HP OpenView Service Navigator Value Pack

Service Configuration for Service Navigator Installation Guide

Software Version: 8.0

for the HP-UX, Microsoft Windows, and Sun Solaris operating systems

Manufacturing Part Number: B7490-90049

August 2004

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1. Introducing HP OpenView Service Configuration for Service Navigator

2. Preparing for Installation

3. Installing Service Configuration

B. Troubleshooting the Installation

C. Installation in High Availability Environments

D. HP OpenView Self-Healing Services

Revisions

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

- Version number, which indicates the software version.
- Print date, which changes each time the document is updated.

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

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

Table 1 indicates changes made to this document since the last released edition.

Table 1 Changes in This Document Version

Chapter	Changes
"Support" on page 13	Updated the support information.
Chapter 2, "Preparing for Installation," on page 29	Removed software and hardware prerequisites to the *Supported Platforms* document.
Chapter 3, "Installing Service Configuration," on page 51	Changed version from 7.1 to 8.0.
Chapter 4, "Configuring the Database," on page 99	Added new instructions about example data when upgrading an existing Service Desk database.
Chapter 7, "Post-installation Tasks," on page 183	Updated references to `opcsvinfo` file with information relevant for OVO 8.
Chapter 9, "Installing the Service Pages Integration," on page 207	Changed version from 7.1 to 8.0.
Chapter 10, "Removing Service Configuration," on page 221	Changed version from 7.1 to 8.0.

Table 1 Changes in This Document Version (Continued)

Chapter	Changes
Appendix C, “Installation in High Availability Environments,” on page 241	Updated references to `opcsvinfo` file with information relevant for OVO 8.
Appendix D, “HP OpenView Self-Healing Services,” on page 251	New appendix.

Support

Please visit the HP OpenView web site at:

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

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

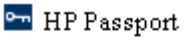
You can also go directly to the support web site at:

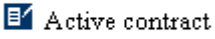
http://support.openview.hp.com/

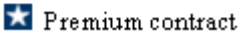
HP OpenView online software support provides customer self-solve capabilities. It provides a fast and efficient way to access interactive technical support tools needed to manage your business. As a valuable support customer, you can benefit by using the support site to:

- Search for knowledge documents of interest
- Submit and track progress on support cases
- Manage a support contract
- Look up HP support contacts
- Review information about available services
- Enter discussions with other software customers
- Research and register for software training

Most of the support areas require that you register as an HP Passport user and log in. Throughout the site, access levels are indicated by the following icons:







To find more information about access levels, go to the following URL:

http://support.openview.hp.com/access_level.jsp

To register for an HP Passport ID, go to the following URL:

https://passport.hp.com/hpp2/newuser.do

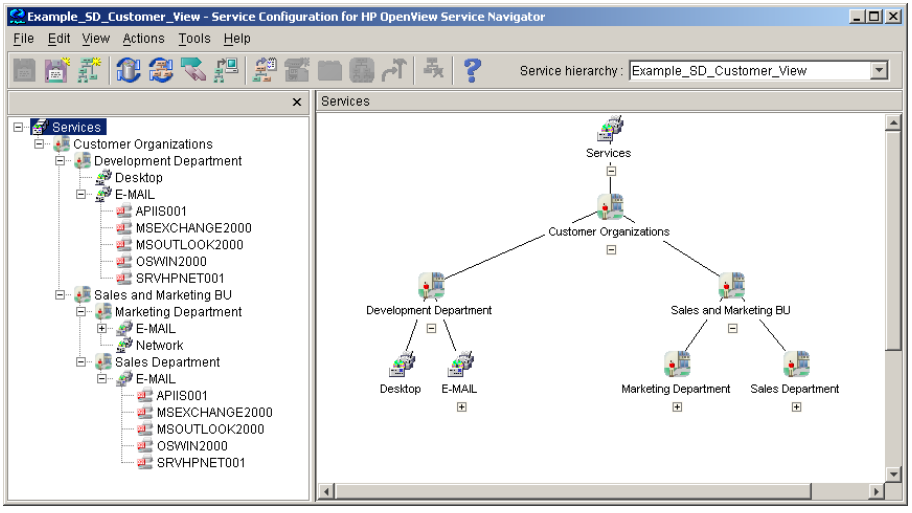
1 Introducing HP OpenView Service Configuration for Service Navigator

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. The upgrade process is described in Appendix A, “Installing Service Desk on Service Configuration,” on page 231.

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 to store its configurational and operational data. You can use an existing OVO database installation (Oracle only) or an existing Service Desk database installation (Oracle only).

- **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 can use your existing Service Desk 4.5 application server. You only need to update it with an extension for Service Configuration.

- **Clients**

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

Installation Overview

NOTE Upgrading Service Configuration from version 7.1 to 8.0 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 29.

   In particular, ensure that an Oracle database installation is available. Either install the database as described by the database vendor, or use an existing Oracle database installation from OVO or Service Desk.

   You also need to ensure that the OVO management server is prepared for the Service Configuration installation. You need to install OVO server patches (OVO 7.1 only) and the Service Configuration connector to update OVO with software files required for Service Configuration.

2. **Application server.**

   Install or update the Service Desk application server. The necessary steps vary depending on whether Service Desk is already installed or not. See Chapter 3, “Installing Service Configuration,” on page 51.

   If Service Desk is not installed, you must install the application server, update it with the Service Desk service pack and install the Service Configuration modules.

   If Service Desk is installed, you only need to update the existing application server with the Service Desk service pack and install the Service Configuration modules.

3. **Database configuration wizard.**

   Run the database configuration wizard to configure the Oracle database instance for Service Configuration. See Chapter 4, “Configuring the Database,” on page 99.

   If Service Desk is not installed, the database configuration wizard will configure the database instance for Service Configuration and create the Service Configuration database users, tablespaces, and data files.

   If Service Desk is installed, it will upgrade the existing database instance to a version that is compatible with Service Configuration and then load the Service Configuration modules into the upgraded database instance.

4. **Clients.**

   Install the Service Configuration GUI client software. See Chapter 6, “Installing the Service Configuration Client,” on page 163.

   If you are installing Service Configuration on an existing Service Desk installation, and you want to use the Service Desk data form integration with the Service Navigator operator console, you must update the Service Desk client with the Service Desk service pack. See “Updating the Service Desk Client” on page 182.

5. **Post-installation steps.**

   Perform the post-installation steps to activate Service Configuration on the OVO management server. See Chapter 7, “Post-installation Tasks,” on page 183.

6. **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 25 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 29.
2. Install an Oracle database and create a new database instance for Service Configuration. See “Setting up the Oracle Database” on page 36. Alternatively, you can also use the existing OVO “openview” instance for Service Configuration.
3. For OVO 7.1 only:

   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 7.1 Management Server” on page 46.
4. Install the Service Configuration connector on the OVO management server system. See “Installing the Service Configuration Connector for OVO” on page 49.
5. Install the application server (see Chapter 3, “Installing Service Configuration,” on page 51):
   a. Install the Service Desk 4.5 application server package.
   b. Update the application server with the Service Desk service pack.
   c. Install the Service Configuration modules.
6. On the application server, use the database configuration wizard to configure the database. This adds the tables, data files, users, and so on to the database instance. See “Configuring the Database for The First Time” on page 102.
7. Configure the application server. This establishes a connection between the application server and the database server. See “Configuring the Application Server” on page 143.

8. Install the Service Configuration console and start it. See Chapter 6, “Installing the Service Configuration Client,” on page 163.

   Configure the OVO management server in Service Configuration and import data from that server. See “Configuring an OVO Management Server” on page 186.

   Configure a default service hierarchy where discovered and migrated objects will be stored. See “Configuring the Default Service Hierarchy” on page 189.

9. Post-installation steps:

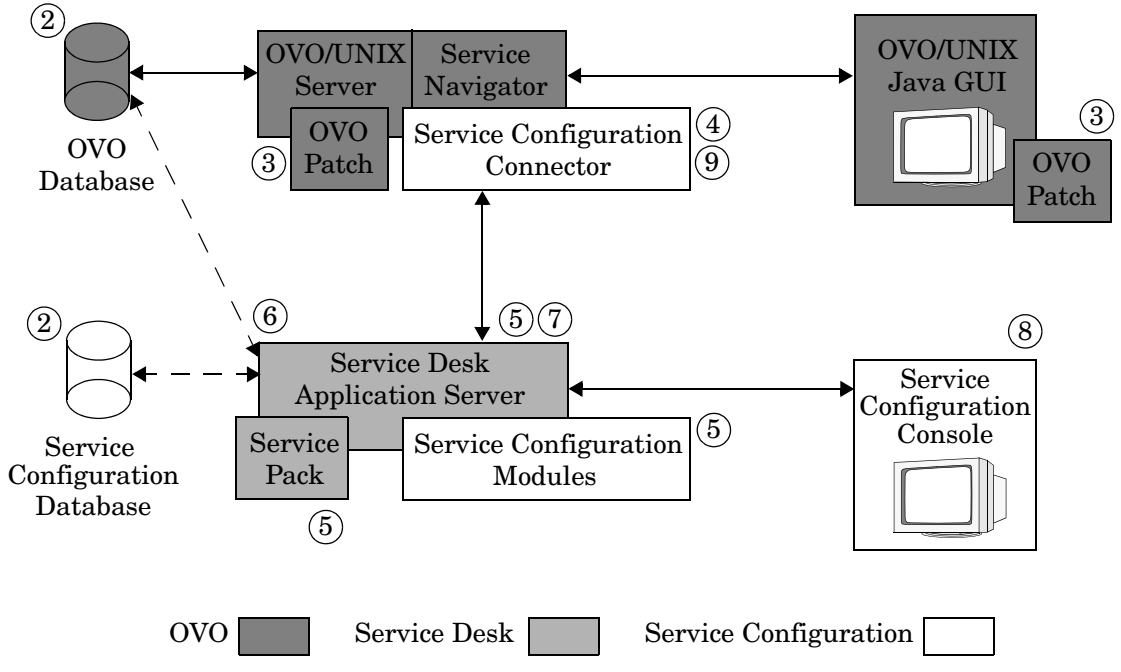
   a. Configure the Service Configuration connector.

   b. Activate Service Configuration on the OVO management server.

   c. Migrate existing Service Navigator data to Service Configuration.

   See Chapter 7, “Post-installation Tasks,” on page 183.

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



Installation Overview 2 (with Service Desk)

Figure 1-3 on page 28 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 29.
2. For OVO 7.1 only:

   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 7.1 Management Server” on page 46.
3. Install the Service Configuration connector on the OVO management server system. See “Installing the Service Configuration Connector for OVO” on page 49.
4. Update the application server with Service Configuration (see Chapter 3, “Installing Service Configuration,” on page 51):

   a. Update the application server with the Service Desk service pack.

   b. Install the Service Configuration modules.
5. On the application server, use the database configuration wizard to upgrade the database and upload the Service Configuration modules. This adds the Service Configuration tables and data files to the existing Service Desk database instance. See “Updating the Database” on page 130.
6. Install the Service Configuration console and start it. See Chapter 6, “Installing the Service Configuration Client,” on page 163.

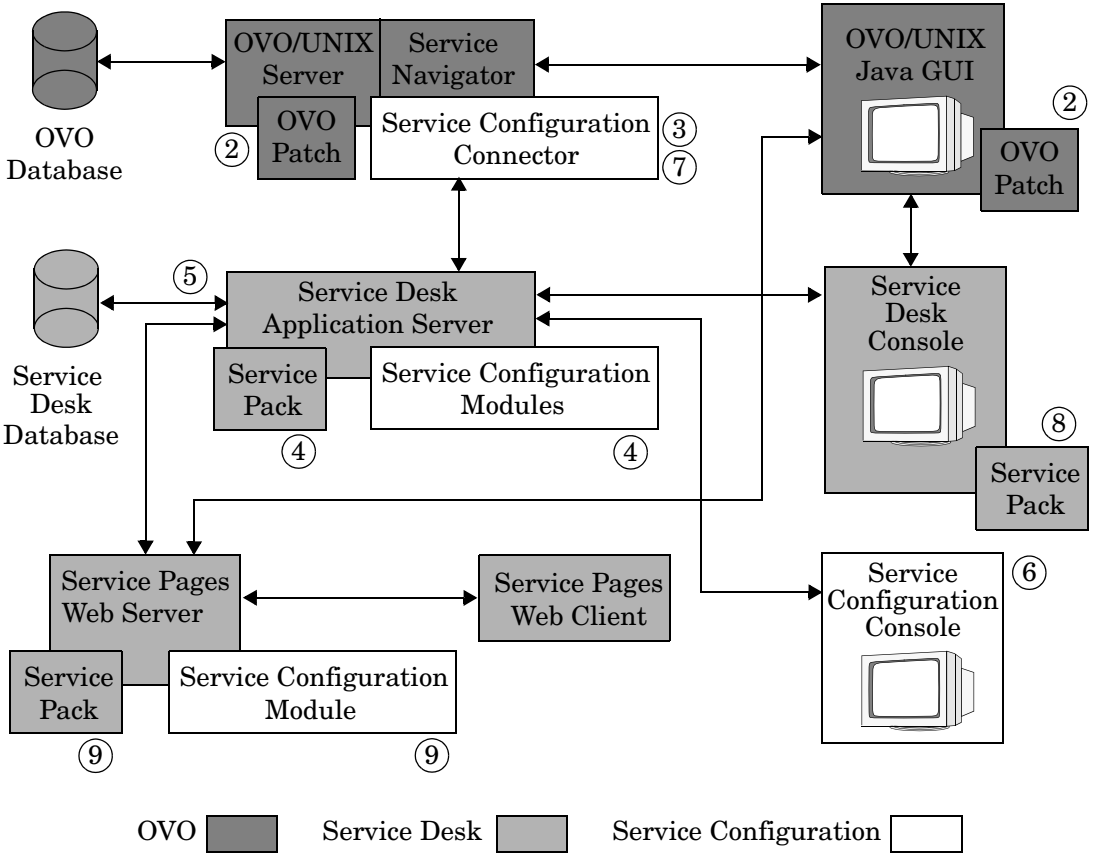
   Configure the OVO management server in Service Configuration and import data from that server. See “Configuring an OVO Management Server” on page 186.

   Configure a default service hierarchy where discovered and migrated objects will be stored. See “Configuring the Default Service Hierarchy” on page 189.

7. Post-installation steps:
   a. Configure the Service Configuration connector on OVO.
   b. Activate Service Configuration on the OVO management server.
   c. Migrate existing Service Navigator data to Service Configuration.

   See Chapter 7, “Post-installation Tasks,” on page 183.
8. Update the Service Desk client with the Service Desk service pack to make it compatible with the version of the application server. See “Updating the Service Desk Client” on page 182.
9. Update Service Pages server to enable the Service Configuration integration with Service Pages. See Chapter 9, “Installing the Service Pages Integration,” on page 207.
   a. Update the Service Pages server with the Service Desk service pack.
   b. Install the Service Configuration integration modules.

Figure 1-3 Installing Service Configuration on Service Desk



2 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. It also describes the main third-party products that need to be installed before installing HP OpenView Service Configuration.

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 servers that should be installed to provide optimum performance. The maximum number of clients supported by Service Configuration is limited to ten (10) concurrent users. It is recommended to start with one (1) server if you are in the early phases of a project.

Does the planned infrastructure meet the minimum requirements?

Download the latest version of the *Supported Platforms* document at http://ovweb.external.hp.com/lpe/doc_serv/ by selecting the product **`operations for UNIX`**, version **`8.x`**.

Is there enough free memory on the application server systems?

Download the latest version of the *Supported Platforms* document at http://ovweb.external.hp.com/lpe/doc_serv/.

Is there enough free memory on the client computers?

Download the latest version of the *Supported Platforms* document at http://ovweb.external.hp.com/lpe/doc_serv/.

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

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

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 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 via hyperlink, or 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 6, “Installing the Service Configuration Client,” on page 163 for more information.

Hardware Requirements

For information about hardware requirements, download the latest version of the *Supported Platforms* document at http://ovweb.external.hp.com/lpe/doc_serv/ by selecting the product **operations for UNIX**, version **8.x**.

Software Requirements

For information about software requirements, download the latest version of the *Supported Platforms* document at http://ovweb.external.hp.com/lpe/doc_serv/ by selecting the product **operations for UNIX**, version **8.x**.

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 HP-UX

    Client on Windows

    Oracle database on HP-UX, Sun Solaris, or Windows
  - Application server on Windows

    Client on Windows

    Oracle database on HP-UX, Sun Solaris, or Windows
- **OVO with Service Navigator on Sun Solaris**
  - Application server on Sun Solaris

    Client on Windows

    Oracle database on HP-UX, Sun Solaris, or Windows
  - Application server on Windows

    Client on Windows

    Oracle database on HP-UX, Sun Solaris, or Windows

Setting up the Oracle Database

Service Configuration requires an existing Oracle database instance. You can use either a new, empty instance or an instance that is used by other applications. For example, you can use the database instance used by OVO. (The default SID for the OVO database instance is `openview`.) To create a new instance, consult the Oracle 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.

Use the database configuration wizard to configure the database instance. The wizard will configure the database instance for use with Service Configuration and create the tablespaces and users. Alternatively, you can create the tablespaces and users yourself, in which case you will still use the database configuration wizard during the installation but will skip some screens.

See Chapter 4, “Configuring the Database,” on page 99 for more information about the database configuration wizard.

Recommended Settings for the Database Instance

The following settings are recommended for the 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 database instance, add the required values for `processes` and `dml_locks` to the existing values.

Table 2-1 Oracle Database Settings (Minimum)

Setting	Oracle 9.2
`db_block_size`	8 KB
`shared_pool_size`	20 MB
`db_file_multiblock_read_count`	16-32
`processes`	100
`dml_locks`	200
`log_buffer`	32768
`db_cache_size`	4505600
`compatible` [a]	8.1.0.0.0

a. OVO 7.1 sets the compatibility level to 8.1.7.0.0, OVO 8.0 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 9i” on page 39.

- **Tablespaces**

  If using an existing 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**

  Use at least one database user. Two database users, adding one as a repository user, may increase performance on large systems. The names of these 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 WE8ISO8859P15. 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 9i

On Oracle 9i, 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 <parameter_name> = <value>
[ SCOPE = SPFILE | MEMORY | BOTH ];
```

SCOPE determines what will actually be changed:

SPFILE	Server Parameter file
MEMORY	running instance
BOTH	both the Server Parameter file and the running 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 <parameter_name>
[ SCOPE = SPFILE | MEMORY | BOTH ]
[ SID = <sid>];
```

<*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.

Before Installing Service Configuration

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

Third-party Software

We recommend that you install the following third party software on the system where you intend to install Service Configuration, before commencing the installation. Neither the application server nor the client installation verify whether these programs are already installed, and will not install them.

TIP The software is supplied on the CD-ROM for each supported operating system.

Third-party Software for Service Configuration

The Service Configuration server (the Service Desk application server), the Service Configuration client (the console), and the Service Configuration connector for OVO require a Java Runtime Environment (JRE) version 1.3.1_03 or higher (but not JRE 1.4):

- **HP-UX**

  `/tools/j2re/rte_13105os11.depot`

- **Sun Solaris**

  `/tools/j2re/j2re-1_3_1_03-solsparc.sh`

  When installing the JRE on Sun Solaris ensure that you are standing in the `/usr` directory.

- **Windows**

  `\tools\j2re\j2re-1_3_1_03-win-i.exe`

NOTE If you plan to install the Service Desk 4.5 Service Pages server on the same system, install a Java Development Kit instead of a Java Runtime Environment. See “Third-party Software for Service Pages” on page 42.

Third-party Software for Service Pages

The Service Pages server requires a Java Development Kit (JDK):

- **HP-UX**

  `/tools/j2dk/sdk_13105os11.depot`

- **Sun Solaris**

  `/tools/j2dk/j2sdk-1_3_1_03-solsparc.sh`

  When installing the JDK on Sun Solaris ensure that you are standing in the `/usr` directory.

- **Windows**

  `\tools\j2dk\j2sdk-1_3_1_03-win.exe`

NOTE Service Configuration itself does not require a JDK; only a JRE is required for the Service Configuration server and clients. See “Third-party Software for Service Configuration” on page 41. If you plan to install the Service Pages server on a Service Configuration system, you must install a JDK instead of a JRE.

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 4.5 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:

- ❏ **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 WE8ISO8859P1. (Choose WE8ISO8859P15 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.

See also “Recommended Settings for the Database Instance” on page 37.

- **Size of 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.

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 7.1 management server must be updated with OVO patches and the Service Configuration connector for OVO must be installed:

- **Patch installation (OVO 7.1 only)**

  Install the OVO 7.1 patches as described in “Installing Patches on the OVO 7.1 Management Server” on page 46

- **Connector installation**

  Install the Service Configuration connector as described in “Installing the Service Configuration Connector for OVO” on page 49

Before updating the OVO management server system, ensure that all operating system patches required by OVO are installed. A list of required patches and software is available in the following OVO documents:

- **OVO 7.1**

  OVO Installation Guide for the Management Server and in the latest *OVO Software Release Notes*.

- **OVO 8.0**

  OVO information text file on the OVO CD-ROMs:

  - HP-UX 11.0: ovo.info.HP-UX.B.11.00.txt
  - HP-UX 11.11: ovo.info.HP-UX.B.11.11.txt
  - Sun Solaris 8: ovo.info.SunOS.5.8.txt
  - Sun Solaris 9: ovo.info.SunOS.5.9.txt

Installing Patches on the OVO 7.1 Management Server

The OVO 7.1 management server must be updated with a server and a Java GUI patch for Service Configuration to be able to run. These patches are cumulative patches that include enhancements and problem solutions for OVO version 7.10.

OVO 8.0 management servers do not require specific patches for Service Configuration.

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.

- **OVO 7.1 server patches**

  The OVO management server version A.07.1x must be updated with a patch for Service Configuration to be able to run:

  HP-UX: PHSS_30283 or higher

  Sun Solaris: ITOSOL_00281 or higher

  You can also download the latest patch for your operating system from `http://support.openview.hp.com/patches/patch_index.jsp`.

  The patch 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 `/opt/OV/nonOV/Xerces-J/2.6.0`.

- **OVO 7.1 Java GUI patches**

  Patches are also available for the Java operator GUI version A.07.1x. The patches must be installed on the OVO management server and the Java GUI installation package must then be transferred to the client system for installation of the GUI:

  HP-UX: PHSS_30604 or higher

  Sun Solaris: ITOSOL_00305 or higher

  You can also download the latest patches for your operating system from `http://support.openview.hp.com/patches/patch_index.jsp`.

Installing Patches on the OVO 7.1 Management Server on HP-UX

Please review all instructions and the Hewlett-Packard SupportLine User Guide or your Hewlett-Packard support terms and conditions for precautions, scope of license, restrictions, and limitation of liability and warranties, before installing any patches.

Install the patches on the OVO management server system. To install the patches, follow these general patch installation guidelines:

1. Back up your system before installing a patch.
2. Login as root.
3. Copy the patch to the `/tmp` directory.
4. Move to the `/tmp` directory and unshar the patch:

   `cd /tmp`

   `sh PHSS_<Number>`

   This unpacks the SD depot file `/tmp/PHSS_<Number>.depot` and the patch description file `/tmp/PHSS_<Number>.text`.

5. Install the patch as described in the patch description file `/tmp/PHSS_<Number>.text`.

Installing Patches on the OVO 7.1 Management Server on Sun Solaris

Please review all instructions and the Hewlett-Packard SupportLine User Guide or your Hewlett-Packard support terms and conditions for precautions, scope of license, restrictions, and limitation of liability and warranties, before installing any patches.

Install the patches on the OVO management server system. To install the patches, follow these general patch installation guidelines:

1. Back up your system before installing a patch.
2. Login as root.
3. Copy the patch to the `/tmp` directory.
4. Move to the `/tmp` directory and unshar the patch:

   ```
   cd /tmp

   cp <patch_source>/ITOSOL_<Number> .

   sh ITOSOL_<Number>
   ```

   This unpacks the patch source and installation files as well as the patch description file `/tmp/ITOSOL_<Number>.text`.
5. Install the patch as described in the patch description file `/tmp/ITOSOL_<Number>.text`.

Installing the Service Configuration Connector for OVO

Service Configuration comes with a special package that must be installed on the OVO management server version 7.1 and 8.0 to enable communication with Service Configuration. This package is available on the Service Configuration installation CD-ROMs for HP-UX and Sun Solaris.

This section describes how to install the Service Configuration connector on the OVO management server running on the HP-UX or Sun Solaris platform. After having installed the Service Configuration connector, configure it as described in “Configuring the Service Configuration Connector” on page 191.

Installing the Service Configuration Connector for OVO on HP-UX

To install the Service Configuration connector for OVO on HP-UX:

1. Mount the HP-UX CD-ROM.
2. Use swinstall to install the server:

   Example:
   `swinstall -s /<mountpoint>/ovo/cadm_common-8.0.depot`
3. In the Software Selection dialog box, select the enabler depot file, and from the Actions menu choose **Mark for Install**. Go to the Actions menu again and click **Install**.
4. The Install Analysis dialog box is displayed, click **OK** to install the connector software.
5. The Install dialog box is displayed while the software is being installed. When the installation is complete, click **Done**.

Installing the Service Configuration Connector on OVO on Sun Solaris

To install the Service Configuration connector on the OVO management server on Sun Solaris:

1. Mount the Sun Solaris CD-ROM.
2. Use `pkgadd` to install the connector software:

   Example:
   `pkgadd -d /<mountpoint>/ovo/cadm_common-8.0.pkg`

3 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.

Installing the application server is a two or three step process, depending on your environment:

- **Installing Service Configuration (no Service Desk installed)**

  If you are installing Service Configuration in an *OVO/Service Navigator only* environment, you must first install the Service Desk application server, then update it with the Service Desk service pack and finally install the Service Configuration module. See “Installing Service Configuration Without Service Desk Installed” on page 54.

- **Installing Service Configuration on Service Desk**

  If you are installing Service Configuration on an existing Service Desk 4.5 installation, you only need to update the application server with the Service Desk service pack and then install the Service Configuration module. See “Installing Service Configuration on an Existing Service Desk Installation” on page 83.

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. To open the Release Notes, choose `Read release notes` from the Service Configuration installation start screen.

- **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 Oracle Database” on page 36.

- **JRE installed**

  Before starting the installation process, ensure that Java 1.3 is installed, and is included in the path. See “Third-party Software” on page 41.

Although the 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.

Installing Service Configuration Without Service Desk Installed

This section describes how to install Service Configuration on OVO and Service Navigator in a Windows, HP-UX, and Sun Solaris environment.

Installation on a Windows Platform

The installation of the Service Desk application server for Service Configuration on a Windows platform includes the following steps:

1. **Check the prerequisites.**

   Make sure all prerequisites are met as described in “Before Installing the Application Server” on page 55.

2. **Install the application server.**

   Install the Service Desk 4.5 application server as described in “Installing the Service Desk Application Server” on page 56.

3. **Install Service Desk service pack.**

   Update the application server with the Service Desk service pack as described in “Installing the Service Pack on the Application Server” on page 70.

4. **Install the Service Configuration module.**

   Install the Service Configuration module on the Service Desk application server as described in “Installing the Service Configuration Modules on the Application Server” on page 72.

5. **Configure the database.**

   Configure the database as described in “Configuring the Database” on page 73.

6. **Configure the application server.**

   Configure the application server as described in “Configuring the Application Server” on page 73.

7. **Install the Windows Server Service (optional).**

   Install the Windows server service if you want to run the Service Desk application server as a Windows service. See “Installing the Windows Server Service” on page 159.

8. **Run the server.**

   See “Starting the Application Server on a Windows Platform” on page 159 for details on how to start and stop the application server processes.

NOTE The installation process may ask you to reboot your system several times during the installation process. All reboots are required and must be performed when prompted.

Before Installing the Application Server

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

The Service Desk application server requires Java Runtime Environment (JRE) 1.3 to be installed on the server system. See “Third-party Software” on page 41.

Installing the Service Desk Application Server

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

Install the Service Desk application server by using the setup program on the HP OpenView Service Configuration CD-ROM. You can install the application server directly from the CD-ROM onto your computer's hard disk, or you can copy the contents of the CD-ROM into a shared folder and install through a network drive.

NOTE

The Service Desk server can be installed silently by running the following command from the DOS prompt in the `server` folder:

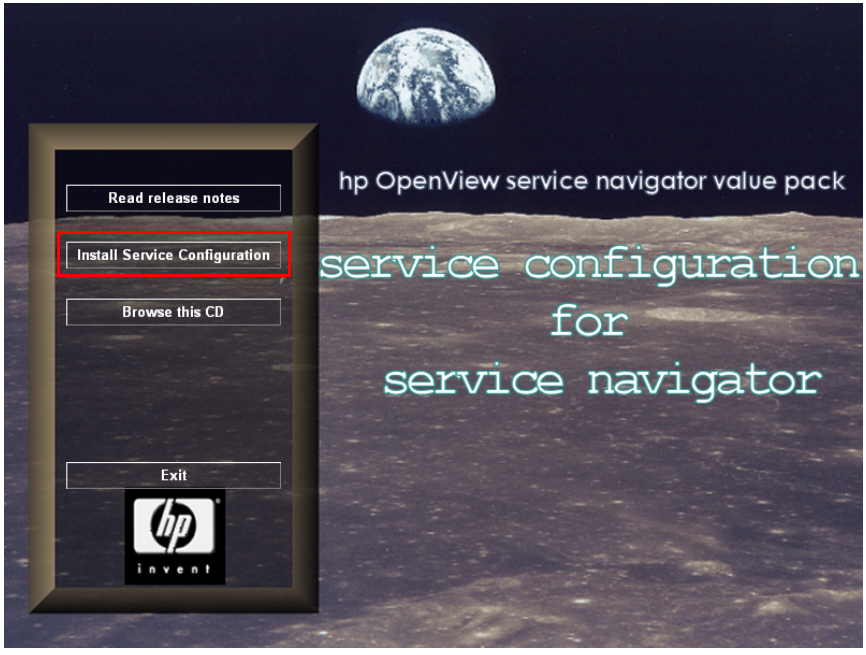
```
msiexec /qn /I "hp OpenView service desk 4.5 application server.msi"
```

See the Windows installer documentation for more information about command line options. Information about the Windows installer is available in the Windows 2000 online help.

To install the Service Desk application server, you must perform the following actions:

1. Insert the HP OpenView Service Configuration for Service Navigator CD-ROM into your CD-ROM drive. The start screen appears. If you do not see the Start screen, double-click `setup.exe` in the root of the CD-ROM drive. When the Start screen appears, click **Install Service Configuration**.

Figure 3-1 Service Configuration Installation Start Screen

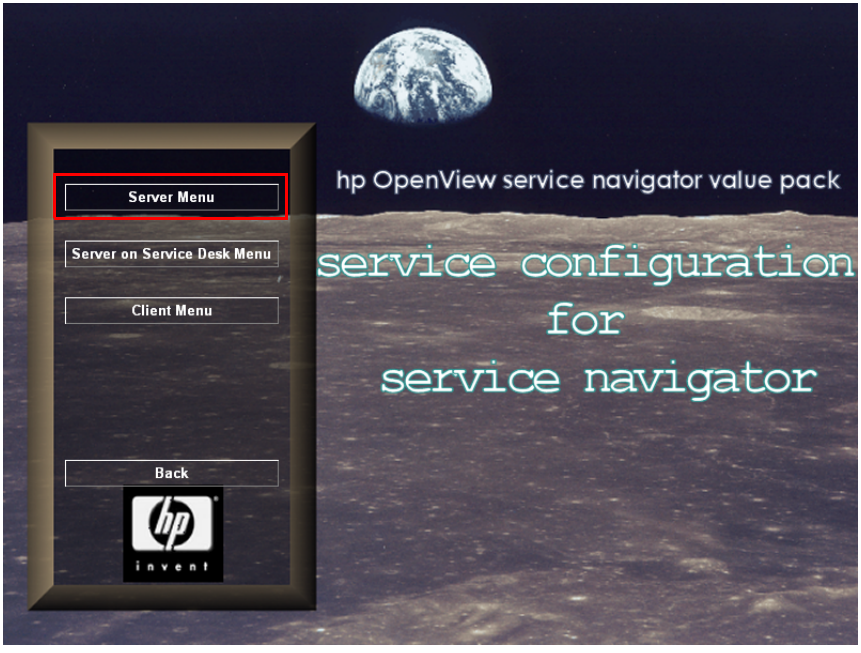


NOTE

If you cannot get the installation program running by double-clicking `setup.exe`, you can try the following procedure: click the CD-ROM drive, open a DOS dialog box, browse to the folder containing the application server installation startup program and run `setup.exe`.

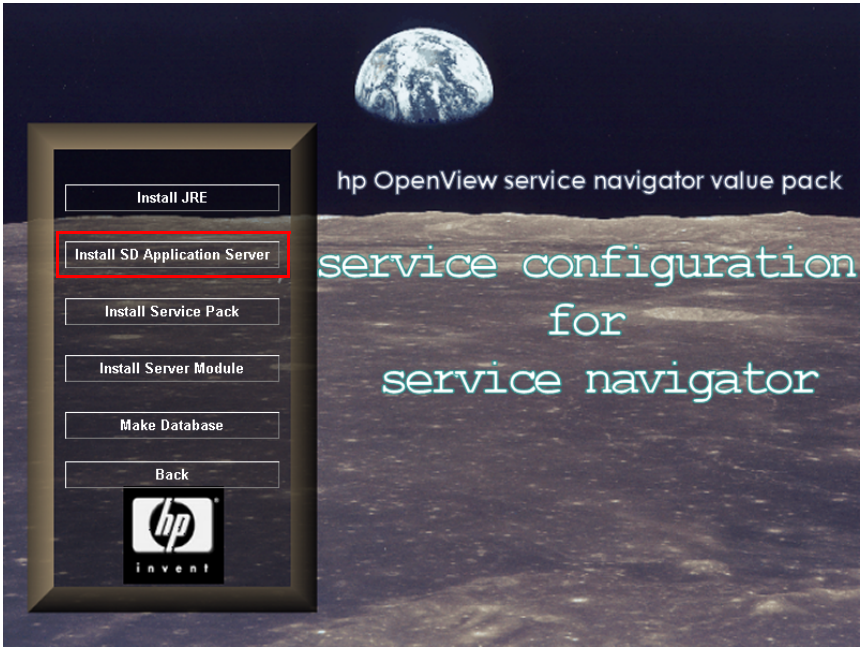
2. In the following screen click **Server Menu**.

Figure 3-2 Service Configuration Installation Menu Screen



3. In the Server installation menu screen, click the **Install SD Application Server** button to start the server installation.

Figure 3-3 Server Installation Menu Screen

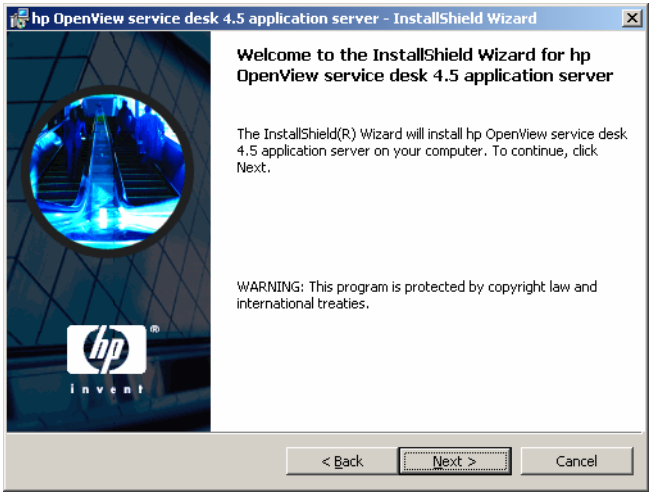


4. The Service Desk 4.5 installation screen is displayed while the installation setup files are downloaded from the CD-ROM. The installation process can be aborted by clicking the **Cancel** button, otherwise the next screen is displayed when the download is complete.

Figure 3-4 Service Desk 4.5 Installation Screen

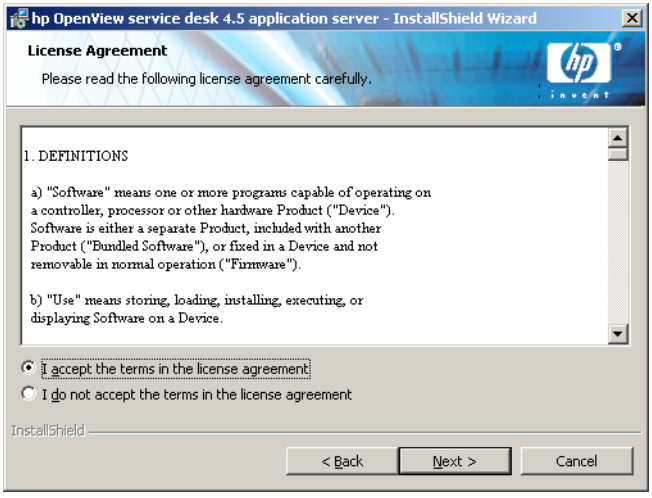
5. After the setup files are downloaded, the Welcome screen for the Server InstallShield Wizard appears. Click **Next** to continue, or **Cancel** to abort the installation.

Figure 3-5 Server Installation Welcome Dialog Box



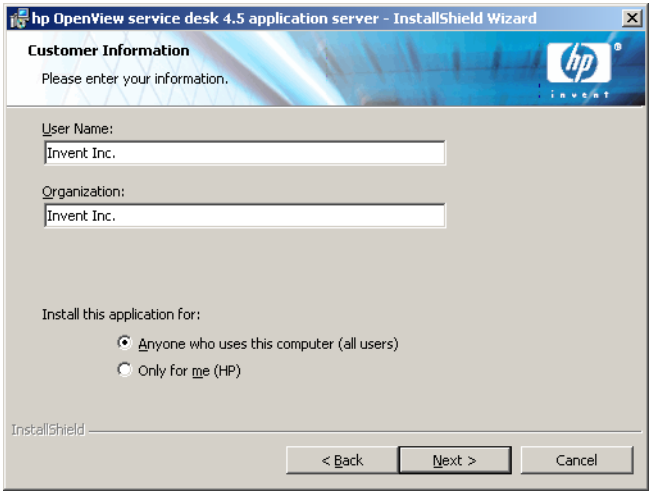
6. If you clicked **Next**, the License Agreement dialog box appears. To proceed, you must select **I accept the terms in the license agreement** and then click **Next**. By doing so, you agree to all license terms, so please read the agreement carefully.

Figure 3-6 License Agreement Dialog Box



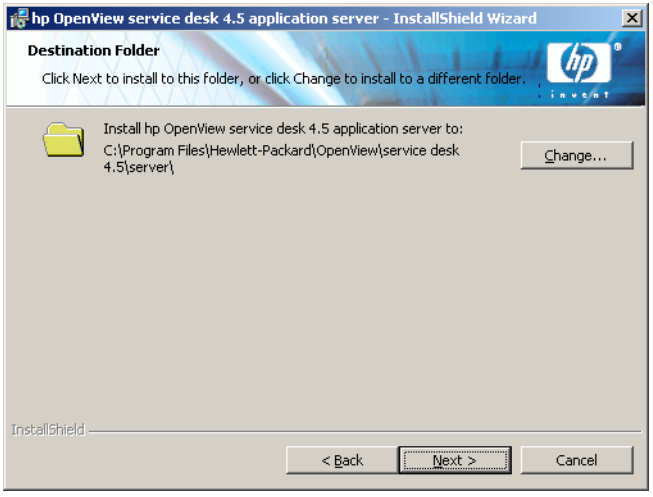
7. The Customer information dialog box is displayed. By default, Service Desk takes the details from the system's profile. If these details are incorrect, enter the correct data. Select either the **Anyone who uses this computer (all users)** or **Only for me (*user name*)** options. If you choose the all users option, any user who logs onto the system where the server is installed will see the Service Desk shortcuts in the start menu, but if you choose the Only for me option only the user named in the **User Name** field will see the short cuts. Click **Next** to continue.

Figure 3-7 Customer Information Dialog Box



8. The Destination Folder dialog box is displayed. Here you must enter the folder where the Service Desk server software will be placed. If you do not want the software to be placed in the default folder shown, you must click **Change** to enter another installation folder. Click **Next** to continue the installation.

Figure 3-8 Destination Folder Dialog Box

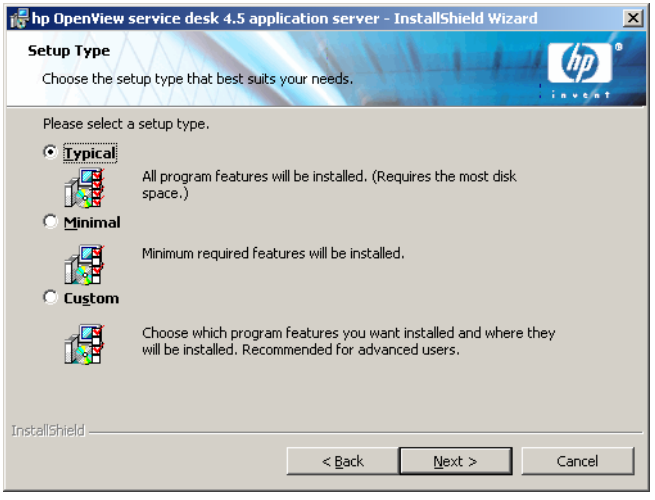


9. The Setup Type dialog box is displayed. Select **Typical**, **Minimal**, or *Custom* setup:

   - Selecting **Typical** will install both the application server and the database wizard.
   - Selecting **Minimal** will install only the server. This is useful for installing multiple application servers when you need the database wizard only on one server. Also, if you have already set up your database, you may decide not to install the database wizard.
   - Selecting **Custom** will allow you to install Service Desk data exchange and migration tools.

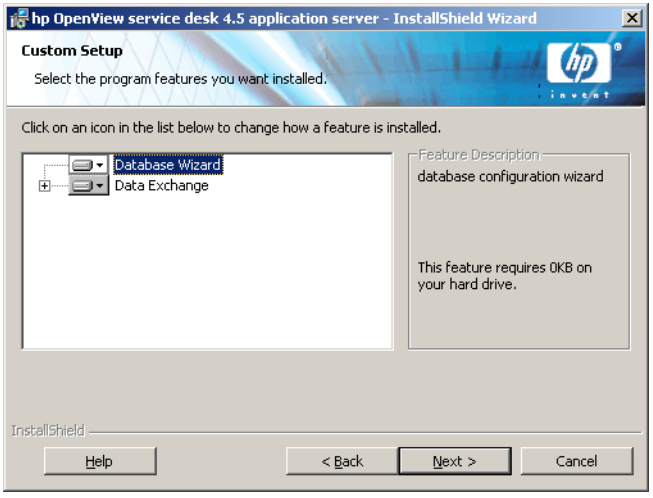
   Click **Next** to continue the installation:

Figure 3-9 Setup Type Dialog Box



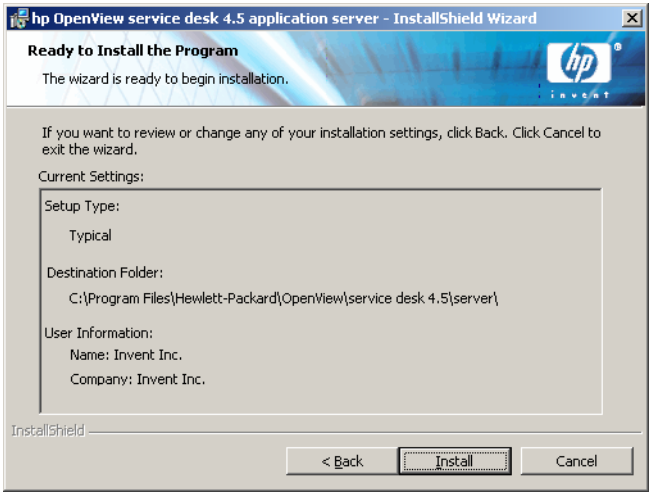
10. If you selected **Custom** in the Setup Type dialog box, the Custom Setup dialog box is displayed. To install the migration feature, select **Migration** from the list. Click **Next** to continue the installation.

Figure 3-10 Custom Setup Dialog Box



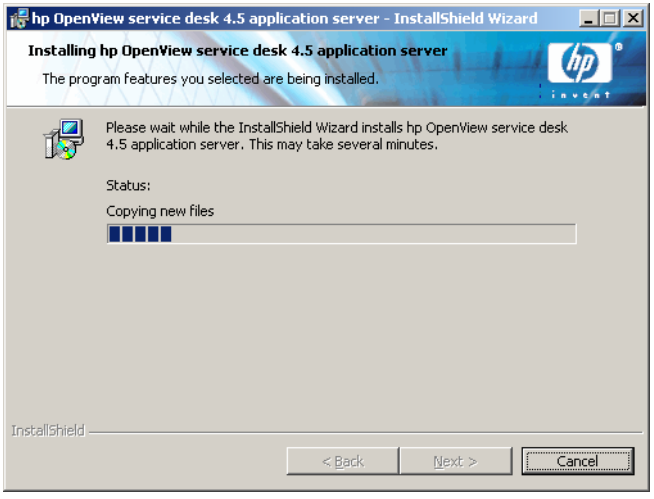
11. The Server Ready to Install dialog box shows the items that will be installed. Select **Install** to continue, or **Back** to return to the previous dialog boxes and make changes.

Figure 3-11 Server Ready to Install Dialog Box



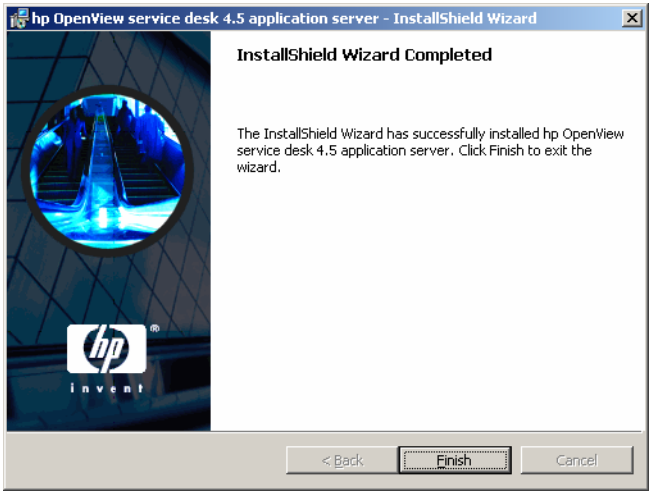
12. The Installing hp OpenView Service Desk 4.5 application server dialog box is displayed. A progress bar reflects the progress of the installation. Click **Next** when the installation is complete.

Figure 3-12 Installing Application Server Dialog Box



13. When all files are installed, the Completed screen appears. Click **Finish** to leave the installation program.

Figure 3-13 InstallShield Wizard Completed Dialog Box



14. When the Service Desk application server installation is complete, the computer where the server is installed must be restarted. In the pop-up dialog box that appears, choose the option to restart immediately.

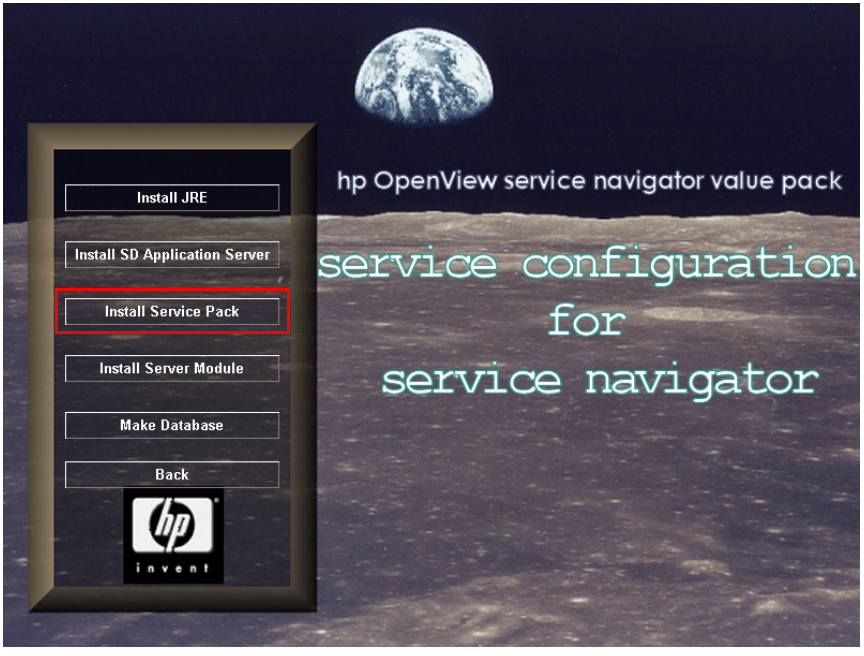
Continue with “Installing the Service Pack on the Application Server” on page 70.

Installing the Service Pack on the Application Server

Update the Service Desk 4.5 application server with the Service Desk service pack for Service Configuration. The service pack prepares the application server for the installation of the Service Configuration modules.

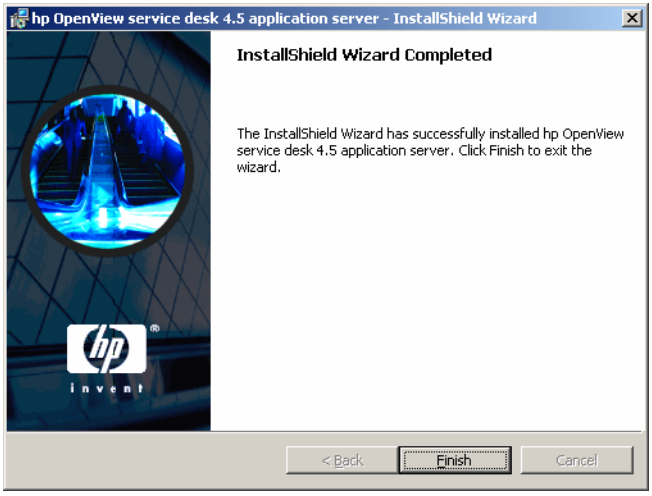
1. In the Server installation menu screen, click the **Install Service Pack** button to start the service pack installation.

Figure 3-14 Server Installation Menu Screen



2. A dialog box with a progress bar appears, showing the progress of the service pack installation. When all files are installed, the Completed screen appears. Click **Finish** to leave the installation program.

Figure 3-15 InstallShield Wizard Completed Dialog Box



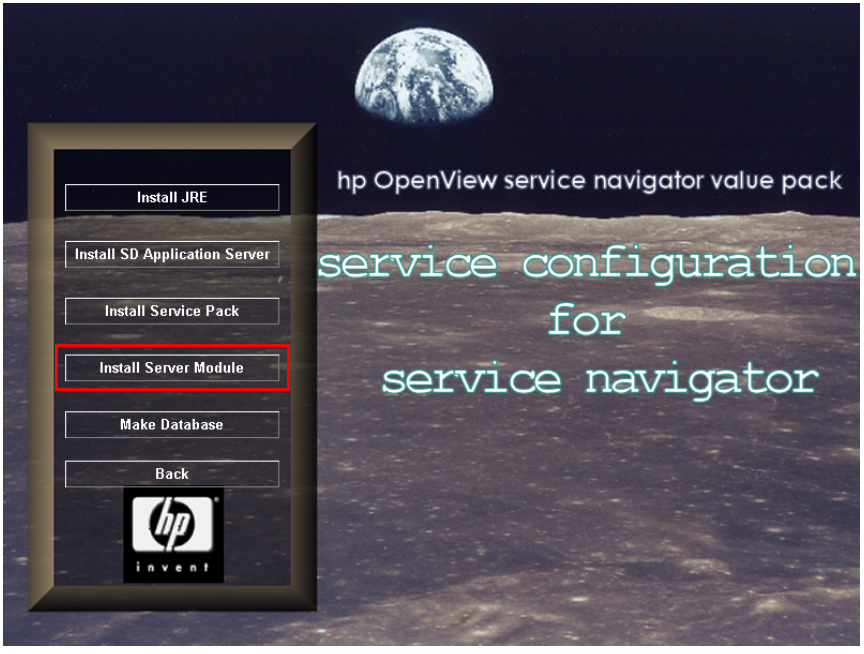
Continue with “Installing the Service Configuration Modules on the Application Server” on page 72.

Installing the Service Configuration Modules on the Application Server

Update the Service Desk 4.5 application server with the Service Configuration modules.

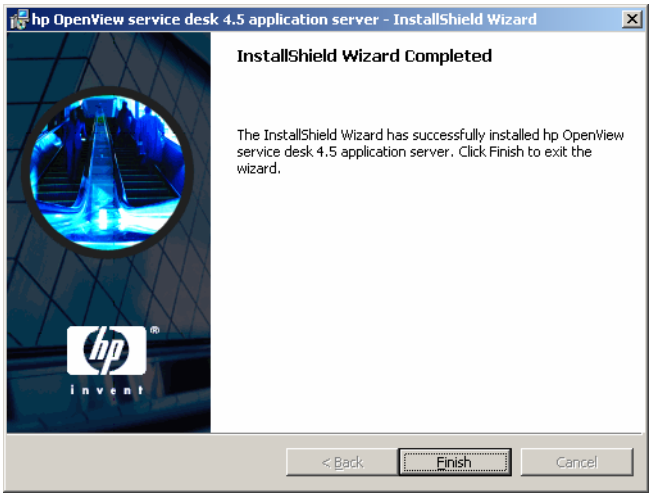
1. In the Server installation menu screen, click the **Install Server Module** button to start the installation of the modules.

Figure 3-16 Server Installation Menu Screen



2. A dialog box with a progress bar appears, showing the progress of the module installation. When all files are installed, the Completed screen appears. Click **Finish** to leave the installation program.

Figure 3-17 InstallShield Wizard Completed Dialog Box



NOTE You can also install the Service Configuration modules on the application server by executing the `cadm_server-8.0.exe` file in the `server` folder.

Configuring the Database

Continue the installation by configuring the database for use with Service Configuration as described in Chapter 4, “Configuring the Database,” on page 99.

Configuring the Application Server

After configuring the database, use the configuration editor to configure the application server as described in Chapter 5, “Configuring and Starting the Application Server,” on page 141.

Installation on an HP-UX Platform

The installation of the Service Desk application server on an HP-UX platform includes the following steps:

1. **Check the prerequisites.**

   Make sure all prerequisites are met as described in “Before Installing the Service Desk Application Server” on page 75.

2. **Optimize the kernel parameters.**

   Optimize the kernel parameters for running a large Java application as described in “Optimizing the Kernel Parameters” on page 76.

3. **Install the application server.**

   Install the Service Desk 4.5 application server as described in “Installing the Service Desk Application Server” on page 77.

4. **Install Service Desk service pack.**

   Update the application server with the Service Desk service pack as described in “Installing the Service Pack on the Application Server” on page 78.

5. **Install the Service Configuration module.**

   Install the Service Configuration module on the Service Desk application server as described in “Installing the Service Configuration Module on the Application Server” on page 79.

6. **Configure the database.**

   Configure the database as described in “Configuring the Database” on page 79.

7. **Configure the application server.**

   Configure the application server as described in “Configuring the Application Server” on page 79.

8. **Run the server.**

   See “Starting the Application Server on an HP-UX Platform” on page 161 for details on how to start and stop the application server processes.

Before Installing the Service Desk Application Server

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

NOTE All components of Service Configuration should be installed as root user.

NOTE Before starting the installation process, ensure that Java 1.3 is installed, and is included in the path. See “Third-party Software” on page 41.

Optimizing the Kernel Parameters

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 the Service Desk Application Server

To install the Service Desk application server on HP-UX:

1. Mount the HP-UX CD-ROM.
2. Use swinstall to install the server:

   Example:
   `swinstall -s /<mountpoint>/server/sdserver-4.5.depot`
3. In the Software Selection dialog box, select the Service Desk depot file, and from the Actions menu choose **Mark for Install**. Go to the Actions menu again and click **Install**.
4. The Install Analysis dialog box is displayed. Click **OK** to install the server software.
5. The Install dialog box is displayed while the software is being installed. When the installation is complete, click **Done**.
6. Check that the JAVA variable in the `/sbin/init.d/hpovsdserver` script is correct. If you do not have Java in the default location `/opt/java1.3/bin/java` then you must edit `hpovsdserver`.
7. Set `:/opt/java1.3/bin` in the `PATH`.
8. Verify that your `DISPLAY` setting was correctly exported.

Continue with “Installing the Service Pack on the Application Server” on page 78.

Installing the Service Pack on the Application Server

To install the Service Desk service pack on the application server on HP-UX:

1. Mount the HP-UX CD-ROM.
2. Use swinstall to install the service pack:

   Example:
   ```
   swinstall -s /<mountpoint>/servicepack/server/\
   sdserver-4.5-sp.depot
   ```
3. In the Software Selection dialog box, select the service pack depot file, and from the Actions menu choose **Mark for Install**. Go to the Actions menu again and click **Install**.
4. The Install Analysis dialog box is displayed. Click **OK** to install the service pack software.
5. The Install dialog box is displayed while the software is being installed. When the installation is complete, click **Done**.

Continue with “Installing the Service Configuration Module on the Application Server” on page 79.

Installing the Service Configuration Module on the Application Server

To install the Service Configuration module on the application server on HP-UX:

1. Mount the HP-UX CD-ROM.
2. Use swinstall to install the module:

   Example:
   `swinstall -s /<mountpoint>/server/cadm_server-8.0.depot`
3. In the Software Selection dialog box, select the Service Configuration depot file, and from the Actions menu choose **Mark for Install**. Go to the Actions menu again and click **Install**.
4. The Install Analysis dialog box is displayed. Click **OK** to install the Service Configuration module.
5. The Install dialog box is displayed while the software is being installed. When the installation is complete, click **Done**.

Continue with “Configuring the Database” on page 79.

Configuring the Database

Continue the installation by configuring the database. Use `/opt/OV/sd/server/bin/sd_dbconfwizard` to start the Database Wizard. Configuring the database using the wizard is described in “Configuring the Database for The First Time” on page 102.

Configuring the Application Server

After configuring the database, use /opt/OV/sd/server/bin/sd_serversettingseditor to initiate the Configuration Editor. Using the configuration editor is described in Chapter 5, “Configuring and Starting the Application Server,” on page 141.

Installation on a Sun Solaris Platform

The installation of the Service Desk application server on a Sun Solaris platform includes the following steps:

1. **Check the prerequisites.**

   Make sure all prerequisites are met as described in “Before Installing the Service Desk Application Server” on page 81.

2. **Install the application server.**

   Install the Service Desk 4.5 application server as described in “Installing the Service Desk Application Server” on page 81.

3. **Install Service Desk service pack.**

   Update the application server with the Service Desk service pack as described in “Installing the Service Pack on the Application Server” on page 85.

4. **Install the Service Configuration module.**

   Install the Service Configuration module on the Service Desk application server as described in “Installing the Service Configuration Server Module on the Application Server” on page 82.

5. **Configure the database.**

   Configure the database as described in “Configuring the Database” on page 82.

6. **Configure the application server.**

   Configure the application server as described in “Configuring the Application Server” on page 82.

7. **Run the server.**

   See “Starting the Application Server on a Sun Solaris Platform” on page 162 for details on how to start and stop the application server processes.

Before Installing the Service Desk Application Server

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

NOTE All components of Service Configuration should be installed as root user.

NOTE Before starting the installation process, ensure that Java 1.3 is installed, and is included in the path. See “Third-party Software” on page 41.

Installing the Service Desk Application Server

To install the Service Desk application server on Sun Solaris:

1. Mount the Sun Solaris CD-ROM.
2. Use `pkgadd` to install the server:

   Example:
   `pkgadd -d /<mountpoint>/server/sdserver-4.5.pkg`
3. Check that the correct version of Java will be used by the application server. The Java default location is `/usr/java/bin/java`. If you do not have Java in this default location, do one of the following:

   - Edit the script `/etc/init.d/hpovsdserver` and make sure that the `JAVA` variable points to your Java installation directory.
   - Create a symbolic link.

     If there is a Java entry in the `/usr` directory, remove or rename it first. Then create a symbolic link for the JRE or the SDK, depending on what you are using:

     JRE: **`ln -s /usr/j2re1_3_1_03 /usr/java`**

     SDK: **`ln -s /usr/j2sdk1_3_1_03 /usr/java`**
4. Verify that your `DISPLAY` setting was correctly exported.

Continue with “Installing the Service Pack on the Application Server” on page 82.

Installing the Service Pack on the Application Server

To install the Service Desk service pack on the application server on Sun Solaris:

1. Mount the Sun Solaris CD-ROM.
2. Use `pkgadd` to install the service pack:

   Example:
   ```
   pkgadd -d /<mountpoint>/servicepack/server/\
   sdserver-4.5-sp.pkg
   ```

Continue with “Installing the Service Configuration Server Module on the Application Server” on page 82.

Installing the Service Configuration Server Module on the Application Server

To install the Service Configuration module on the application server on Sun Solaris:

1. Mount the Sun Solaris CD-ROM.
2. Use `pkgadd` to install the module:

   Example:
   ```
   pkgadd -d /<mountpoint>/server/cadm_server-8.0.pkg
   ```

Continue with “Configuring the Database” on page 82.

Configuring the Database

Continue the installation by configuring the database. Use `/opt/OV/sd/server/bin/sd_dbconfwizard` to start the Database Wizard. Configuring the database using the wizard is described in “Configuring the Database for The First Time” on page 102.

Configuring the Application Server

After configuring the database, use /opt/OV/sd/server/bin/sd_serversettingseditor to initiate the Configuration Editor. Using the configuration editor is described in Chapter 5, “Configuring and Starting the Application Server,” on page 141.

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. Then you run the database configuration wizard to upgrade the existing Service Desk database and to load the Service Configuration modules into the upgraded database.

Installation on a Windows Platform

The installation of the Service Desk application server on a Windows platform includes the following steps:

1. **Check the prerequisites.**

   Make sure all prerequisites are met as described in “Before Updating the Application Server” on page 84.

2. **Install Service Desk service pack.**

   Update the Service Desk application server with the Service Desk service pack as described in “Installing the Service Pack on the Application Server” on page 85.

3. **Install the Service Configuration modules.**

   Install the Service Configuration modules on the Service Desk application server as described in “Installing the Service Configuration Module on the Application Server” on page 89.

4. **Update the database.**

   Upgrade the Service Desk database and upload the Service Configuration modules into the upgraded database using the database configuration wizard. See “Updating the Database with Service Configuration” on page 91.

Before Updating the Application Server

Make sure the database you are using for your Service Desk 4.5 installation is an Oracle database. Other database products are currently not supported with Service Configuration.

Installing the Service Pack on the Application Server

Update the Service Desk 4.5 application server with the Service Desk service pack. The service pack prepares the application server for the installation of the Service Configuration module.

1. Insert the HP OpenView Service Configuration for Service Navigator CD-ROM into your CD-ROM drive. The start screen appears. If you do not see the Start screen, double-click `setup.exe` in the root of the CD-ROM drive. When the Start screen appears, click **Install Service Configuration**.

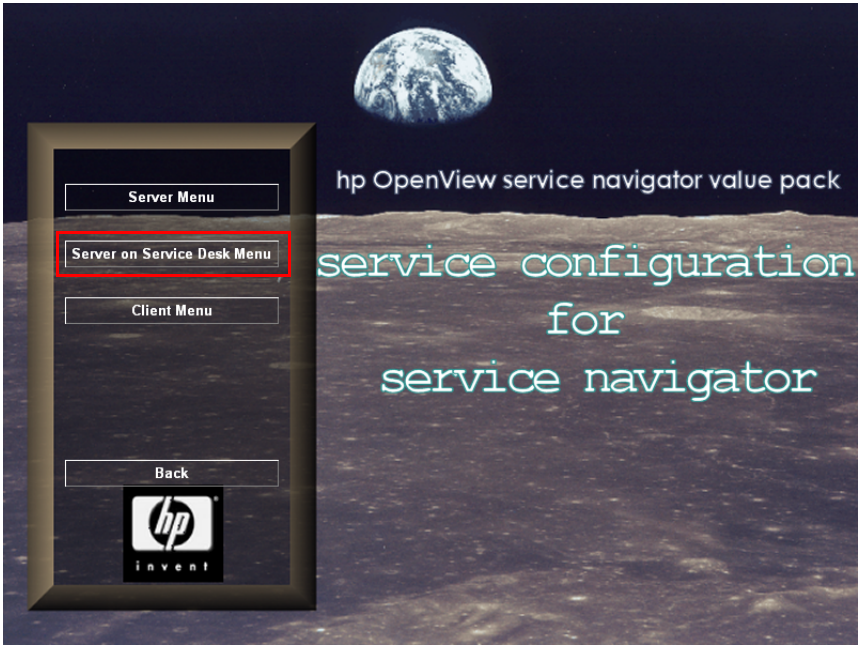
Figure 3-18 Service Configuration Installation Start Screen

NOTE

If you cannot get the installation program running by double-clicking `setup.exe`, you can try the following procedure: click the CD-ROM drive, open a DOS dialog box, browse to the folder containing the application server installation startup program and run `setup.exe`.

2. In the following screen click **Server on Service Desk Menu**.

Figure 3-19 Service Configuration Installation Menu Screen

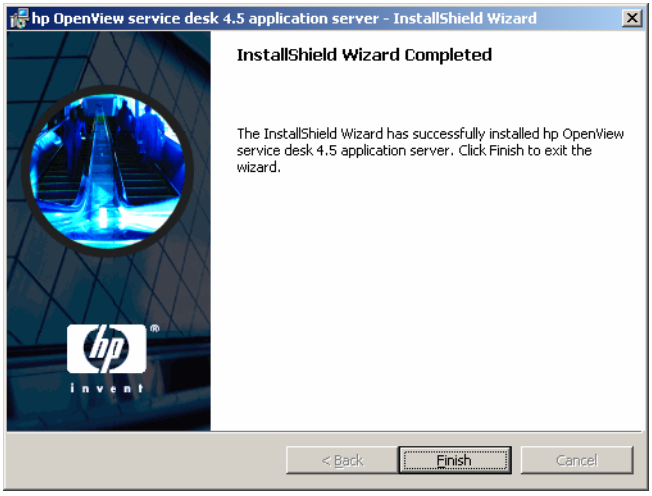


3. In the Server on Service Desk installation menu screen, click the **Install Service Pack** button to start the service pack installation:

Figure 3-20 Server on Service Desk Installation Menu Screen

4. A dialog box with a progress bar appears, showing the progress of the service pack installation. When all files are installed, the Completed screen appears. Click **Finish** to leave the installation program.

Figure 3-21 InstallShield Wizard Completed Dialog Box



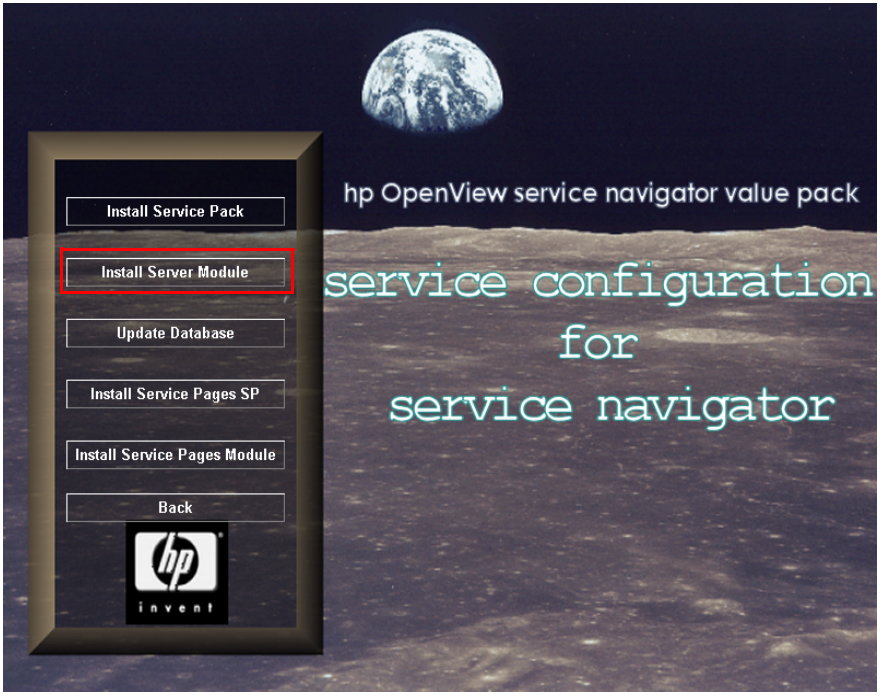
Continue with “Installing the Service Configuration Module on the Application Server” on page 89.

Installing the Service Configuration Module on the Application Server

Update the Service Desk 4.5 application server with the Service Configuration module.

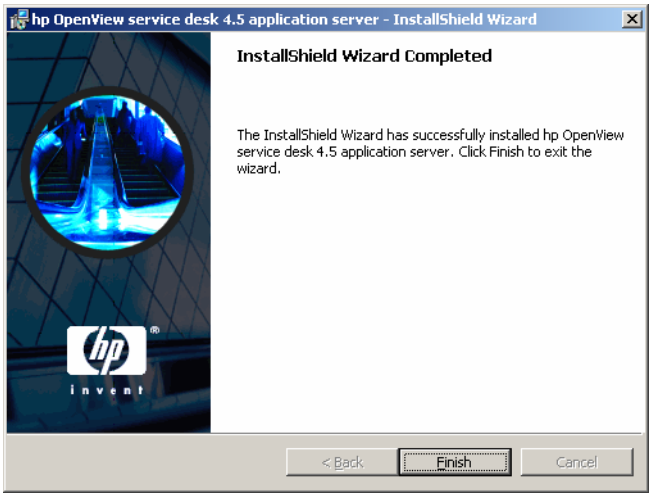
1. In the Server on Service Desk installation menu screen, click the **Install Server Module** button to start the installation of the module.

Figure 3-22 Server on Service Desk Installation Menu Screen



2. A dialog box with a progress bar appears, showing the progress of the module installation. When all files are installed, the Completed screen appears. Click **Finish** to leave the installation program:

Figure 3-23 InstallShield Wizard Completed Dialog Box



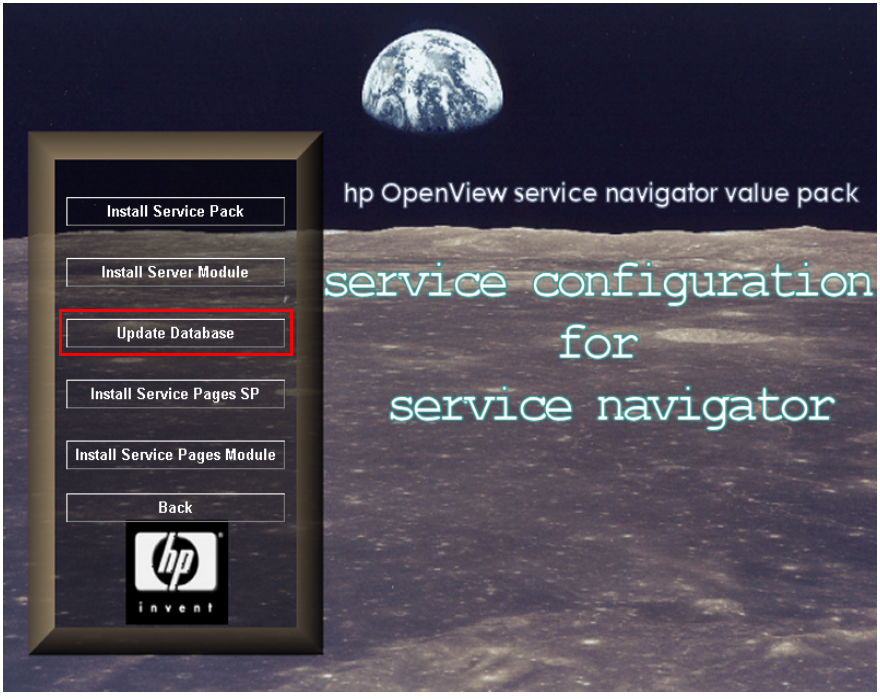
Continue with “Updating the Database with Service Configuration” on page 91.

Updating the Database with Service Configuration

Use the database configuration wizard to upgrade the existing Service Desk database and to upload the Service Configuration module into the upgraded Service Desk database.

1. In the Server on Service Desk installation menu screen, click the **Update Database** button to start the database configuration wizard.

Figure 3-24 Server on Service Desk Installation Menu Screen



2. The Service Desk database configuration wizard appears. Configure the database using the wizard as described in “Updating the Database” on page 130.

Installation on an HP-UX Platform

The installation of the Service Desk application server on an HP-UX platform includes the following steps:

1. **Check the prerequisites.**

   Make sure all prerequisites are met as described in “Before Installing the Service Desk Application Server” on page 75.

2. **Install Service Desk service pack.**

   Update the Service Desk application server with the Service Desk service pack as described in “Installing the Service Pack on the Application Server” on page 78.

3. **Install the Service Configuration modules.**

   Install the Service Configuration modules on the Service Desk application server as described in “Installing the Service Configuration Module on the Application Server” on page 79.

4. **Update the database.**

   Upgrade the existing Service Desk database and upload the Service Configuration modules into the upgraded database using the database configuration wizard. See “Configuring the Database” on page 79

Before Updating the Service Desk Application Server

Make sure the database you are using for your Service Desk 4.5 installation is an Oracle database. Other database products are currently not supported with Service Configuration.

Installing the Service Pack on the Application Server

To install the Service Desk service pack for Service Configuration on the application server on HP-UX:

1. Mount the HP-UX CD-ROM.
2. Use swinstall to install the service pack:

   Example:
   ```
   swinstall -s /<mountpoint>/servicepack/server/\
   sdserver-4.5-sp.depot
   ```
3. In the Software Selection dialog box, select the service pack depot file, and from the Actions menu choose **Mark for Install**. Go to the Actions menu again and click **Install**.
4. The Install Analysis dialog box is displayed, click **OK** to install the service pack software.
5. The Install dialog box is displayed while the software is being installed. When the installation is complete, click **Done**.

Continue with “Installing the Service Configuration Server Module on the Application Server” on page 94.

Installing the Service Configuration Server Module on the Application Server

To install the Service Configuration module on the application server on HP-UX:

1. Mount the HP-UX CD-ROM.
2. Use swinstall to install the module:

   Example:
   `swinstall -s /<mountpoint>/server/cadm_server-8.0.depot`
3. In the Software Selection dialog box, select the Service Desk depot file, and from the Actions menu choose **Mark for Install**. Go to the Actions menu again and click **Install**.
4. The Install Analysis dialog box is displayed, click **OK** to install the Service Configuration module.
5. The Install dialog box is displayed while the software is being installed. When the installation is complete, click **Done**.

Continue with “Updating the Database with Service Configuration” on page 95.

Updating the Database with Service Configuration

Use `/opt/OV/sd/server/bin/sd_dbconfwizard` to start the Database Wizard. The Database Configuration Wizard lets you upgrade the existing Service Desk database and upload the Service Configuration modules into the upgraded database. This is described in “Updating the Database” on page 130.

When you have configured the database, you are ready to install the Service Configuration clients as described in Chapter 6, “Installing the Service Configuration Client,” on page 163.

Installation on a Sun Solaris Platform

The installation of the Service Desk application server on a Sun Solaris platform includes the following steps:

1. **Check the prerequisites.**

   Make sure all prerequisites are met as described in “Before Updating the Service Desk Application Server” on page 96.

2. **Install Service Desk service pack.**

   Update the Service Desk application server with the Service Desk service pack as described in “Installing the Service Pack on the Application Server” on page 97.

3. **Install the Service Configuration modules.**

   Install the Service Configuration modules on the Service Desk application server as described in “Installing the Service Configuration Module on the Application Server” on page 97.

4. **Update the database.**

   Upgrade the existing Service Desk database and upload the Service Configuration modules into the upgraded database using the database configuration wizard. See “Updating the Database with Service Configuration” on page 97.

Before Updating the Service Desk Application Server

Make sure the database you are using for your Service Desk 4.5 installation is an Oracle database. Other database products are currently not supported with Service Configuration.

Installing the Service Pack on the Application Server

To install the Service Desk service pack on the application server on Sun Solaris:

1. Mount the Sun Solaris CD-ROM.
2. Use `pkgadd` to install the service pack:

   Example:
   ```
   pkgadd -d /<mountpoint>/servicepack/server/\
   sdserver-4.5-sp.pkg
   ```

Continue with “Installing the Service Configuration Module on the Application Server” on page 97.

Installing the Service Configuration Module on the Application Server

To install the Service Configuration module on the application server on Sun Solaris:

1. Mount the Sun Solaris CD-ROM.
2. Use `pkgadd` to install the module:

   Example:
   ```
   pkgadd -d /<mountpoint>/server/cadm_server-8.0.pkg
   ```

Continue with “Updating the Database with Service Configuration” on page 97.

Updating the Database with Service Configuration

Use `/opt/OV/sd/server/bin/sd_dbconfwizard` to start the Database Wizard. The Database Configuration Wizard lets you upgrade the existing Service Desk database and upload the Service Configuration modules into the upgraded database. This is described in “Updating the Database” on page 130.

When you have configured the database, you are ready to install the Service Configuration clients as described in Chapter 6, “Installing the Service Configuration Client,” on page 163.

4 Configuring the Database

This chapter describes the procedures for configuring an Oracle database to work with Service Configuration.

Before Configuring the Database

Make sure a database and an application server are already installed. See “Setting up the Oracle Database” on page 36 and Chapter 3, “Installing Service Configuration,” on page 51.

On a Windows platform, after installing an Oracle database, the database server must be restarted before Service Configuration is installed.

When configuring the database using the database configuration wizard, you have the choice between creating a new database, upgrading an existing database, loading modules into a database, and upgrading modules. What you select depends on how you install Service Configuration:

- **Install Service Configuration (no Service Desk installed)**

  If you have installed the Service Configuration server without an existing Service Desk installation, choose the new database option. In this case the database has not yet been created and must be created before you can use Service Configuration. See “Configuring the Database for The First Time” on page 102.

- **Install Service Configuration on Service Desk**

  If you have installed Service Configuration on an existing Service Desk installation, you must first upgrade the database to a version that is compatible with Service Configuration. After that you can start uploading the Service Configuration modules into the upgraded database. See “Updating the Database” on page 130.

Starting the Database Configuration Wizard

This section describes how to start the database configuration wizard on all supported platforms:

- **Windows**

  To start the Database Configuration Wizard on a Windows platform:

  1. From the **Start** button select **Programs: hp OpenView service desk 4.5**.
  2. Select **application server: run the database configuration wizard**.

  The Database Configuration Wizard starts.

- **UNIX**

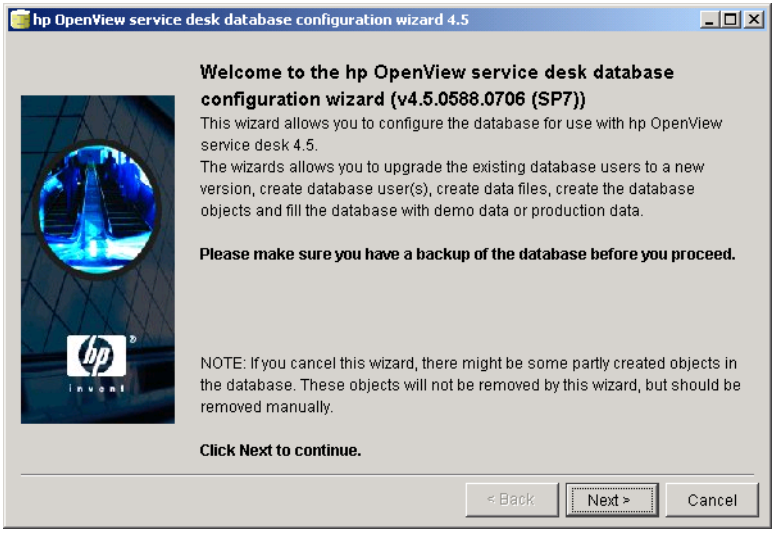
  To start the Database Configuration Wizard on a UNIX platform, navigate to the `/<installed dir>/server/bin` directory and run `sd_dbconfwizard`.

Although there may be some minor differences in look and feel, the database configuration wizard is the same in both Windows and UNIX environments.

Configuring the Database for The First Time

1. Start the database configuration wizard as described in “Starting the Database Configuration Wizard” on page 101.
2. The Database Configuration Wizard Welcome dialog box is displayed. Click **Next** to continue.

Figure 4-1 Database Configuration Wizard



3. The following dialog box appears. You are given the following options:

   - **Create a new database.**

     Choose this option if you are installing Service Configuration without an existing Service Desk installation. In this case, the database instance will be configured and tablespaces and data files will be added. If you select **New Database**, click **Next** to continue with step 4.

   - **Upgrade an existing database.**

     Choose this option if you want to upgrade an existing Service Desk database instance to work with Service Configuration. See “Updating the Database” on page 130 for more information.

   - **Upload Service Configuration modules**

     Choose this option if you are installing Service Configuration on an existing Service Desk installation and you want to upload the Service Configuration modules into the database. Before you can upload the Service Configuration modules into the database, the database must be upgraded as described in “Updating the Database” on page 130.

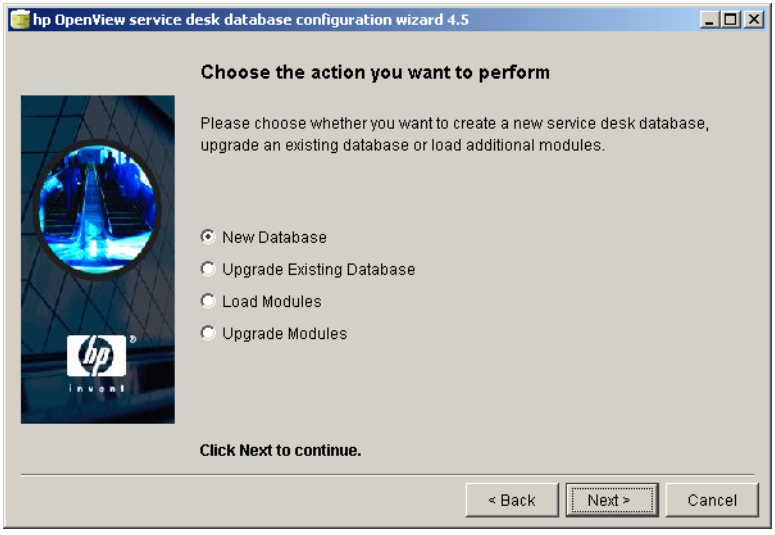
   - **Upgrade Service Configuration modules**

     Choose this option if you are upgrading Service Configuration from an older version to the current version. Before you can upgrade the Service Configuration business logic module to version 8.0, the database must be upgraded as described in “Updating the Database” on page 130. After the business logic module has been upgraded, load the remaining Service Configuration modules.

NOTE

Upgrading Service Configuration from version 7.1 to 8.0 is described in the *Service Configuration Upgrade Guide*.

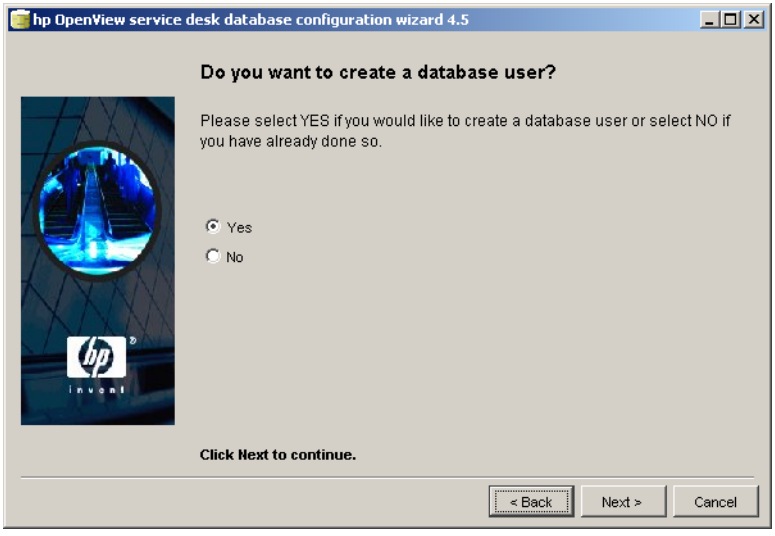
Figure 4-2 Choose Action Dialog Box



4. A dialog box appears. If you want to create a new database user, click **Yes** and proceed to step 5.

   If you have already created a database user, click **No** and continue with 6.

Figure 4-3 Do you want to create a database user? Dialog Box

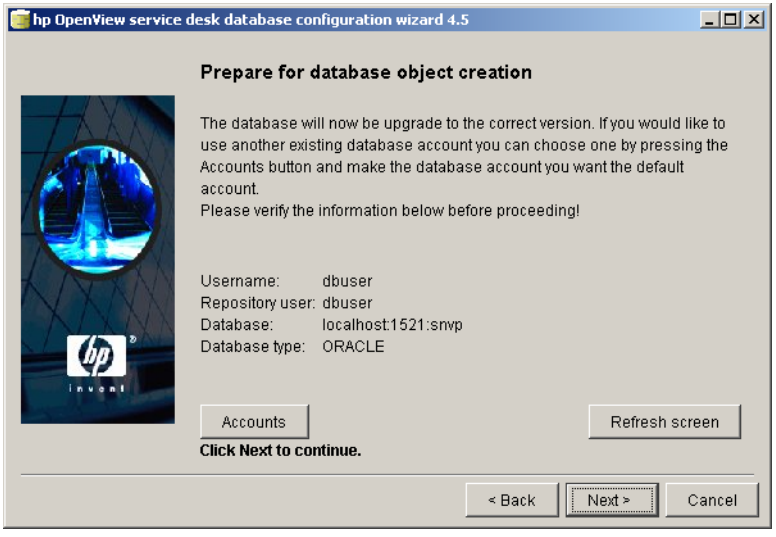


5. In the Choose Database type dialog box, select the **Oracle database** option. SQL databases are not supported with Service Configuration. Proceed to step 7 to continue.

Figure 4-4 Choose Database Type Dialog Box

6. If you select No in the Create Database User dialog box in step 4, the Prepare for Database Object Creation dialog box is displayed. Click **Accounts** to open a dialog box where you can select an existing database user. You may need to click **Refresh screen** to display the selected user in this dialog box. When you click **Next**, the database objects are created based on the parameters defined when the database user was created. Proceed to step 23 to continue.

Figure 4-5 Prepare for Database Object Creation Dialog Box



7. In the Administrator Account dialog box, enter your database administrator name, password, and the database server name, port (if different from the default), and instance. The administrator name must be listed as a member of the DBA group. 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. Instance is the database instance you want to use for Service Configuration. See “Setting up the Oracle Database” on page 36 for more information about database instances.

Figure 4-6 Administrator Account Information Dialog Box

8. With Service Desk on an Oracle database, you have the option to create an Oracle user account and a repository account, or just a single user account. To create just a single user account, enter a user name and a password, and select the **Use same account for the service desk Repository** check box. Having two accounts (user and repository) increases performance on large systems. To create both a user account and repository user account, enter a user name and password for each account.

Figure 4-7 Oracle User Account Information Dialog Box

NOTE

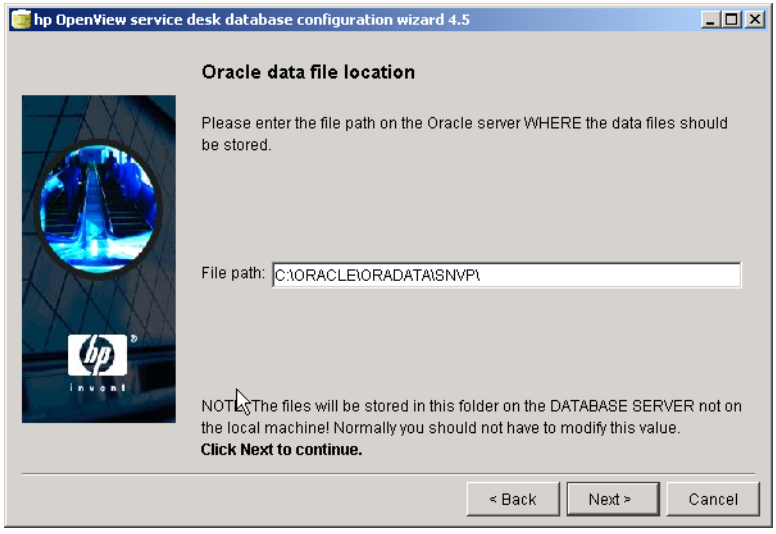
If you want to use non-alphanumeric characters in an account name or password, you must put the whole name or password in quotation marks. An account name or password that starts with a number also requires quotation marks.

9. In the Create data files and tablespaces dialog box, select **Yes** if you want to define your own data file and tablespace sizes and continue with step 10. Select **No** if you want to use existing data files and tablespaces and continue with step 17.

Figure 4-8 Create Datafiles and Tablespaces Dialog Box

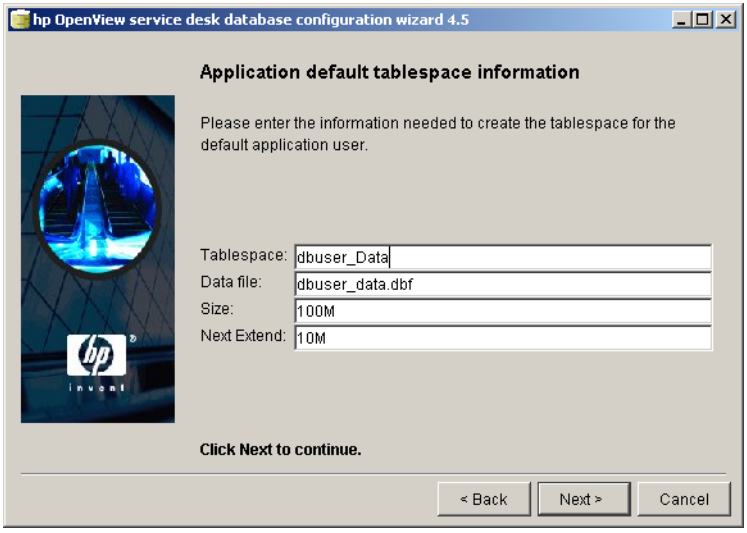
10. The Oracle Data File Location dialog box appears. The configuration wizard searches for and locates the Data files. You should accept this path unless you know for certain that the datafiles are stored in another location. Click **Next** to continue.

Figure 4-9 Oracle Datafile Location Dialog Box



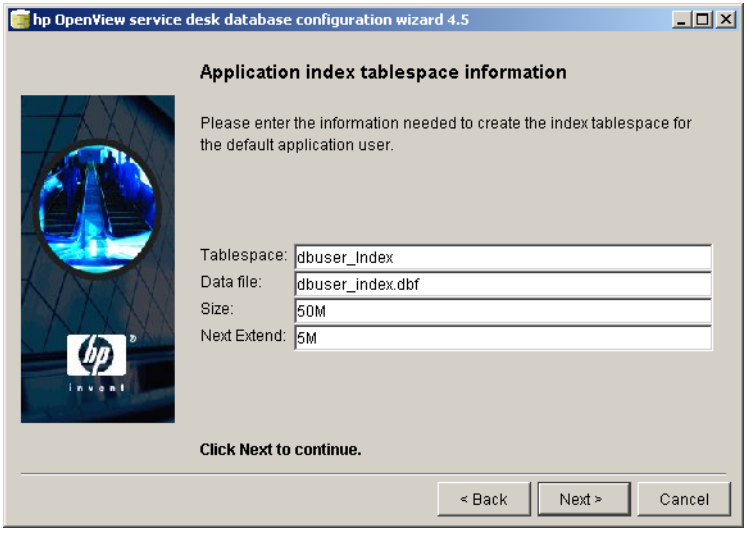
11. The Application Default tablespace information dialog box appears. Change the information as necessary. Names with spaces or periods should not be used, and click **Next** to continue.

Figure 4-10 Application Default Tablespace Information Dialog Box



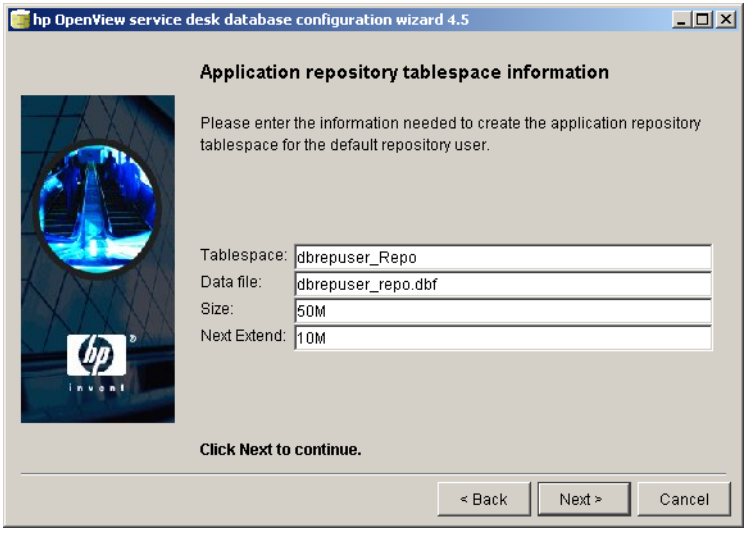
12. The Application Index tablespace information dialog box appears. Change the information as necessary. Names with spaces and periods should not be used. Click **Next** to continue (if you selected only one Oracle user jump to step 15 on page 116).

Figure 4-11 Application Index Tablespace Information Dialog Box



13. If you selected two Oracle users, the Application Repository tablespace information dialog box appears. Change the information as necessary. Names with spaces or periods should not be used. Click **Next** to continue.

Figure 4-12 Application Repository Tablespace Information Dialog Box

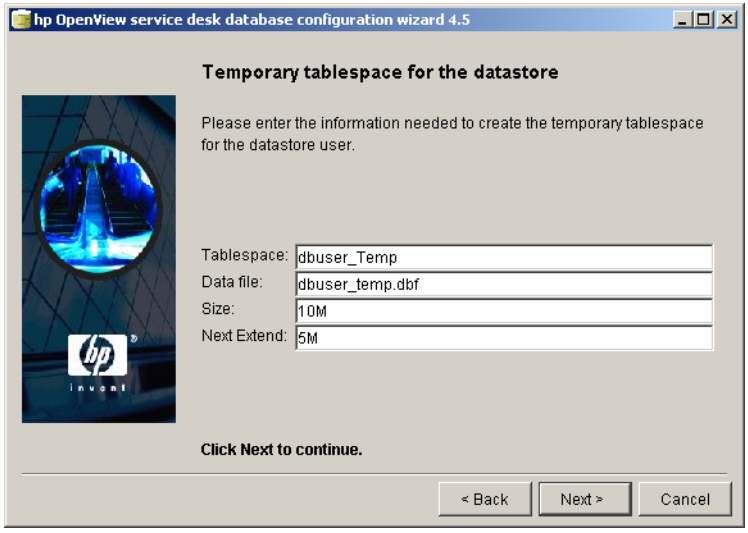


14. If you selected two Oracle users, the Repository Index tablespace information dialog box appears. Change the information as necessary. Names with spaces or periods should not be used. Click **Next** to continue.

Figure 4-13 Repository Index Tablespace Information Dialog Box

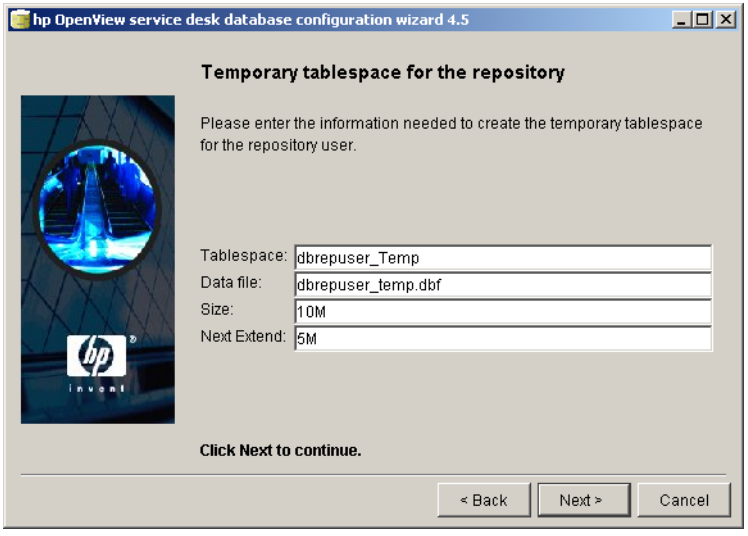
15. The Temporary Tablespace for the Datastore dialog box appears. Change the information as necessary. Names with spaces or periods should not be used. Click **Next** to continue.

Figure 4-14 Temporary Tablespace for the Datastore Dialog Box



16. If you selected two Oracle users, the Temporary Tablespace for the Repository dialog box appears, change the information as necessary, names with spaces and periods should not be used. Click **Next** to continue with the Choose Expected Environment Size dialog box, step 23.

Figure 4-15 Temporary Tablespace for the Repository Dialog Box

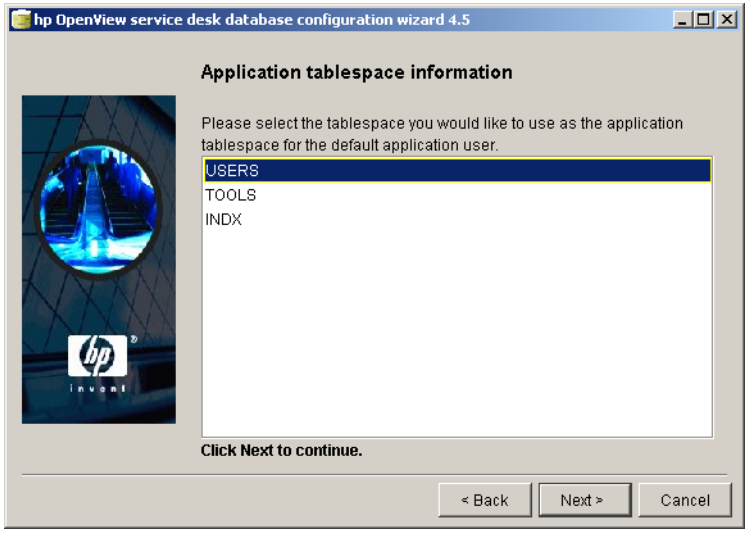


17. If you selected No in the Create Data Files and Tablespaces dialog box in step 9, the Application Tablespace information dialog box is displayed. This dialog box lists the existing tablespaces that can be used by the default application user.

NOTE You can only select existing datafiles and tablespaces. If you then select the defaults provided with Oracle, the installation process may fail as these files may be too small to run Service Desk.

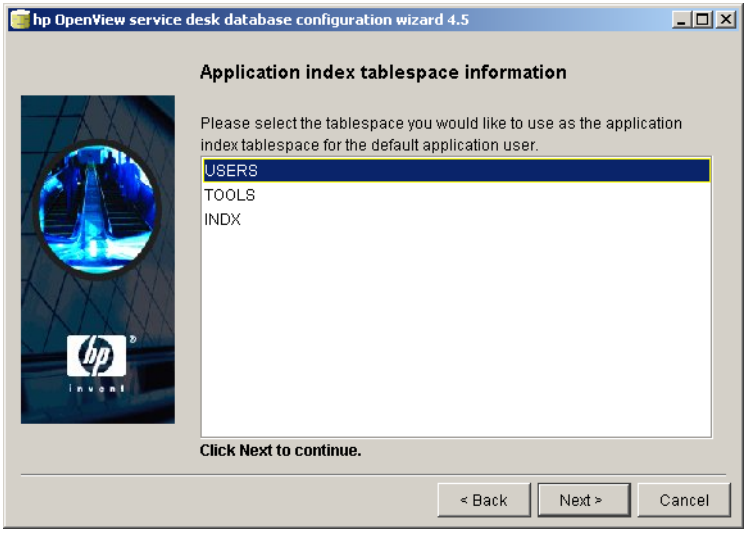
Select an option and click **Next** to continue.

Figure 4-16 Application Tablespace Information Dialog Box



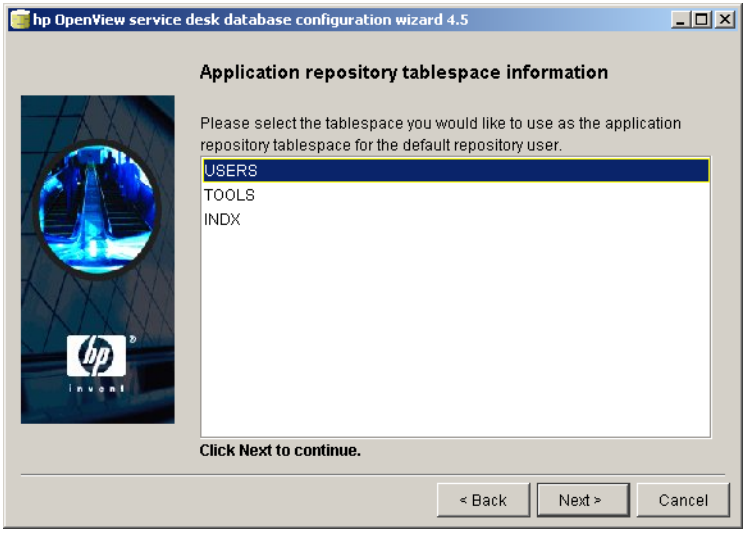
18. The Application Index tablespace information dialog box is displayed. This dialog box lists the existing tablespaces that can be used as the Index for the default application user. Select an option and click **Next** to continue.

Figure 4-17 Application Index Tablespace Information Dialog Box



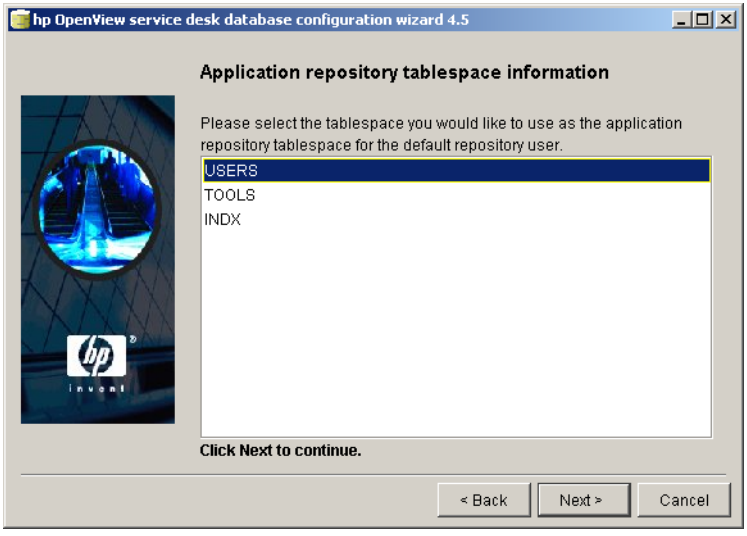
19. If you selected two Oracle users, the Application Repository Default tablespace information dialog box is displayed, otherwise continue with step 22. This dialog box lists the existing tablespaces that can be used by the default repository user. Select an option and click **Next** to continue.

Figure 4-18 Application Repository Tablespace Information Dialog Box



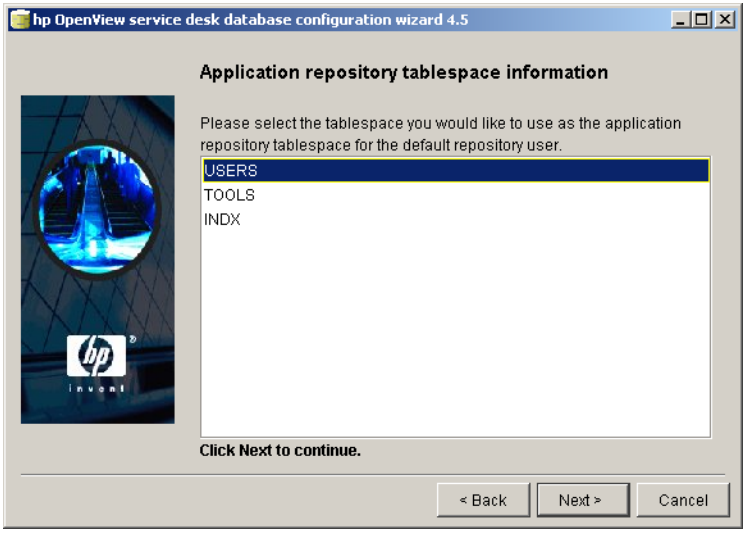
20. If you selected two Oracle users, the Repository Index tablespace information dialog box is displayed. This dialog box lists the existing tablespaces that can be used as the Index for the default repository user. Select an option and click **Next** to continue.

Figure 4-19 Repository Index Tablespace Information Dialog Box



21. The Temporary Tablespace for the Datastore dialog box is displayed. This dialog box lists the existing tablespaces that can be used as the Temporary tablespace for the default application user. Select an option and click **Next** to continue.

Figure 4-20 Temporary Tablespace for the Datastore Dialog Box



22. If you selected two Oracle users, the Temporary Tablespace for the Repository dialog box is displayed. This dialog box lists the existing tablespaces that can be used as the Temporary tablespace for the repository user. Select an option and click **Next** to continue.

Figure 4-21 Temporary Tablespace for the Repository Dialog Box

23. The Choose Expected Environment Size dialog box is displayed. Define the size you expect the environment to be by selecting small, medium, or large. These terms relate to the expected number of objects you think your database will need to hold before you archive or physically delete old records:

    - **Small**

      If you expect less than 25,000 objects, select small.

    - **Medium**

      If you expect between 25,000 and 250,000, select medium.

    - **Large**

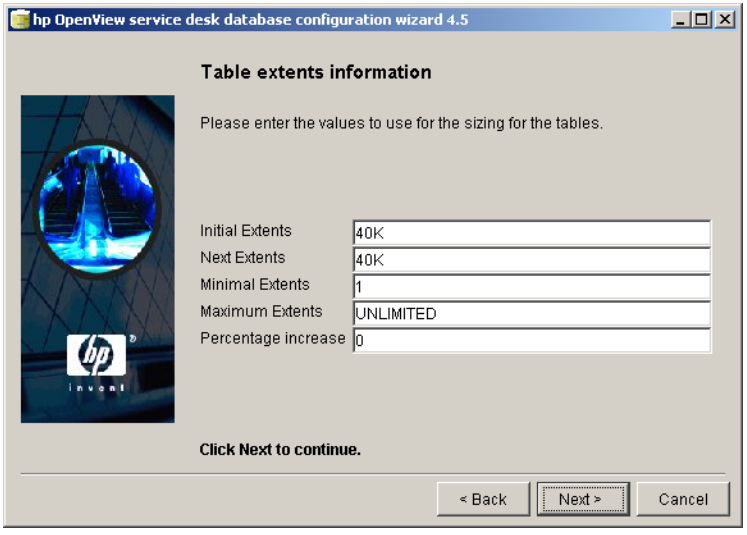
      If you expect over 250,000 objects, select large.

    The table extents created will be sized accordingly. Click **Next** to continue.

Figure 4-22 Oracle Choose Expected Environment Size Dialog Box

24. The Table Extents Information dialog box is displayed. If necessary change the default settings. Click **Next** to continue.

Figure 4-23 Oracle Table Extents Dialog Box



25. The Load Demo Data dialog box appears. If you want to load the demonstration data click **Yes** and then **Next** to continue. The demonstration data can only be loaded when configuring the database for the first time.

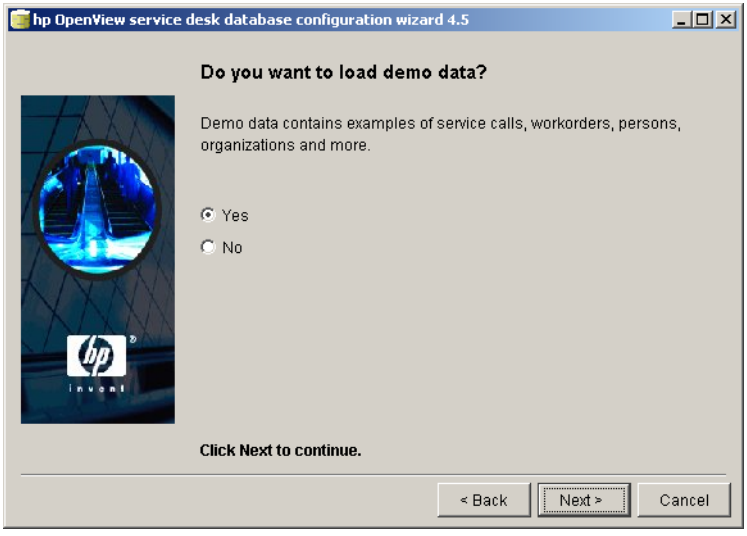
    The demonstration database includes example service hierarchies that illustrate what kind of hierarchies can be created with Service Configuration.

NOTE

The demonstration service hierarchies reference a number of objects in Service Desk that, when installing Service Configuration without Service Desk, do not exist. You can still load the demonstration data if you like, but some parts may be invalid.

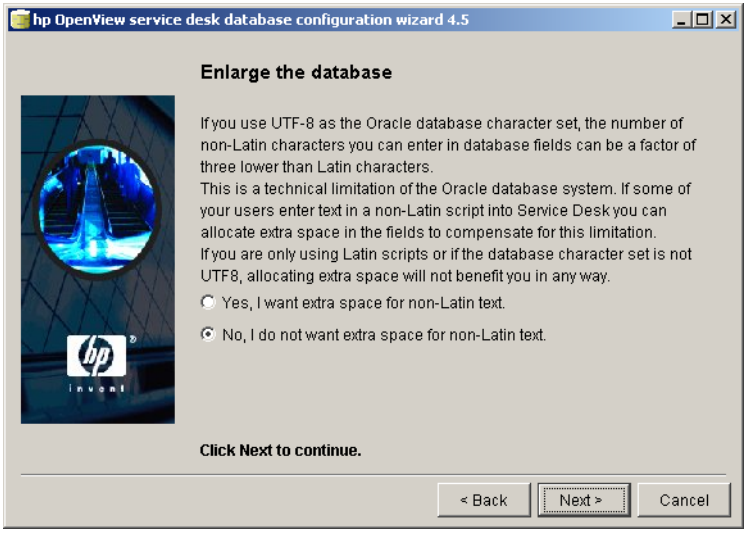
With Service Desk installed, you must authorize the Service Configuration default user to access the appropriate Service Desk modules. See also “Service Configuration with Service Desk” on page 205.

Figure 4-24 Do you want to load demo data? Dialog Box



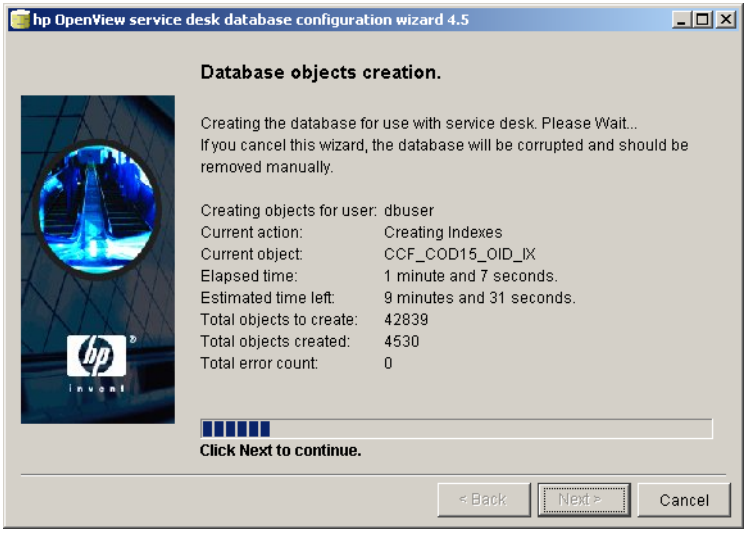
26. If you use UTF-8 as the character set of the Oracle database, non-Latin characters use three time more space in the database than the Latin character. To compensate for this, the database fields can be extended.There is an absolute limit of 1333 characters. To extend the fields select **Yes, I want extra space for non-latin text**. Click **Next** to continue.

Figure 4-25 Enlarge the Database Dialog Box



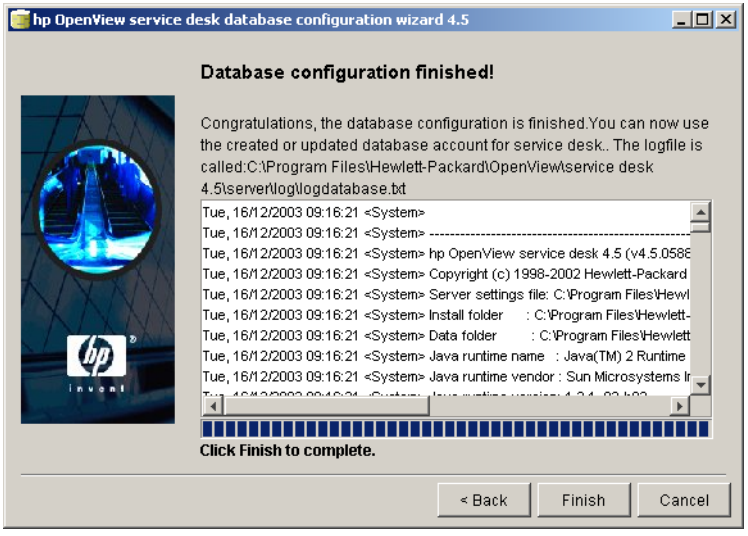
27. A popup dialog box appears with the question Do you want to run the Database objects creation now? Click **Yes**. A dialog box tells you that the database objects are being created. Click **OK**, then click **Next** after reviewing the Database Object Creation Summary dialog box.

Figure 4-26 Database Objects Creation Dialog Box



28. The Database Configuration Finished dialog box appears after the configuration is completed. Click **Finish** to leave the configuration wizard.

Figure 4-27 Database Configuration Wizard



Continue the installation by configuring the application server as described in Chapter 5, “Configuring and Starting the Application Server,” on page 141.

Updating the Database

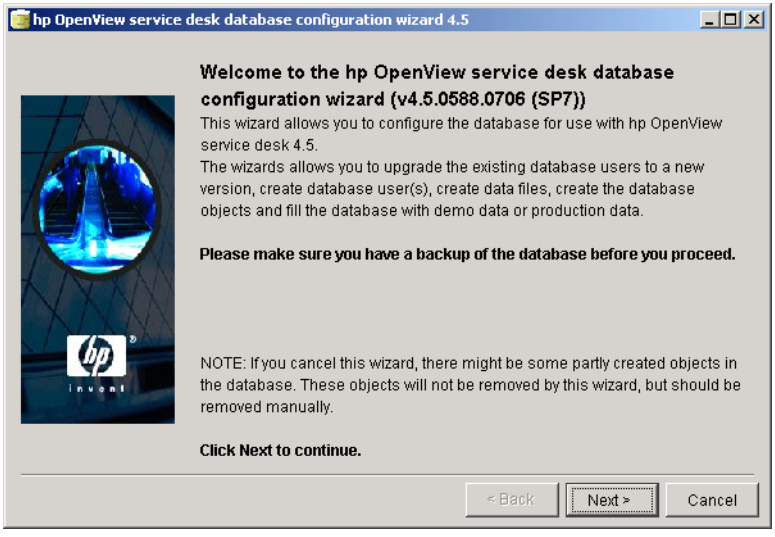
Updating an existing Service Desk database for Service Configuration is a two-step process: you must first upgrade the database to a version compatible with Service Configuration. After that you can start uploading the Service Configuration modules into the upgraded database.

NOTE

Before upgrading the database, make a backup of the database using whatever third-party application you normally use. After the upgrade, you will not be able to re-install the previous version of Service Configuration unless you have a backup of the database.

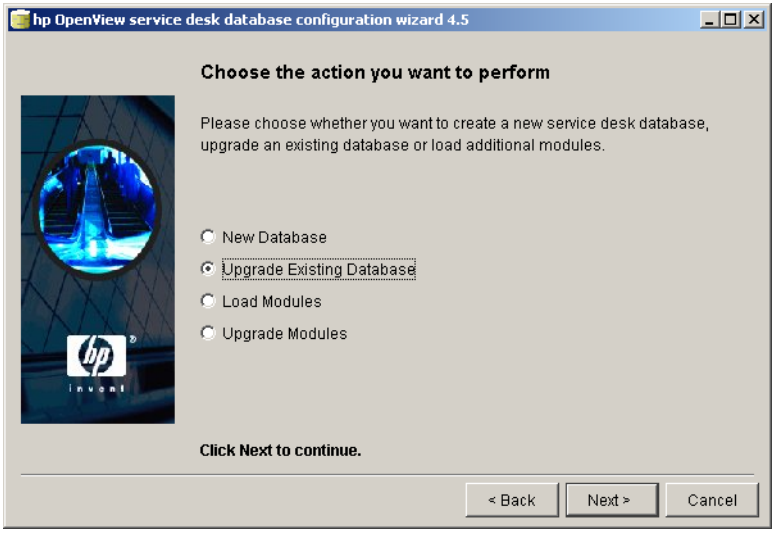
1. Start the database configuration wizard as described in “Starting the Database Configuration Wizard” on page 101.
2. The Database Configuration Wizard Welcome dialog box is displayed. Click **Next** to continue.

Figure 4-28 Database Configuration Wizard



3. The following dialog box appears. Select the **Upgrade Existing Database** option and click next to continue.

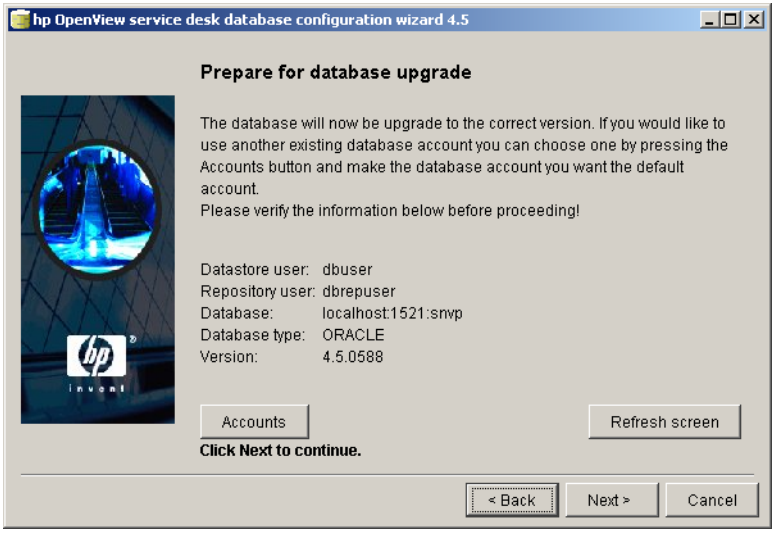
Figure 4-29 Choose Action Dialog Box



4. The Prepare for Database Upgrade dialog box is shown with details of the current default database displayed. Click **Next** to continue.

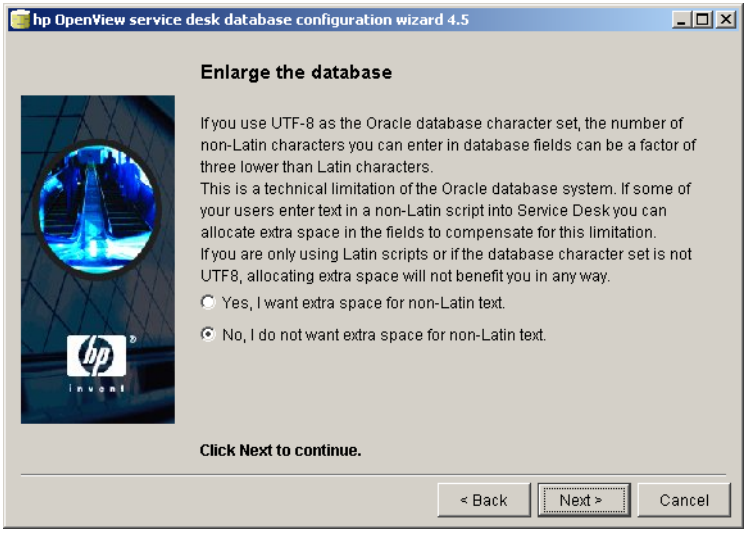
   If the details of a database other than the one you want to upgrade are displayed, click the **Accounts** button. When the Configuration Editor is displayed, click the **Database Accounts** tab and select the database account you want to upgrade. Click **Set as default** (do not restart the service if asked). Click **OK** to return to the Database Configuration Wizard. Click **Refresh screen** to display the correct details. The details of the new default database are shown. Click **Next** to continue the upgrade.

Figure 4-30 Prepare for Database Upgrade Dialog Box



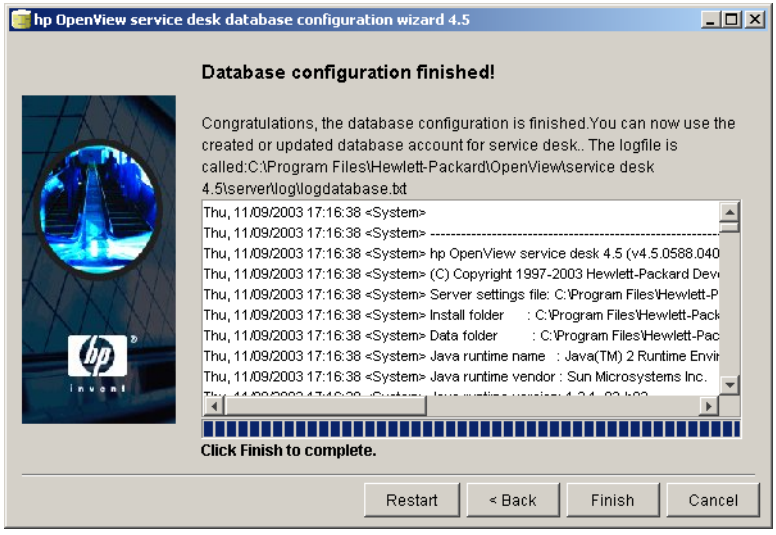
5. If you use UTF-8 as the character set of the Oracle database, non-Latin characters use three time more space in the database than the Latin character. To compensate for this, the database fields can be extended.There is an absolute limit of 1333 characters. To extend the fields select **Yes, I want extra space for non-latin text**. Click **Next** to continue.

Figure 4-31 Enlarge the Database Dialog Box



6. A popup dialog box is displayed asking you to confirm whether you want to continue with the upgrade. Click **Yes**. The upgrade process is started, and tracked by progress bars. When the upgrade is complete, the following dialog box is displayed. Click **Finish** to continue.

Figure 4-32 Upgrade Finished Dialog Box

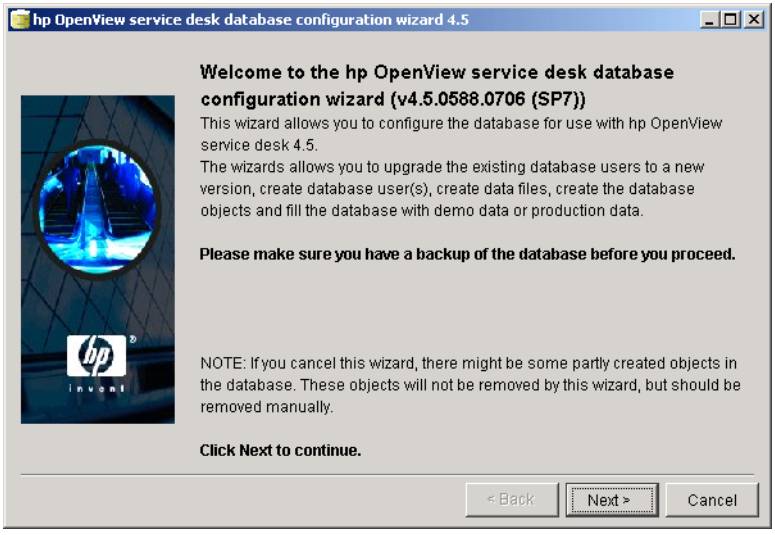


7. Start the database configuration wizard again as described in “Starting the Database Configuration Wizard” on page 101.

CAUTION Do not use the Restart button to restart the database configuration wizard.

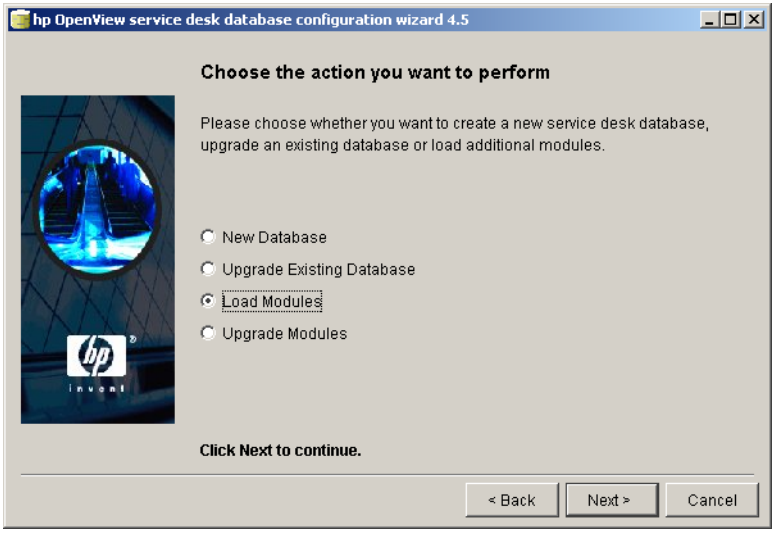
8. The Database Configuration Wizard Welcome dialog box is displayed. Click **Next** to continue.

Figure 4-33 Database Configuration Wizard



9. The following dialog box appears. Choose **Load Modules** to upload the Service Configuration modules into the database. Click **Next** to continue.

Figure 4-34 Choose Action Dialog Box



10. The following dialog box is displayed. Select the modules **Service Editor Business Logic** and **Service Editor User Interface**.

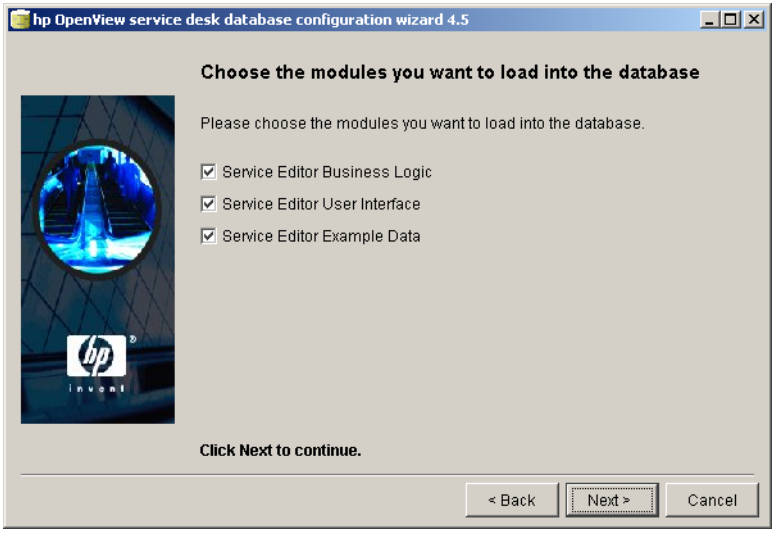
NOTE

If your existing Service Desk database contains the Service Desk example data, you can also select the **Service Editor Example Data** module here.

You must clear the **Service Editor Example Data** check box if you do not have the Service Desk example data installed.

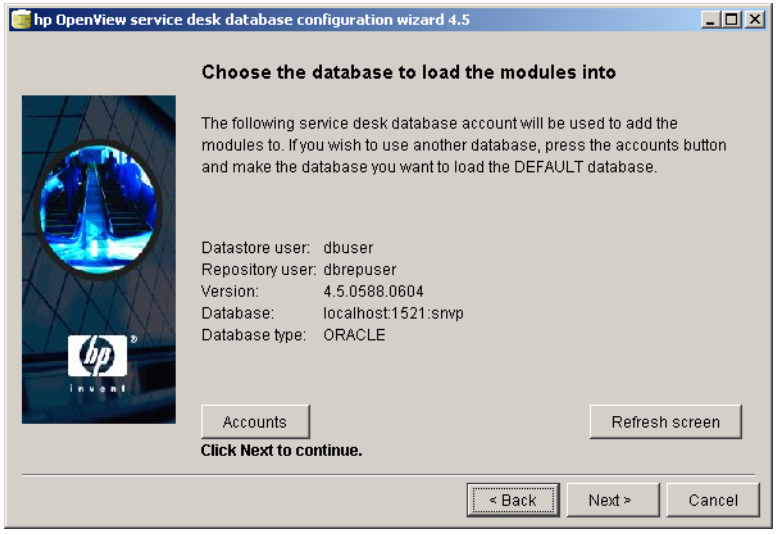
Click **Next** to continue.

Figure 4-35 Upload Service Configuration Modules Dialog Box



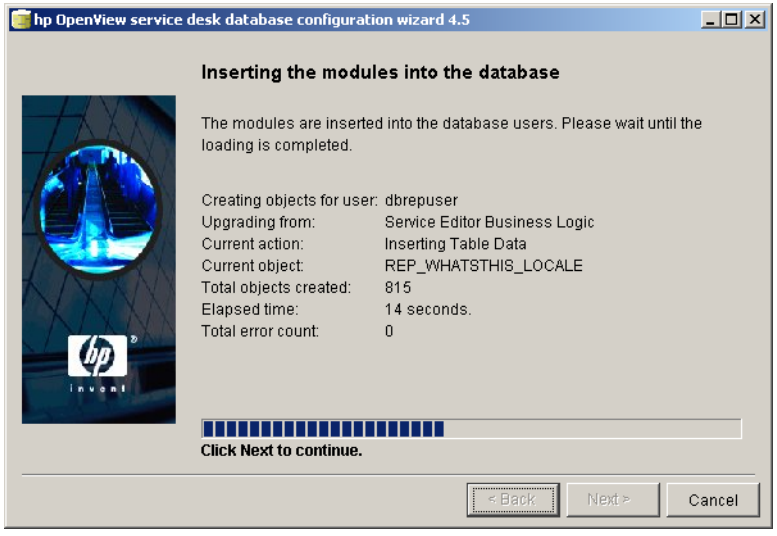
11. The following dialog box lists the database settings that are used when uploading the Service Configuration modules into the database. When you click **Next**, the modules are loaded based on these settings.

Figure 4-36 Choose Database Dialog Box



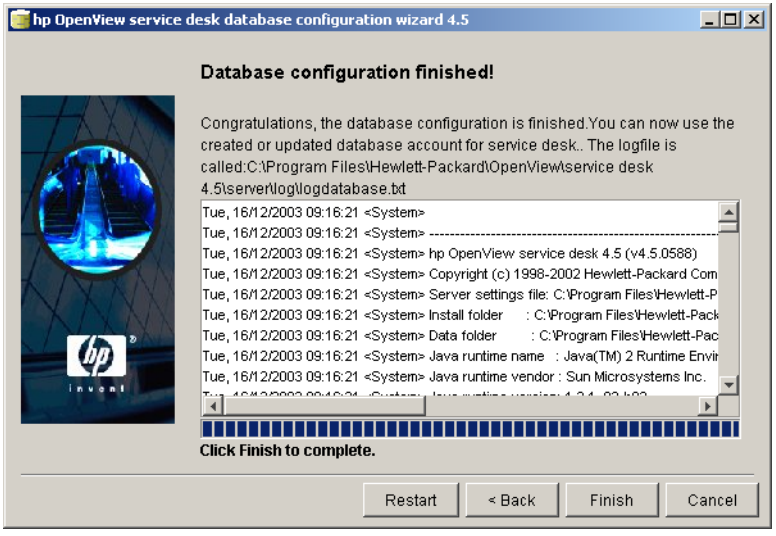
12. A popup dialog box appears with the question Do you want to start loading the modules into the database? Click **Yes**. A dialog box tells you that the modules are being inserted now. When this is complete, click **OK**.

Figure 4-37 Inserting Modules Dialog Box



13. The Database Configuration Finished dialog box appears. Review the information in this dialog box to make sure that no errors occurred. Then click **Finish** to exit the database configuration wizard.

Figure 4-38 Upload Finished Dialog Box



5 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 **Programs: hp OpenView service desk 4.5**.
2. In the HP OpenView Service Desk submenu, select **application server: open the server settings editor**.

❏ **To configure the application server on UNIX:**

1. Change to the `/opt/OV/sd/server/bin` directory.
2. Run the script `sd_serversettingseditor`.

NOTE

The configuration data is held in an XML 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 ITP tab.**

   Supply information about the proprietary ITP transport protocol.

4. **View the SMTP tab.**

   Supply information about the HTTP transport protocol.

5. **View the SMTP tab.**

   Supply information about the SMTP transport protocol.

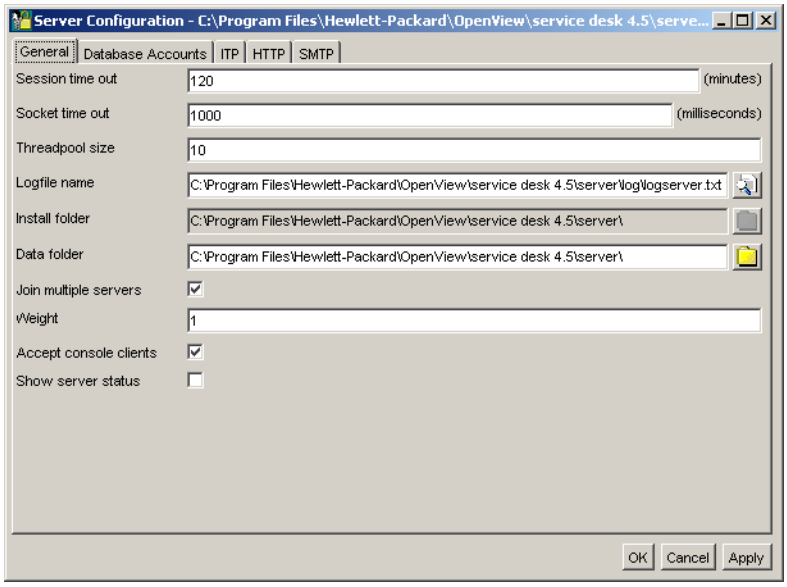
6. **Save the configuration settings.**

   Save your configuration settings.

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

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

Figure 5-1 Server Configuration Dialog Box - General tab



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

   After the session is removed from the 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 server.

NOTE When the session is removed from the 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 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 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 **Logfile name** field specifies the name and location of the application server log file. If you do not specify this option, the log file is called `logserver.txt` and it is placed in the `server\log` folder.

   You can define any folder you want by entering the full path, for example on a Windows environment, `c:\temp\logserver.txt`. However, any folder you specify must already exist.

NOTE There is no record of errors on server startup before the server log file is initialized.

4. The **Install folder** shows the directory path of where the fixed settings for the application server are stored, you cannot change this setting.

5. 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 server.

6. **Multiple servers** specifies whether an application server must join other application servers to serve Service Configuration clients, or work as a stand alone 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 server that is defined in the client's connection settings, the server will check with the database and see what the current load balance and weighting is on all the servers. If the defined server has a disproportionate number of connected clients the new client session will be routed to another server.

7. 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: Server A has weight 10 and server B has weight 2. The first 5 clients will connect to server A, the next one to server B, the next 5 to server A, the next to server B and so on.

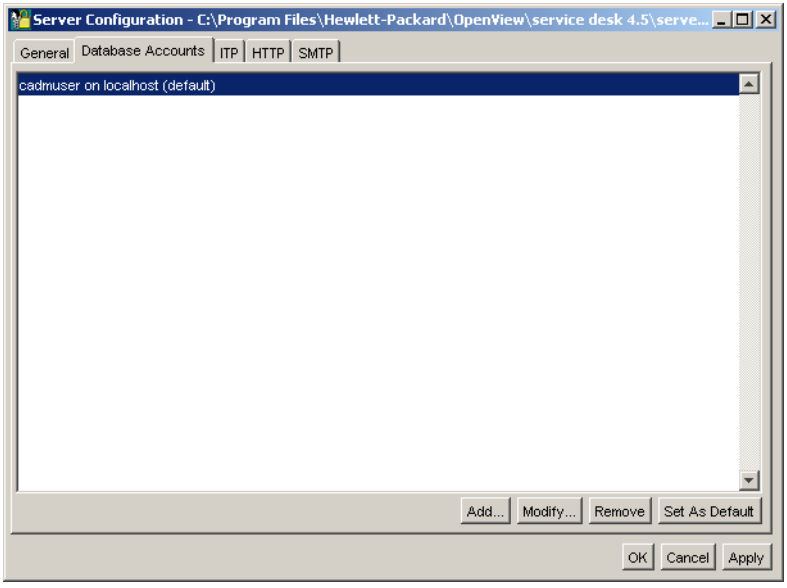
8. The **Accept Console Client** check box indicates that the application server will be used to serve clients that use the client interface. This is the default. If the check box is cleared the server will not accept client connections.

9. Use the **Server Status** check box to enable the server status console. By default this check box is not checked. If the you clear the check box when the server is running, or the close the console using the **Close** button, the user interface will not be displayed until you check the box again and restart the server.

Step 2. Complete the **Database Accounts** tab.

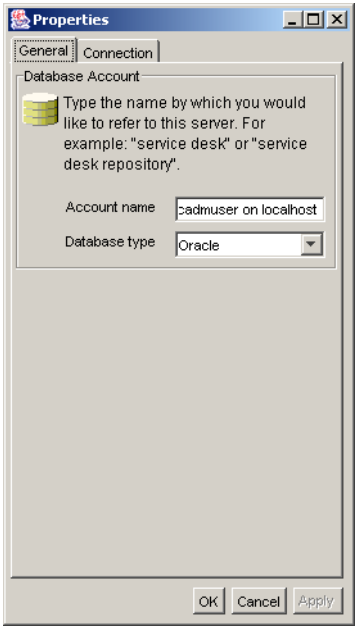
Click the **Database Accounts** tab. The **Database Accounts** tab is displayed.

Figure 5-2 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. Click the **Connection** tab.

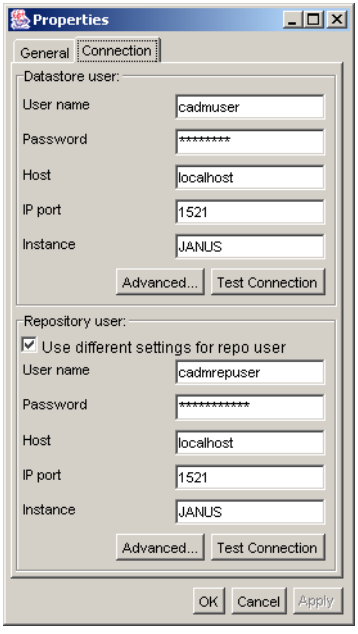
Figure 5-3 Database Account Properties Dialog Box - General tab



2. On the **Connection** tab, 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.

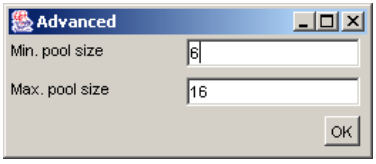
   When using the application server with an Oracle database, you have the option to create an Oracle user account and a repository account, or just a single user account. To create just a single user account, enter a user name and a password, and select the **Use same account for the service desk Repository** check box. Having two accounts (user and repository) will increase performance on large systems. To create both a user account and repository user account, enter a user name and password for each account. Click **Apply** and then **Test Connection** to ensure the details are correct.

Figure 5-4 Database Account Properties Dialog Box - Connection Tab



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

Figure 5-5 DB Account - Advanced Settings Dialog Box



The connection pool specifies the number of connections that the 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 145). 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.

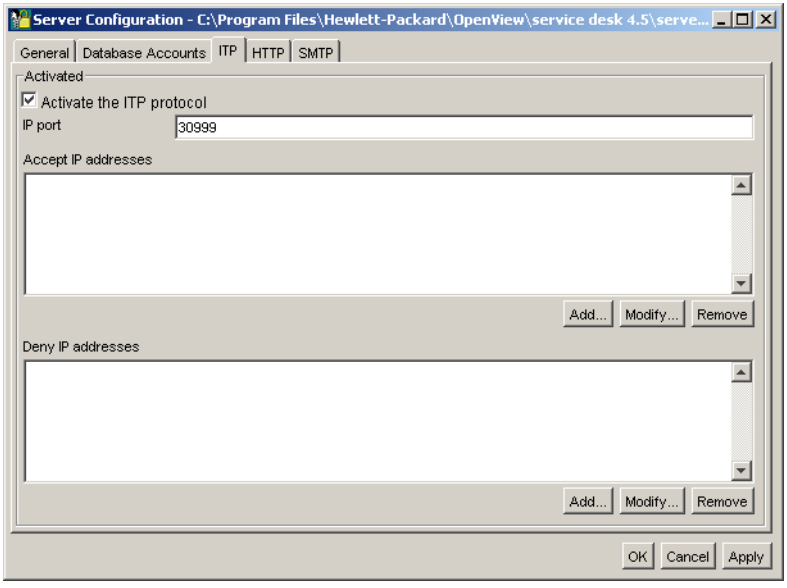
4. Click **OK** to return to the **Server Configuration** dialog box **Database Accounts** tab page.
5. To remove a database account, select the account name and click **Remove**.
6. To set an account as the default, select the account name and click **Set as default**.

Step 3. View the **ITP** tab.

Click the ITP tab. 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 on the ITP tab is not immediately relevant for Service Configuration users. It is *not recommended* to change the default port number.

Figure 5-6 Server Configuration dialog box - ITP tab



1. To use the ITP protocol, check the **Activate the ITP protocol** check box.
2. 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.

3. 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.*.*

4. 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.*

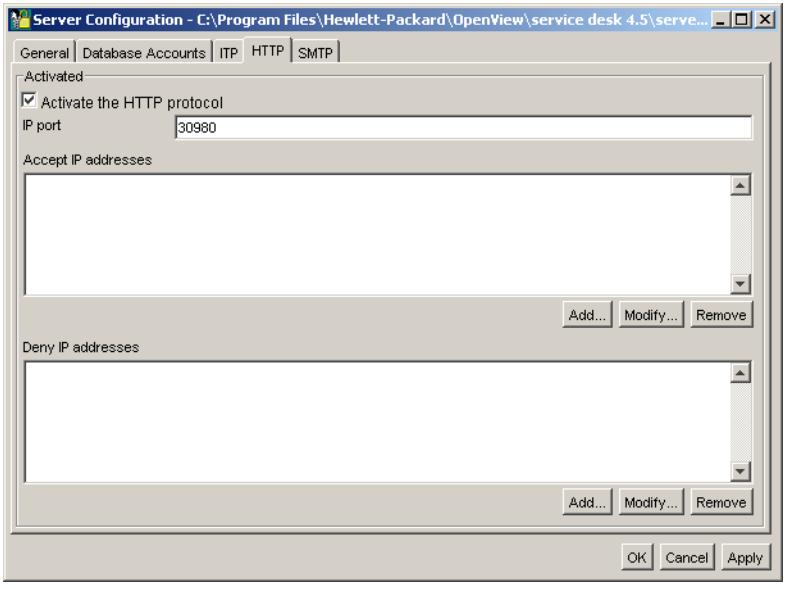
NOTE To provide the highest security level possible using the Access and Deny parameters, enter the IP addresses of all specific machines that should have access to the server using ITP (for example all application servers in the network) in the Accept field and *.*.*.* in the Deny field.

Step 4. View the **HTTP** tab.

Click the **HTTP** tab. 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 on the HTTP tab is not immediately relevant for Service Configuration users. It is *not recommended* to change the default port number.

Figure 5-7 Server Configuration Dialog Box - HTTP Tab



1. To use HTTP protocol, check the **Activate the HTTP 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.
2. Enter the **Port number**, this defines the IP port the HTTP Post Service should listen to.

3. 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.*.*

4. 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.

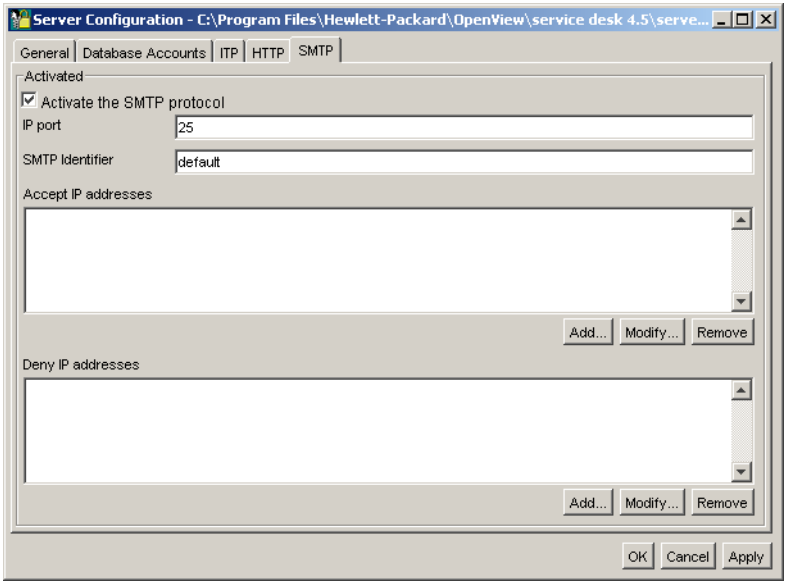
NOTE To provide the highest security level possible using the Access and Deny parameters, enter the IP addresses of all specific machines that should have access to the server using HTTP in the Accept field and *.*.*.* in the Deny field.

Step 5. View the **SMTP** tab.

Click the **SMTP** tab. 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 on the SMTP tab is not immediately relevant for Service Configuration users. It is *not recommended* to change the default port number.

Figure 5-8 Server Configuration Dialog Box - SMTP Tab



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

3. 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.*.*

4. 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 server using SMTP in the Accept field and *.*.*.* in the Deny field.

Step 6. Save the configuration settings.

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

Application Server Port Allocation in Firewall Environments

Communication between 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. The method you use to start the application server depends on the platform. For more information, see:

- ❏ "Starting the Application Server on a Windows Platform" on page 159
- ❏ "Starting the Application Server on an HP-UX Platform" on page 161
- ❏ "Starting the Application Server on a Sun Solaris Platform" on page 162

Starting the Application Server on a Windows Platform

If you installed the application server on a Windows platform, you can either start it automatically as a service, or manually from the start menu.

Installing the Windows Server Service

The Service Desk application server can be run as a Windows service. If you do so the service will be started when the system is restarted. This configuration is optional.

To install the service, run the batch file `installservice.bat` which is in C:\Program Files\Hewlett-Packard\OpenView\service desk 4.5\server\bin (if you accepted the default installation directory).

`installservice.bat` assumes the default directory structure. If you have installed Service Configuration using other destination folders you must edit the batch file accordingly.

Windows Startup Account Authorization

It is important that the Windows account that starts up the Service Desk application server service has access rights to all servers, drives, and folders that it may need to use.

If the startup account does not have sufficient rights, some of the functionality of Service Configuration may not be available. Ensuring that the startup account has sufficient access rights is also relevant when making database downloads to shared drives: the startup account must have access to the shared drive.

When Service Configuration is installed, the default startup account for the service is set as the system account.

To check or change the startup account:

1. From the Windows **Start** menu choose **Settings**.
2. Select **Control Panel** from the **Settings** submenu. The Control Panel dialog box is displayed.
3. Select **Administrative Tools** icon in the Control Panel, then **Services**. The Services dialog box will be displayed.
4. In the Services dialog box, select **hp OpenView service desk 4.5 server** and click the **Startup** button. The Service dialog box is displayed.
5. The currently selected startup account is shown in the **Log On As** area of the Service dialog box. To change this account, select the **This Account** option and enter the account name and password.

Starting the Server Manually

To start or stop the server manually, use the menu options `start the application server` and `stop the application server` from the start menu.

To start the server from the command line, use `startserver.bat` in the `server\bin` folder.

To stop the server from the command line, use `stopserver.bat` in the `server\bin` folder.

NOTE If you configure the application server service to start automatically after a reboot, starting and stopping the server is not a task that you need to perform frequently.

Starting the Application Server on an HP-UX Platform

If you installed the application server on an HP-UX platform:

- Use `/sbin/init.d/hpovsdserver start` to start the server.
- Use `/sbin/init.d/hpovsdserver stop` to stop the server.
- Use `/sbin/init.d/hpovsdserver status` to see the server status.

NOTE There is no record of errors on the server startup before the server log file is initialized.

Starting the Application Server on a Sun Solaris Platform

If you installed the application server on a Sun Solaris platform:

- Use `/etc/init.d/hpovsdserver start` to start the server.
- Use `/etc/init.d/hpovsdserver stop` to stop the server.
- Use `/etc/init.d/hpovsdserver status` to see the server status.

NOTE There is no record of errors on the server startup before the server log file is initialized.

6 Installing the Service Configuration Client

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 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.

NOTE

HP OpenView Service Configuration is distributed with different CD-ROMs for each platform that the Service Configuration 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.

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 166.

- **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 server machine or elsewhere on the network. See “Preparing Shared Folder Installation” on page 166.

- **Hyperlink installation**

  If a Web server is available, you can place the client installation program on the Web server or in a shared folder, and by making the URL available to the users, they can install the client using an intranet. See “Preparing for Hyperlink Installation” on page 167.

The Service Configuration client can also be installed silently, see “Silent Installation” on page 179.

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 `Client` 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.

Preparing for Hyperlink Installation

You can set up a hyperlink to enable the end users to install the client software from a Web server. For example, once you have installed and set up the Service Configuration server, you could inform the users by sending an e-mail message that includes a hyperlink. If the user clicks the hyperlink, the Service Configuration client is installed. To make the hyperlink work, you first have to make the following preparations.

To install the Service Configuration client from a hyperlink, copy the complete contents of the `Client` folder from the CD-ROM to the Web server or to the shared folder you want to use. Then prepare a HTML page on the Web server. The HTML page should include the hyperlink to the installation program `cadm_client-8.0.msi` and installation instructions.

NOTE If you want to use hyperlink installation with a shared folder, you must make sure that all intended Service Configuration users have access to the folder.

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 `Client` folder to a shared drive and install via a network drive.

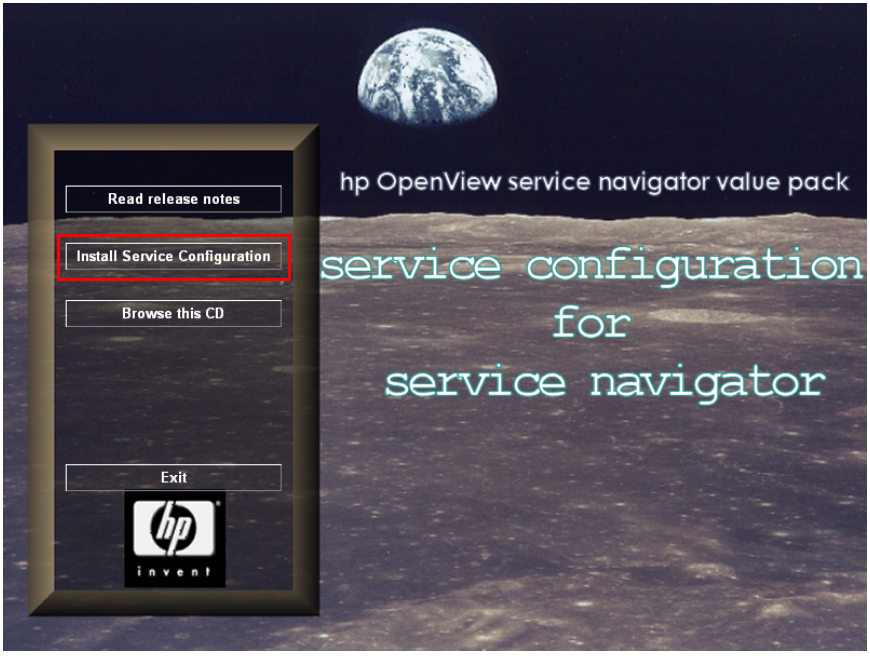
Install the JRE before installing the client. See "Third-party Software" on page 41 for more information.

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:

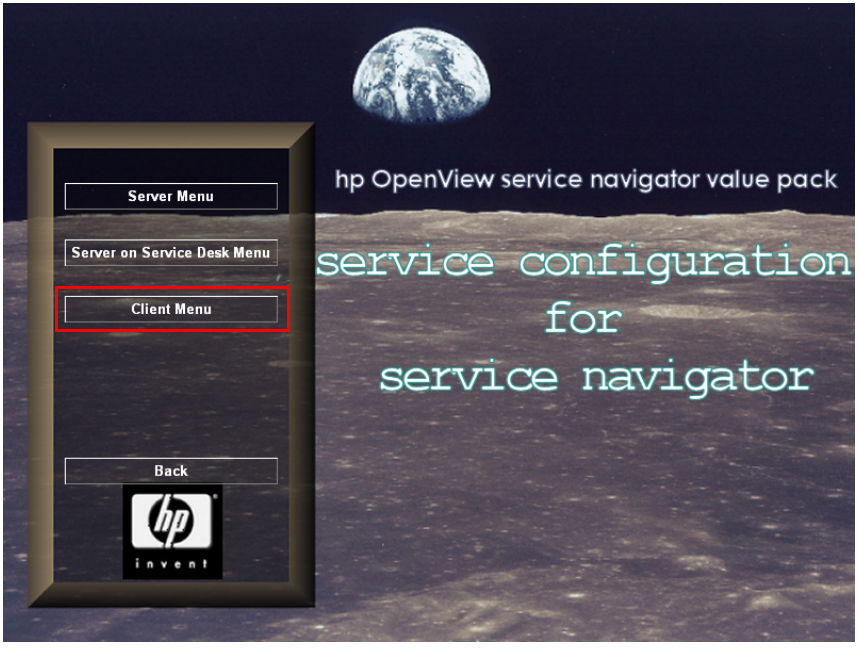
1. Insert the HP OpenView Service Configuration for Service Navigator CD-ROM into your CD-ROM drive. The start screen appears. If it does not, double-click `Setup.exe` in the root of your CD-ROM drive. When the start screen appears, click **Install Service Configuration**.

Figure 6-1 Install Service Configuration



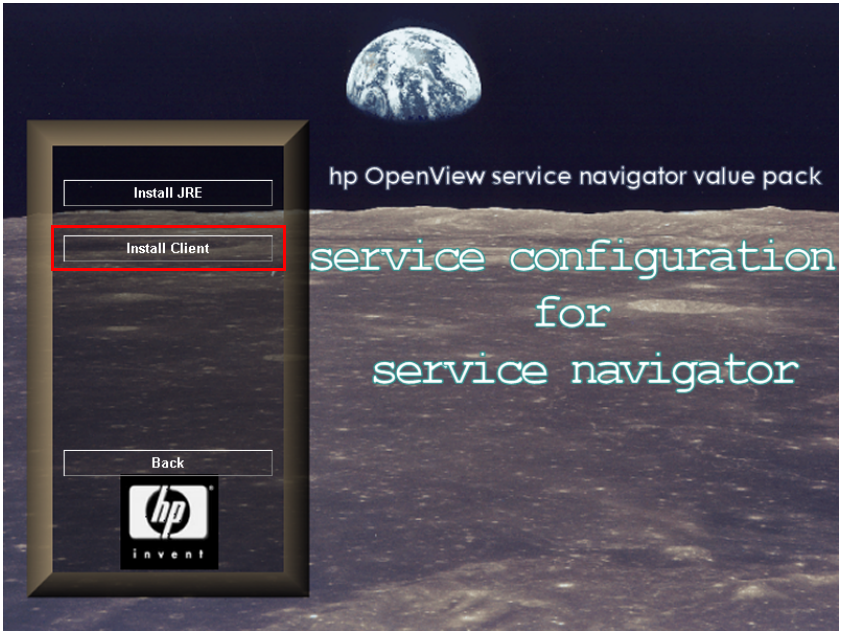
2. In the Menu Selection screen, click **Client Menu**.

Figure 6-2 Client Menu



3. In the Install Client screen, click **Install Client**.

Figure 6-3 Install Client



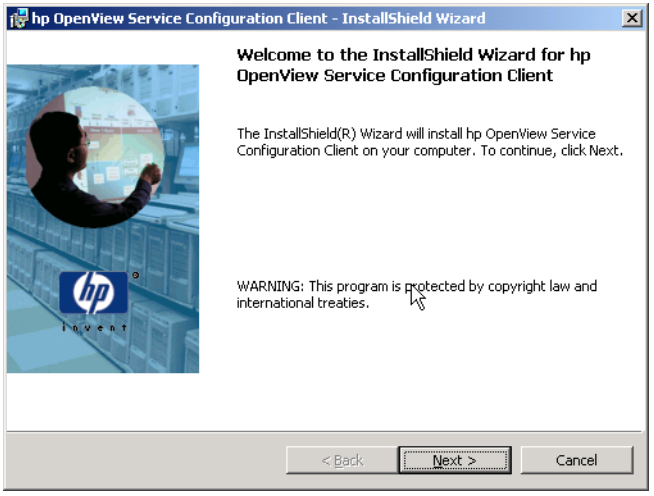
NOTE

The Service Configuration console requires Java Runtime Environment (JRE) 1.3 to be installed on the client system. If you have an earlier version, install JRE 1.3 using the **Install JRE** button on this screen before attempting to start the client.

Installing the client on systems with JRE 1.4 is not supported.

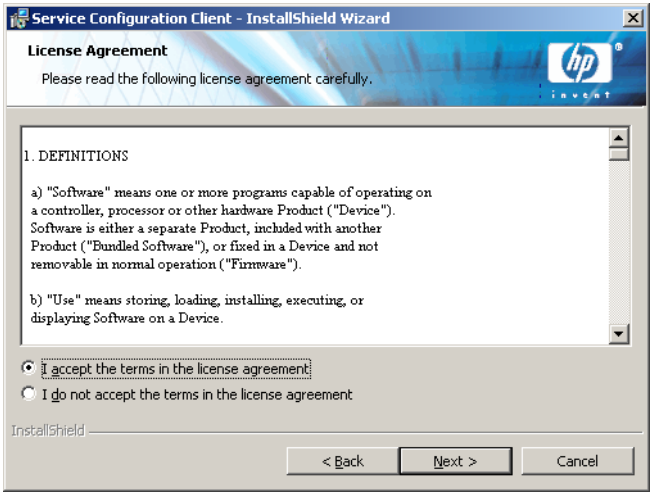
4. Next the Welcome screen for the Client InstallShield Wizard appears. Click **Next** to continue.

Figure 6-4 Client InstallShield Wizard - Welcome Dialog Box



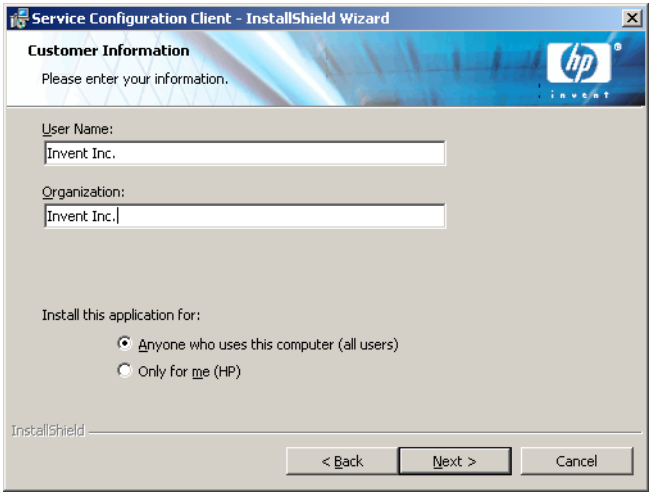
5. Next, the License Agreement dialog box appears. To proceed, you must select the **I accept the terms in the license agreement** check box and then click **Next**. By doing so, you agree to all license terms, so read the agreement carefully.

Figure 6-5 Client License Agreement Dialog Box



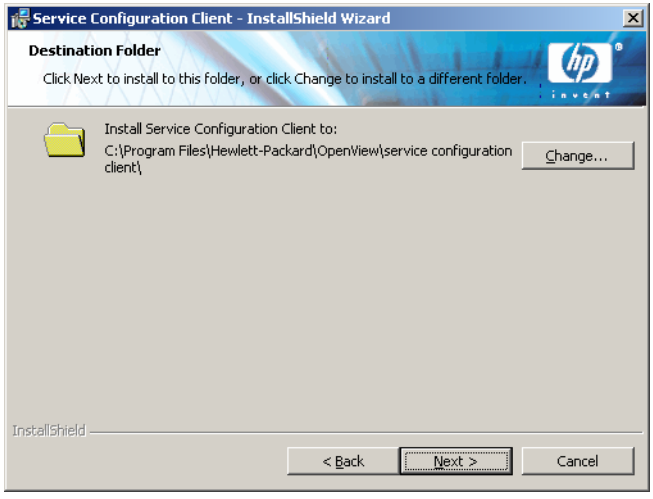
6. In the Customer Information dialog box, enter your **User Name** and **Organization** name. Select either the **Anyone who uses this computer** or the **Only for me** option button. If you select **Anyone who uses this computer**, you will make Service Configuration available for everyone who might use this computer. **Only for me** ensures only you can see the Service Configuration shortcuts in the Start menu, although Service Configuration can still be run by other users. See also “Extending Access to the Service Configuration Client” on page 179. Click **Next** to continue.

Figure 6-6 Customer Information Dialog Box



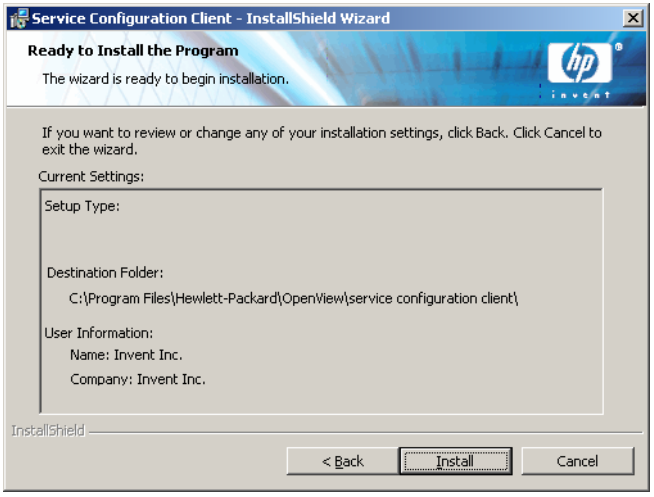
7. Next, the Destination Folder dialog box appears. This is the folder where the Service Configuration client software is to be placed. If you do not want the software to be placed in the default folder shown, you must click **Change** to enter another installation folder. Click **Next** to continue the installation.

Figure 6-7 Destination Folder Dialog Box



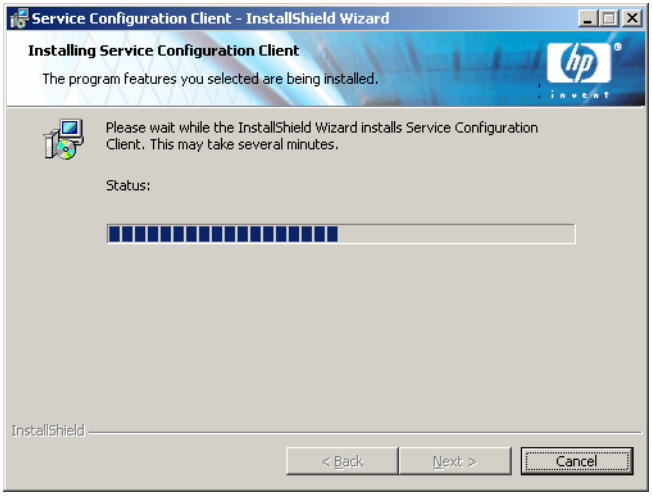
8. The Client Ready to Install dialog box shows a list of items to be installed. Click **Install Now** to install the files or **Back** to make changes in the previous dialog boxes.

Figure 6-8 Client Ready to Install Dialog Box



9. While the installation program is unpacking and reading files, a progress monitor is shown on your screen. You can abort the installation by clicking **Cancel** at any time.

Figure 6-9 Installing Service Configuration Client Dialog Box



10. When the installation is finished, the InstallShield Wizard Completed dialog box appears. Click **Finish** to quit the installation program. The installation is now complete.

Figure 6-10 Client Installation Summary Dialog Box

11. After you have installed the Service Configuration client, select **Start: Programs: Hewlett-Packard: OpenView**. Choose **Service Configuration Client**. The Service Configuration client console starts.

Silent Installation

The Service Configuration client can be installed silently by running the following command from the DOS prompt in the `client` folder:

`msiexec /qn /I cadm_client-8.0.msi`

The options in this command line do the following:

- `/qn`

  No user interface.

- `/I`

  Installs or configures the product or component.

TIP

See the Windows installer documentation for more information about command line options. Information about the Windows installer is available in the Windows 2000 online help.

Extending Access to the Service Configuration Client

The installation of the Service Configuration client creates specific settings for the user who installs the client software. These settings are stored in the profile of that user. Access to the Service Configuration client is therefore restricted to that user only. To allow other users to start the Service Configuration client on the same system, copy the following directory to the profile of the other user:

`C:\Documents and Settings\<`*`InstallationUser`*`>\Application Data\Hewlett-Packard\OpenView\Service Desk`

NOTE

The path may be different on the client system if the client software is not installed in the default installation directory. On some Windows system, this directory is hidden. Ensure that the Windows explorer on the client system is configured to display hidden files and folders.

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 Panel of the Service Desk Administrator 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: Hewlett-Packard: OpenView**. Choose **Service Configuration Client**. 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`. The user name cannot be changed.
3. In the **Password** field, type the password **`servicedesk`**. 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 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.

Updating the Service Desk Client

If you are installing Service Configuration on an existing Service Desk installation, and you want to use the Service Desk data form integration with the Service Navigator operator console, you must update the Service Desk client with the Service Desk service pack.

The Service Desk client service pack is available on the Service Configuration installation CD-ROM for Windows in the following directory:

```
\servicepack\client\client.exe
```

To install this service pack, double-click the file `client.exe` and follow the instructions presented by the installation wizard.

7 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 the 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 server and client software have been installed. See “Configuring an OVO Management Server” on page 186.

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 189.

3. **Configuring the Service Configuration Connector**

   Configure the Service Configuration connector on the OVO management server. This is the piece of software you installed in “Installing the Service Configuration Connector for OVO” on page 49.

   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 the Service Configuration Connector” on page 191.

4. **Activating Service Configuration on the OVO Management Server**

   Activate Service Configuration on the OVO management server using the command line tool `cadmactivate`. After Service Configuration has been activated, all configuration input into the Service Navigator service engine is redirected to the Service Configuration 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 196.

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 198.

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 servers in Service Configuration.

Figure 7-1 on page 188 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 180.
2. 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. This name must match the OVO management server name specified for your OVO installation:

   - *OVO 7.1*

     Look up the OVO management server name in the `/opt/OV/bin/OpC/install/opcsvinfo` file.

   - *OVO 8.0*

     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.

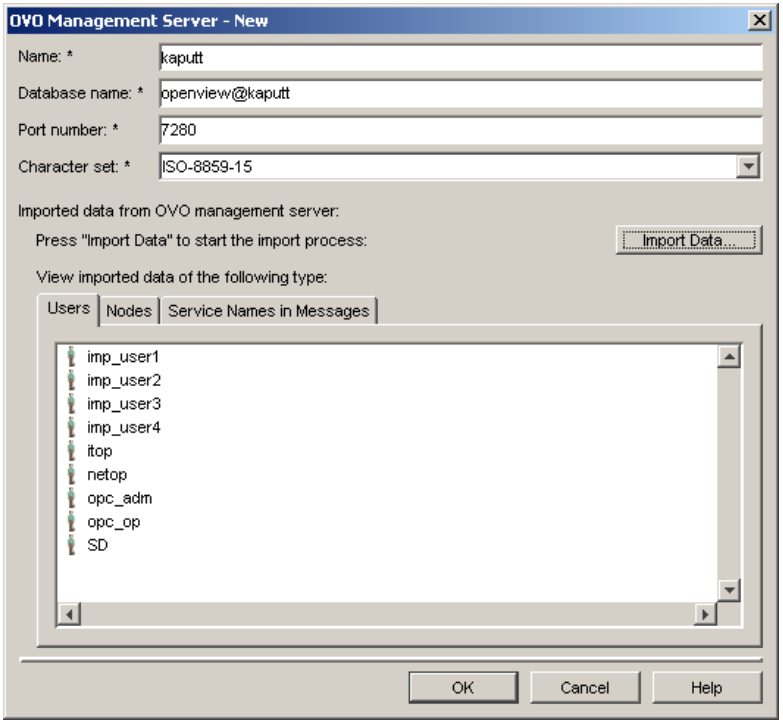
   To view the imported data, choose the type of data you are interested in and select the corresponding tab. You can choose between nodes, users, and service names in messages.

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.
10. Continue with “Configuring the Default Service Hierarchy” on page 189.

Figure 7-1 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 7-2 on page 190 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 186.

   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 cadmexport are also added to this service hierarchy.

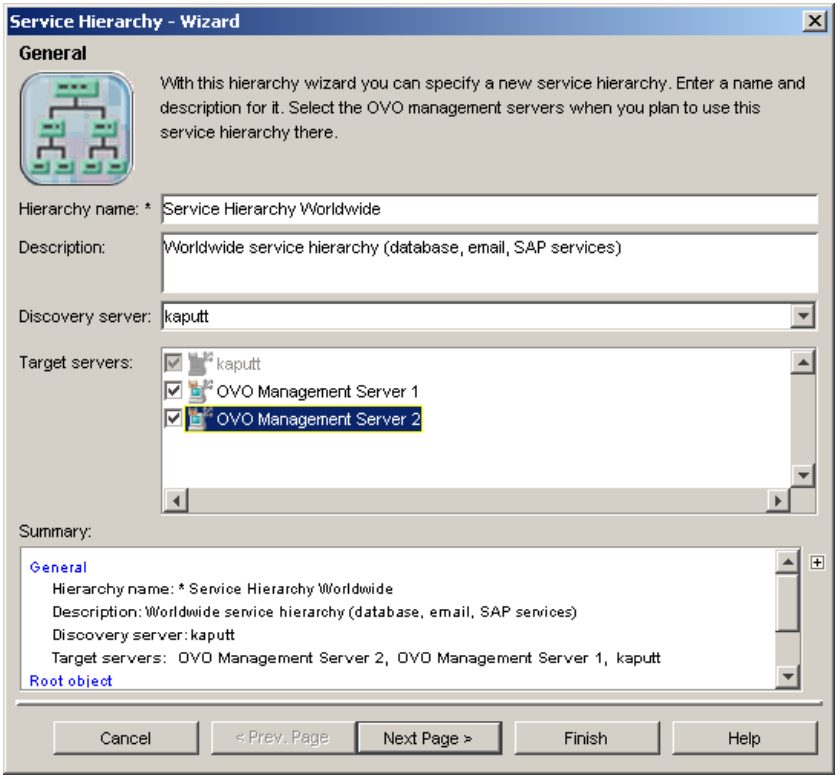
5. Select one or more OVO management servers as target servers for deployment. Service Configuration automatically selects the discovery server as target server.

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 the Service Configuration Connector” on page 191.

Figure 7-2 The Service Hierarchy Wizard — General Page



Configuring the Service Configuration Connector

Configure the Service Configuration connector on the OVO management server. This is the piece of software you installed in “Installing the Service Configuration Connector for OVO” on page 49.

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

1. Check that the correct version of JRE is used by the connector:

   `java -version`

   If the output indicates that a version other than 1.3.1 is being used, include the path to the correct JRE version in your `PATH` variable. See “Third-party Software” on page 41 for more information about the JRE requirements of Service Configuration.

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

   `/opt/OV/sd/common/bin/sd_useraccounts`

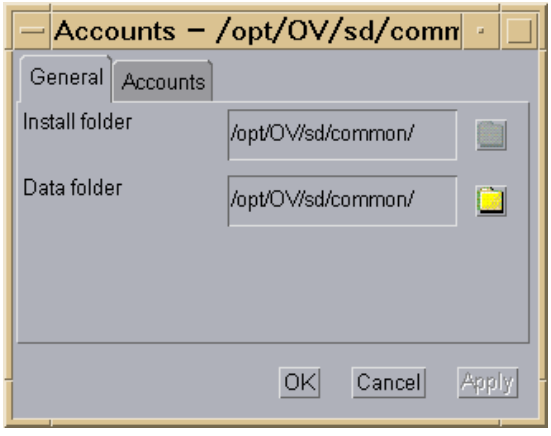
   The Accounts dialog box opens and displays the General tab.

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

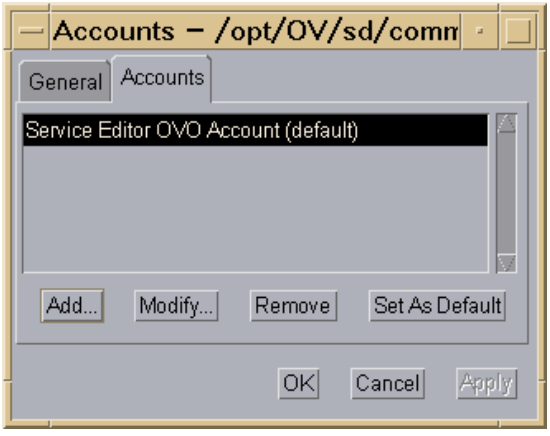
Figure 7-3 Accounts Dialog Box - General Tab



4. Click the **Accounts** tab. The Accounts tab lists the account of the "Service Editor OVO Account" 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 7-4 Accounts Dialog Box - Accounts Tab



See also "User Management in Service Configuration" on page 203 for more information about Service Configuration accounts and roles.

5. 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 **`servicedesk`**.

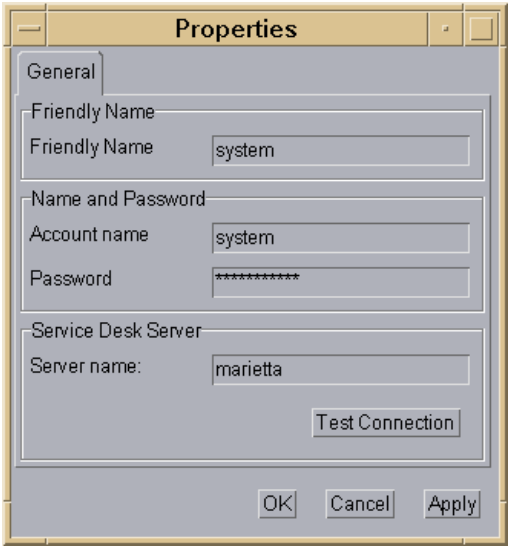
   d. In the **Server name** field, type the name of the Service Desk application server. If the application server is located on the same system as the OVO management server, type `localhost`.

   e. Click **Apply** to register the data, and then **Test Connection** to ensure the account can connect to the 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 server. The message `Connection successful.` indicates that the connector can connect successfully to the application server.

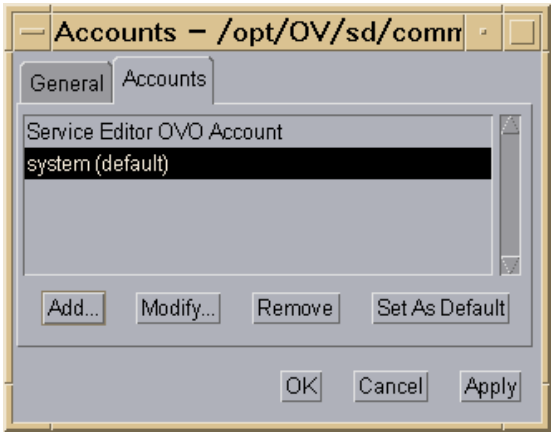
Figure 7-5 Accounts Dialog Box - Properties



6. The Accounts tab now lists the account you have configured in step 5. 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 **OK** to save your changes and close the Accounts dialog box.

Figure 7-6 Accounts Dialog Box - Accounts Tab



7. Continue with “Activating Service Configuration on the OVO Management Server” on page 196.

NOTE The settings for the Service Configuration connector are stored in the file `/opt/OV/sd/common/user_settings.xml`. This 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 configuration data is placed in. Do not edit the configuration file directly

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 server.

You activate Service Configuration using the command line tool `cadmactivate`. 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/cadmactivate.trace`. For more information about the tool, access the *cadmactivate(1m)* man page on the OVO management server.

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

   `/opt/OV/bin/OpC/cadmactivate`

   The tool first checks the following prerequisites:

   - **application server**

     `cadmactivate` checks which application server and user is used by the Service Configuration connector for OVO by reading the connector's configuration file `/opt/OV/sd/common/user_settings.xml` file. It then verifies that the application server is running and that the user can connect to it.

   - **OVO management server**

     `cadmactivate` checks that the OVO management server has been set up in Service Configuration and that a service hierarchy has been created where this server functions as discovery server. See "Configuring an OVO Management Server" on page 186.

When all prerequisites are met, `cadmactivate` 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, `cadmactivate` 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.

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 `cadmexport`. 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 *cadmexport(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/OpC/cadmexport`

   The tool creates backup copies of the Service Navigator `services` and `loggings` files before processing them. `cadmexport` 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 189. You can then copy and paste object branches from the migrated service hierarchy to other service hierarchies as required.

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:

   - If Service Configuration is not yet activated:

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

   - If Service Configuration is already activated:

     ```
     echo "<Operations><Remove><All/></Remove>\
     </Operations>" | /opt/OV/bin/OpC/cadmsnd
     ```

8 Licensing and User Management

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 “servicedesk”.

- **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 “servicedesk”.

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 205.

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 the Service Configuration Connector” on page 191 for information about how to use the Accounts dialog box.

To change the password on the server, use the tool `cadm_chpwd.bat`. 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.

Service Configuration with Service Desk

If you are using Service Configuration together with Service Desk, use the Service Desk administrator console to manage accounts and roles. Service Configuration adds the following accounts and roles to Service Desk:

Item	Name	Password	Description
Accounts	cadm_ui_user	navigator	Dedicated user for the console.
	cadm_ovo_user	navigator	Dedicated user for the Service Configuration connector (which connects OVO with the application server).
Roles	Service Editor	n/a	Dedicated role for the Service Configuration users cadm_ui_user and cadm_ovo_user. This role has all rights required to use Service Configuration.

After having connected the Service Configuration console and OVO with the application server for the first time, consider assigning the Service Editor role to an existing account, or create a new account and apply this role. This ensures that access to the application server is limited to Service Configuration data and Service Desk data is protected from unauthorized access.

See the *Service Desk Administrator's Guide* for more information about accounts and roles.

9 Installing the Service Pages Integration

Installation Overview

This chapter 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 *HP OpenView Service Desk 4.5 Installation Guide*, chapter 7. Note that the Service Pages server installation requires a Java Development Kit installation on the server system.
2. Stop the Service Pages web server.
3. Install the Service Desk service pack on the Service Pages web server. This service pack for Service Pages is available on the HP OpenView Service Configuration for Service Navigator CD-ROM.
4. Install the Service Configuration integration with Service Pages on the Service Pages server system. This involves installing the Service Configuration module for Service Pages on the Service Pages web server. This module is available on the HP OpenView Service Configuration for Service Navigator CD-ROMs.

Installing the Service Pages Integration on Windows

Installing the Service Configuration integration with Service Pages involves installing the Service Desk service pack on the Service Pages Tomcat server and updating the server with the Service Configuration module for Service Pages.

1. Make sure you have an existing Service Pages installation that is installed and configured as described in the *HP OpenView Service Desk 4.5 Installation Guide*, chapter 7. Note that the Service Pages server installation requires a Java Development Kit installation on the server system.
2. Stop the Service Pages web server. Either execute the following batch file or stop the Tomcat service:

   ```
   C:\Program Files\Hewlett-Packard\OpenView\service desk 4.5\service pages\bin\shutdown.bat
   ```

3. Remove the web server cache for the Service Pages application by deleting the following directory:

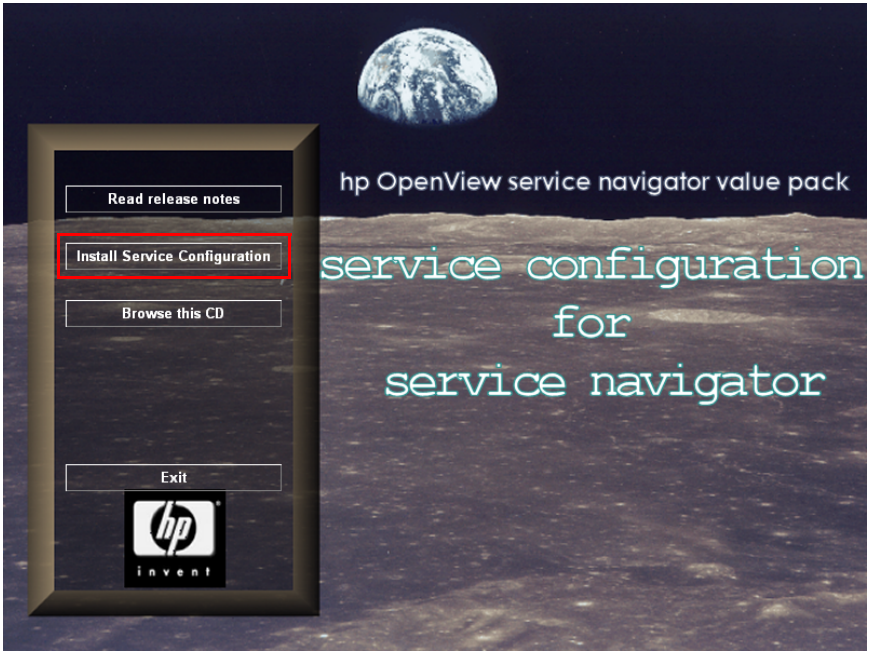
   ```
   %TOMCAT_HOME%\work\localhost\sd-sp45\
   ```

   `%TOMCAT_HOME%` is the directory where Service Pages is installed, for example:

   ```
   C:\Program Files\Hewlett-Packard\OpenView\service desk 4.5\service pages\work\localhost\sd-sp45
   ```

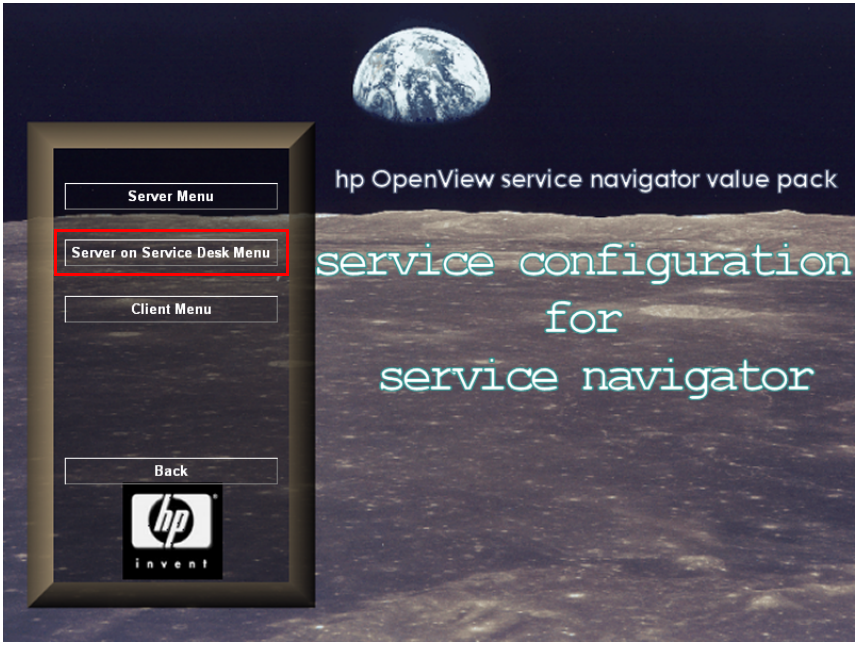
4. Insert the HP OpenView Service Configuration for Service Navigator CD-ROM into your CD-ROM drive. The start screen appears. If it does not, double-click `Setup.exe` in the root of your CD-ROM drive. When the start screen appears, click **Install Service Configuration**.

Figure 9-1 Install Service Configuration



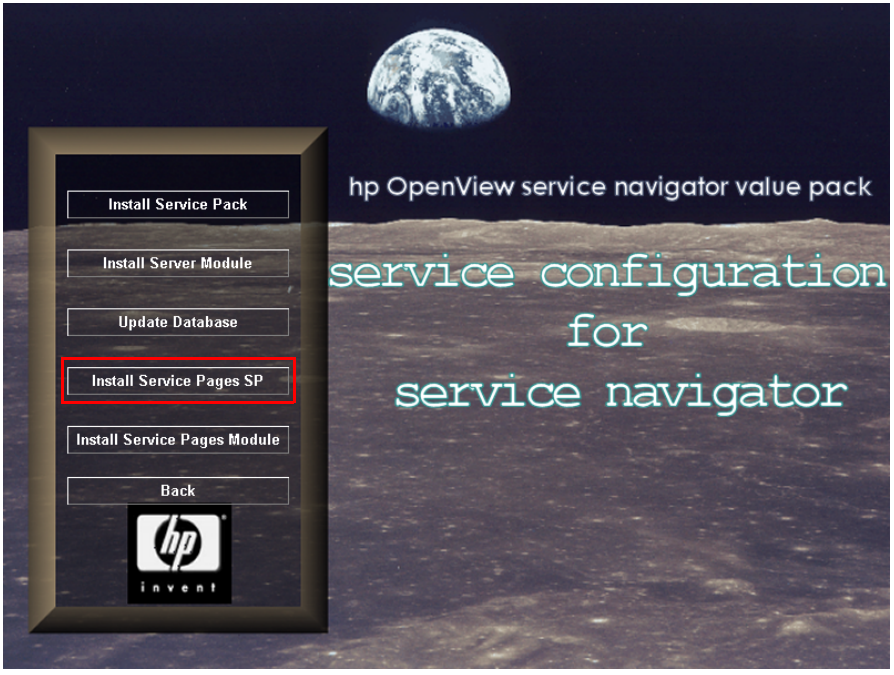
5. In the Menu Selection screen, click **Server on Service Desk Menu**.

Figure 9-2 Server on Service Desk Menu



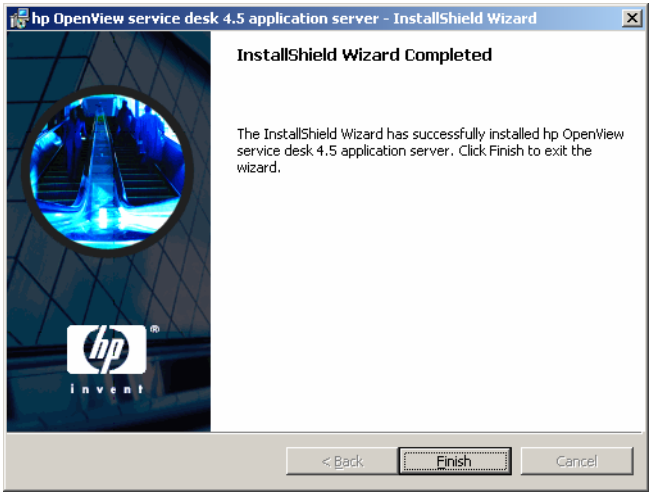
6. In the Menu Selection screen, click **Install Service Pages SP** to install the Service Pages service pack.

Figure 9-3 Install Service Pages SP



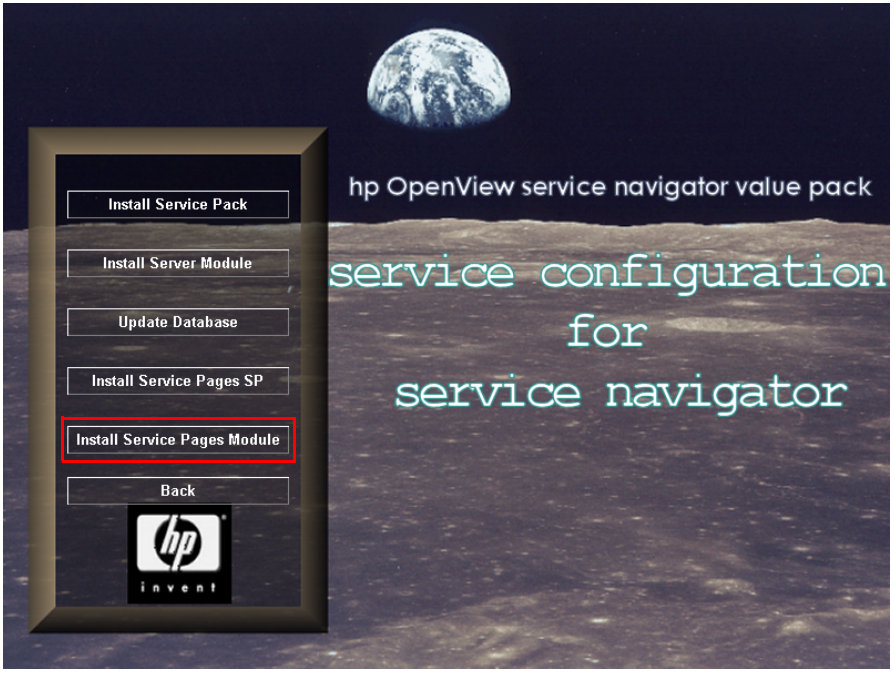
7. A dialog box with a progress bar appears, showing the progress of the service pack installation. When all files are installed, the Completed screen appears. Click **Finish** to leave the installation program.

Figure 9-4 InstallShield Wizard Completed Dialog Box



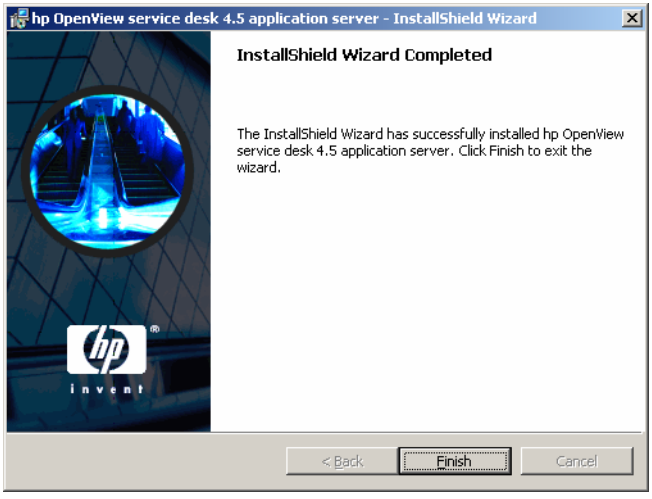
8. In the Menu Selection screen, click **Install Service Pages Module** to install the Service Configuration module for Service Pages.

Figure 9-5 Install Service Pages Module



9. A dialog box with a progress bar appears, showing the progress of the Service Pages module installation. When all files are installed, the Completed screen appears. Click **Finish** to leave the installation program.

Figure 9-6 InstallShield Wizard Completed Dialog Box



10. Start the Service Pages web server. Either execute the following batch file or start the Tomcat service:

```
C:\Program Files\Hewlett-Packard\OpenView\service desk
4.5\service pages\bin\startup.bat
```

Installing the Service Pages Integration on HP-UX

Installing the Service Configuration integration with Service Pages involves installing the Service Desk service pack on the Tomcat server and updating the server with the Service Configuration module for Service Pages.

NOTE Make sure you have an existing Service Pages server installation that is installed and configured as described in the *HP OpenView Service Desk 4.5 Installation Guide*, chapter 7. Note that the Service Pages server installation requires a Java Development Kit installation on the server system.

Installing the Service Pack on the Tomcat Server

To install the Service Desk service pack on the Tomcat server on HP-UX:

1. Stop the Service Pages web server. Do one of the following:
   - `/opt/OV/sd/servicepages/bin/shutdown.sh`
   - `/sbin/init.d/hpovsdservicepages stop`
2. Remove the web server cache for the Service Pages application by deleting the following directory:

   `/opt/OV/sd/servicepages/work/localhost/sd-sp45/`
3. Mount the HP-UX CD-ROM.
4. Use swinstall to install the service pack:

   Example:
   `swinstall -s /<mountpoint>/servicepack/servicepages/\`
   `sdservicepages-4.5-sp.depot`
5. In the Software Selection dialog box, select the service pack depot file, and from the Actions menu choose **Mark for Install**. Go to the Actions menu again and click **Install**.
6. The Install Analysis dialog box is displayed. Click **OK** to install the service pack software.
7. The Install dialog box is displayed while the software is being installed. When the installation is complete, click **Done**.

Installing the Integration on the Tomcat Server

To install the Service Configuration integration with Service Pages on the Tomcat server on HP-UX:

1. Mount the HP-UX CD-ROM.
2. Use swinstall to install the integration:

   Example:
   ```
   swinstall -s /<mountpoint>/servicepages/\
   cadm_servicepages-8.0.depot
   ```
3. In the Software Selection dialog box, select the Service Pages integration depot file, and from the Actions menu choose **Mark for Install**. Go to the Actions menu again and click **Install**.
4. The Install Analysis dialog box is displayed. Click **OK** to install the integration software.
5. The Install dialog box is displayed while the software is being installed. When the installation is complete, click **Done**.
6. Start the Service Pages web server. Do one of the following:
   - `/opt/OV/sd/servicepages/bin/startup.sh`
   - `/sbin/init.d/hpovsdservicepages start`

Installing the Service Pages Integration on Sun Solaris

Installing the Service Configuration integration with Service Pages involves installing the Service Desk service pack on the Tomcat server and updating the server with the Service Configuration module for Service Pages.

NOTE

Make sure you have an existing Service Pages server installation that is installed and configured as described in the *HP OpenView Service Desk 4.5 Installation Guide*, chapter 7. Note that the Service Pages server installation requires a Java Development Kit installation on the server system.

Installing the Service Pack on the Tomcat Server

1. Stop the Service Pages web server. Do one of the following:
   - `/opt/OV/sd/servicepages/bin/shutdown.sh`
   - `/etc/init.d/hpovsdservicepages stop`
2. Remove the web server cache for the Service Pages application by deleting the following directory:

   `/opt/OV/sd/servicepages/work/localhost/sd-sp45/`
3. Mount the Sun Solaris CD-ROM.
4. Use `pkgadd` to install the service pack:

   Example:
   `pkgadd -d /<mountpoint>/servicepack/servicepages/\`
   `sdservicepages-4.5-sp.pkg`

Installing the Integration on the Tomcat Server

1. Mount the Sun Solaris CD-ROM.
2. Use `pkgadd` to install the integration:

   Example:
   ```
   pkgadd -d /<mountpoint>/servicepages/\
   cadm_servicepages-8.0.pkg
   ```
3. Start the Service Pages web server. Do one of the following:
   - `/opt/OV/sd/servicepages/bin/startup.sh`
   - `/etc/init.d/hpovsdservicepages start`

10 Removing Service Configuration

This chapter describes the Service Configuration installation packages and the tasks you must perform to remove the Service Configuration software completely from your system.

Installation Packages

This section lists the installation packages that must be uninstalled to remove Service Configuration from your system. What exactly must be removed depends on how Service Configuration is installed:

- **Service Configuration without Service Desk installed**

  See “Installation Packages for Service Configuration” on page 224.

- **Service Configuration with Service Desk installed**

  See “Installation Packages for Service Configuration on Service Desk” on page 225.

NOTE It is recommended to retain the OVO management server and Java GUI patches in order to take advantage of the software fixes that are contained in these patches. See “Deactivating Service Configuration on the OVO Management Server” on page 230 for more information about disabling Service Configuration functionality on the OVO management server.

Installation Packages for Service Configuration

If Service Configuration is installed standalone, that is without an existing Service Desk installation, you must remove the client package as well as all application server packages.

Platform	OVO Management Server	Application Server	Client
Windows	n/a	`hp OpenView service desk 4.5 application server`	`hp OpenView Service Configuration Client`
HP-UX	Server and Java GUI patches Connector: `cadmovoserver`	Application server, service pack for the application server, Service Configuration modules: `sdserver`	n/a

Sun Solaris	Server and Java GUI patches
	`cadm_common-8.0.pkg`
		`sdserver-4.5.pkg`
		`sdserver-4.5-sp.pkg`
		`cadm_server-8.0.pkg`
			n/a

Use your database administration tool to remove the Service Configuration database instance including all data.

Installation Packages for Service Configuration on Service Desk

If Service Configuration is installed on Service Desk, and you only want to remove Service Configuration but not Service Desk, you must re-install the Service Desk application server (Windows) or remove the Service Configuration server packages from the application server (UNIX). This procedure does not remove the Service Configuration data from the database. In addition, you must uninstall the Service Configuration client, and re-install the Service Pages server if the Service Configuration integration with Service Pages is installed.

Platform	OVO Management Server	Application Server	Service Pages	Client
Windows	n/a	To remove the Service Configuration modules, re-install the Service Desk application server as described in the Service Desk documentation. This does not remove Service Configuration data from the database.	To remove the Service Configuration modules, re-install the Service Pages server as described in the Service Desk documentation.	`hp OpenView Service Configuration Client`
HP-UX	Server and Java GUI patches Connector: `cadmovoserver`	Application server, service pack for the application server, Service Configuration modules: `sdserver` This does not remove Service Configuration data from the database.	Service Pages and Service Configuration integration with Service Pages: `sdservicepages`	n/a
Sun Solaris	Server and Java GUI patches `cadm_common -8.0.pkg`	`cadm_server-8.0.pkg` This does not remove Service Configuration data from the database.	`cadm_servicepages-8.0.pkg`	n/a

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.

If the component you are uninstalling has been installed as a Windows service, first remove the service before removing the component.

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 component you want to uninstall, for example the client, and click **Remove**. You can only remove one component at a time; this procedure must be repeated for each component.
4. A dialog box appears asking you to confirm that you want to uninstall the component. Click **OK** to remove the component selected in Step 3 above.
5. 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 **OK** to finish the procedure.

Uninstalling from HP-UX

To remove Service Configuration from your HP-UX system, use the `swremove` command on HP-UX. A dialog box appears that allows you to choose which Service Configuration component you want to uninstall.

Uninstalling from Sun Solaris

Use the `pkgrm` command to remove Service Configuration components.

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 packs

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

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/OpC/cadmactivate -d
```

`cadmactivate` 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.

A Installing Service Desk on Service Configuration

This appendix describes how to upgrade a Service Configuration installation to the full version of Service Desk.

Overview

Service Configuration is built on HP OpenView Service Desk technology and installs a Service Desk component, the application server as part of the server installation. When you migrate your Service Configuration installation to a full Service Desk installation, you only need to install those Service Desk components that are not embedded into Service Configuration. These components are:

- **Service Desk client**

  The Service Configuration installation does not include a Service Desk client which must be installed separately. See “Installing the Service Desk Client” on page 234 for an overview over the Service Desk client installation.

  After you have installed the Service Desk client, you must update it with the Service Desk service pack to make it compatible with the application server and to take advantage of the Service Desk data form integration with the OVO Java GUI. See the *Integrating Service Desk with Service Configuration for Service Navigator* guide for more information about this integration.

- **Service Pages**

  Service Pages are HTML pages that enable Service Desk customers to report problems directly to Service Desk over the web. Service Pages are installed on a server. Client users can open the pages using a web browser pointing at the Service Pages URL. The servlet engine used by the Service Pages server is Tomcat from Apache Software Foundation. See “Installing Service Pages” on page 236 for an overview over the Service Pages installation.

  When you install the Service Configuration integration with Service Pages on the Service Pages server, OVO Java GUI users can display and edit Service Pages that are related to the currently selected Service Desk object, by starting an action from the shortcut menu. See the *Integrating Service Desk with Service Configuration for Service Navigator* guide for more information about this integration.

Installing the Service Desk Client

This section gives an overview over the Service Desk client installation. For complete installation instructions, see the *HP OpenView Service Desk 4.5 Installation Guide* on the HP OpenView Service Desk 4.5 CD-ROM. The client installation is described in chapter 6.

1. **Check the prerequisites.**

   Make sure the system where you want to install the Service Desk client meets the requirements listed in the *HP OpenView Service Desk 4.5 Installation Guide*. In particular, ensure that the following software is installed:

   - *Java Virtual Machine (JVM)*

     If no JVM is installed, install one from the HP OpenView Service Desk 4.5 CD-ROM. The Service Desk 4.5 client is only supported on Windows and requires a Windows JVM to run.

   - *HTML Help Update for Windows NT and 98*

     Install this software from the HP OpenView Service Desk 4.5 CD-ROM.

   - *Microsoft data access components*

     Install this software from the HP OpenView Service Desk 4.5 CD-ROM.

2. **Install the client.**

   Install the Service Desk client software as described in the *HP OpenView Service Desk 4.5 Installation Guide*, chapter 6.

3. **Install the Service Desk service pack.**

   Update the installed Service Desk client with the Service Desk service pack. This makes the client compatible with the application server and enables the data form integration for the OVO Java GUI.

   The Service Desk client service pack is available on the Service Configuration installation CD-ROM for Windows in the following directory:

   ```
   \servicepack\client\client.exe
   ```

   To install this service pack, double-click the file `client.exe` and follow the instructions presented by the installation wizard.

Installing Service Pages

This section gives an overview over the Service Pages installation. For complete installation instructions, see the *HP OpenView Service Desk 4.5 Installation Guide* on the HP OpenView Service Desk 4.5 CD-ROM. The Service Pages installation is described in chapter 7.

1. **Check the prerequisites.**

   Make sure the system where you want to install the Service Pages server meets the requirements listed in the *HP OpenView Service Desk 4.5 Installation Guide*.

   In particular, ensure that a Java Development Kit is installed. If not, install one from the HP OpenView Service Desk 4.5 CD-ROM. Installing a JDK includes setting up a `JAVA_HOME` system variable. This is important for successful installation and operation of the product.

2. **Install the Service Pages web server.**

   Install the Service Pages web server as described in the *HP OpenView Service Desk 4.5 Installation Guide*, chapter 7.

3. **Configure the Service Pages web server.**

   Configure the Service Pages web server as described in the *HP OpenView Service Desk 4.5 Installation Guide*.

4. **Install the Service Configuration integration.**

   Install the Service Configuration integration with Service Pages. The installation is described in Chapter 9, “Installing the Service Pages Integration,” on page 207. This step includes updating the Service Pages web server with the Service Desk service pack to make it compatible with the application server and to enable the integration, and installing the integration itself.

B 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 a number of possible problem scenarios and suggestions for their resolution.

The list of issues discussed here is by no means comprehensive. 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.

This section discusses the following topics:

- ❏ Reinstalling after Cancelling an Installation
- ❏ Unable to Connect to Server on a Windows Platform
- ❏ Version Numbers

Reinstalling after Cancelling an Installation

If you cancel the installation process on Windows the installation program removes the components already installed before clicking Cancel. A dialog box is displayed showing the progress of the uninstallation. Data is retained by Windows and it remembers you have once attempted to install Service Configuration.

When you then reinstall Service Configuration, a screen is displayed enabling you to choose how the installation should continue, select an option:

- **Modify**

  Displays the custom installation screen, enabling you to select components to install.

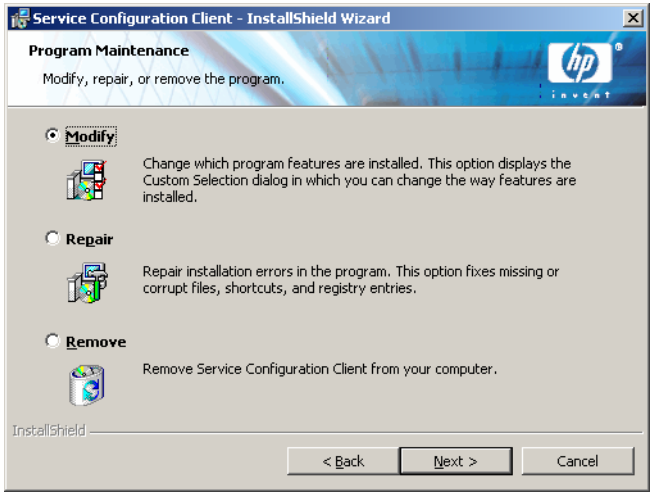
- **Repair**

  Continues with a typical installation.

- **Remove**

  Completely removes the remaining Service Configuration components from the computer:

Figure B-1 Program Maintenance Dialog Box



Unable to Connect to Server on a Windows Platform

If, when you start Service Configuration, you are unable to connect to the server, check that the installation is complete. For instance, after you have installed the application server, you should run the database configuration wizard to set up the database. Without an Oracle Server database installed and configured, Service Configuration will not work.

If you are confident that all the steps of the installation process were done, try to find out if the installation was error-free. To do this, check the `logserver.txt` file located in the application server home folder and `logclient.txt` file located in the user's Windows profile. These files may give information about the cause of the problem. For example, there might be a message about different versions of the database and server.

If there are no messages indicating a problem with the installation, try starting the application server in console mode. To start the application server as a console program:

1. Select **Settings** from the **Start** menu, and open the Control Panel.
2. In the Control Panel, click **Administrative Tools: Services**. Select **HP Service Desk service** in the Services dialog box.
3. Click the **Stop** button to stop the Service Desk application server from running as a service.
4. In Windows Explorer. navigate to the `C:\program files\Hewlett Packard\OpenView\Service Desk 4.5\Server\bin` folder and double-click `sdserverservice.exe`. A DOS box with the application server running as a console program is displayed.
5. Restart the Service Configuration client. If you still get the message `Failed to connect to server.`, restart the system and try again.

Version Numbers

If the `logserver.txt` states that the application server and database have different version numbers, it could indicate that a previous Service Desk installation (on the same machine) was not properly removed.

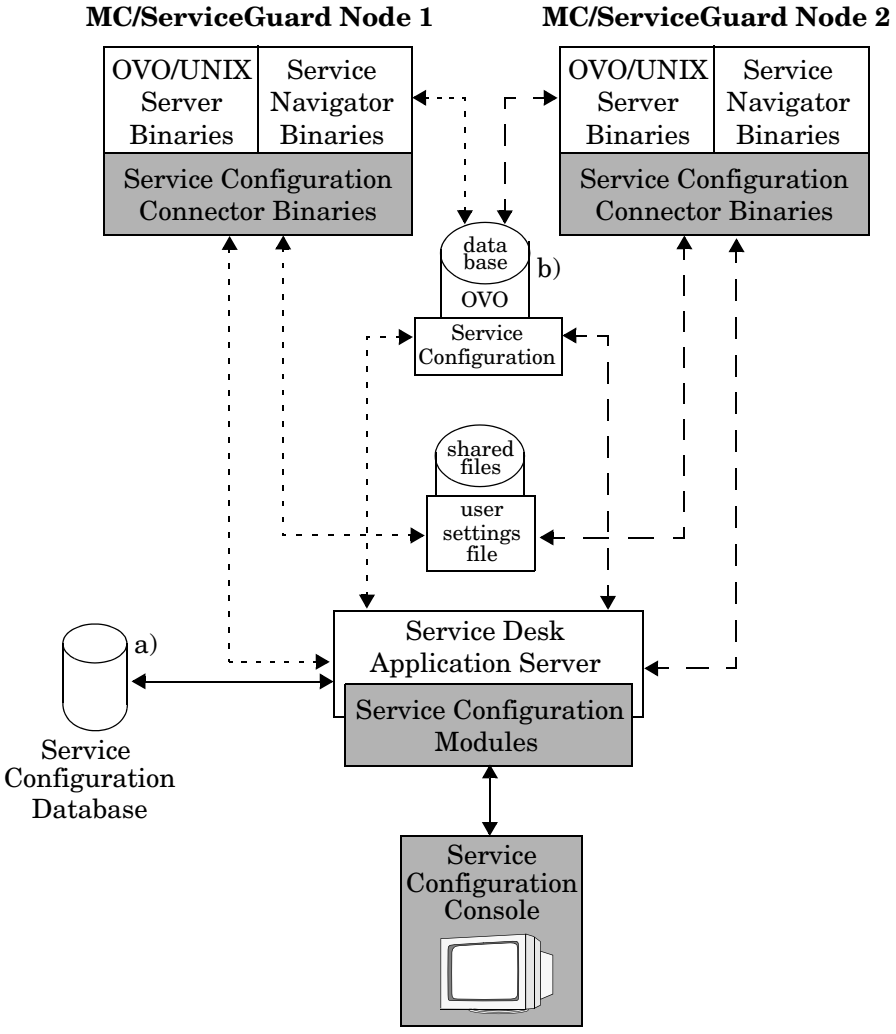
C Installation in High Availability Environments

High Availability Overview

Service Configuration as a whole is not supported in high availability environments. Only the Service Configuration connector can run in a high availability cluster along with the OVO management server. The connector is a component of the Service Configuration application that is present on the OVO management server and that connects the Service Configuration adapter (seadapter) 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 C-1 on page 243 shows how the Service Configuration connector binaries are installed on two different MC/ServiceGuard nodes and connect to a shared user settings file.

The only high-availability solution that is supported with this release of Service Configuration is HP Multi-Computer/ServiceGuard (MC/ServiceGuard) for HP-UX. See “Installing Service Configuration in an MC/ServiceGuard Environment” on page 245 for more information about installing the connector in a cluster environment.

Figure C-1 Running OVO and the Connector in MC/ServiceGuard



About HP MC/ServiceGuard

HP Multi-Computer/ServiceGuard (MC/ServiceGuard) is a powerful hardware and software solution 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 MC/ServiceGuard installation make up an MC/ServiceGuard cluster.

This section assumes that you are familiar with MC/ServiceGuard and the general concepts of OVO. For more detailed information about MC/ServiceGuard, see the *Managing MC/ServiceGuard* guide[1]. To find out how to install and configure OVO in an MC/ServiceGuard cluster, see the *OVO Installation Guide for the Management Server*.

1. The *Managing MC/ServiceGuard* guide is available from `http://www.docs.hp.com/hpux/ha/index.html`.

Installing Service Configuration in an MC/ServiceGuard Environment

The Service Configuration connector must be installed and configured on *each* MC/ServiceGuard cluster node. The connector 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 connector includes the log data, cache, and user settings 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 186. 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 7.1 management server*

        Look up the OVO management server name in the `/opt/OV/bin/OpC/install/opcsvinfo` file.

      - *OVO 8.0 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 189.

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 connector. 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. Ensure that a supported version of JRE is installed on the local node. See “Third-party Software for Service Configuration” on page 41.
6. Install the required OVO patches on the local node. See “Installing Patches on the OVO 7.1 Management Server” on page 46.
7. Install the Service Configuration connector for OVO on the local node. See “Installing the Service Configuration Connector for OVO” on page 49.

8. Configure the Service Configuration connector for OVO on the local. This procedure is very similar to the one described in “Configuring the Service Configuration Connector” on page 191. However, instead of accepting the default settings on the General tab of the Accounts dialog box, specify a shared folder as data folder.

NOTE

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

a. On the local node, create the shared folder for the connector’s variable data:

```
mkdir -p /var/opt/OV/share/sd/common
```

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

```
/opt/OV/sd/common/bin/sd_useraccounts
```

The Accounts dialog box opens and displays the General tab.

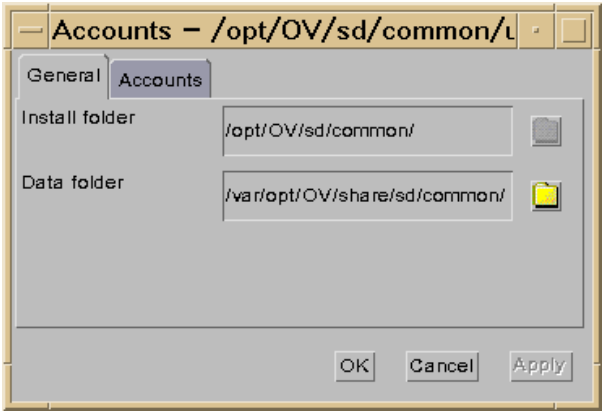
c. On the General tab, do the following:

The **Install folder** is the product folder where the fixed settings for Service Configuration are stored. Accept the default setting `/opt/OV/sd/common/`.

The **Data folder** is the folder containing the connector’s variable data, for example, user settings, cache, and so on. Change the default folder `/opt/OV/sd/common/` to the following shared folder:

```
/var/opt/OV/share/sd/common/
```

Figure C-2 Accounts Dialog Box - General Tab



d. Continue configuring the Service Configuration connector as described on page 193 and following. Make sure to test the connection to the application server.

9. Link the shared files and data folders:

   ```
   ln -s /var/opt/OV/share/sd/common/cache \
   /opt/OV/sd/common/cache

   ln -s /var/opt/OV/share/sd/common/log \
   /opt/OV/sd/common/log

   ln -s /var/opt/OV/share/sd/common/SRV.dat \
   /opt/OV/sd/common/SRV.dat
   ```

10. Make the user settings file available on the shared folder:

    a. Move the user settings file from the installation folder to the shared data folder:

       ```
       mv /opt/OV/sd/common/user_settings.xml \
       /var/opt/OV/share/sd/common/
       ```

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

       ```
       ln -s /var/opt/OV/share/sd/common/user_settings.xml \
       /opt/OV/sd/common/user_settings.xml
       ```

NOTE This step is required only on the first cluster node.

11. On the local node, activate Service Configuration as described in “Activating Service Configuration on the OVO Management Server” on page 196. The application server must be running, otherwise the tool cadmactivate cannot activate Service Configuration.

12. Disable maintenance mode on the local node:

    ```
    rm /tmp/maint_NNM
    ```

13. On all other nodes in the cluster, perform Steps 2 to 9 to install and configure the Service Configuration connector for OVO. When the connector is configured, activate Service Configuration and disable maintenance mode.

D 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 D-1 HP OpenView Self-Healing Services

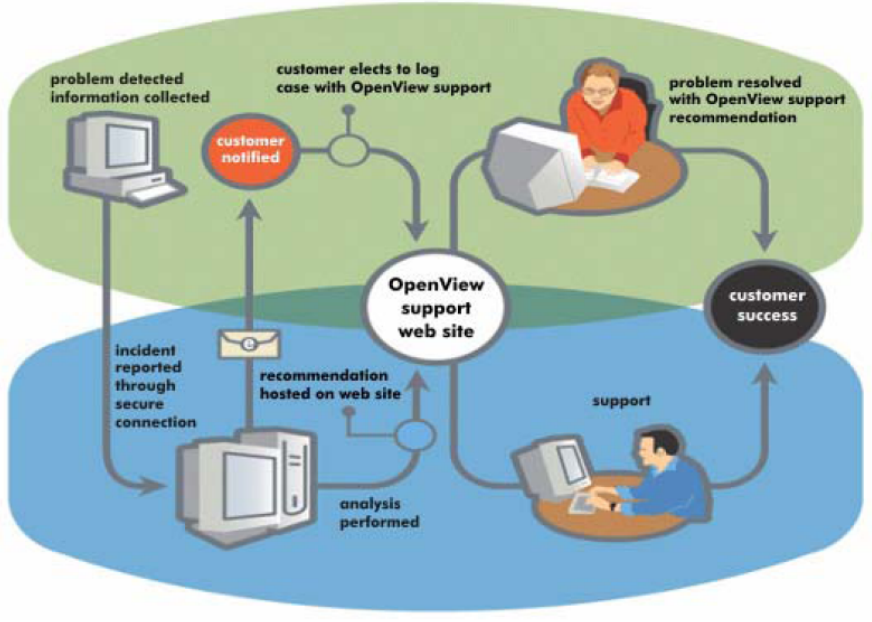


Figure D-1 illustrates the operation of HP OpenView Self-Healing Services. When a fault occurs in a supported OpenView software application, the Self-Healing Services engine automatically triggers the collection of troubleshooting data and system information. An administrator at your site can also trigger 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 connector, the seadapter process, and the cadmactivate 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.

In addition to the Self-Healing Services client, the data collector requires the following software on the Service Configuration component that you plan to monitor:

- **JRE**

  The data collector software requires a Java Runtime Environment (JRE). As all Service Configuration components already have a JRE installed, there is no need to install an additional JRE.

- **Xerces XML parser**

  The data collector software 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 `/opt/OV/nonOV/Xerces-J/2.6.0`.

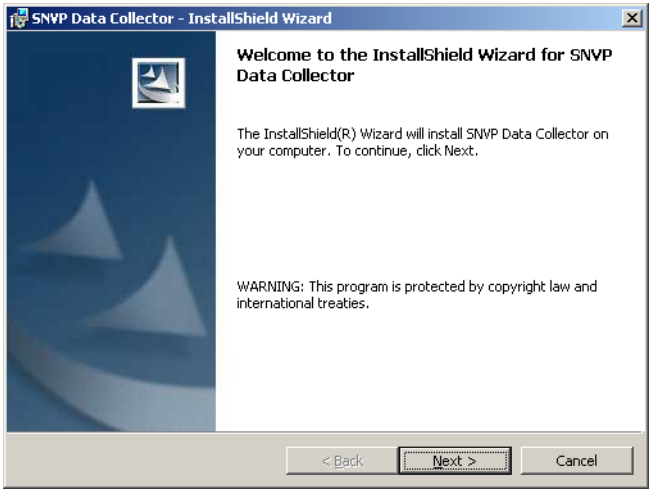
Installing the Data Collector on Windows

To install the Service Configuration data collector on Windows:

1. Insert the HP OpenView Service Configuration for Service Navigator CD-ROM into your CD-ROM drive. Navigate to the support directory and execute the `cadm_datacollector-8.0.exe` file.

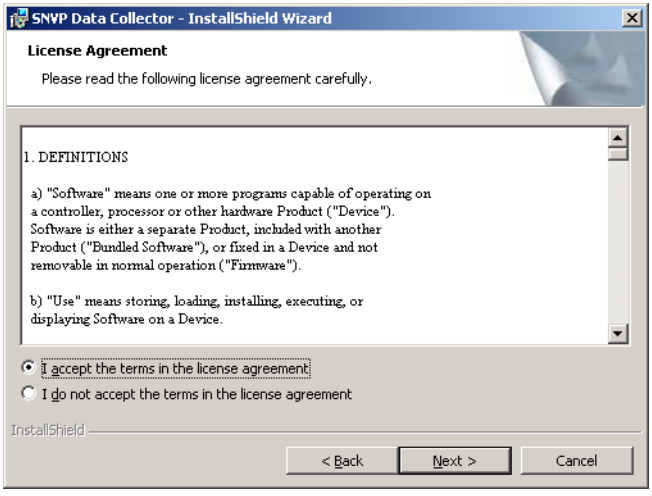
   The Welcome screen for the Data Collector InstallShield Wizard appears. Click **Next** to continue, or **Cancel** to abort the installation.

Figure D-2 SNVP Data Collector Welcome Screen



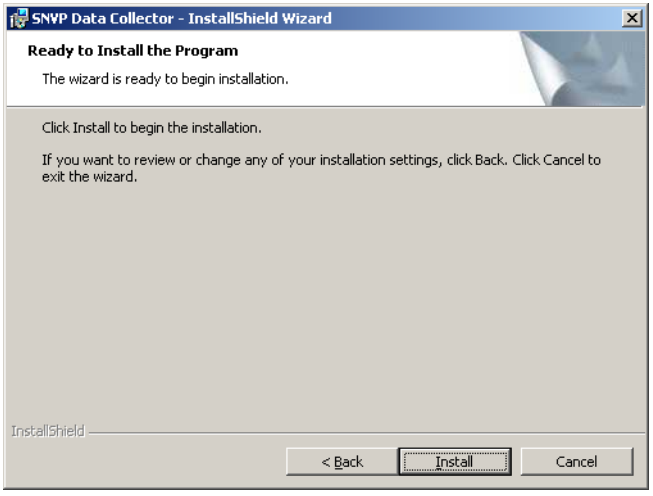
2. If you clicked **Next**, the License Agreement dialog box appears. To proceed, you must select **I accept the terms in the license agreement** and then click **Next**. By doing so, you agree to all license terms, so please read the agreement carefully.

Figure D-3 License Agreement Dialog Box



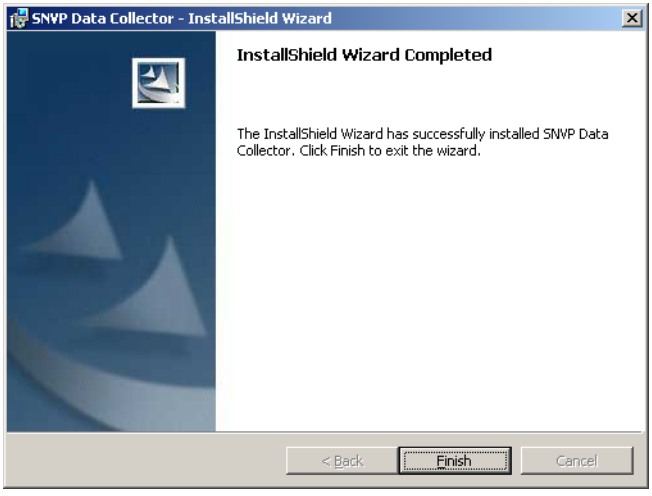
3. The Ready to Install dialog box appears. Select **Install** to start the installation.

Figure D-4 Server Ready to Install Dialog Box



4. When all files are installed, the Completed screen appears. Click **Finish** to leave the installation program.

Figure D-5 InstallShield Wizard Completed Dialog Box



Installing the Data Collector on HP-UX

To install the Service Configuration data collector on HP-UX:

1. Mount the HP-UX CD-ROM.
2. Use swinstall to install the data collector:

   Example:

   ```
   swinstall -s /<mountpoint>/support/\
   cadm_datacollector-8.0.depot cadmdc
   ```

Installing the Data Collector on Sun Solaris

To install the Service Configuration data collector on Sun Solaris:

1. Mount the Sun Solaris CD-ROM.
2. Use `pkgadd` to install the connector software:

   Example:

   ```
   pkgadd -d
   /<mountpoint>/support/cadm_datacollector-8.0.pkg
   ```

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” on page 263.

snvpDataCollector

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

Removing the Service Configuration Data Collector

To remove the Service Configuration data collector for HP OpenView Self-Healing Services, use the software removal tools that are available with the operating system:

- **Windows**

  Use the Add/Remove Programs tool in the Windows Control Panel to remove the data collector. Choose the `hp OpenView SNVP Data Collector` component.

- **HP-UX**

  To remove the data collector from your HP-UX system, use the `swremove` command. A dialog box appears that allows you to choose which Service Configuration component you want to uninstall. Choose the `cadmdc` component.

- **Sun Solaris**

  Use the `pkgrm` command to remove the `cadm_datacollector-8.0.pkg` package.

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