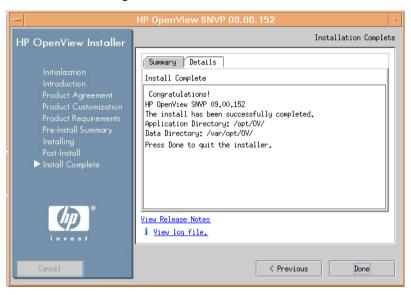
Figure 3-25 Performing a Feature Selection (application server)



2. The HP OpenView Installer will perform the install checks and then display the pre-install summary. Click **Install** to proceed with installation.

When the installation finishes, the wizard informs you whether the installation succeded and offers you to view the details about the eventual errors.

Figure 3-26 Installation Complete



# Installing Service Configuration

Installing Service Configuration on an Existing Service Desk Installation

Configuring and Starting the Application Server

This chapter describes how to configure the application server by using the application server configuration tool to edit the configuration XML file. It also describes how to start the application server after you configure it.

# **Configuring the Application Server**

The application server is configured using the application server configuration tool. This tool is the same for UNIX and Windows:

- ☐ To configure the application server on Windows:
  - 1. From the **Start** menu select **HP OpenView: Edit Server Settings**.
- ☐ To configure the application server on UNIX:
  - 1. Change to the /opt/OV/bin directory.
  - 2. Run the script OvObsServerSettingsEditor.

#### NOTE

The configuration data is held in an configuration file, and only as secure as the system it is stored on. You should therefore specify appropriate permissions for the file or for the folder the configuration data is placed in. Do not edit the configuration file directly.

# **Completing the Application Server Configuration**

Although there may be some minor differences in look and feel, the application server configuration tool is the same in both Windows and UNIX environments. Complete the following steps using the application server configuration tool:

# 1. Complete the General tab.

Supply general information to configure the Service Desk application server.

### 2. Complete the Database Accounts tab.

Supply information relating to the database users and connections.

#### 3. View the Protocols tab.

Supply information about the proprietary ITP, HTTP or SMTP transport protocol.

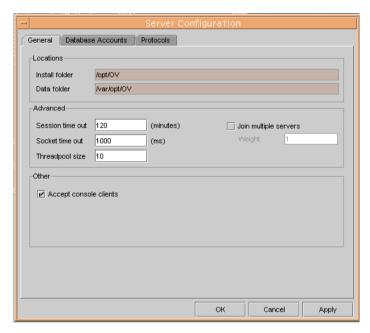
## 4. Save the configuration settings.

Save your configuration settings.

# **Step 1.** Complete the **General** tab.

When the configuration tool opens, the **General** tab is displayed.

Figure 4-1 Application Server Configuration Dialog Box - General tab



Enter the Session time out. Session time out is the time-out period, in minutes, for client sessions on the application server. When a user starts a client console, a session is created on the application server. If the user keeps the client console inactive for more than the given amount of time, the session on the application server is removed. This makes more resources on the application server available. Default for the Session time out is 120 minutes.

After the session is removed from the application server, the client must create a new session. This happens automatically when the user starts working with the application again. The user does not notice that the session is terminated except by the short delay as the client reconnects to the application server.

#### NOTE

When the session is removed from the application server, the user does not receive any online notifications of newly assigned items.

2. In the **Threadpool** field, enter the maximum number of threads to be shared by clients connected to the application server.

The value you enter should match the expected number of concurrent ITP requests. The default value of 10 threads is appropriate for most standard installations. Setting the value too high or too low causes a reduction in overall performance. Raising the value increases consumption of application server resources. Reducing the value increases the time clients need to wait for a thread to become available. You can get some idea of the demand for ITP requests using the service status console.

- 3. The **Install folder** shows the directory path of where the fixed settings for the application server are stored, you cannot change this setting.
- 4. The **Data folder** field shows the directory path for the application server's variable data such as user settings, cache, and so on. Only change this if you create a new instance of the application server.
- 5. **Multiple servers** specifies whether an application server must join other application servers to serve Service Configuration clients, or work as a standalone application server. This service is checked as the default when the application server is installed, generally, it will not need to be changed. Multiple servers should only be unchecked when a single (stand-alone) application server is being used and that server is being run with a firewall that uses port-mapping.

Running multiple servers provide a more robust environment: for instance, if an application server fails, all clients connected to that server will automatically reconnect to another application server.

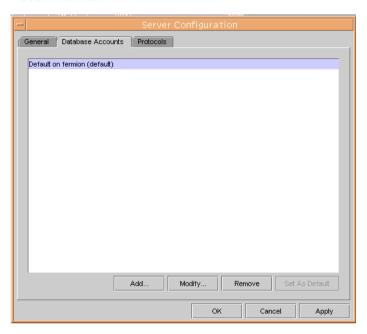
Multiple servers are also used for load balancing: When a client connects to the application server that is defined in the client's connection settings, the application server will check with the database and see what the current load balance and weighting is on all the application servers. If the defined application server has a disproportionate number of connected clients the new client session will be routed to another application server.

- 6. The **Weight** field expresses how efficient application servers are. The higher the value, the more clients the application server will take. By default, the parameter is set to "1". Accept this value, or set to a higher value. The parameter must be an integer value.
  - For example: Application server A has weight 10 and application server B has weight 2. The first 5 clients will connect to application server A, the next one to application server B, the next 5 to application server A, the next to application server B and so on.
- 7. The **Accept Console Clients** check box indicates that the application server will be used to serve clients that use the client interface. This is the default. If the check box is cleared the application server will not accept client connections.

# Step 2. Complete the Database Accounts tab.

Click the **Database Accounts** tab. The **Database Accounts** tab is displayed.

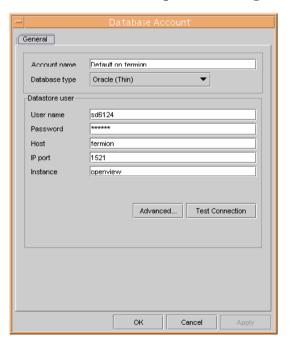
Figure 4-2 Application Server Configuration Dialog Box - Database Accounts Tab



1. To add a new database account, click Add. To modify an existing database account, select the account and click Modify. In each case, the Database Account Properties dialog box is displayed. When adding a new account, the fields are blank. When modifying an account, the details of the selected account are displayed. Enter the Account Name and select the database Server type from the drop down list.

In the **Datastore User** window frame enter the database **User name**, **Password**, **Host**, **Port**, and **Instance**. For Oracle, all three fields **Host** (database server name), **Port** number and **Instance** (Oracle instance identifier) must be completed. 1521 is the default port number used by the Oracle Net protocol. Also for SQL Database Server, all three fields **Host** (database server name), **Port** number and **Instance** (instance identifier) must be completed. 1433 is the default port number used by the SQL Database Server Net protocol.

Figure 4-3 Database Account Properties Dialog Box



2. To set the connection pool size click **Advanced**. The **Advanced** dialog box is displayed.

Figure 4-4 DB Account - Advanced Settings Dialog Box



The connection pool specifies the number of connections that the application server keeps open to the database. The minimum number is kept open all the time, the maximum number is the maximum size of the pool. The number of connections never exceeds the configured thread pool (see Step 1 on page 93). Any connections that exceed the minimum amount are closed if they are not used for 10 minutes. Click **OK** to return to the **DB Account Properties** dialog box.

- 3. Click **OK** to return to the **Server Configuration** dialog box **Database Accounts** tab page.
- 4. To remove a database account, select the account name and click **Remove**.
- 5. To set an account as the default, select the account name and click **Set as default**.

## **Step 3.** View the **Protocols** tab.

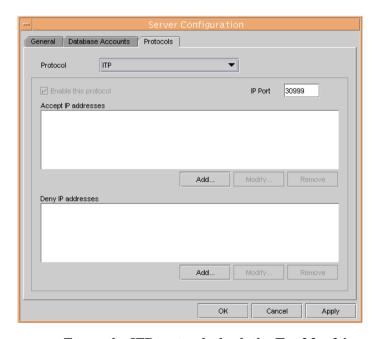
1. Select the **ITP** from the Protocol drop-down list.

ITP is an IT Service Manager proprietary transport protocol built on top of TCP/IP. It is comparable to HTTP, but ITP is in binary format and more efficient. The ITP service is used by all clients connecting to the application server.

### NOTE

The information for the ITP protocol is not immediately relevant for Service Configuration users. It is *not recommended* to change the default port number.

Figure 4-5 Application Server Configuration dialog box - ITP Protocol



- a. To use the ITP protocol, check the **Enable this protocol** check box.
- b. Enter the ITP **Port number**. This is the IP port that the ITP service should listen to. The default value is 30999, it cannot be changed.

c. To accept only specific IP addresses, enter them in the Accept IP addresses field by clicking the Add button and typing the IP address. (You can include wildcards.) Click OK and the new IP address is added to the list. Modify an existing IP address by selecting the IP address and clicking Modify. To remove an IP address, select the IP address and click Remove.

With the accept field, you can explicitly allow specific IP addresses and/or entire IP subnetworks to access the services offered by ITP. If you do not specify anything, ITP accepts connections from any IP address.

You can use wildcards; for instance \* denotes any number between 0 and 255. Thus IP addresses could be, for example, 127.0.0.1 or 12.34.\*.\*

d. To deny access to specific IP addresses, enter them in the **Deny IP addresses** field by clicking the **Add** button and typing the IP address. (You can include wildcards.) Click **OK** and the new IP address is added to the list. Modify an existing IP address by selecting the IP address and clicking **Modify**. To remove an IP address, select the IP address and click **Remove**.

With the deny field, you can explicitly exclude specific IP addresses and/or entire IP subnetworks from accessing the services offered by ITP. If you do not specify anything, ITP accepts connections from any IP address, it does not block any.

For example (\* denotes any number between 0 and 255):

123.45.67.88 123.45.67.89 123.45.67.90 123.98.76.\*

## NOTE

To provide the highest security level possible using the Access and Deny parameters, enter the IP addresses of all specific machines that should have access to the application server using ITP (for example all application servers in the network) in the Accept field and \*.\*.\*.\* in the Deny field.

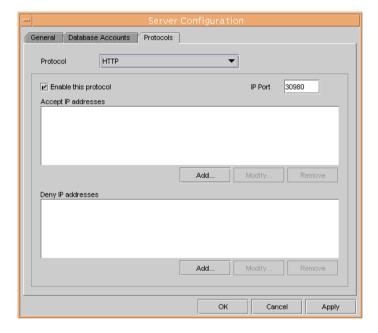
2. Select the **HTTP** from the Protocol drop-down list.

The application server can run an HTTP Post Service. This service makes it possible to receive events from third party products such as NNM, OVO, ManageX, and so on.

#### NOTE

The information for the HTTP protocol is not immediately relevant for Service Configuration users. It is *not recommended* to change the default port number.

Figure 4-6 Application Server Configuration Dialog Box - HTTP Protocol



- a. To use HTTP protocol, check the **Enable this protocol** check box. The default is checked, only clear the check box if the application server does not need to offer the HTTP Post Service.
- b. Enter the **Port number**, this defines the IP port the HTTP Post Service should listen to.

Configuring the Application Server

c. To accept only specific IP addresses, enter them in the **Accept IP addresses** field by clicking the **Add** button and typing the IP
address. (You can include wildcards.) Click **OK** and the new IP
address is added to the list. Modify an existing IP address by
selecting the IP address and clicking **Modify**. To remove an IP
address, select the IP address and click **Remove**.

With the accept field, you can explicitly allow specific IP addresses and/or entire IP subnetworks to access the services offered by HTTP. If you do not specify anything, HTTP accepts connections from any IP address.

You can use wildcards; for instance \* denotes any number between 0 and 255. Thus IP addresses could be, for example, 192.168.0.4 or 172.16.\*.\*

d. To deny access to specific IP addresses, enter them in the **Deny IP addresses** field by clicking the **Add** button and typing the IP address. (You can include wildcards.) Click **OK** and the new IP address is added to the list. Modify an existing IP address by selecting the IP address and clicking **Modify**. To remove an IP address, select the IP address and click **Remove**.

With the deny field, you can explicitly exclude specific IP addresses and/or entire IP subnetworks from accessing the services offered by HTTP. If you do not specify anything, HTTP accepts connections from any IP address, it does not block any.

You can use wildcards; for instance \* denotes any number between 0 and 255. Thus IP addresses could be, for example, 192.168.7.77, 10.\*.\*.\* with 127.0.0.1 for the loop back address.

#### NOTE

To provide the highest security level possible using the Access and Deny parameters, enter the IP addresses of all specific machines that should have access to the application server using HTTP in the Accept field and \*.\*.\*.\* in the Deny field.

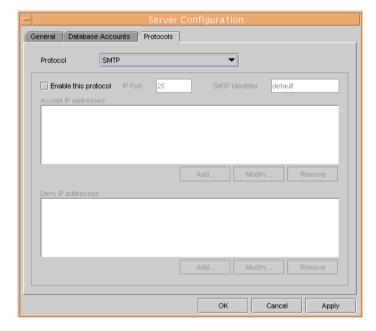
3. Select the **SMTP** from the Protocol drop-down list.

The application server can run an SMTP service, which can be used to receive e-mail messages for conversion to service calls in the application server. The SMTP service conforms to the Internet RFC 821 and RFCs 2045 to 2049.

#### NOTE

The information for the SMTP protocol is not immediately relevant for Service Configuration users. It is *not recommended* to change the default port number.

Figure 4-7 Application Server Configuration Dialog Box - SMTP Protocol



- a. Select the **Enable this protocol** check box if the application server must offer the SMTP service, this is the default.
- b. The **Port number** field defines the IP port the SMTP Service must listen to. The default setting for the port number is 25.

c. To accept only specific IP addresses, enter them in the **Accept IP** addresses field by clicking the **Add** button and typing the IP address. (You can include wildcards.) Click **OK** and the new IP address is added to the list. Modify an existing IP address by selecting the IP address and clicking **Modify**. To remove an IP address, select the IP address and click **Remove**.

With the accept field, you can explicitly allow specific IP addresses and/or entire IP subnetworks to access the services offered by SMTP. If you do not specify anything, SMTP accepts connections from any IP address.

You can use wildcards; for instance \* denotes any number between 0 and 255. Thus IP addresses could be, for example, 192.168.0.4 or 172.16.\*.\*

d. To deny access to specific IP addresses, enter them in the **Deny IP addresses** field by clicking the **Add** button and typing the IP address. (You can include wildcards.) Click **OK** and the new IP address is added to the list. Modify an existing IP address by selecting the IP address and clicking **Modify**. To remove an IP address, select the IP address and click **Remove**.

With the deny field, you can explicitly exclude specific IP addresses and/or entire IP subnetworks from accessing the services offered by SMTP. If you do not specify anything, SMTP accepts connections from any IP address, it does not block any.

You can use wildcards; for instance \* denotes any number between 0 and 255. Thus IP addresses could be, for example, 192.168.7.77, 10.\*.\*.\* with 127.0.0.1 for the loop back address.

#### NOTE

To provide the highest security level possible using the Access and Deny parameters, enter the IP addresses of all specific machines that have access to the application server using SMTP in the Accept field and \*.\*.\*\* in the Deny field.

**Step 4.** Save the configuration settings.

Click  $\mathbf{OK}$  to save the configuration settings.

# **Application Server Port Allocation in Firewall Environments**

Communication between application servers and client computers takes place via TCP/IP ports.

When running in a firewall environment, all network traffic destined for the port numbers listed below (the application server defaults) must be allowed to pass the firewall.

## **□** Incoming client connections

The application server listens by default on port 30999 for incoming connections from Service Desk clients. The port number cannot be changed on Service Configuration clients.

## ☐ HTTP Post requests (SD event program)

The application server listens by default on port 30980 for incoming HTTP Post requests from the SD\_event program. This is not applicable to Service Configuration users.

# **□** SMTP connections

The application server uses by default port 25 for SMTP connections. This is not applicable to Service Configuration users.

# ☐ Service Desk Agent

The Service Desk Agent listens by default on port number 50998 for incoming requests from the Service Desk application server. The value of this port number cannot be changed. This is not applicable to Service Configuration users.

#### □ Communication with the database server

Communication between application servers and the database server takes place via TCP/IP ports.

Oracle Net uses port 1521.

# **Starting the Application Server**

After you configure the application server, you need to start it so that clients can connect to it. You can start the application server in one of the following ways:

- ☐ Using the ovc -start command
  - On Windows systems
    - C:\\Program Files\HP OpenView\bin\ovc -start
  - On UNIX systems
    - /opt/OV/bin/ovc -start
- Manually
  - On Windows systems
    - C:\\Program Files\HP OpenView\bin\OvObsServer -start
  - On UNIX systems

/opt/OV/bin/OvObsServer -start

5 Installing the Service Configuration Client

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This chapter describes the tasks you must perform to install and start the Service Configuration client.

# Preparing for Service Configuration Client Installation

After you install the Service Configuration application server, you must install all the Service Configuration clients individually from the Service Configuration Windows CD-ROM, or make preparations for shared folder or hyperlink installation. Whoever performs the installation, they must have administrator rights on the computer where the client is being installed.

#### **IMPORTANT**

If you plan to install client on the same system with the application server, choose Custom installation type for the application server installation and install both client and the server simultaneously (see "Installing Service Configuration" on page 51 for the installation instructions).

You can, nevertheless, install the client (as well as any other Service Configuration component, or Service Pages integration) later by selecting Modify and then Server installation.

Make sure that you select all already installed components in the Feature Selection dialog box in addition to the component that you have chosen to install at the moment. If you fail to do so, these components will be uninstalled. See "Modifying Single SNVP Components" on page 141 for the installation details.

#### NOTE

HP OpenView Service Configuration is distributed with different CD-ROMs for each platform that the Service Configuration application server can run on. The Service Configuration client software can only run on a Windows environment, and is therefore supplied on the Windows CD-ROM alone. All references to CD-ROM in this chapter refer to the Windows CD-ROM.

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There are three sources that can be used to install Service Configuration clients:

#### ☐ CD-ROM installation

If you install the clients from a CD-ROM, you install the client software on each client computer using the installation program on the Service Configuration CD-ROM inserted in the CD-ROM drive of the client computer or a CD-ROM drive elsewhere on the network. See "CD-ROM Installation on a Client PC" on page 110.

#### ☐ Shared folder installation

If you install the clients from a shared folder, you start the client installation program from each client computer by accessing a shared folder on either the Service Configuration application server machine or elsewhere on the network. See "Preparing Shared Folder Installation" on page 110.

#### CD-ROM Installation on a Client PC

When the Service Configuration CD-ROM is inserted in the CD-ROM drive of a client computer, autorun cause the installation program to start, and the Service Configuration start screen is displayed. If the client computer has autorun switched off, insert the CD-ROM in the CD-ROM drive and double-click Setup. exe. If you are using the CD-ROM in a networked CD-ROM drive, navigate to the same file through your network.

### **Preparing Shared Folder Installation**

You can install each client directly from a shared folder on the network, or from the CD-ROM on a network drive.

To install Service Configuration clients from a shared location, copy the complete contents of the SNVP folder from the CD-ROM to the shared folder you want to use to install the Service Configuration clients. Ensure that the client has access rights to the folder you choose. You can then install the client using the silent installation method.

# **Installing the Client on Windows**

To install software on a Windows computer, you must be logged on with an account that has system administrator rights to make changes in the Windows registry. If the account does not have sufficient rights, the installation of the software will not succeed.

Install the Service Configuration client by using the setup program on the HP OpenView Service Configuration for Service Navigator CD-ROM. You can install Service Configuration directly from the CD-ROM onto your computer's hard disk, or you can copy the contents of the SNVP folder to a shared drive and install via a network drive.

The Service Configuration client includes software developed by the Apache Software Foundation (http://www.apache.org). Copyright © 1999-2003. The Apache Software Foundation. All rights reserved. This software is subject to a license agreement, a copy of which is installed in the license-agreements\xerces\1.4.3 directory below your chosen installation directory.

To install the Service Configuration client on Windows:

 To start the installation, insert the HP OpenView Service Configuration for Service Navigator CD-ROM into your CD-ROM drive.

Start the HP OpenView Installer wizard with the following command:

\<mountpoint>\<platform>\snvp\_09.00.<nnn>\_setup.exe

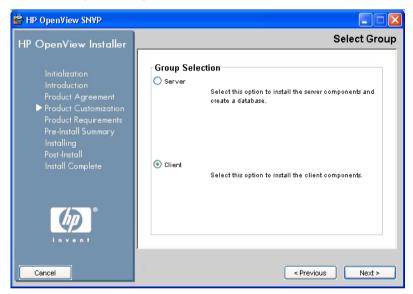
The HP OpenView Installer start screen appears. Click **Next** to continue, or **Cancel** to abort the installation.

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2. When installing Service Configuration on Windows systems, the wizard offers the option to install the application server components and create a database or to install only client components.

Choose **Client** option, as described on Figure 5-1.

Figure 5-1 Performing a Group Selection (client)



3. Decide whether to install the typical features or to customize your installation. In both cases, the wizard installs the standard set of features installed with this application, that includes common and client components.

Custom installation type enables you to choose also the SHS Data Collector components.

NOTE

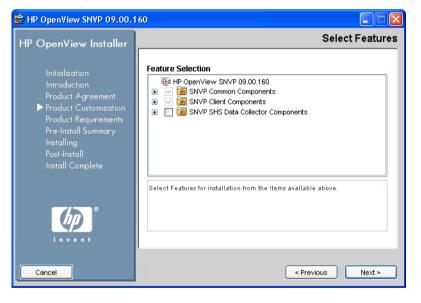
If you changed your mind regarding the installation of any particular SNVP component after the SVNP installation process is already completed, it is possible to install (or uninstall) these components at a later time. See "Modifying Single SNVP Components" on page 141 for more information.

Figure 5-2 shows the custom selection of features for client installation.

#### NOTE

Since the Online Help is an integrating part of the Service Configuration console, the documentation components are automatically installed together with the standard set of features for client installation.

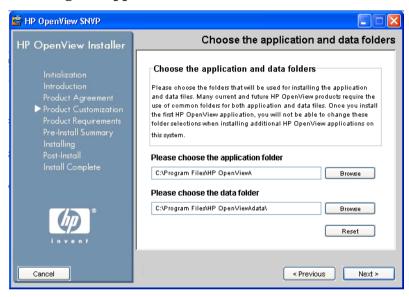
Figure 5-2 Performing a Feature Selection (client)



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4. Choose the folders that will be used for installing application and data files. You can enter the path in the text fields provided, or use the **Browse** buttons to choose the appropriate folders, as shown in the Figure 5-3.

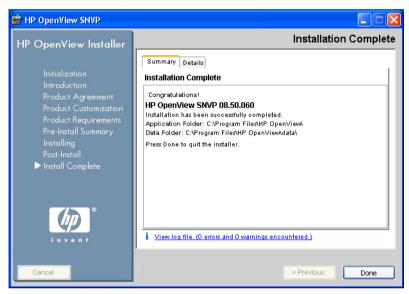
Figure 5-3 Choosing the Application and Data Folders



5. The HP OpenView Installer will perform the install checks and then display the pre-install summary. Click **Install** to proceed with installation.

When the installation finishes, the wizard informs you whether the installation succeded and offers you to view the details about the eventual errors.

#### Figure 5-4 Installation Complete



For information on installing the application server on Windows and the instructions for installation on UNIX systems, see Chapter 3, "Installing Service Configuration," on page 51.

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# **Starting the Client on Windows**

When you start the Service Configuration client, the console usually appears without requiring further input from you. Input may be required from you in the following cases:

#### □ Failure to connect

The error message Failed to connect appears when the console encounters a problem when trying to connect to the **UI server** (the application server). This happens, for example, when the UI server has not been installed yet or is not running, or when the system administrator has changed the password. When you are sure that the UI server is installed and running, acknowledge the error message. The Login dialog box appears. Enter the required information as described below and click **OK** to start the Service Configuration console.

#### Service Desk users only

Service Desk can be configured to always display the Service Desk Login dialog box. If this is configured in the System Settings of the Service Desk Console, Service Configuration users are also always presented with the Service Configuration Login dialog box. Enter the required information as described below and click **OK** to start the Service Configuration console.

TIP

If the administrator has changed the password or if you would like to connect to another UI server, enter the new data in the Login dialog box, then modify the appropriate information on the General tab of the Options dialog box. The next time you start the console, the new password and the new UI server will be used.

#### To start the Service Configuration console:

1. Select **Start: Programs: HP OpenView**. Choose **HP OpenView SNVP**. The Service Configuration client console starts.

The Service Configuration Login dialog box may open if input is required from you.

- 2. The **User name** field displays the default user system.
- 3. In the **Password** field, type the password **openview**. This is the default password of the default user. If your system administrator has changed this password on the UI server, type the new password.
- 4. In the **UI server** field, type the name of the computer where the Service Configuration application server is installed. This is the system where the Service Desk application server is running.
- 5. Click **OK**. The Login dialog box closes and the Service Configuration main console is displayed.

#### NOTE

The login data is held in a personal settings file for each Service Configuration user. This file is stored in the profile of the user. Do not edit this file directly.

The settings file is only as secure as the system it is stored on. You should therefore specify appropriate permissions for the file or for the folder the file is placed in.

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Installing the Service Configuration Client Starting the Client on Windows

**6** Post-installation Tasks

#### Overview

After the Service Configuration client has been installed, you must perform some configuration tasks for Service Configuration to start working.

#### 1. Configuring an OVO Management Server

Configure one or more OVO management servers for Service Configuration using the Service Configuration client console. This task involves setting up the OVO management server in Service Configuration and importing data (users, nodes, and service names in messages) from this server. This is necessary because Service Configuration needs this data in the service hierarchies.

This step is required. It must be performed after the Service Configuration application server and client software have been installed. See "Configuring an OVO Management Server" on page 122.

#### 2. Configuring the Default Service Hierarchy

Create a service hierarchy in Service Configuration that will be the default service hierarchy for migrated and discovered objects.

This step is required. It must be performed after you have set up your OVO management servers in Service Configuration. See "Configuring the Default Service Hierarchy" on page 125.

#### 3. Configuring Service Navigator Adapter (seadapter)

Configure the Service Configuration connector on the OVO management server. This is the piece of software you installed in "Installing Service Navigator Adapter (seadapter)" on page 47.

This step is required. It must be performed after you have installed the Service Configuration connector on the OVO management server and after you have installed and configured the application server. The application server processes must be running. See "Configuring Service Navigator Adapter (seadapter)" on page 127.

# 4. Activating Service Configuration on the OVO Management Server

Activate Service Configuration on the OVO management server using the command line tool /opt/OV/bin/OvSnvpActivate. After Service Configuration has been activated, all configuration input into the Service Navigator service engine is redirected to the Service Configuration application server. Service Configuration can be deactivated again if required. Activation must be performed after the OVO management servers have been set up in Service Configuration and the OVO data has been imported. See "Activating Service Configuration on the OVO Management Server" on page 131.

#### 5. Migrating Service Navigator Data

If you are already using Service Navigator, you can migrate your existing service configuration data to Service Configuration. This task must be performed after the OVO management servers have been set up in Service Configuration, the OVO data has been imported, and a default service hierarchy has been created. Service Configuration does not have to be activated when you migrate the data. In fact, you can migrate your data to Service Configuration and inspect it using the Service Configuration console before redirecting the Service Navigator service engine to Service Configuration. See "Migrating Service Navigator Data" on page 133.

# Configuring an OVO Management Server

Configure one or more OVO management servers in Service Configuration. If you are working in a flexible management environment with multiple OVO management servers, you must set up all of your management servers in Service Configuration.

Figure 6-1 on page 124 shows the OVO management server dialog box where you set up an OVO server in Service Configuration.

- 1. Start the Service Configuration GUI client as described in "Starting the Client on Windows" on page 116.
- Select Tools: Options from the menu bar to open the Options dialog box.
- 3. In the Options dialog box, click **New**. The OVO Management Server dialog box opens.
- 4. In the **Name** field, type the hostname of the OVO management server. Look up the OVO management server name in the output of the ovconfget(1) command:

```
ovconfget -ovrg server opc OPC MGMT SERVER
```

5. In the **Database name** field, type the name of the OVO database instance you want to connect to, using the following format:

```
<OVO database instance>@<server hostname>
```

#### Where:

<OVO database instance>

Name of the OVO database instance. The default name is openview but the OVO administrator can specify a different name when configuring

OVO.

<server hostname>

Name of the OVO management server you want to connect to.

Example: openview@server

- 6. The **Port number** field displays the default port Service Configuration uses to communicate with OVO for deployment. See the online help for information about additional configuration steps needed if you do not want to use the default port 7280.
- 7. In the **Character set** field, select the codeset you want to use in the deployed XML file. Choose ISO-8859-15 for Western European languages and Shift\_JIS for the Japanese language.
- 8. Click **Import Data** to start importing data from OVO. You are prompted to supply a password for the OVO database user opc\_op. Service Configuration uses the account of this user to connect to the OVO database. See the online help for more information about supplying a user name and password for OVO.

To view the imported data, choose the type of data you are interested in and select the corresponding tab. You can choose between nodes, users, and service names in messages.

#### NOTE

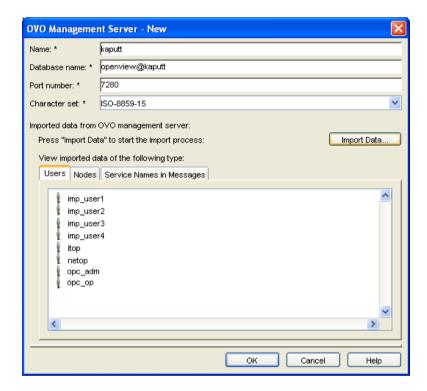
The import process can take a long time depending on the amount of data being imported. To speed up the import process, ensure you have sufficient memory available on your system. In addition, ensure that the OVO database does not contain too many active and history messages.

9. Click **OK** to save the configuration.

#### **Configuring an OVO Management Server**

10. Continue with "Configuring the Default Service Hierarchy" on page 125.

Figure 6-1 The OVO Management Server Dialog Box



# Configuring the Default Service Hierarchy

Configure a service hierarchy that will be the default hierarchy for discovered and migrated objects.

Figure 6-2 on page 126 shows the General page of the Service Hierarchy Wizard where you set up the default service hierarchy.

1. Start the Service Hierarchy Wizard.

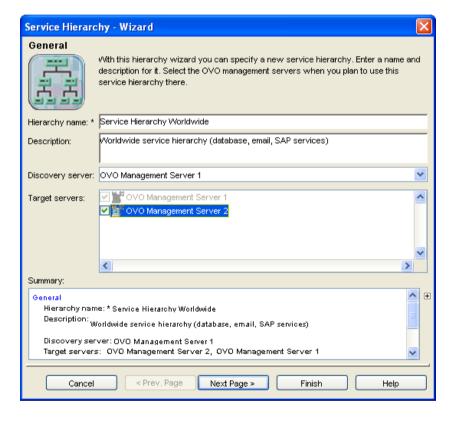
From the **File** menu, click **New Service Hierarchy**, or click the **New Service Hierarchy** toolbar button. The Service Hierarchy Wizard opens and displays the General page.

- 2. In the **Hierarchy name** field, type the name of your hierarchy. This name will be used to reference the hierarchy within the Service Configuration application.
- 3. In the **Description** field, type a short description to summarize the purpose and content of the service hierarchy.
- 4. Select an OVO **management server** as discovery server from the drop-down list. This is the server you have set up in "Configuring an OVO Management Server" on page 122.
  - By choosing a server as discovery server, the hierarchy becomes the default service hierarchy for objects discovered on that server. Objects migrated with the tool OvSnvpExport are also added to this service hierarchy.
- 5. Select one or more OVO management servers as target servers for deployment. Service Configuration automatically selects the discovery server as target server.
- 6. Click **Finish** to complete the configuration of the service hierarchy.

A message asks you to confirm that you really want to create a service hierarchy without any root objects. It is not necessary to create root objects for the default service hierarchy because they will be supplied by the discovery or migration processes.

- 7. Click **Continue** to confirm that you want to create a service hierarchy without any root objects. The service hierarchy is created and displayed in the Service Configuration console.
- 8. Continue with "Configuring Service Navigator Adapter (seadapter)" on page 127.

Figure 6-2 The Service Hierarchy Wizard — General Page



Configure the Service Configuration connector on the OVO management server. This is the piece of software you installed in "Installing Service Navigator Adapter (seadapter)" on page 47.

#### NOTE

To successfully configure the seadapter, an application server must be installed, configured, and running.

1. On the OVO management server, open the Accounts dialog box:

/opt/OV/bin/OvObsClientSettingsEditor

The Accounts dialog box opens and displays the General tab.

2. On the **General** tab, accept all default settings.

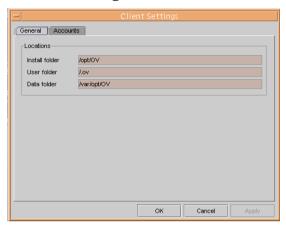
The **Install folder** is the product folder where the fixed settings for Service Configuration are stored.

The **User folder** is the folder containing cache files, log files, configuration files and so on.

#### **Configuring Service Navigator Adapter (seadapter)**

The **Data folder** is the folder containing Service Configuration's variable data, for example, user settings, cache, and so on.

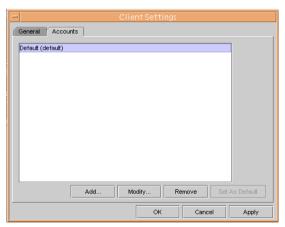
Figure 6-3 Accounts Dialog Box - General Tab



3. Click the **Accounts** tab. The Accounts tab lists the account of the "Default" as the default account for the connector.

This account does not have sufficient rights to successfully connect OVO with the application server. Click **Add** to create another, more powerful account.

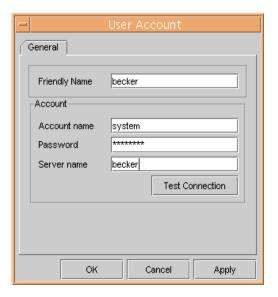
Figure 6-4 Accounts Dialog Box - Accounts Tab



- 4. The Account Properties dialog box opens. Set up a new account with the following information:
  - a. In the **Friendly Name** field, type the name of the account. This is the name that is shown in the Accounts dialog box.
  - b. In the **Account name** field, type system.
  - c. In the **Password** field, type openview.
  - d. In the **Server name** field, type the name of the Service Desk application server. If the application server is located on the same system as the OVO management server, type <*localhost>*.
  - e. Click **Apply** to register the data, and then **Test Connection** to ensure the account can connect to the application server.
  - f. Click **OK** to close the Account Properties dialog box and return to the Accounts dialog box.

Click **Test Connection** to ensure the account can connect to the application server. The message Connection successful. indicates that the connector can connect successfully to the application server.

Figure 6-5 Accounts Dialog Box - Properties

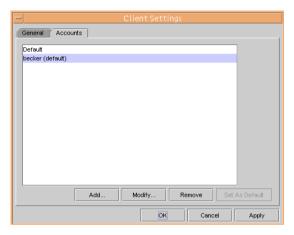


#### **Configuring Service Navigator Adapter (seadapter)**

5. The Accounts tab now lists the account you have configured in step 4. Select the system account and click **Set As Default**. This ensures that only this account is used for all connections between OVO and the application server.

Click  $\mathbf{OK}$  to save your changes and close the Accounts dialog box.

Figure 6-6 Accounts Dialog Box - Accounts Tab



6. Continue with "Activating Service Configuration on the OVO Management Server" on page 131.

# Activating Service Configuration on the OVO Management Server

Activating Service Configuration involves diverting any input to the Service Navigator service engine and redirecting it to the Service Configuration application server.

You activate Service Configuration using the command line tool OvSnvpActivate. This tool must be called with root privileges on the OVO management server. It writes information to standard output and to the log file /var/opt/OV/log/OvSnvpActivate.txt. For more information about the tool, access the OvSnvpActivate(1m) man page on the OVO management server.

1. As user root, enter the following at the command prompt:

#### /opt/OV/bin/OvSnvpActivate

The tool first checks the following prerequisites:

#### Application server

OvSnvpActivate checks which application server and user is used by the Service Configuration connector for OVO by reading properties stored in the OVO resource group server and the namespace opc. It then verifies that the application server is running and that the user can connect to it.

#### □ OVO management server

OvSnvpActivate checks that the OVO management server has been set up in Service Configuration and that a service hierarchy has been created where this management server functions as discovery server. See "Configuring an OVO Management Server" on page 122.

When all prerequisites are met, OvSnvpActivate stops the OVO management server processes and updates the OVO configuration file with settings for default service names in messages and for a socket used by the deployment processes. It then updates the local OpenView registry (LRF) to include the seadapter process in the ovstart, ovstop, and ovstatus sequence, and then starts the OVO management server processes. Finally, OvSnvpActivate configures an inetd service. This service listens for configuration data being deployed from Service Configuration.

2. Verify that Service Configuration has been activated successfully on the OVO management server by entering the following at the command prompt:

#### /opt/OV/bin/ovstatus seadapter

The output should include an entry for the seadapter process. If the process is running, Service Configuration has been activated successfully on the OVO management server.

# **Enabling Automatic Hierarchy Deployment** on Solaris 10

On Solaris 10, after you successfully installed and activated Service Configuration, the automatic hierarchy deployment from Service Configuration to OVO/UNIX does not function properly due to the difference in the inetd configuration between Solaris 10 and Solaris 9.

To enable automatic hierarchy deployment on Solaris 10, perform these steps after activating Service Configuration:

1. Enter the following command:

```
svcs | grep cadm
```

- 2. Depending on the output, perform one of the following:
  - If there is no output displayed, enter:

```
inetconv -i /etc/inet/inetd.conf
```

If seadapter is in the maintenance mode, enter:

svcadm clear /network/cadmsnd/tcp

# **Migrating Service Navigator Data**

Migrating Service Navigator data includes the migration of the service configuration data itself as well as any logging information. The content of the following Service Navigator files is migrated:

/etc/opt/OV/share/conf/OpC/mgmt\_sv/opcsvcm/services
/etc/opt/OV/share/conf/OpC/mgmt sv/opcsvcm/loggings

Before starting the migration process, ensure that the Service Configuration server (application server) processes are running and that the content of the Service Navigator service engine does not change while it is being migrated. It is recommended that you do not use the command opcservice during the migration and that you stop any service discovery processes run by SPIs.

You migrate Service Navigator service configuration files using the command line tool OvSnvpExport. This tool must be called with root privileges on the OVO management server. It writes information to standard output. For more information about the tool, access the OvSnvpExport(1m) man page on the OVO management server.

- 1. Ensure that the Service Configuration server (application server) processes are running and that the configuration data in the Service Navigator service engine does not change during the migration.
- 2. As user root, enter the following at the command prompt:

#### /opt/OV/bin/OvSnvpExport

The tool creates backup copies of the Service Navigator services and loggings files before processing them. OvSnvpExport informs you about the progress of the migration with informational messages. It first migrates the content of the services file, then the content of the loggings file.

The migrated data is saved into the default service hierarchy specified for the OVO management server, see "Configuring the Default Service Hierarchy" on page 125. You can then copy and paste object branches from the migrated service hierarchy to other service hierarchies as required.

#### Post-installation Tasks

## **Migrating Service Navigator Data**

3. Before deploying your migrated service hierarchies to OVO for the first time, it is recommended that you empty the content of the service engine using the following command:

/opt/OV/bin/OpC/opcservice -remove

7 Licensing and User Management

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## **About Licenses**

The HP OpenView Operations for UNIX management server license-to-use (LTU) entitles to the use of the HP OpenView Service Navigator Value Pack (Service Configuration for Service Navigator). An additional LTU is not required.

#### **NOTE**

The default internal license entitles ten (10) concurrent users to access Service Configuration at any one time. All users use the same user name and password.

# **User Management in Service Configuration**

Service Configuration uses the Service Desk user concept which is based on accounts and roles. Accounts specify the information users need to log in with a user name and password. The access rights that an account has to Service Configuration are defined by applying a role, or multiple roles, to the account.

Service Configuration uses two accounts to connect to the application server:

#### ☐ User account for the console

The console uses a named user account to connect to the application server. This is the account of the Service Desk "system" user which has the Service Desk "system administrator" role assigned. The default password of the system account is "openview".

#### ☐ Integration account for the seadapter

The service engine adapter (which runs on the OVO management server system) uses an integration account to connect the service engine with the application server. This is the account of the Service Desk "system" user which has the Service Desk "system administrator" role assigned. The default password of the system account is "openview".

#### **CAUTION**

The system administrator role is the most powerful role existing in Service Desk. If you are using Service Configuration together with Service Desk, consider setting up a dedicated Service Configuration user with a more restricted role to limit access to data in Service Desk. See "Service Configuration with Service Desk" on page HIDDEN.

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# **About Security**

This section explains how you can increase the security of Service Configuration data by restricting access to the application.

### Service Configuration without Service Desk

If you are using Service Configuration without Service Desk, consider changing the default password of the default system user.

When you change the password of this user, remember to notify all users who use the Service Configuration console. They must enter the new password in the Login dialog box the next time they log into Service Configuration. After they have logged in successfully, they can change the password on the client in the Options dialog box. The Service Configuration connector uses the same account to connect OVO with the application server. If you change the password of the system account, you must also modify the password for the connector using the Accounts dialog box. See "Configuring Service Navigator Adapter (seadapter)" on page 127 for information about how to use the Accounts dialog box.

To change the password on the application server, use the tool <code>cadm\_chpwd.bat</code>. This tool is located in the bin directory of the client installation. See the *Service Configuration for Service Navigator User's Guide* for more information about managing passwords.

8 Installing and Uninstalling Single SNVP Components

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If you changed your mind regarding the installation of any particular SNVP component after the SVNP installation process is already completed, it is possible to modify your preferences for these components at a later time. You can install or uninstall any of SNVP components offered in the Select Features dialog box of the HP OpenView Installer wizard, such as SNVP Data Collector, Service Pages integration and so on.

# **Modifying Single SNVP Components**

By modifying single SNVP components you can renew your selection of features that you prefer to have installed, apart from the very Service Configuration installation process.

#### NOTE

This procedure is aimed for the (un)installation on Windows systems. To modify SNVP components on UNIX systems, you should consider the appropriate steps aimed for the SNVP installation on UNIX systems, as described in the "Installing Service Configuration on UNIX Systems (without Service Desk)" on page 67.

 Insert the HP OpenView Service Configuration for Service Navigator CD-ROM into your CD-ROM drive.

Start the HP OpenView Installer wizard with the following command:

• On Windows systems

\<mountpoint>\<platform>\snvp\_09.00.<nnn>\_setup.exe
Where <nnn> presents a product build version.

On UNIX systems

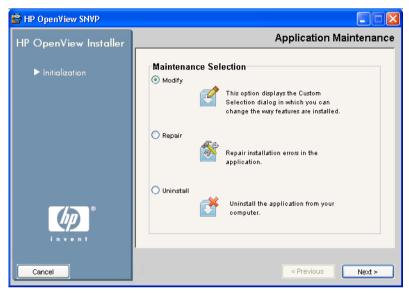
/<mountpoint>/<platform>/snvp 09.00.<nnn> setup.bin

The HP OpenView Installer start screen appears. Click **Next** to continue, or **Cancel** to abort the installation.

In the Application Maintenance dialog box, select **Modify** and click **Next**. The Introduction (Modify) window opens.

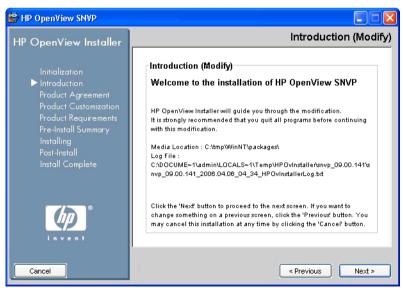
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Figure 8-1 Application Maintenance Dialog Box

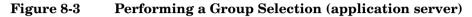


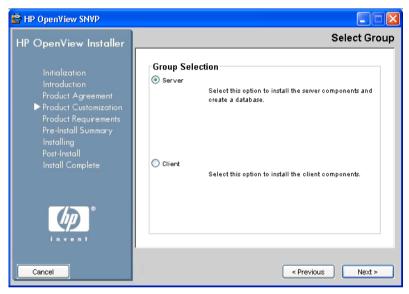
2. In the Introduction (Modify) dialog box click  $\bf Next$ .

Figure 8-2 Introduction (Modify) Dialog Box



The wizard offers the option to install the application server components or to install only client components. Figure 8-3 shows the selected **Server** option, where **Server** stands for the application server you are installing.





Click **Next**. The Select Features dialog box appears.

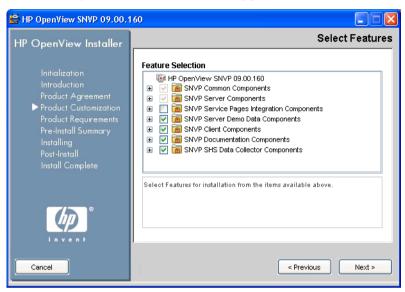
3. In the Select Features dialog box, select the appropriate SNVP components (see Figure 8-4). Click **Next**.

#### CAUTION

Make sure that you select all already installed components in the Feature Selection dialog box in addition to the component that you have chosen to install at the moment. If you fail to do so, these components will be uninstalled.

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Figure 8-4 Performing a Feature Selection (application server)



4. Follow the rest of the appropriate installation procedure as described in the Chapter 3, "Installing Service Configuration," on page 51.

## **Installing the Service Pages Integration**

This section describes the tasks required to install the Service Configuration integration with Service Pages on all supported platforms. In general, the following high-level steps must be completed:

- 1. Make sure you have an existing Service Pages server installation that is installed and configured as described in the Service Desk documentation.
- 2. Stop the Service Pages tomcat server.
- 3. Install the Service Configuration integration with Service Pages on the Service Pages server system. You can install Service Pages integration as any other single SNVP component as described in the "Modifying Single SNVP Components" on page 141.
- 4. Start the Service Pages tomcat server.

#### NOTE

Before you begin with installing the Service Pages integration, make sure you have properly installed and configured Service Pages server installation. Refer to the Service Desk documentation for the installation and configuration instructions.

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Installing and Uninstalling Single SNVP Components Installing the Service Pages Integration

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9 Removing Service Configuration

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This chapter describes the tasks you must perform to remove the Service Configuration software completely from your system. The following is detailed within this chapter:

□ Service Configuration uninstallation procedures (from Windows and UNIX platforms)

See "Uninstalling from Windows" on page 149 and "Uninstalling from UNIX" on page 151 for more information.

☐ Deactivating Service Configuration on the OVO management server

See "Deactivating Service Configuration on the OVO Management Server" on page 154 for more information.

☐ Files that must be removed manually after the uninstallation program finishes

See "Files Not Removed During Uninstallation" on page 153 for more information.

#### CAUTION

Make sure that you have deactivated the seadapter software *before* you begin with the Service Configuration uninstallation. Deactivate the seadapter on the OVO management server by entering the following:

/opt/OV/bin/OvSnvpActivate -d

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## **Uninstalling from Windows**

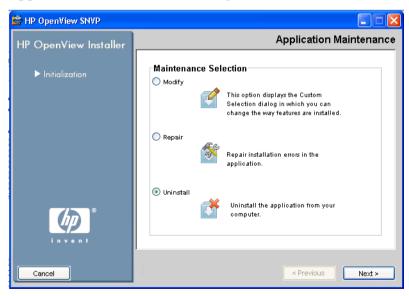
When any part of Service Configuration is being uninstalled from a Windows platform, you use the standard windows functionality to remove it.

You can remove Service Configuration using the Control Panel:

- 1. Click the Windows **Start** button. In the Start menu, choose **Settings**. In the submenu, select **Control Panel**.
- 2. Double-click the **Add/Remove Programs** icon.
- 3. In the list, select the **HP OpenView SNVP** component and click **Remove**. The Application Maintenance Dialog Box opens.
- 4. In the Application Maintenance dialog box, select Uninstall, as shown in the Figure 9-3.

Pre-Unistall Summary window opens.

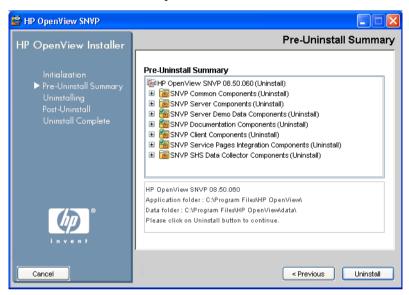
Figure 9-1 Application Maintenance Dialog Box



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5. The Pre-Uninstall Summary window lists the SNVP components targeted for uninstallation. Select **Uninstall** to begin with uninstallation.

Figure 9-2 Pre-Uninstall Summary Window



6. A dialog box showing the progress of the uninstallation is shown. When the progress reaches 100% another dialog box is displayed saying the uninstallation is complete. Click **Done** to finish the procedure.

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## **Uninstalling from UNIX**

To remove Service Configuration from your UNIX system, follow the procedure:

1. Start the uninstallation wizard by entering the following:

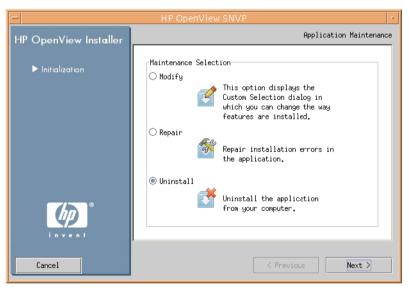
/opt/OV/Uninstall/snvp/setup.bin

The Application Maintenance Dialog Box opens.

2. In the Application Maintenance Dialog Box, select Uninstall, as shown in the Figure 9-3.

Pre-Unistall Summary Window opens.

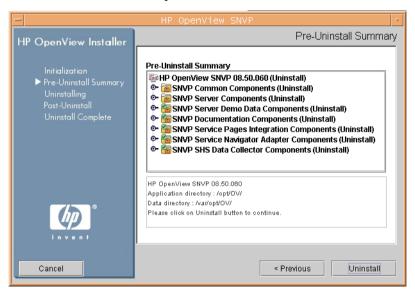
Figure 9-3 Application Maintenance Dialog Box



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3. The Pre-Uninstall Summary window lists the SNVP components targeted for uninstallation. Select [Uninstall] to begin with uninstallation.

Figure 9-4 Pre-Uninstall Summary Window



4. A dialog box showing the progress of the uninstallation is shown. When the progress reaches 100% another dialog box is displayed saying the uninstallation is complete. Click [Done] to finish the procedure.

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## **Files Not Removed During Uninstallation**

The uninstallation program can only uninstall files that were included in the original installation. The following files are not removed by the uninstallation program. These files must be removed manually:

- ☐ Cache
- Configuration settings
- Log files

Service Configuration creates variable files for the application server as well as for all clients, including all console clients and the seadapter. Variable files may exist both in the installation directory and in user-specific directories.

#### NOTE

At the end of the unistallation process you may receive some warnings related to unsuccessful uninstallation of some packages, such as Service Desk packages. These warnings can be safely ignored, since these packages are used by other applications.

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## Deactivating Service Configuration on the OVO Management Server

Deactivating Service Configuration on the OVO management server has the effect that any input to the Service Navigator service engine via opcservice goes directly into the Service Navigator service engine rather than into the Service Configuration server.

#### /opt/OV/bin/OvSnvpActivate -d

OvSnvpActivate stops the OVO management server processes, updates the OVO configuration settings file, updates the local HP OpenView registry (LRF) for the ovstart, ovstop, and ovstatus sequence, and then starts the OVO management server processes. Finally, it de-configures an inetd service. This service listened for configuration data being deployed from Service Configuration.

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# Troubleshooting the Installation

## **Troubleshooting Service Configuration**

Ideally, we would hope that your installation of Service Configuration is completed without complications. However, Service Configuration is a finely tuned product and sometimes minor variations of hardware or software configuration can cause unexpected results. This section contains some possible problem scenarios and suggestions for their resolution.

If you have a problem not addressed in this section, or a problem that persists even when the solutions given here have been tried, go to the HP OpenView Support Web site at

http://www.hp.com/managementsoftware/support and follow the link for how to get OpenView support in your region.

## Unable to Connect to Application Server on a Windows Platform

If, when you start Service Configuration, you are unable to connect to the application server, check that the application server is running. Enter the following command:

☐ On Windows systems
C:\\Program Files\HP OpenView\bin\ovc
☐ On UNIX systems
/opt/OV/bin/ovc

If the application server is running, check the log files. These files may give you additional information about the cause of the problem. Log files are located at:

☐ On Windows systems

C:\Program Files\HP OpenView\data\log

☐ On UNIX systems

/var/opt/OV/log

If application server is not running, start it in one of the following ways:

- ☐ Using the ovc -start command
  - On Windows systems

C:\\Program Files\HP OpenView\bin\ovc -start

• On UNIX systems

/opt/OV/bin/ovc -start

- Manually
  - On Windows systems

C:\\Program Files\HP OpenView\bin\OvObsServer -start

• On UNIX systems

/opt/OV/bin/OvObsServer -start

## **Man Entries for SNVP Command-line Tools are Missing**

MANPATH variable on system is not properly configured.

Properly set MANPATH variable:

export MANPATH=/opt/OV/man:\$MANPATH

## Missing Path to service.dtd File

Seadapter requires service.dtd to check the correctness of a service hierarchy. In a service hierarchy XML file generated by an SPI, OVSnvpExport or opcservice, the complete path to service.dtd should be specified.

If the path is not specified, the following error message is displayed:

'Parse error occurred - /var/opt/OV/share/osspi/tmp/service.dtd (No such file or directory)'

This problem can also occur when the data is migrated from Service Navigator, where only the services and loggings files are migrated. Service Navigator or opcservice does not check whether the correct path to service.dtd is specified.

To solve the problem, create a symbolic link to the actual location of the service.dtd file. For example: cd /var/opt/OV/share/osspi/tmp

Enter the following:

ln -s /etc/opt/OV/share/conf/OpC/mgmt\_sv/dtds/service.dtd \
service.dtd'

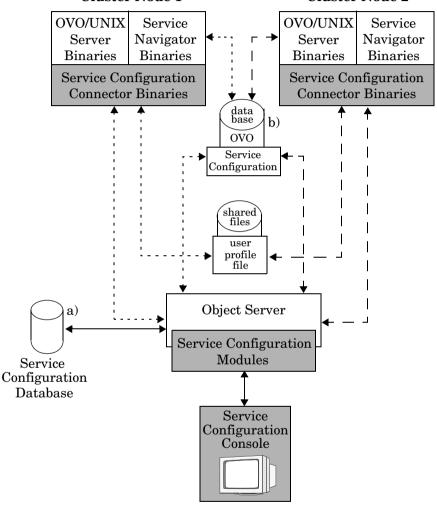
B Installation in High Availability Environments

## **High Availability Overview**

Service Configuration as a whole is not supported in high availability environments. Only the Service Navigator adapter (seadapter) can run in a high availability cluster along with the OVO management server. The seadapter is a component of the Service Configuration application that is present on the OVO management server and that connects the Service Navigator with the Service Desk application server. Other components of Service Configuration, such as the Service Desk application server and the Service Configuration client console cannot be installed in a cluster. Figure B-1 on page 161 shows how the Service Navigator adapter (seadapter) binaries are installed on two different cluster nodes and connect to a shared user profile file.

The high-availability solutions supported with Service Configuration version 9.0 are HP Serviceguard and VERITAS Cluster. See "About High Availability Environments" on page 162 for more information about these solutions.

Figure B-1 Running OVO and the seadapter in a Cluster Environment
Cluster Node 1 Cluster Node 2



active connections if the OVO server is running on Node 1
 active connections if the OVO server is running on Node 2
 connections outside the cluster

Scenario a) Dedicated database for Service Configuration Scenario b) Service Configuration data stored in OVO database

## **About High Availability Environments**

HP Serviceguard and VERITAS Cluster are powerful hardware and software solutions that helps to ensure system availability by switching control from one OVO management server to a second in the event of the failure of the first management server. Critical information is stored on shared disks that are also mirrored. Uninterruptible power supplies (UPS) are also included to guarantee continuous operation in the event of a power failure. A highly-available computer system is one that allows access to your data and applications even if a system component such as a CPU or network interface card fails.

The systems, also called nodes, belonging to the cluster installation make up a cluster.

This section assumes that you are familiar with cluster environments (HP Serviceguard or VERITAS) and the general concepts of OVO. For more detailed information about supported clusters, refer to the *Managing HP Serviceguard* guide<sup>1</sup> as well as to the VERITAS Cluster documentation. To find out how to install and configure OVO in cluster environments, see the *OVO Installation Guide for the Management Server*.

<sup>1.</sup> The *Managing HP Serviceguard* guide is available from http://www.docs.hp.com/hpux/ha/index.html.

## Installing Service Configuration in an HP Serviceguard Environment

The Service Navigator adapter (seadapter) must be installed and configured on *each* HP Serviceguard cluster node. The seadapter binaries must be present on all nodes but only one instance of the runtime data is present and this is located on the shared disk. The runtime data of the seadapter includes the log data, cache, and user profile file.

- 1. Using the Service Configuration console, set up the OVO management server and create a default service hierarchy for that server:
  - a. Set up the cluster nodes as OVO management server in Service Configuration. This is described in "Configuring an OVO Management Server" on page 122. Use the *virtual* name for the OVO management server and for the database host (if the Oracle database is also installed on the cluster).

You can find the virtual names in the following files:

• OVO 8 management server

Look up the OVO management server name in the output of the ovconfget(1) command:

ovconfget -ovrg server opc OPC MGMT SERVER

• Oracle database

\$ORACLE HOME/network/admin/listener.ora

b. Create a default service hierarchy for the OVO management server as described in "Configuring the Default Service Hierarchy" on page 125.

#### NOTE

This step is required only once as the virtual names of the OVO server and Oracle database will be used. This step must be performed *before* Service Configuration can be activated on the first cluster node.

#### Installing Service Configuration in an HP Serviceguard Environment

- 2. Log into the cluster node where you want to install the seadapter. This node is from now on called the "local node".
- 3. Switch the OpC package to the local node:
  - a. Find out where the OpC package is currently running:

cmviewcl -v

b. Halt the OpC package:

cmhaltpkg OpC

c. Switch the package to the local node:

cmrunpkg -n < local node> OpC

4. Enable maintenance mode on the local node:

touch /tmp/maint NNM

If the OpC package is not in maintenance mode, it will automatically switch to another node when stopping the OVO management server processes. (Stopping the OVO management server processes is part of the patch installation procedures.)

- 5. Install the Service Navigator adapter (seadapter) on the local node. See "Installing Service Navigator Adapter (seadapter)" on page 47.
- 6. Configure the Service Navigator adapter (seadapter) on the local. This procedure is very similar to the one described in "Configuring Service Navigator Adapter (seadapter)" on page 127.

#### NOTE

To successfully configure the seadapter, an application server must be installed, configured, and running.

a. On the local node, create the shared folder for the seadapter's variable data:

mkdir -p /var/opt/OV/share/snvp

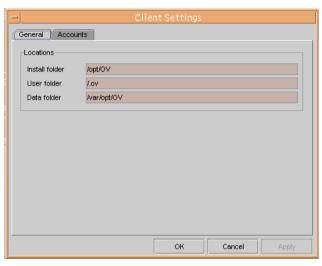
b. On the local node, open the Accounts dialog box:

/opt/OV/bin/OvObsClientSettingsEditor

The Accounts dialog box opens and displays the General tab.

c. On the General tab accept default settings.

Figure B-2 Accounts Dialog Box - General Tab



- d. Continue configuring the Service Navigator adapter (seadapter) as described on page 128 and following. Make sure to test the connection to the application server.
- 7. Link the shared files and data folders:

```
ln -s /var/opt/OV/share/snvp/data \
/.ov/data
ln -s /var/opt/OV/share/snvp/log \
/var/opt/OV/log
```

- 8. Make the user profile file available on the shared folder:
  - a. Move the user profile file from the installation folder to the shared data folder:

```
mv /.ov/conf/OvObsClient.conf \
/var/opt/OV/share/snvp/
```

b. Link the user profile file to the installation folder:

```
ln -s /var/opt/OV/share/snvp/OvObsClient.conf \
/.ov/conf/OvObsClient.conf
```

## Installing Service Configuration in an HP Serviceguard Environment

- 9. On the local node, activate Service Configuration. The application server must be running, otherwise the tool OvSnvpActivate cannot activate Service Configuration.
- 10. Disable maintenance mode on the local node:
  - rm /tmp/maint NNM
- 11. On all other nodes in the cluster, perform Steps 2 to 7 to install and configure the Service Navigator adapter (seadapter). When the seadapter is configured, activate Service Configuration and disable maintenance mode.

## Installing Service Configuration in a VERITAS Cluster Environment

#### NOTE

For detailed information on how to perform particular steps from these procedures refer to the *Service Configuration for Service Navigator Installation Guide*.

The Service Navigator adapter (seadapter) must be installed and configured on *each* VERITAS cluster node. The seadapter binaries must be present on all nodes but only one instance of the runtime data is present and this is located on the shared disk. The runtime data of the seadapter includes the log data, cache, and user profile file.

- 1. Using the Service Configuration console, set up the OVO management server and create a default service hierarchy for that server:
  - a. Set up the cluster nodes as OVO management server in Service Configuration. Use the *virtual* name for the OVO management server and for the database host (if the Oracle database is also installed on the cluster).

You can find the virtual names in the following files:

• OVO 8 management server

Look up the OVO management server name in the output of the ovconfget (1) command:

ovconfget -ovrg server opc OPC MGMT SERVER

• Oracle database

\$ORACLE HOME/network/admin/listener.ora

b. Create a default service hierarchy for the OVO management server.

#### NOTE

This step is required only once as the virtual names of the OVO server and Oracle database will be used. This step must be performed *before* Service Configuration can be activated on the first cluster node.

- 2. Log into the cluster node where you want to install the seadapter. This node is from now on called the "local node".
- 3. Switch the OpC package to the local node:
  - a. Find out where the OpC package is currently running:

#### hastatus

b. Switch the package to the local node:

```
hagrp -switch <group> -to <local node>
```

4. Enable maintenance mode on the local node:

```
/opt/OV/lbin/ovharg -monitor <group> disable
```

If the OpC package is not in maintenance mode, it will automatically switch to another node when stopping the OVO management server processes. (Stopping the OVO management server processes is part of the patch installation procedures.)

- 5. Install the required OVO patches on the local node.
- 6. Install the Service Navigator adapter (seadapter) on the local node.
- 7. Configure the Service Navigator adapter (seadapter) on the local. This procedure is very similar to the one described in the Service Configuration for Service Navigator Installation Guide.

#### NOTE

To successfully configure the seadapter, an application server must be installed, configured, and running.

a. On the local node, create the shared folder for the seadapter's variable data:

mkdir -p /var/opt/OV/share/snvp

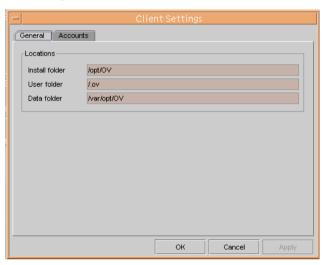
b. On the local node, open the Accounts dialog box:

#### /opt/OV/bin/OvObsClientSettingsEditor

The Accounts dialog box opens and displays the General tab.

c. On the General tab accept default settings:

Figure B-3 Accounts Dialog Box - General Tab



- d. Continue configuring the Service Navigator adapter (seadapter). Make sure to test the connection to the application server.
- 8. Link the shared files and data folders:

```
ln -s /var/opt/OV/share/snvp/data \
/.ov/data
ln -s /var/opt/OV/share/snvp/log \
/var/opt/OV/log
```

- 9. Make the user profile file available on the shared folder:
  - a. Move the user profile file from the installation folder to the shared data folder:

```
mv /.ov/conf/OvObsClient.conf \
/var/opt/OV/share/snvp/
```

b. Link the user profile file to the installation folder:

```
ln -s /var/opt/OV/share/snvp/OvObsClient.conf \
/.ov/conf/OvObsClient.conf
```

## **Installing Service Configuration in a VERITAS Cluster Environment**

- 10. On the local node, activate Service Configuration. The application server must be running, otherwise the tool cadmactivate cannot activate Service Configuration.
- 11. Disable maintenance mode on the local node:

/opt/OV/lbin/ovharg -monitor <group> enable

12. On all other nodes in the cluster, perform Steps 2 to 9 to install and configure the Service Navigator adapter (seadapter). When the seadapter is configured, activate Service Configuration and disable maintenance mode.

C HP OpenView Self-Healing Services

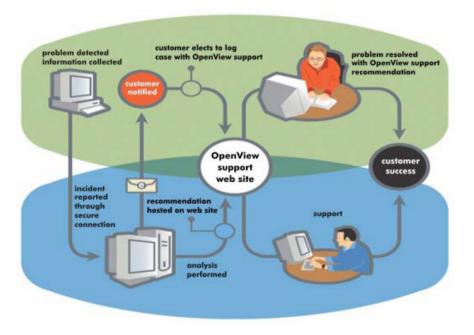
HP OpenView Self-Healing Services provides automated fault detection, real-time data collection, streamlined problem analysis and recommendations, and efficient support case initiation for HP OpenView Network Node Manager for UNIX (NNM) and HP OpenView Operations for UNIX (OVO), including the HP OpenView Service Navigator Value Pack.

## **About HP OpenView Self-Healing Services**

HP OpenView Self-Healing Services is a new service that significantly decreases the time and effort involved in fixing faults within the HP OpenView product suite by automating fault detection and much of the troubleshooting process. In effect, Self-Healing Services allows HP to manage its own management software. This leading-edge technology makes it possible for OVO and NNM administrators to spend less time maintaining their OpenView software and more time managing their business.

Self-Healing Services carries out four primary steps: fault detection, data collection, incident analysis, and customer notification. It performs these steps automatically without intervention on your part. In most cases, your first contact with Self-Healing Services happens when you receive a notification e-mail message informing you that a problem has been detected and that an Incident Analysis Report is ready for your review.

Figure C-1 HP OpenView Self-Healing Services



#### **About HP OpenView Self-Healing Services**

Figure C-1 illustrates the operation of HP OpenView Self-Healing Services. When a fault occurs in a supported OpenView software application, the Self-Healing Services engine automatically triggers the collection of troubleshooting data and system information. An administrator at your site can also trigger the service directly using the Self-Healing Services user interface.

The troubleshooting data and system information is then sent to HP for analysis through a secure connection called HP Instant Support Enterprise Edition (ISEE), a multilevel, layered security structure that uses encryption, authentication, industry-standard security protocols, and best practices integrated at the physical, network, application, and operational levels to protect your information. Transactions from your enterprise network to HP are restricted and tightly controlled through this single secure access point. For additional information about ISEE, see the information available at

http://www.hp.com/hps/hardware/hw enterprise.html.

When your data arrives at HP, Self-Healing Services does three things. First, it analyzes your data and generates a comprehensive Incident Analysis Report. Then, it stores your report on a private and protected Web page on an HP OpenView support server. Finally, it sends you a notification email message containing instructions for accessing your report.

## About the Service Configuration Data Collector

The Service Configuration data collector collects data for Self-Healing Services. Data collection can be triggered automatically, for example by an application fault, or manually, by the administrator. There are two ways for manually triggering data collection for Self-Healing Services: by using the Self-Healing Services user interface or by executing the data collector command-line tool.

The following Service Configuration components can supply data for Self-Healing Services.

### □ OVO management server

Collects data for the service engine, the seadapter process, and the OvSnvpActivate command-line tool.

#### **☐** Service Configuration console

Collects data for the Service Configuration console.

## ☐ Service Desk application server

Collects data for the Service Desk application server and the Database Configuration Wizard.

## ☐ Service Pages server

Collects data for the Tomcat Web server.

## **Installing the Service Configuration Data**Collector

The task of the Service Configuration data collector for Self-Healing Services is to collect data when a fault has occurred or when triggered by the administrator. The collector then passes this data on to the Self-Healing Services client. The Self-Healing Services client is responsible for sending the information to HP. This is why the data collector requires an installation of the Self-Healing Services client on the Service Configuration component that you plan to monitor. See the Self-Healing Services documentation for more information about installing, configuring, and using Self-Healing Services.

## **Installing the Data Collector**

Data Collector is installed in the same manner as the rest of the SNVP components, using the HP OpenView Installer wizard. For the installation instructions, see "Modifying Single SNVP Components" on page 141.

## **Manual Data Collection**

There are two ways to manually trigger data collection for Self-Healing Services:

## □ Self-Healing Services user interface

See the Self-Healing Services documentation for information about using the Self-Healing Services user interface.

### □ snvpDataCollector

Using the data collector command-line tool to trigger data collection is described in "snvpDataCollector (1m)" on page 179.

## snvpDataCollector (1m)

## **NAME**

snvpDataCollector – Collects Service Configuration data for HP OpenView Self-Healing Services

### **SYNOPSIS**

snvpDataCollector -t -d -x

## **DESCRIPTION**

The snvpDataCollector tool collects data for HP OpenView Self-Healing Services. Data is collected on the OVO management server, the Service Configuration console, the Service Desk application server, and the Service Pages server.

The tool runs on UNIX and Windows platforms. It requires JRE and the Self-Healing Services client installed and configured on the system where you plan to collect data.

#### **Parameters**

#### Options:

-t	Task file. Name of the task file that lists the data that will be gathered.
-d	Output directory. Absolute path of the output directory where collected files are stored. If the directory does not yet exist, it will be created.
-x	Output file. Absolute path to the output file generated by the data collector. The output file is in XML format.

If called without any options, snvpDataCollector displays text describing its options.

## **EXIT VALUES**

This command exits with value 1 if an error occurs and 0 in all other cases.

## RESTRICTIONS

This command can only be issued by the root user (UNIX) or the administrator (Windows).

### **EXAMPLES**

1. Start data collection on the OVO management server on HP-UX:

```
/opt/OV/support/dc/snvp/bin/snvpDataCollector.sh
-t /opt/OV/support/dc/snvp/conf/snvpTaskFile.xml
-d /tmp/snvp -x /tmp/snvp/dcoutput.xml
```

2. Start data collection on the application server running on Windows:

```
"C:\Program Files\HP OpenView\support\dc
\snvp\bin\snvpDataCollector.bat" -t "C:\Program Files\
HP OpenView\support\dc\snvp\conf\snvpTaskFile.xml"
-d C:\temp\snvp -x C:\temp\snvp\dcoutput.xml
```

## Removing the Service Configuration Data Collector

The Service Configuration data collector for HP OpenView Self-Healing Services is removed in one of the following ways:

#### ☐ Upon SNVP uninstallation

Data collector software is removed upon uninstallation of the SNVP software. See Chapter 9, "Removing Service Configuration," on page 147 for more information.

#### □ By modifying the installation preferences

You can remove *only* data collector software from your system by modifying the preferences you have chosen during the installation process. See "Modifying Single SNVP Components" on page 141 for more information.

## HP OpenView Self-Healing Services

**Removing the Service Configuration Data Collector** 

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