

# **HP OpenView Service Desk 4.0**

## **Installation Guide**

**First Edition**



i n v e n t

**Manufacturing Part Number: N/A**

**August 2001**

---

## Legal Notices

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

**Restricted Rights Legend.** Use, duplication or disclosure by the U.S. Government is subject to restrictions as set forth in subparagraph (c)(1)(ii) of the Rights in Technical Data and Computer Software clause in DFARS 252.227-7013.

Hewlett-Packard Company  
3000 Hanover Street  
Palo Alto, CA 94304 U.S.A.

Rights for non-DOD U.S. Government Departments and Agencies are as set forth in FAR 52.227-19 (c)(1,2).

**Copyright Notice.** © Copyright 2000, 2001 Hewlett-Packard Company

The nomenclature of each version of this software (and manuals therefore) has been devised for commercially convenient reasons, and is not intended to denote the degree of originality of any version of the software with respect to any other version. The extent of protection afforded by, and duration of copyright is to be determined entirely independently of this nomenclature.

### Trademark Notices

Adobe® and Acrobat® are trademarks of Adobe Systems Incorporated.

Helvetica\* is a trademark of Linotype-Hell AG and/or its subsidiaries in the U.S. and other countries.

Intel® is a U.S. registered trademark of Intel Corporation.

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

Microsoft® is a U.S. registered trademark of Microsoft Corporation.

Oracle® is a registered U.S. trademark of Oracle Corporation, Redwood City, California.

Pentium® is a U.S. registered trademark of Intel Corporation.

**UNIX® is a registered trademark of the Open Group.**

**Windows NT® is a U.S. registered trademark of Microsoft Corporation.**

**Windows® and MS Windows® are U.S. registered trademarks of Microsoft Corporation.**



**1. Introduction**

Architecture .....	26
The Installation Program .....	27
The Installation Process .....	28
Files That Will Be Installed .....	29
Windows Startup Account Authorization.....	30

**2. Preparing for Installation**

Requirements .....	32
Service Desk Client.....	32
Service Desk Application Server .....	32
Service Desk Database Server .....	32
Service Desk Service Pages Client.....	32
Service Desk Service Pages Web Server .....	33
Service Desk Event Communicator.....	33
Setting up the Oracle Database .....	34
Oracle Settings .....	34
Before Installing Service Desk.....	35
Setting up SQL Server.....	36
Microsoft Java Virtual Machine .....	39
Installing Microsoft Java Virtual Machine .....	39
Other Third-Party Software .....	42
Java Runtime Environment.....	42
Microsoft Data Access components .....	42
Adobe Acrobat Reader 4 (English).....	42

**3. Installing the Application Server**

Application Server Installation and Database Configuration.....	45
Before Installing Service Desk.....	45
Installing Service Desk.....	45
SQL Server Database Configuration Wizard .....	51
Oracle Database Configuration Wizard .....	59

**4. Installing the Client**

Preparing for Service Desk Client Installation .....	78
CD-ROM installation on a Client PC.....	79
Preparing for Shared Folder Installation .....	79
Preparing for Hyperlink Installation.....	79

---

# Contents

Client Installation .....	81
The Connection Wizard .....	87

## 5. Installing Service Pages

Installing Service Pages on Windows 2000 or Windows NT .....	94
Configuring Service Pages .....	100
Connecting Tomcat and IIS Web Server on Windows NT and Windows 2000 ....	100
Installing Service Pages with Apache Web Server on UNIX .....	108
Installing Apache and Tomcat .....	108
Installing Service Pages .....	109
Configuring Apache and Tomcat .....	109
Starting and Testing Apache Web Server .....	111
Troubleshooting Service Pages on Windows NT and 2000 .....	112
Checking Service Pages Connection to Service Desk .....	112
Manually Install and Configure Tomcat as a Service .....	113
Manually Install and Configure Service Desk Service Pages Web Application ...	113
Troubleshooting the Tomcat and Apache Web Server Connection on Windows NT	114
Troubleshooting the Tomcat and IIS Web Server Connection on Windows NT and Windows 2000 .....	114

## 6. Installing Integrations

Integrations .....	118
Integration Tools on HP-UX and Solaris Platforms .....	122

## 7. Installing the Service Desk Agent

Service Desk Agent .....	126
Windows Platform .....	126
HP-UX Platforms .....	130
Solaris Platforms .....	133
Activating the Service Desk Agent .....	135
Under Windows NT and/or 2000 .....	135

Under Windows 95 and/or 98 . . . . .	135
Under HP-UX and Solaris . . . . .	135

**8. Post-Installation Tasks**

Licenses . . . . .	138
Getting your License Key . . . . .	140
Changing the License Key . . . . .	141
Adding Accounts. . . . .	142
Using a Different Account . . . . .	142

**9. Upgrading from Previous Versions of Service Desk**

Introduction . . . . .	144
Upgrading the Service Desk Application Server . . . . .	145
Upgrading the Service Desk Database . . . . .	147
Upgrading the Database from the Database Wizard . . . . .	148
Setting the Default Database Account . . . . .	149
Preparing for Service Desk Client Upgrade . . . . .	151
CD-ROM Installation on a Client PC . . . . .	152
Preparing for Shared Folder Upgrade . . . . .	152
Preparing for Hyperlink Upgrades . . . . .	152
Upgrading Service Desk Clients . . . . .	154
Upgrading Service Desk Agents . . . . .	156
Uninstalling Upgrades. . . . .	157

**10. Service Pack Releases**

Service Packs . . . . .	160
Obtaining Service Packs. . . . .	160
Installing Service Packs . . . . .	160
Uninstalling Service Packs . . . . .	160

**11. Removing Service Desk**

Registry Keys . . . . .	165
Files That Will Not Be Removed during Uninstallation . . . . .	166

**A. Troubleshooting**

Troubleshooting the Installation. . . . .	170
Unable to Connect to Server . . . . .	170
Version Numbers. . . . .	171

---

# Contents

Service Pages.....	171
Service Desk 3.0 and 4.0 on One Client PC.....	171
ActiveX Error Messages During Installation .....	171



---

# Figures

Figure 2-1. Database Properties dialog box . . . . .	36
Figure 2-2. SQL Server Login Properties - New Login dialog box . . . . .	37
Figure 2-3. Database Access tab page . . . . .	38
Figure 2-4. Start screen. . . . .	40
Figure 2-5. Restart Virtual Machine . . . . .	41
Figure 3-1. Start screen. . . . .	46
Figure 3-2. Install Service Desk Application Server . . . . .	47
Figure 3-3. Server Destination Folder dialog box . . . . .	48
Figure 3-4. Server Ready to Install dialog box. . . . .	49
Figure 3-5. Server Installation Summary dialog box . . . . .	50
Figure 3-6. Database Configuration Wizard . . . . .	51
Figure 3-7. Create New or Upgrade Database dialog box. . . . .	52
Figure 3-8. Create Database User dialog box . . . . .	53
Figure 3-9. Prepare for Database Object Creation dialog box . . . . .	53
Figure 3-10. Choose Database type dialog box . . . . .	54
Figure 3-11. Administrator Account dialog box. . . . .	54
Figure 3-12. SQL Server user account dialog box . . . . .	55
Figure 3-13. SQL Server Datafile location dialog box . . . . .	55
Figure 3-14. SQL Server Database information dialog box . . . . .	56
Figure 3-15. SQL Server User Created dialog box . . . . .	56
Figure 3-16. Load Demo Data dialog box. . . . .	57
Figure 3-17. Database Configuration Wizard . . . . .	58
Figure 3-18. Database Configuration Wizard . . . . .	59

---

## Figures

Figure 3-19. Create New or Upgrade Database dialog box . . . . .	60
Figure 3-20. Create Database User dialog box . . . . .	61
Figure 3-21. Prepare for Database Object Creation dialog box . . . . .	61
Figure 3-22. Choose Database type dialog box . . . . .	62
Figure 3-23. Administrator Account dialog box . . . . .	62
Figure 3-24. Oracle user account dialog box . . . . .	63
Figure 3-25. Create datafiles and tablespaces dialog box . . . . .	64
Figure 3-26. Oracle Datafile location dialog box . . . . .	64
Figure 3-27. Application Default tablespace information dialog box . .	65
Figure 3-28. Application Index Tablespace information dialog box . . .	65
Figure 3-29. Application Repository tablespace information dialog box	66
Figure 3-30. Repository index tablespace information dialog box . . . .	66
Figure 3-31. Temporary Tablespace for the Datastore dialog box . . . .	67
Figure 3-32. Temporary Tablespace for the Repository dialog box . . . .	68
Figure 3-33. Oracle User Creation dialog box . . . . .	68
Figure 3-34. Application tablespace information dialog box . . . . .	69
Figure 3-35. Application Index tablespace information dialog box . . . .	69
Figure 3-36. Application Repository tablespace information dialog box	70
Figure 3-37. Repository Index tablespace information dialog box . . . .	71
Figure 3-38. Temporary Tablespace for the Datastore dialog box . . . .	71
Figure 3-39. Temporary Tablespace for the Repository dialog box . . . .	72
Figure 3-40. Oracle User Creation dialog box . . . . .	72
Figure 3-41. Oracle Choose Expected Environment Size dialog box . . .	73

---

# Figures

Figure 3-42. Oracle Table Extents dialog box . . . . .	74
Figure 3-43. Load Demo Data dialog box . . . . .	74
Figure 3-44. Database Configuration Wizard . . . . .	75
Figure 4-1. Start screen. . . . .	82
Figure 4-2. Install Client . . . . .	83
Figure 4-3. Client Destination Folder dialog box. . . . .	84
Figure 4-4. Client Ready to Install dialog box . . . . .	85
Figure 4-5. Client Installation Summary dialog box. . . . .	86
Figure 4-6. Service Desk Connection Wizard. . . . .	87
Figure 4-7. Service Desk Server dialog box . . . . .	88
Figure 4-8. The Account Name and Password dialog box. . . . .	88
Figure 4-9. The Friendly Name dialog box. . . . .	89
Figure 4-10. Congratulations dialog box . . . . .	89
Figure 5-1. Start screen. . . . .	95
Figure 5-2. Install Service Pages . . . . .	96
Figure 5-3. Service Pages Setup Type dialog box . . . . .	97
Figure 5-4. Service Pages Destination Folder dialog box . . . . .	98
Figure 5-5. Use Apache for SP dialog box . . . . .	98
Figure 5-6. Service Pages Installation Summary dialog box . . . . .	99
Figure 5-7. IIS Management Console - Submenu . . . . .	101
Figure 5-8. Virtual Directory Creation Wizard - welcome screen. . . . .	102
Figure 5-9. Virtual Directory Creation Wizard - alias dialog box. . . . .	102
Figure 5-10. Virtual Directory Creation Wizard - web content dialog box	103

---

## Figures

Figure 5-11. Virtual Directory Creation Wizard - permissions dialog box	103
Figure 5-12. Virtual Directory - Properties dialog box . . . . .	104
Figure 5-13. Virtual Directory - Add Default Document dialog box . .	104
Figure 5-14. Virtual Directory - Properties dialog box . . . . .	105
Figure 5-15. Default Web Site - Properties dialog box . . . . .	106
Figure 5-16. Default Web Site - Filter Properties dialog box . . . . .	106
Figure 5-17. Default Web Site - Properties dialog box . . . . .	107
Figure 6-1. Start screen . . . . .	119
Figure 6-2. Install Integrations . . . . .	120
Figure 6-3. Integrations Setup Type dialog box . . . . .	121
Figure 6-4. Integrations Feature Selection dialog box . . . . .	121
Figure 6-5. Integrations Ready to Install dialog box . . . . .	122
Figure 7-1. Start screen . . . . .	127
Figure 7-2. Install Agent . . . . .	128
Figure 7-3. Agent Destination Folder dialog box . . . . .	129
Figure 7-4. Agent Ready to Install dialog box . . . . .	130
Figure 7-5. HPOVSD File - X-windows display . . . . .	131
Figure 7-6. Mark For Install - X-windows display . . . . .	131
Figure 7-7. Install (analysis) -X-windows display . . . . .	132
Figure 7-8. Logfile - X-windows display . . . . .	132
Figure 9-1. Create New or Upgrade Database dialog box . . . . .	148
Figure 9-2. Server Accounts dialog box . . . . .	149
Figure 11-1. Ready to Uninstall dialog box . . . . .	163

---

## Figures

Figure 11-2. Uninstallation Summary dialog box . . . . .163

---

## Figures

---

## Preface

This guide describes the installation of HP OpenView Service Desk 4.0. With the procedures in this guide you can prepare for installation, install, configure, and remove components of Service Desk. It also describes setting up a database. There is also a troubleshooting section, although it is hoped it will not be needed.

This guide is intended for system administrators responsible for installing and maintaining the Service Desk application server and database, and for users who want to install the Service Desk client. The guide has been written and tested for accuracy primarily against an installation on a Windows® NT® 4.0 platform (and other platforms where relevant, for example, HP-UX, Windows 2000), with Apache Web Server 1.3.12 and Apache JServ 1.1. This does not exclude other platforms, however there may be some slight variations in minor issues such as the size of dialog boxes.

If you want to install the Service Desk application server and database server, you must have a thorough knowledge of databases, servers and networking; knowledge of IT service management is not required. It is also assumed that you have access to all resources on the computer or network where HP OpenView Service Desk will be installed.

If you want to install the Service Desk client, only a basic knowledge of computers is sufficient to complete the installation; knowledge of IT Service Management is not required.

Please read through the relevant sections before you install any HP OpenView Service Desk component.

This guide is organized as follows:

- Chapter 1, “Introduction,” on page 25 provides a description of the functional design of HP OpenView Service Desk and the installation process of this program. It also contains a list of files and their version numbers that will be installed if you run the installation of Service Desk. There is also important information about the authorization level of the Windows Startup Account.
- Chapter 2, “Preparing for Installation,” on page 31 explains how to find information about the system requirements and supported platforms for Service Desk. It also describes the main third-party

products that need to be installed before installing HP OpenView Service Desk.

- Chapter 3, “Installing the Application Server,” on page 43 describes the tasks you must perform during the installation of the application server and configuration of the database.
- Chapter 4, “Installing the Client,” on page 77 describes the tasks you must perform to install and connect the clients.
- Chapter 5, “Installing Service Pages,” on page 91 describes how to install and configure Service Pages on both Windows and UNIX® platforms.
- Chapter 6, “Installing Integrations,” on page 117 describes how to install integrations.
- Chapter 7, “Installing the Service Desk Agent,” on page 125 describes how to install and setup the Service Desk Agent.
- Chapter 8, “Post-Installation Tasks,” on page 137 describes the steps you must perform after installation: entering your license keys, adding user accounts.
- Chapter 9, “Upgrading from Previous Versions of Service Desk,” on page 143 describes the steps you must perform in order to upgrade from version 3.0, or earlier, of Service Desk to version 4.0.
- Chapter 10, “Service Pack Releases,” on page 159 describes how service packs can be obtained, and provides basic service pack information.
- Chapter 11, “Removing Service Desk,” on page 161 describes the tasks you must perform to remove HP OpenView Service Desk completely from your system, including the elimination of files and components residing in local systems. It also contains a list of files that will not be removed because they may also be used by other applications installed on your system.
- Appendix A, “Troubleshooting,” on page 169 describes how to deal with some of the errors that may, under certain circumstances, occur during installation.



## Revision History

When an edition of a manual is issued with a software release, it has been reviewed and tested and is therefore considered correct at the date of publication. However, errors in the software or documentation that were unknown at the time of release, or important new developments, may necessitate the release of a service pack that includes revised documentation. Revised documentation may also be published on the Internet, see “We Welcome Your Comments!” on page 24 for the URL.

A revised edition will display change bars in the left-hand margin to indicate revised text. These change bars will only mark the text that has been edited or inserted since the previous edition or revised edition.

When a revised edition of this document is published, the latest revised edition nullifies all previous editions.

**Table 1**                      **Revision History**

Edition and Revision Number	Issue Date	Product Release
First Edition	August 2001	Service Desk 4.0

## Related Publications

This section helps you find information that is related to the information in this guide. It gives an overview of the Service Desk documentation and lists other publications you may need to refer to when using this guide.

### The Service Desk Documentation

Service Desk provides a selection of books and online help to assist you in using Service Desk and improve your understanding of the underlying concepts. This section illustrates what information is available and where you can find it.

---

**NOTE**

This section lists the publications provided with Service Desk 4.0. Updates of publications and additional publications may be provided in later service packs. For an overview of the documentation provided in service packs, please refer to the readme file of the latest service pack. The service packs and the latest versions of publications are available on the Internet. See the section “We Welcome Your Comments!” in this preface for the URLs.

- The `Readme.htm` file on the Service Desk CD-ROM contains information that will help you get started with Service Desk. It also contains any last-minute information that became available after the other documentation went to manufacturing.
- The *HP OpenView Service Desk: Release Notes* give a description of the features that Service Desk provides. In addition, they give information that helps you:
  - compare the current software’s features with those available in previous versions of the software;
  - solve known problems.

The Release Notes are available as a PDF file on the HP OpenView Service Desk 4.0 CD-ROM. The file name is `Release_Notes.pdf`.

- The *HP OpenView Service Desk: User’s Guide* introduces you to the key concepts behind Service Desk. It gives an overview of what you can do with Service Desk and explains typical tasks of different types of Service Desk users. Scenario descriptions are provided as examples of how the described features could be implemented.

The User's Guide is available as a PDF file on the HP OpenView Service Desk 4.0 CD-ROM. The file name is `User's_Guide.pdf`.

- The *HP OpenView Service Desk: Supported Platforms List* contains information that helps you determine software requirements. It lists the software versions supported by Hewlett-Packard for Service Desk 4.0.

The Supported Platforms List is available as a PDF file on the HP OpenView Service Desk 4.0 CD-ROM. The file name is `Supported_Platforms_List.pdf`.

- The *HP OpenView Service Desk: Installation Guide* covers all aspects of installing Service Desk.

The Installation Guide is available as a PDF file on the HP OpenView Service Desk 4.0 CD-ROM. The file name is `Installation_Guide.pdf`.

- The *HP OpenView Service Desk: Administrator's Guide* provides information that helps application administrators to set up and maintain the Service Desk application server for client usability.

The Administrator's Guide is available as a PDF file on the HP OpenView Service Desk 4.0 CD-ROM. The file name is `Administrator's_Guide.pdf`.

- The *HP OpenView Service Desk: Data Exchange Administrator's Guide* explains the underlying concepts of the data exchange process and gives instructions on exporting data from external applications and importing it into Service Desk. The data exchange process includes importing single service events and batches of data.

The Data Exchange Administrator's Guide is available as a PDF file on the HP OpenView Service Desk 4.0 CD-ROM. The file name is `Data_Exchange.pdf`.

- The *HP OpenView Service Desk: VantagePoint Operation Integration Administrator's Guide* explains the integration between Service Desk and VantagePoint for Windows and UNIX®. This guide covers the installation and configuration of the integration and explains how to perform the various tasks available with the integration.

The VantagePoint Operation Integration Administrator's Guide is available as a PDF file on the HP OpenView Service Desk 4.0 CD-ROM. The file name is `VPO_Integration_AG.pdf`.

- The *HP OpenView Service Desk: Migration Guide* provides a detailed

overview of the migration from ITSM 5.7 to Service Desk 4.0, to include an analysis of the differences in the two applications. Detailed instructions in this guide lead through the installation, configuration and other tasks required for a successful migration.

The Migration Guide is available as a PDF file on the HP OpenView Service Desk 4.0 CD-ROM. The file name is `Migration_Guide.pdf`.

- The *HP OpenView Service Desk: API Programmer's Guide* contains information that will help you create customized integrations with Service Desk. This guide depicts the API structure, and explains some of the basic functions with examples for using the Application Programming Interface (API) provided with Service Desk. The API extends the HP OpenView Service Desk environment by providing independent programmatic access to data-centered functionality in the Service Desk application server environment.

The API Guide is available as a PDF file on the HP OpenView Service Desk 4.0 CD-ROM. The file name is `API_pg.pdf`.

- The *HP OpenView Service Desk: Web API Programmer's Guide* contains information that will help you create customized integrations with Service Desk using the Service Desk Web API. This API is particularly suited for developing Web applications.

The Web API Programmer's Guide is available as a PDF file on the HP OpenView Service Desk 4.0 CD-ROM. The file name is `Web_API_pg.pdf`.

- The *HP OpenView Service Desk: Data Dictionary* contains helpful information about the structure of the application.

The Data Dictionary is available as an HTML file on the HP OpenView Service Desk 4.0 CD-ROM. The file name is `Data_Dictionary.htm`.

- The *HP OpenView Service Desk 4.0 Computer Based Training (CBT)* CD-ROM is intended to assist you in learning about the functionality of HP OpenView Service Desk 4.0 from both a user and a system administrator perspective. The CD-ROM contains demonstration videos and accompanying texts that explain and show how to perform a wide variety of tasks within the application. The CBT also explains the basic concepts of the Service Desk application.

The *HP OpenView Service Desk 4.0 Computer Based Training (CBT)* CD-ROM will be shipped automatically with the regular Service Desk software. The CBT will be available for shipment shortly after the

release of the Service Desk software.

- The online help is an extensive information system providing:
  - procedural information to help you perform tasks, whether you are a novice or an experienced user;
  - background and overview information to help you improve your understanding of the underlying concepts and structure of Service Desk;
  - information about error messages that may appear when working with Service Desk, together with information on solving these errors;
  - help on help to learn more about the online help.

The online help is automatically installed as part of the Service Desk application and can be invoked from within Service Desk. See the following section entitled “Using the Online Help” for more information.



### **Reading PDF Files**

You can view and print the PDF files with Adobe® Acrobat® Reader. This software is included on the HP OpenView Service Desk 4.0 CD-ROM. For installation instructions, see the `readme.htm` file on the CD-ROM.

The latest version of Adobe Acrobat Reader is also freely available from Adobe’s Internet site at <http://www.adobe.com>.

### **Using the Online Help**

You can invoke help from within Service Desk in the following ways:

- To get help for the window or dialog box you are working in, do one of the following:
  - Press **F1**.
  - Click the help toolbar button .
  - Choose **Help** from the **Help** menu.
  - Click the help command button  in a dialog box.
- To search for help on a specific subject using the table of contents or the index of the help system: choose **Help Contents & Index** from the **Help** menu.



When you are in the help viewer, you can find help on how to use the help system itself by clicking the Help toolbar button:



Service Desk also provides *tooltips* and “What’s This?” help for screen items like buttons, boxes, and menus.

A *tooltip* is a short description of a screen item. To view a tooltip, rest the mouse pointer on the screen item. The tooltip will appear at the position of the mouse pointer.

“What’s This?” help is a brief explanation of how to use a screen item. “What’s This?” help generally gives more information than tooltips. To view “What’s This?” help:

1. First activate the “What’s This?” mouse pointer in one of the following ways:
  - Press **Shift+F1**.
  - Click the “What’s This?” toolbar button .
  - Choose What’s This? from the Help menu.
  - In dialog boxes, click the question mark button  in the title bar.

The mouse pointer changes to a “What’s This?” mouse pointer .

2. Then click the screen item for which you want information. The “What’s This?” help information appears in a pop-up window.

To close the pop-up window, click anywhere on the screen or press any key on your keyboard.

## Typographic Conventions

The table below illustrates the typographic conventions used in this guide.

Font	What the Font Represents	Example
<i>Italic</i>	References to book titles  Emphasized text	See also the <i>HP OpenView Service Desk: Installation Guide</i> .  <i>Do not delete</i> the System user.
<b>Bold</b>	First-time use of a term that is explained in the glossary	The <b>service call</b> is the basis for incident registration.
Courier	Menu names  Menu commands  Button names  File names  Computer-generated output, such as command lines and program listings	You can adjust the data view with the commands in the <b>View</b> menu.  Choose <b>Save</b> from the menu.  Click <b>Add</b> to open the Add Service Call dialog box.  To start the installation, double-click <b>setup.htm</b> .  If the system displays the text C:\>dir a: The device is not ready then check if the disk is placed in the disk drive.
<b>Courier bold</b>	User input: text that you must enter in a box or after a command line	If the service call must be solved within 30 minutes, enter <b>30</b> .
<i>Courier italic</i>	Replaceable text: text that you must replace by the text that is appropriate for your situation	Go to the folder X:\Setup, where X is your CD-ROM drive.
<b>Helvetica bold</b>	Keyboard keys  A plus sign (+) means you must press the first key ( <b>Ctrl</b> in the example), hold it, and then press the second key ( <b>F1</b> in the example).	Press <b>Ctrl+F1</b> .

## **We Welcome Your Comments!**

Your comments and suggestions help us understand your needs, and better meet them. We are interested in what you think of this manual and invite you to alert us to problems or suggest improvements. You can submit your comments through the Internet, using the HP OpenView Documentation Comments Web site at the following URL:

[http://ovweb.external.hp.com/lpe/comm\\_serv](http://ovweb.external.hp.com/lpe/comm_serv)

If you encounter errors that impair your ability to use the product, please contact the HP Response Center or your support representative.

The latest versions of OpenView product manuals, including Service Desk manuals, are available on the HP OpenView Manuals Web site at the following URL:

[http://ovweb.external.hp.com/lpe/doc\\_serv](http://ovweb.external.hp.com/lpe/doc_serv)

Software patches and documentation updates that occur after a product release, will be available on the HP OpenView Software Patches Web site at the following URL:

<http://support.openview.hp.com/cpe/patches>



---

# **1 Introduction**

This chapter describes the architecture and installation process of HP OpenView Service Desk. It also contains a list of files and their version numbers that will be installed when you install Service Desk.

## **Architecture**

HP OpenView Service Desk has a three-tier architecture, which means an architecture in which Service Desk is structured into three tiers or layers:

- database server
- application server
- client

Specific requirements apply to the server computers and client computers. Server computers and client computers are separate machines. The application server software, however, must be on a central computer that can be accessed by all client computers.

## The Installation Program

The basic Service Desk installation consists of two different programs:

- Server

This program installs software on a network server to enable the clients to access the data stored in the database. The server installation program consists of:

- the application server software. The application server monitors the application on the client PCs and assists the application where needed, for example in case of a version update or while communicating with the database.
- the database server software. This is where all data is stored. The database can be an Oracle® database or a Microsoft® SQL Server database.
- the client software, to test and configure the application server.

- Client

The client installation program installs the software required to work with Service Desk from a networked client PC.

## **The Installation Process**

The HP OpenView Service Desk installation process can be summarized into three successive stages:

1. The application installation program installs the Service Desk application server software and client software on the application server.
2. The database configuration program configures the database from the application server site.
3. On each client machine, the client installation program runs a setup program to install the client software.

## Files That Will Be Installed

The following list provides an overview of files that will be installed when you run the Service Desk installation program. It does not list all files that will be installed, but only those of which the version number is important. Some of these files may already have been installed on your computer before you installed HP OpenView Service Desk. If these are older versions, they will be replaced by the versions given below. If you have newer versions of any of these files on your machine, those files will not be overwritten by the installation program.

- Files installed in the %Windir%\system32 folder:
  - Application server (only if integrations installed):
    - msvc60.dll version 6.0.8168.0
    - mfc42.dll version 6.0.8665.0
    - msvcrt.dll version 6.1.8637.0
  - All configurations (application server and client):
    - msvbvm60.dll version 6.0.88.77
    - hhctrl.ocx version 4.74.8793.0
    - itircl.dll version 4.72.7277.0
    - itss.dll version 4.72.8085.0
    - hh.exe version 4.74.8793.0
- Files installed to the %CommonFiles% folder with their own subfolder:
  - OCX Control ChartFX98:
    - cfx4032.ocx version 4.0.21.0
    - cfx4data.dll version 1.0.7.0
    - sfxbar.dll version 1.0.15.1
  - OCX Control GridEx:
    - GridEX20.ocx version 2.0.0.2193
    - Grid20Fix.dll version 1.0.0.0
  - OCX Control SSTBars:
    - sstbars2.ocx version 2.0.3.6
  - OCX Control SupraSoft:
    - Psuite.ocx version 1.7.1.0

## **Windows Startup Account Authorization**

It is important that the Windows (2000 or NT) account that starts up the HP OpenView Service Desk Service has access rights to all servers, drives, and folders that Service Desk may need to use.

If the startup account does not have sufficient rights, some of the functionality of Service Desk may not be available. For example, one feature of Service Desk is that it can be set up to automatically create a service call when it receives an e-mail from a customer, and include it with the service call as an attachment. However, e-mail messages are stored in a specified attachments folder (sometimes on a dedicated file server). If the startup account does not have access rights to this folder a service call is not created and the e-mail message is not stored.

Ensuring that the startup account has sufficient access right is also relevant when making database dumps to shared drives, the startup account must have access to the shared drive.

When Service Desk was installed the default startup account for the service was set as the system account.

To check or change the start up account:

1. From the Windows Start menu choose Settings.
2. Select Control Panel from the Settings submenu. The Control Panel dialog box will be displayed.
3. Double-click on the Services icon in the Control Panel dialog box. The Services dialog box will be displayed.
4. In the Services dialog box select HP OpenView Service Desk Service 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 radio button and enter the account name and password.

---

### **NOTE**

Regardless of which account you choose to set as the startup account, it is recommended that you switch of the password expiry period.

---

---

---

## **2**

# **Preparing for Installation**

This chapter explains how to find information about the system requirements and supported platforms for Service Desk. It also describes the main third-party products that need to be installed before installing HP OpenView Service Desk.

## **Requirements**

This section lists the minimum hardware requirements for each of the components of Service Desk 4.0. For software requirements, please refer to the *HP OpenView Service Desk: Supported Platforms List*. You can find this document on the HP OpenView Service Desk 4.0 CD-ROM, under the file name `\Doc\Supported_Platforms_List.htm`.

### **Service Desk Client**

- Processor: Intel® Pentium® 166 MHz (200 MHz or higher recommended)
- Memory: 64 MB RAM (128 MB or higher recommended)
- Disk space: 55 MB
- Display: 800 x 600 resolution, 256 colors (1024 x 768 resolution, high color or higher recommended)
- Network connection: TCP/IP, 28.8 K (56 K or higher recommended)

### **Service Desk Application Server**

- Processor: Intel Pentium 350 MHz (700 MHz or higher recommended)
- Memory: 256 MB RAM
- Disk space: 80 MB
- Network connection: TCP/IP, 10 Mb/s

### **Service Desk Database Server**

- Network connection: TCP/IP, 10 Mb/s

### **Service Desk Service Pages Client**

- Processor: Intel Pentium 90 MHz (166 MHz or higher recommended)
- Memory: 32 MB RAM
- Display: 800 x 600 resolution, 256-colors (1024 x 768 resolution, high



color or higher recommended)

- Network connection: TCP/IP, 28.8 K (56 K or higher recommended)

### **Service Desk Service Pages Web Server**

- Memory: 128 MB RAM (256 MB or higher recommended)
- Disk space: 2 MB
- Network connection: TCP/IP, 10 Mb/s

### **Service Desk Event Communicator**

#### **Service Desk Agent**

- Disk space: 200 KB on Windows® platforms or 20 MB on UNIX® platforms
- Network connection: TCP/IP, 28.8 K

#### **Service Desk Service Event**

- Disk space: 2 MB on Windows platforms or 200 KB on UNIX platforms
- Network connection: TCP/IP, 28.8 K

## **Setting up the Oracle Database**

To create an Oracle database, please consult your Oracle documentation.

To set up your Oracle database for use with Service Desk 4.0, run the Service Desk application server installation program, this includes the Configuration Wizard. Use the wizard to configure the database, and create table spaces and users.

Alternatively, you can create the tablespaces and users yourself before installation, in which case you will use the Configuration Wizard during installation but will skip some screens described there. If you create the tablespaces and users before installation, follow the guidelines below:

1. Verify that the available space in the table spaces is at least 50 MB.
2. Create at least one database user. Two database users (`service_desk` and `service_desk_repo`), may increase performance on large systems. The names of these users are not case-sensitive.
3. We recommend the following minimum settings:
  - `db_block_size`: 8 KB
  - `shared_pool_size`: 20 MB
  - `db_file_multiblock_read_count`: 16-32
  - `db_block_buffers`: 550
  - `processes`: 100
  - `dml_locks`: 200
  - `log_buffer`: 32768

### **Oracle Settings**

If you want to use the Euro sign in your database, the server and the clients must use the same code page. The database character set must be WE8ISO8859P15. Not all versions of Oracle Server support the Euro sign; for more information see “Requirements” on page 32.

If you intend to use Service Desk with multiple languages, or to use a none western character set, you should set your Oracle database to use the Unicode UTF8 character set.

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 use statistics (and therefore it is not

rule-based), some functions of Service Desk may take 20 to 50 times longer than normal. See your Oracle documentation for information about setting rule-based optimization.

### **Before Installing Service Desk**

After an Oracle database has been installed on a database server using a Windows operating system, the server must be rebooted before Service Desk is installed. With the exception of the database server itself, all machines where the Service Desk application server is going to be installed must have an Oracle NET8 client installed and must also be rebooted before the Service Desk installation.

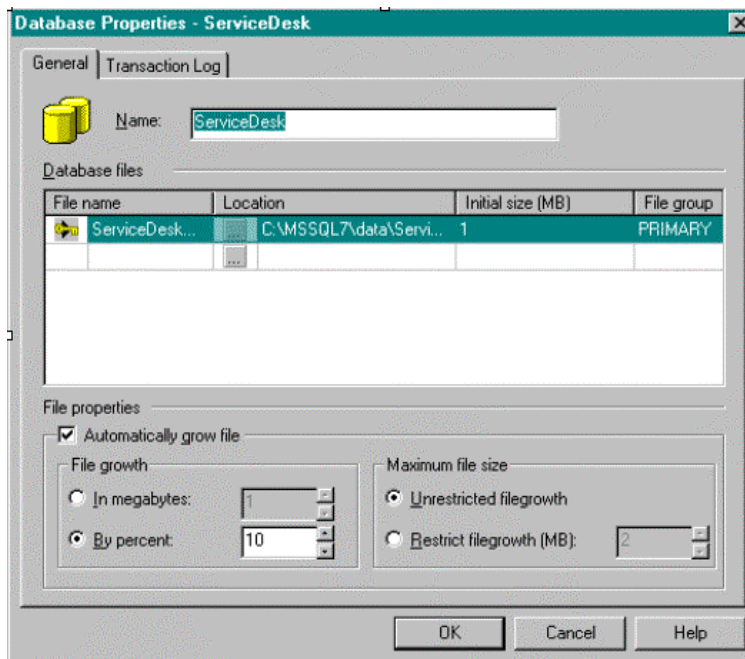
## Setting up SQL Server

To install SQL Server, please consult your SQL Server documentation.

The following procedure is optional, as the Configuration Wizard will configure the database. If you choose to create a SQL Server Database manually, you will need at least 50 MB free space in the file system where SQL Server is located. To create a SQL Server database, do the following:

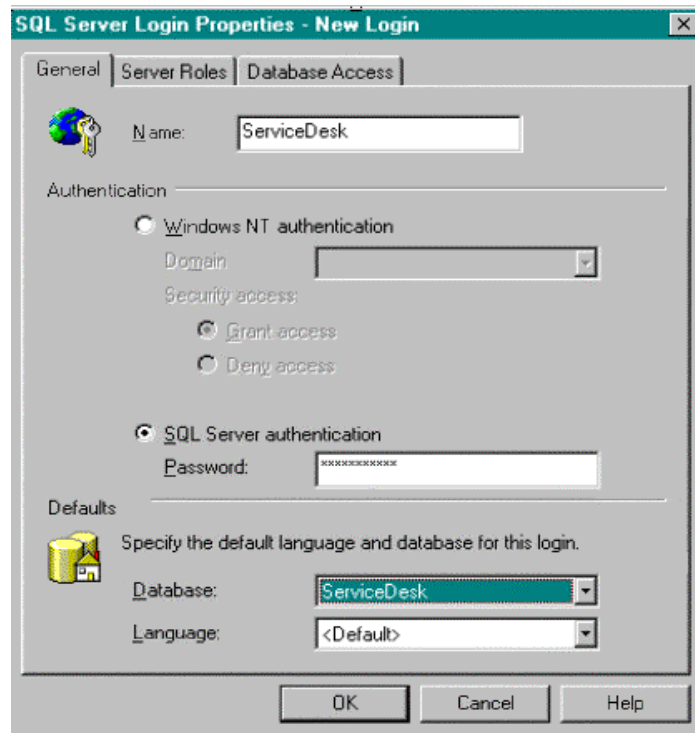
1. Start SQL Server Enterprise Manager. Connect as a user with access to the System Administrator role.
2. Select the server where you want to install the Service Desk database. Click the plus sign to expand this server.
3. Create the database by right-clicking Databases. Select New Database. The Database Properties dialog box appears:

**Figure 2-1 Database Properties dialog box**



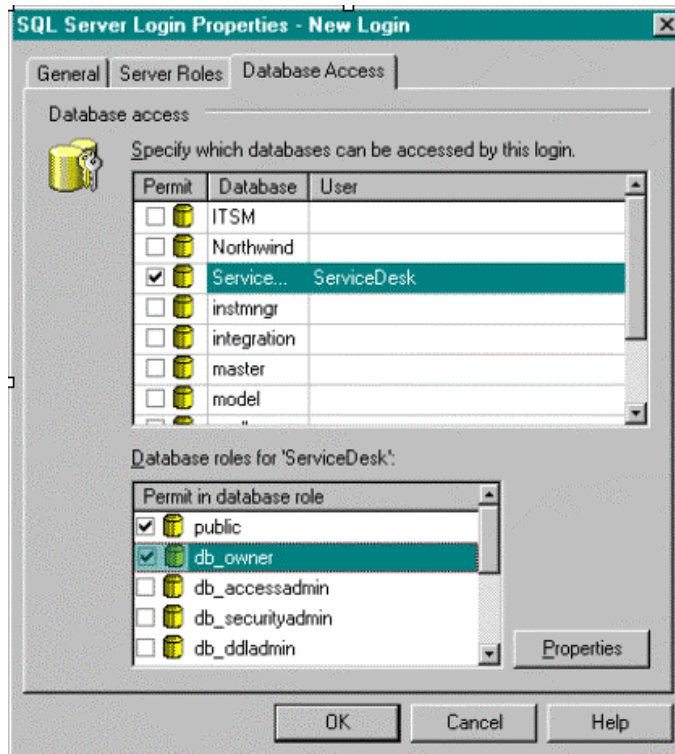
- In the Database Properties dialog box, enter:  
Name: **ServiceDesk**.  
Accept the default for other options. Click **OK**.
- Create a SQL Server Login by navigating to **Security**. Right-click **Logins** and choose **New Login**. The SQL Server Login Properties dialog box appears:

**Figure 2-2 SQL Server Login Properties - New Login dialog box**



- In the SQL Server Login Properties dialog box, enter:  
Name: **ServiceDesk**  
Select **SQL Server authentication**.  
Password: enter a password  
Default database: Select **ServiceDesk** from the list box.  
Language: Accept default  
*Do not click OK yet!*
- Select the **Database Access** tab.

**Figure 2-3 Database Access tab page**



8. On the Database Access tab page, select the ServiceDesk database. Select the Permit check box. Select the db\_owner database role for the ServiceDesk database. Click OK.  
You have now created your SQL Server database.

The Service Desk database objects are created via the Service Desk installation program.

---

**NOTE**

For Euro sign support in SQL Server Engine, select one of the following code pages: 1252/ISO (default); CP1250;CP1251; CP1253; CP1254; cp1255; CP1256; CP1257.

Not all versions of SQL Server have sort order definitions that include the Euro symbol; for more information see “Requirements” on page 32.

---

## **Microsoft Java Virtual Machine**

Install the Microsoft Java Virtual Machine on both the client and application server machines before you start installing HP OpenView Service Desk. This is recommended as the Service Desk installation program uses the virtual machine during installation. The installation program will automatically install virtual machine if it finds an older version. After the virtual machine is installed the system must be rebooted, and the installation program started again. Installing the virtual machine first avoids this reboot. If the installation program finds a later version of the virtual machine, the version on the CD-ROM is not installed.

The Virtual Machine software is included on the HP OpenView Service Desk CD-ROM. After installing the Virtual Machine, you can start the installation of HP OpenView Service Desk.

### **Installing Microsoft Java Virtual Machine**

To install Microsoft Java Virtual Machine directly onto your computer's hard disk, perform the following actions:

1. Insert the HP OpenView Service Desk CD-ROM; automatically the start screen appears. On the start screen, click `Install VM` for the platform you are using:

Preparing for Installation  
**Microsoft Java Virtual Machine**

**Figure 2-4**      **Start screen**



---

**NOTE**

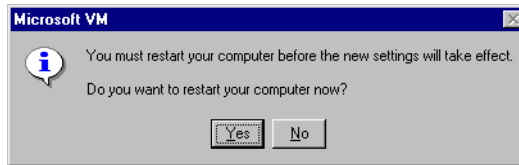
---

If the start screen does not appear automatically, insert the CD-ROM and double-click `setup.exe` in the root of the CD-ROM drive.

2. Next, a screen pops up with the question **Would you like to install the Microsoft VM?** Click **Yes to install**.
3. The **Microsoft VM License Agreement** dialog box will be displayed. Read the agreement carefully, and click **Yes** to start the installation if you agree to all license terms. If you click **No**, the installation of the Virtual Machine will not start, and you will not be able to run Service Desk later.
4. After you click **Yes**, the installation program will start extracting files. A progress monitor will show the status of the installation.
5. A dialog box will inform you the installation is complete. Click **OK**.
6. Next, a dialog box appears giving you the option to restart your computer:



**Figure 2-5 Restart Virtual Machine**



Click **Yes**. Your computer will be shut down and restarted, and Microsoft Java Virtual Machine will be installed.

---

**NOTE**

For guidelines on the installation of the database and application servers, see “Application Server Installation and Database Configuration” on page 45; for guidelines on the client installation, see “Client Installation” on page 81.

---

## **Other Third-Party Software**

We recommend that you install the following third party software on the machine where you intend to install the application server software, before commencing the installation. Both the application server and client installations verify whether these programs are already installed, and if they are not they will proceed to install them. In the case of the Microsoft Data Access components you must reboot the machine before carrying on with the application server installation.

All these programs are supplied on the Service Desk 4.0 installation CD. To install any one of them click the `Browse CD` button on the Service Desk Start Screen, navigate to the folder for each program and double-click the installation file named below. An install wizard will guide you through the installation, accept the defaults unless you have good reason to use your own settings.

### **Java Runtime Environment**

`\Tools\Java Runtime Environments\j2re1-1_3_0-win-i.exe`

### **Microsoft Data Access components**

`\Tools\ADODB\mdac_typ.exe`

---

#### **NOTE**

You will need to reboot the machine after installing the MS Data Access components.

---

### **Adobe Acrobat Reader 4 (English)**

`\Tools\Acrobat reader\<language>` Double-click on the exe file for the language you want to use.

---

---

# 3

## **Installing the Application Server**

This chapter describes the tasks you must perform during the installation of HP OpenView Service Desk application server.

Before installing Service Desk, check the `Readme.htm` file on the Service Desk installation CD for any issues regarding the installation procedures that may have arisen after this documentation was completed. To open the `Readme` file choose `View Readme` from the Service Desk installation start screen.

---

**NOTE**

If a stand-alone Service Pages or Service Desk Agent installation already exists on the machine where you plan to install the Service Desk application server, remove it before starting the installation. If you require either of these services to be installed on the machine, ensure that you specify Shared Installation when you reinstall them after the Service Desk installation. For more information on installing Service Pages see “Installing Service Pages on Windows 2000 or Windows NT” on page 94, and for the Service Desk Agent see “Service Desk Agent” on page 126.

---

## **Application Server Installation and Database Configuration**

### **Before Installing Service Desk**

Make sure a database is already installed, either on the machine where you want to install HP OpenView Service Desk, or on another accessible machine. See “Setting up the Oracle Database” on page 34 and “Setting up SQL Server” on page 36.

After an Oracle database has been installed the database server where Oracle has been installed must be rebooted. With the exception of the database server, all machines where the Service Desk application server is going to be installed must have an Oracle NET8 client installed and must also be rebooted before the Service Desk installation.

---

#### **NOTE**

When installing the application server software, ensure that the Services dialog box, in the Control Panel, is not open. If it is, the HP OpenView Service Desk Service will not be created. The only way to rectify this is to reinstall the service.

---

### **Installing Service Desk**

To install software on a Windows NT or Windows 2000 computer, you must be logged in to an account with 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.

When any part Service Desk is being installed, the installation program checks the regional setting properties set in the Windows NT or 2000 general settings, and sets the language for the installation wizard accordingly.

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

## Application Server Installation and Database Configuration

You can also start the installation by double-clicking the file `Setup.html` in the `HTML Setup` folder, and then selecting the `Installation Program` link on the Web page that is displayed. This file can also be used with the methods described above.

---

### NOTE

When you install the application server software a copy of the Client software is automatically installed on the server for Service Desk systems administration. This client installation has a default systems administrator account with the user name 'system' and password 'servicedesk'. Do not install another copy of the client software on the server as this may cause the system to become unusable.

---

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

1. Insert the HP OpenView Service Desk 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 Desk`:

**Figure 3-1 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 for the folder you want to install and run `startinstallation.exe`. Alternatively, you can use `java.exe -cp . setup`; note, however, that this will only install Service Desk and not any of the third-party software supplied with Service Desk; these must be installed separately.

---

2. In the following screen click `Install Server`:

**Figure 3-2** Install Service Desk Application Server



---

**NOTE**

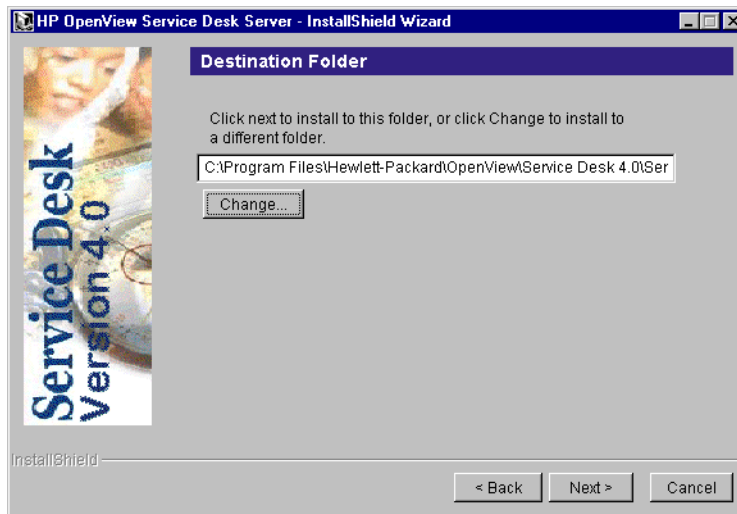
The program will verify whether certain programs are installed; if they are not, the installation program will install them at this point. These programs are: Java Runtime Environment, the correct Microsoft Virtual Machine version, Microsoft Data Access components, HTML Help update, Adobe Acrobat Reader 4. Accept the defaults as they install.

---

## Application Server Installation and Database Configuration

3. The setup file is downloaded, then the Welcome screen for the Server InstallShield Wizard appears. Click **Next** to continue, or **Cancel** to abort the installation.
4. If you clicked **Next**, the License Agreement dialog box appears. To proceed, you must select **I Accept all terms of the license agreement** and then click **Next**. By doing so, you agree to all license terms, so read the agreement carefully.
5. Next, the Destination Folder dialog box appears. Here you must enter the folder where the Service Desk 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 3-3** Server Destination Folder dialog box



6. If the folder did not already exist, a Confirm dialog box will appear asking if you want to create it now. Select **Next** to continue or **Back** to go to the previous screen and change the destination folder.
7. The Server Ready to Install dialog box shows the items that will be installed. Select **Install Now** to continue or **Back** to return to the previous dialog boxes and make changes:



**Figure 3-4** Server Ready to Install dialog box



---

**NOTE**

If the installation program finds an existing copy of Service Desk, a dialog box will be displayed asking if you want to continue. Click **Yes**, and then uninstall the old version once the installation of Service Desk 4.0 is complete. This is preferable to uninstalling the old version first because this way the Service Desk account and other details are copied from the old to the new installations.

- 
8. When all files are installed, the Installation Summary screen will appear. Click **Exit** to leave the installation program:

Installing the Application Server  
**Application Server Installation and Database Configuration**

**Figure 3-5**      **Server Installation Summary dialog box**

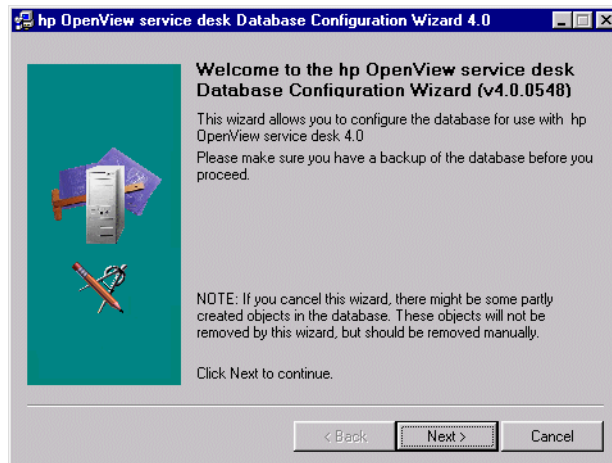


## SQL Server Database Configuration Wizard

From the Start button select Programs, then HP OpenView Service Desk 4.0, and then click HP OpenView Service Desk Database Configuration Wizard.

1. The Database Configuration Wizard will start. Click Next to begin:

**Figure 3-6 Database Configuration Wizard**



2. The following dialog box will appear. You are given two options, to create a new database or to upgrade the existing database.

If you select New Database click Next to carry on with step 3. If you select Upgrade Existing Database click Next to carry on with "Upgrading the Database from the Database Wizard" on page 148:

**Figure 3-7** **Create New or Upgrade Database dialog box**



3. A dialog box will appear. If you want to create a new database user, click **Yes** and skip to step 5. If you have already created a database user, click **No** and continue:

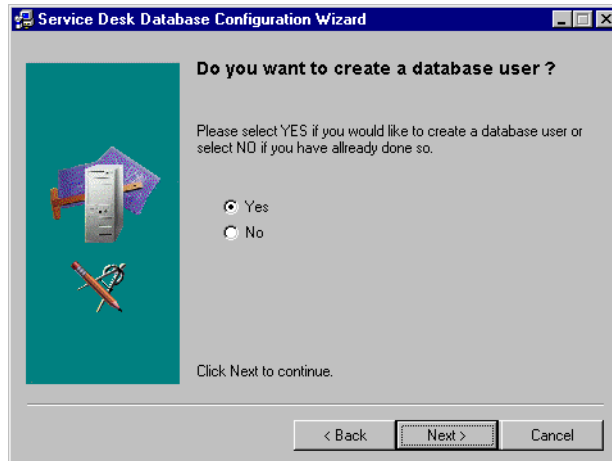
---

**NOTE**

If you select **No**, you must have already added a database account for Service Desk manually, this can be done following the procedure “Adding Accounts” on page 142, and changing step 4 to **Database** tab before running the Database Configuration Wizard.

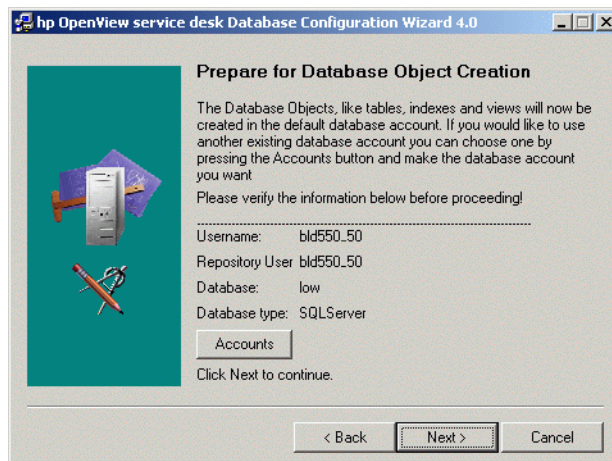
---

**Figure 3-8** Create Database User dialog box



4. If you selected **No** in the Create Database User dialog box the Prepare for Database Object Creation dialog box is displayed. When you click **Next** the database objects are created based on the parameters defined when the database user was created. Skip to Step 11 to continue:

**Figure 3-9** Prepare for Database Object Creation dialog box



5. In the Choose Database type dialog box, select the **SQL Server** database option, and click **Next**:

## Installing the Application Server

### Application Server Installation and Database Configuration

**Figure 3-10** Choose Database type dialog box



6. In the Administrator Account dialog box enter your database administrator name and password for the database, and the database name. Enter **Local** in the Database field if the database is located on the machine you are working on. Click **Next** to continue:

**Figure 3-11** Administrator Account dialog box



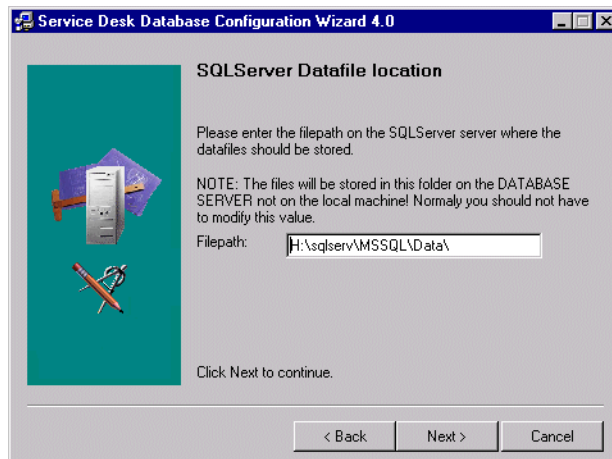
7. To create a SQL Server user account, enter a SQL Server user name and password of your choice:

**Figure 3-12** SQL Server user account dialog box



8. The SQL Server Datafile location dialog box appears. The configuration wizard searches for the location of the Datafiles. You should accept this path unless you know for certain that the datafiles are stored in another location. Click **Next** to continue:

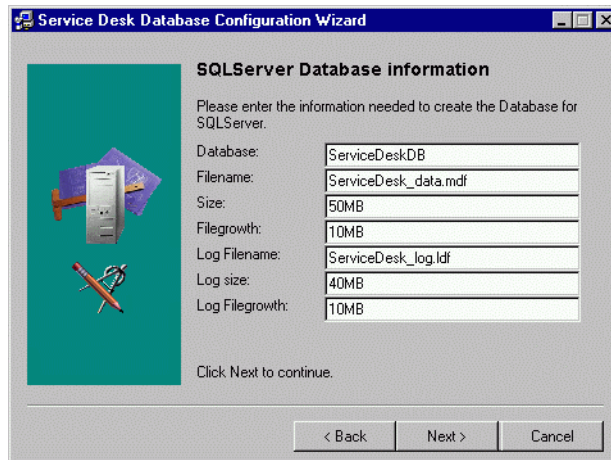
**Figure 3-13** SQL Server Datafile location dialog box



9. The SQL Server Database information dialog box will appear. Change the information as necessary, but do not use names with spaces and dots. Click **Next** to continue:

Installing the Application Server  
**Application Server Installation and Database Configuration**

**Figure 3-14 SQL Server Database information dialog box**



10. A dialog box will appear informing you that the database user is being created. When the creation is complete the text will change to `User created`. Click `Next` to continue:

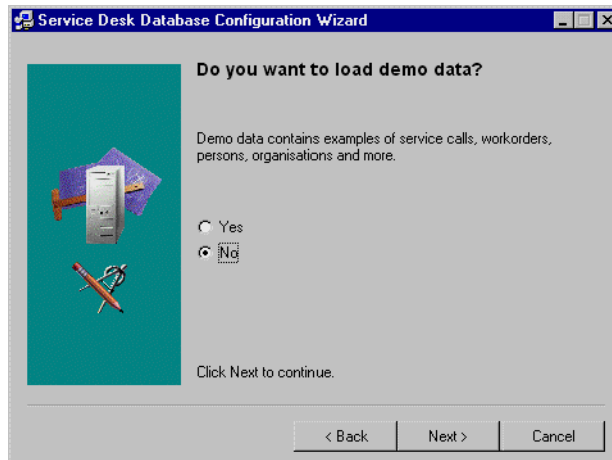
**Figure 3-15 SQL Server User Created dialog box**



11. The Load Demo Data dialog box will appear. If you want to load demo data click `Yes`, if not click `No` and then `Next` to continue. The demo database includes dummy entries for Service Desk entities; these illustrate what kind of data is entered in Service Desk dialog boxes:



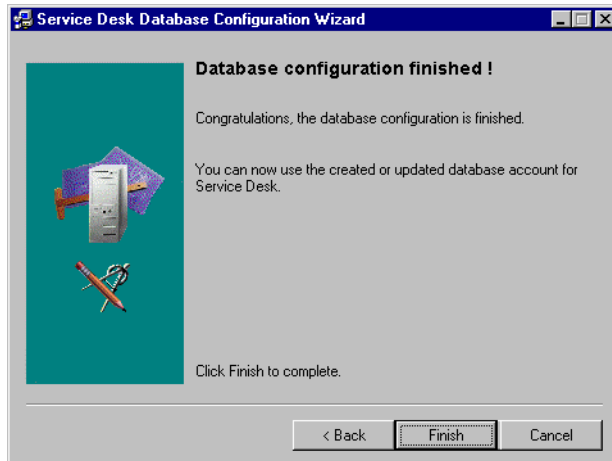
**Figure 3-16** Load Demo Data dialog box



12. A dialog box will appear with the question Do you want to run the Database objects creation now? Click Yes or No. If you selected Yes, a dialog box will tell you that the database objects were created. Click OK, then click Next after reviewing the Database Object Creation Summary dialog box.
13. A dialog box is displayed asking Do you want to create database accounts for Service Desk and restart the Application Server? Click Yes or No.
14. A dialog box is displayed asking Do you want to read the log file now? Click Yes or No.
15. The Database configuration finished dialog box will appear after the configuration is completed. Click Finish to leave the configuration wizard.

Installing the Application Server  
**Application Server Installation and Database Configuration**

**Figure 3-17 Database Configuration Wizard**

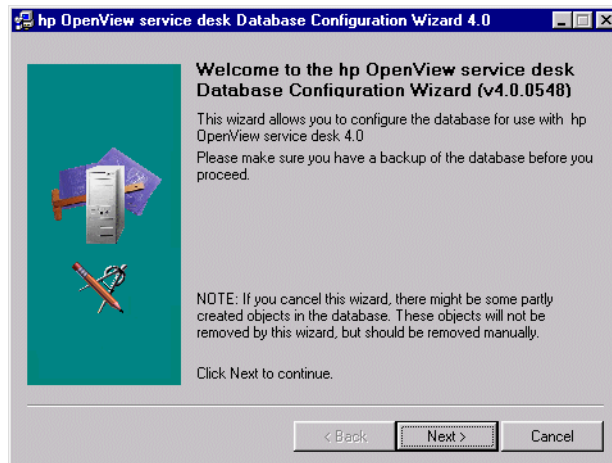


## Oracle Database Configuration Wizard

From the Start button select Programs, then HP OpenView Service Desk 4.0, and then click HP OpenView Service Desk Database Configuration Wizard.

1. The Database Configuration Wizard will start. Click Next to begin:

**Figure 3-18 Database Configuration Wizard**



2. The following dialog box will appear. You are given two options, to create a new database or to upgrade the existing database.

If you select New Database click Next to carry on with step 3. If you select Upgrade Existing Database click Next to carry on with "Upgrading the Database from the Database Wizard" on page 148:

Installing the Application Server  
**Application Server Installation and Database Configuration**

**Figure 3-19** Create New or Upgrade Database dialog box



3. A dialog box will appear. If you want to create a new database user, click **Yes** and skip to step 5. If you have already created a database user, click **No** and continue:

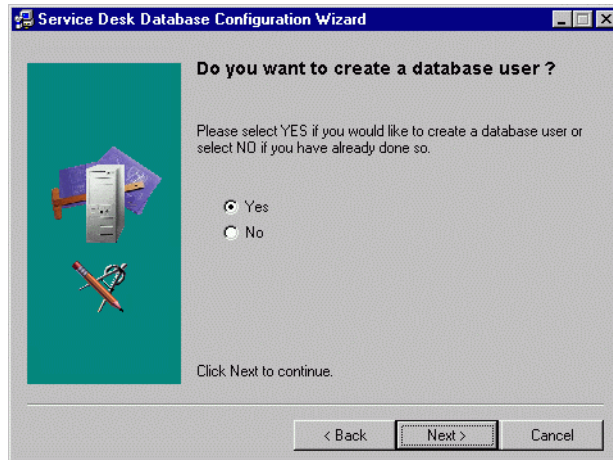
---

**NOTE**

If you select **No**, you must have manually added a database account for Service Desk already, this can be done following the procedure “Adding Accounts” on page 142, and changing step 4 to **Database** tab before running the Database Configuration Wizard.

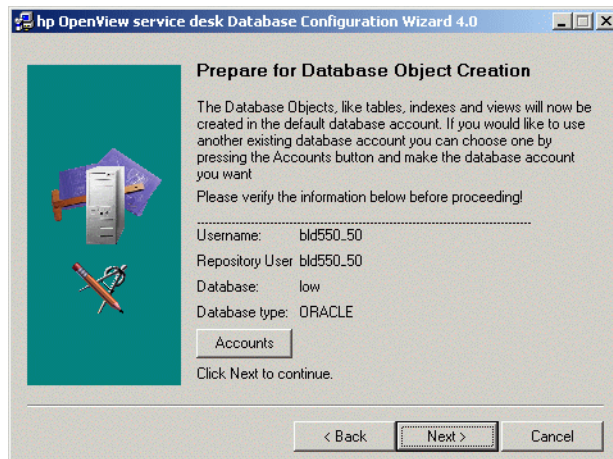
---

**Figure 3-20 Create Database User dialog box**



4. If you selected **No** in the **Create Database User** dialog box the **Prepare for Database Object Creation** dialog box is displayed. When you click **Next** the database objects are created based on the parameters defined when the database user was created. Skip to Step 26 to continue:

**Figure 3-21 Prepare for Database Object Creation dialog box**



5. In the **Choose Database type** dialog box, select the **Oracle** database option;

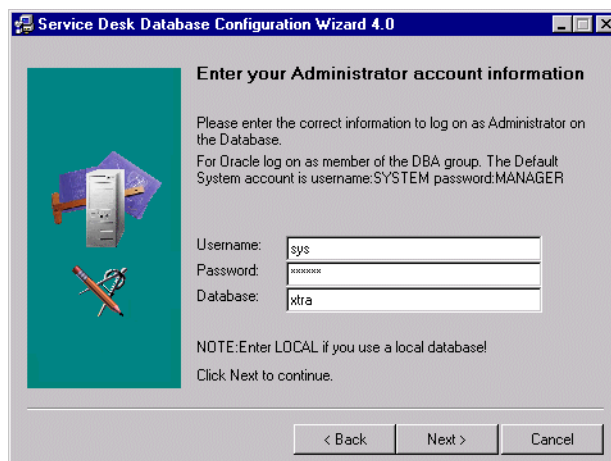
Installing the Application Server  
**Application Server Installation and Database Configuration**

**Figure 3-22 Choose Database type dialog box**



6. In the Administrator Account dialog box enter your database administrator name, password, and the database name. The administrator name must be a member of the DBA group. Enter LOCAL in the Database field if the database is located on the machine you are working on:

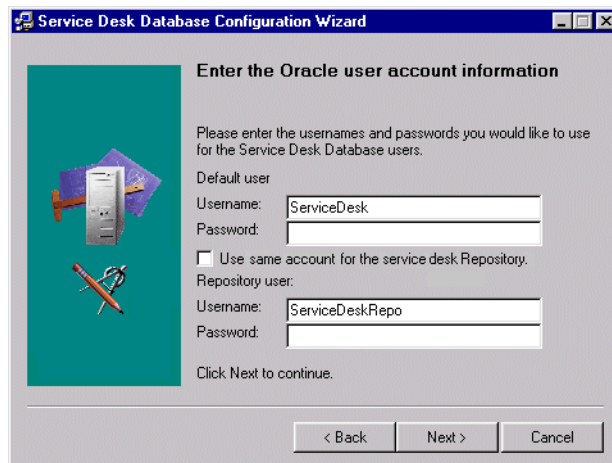
**Figure 3-23 Administrator Account dialog box**



7. 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** checkbox. 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:

**Figure 3-24 Oracle user account dialog box**



8. In the Create datafiles and tablespaces dialog box, select **Yes** if you want to define your own datafile and tablespace sizes and continue with step 9. Select **No** if you want to use existing datafiles and tablespaces and continue with step 17:

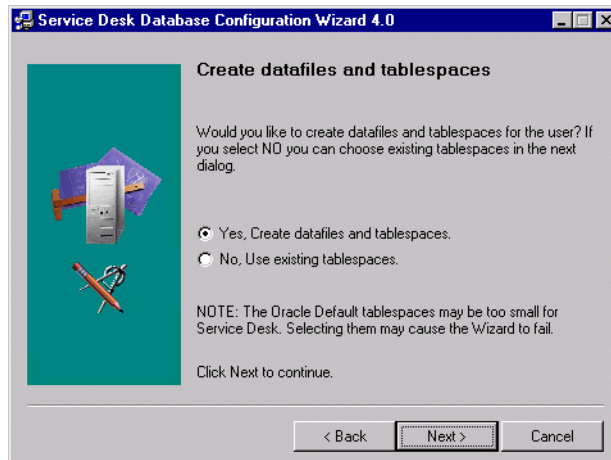
---

**NOTE**

If you select **No** you will only be able to select datafiles and tablespaces that have been created previously. If you then select the defaults provided with Oracle, the install may fail as these files may be too small to run Service Desk.

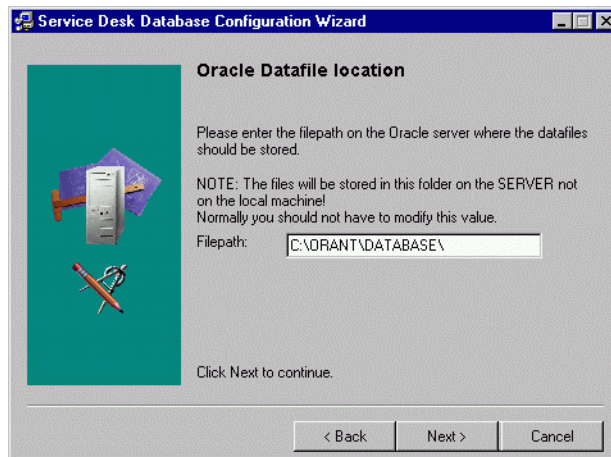
---

**Figure 3-25 Create datafiles and tablespaces dialog box**



9. The Oracle Datafile location dialog box appears. The configuration wizard searches for and locates the location of the Datafiles. You should accept this path unless you know for certain that the datafiles are stored in another location. Click `Next` to continue:

**Figure 3-26 Oracle Datafile location dialog box**

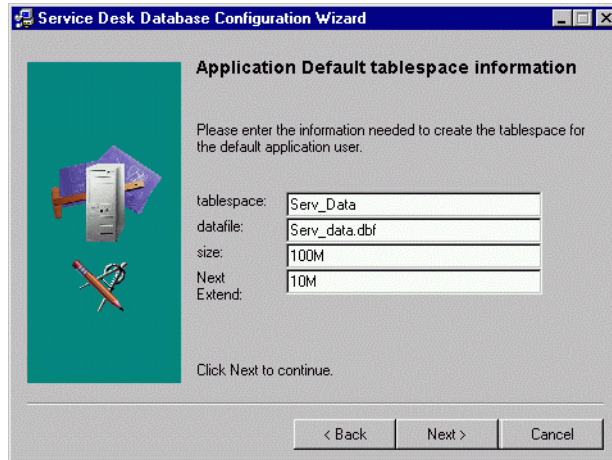


10. The Application Default tablespace information dialog box will appear. Change the information as necessary. Names with spaces and dots should not be used, and click `Next` to continue (if you selected on



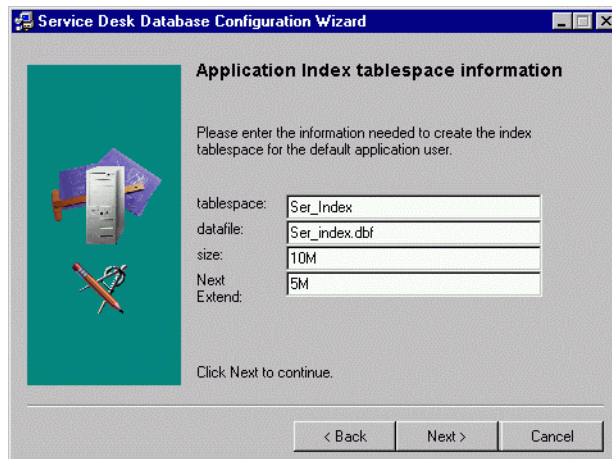
one Oracle user skip the next step):

**Figure 3-27 Application Default tablespace information dialog box**



11. The Application Index tablespace information dialog box will appear. Change the information as necessary. Names with spaces and dots should not be used, and click `Next` to continue (if you selected on one Oracle user skip the next step):

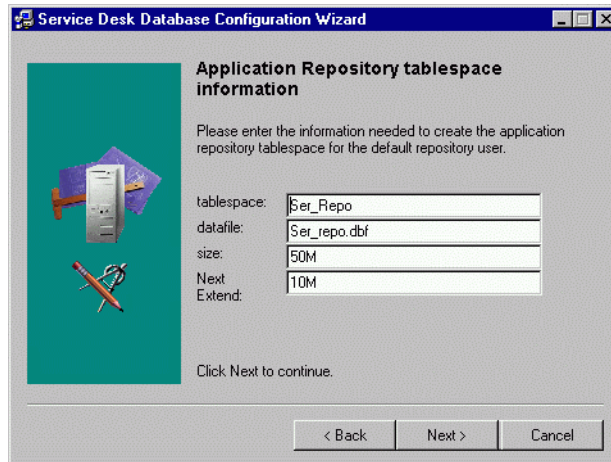
**Figure 3-28 Application Index Tablespace information dialog box**



12. If you selected two Oracle users the Application Repository tablespace

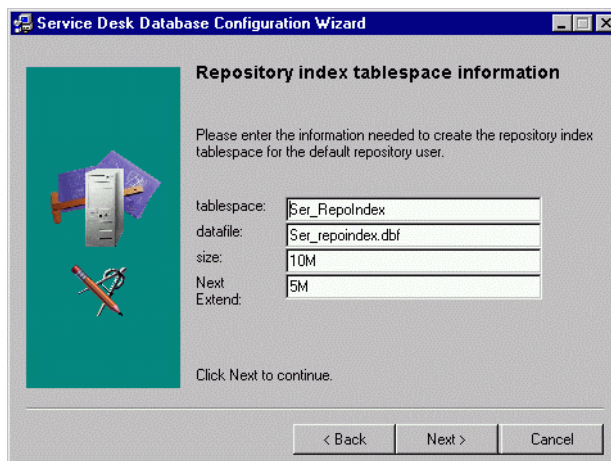
information dialog box will appear. Change the information as necessary. Names with spaces and dots should not be used, and click **Next** to continue:

**Figure 3-29 Application Repository tablespace information dialog box**



13. If you selected two Oracle users the Repository Index tablespace information dialog box will appear. Change the information as necessary. Names with spaces and dots should not be used, and click **Next** to continue:

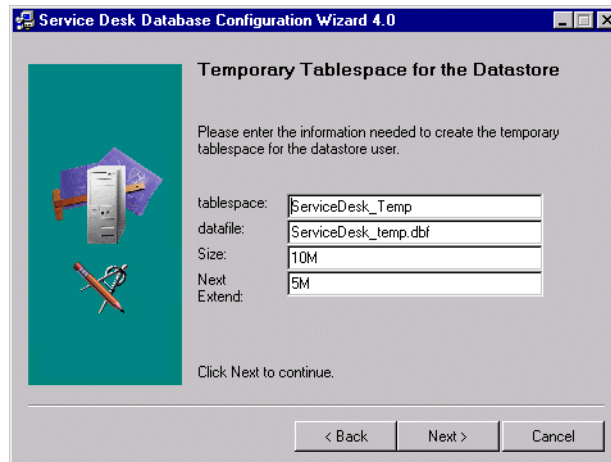
**Figure 3-30 Repository index tablespace information dialog box**



**Application Server Installation and Database Configuration**

14. The Temporary Tablespace for the Datastore dialog box appears. Change the information as necessary. Names with spaces and dots should not be used, and click **Next** to continue (if you selected one Oracle user skip the next step):

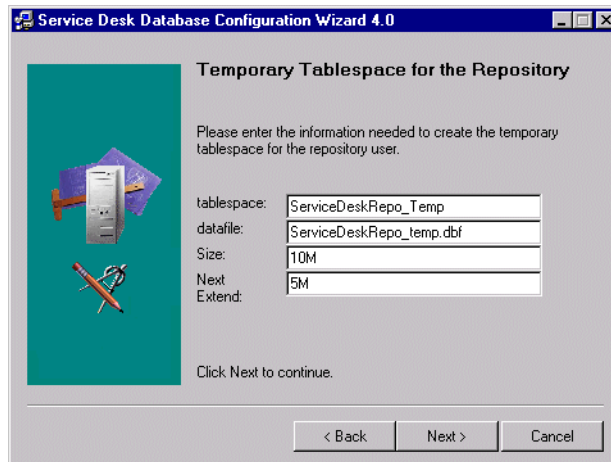
**Figure 3-31** Temporary Tablespace for the Datastore dialog box



15. If you selected two Oracle users the Temporary Tablespace for the Repository dialog box will appear, change the information as necessary, names with spaces and dots should not be used, and click **Next** to continue:

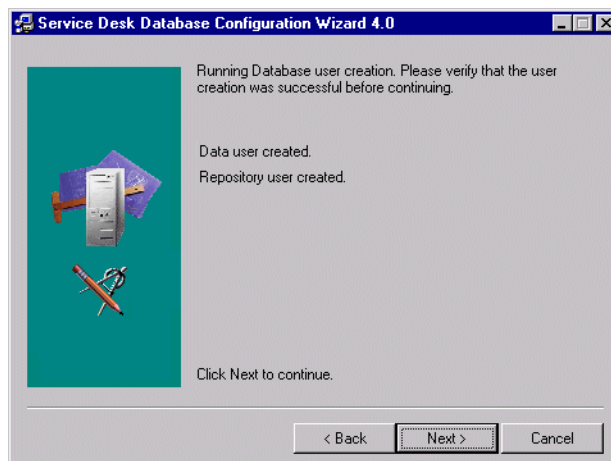
Installing the Application Server  
**Application Server Installation and Database Configuration**

**Figure 3-32 Temporary Tablespace for the Repository dialog box**



16. A dialog box will appear informing you that the database user is being created if you selected only one user, or both a database user and a repository user are being created if you selected two users. When the user creation is complete the text will change `User created`. Click `Next` to continue with the `Choose Expected Environment Size` dialog box, step 24:

**Figure 3-33 Oracle User Creation dialog box**

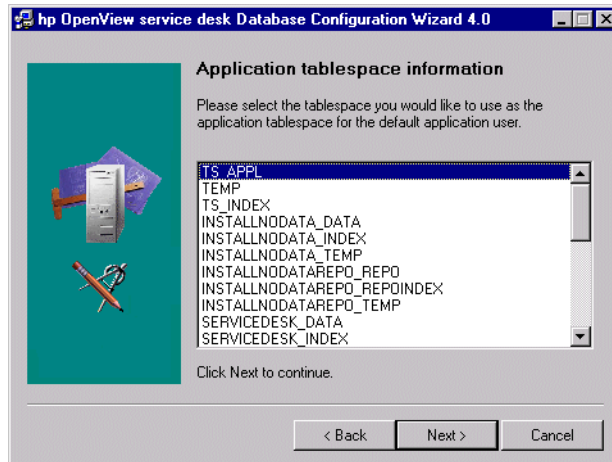


17. If you selected `No` in the `Create datafiles and tablespaces` dialog box in

**Application Server Installation and Database Configuration**

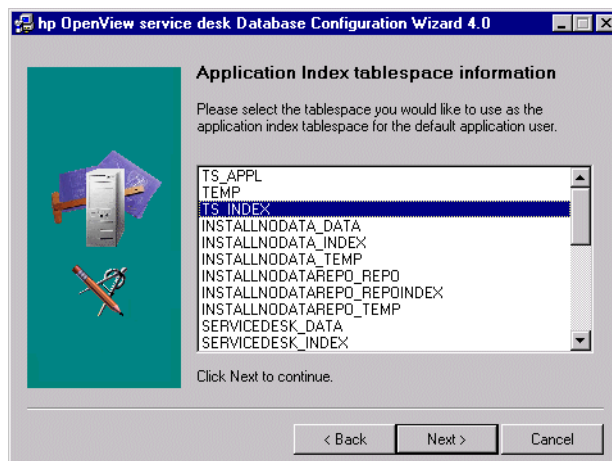
step 8, the Application tablespace information dialog box is displayed. This dialog box lists the existing tablespaces that can be used by the default application user. Select an option and click **Next** to continue:

**Figure 3-34 Application tablespace information dialog box**



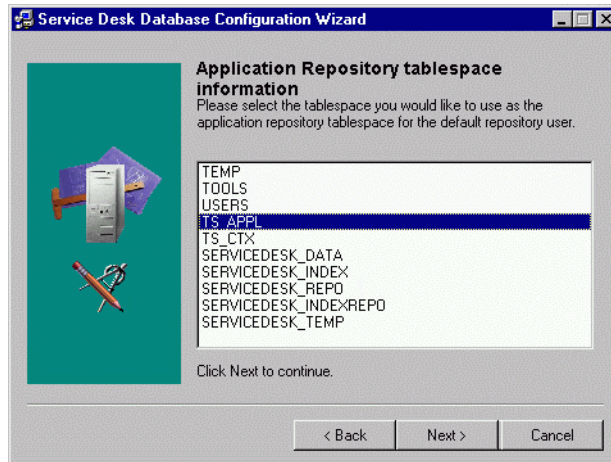
18. The Application Index tablespace information dialog box is displayed. This dialog box lists the existing tablespaces that can be used as the Index for the default application user. Select an option and click **Next** to continue:

**Figure 3-35 Application Index tablespace information dialog box**



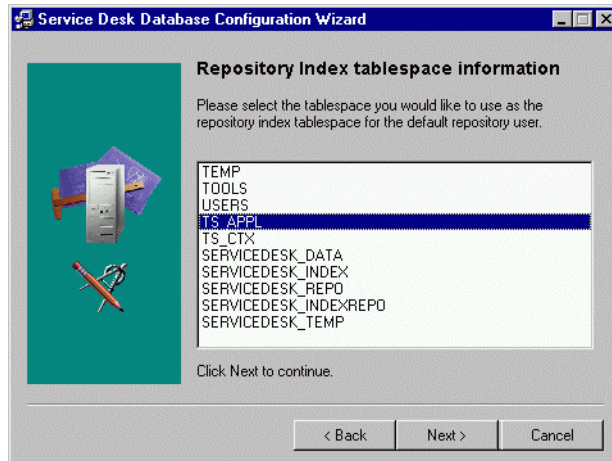
19. If you selected two Oracle users the Application Repository Default tablespace information dialog box is displayed, otherwise continue with step 21. This dialog box lists the existing tablespaces that can be used by the default repository user. Select an option and click **Next** to continue:

**Figure 3-36 Application Repository tablespace information dialog box**



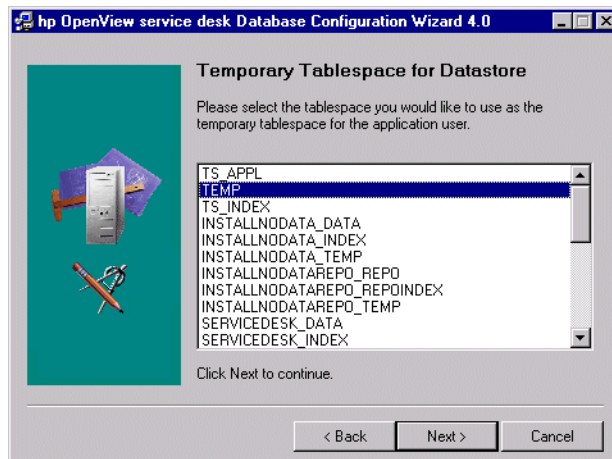
20. If you selected two Oracle users the Repository Index tablespace information dialog box is displayed. This dialog box lists the existing tablespaces that can be used as the Index for the default repository user. Select an option and click **Next** to continue:

**Figure 3-37** 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 3-38** Temporary Tablespace for the Datastore dialog box

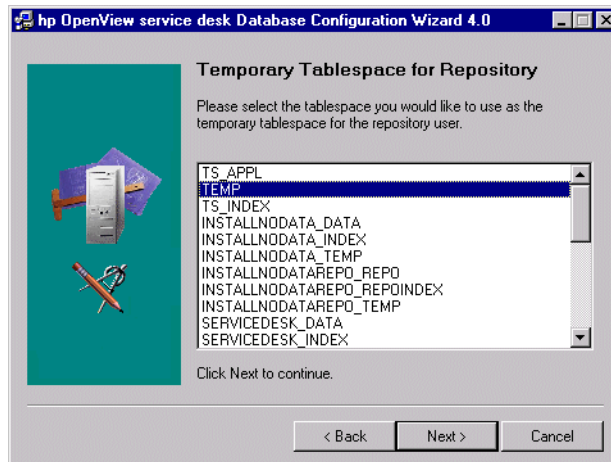


22. If you selected two Oracle users the Temporary Tablespace for the Repository dialog box is displayed. This dialog box lists the existing tablespaces that can be used as the Temporary tablespace for the



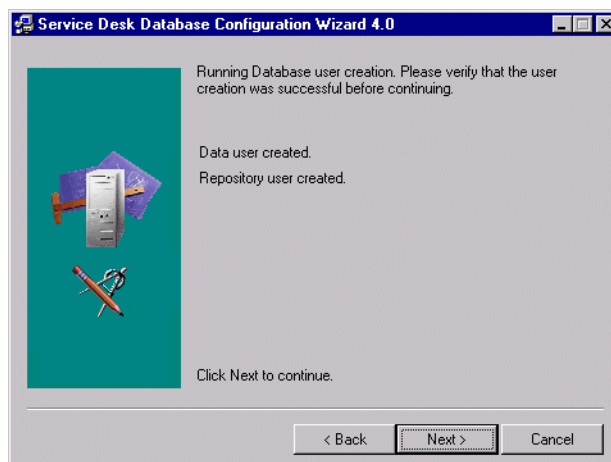
repository user. Select an option and click **Next** to continue:

**Figure 3-39 Temporary Tablespace for the Repository dialog box**



23. A dialog box will appear informing you that the database user is being created, if you selected only one user, or both a database user and a repository user are being created, if you selected two users. When the user creation is complete the text will change to **User created**. Click **Next** to continue:

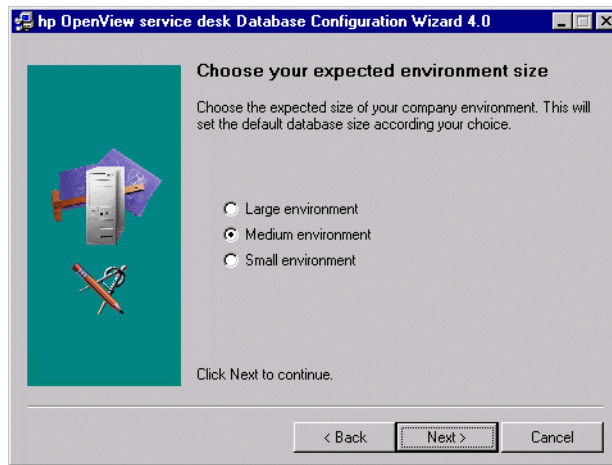
**Figure 3-40 Oracle User Creation dialog box**





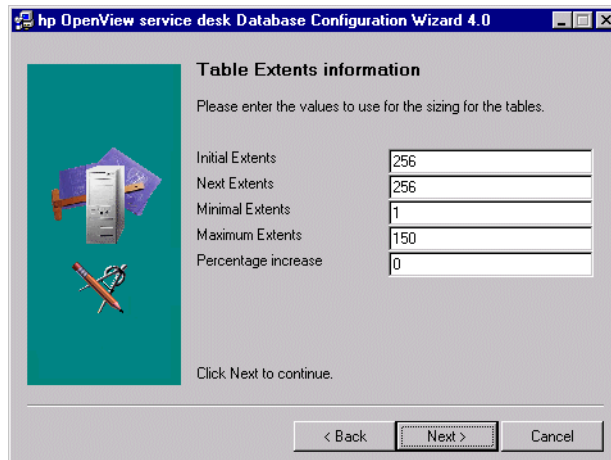
24. The Choose Expected Environment Size dialog box is displayed. Define the size you expect the environment to be by selecting small, medium, or large. These terms relate to the expected number of service calls you think your database will need to hold before you archive or physically delete old records. If you expect less than 25,000 service calls you should select *Small*, between 25,000 and 250,000 select *Medium*, or over 250,000 service calls select *Large*. The table extents created will be sized accordingly. Click *Next* to continue:

**Figure 3-41 Oracle Choose Expected Environment Size dialog box**



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

**Figure 3-42 Oracle Table Extents dialog box**



26. The Load Demo Data dialog box will appear. If you want to load demo data click **Yes**, if not click **No** and then **Next** to continue. The demo database includes dummy entries for Service Desk entities, these illustrate what kind of data is entered in Service Desk dialog boxes:

**Figure 3-43 Load Demo Data dialog box**



27. A dialog box will appear with the question **Do you want to run the Database objects creation now?** Click **Yes** or **No**. If you selected **Yes**, a dialog box will tell you that the database objects were

**Application Server Installation and Database Configuration**

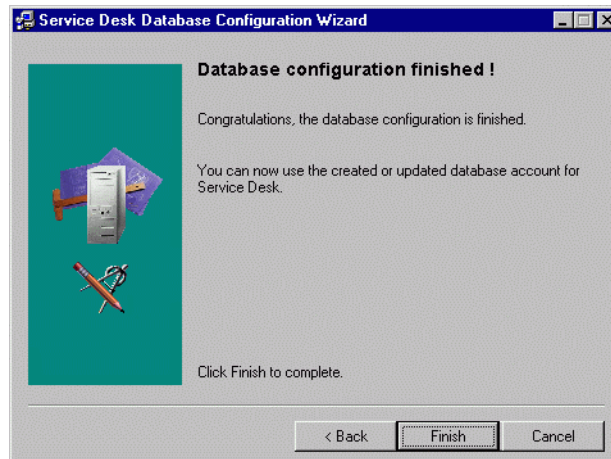
created. Click **OK**, then click **Next** after reviewing the **Database Object Creation Summary** dialog box.

28. A dialog box is displayed asking **Do you want to create database accounts for Service Desk and restart the Application Server?** Click **Yes** or **No**.

29. A dialog box is displayed asking **Do you want to read the log file now?** Click **Yes** or **No**.

30. The **Database configuration finished** dialog box will appear after the configuration is completed. Click **Finish** to leave the configuration wizard:

**Figure 3-44 Database Configuration Wizard**



Installing the Application Server

## **Application Server Installation and Database Configuration**

---

## **4** **Installing the Client**

This chapter describes the tasks you must perform to install an HP OpenView Service Desk client and connect to the application server.

## Preparing for Service Desk Client Installation

After you install the Service Desk 4.0 application server, you must install all the Service Desk clients individually from the Service Desk CD-ROM, or make preparations for shared folder or hyperlink installation.

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

- **CD-ROM installation.**  
If you install the clients from a CD-ROM, you install the client software on each client machine using the installation program on the Service Desk CD-ROM inserted in the CD-ROM drive of the client machine or a CD-ROM drive elsewhere on the network.
- **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 Desk application server machine or elsewhere on the network.
- **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.

There are two executable files that can be used for the client install, either can be selected from the CD-ROM, from a shared folder, or via a hyperlink:

- `HPOpenViewServiceDesk.exe`  
When this file is opened it is first copied to the `C:\Temp` folder of the client machine, from where it is unpacked and installed. On the CD this file located in the `client\packed` folder.
- `StartInstallation.exe`.  
When this file is opened it is installed from its original location. On the CD this file located in the `client` folder.

You can also start the client installation by double-clicking the file `Setup.html` in the `HTML Setup` folder, and then selecting the **Installation Program** link on the Web page that is displayed. This file can also be used with the methods described above.

---

**NOTE**

If a stand-alone Service Pages or Service Desk Agent installation already exists on the machine where you plan to install the Service Desk client, remove it before starting the installation. If you require either of these services to be installed on the machine, ensure that you specify Shared Installation when you reinstall them after the Service Desk installation. For more information on installing Service Pages see “Installing Service Pages on Windows 2000 or Windows NT” on page 94, and for the Service Desk Agent see “Service Desk Agent” on page 126.

---

## **CD-ROM installation on a Client PC**

When the Service Desk CD-ROM is inserted in the CD drive of a client PC, autorun will cause the installation program to start, and the Service Desk start screen to be displayed. If the client PC has autorun switched off, insert the CD in the CD-ROM drive and navigate to the `Client` folder and double-click `StartInstallation.exe` or navigate to `Client\Packed` and double-click `HPOpenViewServiceDesk.exe`. If you are using the CD in a networked CD-ROM drive navigate to the same file through your network. In either of these two cases the start screen is not shown, and the installation wizard is started directly.

## **Preparing for Shared Folder Installation**

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

To install Service Desk clients from a shared location, copy the complete contents of the `Client` or `Client\Packed` folders on the CD-ROM to the shared folder you want to use to install the Service Desk clients. Ensure that the client has access rights to the folder you choose.

## **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 application server you could inform the users by sending an email that includes a hyperlink. If the user clicks the hyperlink, the Service Desk client is installed. To make the hyperlink work, you first have to make the following preparations.

Installing the Client

### Preparing for Service Desk Client Installation

To install the Service Desk client from a hyperlink, copy the Service Desk client upgrade installation program to a folder in a Web server or to a shared folder. Copy the complete contents of the Client or Client\Packed folder from the CD-ROM to the Web server or to the shared folder you want to use.

---

**NOTE**

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

---



## Client Installation

Use this procedure to install the client software on a client PC that can communicate with the application server. A copy of the client software was automatically installed on the server along with the application server software.

To install software on a Windows NT or 2000 computer, you must be logged on to an account with 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.

When any part Service Desk is being installed, the installation program checks the regional setting properties set in the Windows NT or 2000 general settings, and sets the language for the installation wizard accordingly.

---

### NOTE

When the Service Desk client is installed on a Windows 98 platform Service Desk's internal icons are switched off. This is necessary because of a known Windows 98 performance problem. It is possible to switch these icons back on in the **Advanced** tab of the **Options** dialog box from the **Service Desk Tools** menu. However, we recommended that you do not do so, as after a short while Windows 98 will cause Service Desk to slow down.

---

Install HP OpenView Service Desk client by using the setup program on the HP OpenView Service Desk CD-ROM. You can install Service Desk directly from CD-ROM onto your computer's hard disk, or you can copy the contents of the **Client** or **Client\Packed** folders to a shared drive and install via a network drive. If you choose to install the client from a shared folder you use either **StartInstallation.exe** from the **Client** folder or **HPOpenViewServiceDesk.exe** from the **Client\Packed** folder. The first of these two files will install the client from the shared folder, the second will copy the installation program to the client PC's **C:\temp** folder and install the client from there.

---

### NOTE

Install the Microsoft Java Virtual Machine before installing the client.

## Installing the Client Client Installation

The Virtual Machine software is distributed with this release on the HP OpenView Service Desk CD-ROM. To install the software, see “Installing Microsoft Java Virtual Machine” on page 39.

To install HP OpenView Service Desk client from the CD-ROM, perform the following actions:

1. Insert the HP OpenView Service Desk 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 Desk`:

**Figure 4-1 Start screen**



2. In the following screen click `Install Client`:

**Figure 4-2**      **Install Client**



---

**NOTE**

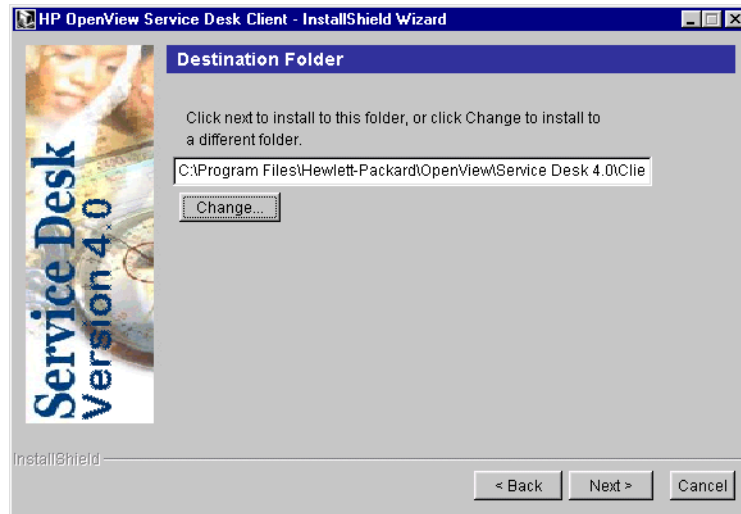
If you cannot get the installation program running by double-clicking `setup.exe`, you can try the following procedure: click the CD-ROM drive, open a DOS dialog box, browse for the folder you want to install, and run `startinstallation.exe`. Alternatively, you can use `java.exe -cp . setup`, note however that this will only install Service Desk and not any of the third-party software supplied with Service Desk, these must be installed separately.

- 
3. Next the Welcome screen for the Client InstallShield Wizard appears. Click **Next** to continue.
  4. Next, the License Agreement dialog box appears. To proceed, you must select the  **I accept all terms of the license agreement** check box and then click **Next**. By doing so, you agree to all license terms, so read the agreement carefully.
  5. Next, the Destination Folder dialog box appears. Here you must enter the folder where the Service Desk Client software will be placed. If

Installing the Client  
Client Installation

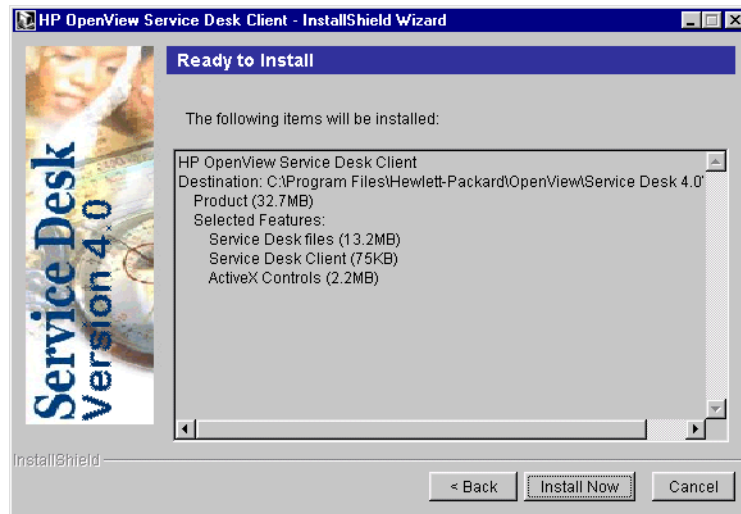
you do not want the software to be placed in the default folder shown, you must click **Change** to enter another installation folder. Click **Next** to continue the installation:

**Figure 4-3** Client Destination Folder dialog box



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

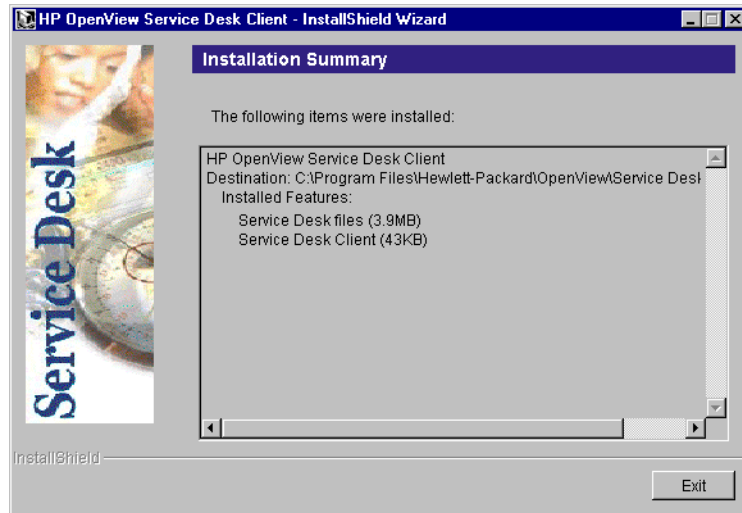
**Figure 4-4** Client Ready to Install dialog box



7. While the installation program is unpacking and reading files, a progress monitor will be shown on your screen. You can abort the installation by clicking **Cancel** at any time.
8. When the installation is finished, the Client Installation Summary dialog box appears. Click **Exit** to quit the installation program. The installation is now complete:

**Figure 4-5**

**Client Installation Summary dialog box**



---

## The Connection Wizard

After you have installed the HP OpenView Service Desk Client, select Programs from the Start menu. Choose HP Openview Service Desk 4.0 and click HP Openview Service Desk 4.0 again from the sub-menu. The Service Desk Connection Wizard starts. The Connection Wizard enables you to enter the information required to set up your account, such as the name of the Service Desk server you connect to, your account name and password and your “friendly name”.

Click **Cancel** at any time to quit the Connection Wizard; click **Back** at any time to return to the previous screen.

The Connection Wizard procedure is as follows:

1. The Service Desk Connection Wizard opens with the Get Connected dialog box. Read the welcome text and click **Next** to continue.

**Figure 4-6** Service Desk Connection Wizard



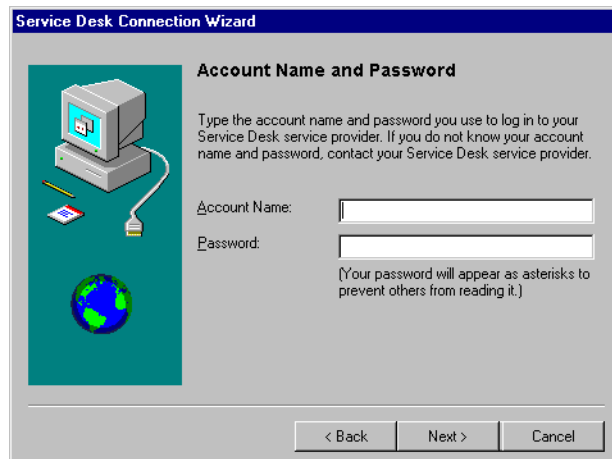
2. In the Service Desk Server dialog box, fill in the name of the Service Desk server. Click **Next** to continue:

**Figure 4-7** Service Desk Server dialog box



3. In the Account Name and Password dialog box, enter the account name and password you use to log on to your Service Desk service provider. Contact your Service Desk service provider if you do not know the name and password. Click **Next** to continue.

**Figure 4-8** The Account Name and Password dialog box

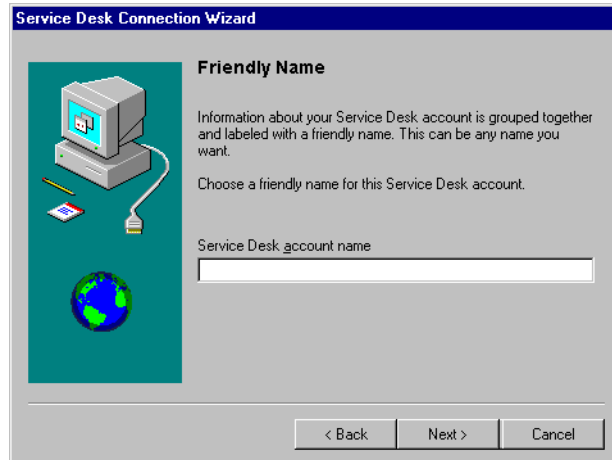


4. Finally, you must fill in your 'friendly name'. The only place where this name is subsequently displayed is in the Server Accounts dialog box available from the HP OpenView Service Desk 4.0 option of the



Programs sub-menu in the Start menu:

**Figure 4-9** The Friendly Name dialog box



5. The last Connection Wizard dialog box informs you that you have entered all information required to set up your account. Click **Finish** to set up your account. The Service Desk Connection Wizard will be closed, and HP OpenView Service Desk will be started.

**Figure 4-10** Congratulations dialog box



Installing the Client  
**The Connection Wizard**

---

# **5** **Installing Service Pages**

Service Pages (SP) are HTML pages that have been created to enable your customers to report problems directly to Service Desk over the Internet or an Intranet.

Using a secure connection your customer is able to access the Service Pages and complete a form to register a service call. Your support engineers can also connect to view and modify service calls, problems, or incidents etc. The data is passed directly to Service Desk, and your help desk is notified. The help desk staff can then contact the customer for further details.

The Service Pages are installed on a server and clients users can open the pages using a web browser pointing at the Services Page URL. There are no software downloads when the end user accesses a page.

The Service Pages can be installed on a shared machine, that is, one that has Service Desk installed on it too, or they can be installed on a stand-alone machine that does not have Service Desk installed. The distinction is important as certain class files will be shared with Service Desk if it is installed but they will be installed in the SP folder on a stand alone PC.

---

**NOTE**

Service Pages installed with Service Desk 3.0 are not compatible with Service Desk 4.0; the latest version can be installed when installing HP OpenView Service Desk 4.0. When upgrading from Service Desk 3.0 to 4.0 remember that any stand-alone installations of the service pages must also be upgraded. The upgrade must be done by first uninstalling the old version and then installing the service pages for Service Desk 4.0 as there is no upgrade path.

---

Service Pages can be configured to run on an Apache Web server or on Microsoft IIS Web server. Each web server needs a servlet engine, the servlet engine used by Service Desk is Tomcat. The following sections explain how to configure the Service Pages to run on Windows NT, Windows 2000, HP-UX, and SUN Solaris with the Apache Web server.

If you intend to use Apache as your web server, Apache must be installed as a service on your machine before Service Pages, and the IIS Admin and World Wide Web Services must be stopped and disabled. If this is not done, whenever the Windows Server is rebooted it will default IIS to port 80 and override the Apache connection. This will stop Service Pages from working.

---

**NOTE**

When using a Windows NT4.0 Server, the NT4.0 Server Option Pack

must first be installed.

---

To verify that you are using the correct versions of the third-party software needed for the service pages see “Requirements” on page 32. If the requirements have been updated, see “We Welcome Your Comments!” on page 24, for the URL of the HP site where you can get the latest software patches and documentation updates.

---

**NOTE**

The SP templates provided with Service Desk 4.0 have been saved with the HTML encoding set as Multilingual UTF-8 (Unicode). It is important that they are saved with this same encoding when you modify them in an HTML editor. Some characters may not be displayed if you change this setting.

---

---

**NOTE**

The files `CustomerHeader.html` and `CustomerLinks.html` should only be modified in an HTML editor, and not by editing the HTML code in a text editor.

---

## Installing Service Pages on Windows 2000 or Windows NT

When any part Service Desk is being installed, the installation program checks the regional setting properties set in the Windows NT or 2000 general settings, and sets the language for the installation wizard accordingly.

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

You can also start the installation by double-clicking the file `Setup.html` in the `HTML Setup` folder, and then selecting the `Installation Program` link on the Web page that is displayed. This file can also be used with the methods described above.

---

### NOTE

Service Pages are installed and configured automatically using the installation program on Windows 2000 and NT4, except when you are using Microsoft IIS as your webserver, in which case some manual configuration must be done. This procedure is explained in the section "Connecting Tomcat and IIS Web Server on Windows NT and Windows 2000" on page 100.

---

To install Service Pages on Windows 2000 or NT4 perform the following actions:

1. Insert the HP OpenView Service Desk CD-ROM; automatically the start screen appears. If it does not, double-click `setup.exe` in the root of the CD-ROM drive. Click `Install Service Desk`.

**Figure 5-1 Start screen**



2. In the following dialog box, click Install Service Pages:

**Figure 5-2**      **Install Service Pages**



---

**NOTE**

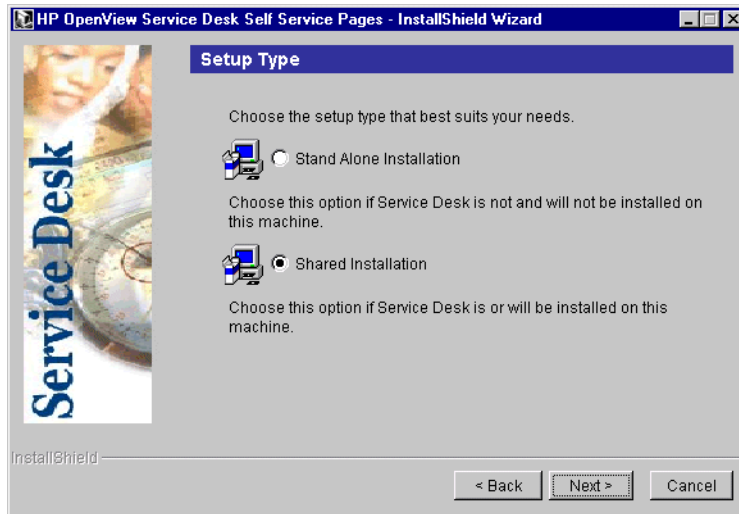
If you cannot get the installation program running by double-clicking `setup.exe`, you can try the following procedure: click the CD-ROM drive, open a DOS dialog box, browse for the folder you want to install and run `startinstallation.exe`. Alternatively, you can use `java.exe -cp . setup`. Note however that this will only install Service Desk and not any of the third-party software supplied with Service Desk. These must be installed separately.

- 
3. Next the Service Pages InstallShield Wizard will appear. Select `Next` to continue.
  4. If you accept the terms of the license agreement, select that option and then `Next` to continue.
  5. Use the Service Pages Setup Type dialog box to define whether the Service Pages are being installed on a shared machine, that is, one that has Service Desk installed on it, or whether the installation is being done on a stand alone machine that does not Service Desk



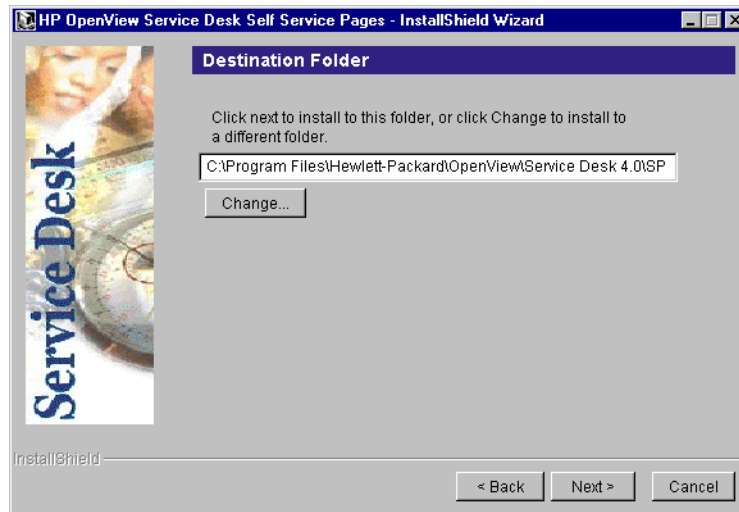
installed. The distinction is crucial as certain class files will be shared with Service Desk if it is installed but installed in the SP folder on a stand alone machine. Click **Next** to continue:

**Figure 5-3**      **Service Pages Setup Type dialog box**



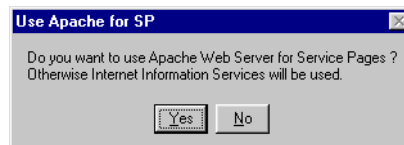
6. In the Service Pages Destination Folder dialog box, enter the folder where you want the Service Pages files installed, or click **Browse** to search for and select a different installation folder. Click **Next** to continue the installation:

**Figure 5-4**      **Service Pages Destination Folder dialog box**



7. A Confirm dialog box will appear if the folder does not exist. Click **Yes** if you want to create the folder or **Back** to return to the Destination Folder dialog box and change the folder.
8. The Ready to Install dialog box shows the items that will be installed. Click **Install Now** to continue or **Back** to return to the previous screens and make changes.
9. A progress screen will show you the files being unpacked and read during the installation process.
10. At around the 90% mark a pop-up dialog box is displayed and you will be asked if you want to use Apache Web Server, if you select **No** Microsoft IIS will be used.

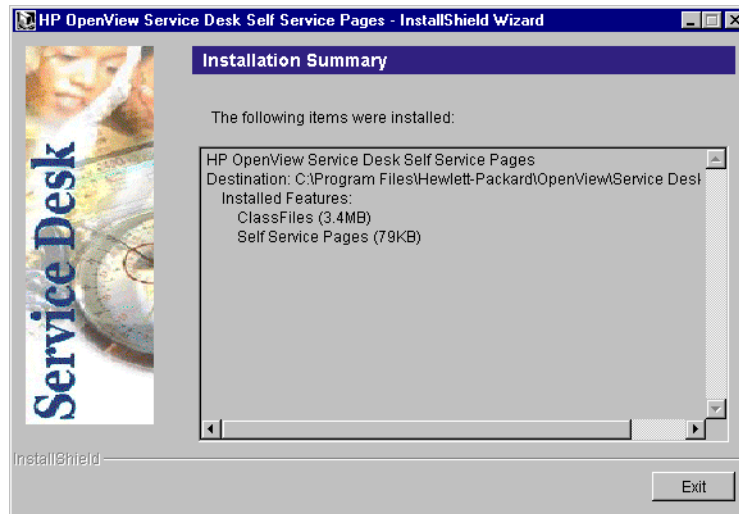
**Figure 5-5**      **Use Apache for SP dialog box**



11. You will be asked if the current machine is the application server. Click **Yes** or **No**. If you clicked **No**, a dialog box will be displayed for you to enter the name of the application server.

12. When the installation is complete the Installation Summary dialog box will appear. Click **Exit** to leave the installation program:

**Figure 5-6** Service Pages Installation Summary dialog box



13. Open a Command Prompt dialog box from the Start menu and start Tomcat using the command `net start tomcat` from the DOS prompt.

---

**NOTE**

If the Service Pages installation is on a shared machine, the IIS or Apache, and Tomcat services must be stopped before uninstalling the Service Pages, otherwise there will be an unclean removal.

---

## Configuring Service Pages

When Service Desk is installed by clicking `Install Service Pages` on the Service Desk installation start screen the Service Pages are configured automatically for Apache Web Server. However, if you use Microsoft IIS, some manual configuration is needed.

### Connecting Tomcat and IIS Web Server on Windows NT and Windows 2000

To connect Tomcat and IIS Web Server:

1. Open a `Command Prompt` dialog box from the `Start` menu and start Tomcat using the command `net start tomcat` from the DOS prompt.
2. Two virtual directories must be created, one for Tomcat and one for the Service Desk Service Pages. These steps are performed using the Virtual Directory Creation Wizard.

To start the wizard on Windows NT:

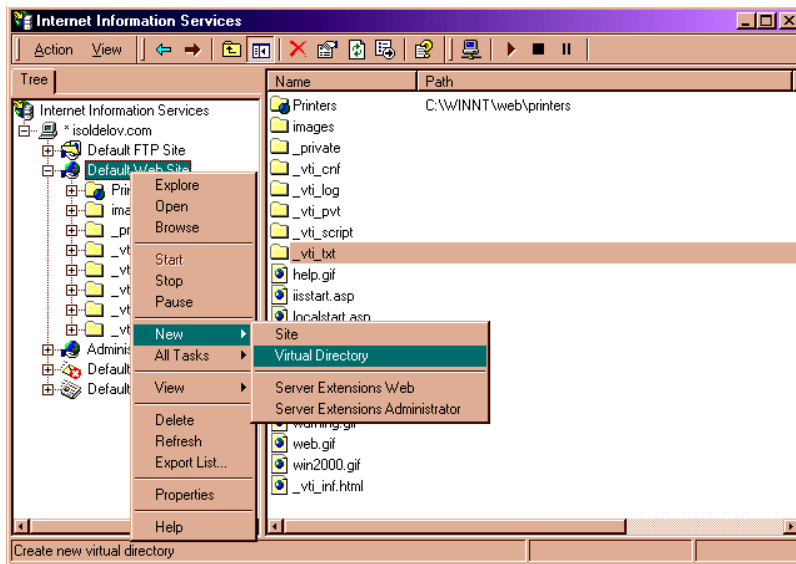
- From the `Start` menu open the `Programs` sub-menu.
- From `Programs` select `Windows NT4.0 Option Pack`.
- In the `Windows NT 4.0 Option Pack` sub-menu select `Microsoft Internet Information Server`.
- From the `IIS` sub-menu choose `Internet Services Manager`. This will display the IIS management console.
- In the IIS management console open the branch for the server machine name where the Service Pages are installed.
- Right click on `Default Web Site`, or the web site that will display the Service Pages.
- Choose `New` in the pop-up menu and then `Virtual Directory` in the submenu.

To start the wizard on Windows 2000:

- From the `Start` menu open `Programs`.

- Select Administrative Tools in the Programs menu.
- From the Administrative Tools submenu choose Internet Services Manager. This will display the IIS management console.
- In the IIS management console open the branch for the server machine name where the Service Pages are installed.
- Right click on Default Web Site. Choose New in the pop-up menu and then Virtual Directory in the submenu.

**Figure 5-7 IIS Management Console - Submenu**



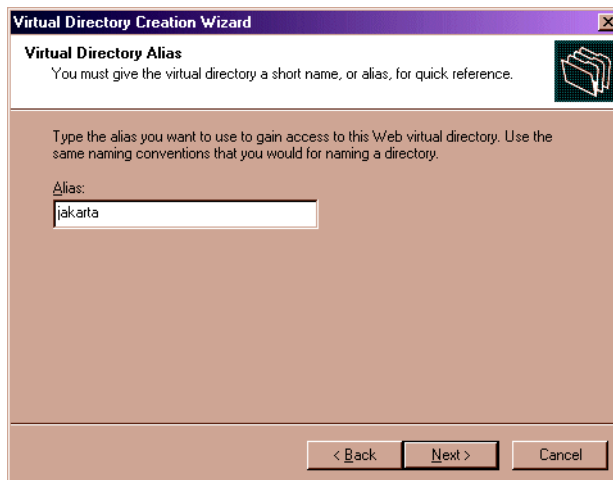
3. The Virtual Directory Creation Wizard is started. Click Next to continue.

**Figure 5-8 Virtual Directory Creation Wizard - welcome screen**



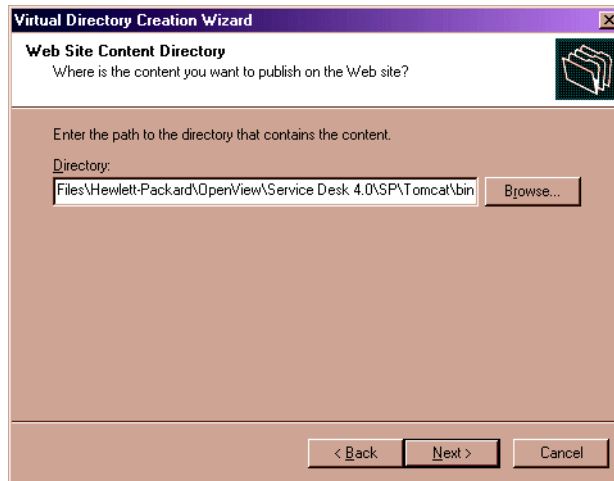
4. Enter an alias, that is, an alternative, name for the virtual directory. Use `jakarta` for the Tomcat directory and `sd-sp4` for Services Pages. Click `Next` to continue.

**Figure 5-9 Virtual Directory Creation Wizard - alias dialog box**



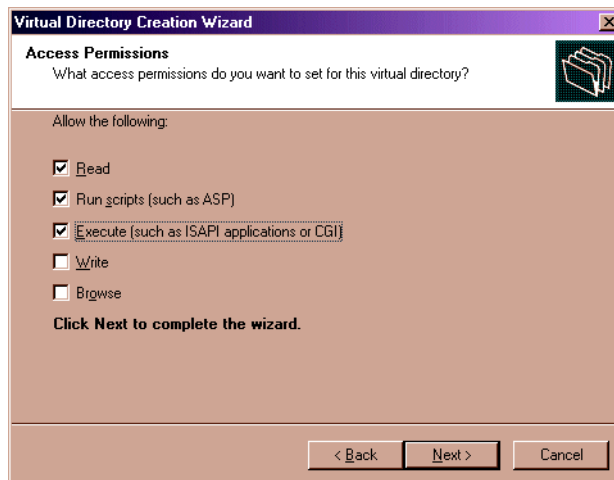
5. Enter the path where you want to store the web site content. Enter `<Tomcat>\bin` for Tomcat and `<Service Desk home>\sp\SSP_Files` for Service Pages.

**Figure 5-10 Virtual Directory Creation Wizard - web content dialog box**



6. Define the access permissions for the virtual directory. For both the Tomcat (jakarta) and Service Pages directories set the Read, Run Scripts, and Execute checkboxes. Click Next to continue.

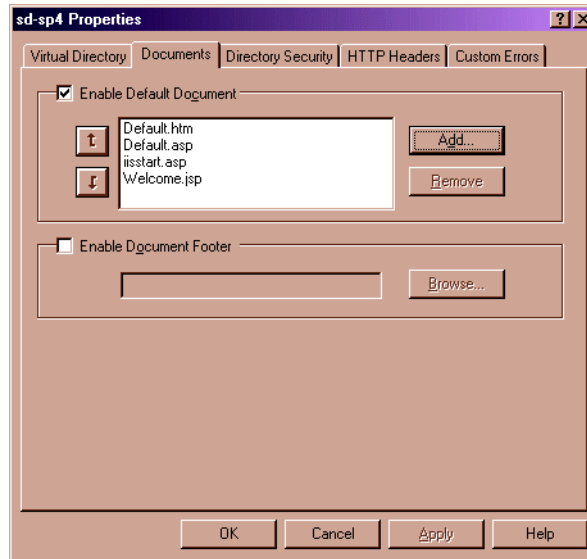
**Figure 5-11 Virtual Directory Creation Wizard - permissions dialog box**



7. Click Finish to complete the creation of the virtual directory.
8. Once you have created a virtual directory for Tomcat, return to step 5 and repeat the process to create a virtual directory for Service Pages.

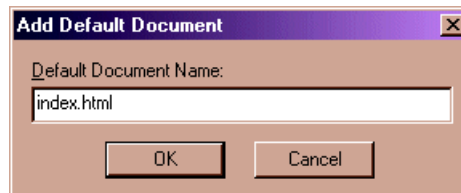
9. The Service Pages index page must be added to the list of default pages. In the IIS management console right-click on the Service Pages virtual directory (sd-sp4) and select Properties from the pop-up menu. In the Properties dialog box select the Documents tab and click the Add button.

**Figure 5-12** Virtual Directory - Properties dialog box



10. In the Add Default Document pop-up enter index.html and click OK. The index page is added to the default documents list.

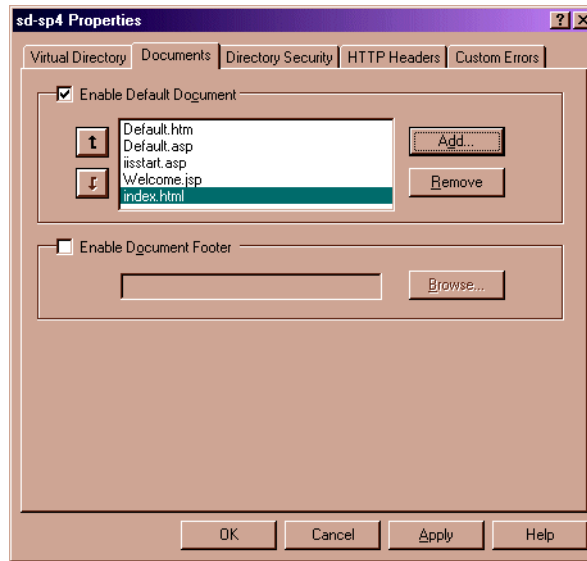
**Figure 5-13** Virtual Directory - Add Default Document dialog box



11. The other documents in the list are not used and you can delete them if you wish, but it is not necessary. However, index.html must be listed for Service Pages to work. Click Apply and then OK.

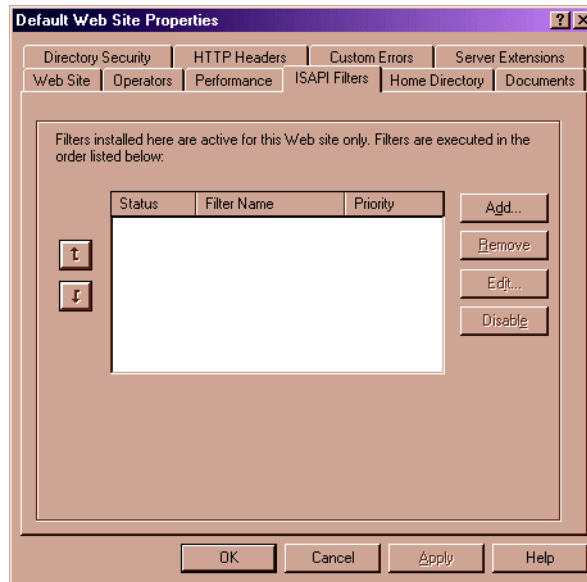


**Figure 5-14 Virtual Directory - Properties dialog box**



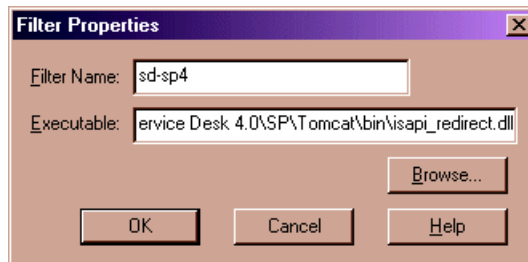
12. A redirect filter must be applied to the default web site. In the IIS management console right-click on the Default Web Site directory, and select Properties from the pop-up menu. In the Default Web Site Properties dialog box click Add.

**Figure 5-15** Default Web Site - Properties dialog box



13. In the Add Filter dialog box enter the filter name as sd-sp4 and the executable as <Tomcat>\bin\isapi\_redirect.dll. Click Ok.

**Figure 5-16** Default Web Site - Filter Properties dialog box



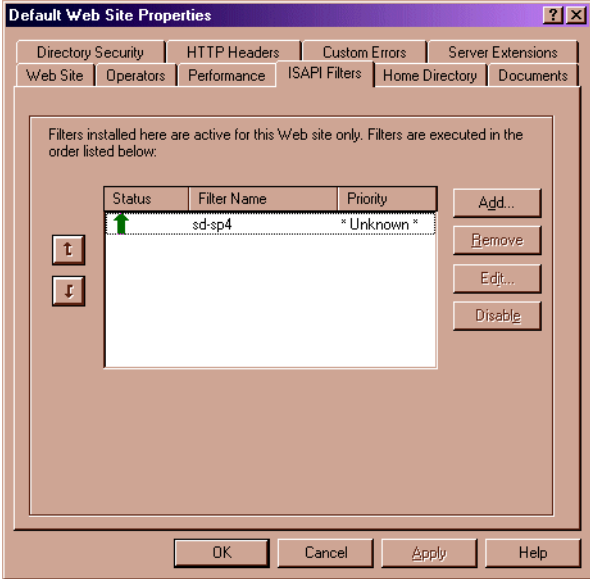
14. The filter is displayed in the Default Web Site Properties dialog box. Click Apply.

15. Exit Microsoft Management Console. You will be asked if you want to save the console setting to iis.msc. Click Yes.

16. Stop and restart the IIS Admin service and World Wide Web Server service. If everything is working correctly a green arrow should be displayed next to the sd-sp4 filter entry in the Default Web Site

Properties dialog box (see step 13).

**Figure 5-17** Default Web Site - Properties dialog box



## Installing Service Pages with Apache Web Server on UNIX

This section includes installation and configuration information for Service Pages on UNIX platforms.

The following Third Party products must be installed on the same machine as the Service Pages prior to installation.

- A Java Development Kit (JDK) or Java Runtime Environment (JRE)
- Apache HTTP Server
- A Tomcat binary
- A Web Server Adapter compiled for your computer.

For exact information about which UNIX platforms and which versions of the third-party software are supported by Service Desk see “Requirements” on page 32.

The instructions given below assume the Apache server and only one Tomcat process are running on the same computer. If you require to configure more Tomcat processes for load balancing purposes, please consult the *Workers* section in your Tomcat documentation.

### Installing Apache and Tomcat

The Service Desk CD contains two depot files for installing and configuring Apache Web Server and Tomcat. One for HP-UX and one for Sun Solaris. These can be found in the `Tools/ApacheGroup/HTTP Server/HP-UX-11 Binaries` and `Solaris-7 Binaries` folders and should be copied from the CD using `ftp` in `BINARY` mode.

For HP-UX 11:

- Using `swinstall`, install the file  
`Apache-1.3.14+Tomcat-3.1.1.depot`.  
From the **Actions** menu choose **Change Source**  
In the **Source depot type** field enter **local directories**  
In the **Source Depot path** field enter the full path and filename  
From the **Action** menu choose **Change Target** and confirm that the

target is the default root.

From the Action menu choose Install.

- Unpack the file `work-localhost_8080%2Fsd-sp4.tar.gz` from the UNIX directory into the `/opt/tomcat` directory.

For Sun Solaris 2.7:

- Install the following file in the root directory using the `pkgadd` command:  
`pkgadd -d Apache-1.3.20+Tomcat-3.2.1_Solaris7.`
- Unpack the file `work-localhost_8080%2Fsd-sp4.zip` from the UNIX directory into the `/opt/tomcat` directory.

These files will create both Apache and Tomcat directories in `/opt`.

The remaining instructions are common to both HP-UX and Sun Solaris. The variable, `<Tomcat>` in these instructions assumes `/opt/Tomcat`.

## Installing Service Pages

Before installing the Service Pages, ensure that Tomcat is stopped:

```
<Tomcat>/bin/shutdown.sh
```

To install the Service Pages:

Unpack the file `sp-4.0.tar.gz` in the `/opt` directory.

The file `/opt/sp-4.0/WEB-INF/web.xml` must be edited. The name of the application server must be entered in the `sd_application_server` context parameter. This should take the form of `Named|MachineName.Domain:ITP number` (the Domain is optional).

---

### NOTE

If you are using multiple servers it may be wise to choose one that is near in the network, and you should also take into account any firewall issues. If the application server is on the same computer as Service Pages then `LOCALHOST` can be used for the application server host name.

---

## Configuring Apache and Tomcat

Modify the `<Tomcat>/conf/server.xml` file by inserting the following before the last two lines (the last two lines are shown):

```

        <Context path="/sd-sp4"
            docBase="/opt/sp-4.0"
            debug="0"
            reloadable="false" >
        </Context>
    </ContextManager>
</Server>

```

**NOTE**

The `DocBase` parameter must correspond to the installation directory defined for the Service Pages.

Edit the file `/opt/tomcat/conf/tomcat.conf`. You need to add the following lines immediately above the line with `</IfModule>`.

```

###-----
###Changes for Service Pages
###
#
# The following line makes Apache aware of the location of
# the /sd-sp4 context
#
Alias /sd-sp4 "/opt/sp-4.0"
<Directory "/opt/sp-4.0">
Options Indexes FollowSymLinks
</Directory>
#
# The following line mounts all JSP files to Tomcat
#
ApJservMount /sd-sp4/*.jsp ajp12
###
###-----

```

Start Tomcat as a non-privileged user, using the `sd` account or `nobody`, with the command:

```
<Tomcat>/bin/startup.sh
```

**NOTE**

You may be asked for the path of the Java Runtime Environment (JRE),

if so enter the full path.

---

Before starting the Apache Web Server ensure the file `opt/apache/httpd.conf` has the port setting `Port=80`.

You can test that Tomcat is functioning properly by pointing your web-browser at `http://<your host-name>:8081/index.html` if you are using HP-UX. Or `http://<your host-name>:8080/index.html` on Sun Solaris. If the test page is displayed Tomcat is working.

## Starting and Testing Apache Web Server

To test that the Apache Web Server is working before running Service Pages do the following.

To start the Apache server:

Use the command `"/opt/apache/bin/apachectl start"`

To test that Apache is working:

Connect to the URL `http://<your hostname>:80/sd-sp4/index.html`

To test the default Service Pages:

Enter the URL `http://<your hostname>/sd-sp4/index.html`

To stop Apache:

Use the command `"/opt/apache/bin/apachectl stop"`

## Troubleshooting Service Pages on Windows NT and 2000

When Service Desk is installed by clicking `Install service pages` on the standard installation Start screen the service pages are configured automatically for Apache Web Server. However, you may need (because of an error), to configure them yourself, or to troubleshoot the configuration. If so, follow the manual installation and configuration instructions below.

The following third party tools are required:

- Apache Web Server or Microsoft IIS
- A Tomcat binary, we recommend you use the version shipped on the Service Desk CD.
- Java Runtime Environment (JRE) for Windows NT4.0.

The HP OpenView Service Desk CD contains copies of the above for Windows NT.

When installing Service Pages the following default directories should have been created; you may have chosen different directories on your computer:

- `C:\Program Files\Apache Group\Apache`
- `C:\Program Files\Hewlett-Packard\Openview\Service Desk 4.0\Sp`
- `C:\Program Files\Hewlett-Packard\Openview\Service Desk 4.0\Sp\SSP_Files`
- `C:\Program Files\Hewlett-Packard\Openview\Service Desk 4.0\Sp\Tomcat`

### Checking Service Pages Connection to Service Desk

The name of the Service Desk application server that Service Pages connects with, to send and receive data, must be defined correctly. This server name is located in the file `web.xml`, which can be found in the `<Service Desk>/SP/SSPfiles/WEB-inf/` folder.

The parameter value of `sd_application_server` should be the name of



the machine where the Service Desk application server used for Service Pages is resident.

## Manually Install and Configure Tomcat as a Service

Whether you use Apache or IIS, a Tomcat binary must be installed.

1. Tomcat is supplied as a zip file that has to be unpacked manually. Choose a directory to extract the zip file into.
2. Edit the file `<Tomcat>\conf\server.xml` by adding the following before the last two lines (the last two lines are shown):

```
    <Context path="/sd-sp4.0"
            docBase="c:\sd\sp-4.0"
            debug="0"
            reloadable="true" >
    </Context>
</ContextManager>
</Server>
```

When doing a manual installation you do not need to use the sd folder path shown on the previous page. The assumption above is that the Service Pages files are installed in the folder `C:\sd`. If install them elsewhere, change the `docBase` parameter to reflect that location.

3. Copy the file `jk_nt_service.exe` into the `<Tomcat>\bin` folder.
4. Edit the file `<Tomcat>\conf\wrapper.properties` and change the following parameters. The comments above the parameters explain what changes are needed:

```
- wrapper.tomcat_home
- wrapper.java_home
```

5. Install Tomcat as a service using the following command at the DOS prompt:

```
"<Tomcat>\bin\jk_nt_service.exe" -I tomcat
"<Tomcat>\conf\wrapper.properties"
```

6. Start Tomcat using: `net start tomcat`

## Manually Install and Configure Service Desk Service Pages Web Application

The Service Pages are divided into two distinct parts. One part is

collection of static HTML pages, cascading style sheets, and images. The other part is a set of precompiled Java Server Pages. These are distributed in zip files.

The static part is distributed in `sp-4.0.zip`, and the precompiled Java Server Pages are distributed in `work-localhost_8080%2Fsd-sp4.zip`.

Unzip the static part to `C:\sd` (as in our previous example), this will create the folder `C:\sd\sp-4.0`. Unzip the precompiled Java Server Pages in the `<Tomcat>` folder. This should create the subfolder `<Tomcat>\work\localhost_8080%2Fsd-sp4`.

---

**NOTE**

To test the installation so far: Start Tomcat and point a web browser at `http://your-host-name:8080/sd-sp4/index.html`. The Service Page should start in Tomcat's stand alone mode. Only use Tomcat's stand-alone mode for testing. Do not use it for a production environment.

---

## **Troubleshooting the Tomcat and Apache Web Server Connection on Windows NT**

To manually complete the installation and configuration of Service Pages for Apache Web Server on Windows NT or Windows 2000 the following must be done:

1. Copy the file `mod_jk.dll` from `\tools\Apache group\Tomcat` folder on the Service Desk CD, to `<Apache>\modules`.
2. Add the following line at the end of the file `<Apache>\conf\httpd.conf`:  

```
include <Tomcat>\conf\mod_jk.conf-auto
```
3. Restart Tomcat and then restart the Apache Web Server service. It is important to restart Tomcat first.

## **Troubleshooting the Tomcat and IIS Web Server Connection on Windows NT and Windows 2000**

To manually configure the connection between Tomcat and IIS on either Windows NT or Windows 2000 use the following instructions. For further information consult your Tomcat documentation.

Once the following steps are done the configuration must be completed using the wizard described in “Connecting Tomcat and IIS Web Server on Windows NT and Windows 2000” on page 100.

1. Edit the file `workers.properties`, and change the values for `workers.tomcat_home` and `workers.java_home` to the relevant folders on your machine.
2. Copy the shared library `isapi_redirect.dll` into the folder `<Tomcat>\bin`.
3. In the registry, create a new registry key named:  
`HKEY_LOCAL_MACHINE\SOFTWARE\Apache Software Foundation\Jakarta Isapi Redirector\1.0`
4. In the Registry add the following strings:
  - Add a string value with the name `extension_uri` and a value of `\jakarta\isapi_redirect.dll`
  - Add a string value with the name `log_file` and a value pointing to where you want your log file to be (for example, `<Tomcat>\logs\isapi.log`)
  - Add a string value with the name `log_level` and a value for your log level (can be, debug, info, error, or emerg)
  - Add a string value with the name `worker_file` and value which is the full path to your `workers.properties` file (for example `<Tomcat>\conf\worker.properties`)
  - Add a string value with the name `worker_mount_file` and a value which is the full path to your `uriworkermap.properties` file (for example, `<Tomcat>\conf\uriworkermap.properties-auto`).
5. Restart the IIS Admin service and World Wide Web Server service.
6. Test that IIS is working by connecting to the URL:  
`http://<your hostname>:80/sd-sp4/index.html`

Installing Service Pages

**Troubleshooting Service Pages on Windows NT and 2000**

---

# **6** **Installing Integrations**

This chapter describes the tasks you must perform during the installation of HP OpenView Service Desk integrations.

## Integrations

To install software on a Windows NT or 2000 computer, you must be logged on to an account with 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.

When any part Service Desk is being installed, the installation program checks the regional setting properties set in the Windows NT or 2000 general settings, and sets the language for the installation wizard accordingly.

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

You can also start the installation by double-clicking the file `Setup.html` in the `HTML Setup` folder, and then selecting the `Installation Program` link on the Web page that is displayed. This file can also be used with the methods described above.

---

### NOTE

If you are going to install the ManageX integration tools, or going to do a typical install you must install ManageX on the same machine as the application server software before installing the integrations.

---

Install HP OpenView Service Desk Integrations software by using the setup program on the HP OpenView Service Desk CD-ROM:

1. Insert the HP OpenView Service Desk 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. The Start screen appears on your screen. Click `Install Service Desk`:

**Figure 6-1 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 for the folder you want to install and run `startinstallation.exe`. Alternatively, you can use `java.exe -cp . setup`, note however that this will only install Service Desk and not any of the third-party software supplied with Service Desk, these must be installed separately.

- 
2. In the following screen click Install Integrations:

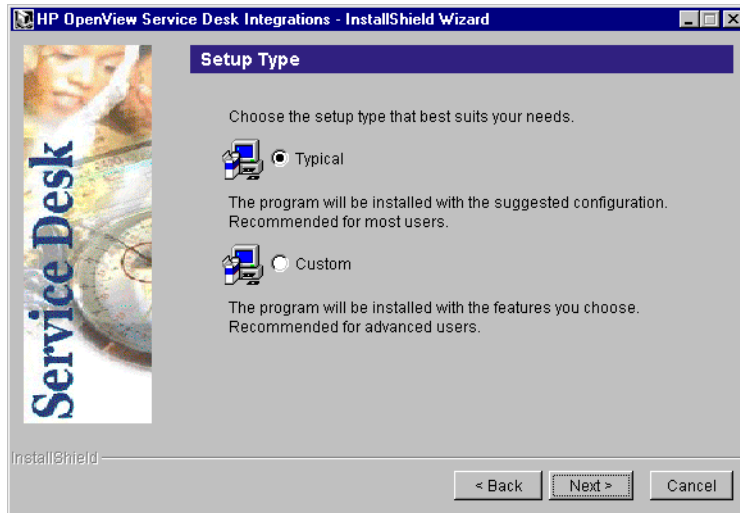
**Figure 6-2**      **Install Integrations**



3. After installing the application files, the Integrations InstallShield Wizard appears. Click **Next** to continue, or **Cancel** to abort the installation.
4. Next, the Integrations Setup Type dialog box appears. Select **Typical** or **Custom** setup. Selecting **Typical** will install the Data Exchange components, Data Exchange will enable you to exchange data with any third party product. The **custom** installation option makes it possible to choose integration components from a list. Select the type of installation you want and click **Next** to continue:

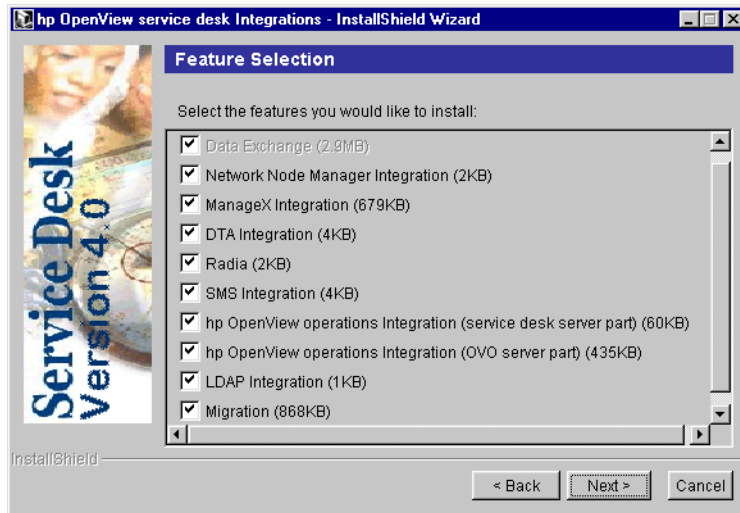


**Figure 6-3** Integrations Setup Type dialog box



5. If you selected the **Custom** setup, the **Feature Selection** dialog box will appear. The **Data Exchange** feature must be installed for all integrations, and is set as a default. Choose the items you want to install from the list and click **Next** to continue:

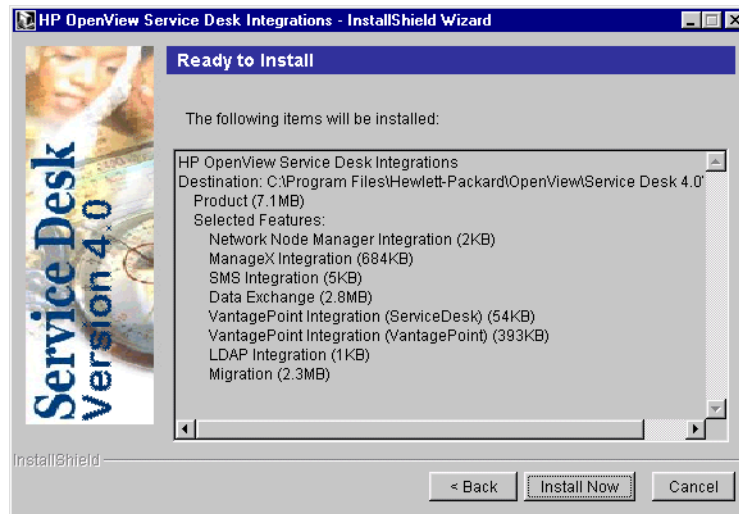
**Figure 6-4** Integrations Feature Selection dialog box



## Installing Integrations Integrations

6. The Ready to Install dialog box shows the items that will be installed, select **Install Now** to continue:

**Figure 6-5** Integrations Ready to Install dialog box



7. A progress screen will appear showing the files being installed.
8. When all files are installed, the Installation Summary screen will appear. Select **Exit** to leave the installation program.

---

### NOTE

The data exchange process only works if Service Desk runs in three-tier mode. Configuration, XML and log files can only be accessed from the application server or the data exchange server.

---

## Integration Tools on HP-UX and Solaris Platforms

The integration tools used for sending service events from an external application to Service Desk can also be installed on HP-UX and Solaris platforms. The tools for queuing events, the `sd_event` program for sending service events, and the Rule Manager agent files are all provided in the HPOVSD depot in the `/unix` folder on the Service Desk 4.0 CD-ROM, and also in \*.tar file format. The programs `#swinstall` and `#swremove` are provided on the CD-ROM for use in installing and uninstalling these integration tools.

---

**NOTE**

Install Java Virtual Machine (jre or java) on the computer where you want to install the integration tools before installing them. The installation script searches for the java runtime interpreter (jre or java) in a standard PATH (/bin:/usr/bin), and in /opt/java/bin. So if you have it installed elsewhere, you must edit /sbin/init.d/hpovsdagent after installation. The depot-based installation will remind you of this.

---

To install the Rule Manager agent, see “HP-UX Platforms” on page 130, or “Solaris Platforms” on page 133. The `sd_event` program and the event queuing tools can be installed when you install the Rule Manager agent from the HPOVSD depot. The files are called: `Agent`, `SDevent`, and `EventQueuing` in the HPOVSD depot. If you want to install the files manually using the TAR file formats, the file names and locations are:

**Table 6-1****TAR Files**

<b>File</b>	<b>Location</b>
<code>sd_event.tar</code>	<code>/opt/OV/SD/bin</code>
<code>jobqueue.tar</code>	<code>/opt/OV/SD/queuing</code>
<code>hpovsdagent.zip</code>	<code>/opt/OV/SD/classes</code>
<code>mclasses.zip</code>	<code>/opt/OV/SD/classes</code>

Installing Integrations  
**Integrations**

---

# 7

## **Installing the Service Desk Agent**

This chapter describes the tasks you must perform to install and start the HP OpenView Service Desk Agent.

## Service Desk Agent

This section explains how to install the Service Desk agent on Windows, HP-UX and Solaris platforms. For information about starting the agent, see “Activating the Service Desk Agent” on page 135. For additional information about the Event Communicator, refer to “Importing Service Events” in the *HP OpenView Service Desk: Data Exchange Administrator’s Guide*.

### Windows Platform

To install software on a Windows NT or Windows 2000 computer, you must be logged on to an account with 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.

When any part of Service Desk is being installed, the installation program checks the regional setting properties set in the Windows NT or 2000 general settings, and sets the language for the installation wizard accordingly.

Install HP OpenView Service Desk Agent by using the setup program on the HP OpenView Service Desk CD-ROM. You can install Service Desk directly from CD-ROM onto your computer’s hard disk, or you can copy the contents of the Agent folder to a shared drive and install via a network drive. If you choose to install the client from a shared folder you use `StartInstallation.exe` from the Agent folder to start the installation.

You can also start the installation by double-clicking the file `Setup.html` in the HTML Setup folder, and then selecting the Installation Program link on the Web page that is displayed. This file can also be used with the methods described above.

To install HP OpenView Service Desk Agent, you must perform the following actions:

1. Insert the HP OpenView Service Desk 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 on your screen, click `Install Service Desk:`

**Figure 7-1 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 for the folder you want to install and run `startinstallation.exe`. Alternatively, you can use `java.exe -cp . setup`, note however that this will only install Service Desk and not any of the third-party software supplied with Service Desk, these must be installed separately.

- 
2. In the following screen click Install Agent:

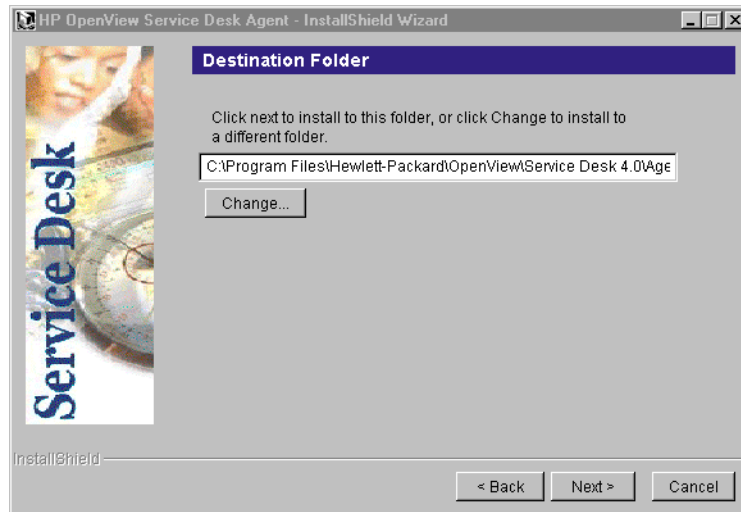
**Figure 7-2**      **Install Agent**



3. The Welcome screen for the Agent InstallShield Wizard appears. Click **Next** to continue, or **Cancel** to abort the installation.
4. If you clicked **Next**, the License Agreement dialog box appears. To proceed, you must select **I accept all terms of the license agreement**, and then click **Next**. By doing so, you agree to all license terms, so read the agreement carefully.
5. The Setup Type dialog box appears. If the Service Desk application will *not* be installed on this machine, select **Stand Alone** installation. If the Service Desk application is installed on this machine, select **Shared Installation**. Click **Next** to continue.
6. The Destination Folder dialog box appears. Here you must enter the folder where the Service Desk 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.

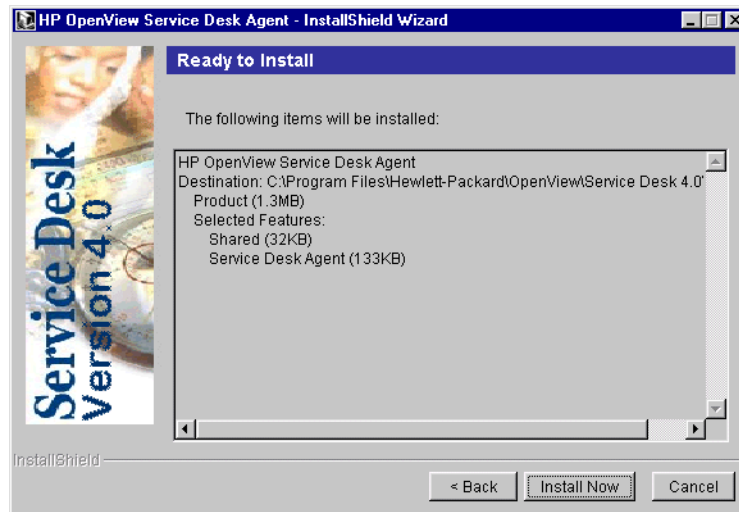


**Figure 7-3 Agent Destination Folder dialog box**



7. If the folder did not already exist, the Confirm dialog box will appear asking if you want to create it now. Select **Next** to continue or **Back** to go to the previous screen and change the destination folder.
8. The Agent Ready to Install dialog box shows the items that will be installed, click **Install Now** to continue:

**Figure 7-4** Agent Ready to Install dialog box



9. A progress monitor will appear showing the files being installed.
10. When all files are installed, the Agent Installation Summary screen will appear. Select Exit to leave the installation program.

## HP-UX Platforms

The installation of the Service Desk agent is available in a packaged form for HP-UX. You can install the agent with the standard HP-UX installation tools `swinstall` and `swremove`, which are included on the Service Desk 4.0 CD-ROM. Before you start the installation, make sure your system meets the installation requirements, see “Requirements” on page 32.

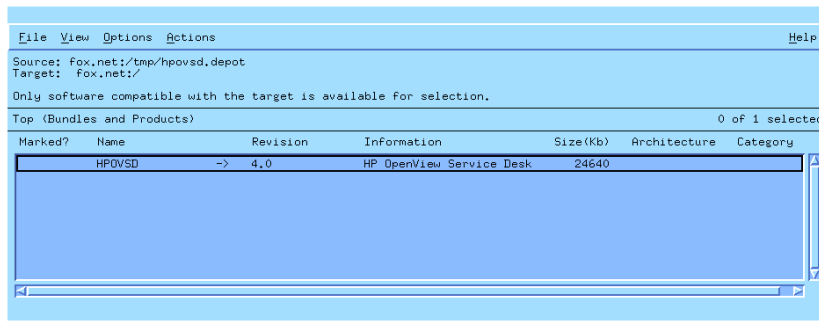
To install the Service Desk agent:

1. Copy the file `hpovsd.depot` to your `/tmp` folder, or to another mounted file system, it is located in the `/unix` directory on the Service Desk 4.0 CD-ROM.
2. Log on as root.
3. Run `# swinstall -s /tmp/hpovsd.depot` to install the agent software. The software will be installed mainly in `/opt/OV/SD/classes`, with one file in `/sbin/init.d/hpovsdagent`, one in

/sbin/rc1.d/K00hpovsdagent, and another in  
/sbin/rc3.d/S99hpovsdagent.

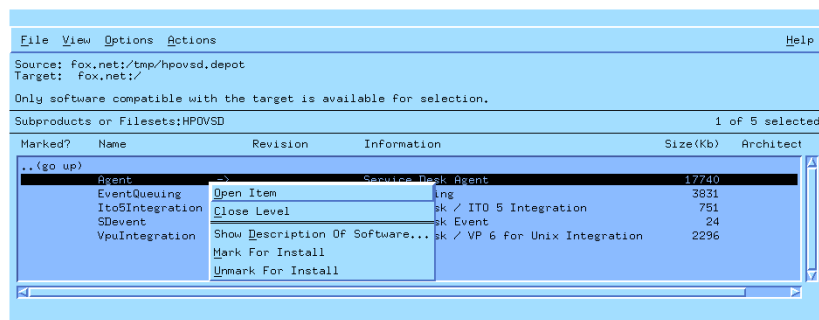
If you are on an X-windows display, and your DISPLAY environment variable is set correctly, a graphical user interface will appear. If you are on a terminal, a full-screen character-based interface will appear:

**Figure 7-5 HPOVSD File - X-windows display**



4. Double-click HPOVSD to expand it so that you can access the entries named Agent, SD\_Event, EventQueuing, and Ito5Integration.
5. To mark one of the products for installation, left-click to select it, and then right-click and select Mark for Install. Click Agent:

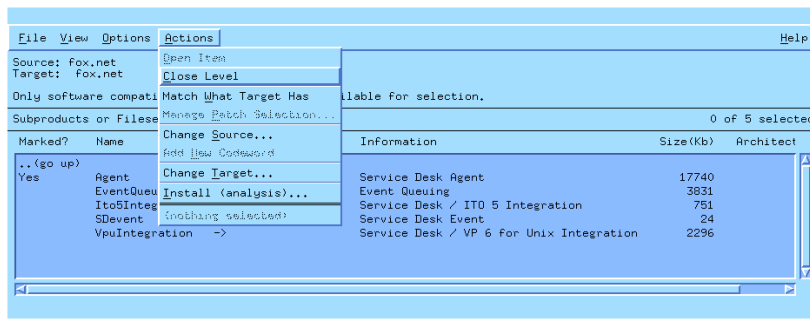
**Figure 7-6 Mark For Install - X-windows display**



6. From the Actions menu select Install (analysis):

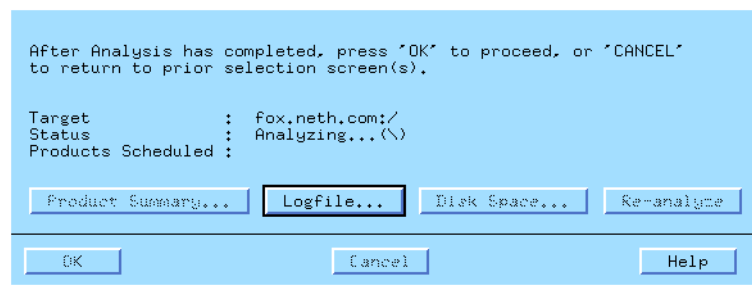
## Installing the Service Desk Agent Service Desk Agent

**Figure 7-7 Install (analysis) -X-windows display**



When the following dialog box appears, click the Logfile button to view the installation process.

**Figure 7-8 Logfile - X-windows display**



If the installation cannot run correctly you will see an error message. If there are no error messages you can click OK to install. The installation process will copy all necessary files, and create entries in the system's run level directories so that it can be started automatically during system start-up and stopped automatically during system shutdown.

7. After installation you can exit the program from the File menu by selecting the Exit command.
8. The script: `/sbin/init.d/hpovsdagent` must be edited before you can use the agent. In the line `APPSEVER=localhost`, change the name `localhost` to the name of the host the application server is running on.

---

**NOTE**

If the virtual machine was not found during installation you must enter the absolute path and the path containing all used classes (including those from the Java Runtime Environment) in JAVA and CLASSPATH lines.

---

## Solaris Platforms

The Service Desk agent installation on Solaris can be done using the `swinstall` program. The `swinstall` program is included on the Service Desk 4.0 CD-ROM. Unlike the HP-UX installation, there is no graphical user interface for `swinstall` on Solaris, which means that you must specify the product you want to install on the command line. To install the agent, copy `hpovsd.depot` to your `tmp` directory and then run:

1. `#swinstall -s/tmp/hpovsd.depot HPOVSD.Agent`

To install all of the files in the depot; which includes the agent, `SDevent`, `Ito5Integration`, and `EventQueuing`, enter: `#swinstall -s/tmp/hpovsd.depot HPOVSD`

2. Edit the script `/sbin/init.d/hpovsdagent` before using it. The line `APPSERVER=localhost` replace `localhost` with the name of the host your application server is running on.

As an alternative you can install the agent manually from the tar file, without using the `swinstall` program:

1. `#mkdir/opt/OV/SD/classes`
2. `#cd/opt/OV/SD/classes`
3. `#tar xvf</path/to/>hpovsdagent.tar`
4. Then start the agent with:  
`#<java> -classpath  
/opt/OV/SD/classes/hpovsdagent.zip:</default/classpath>:/  
opt/OV/SD/classes/mclasses.zip  
com.hp.ifc.ev.ag.sdalocal.AppAgent <appserver>`

The command for starting the agent goes on one line, where `<java>` is the command to run the Java runtime interpreter (typically `java` or `jure`), `</default/classpath>` is the java default classpath (typically `/opt/java/lib/classes.zip`), and `<appserver>` is the name of the

host where the application server is running.

---

**NOTE**

---

For security reasons, users should avoid running the Agent as root.

### **Command failures when using the Agent on UNIX**

The following problems can occur with the Service Desk agent on both HP-UX and Solaris platforms.

The agent will report success if it finds and successfully starts the command; it doesn't wait for the command to finish, nor for its exit code. This means that the command itself may still fail.

The agent uses the 'exec' family of system calls to carry out its commands on unix. This means that redirection will not work, as there is no intermediate shell to carry out the redirection. So even if the `logserver.txt` says that the agent reports successful execution of the command, it might not actually work at all. As a solution for both problems, try:

```
sh -c '<command> >>/tmp/<command>.log 2>&1 ; echo "<command>  
exited with code: $?" >>/tmp/<command>.log 2>&1'
```

Where `<command>` is the command you would normally have used. Take care with spaces and punctuation. After executing the command this way check `/tmp/<command>.log` for the output and exit code of the command.

## Activating the Service Desk Agent

The agent must be installed on all computers where you want to execute database or UI rules. This section explains how to activate the agent on computer systems running under Windows NT, 95, 98, or 2000, or under HP-UX or SUN Solaris.

### Under Windows NT and/or 2000

After installing the agent, you can activate it as follows:

1. From the Start menu select `Settings` and click `Control Panel`.
2. In the Control Panel double-click `Services`.
3. In the Services dialog box find the HP OpenView Service Desk agent entry and click `Startup`.
4. Select `Startup Type: Automatic`, then click `Log On As: System Account` and select the `Allow Service to Interact with Desktop` check box. Click `OK`. If you do not select the check box, the output of the agent will not be visible.

### Under Windows 95 and/or 98

After installing the agent, you can activate it as follows:

From the `Start` menu select `Programs`, then `HP OpenView Service Desk`, then the `Service Desk` agent. You can also put this command in your `Startup` menu.

### Under HP-UX and Solaris

If you installed the agent correctly, it should become active at startup. However, the following commands can be used to stop and start the agent manually:

Change directory using `cd /sbin/init.d`

Use `./hpovsdagent start` to start the agent.

Use `./hpovsdagent stop` to stop the agent.

Use `./hpovsdagent status` to check whether the agent is running.

Installing the Service Desk Agent  
**Activating the Service Desk Agent**



---

## **8** **Post-Installation Tasks**

This chapter describes the tasks you must perform after you have finished installing HP OpenView Service Desk. It describes how to obtain and insert your license key, and how to create and modify Service Desk accounts.

## Licenses

Three types of licenses will be supported with Service Desk 4.0:

- Named user licenses:

A named user license allows you to create the specified number of Service Desk user accounts that will have access to the Service Desk graphical user interface (GUI) no matter how many other users are connected (as long as the maximum number of named users specified in the license is not exceeded). Such an account is especially suited for system administrators and key users that need to be able to access the application at all times. A named user can access up to three sessions at the same time.

- Concurrent user licenses:

A concurrent user license allows the specified number of Service Desk user accounts access to Service Desk simultaneously (not counting the named users that are connected). You can create as many concurrent user accounts as you wish, but no more than the licensed number of concurrent user accounts can access Service Desk at the same time. Concurrent users can access multiple sessions at the same time, but each session counts as a concurrent user.

- Module licenses:

A module license gives all your named and concurrent users access to the module or modules specified in the module license.

You always need one or more module licenses as well as one or more named user licenses or concurrent user licenses, or both.

In Service Desk 4.0, blocked accounts (user accounts that are disabled rather than removed) do not count for the licenses.

In addition to named user accounts and concurrent user accounts, Service Desk 4.0 lets you create an unlimited number of integration accounts and Service Pages accounts. These accounts give access to the Service Desk integrations or Service Pages only; they do not give access to the Service Desk GUI.

The License dialog box in the Administrator Console of Service Desk 4.0 gives more information than in previous versions of Service Desk. For each license it shows the following information:

- License type: named users, concurrent users, or module
- License key
- Number of users
- Expiration date
- Status: active or inactive (expired)

The License dialog box also displays the total number of available: named users, concurrent users, and the names of all the licensed modules. These totals are also displayed in the About dialog box in the Help menu.

---

**NOTE**

Customers who are upgrading from Service Desk 3.0 to Service Desk 4.0 should take note that, although the modules existed in Service Desk 3.0, module based licensing was not enforced. All areas of all modules were available without restriction. Service Desk 4.0, however, rigidly enforces module based licensing. There is therefore, a danger that an upgrade customer who does not obtain licenses for all modules may lose access to data input or viewed through fields that are only applicable to the unlicensed modules. This data is not lost, or deleted, and is still stored on the customer database. It will become accessible again once the customer obtains a suitable license.

---

## **Getting your License Key**

You can get a permanent license key for Service Desk from the Internet or by calling your local response center or HP password center.

To obtain the license key from the Internet:

1. Go to <http://www.webware.hp.com>, and select **Generate product passwords** then click **Next**.
2. Enter the order number from your entitlement certificates and click **Next**.
3. Click the **Service Desk** product name. The check box should be marked. If the product shows **No LTUs available**, contact your sales representative or password center for assistance.
4. After selecting the **Service Desk** product name, you need to enter the number of licenses to use (LTUs) you have, this is the number of users you purchased.
5. In the IP address field enter **0.0.0.0**
6. Fill in the remaining fields with name, address, and company information as required. When you are finished, you will have the option of receiving your license key from the browser page or having it sent to you via e-mail.

---

### **NOTE**

When entering your license key in Service Desk, enter it exactly as shown, without quotation marks; it is case-sensitive.

---

## Changing the License Key

HP OpenView Service Desk is delivered with a license key which will last 60 days. After that period - or earlier if you prefer - you must adjust the license key in Service Desk. The license key is changed in the database. You do not need to adjust it for all client servers separately; once it has been changed in the database, all client servers' license keys will be changed automatically.

To adjust the license key, perform the following actions:

1. Start Service Desk.
2. From the `Tools` menu, select `System`.
3. Click on the `System Panel` branch, or double-click the `System Panel` icon in the `Administrator Console` and double-click `License`.
4. The `License` dialog box displays your current license keys including the number of named users, concurrent users, and the Service Desk modules that you are entitled to use. `Named Users` are users who are specifically named in the license agreement, `Concurrent Users` are a specified number of users, from a greater number of accounts, who can be logged on at any one time. Click `Add` to enter more licenses.

---

### WARNING

You must not create more user accounts than your license permits. If you have used a temporary license key to create more users than you have a permanent license for, you must delete the extra users before the temporary license key runs out. If you do not, all access to Service Desk will be denied at the expiry date.

---

5. The `New Licenses` dialog box has two fields: the `License key` field and the `Annotation` field. Enter the license key and annotation exactly as provided (without quotation marks) and click `OK`.

## **Adding Accounts**

If you have different roles when using Service Desk, or two people are working on the same computer, you will need to define multiple accounts. Your initial system account is set when you install the Service Desk client.

To add additional accounts:

1. Click **Start** in the taskbar.
2. Point to **Programs**, and then point to **HP OpenView Service Desk**.
3. Choose **Service Desk Accounts**.
4. In the **Service Desk Accounts** dialog box, select the **Accounts** tab, click **Add** and choose **Account** from the popup menu. The **Service Desk Connection Wizard** will start.
5. Use the connection wizard to create an additional account. For more information on using the **Connection Wizard** see “**The Connection Wizard**” on page 87.

## **Using a Different Account**

If you use different accounts, or if two people work on the same computer but use different accounts, you will need to switch between the two. To use a different account:

1. Click **Start** in the taskbar.
2. Point to **Programs**, and then to **HP OpenView Service Desk 4.0**.
3. Choose **Accounts**.
4. In the **Service Desk Server Accounts** dialog box, choose the **Account** tab, select the account you want to use and then click **Set As Default**.

---

# 9

## **Upgrading from Previous Versions of Service Desk**

This chapter explains how to install Service Desk 4.0 if you have an older version of Service Desk installed on your system.

## **Introduction**

When you upgrade from an earlier version of Service Desk to Service Desk 4.0:

1. The application server installation program places application server files in a new folder.
2. The client installation program places the new client files in a new folder.
3. The database wizard upgrades the contents of the database that is referred to by the default database account.
4. If you use Service Desk agents, you must first uninstall the old components and re-install the agents.
5. If you use Service Pages you must uninstall the old Self-Service Pages components, including the Self-Service Pages, Apache Web Server, Java Servlet Development Kit (JSDK 2.0), and JServ. Then install the new components for Service Desk 4.0.

---

### **CAUTION**

After you have upgraded, you cannot turn back to a previous version of Service Desk unless you have a backup of the database.

---

The Service Desk toolbar settings are stored in a personal folder on each client machine. Once the Service Desk Upgrade has been installed, client users will have to either reset the Service Desk toolbar (right-click the toolbar and choose *Reset*), or add new shortcuts. If they choose to reset, they will lose any personalized toolbar settings. To retain personalized settings, they will have to add new shortcuts for the new features of Service Desk. Further information can be found in the online help.

---

### **NOTE**

If you are installing Service Desk 4.0 after using an evaluation version, you are advised to first remove the evaluation version. To move from the evaluation version to version 4.0 is considered to be a full install not an upgrade.

---



## Upgrading the Service Desk Application Server

---

### CAUTION

Before upgrading the Service Desk application server, make a backup of your Service Desk database. After the upgrade you cannot turn back to the previous version of Service Desk unless you have a backup of the database.

---

---

### NOTE

Stop the Service Desk service and the Service Desk agent running, in Control Panel\Services on the computer where you are upgrading Service Desk. If Service Pages are installed on the machine the Web Server service must also be stopped. After upgrading the Application Server restart the services and agent.

---

Upgrading the Service Desk application server is equal to installing the Service Desk application server. See “Application Server Installation and Database Configuration” on page 45 for detailed installation instructions. However, pay attention to the following:

- To start the installation program, the Sun Java Runtime Environment (JRE) will be installed.
- The installation program will check the version of Microsoft Data Access components, Microsoft Java Virtual Machine, and Adobe Acrobat Reader. If the installation program finds older versions of these programs, the installation program will start the installation programs of the respective programs. You may have to restart the computer after installing these programs.
- The installation program will copy existing Service Desk 3.0 database accounts to use as Service Desk 4.0 database accounts. The copied database accounts refer to the same database as the Service Desk 3.0 accounts; the databases are not copied.
- The installation program will place the new files in a folder that is located within the Service Desk 4.0 folder. Do not use the Service Desk 3.0 folder as the installation folder for Service Desk 4.0 since

## Upgrading from Previous Versions of Service Desk

### Upgrading the Service Desk Application Server

this will make uninstalling the upgrade impossible and may conflict with future service packs and future upgrades to higher versions of Service Desk.

- Once the application server upgrade installation has been completed, you must run the database configuration wizard to upgrade the database. This can be started by selecting `hp OpenView service desk 4.0, Database Configuration Wizard` option from the Start menu. The database wizard is described in full for SQL Server on page 51 and for Oracle on page 59. However, for upgrading the database only see “Upgrading the Service Desk Database” on page 147. If the application server is started before the database upgrade has been performed the Database Wizard is started automatically.

---

#### NOTE

After you have upgraded the application server software from an existing Service Desk 3.0 application server, you should verify that the default service desk account is correct. Check that both the username, password and server name are correct. Also check that the optional port number is specified correctly if the you were running the old application server on a different port number than the default.

To test if the account details are correct you should open the accounts window from the Service Desk 4.0 menu option, select the `Accounts` tab, find the default account and click the `Properties` button. When you press the `Test Connection` button, it should display `Connection Successful`. If it doesn't, check the details mentioned above.

---

## **Upgrading the Service Desk Database**

---

### **CAUTION**

Before upgrading the Service Desk database, please make a backup of your Service Desk database using whatever third-party application you normally use. After the upgrade you cannot turn back to the previous version of Service Desk unless you have a backup of the database.

---

---

### **NOTE**

Stop the Service Desk service and the Service Desk agent running, in Control Panel\Services on the computer where you are upgrading Service Desk. If Service Pages are installed on the machine the Web Server service must also be stopped. After upgrading the Service Desk database restart the services and agent.

---

Upgrading the Service Desk database is a fairly simple task. Before upgrading the Service Desk database, you must have upgraded the Service Desk application server. Pay attention to the following:

- If you did not use the database wizard while upgrading the Service Desk application server, see “Upgrading the Database from the Database Wizard” on page 148 to start it.
- The database wizard automatically finds existing Service Desk database accounts. If the database does not have the right Service Desk version, the database wizard will propose to upgrade the database.
- The database wizard will update the Service Desk database that is referred to by the default database account. If you want to upgrade a test database before upgrading the production database, make the test database account the default database account first. To set the default database account, see “Setting the Default Database Account” on page 149.
- Once the application server upgrade installation has been completed, you must run the database configuration wizard to upgrade the Service Desk database. This can be started by selecting **HP OpenView Service Desk Database Configuration Wizard** option from the

## Upgrading from Previous Versions of Service Desk Upgrading the Service Desk Database

Start menu. If the application server is started before the database upgrade has been performed the Database Wizard is started automatically.

### Upgrading the Database from the Database Wizard

When any part Service Desk is being upgraded, the upgrade program checks the regional setting properties set in the Windows NT or 2000 general settings, and sets the language for the wizard accordingly.

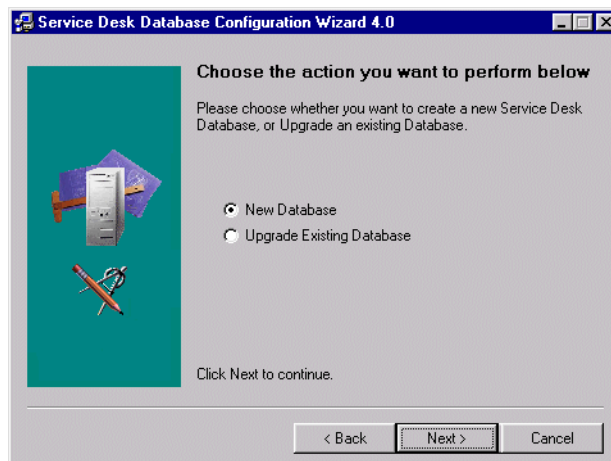
Start the Service Desk database wizard as follows:

- Step 1.** In the taskbar, click Start.
- Step 2.** Point to Programs and then to HP OpenView Service Desk 4.0.
- Step 3.** Choose HP OpenView Service Desk Database Wizard. The Database Wizard is started, on the Welcome screen click Next.
- Step 4.** The following dialog box will appear. You are given two options, to create a new database or to upgrade the existing database.

Select Upgrade Existing Database and click Next to carry on.

**Figure 9-1**

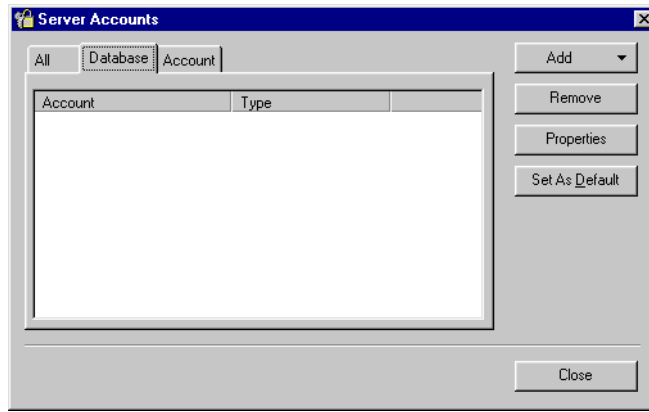
#### Create New or Upgrade Database dialog box



- Step 5.** The details of the current default database are shown. Click Next to continue. If the details of a database other than the one you want to upgrade are displayed, click the Accounts button. The Accounts dialog

box is displayed, select the database account you want to upgrade, and click the **Set as Default** button (do not restart the service if asked). Click **Close** to return to the Database Configuration Wizard. Click **Back** to return to Step 4 and then **Next** again. The details of the new default database will be shown. Click **Next** to continue the upgrade.

**Figure 9-2** **Server Accounts dialog box**



- Step 6.** A pop-up 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.
- Step 7.** If any errors occur in the upgrade process a dialog box listing the errors is displayed. The dialog box asks if you want to continue with the upgrade. If you click **Yes** the upgrade continues with Step 7. If you click **No** the upgrade process is aborted, but the wizard will then continue with the option to view the log file. Before re-running the upgrade, the errors must be fixed and the database restored.
- Step 8.** A dialog box is displayed when the process has finished, and you are asked whether you would like to view the generated log file.

### **Setting the Default Database Account**

To make a database account the default database account, do the following:

- Step 1.** In the taskbar, click **Start**.
- Step 2.** Point to **Programs** and then to **HP OpenView Service Desk 4.0**.

Upgrading from Previous Versions of Service Desk  
**Upgrading the Service Desk Database**

- Step 3.** Choose HP OpenView Service Desk Accounts.
- Step 4.** In the Service Desk Accounts dialog box, click the Databases tab.
- Step 5.** Select the database account you want to make the default and click Set As Default.

## Preparing for Service Desk Client Upgrade

After you upgraded the Service Desk 4.0 application server, you must upgrade all Service Desk clients, or make preparations for hyperlink upgrade, before the user starts Service Desk. Otherwise, Service Desk will display a confusing message with a hyperlink that does not work.

When you upgrade to Service Desk 4.0, you effectively install the new Service Desk in a directory tree along side the exist version. At the end of the installation of Service Desk 4.0 (which copies all personal settings from the earlier version) the old version can be deleted.

There are three sources that can be used to upgrade Service Desk clients:

- **CD-ROM installation.**  
If you upgrade the clients from a CD-ROM, you install the new client software on each Service Desk client machine using the installation program on the Service Desk CD-ROM inserted in the CD-ROM drive of the client machine or a CD-ROM drive elsewhere on the network.
- **Shared folder installation.**  
If you upgrade the clients from a shared folder, you start the client installation program from each Service Desk client computer by accessing a shared folder on either the Service Desk application server machine or elsewhere on the network.
- **Hyperlink installation.**  
If a Web server is available, you place the client installation program on the Web server. Alternatively, you can place the client upgrade program in a shared folder. By making the URL available in Service Desk, users can upgrade the client using the intranet.

There are two executable files that can be used for the client upgrade, either can be selected from the CD-ROM, from a shared folder, or via a hyperlink:

- `HPOpenViewServiceDesk.exe`  
When this file is opened it is first copied to the `C:\Temp` folder of the client machine, from where it is unpacked and installed. On the CD this file located in the `client\packed` folder.
- `StartInstallation.exe`.  
When this file is opened it is installed from its original location. On the CD this file located in the `client` folder.

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

When the Service Desk CD-ROM is inserted in the CD drive of a client PC, autorun will cause the installation program to start, and the Service Desk start screen to be displayed. Install the client software as described in “Client Installation” on page 81. If the client PC has autorun switched off, insert the CD in the CD-ROM drive and navigate to the `Client` folder and double-click `StartInstallation.exe` or navigate to `Client\Packed` and double-click `HPOpenViewServiceDesk.exe`. If you are using the CD in a networked CD-ROM drive navigate to the same file through your network. In either of these two cases the start screen is not shown, and the installation wizard is started directly.

## **Preparing for Shared Folder Upgrade**

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

To enable upgrading Service Desk clients from a shared location, copy the Service Desk client installation program to a shared folder. For example you could use the default folder created in the application server structure during the upgrade of the Service Desk application server. This folder is: `\\Program Files\Hewlett-Packard\OpenView\Service Desk 4.0\Server\ClientUpgrade\` on the application server machine. Copy the complete contents of the `Client` or `Client\Packed` folders on the CD-ROM to the shared folder you want to use to upgrade the Service Desk clients. Whatever the folder you use, the client must have access rights.

## **Preparing for Hyperlink Upgrades**

After you upgrade the application server, the Service Desk client will display an error message with a hyperlink when it finds a mismatch between the server and client version numbers. If the user clicks the hyperlink, the Service Desk client is upgraded. To make the hyperlink work, you first have to make the following preparations.

To upgrade the Service Desk client from the hyperlink shown in the update message, copy the Service Desk client upgrade installation program to a folder in a Web server or to a shared folder. Copy the complete contents of the `Client` or `Client\Packed` folder from the CD-ROM to the Web server or to the shared folder you want to use.



---

**NOTE**

---

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

To make the location of the Service Desk client upgrade installation program available in the error message, do the following:

- Step 1.** On the application server, choose `System` from the `Tools` menu.
- Step 2.** In the Administrator Console, select `System Panel`.
- Step 3.** Double-click `General Settings`.
- Step 4.** In the `URL Of The Latest Software Version` text box type the path and file name of the `.exe` file.
  - If you use a Web server to make the file available, type a URL for the `http` protocol for example:  
`http:\\mywebserver\client\HPOpenViewServiceDesk.exe`  
In this example `mywebserver\client` is the name of your Web server and location where you copied the client upgrade file.
  - If you use a shared folder to make the file available, type a URL for the file transfer protocol, for example:  
`file:\\myfileserv\myshare\HPOpenViewServiceDesk.exe`  
In this example `myfileserv\myshare` specifies your file server and shared folder where you copied the client upgrade files.

When a user starts the Service Desk client after the Service Desk application server has been upgraded, a message is shown supplying a hyperlink to the client upgrade installation program. See “Upgrading Service Desk Clients” on page 154 for further instructions for the user to upgrade the client.

## Upgrading Service Desk Clients

There are three ways to upgrade a client to Service Desk 4.0, either directly from the CD, from a shared folder, or via a hyperlink that points to a web server.

---

### NOTE

All the client upgrade installation methods described in the previous section (“Preparing for Service Desk Client Upgrade” on page 151), with the exception of the installation from the CD-ROM, start the installation from Step 4.

---

To upgrade Service Desk clients from the CD do the following:

- Step 1.** If autorun does not start the installation program’s welcome page, open the CD-ROM drive in Windows explorer and double-click `setup.exe`.
- Step 2.** In the start screen, click `Install Service Desk`. A second start screen is show.
- Step 3.** In the second start screen, click `Install Client`.
- Step 4.** The installation program will automatically install Adobe Acrobat, and will check that the required version of Microsoft Virtual Machine is installed. If it is not, Service Desk will install it, and the machine should be re-started. Once the machine has re-started, you must start the installation program again.

---

### NOTE

If you ran the installation program from the packed `HPOpenViewServiceDesk.exe` file, the installation program files have already been downloaded to `C:\Temp\Service Desk Client\` folder on your harddisk and you should now restart the installation program by double-clicking on the file `StartInsallation.exe` in this folder. This will reduce network traffic by not down loading the packed file again.

---

- Step 5.** The Service Desk installation program automatically detects the existing Service Desk client installation and copies the account and profile details (this will include customized views, icons, etc). The new client

installation is created in a separate folder and does not overwrite the old version.

**Step 6.** At the end of the installation process the wizard asks if you want to uninstall the old Service Desk 3.0 client. If you click `Yes` the uninstall process of Service Desk 3.0 is started. If you click `No` you will still not be able to run the old version as it is incompatible with the Service Desk 4.0 server and database. However, you may want to keep it to double check that your personalized customizations have been copied correctly and to recreate them manually if necessary.

## **Upgrading Service Desk Agents**

To upgrade Service Desk agents, re-install the agents. Before re-installing agents, consider the following:

- You have to upgrade the agent on each computer where the previous version of the agent is installed.
- If you install the agent and the client on the same Windows NT computer, then the shared installation is the preferred installation option for agents. With the shared installation, the `classes.zip` file on the computer is shared between agent and client.
- In a stand-alone installation, you may first want to uninstall the previous version of the agent to save disk space. However, you can install the new agent without first removing the old agent.
- In the previous version of Service Desk there was no agent available for HP-UX platforms. Follow the agent installation instructions for HP-UX to install the agent on HP-UX platforms.

To install the Service Desk agents, see “Service Desk Agent” on page 126. To install the Service Desk agents on Windows NT or Windows 2000 platforms, see “Under Windows NT and/or 2000” on page 135. To install the Service Desk agents on HP-UX platforms, see “Under HP-UX and Solaris” on page 135.

## Uninstalling Upgrades

---

### NOTE

Uninstalling the upgrades is only possible under the following conditions:

- You have a backup of the previous version of the database.
- The contents of the database did not change since the upgrade. Any changes applied since the upgrade will be lost by uninstalling the upgrade.

---

To uninstall the upgrade, do the following:

- Step 1.** Roll back the database to the backup you have made before you started the upgrade.
- Step 2.** At the Service Desk application server computer, uninstall the Service Desk upgrade using the Add/Remove function from Windows Control Panel.
- Step 3.** At each Service Desk client computer, uninstall the Service Desk upgrade using the Add/Remove function from Windows Control Panel.

After uninstalling the upgrade, the HP OpenView Service Desk service is removed from the application server computer. To install and start the HP OpenView Service Desk service again do the following:

- Step 1.** Open the DOS prompt in the folder where the `ovsds.exe` program is located. You find the `ovsds.exe` program in the `bin` folder in the folder where you installed the old version of Service Desk.
- Step 2.** At the DOS-prompt, type `ovsds.exe /install` and press **Enter**.
- Step 3.** Type `net start "HP OpenView Service Desk Service"` and press **Enter**.

Upgrading from Previous Versions of Service Desk  
**Uninstalling Upgrades**

---

## **10**      **Service Pack Releases**

We try to make Service Desk 4.0 the highest quality application available. To ensure optimal performance, it may be necessary to provide you with solutions for problems. This chapter explains how to obtain Service Desk 4.0 service packs.

## **Service Packs**

The information in this chapter is about service packs that at the moment of this writing have yet to be released. This chapter gives the general outline of how to work with service packs. Always read the documentation provided with the service pack first. The documentation for the service packs includes installation and uninstallation procedures.

With each service pack, you can upgrade the Service Desk application server and Service Desk clients with the latest software patches. Each subsequent service pack will contain all patches made available in the previous service pack.

### **Obtaining Service Packs**

You can download the latest service pack from the HP OpenView Patches Web site at <http://ovweb.external.hp.com/cpe/patches>, or you can order the service pack CD-ROM from your supplier.

### **Installing Service Packs**

For each service pack, you first install the service pack on the Service Desk application server. After that, you can prepare for the installation of the service pack on Service Desk clients. You can set up a procedure so that users can install the service pack themselves the next time they log on to Service Desk. Alternatively you can install each client individually from the CD.

### **Uninstalling Service Packs**

You cannot remove a service pack by just removing the service pack folder. Follow the instruction provided in the service pack documentation for uninstallation procedures.



---

## **11 Removing Service Desk**

This chapter describes the tasks you must perform to remove the HP OpenView Service Desk software completely from your system, including the removal of files and components residing in local systems. It also contains a list of files that will not be removed.

---

**NOTE**

---

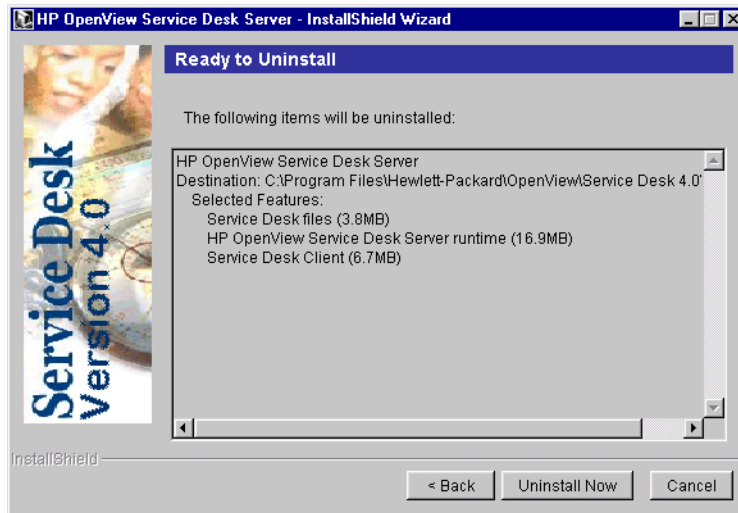
If you are uninstalling a client from a machine where a Service Desk Agent is also installed, the Agent must be uninstalled before the Client.

When any part Service Desk is being uninstalled, the uninstallation program checks the regional setting properties set in the Windows NT or 2000 general settings, and sets the language for the uninstallation wizard accordingly.

You can remove HP OpenView Service Desk using the Control Panel:

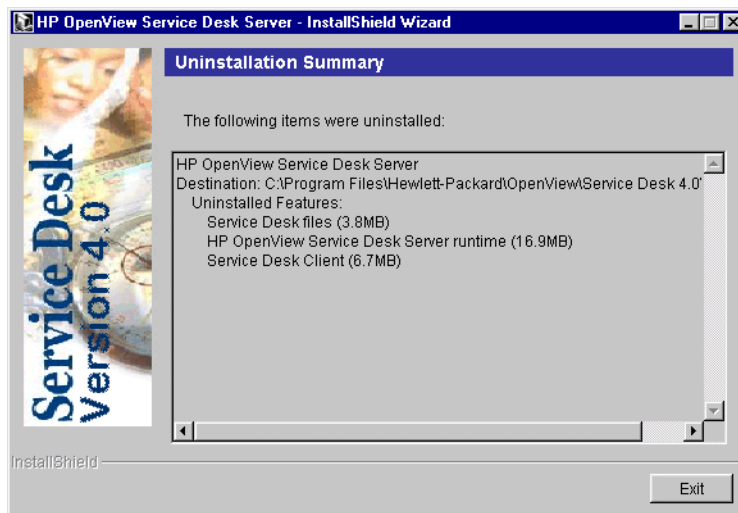
1. Start Windows, and then click the **Start** button. In the Start menu, choose **Settings**. In the submenu, select **Control Panel**.
2. Double-click the **Add/Remove Programs** icon.
3. Choose the **Install/Uninstall** tab.
4. In the list, select the HP OpenView Service Desk component you want to uninstall, for instance the **Server**, **Client**, **Agent**, etc. and click **Add/Remove**. You can only remove one component at a time, this procedure must be repeated for each component.
5. The **Service Desk Uninstall** wizard is displayed, follow the instructions.
6. The **Ready to Uninstall** dialog box appears, Click **Uninstall Now** to remove the HP OpenView Service Desk component selected in Step 4 above.

**Figure 11-1 Ready to Uninstall dialog box**



7. A dialog box showing the progress of the Uninstallation is shown. When the progress reaches 100% the Uninstallation Summary dialog box is displayed. Click **Exit** to finish the procedure.

**Figure 11-2 Uninstallation Summary dialog box**



---

**NOTE**

If Apache web server has been installed it must be switched off before uninstalling Service Desk. However, if a Service Desk client is being uninstalled so that the Application Server can be installed on the machine, or the Application Server is being uninstalled so that the client can be installed, Apache should be removed completely, then reinstalled.

---

---

**NOTE**

If for some reason the uninstallation of any Service Desk component does not work on a client, do the following:

1. Open a DOS box
  2. Change the directory to C:\Program Files\Hewlett-Packard\Openview\Service Desk 4.0\Client
  3. Run `java.exe -cp . uninstall.`
-

## **Registry Keys**

Once you have removed Service Desk 4.0, you can check that the following registry keys have been removed:

- HKEY\_CURRENT\_USER\Software\Hewlett-Packard\OpenView\Service Desk\4.0\Accounts **(the Service Desk accounts)**
- HKEY\_CURRENT\_USER\Software\Hewlett-Packard\OpenView\Service Desk\4.0\cache **(the Service Desk cache)**
- HKEY\_LOCAL\_MACHINE\SOFTWARE\Hewlett-Packard\OpenView\Service Desk\4.0->ProductPath **(the Service Desk home folder)**
- HKEY\_LOCAL\_MACHINE\SOFTWARE\Hewlett-Packard\OpenView\Service Desk\4.0\Accounts **(the Service Desk Database accounts for the application server)**

---

## Files That Will Not Be Removed during Uninstallation

It is possible to remove most of the files listed below, but removing them may have a negative effect on the performance of your computer. Removing the Microsoft HTML Help Update will cause performance problems in HTML browsers. Therefore, we advise you not to remove these files.

- DLL files that have been installed to the %Windir%\system32 directory:
  - All installs:
    - MSVBVM60.DLL
    - license.dll
  - Integrations:
    - msvc60.dll
    - mfc42.dll
    - msvcrt.dll
- OCX controls located in %CommonFiles%\Software Sheridan Shared:
  - sstbars2.ocx
- OCX controls located in %CommonFiles%\Software GridEx Shared:
  - GridEx20.ocx
  - GridExFix.dll
- OCX controls located in %CommonFiles%\Software FX Shared:
  - CFX4032.ocx
  - CFX4Data.dll
  - SfxBar.dll
- Software Suprasoft Shared:
  - PSuite.ocx
- Microsoft Java Virtual Machine
- Microsoft Data Access Components 2.6
- Microsoft HTML Help Update located in the %Windir%\system32 folder:
  - hhctrl.ocx
  - itircl.dll

Removing Service Desk  
**Files That Will Not Be Removed during Uninstallation**

itss.dll  
hh.exe

Removing Service Desk

**Files That Will Not Be Removed during Uninstallation**



---

# **A Troubleshooting**

This section discusses problems that could occur and prevent you from running Service Desk or connecting to the server. Once you have started the Service Desk GUI/console, you can consult the online Help to troubleshoot problems that occur while using Service Desk.

## Troubleshooting the Installation

Ideally, we would hope that your installation of Service Desk 4.0 is completed without complications. However, Service Desk 4.0 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 or exhaustive. 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.openview.hp.com/services/> and follow the link for how to get OpenView support in your region.

### Unable to Connect to Server

If, when you start Service Desk, particularly for the first time after installing the software, 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 or SQL Server database installed and configured, Service Desk 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 Service Desk 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 so, see below.

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 double-click the **Services** icon, and select **HP Service Desk** service in the Services dialog box.
3. Click the **Stop** button to stop Service Desk from running as a service.

4. In Windows Explorer navigate to the C:\program files\Hewlett Packard\OpenView\Service Desk 4.0\Server folder and double-click ServiceDeskServer.exe. A DOS box with the application server running as a console program is displayed.
5. Restart the Service Desk client program. If you still get the message 'unable to connect to server', restart the machine 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.

## Service Pages

To find out if the Service Pages work, open a Web-browser and navigate to: `http://localhost/sp/start`

If the Service Pages are not displayed, try the following to locate the problem: `http://localhost` this should display the Apache Web server local homepage.

Test the Tomcat engine, without testing Apache or IIS, by opening: `http://localhost:8080/`

Also, have a look at the log files from the Apache Web server and double-check the Service Pages configuration section in the Service Desk Administrators Guide. Verify that all the entries in the configuration files are correct.

## Service Desk 3.0 and 4.0 on One Client PC

There can only be one Service Desk client installation on a single machine.

It is not possible to run both Service Desk 3.0 and Service Desk 4.0 client software on the same machine. This is because Service Desk uses the same virtual machine registry entries for both versions.

## ActiveX Error Messages During Installation

There is an issue with the ActiveX controls used by Service Desk. It seems that if a specific ActiveX control is registered, Windows gives an

Troubleshooting

## **Troubleshooting the Installation**

error message during installation. This message appears in a dialog box titled regsvr32.exe - Application Error. You can safely ignore this error message as it has no effect on the working of Service Desk.

---

# Index

---

## A

Accounts  
  Windows startup account, 30  
administrator account, 46  
Adobe Acrobat  
  installation, 47, 145, 154  
Agent activation, 135  
Apache HTTP Server, 108  
Apache JServ  
  tested against guide, 15  
Apache Web Server, 112  
Apache web server  
  SP configuration, 92  
  tested against guide, 15  
application server, 27  
architecture, three tier, 26  
attachments, 30

## C

changing license key, 141  
Client Installation  
  autorun, 79  
  CD-ROM, 78  
  Hyperlink, 78, 79  
  Packed, 79  
  Shared folder, 78  
  unpacked, 78  
  Windows NT/2000, 81  
Client installation, 27, 81  
configuring  
  Service pages, 100  
Connection Wizard, 87  
Control Panel, close, 45

## D

database  
  application server, installing, 45  
  Oracle, creating, 34  
  server, 27  
  SQL Server, creating, 36  
  type, 27

database dump, 30  
datafiles, 63  
Demo data, 56  
DOS  
  agent installation, 127  
  client installation, 83  
  integrations installation, 119  
  server installation, 47  
  SSP installation, 96  
  troubleshooting, 171  
  uninstalling, 164  
  upgrades, 157

## E

e-mail  
  attachments, 30  
Euro sign, 34, 38  
Exec Commands, 134  
expiration, license, 141

## F

file server, 30  
files  
  installed, 29  
  not removed, 166  
firewall, 109

## H

Help, 170  
HP password center, 140  
HP-UX, 92, 108, 134  
  agent activation, 135  
  integration tools, 122  
  service desk agent, 126  
  upgrading, 156  
HTML, 91, 93, 114  
Hyperlink installation  
  shared folder, 80, 153  
  upgrades, 151

## I

IIS web server, 92  
installing  
  client, 27, 81  
  database, application server, 45  
  files, 29  
  options, 27  
  process, 28  
  server, 27  
  virtual machine, 39  
Integrations  
  Windows NT/2000, 118  
Internet, 91, 140

## J

Java Development Kit, 108  
Java Runtime Environment, 47, 108, 145  
Java runtime interpreter, 123, 133  
Java Virtual Machine, 39, 81, 145  
  client installation, 81  
  integration tools, 123  
JRE, 110, 112

## L

license key, changing, 141  
Log files, 170

## M

ManageX, 118  
Microsoft Data Access, 47, 145  
Microsoft IIS, 112  
Microsoft Virtual Machine, 47, 154  
Multiple languages, 34  
Multiple servers, 109

---

# Index

---

## N

NET8, 35, 45  
NT4.0 Server Option Pack, 92

## O

Oracle database, 27, 170  
  creating, 34  
  rule-based optimization, 34, 35

## R

Registry keys, 165  
requirements  
  knowledge, 15

## S

Security, 134  
Self-Service pages  
  shared installation, 99  
  stand-alone installation, 96  
Server installation  
  Windows NT/2000, 45  
  server installation, 27  
Service Desk agent  
  HP-UX installation, 130  
  shared installation, 44, 79  
  Solaris installation, 133  
  stand-alone installation, 44, 79  
  Windows NT/2000, 126  
Service Desk, removing, 162  
Service packs, 160  
Service Pages, 91  
  Class files, 92  
  Redirect filter, 105  
Service pages  
  shared installation, 44, 79, 92,  
  96  
  stand-alone installation, 44,  
  79, 92  
  upgrading, 92  
Solaris, 134  
  agent activation, 135

  integration tools, 122  
  service desk agent, 126  
  SP configuration, 92

Spaces, 55

SQL Server

  database, 27  
  access, 38  
  manual creation, 36  
  properties, 36  
  requirements, 36  
  unable to connect, 170  
  Enterprise Manager, 36  
  login properties, 37

Sun Solaris, 108

Support, 170

symbols

  Euro sign, 34, 38

system administrator

  account, 54  
  DBA group, 62  
  rights, 45, 81, 118, 126  
  role, 36  
  skill level, 15

## T

   tablespaces, 63  
  Tomcat, 92, 108, 112, 171  
  troubleshooting  
    installation program, 47, 83,  
    96, 119, 127  
    uninstall, 166

## U

  Unicode, UTF8, 34, 93  
  uninstall, Service Desk, 162  
  UNIX, 108

## V

  version numbers  
    files, 29  
    server, database mismatch,  
    171

  software, 32  
  tested against guide, 15  
  virtual machine  
    installing, 39

## W

Web Server Adapter, 108  
Windows 2000  
  agent activation, 135  
  client installation, 81  
  integrations, 118  
  server installation, 45  
  service desk agent, 126  
Windows 95  
  agent activation, 135  
Windows 98, 81  
  agent activation, 135  
Windows NT  
  agent activation, 135  
  client installation, 81  
  integrations, 118  
  server installation, 45  
  service desk agent, 126  
  SP configuration, 92  
  tested against guide, 15  
  upgrading agents, 156