

# **HP OpenView Service Desk 4.5 Web Console**

## **Installation and Configuration Guide**

**Software Version: 1.0**

**Windows®, HP-UX, and Solaris**



**Manufacturing Part Number: None**

**August 2004**

© Copyright 2004 Hewlett-Packard Development Company, L.P.

---

## Legal Notices

### **Warranty.**

*Hewlett-Packard makes no warranty of any kind with regard to this document, 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.*

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

### **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  
United States of America

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

### **Copyright Notices.**

©Copyright 1999-2004 Hewlett-Packard Development Company, L.P.

No part of this document may be copied, reproduced, or translated to another language without the prior written consent of Hewlett-Packard Company. The information contained in this material is subject to change without notice.

### **Trademark Notices.**

Adobe® is a trademark of Adobe Systems Incorporated.

HP-UX Release 10.20 and later and HP-UX Release 11.00 and later (in both 32 and 64-bit configurations) on all HP 9000 computers are Open Group UNIX 95 branded products.

Intel386, Intel80386, Intel486, and Intel80486 are U.S. trademarks of Intel Corporation.

Intel Itanium™: Intel, Intel Inside and Itanium are trademarks or registered trademarks of Intel Corporation in the U.S. and other countries and are used under license.

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

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

MS-DOS® is a U.S. registered trademark of Microsoft Corporation.

Netscape™ and Netscape Navigator™ are U.S. trademarks of Netscape Communications Corporation.

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

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

OSF, OSF/1, OSF/Motif, Motif, and Open Software Foundation are trademarks of the Open Software Foundation in the U.S. and other countries.

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

SQL\*Plus® is a registered U.S. trademark of Oracle Corporation, Redwood City, California.

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 .....	12
Distribution .....	14
What This Manual Covers.....	15
Features and Benefits of Service Desk 4.5 Web Console.....	16
Limitations of the Service Desk 4.5 Web Console .....	17

## 2. Pre-Installation Tasks

Obtaining the Required Service Pack .....	20
Checking System Requirements .....	21
Verifying Sufficient Disk Space.....	22
Verifying that a Port Is Available .....	23
Assigning the “User and Group” (UNIX only) .....	24

## 3. Installing the Service Desk 4.5 Web Console Server

On Windows Operating Systems.....	26
On HP-UX or Solaris Operating Systems.....	32

## 4. Post-Installation Tasks

Increasing Kernel Parameters (HP-UX only).....	38
Ensuring that an X11 Display Is Always Available (UNIX only) .....	39
Verifying the Installation .....	41
Starting the Service Desk 4.5 Web Console .....	41
Stopping the Service Desk 4.5 Web Console .....	44

## 5. Essential Concepts

Service Desk 4.5 Web Console Data Security.....	46
Authorization .....	46
Authentication .....	46
Refresh Model for Modified Configuration and Data Files .....	47
Service Desk 4.5 Web Console Windowing Behavior .....	50
Configuration Options .....	53
User Configuration Options.....	53
Administrator Configuration Options .....	53
Start Up Options .....	55

---

# Contents

## 6. Configuration Tasks

Configuring Communication with Your Service Desk 4.5 Server . . . . .	58
Connecting to a Service Desk 4.5 Server After Installation. . . . .	58
Changing the Specified Service Desk 4.5 Server . . . . .	59
Configuring Supported Applications for Smart Actions . . . . .	61
Configuring Object Attachments. . . . .	63
Setting the JAVA_HOME Environment Variable . . . . .	64

## 7. Performing Routine Administration Tasks

Access the Web Console Administrator Page . . . . .	66
Logging and Tracing . . . . .	67
Viewing Log Files . . . . .	67
Setting Trace Level and Viewing Trace Files . . . . .	68
Controlling the Size of the Log Files and Trace Files. . . . .	69
Restarting the Apache Tomcat Servlet. . . . .	70
From the Web Console Administrator Page . . . . .	70
From Outside of the Service Desk 4.5 Web Console . . . . .	70
Restarting the Apache HTTP Server . . . . .	72
Running the JVM Garbage Collector . . . . .	73
Configuring the Maximum Number of Forms in Cache. . . . .	74
Determining which Service Desk 4.5 Server . . . . .	76
When Service Desk Server is Part of a Server Pool . . . . .	76
When Service Desk Server is NOT Part of a Server Pool. . . . .	76

## A. Troubleshooting the Service Desk 4.5 Web Console

Resolving Installation Problems . . . . .	80
Troubleshooting the Apache HTTP Server. . . . .	84
Fixing Server-to-Server Communication Problems . . . . .	86
Error Message 1: Check Application Server . . . . .	86
Error Message 2: Upgrade Your Software. . . . .	87
Error Message 3: Login Incorrect . . . . .	87
Responding to Routine Error Messages . . . . .	88
“Maximum # concurrent users can log in at one time”. . . . .	88
“The maximum of logins with the same user has been reached”. . . . .	89
“You have been logged out...You have no authorization” . . . . .	89

Troubleshooting Missing Form Fields . . . . .	91
Understanding Display Differences . . . . .	92
The “New” button is missing from Service Today views . . . . .	92
The “New” button is missing from Configuration Item views . . . . .	92
There is no way to determine which filter is currently active in any view . . . . .	92
Understanding Lookup Field Behavior . . . . .	93
Lookup field behavior with multiple matches . . . . .	93
Understanding the Timezone Field on the Login Page . . . . .	94
Resolving out of Memory Errors . . . . .	95
Reporting and Monitoring Resolution of Problems . . . . .	96
<b>B. Rules for Direct Editing of XML Files</b>	
Backing Up XML Files . . . . .	98
Validating XML Files . . . . .	99
<b>C. Uninstalling Service Desk 4.5 Web Console</b>	
On Windows Operating Systems . . . . .	102
On UNIX Operating Systems . . . . .	103
<b>Index . . . . .</b>	<b>105</b>

---

# Contents



---

## Support

Please visit the HP OpenView web site at:

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

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


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


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


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

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

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

 HP Passport

 Active contract

 Premium contract

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

[http://support.openview.hp.com/access\\_level.jsp](http://support.openview.hp.com/access_level.jsp)

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

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



---

# 1

# Introduction

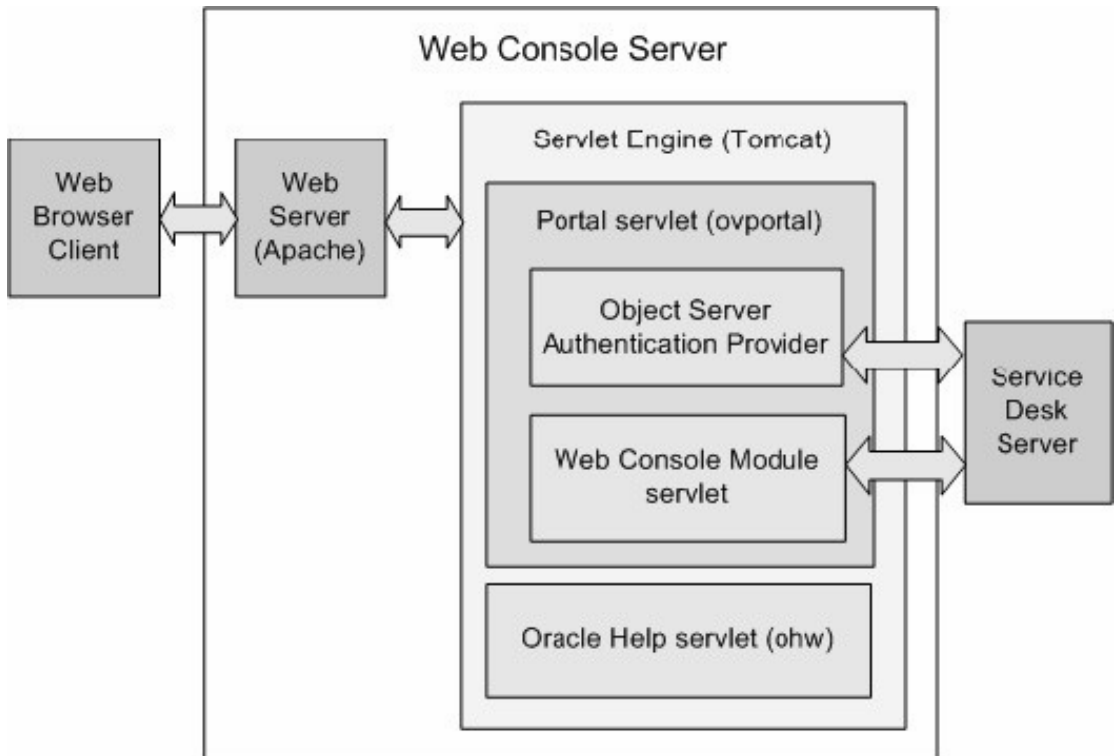
- “Architecture” on page 12
- “Distribution” on page 14
- “What This Manual Covers” on page 15
- “Features and Benefits of Service Desk 4.5 Web Console” on page 16
- “Limitations of the Service Desk 4.5 Web Console” on page 17

## Architecture

The Service Desk 4.5 web console architecture includes three main elements, as shown in Figure 1-1: Web Browser client, Service Desk 4.5 web console server, and Service Desk server. The Service Desk 4.5 web console server requires that two services/daemons are running:

- Apache HTTP Server (ovapache)
- Apache Tomcat Servlet/JSP Container (ovtomcat)

**Figure 1-1** Service Desk 4.5 Web Console Architecture



The Service Desk 4.5 web console server uses the Apache Tomcat Servlet as the application server. By starting and stopping the Apache Tomcat Servlet, you also start and stop the Service Desk 4.5 web console.

The Service Desk 4.5 web console runs two additional servlets:

- Portal (`ovportal`) to communicate with your standard Service Desk server regarding authentication during login (using Service Desk accounts and passwords) and to gather Service Desk data.
- Oracle Help for the Web (`ohw`) to display the Service Desk 4.5 web console online help files.

---

## Distribution

The Service Desk 4.5 web console supports a three-tiered distribution model (as shown in Figure 1-2):

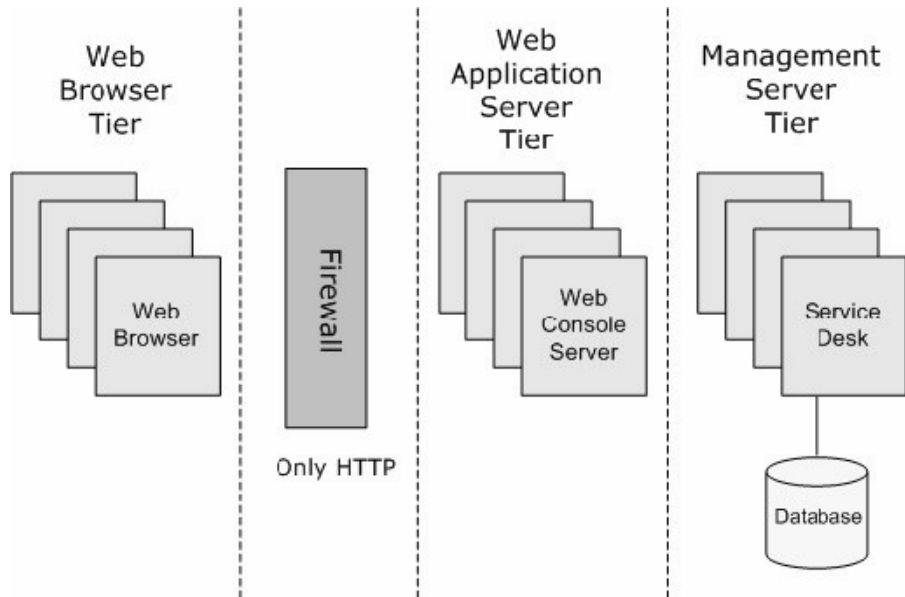
- Web Browser (client)
- Web Application Server (Service Desk 4.5 web console server)
- Management Server (Service Desk 4.5 server)

The model supports placement of a firewall between the web browser and web application server tiers, with HTTP as the protocol between them.

Install Service Desk 4.5 web console on a separate machine from Service Desk 4.5 and Service Desk Service Pages. The Service Desk 4.5 web console server cannot be installed onto the same system as your standard Service Desk/Service Pages server. Coexistence is not supported with Service Desk because of Java version conflicts between the two JVMs. Coexistence is not supported with Service Pages because of port conflicts between the two Apache Tomcat servlet installations.

**Figure 1-2**

### Three-Tiered Distribution Model



## What This Manual Covers

This manual, *HP OpenView Service Desk 4.5 Web Console Installation and Configuration Guide*, describes the installation of the Service Desk 4.5 web console server on Windows, HP-UX, and Solaris:

- Pre-installation tasks
- Installation steps
- Post-installation tasks.

This manual also provides additional information for the Service Desk 4.5 web console Administrator:

- Essential concepts
- Configuration tasks
- Routine administrative tasks
- Troubleshooting.

This manual is included in the software download. The most recent version is available on the `doc_serv` web site (see NOTE). During installation, a copy of this manual is also placed in the following directory for future reference:

*Windows:*

```
<install_dir>\paperdocs\en\ov_web\ui\OVWeb_Console_Install_Guide.pdf
```

*UNIX:*

```
/opt/OV/paperdocs/en/ov_web/ui/OVWeb_Console_Install_Guide.pdf
```

---

### NOTE

This manual does not cover information about Service Desk 4.5, itself.

If you want more information about Service Desk 4.5, the complete documentation set is available at the following web site (where documentation from all OpenView software is available):

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

Please note that in the other Service Desk documentation, you will not find any mention of the Service Desk 4.5 web console because this feature did not exist when the Service Desk documentation was developed.

## Features and Benefits of Service Desk 4.5 Web Console

The Service Desk 4.5 web console enables you to give your Service Desk users a personalized and remote view of the managed environment through the following benefits and features:

- Remote access to Service Desk data:
  - Any user with an established *Application Account* in Service Desk can log into and use the Service Desk 4.5 web console.
  - Requires Internet Explorer 6.x, Netscape 7.x, or Mozilla 1.4.x.
  - No installation necessary.
- Enhanced web interface that provides much of the functionality available in the Service Desk 4.5 client application:
  - Table, explorer, tree, and chart views
  - Views and forms for all object types
  - Overview and Smart actions
- Gives your users a personalized view:
  - A variety of portal skins based on cascading style sheets
  - Data filtering and access to actions based on the user's role as defined on the Service Desk server
- Minimal configuration and administration:
  - No download necessary for client systems
  - Automatic login for established Service Desk *Applications Accounts*
  - Web Console Administrator page for troubleshooting problems
- Online help system that explains the tasks you can perform through the Service Desk 4.5 web console



---

## Limitations of the Service Desk 4.5 Web Console

Some *general* features are supported only in Service Desk and not available in the Service Desk 4.5 web console:

- Multiple-object-instance selection.
- Multiple-object-instance update.
- Cut, copy, and paste.
- Drag and drop.
- Persistence of user's last selected object type and last view selected for an object type.
- The **More Choices** tab in the **Advanced Find** window.

Some *form* features are supported only in Service Desk and are not available in the Service Desk 4.5 web console:

- Ability to create new form definitions or form templates.
- The **Templates** selection list is *not* organized into a hierarchy of template categories.
- Specialized UI field types (for example, UI Approval Vote).
- Access to Quick views.

Some *view* features are supported only in Service Desk and are not available in the Service Desk 4.5 web console:

- Card view type.
- Project view type.
- Chart view drill-down.
- Export views to external formats such as CSV, HTML, XML.
- Filter application and selection (data is automatically filtered according to your current filter settings on your Service Desk server).

## Limitations of the Service Desk 4.5 Web Console

Some *actions* are supported only in Service Desk and are not available in the Service Desk 4.5 web console:

- System Actions.
- Shortcut menus for fields.

---

# 2

## Pre-Installation Tasks

- “Obtaining the Required Service Pack” on page 20
- “Checking System Requirements” on page 21
- “Verifying Sufficient Disk Space” on page 22
- “Verifying that a Port Is Available” on page 23
- “Assigning the “User and Group” (UNIX only)” on page 24

## Obtaining the Required Service Pack

The HP OpenView Service Desk 4.5 web console server software is provided in a Service Desk patch:

1. Using a computer that is running the Windows operating system, download the service pack from the following web site:  
  
`http://support.openview.hp.com`
2. Select **Demos & Downloads**.
3. Under the **downloads** heading, select **Patches**.
4. At the bottom of the page, select **download software patches**.
5. On the **Software Patches** page, search for **Service Desk** patches.
6. Under **release 4.5**, click **Windows**.
7. Locate Service Desk patch **SDSK\_00047**.
8. For an overview, please select **view patch full text** for this service pack.
9. Download the **SDSK\_00047** file onto your local system.
10. Verify that the following files were successfully placed on your hard drive:
  - `OVWeb_Console_Install_Guide.pdf`  
`README.htm` (release notes)
  - *Windows operating system installation program:*  
`webconsole_install.exe`
  - *HP-UX operating system installation program:*  
`webconsole_install_hpux.bin`  
`vnc_setup_info.tar`
  - *Solaris operating system installation program:*  
`webconsole_install_solaris.bin`  
`vnc_setup_info.tar`
11. Move the installation guide, release notes and the appropriate installation program files to the system where you want to install the HP OpenView Service Desk 4.5 web console server.

## Checking System Requirements

Before starting, ensure that the system where you plan to install the Service Desk 4.5 web console server meets the minimum hardware and software requirements.

Refer to the *HP OpenView Service Desk 4.5 Web Console Release Notes* (`README.htm`) for hardware and software requirements. The release notes file was placed on your hard drive when you downloaded the installation software (see “Obtaining the Required Service Pack” on page 20).

---

### CAUTION

The Service Desk 4.5 web console server cannot be installed onto the same system as your standard Service Desk/Service Pages server. Coexistence is not supported with Service Desk because of Java version conflicts between the two JVMs. Coexistence is not supported with Service Pages because of port conflicts between the two Apache Tomcat servlet installations.

The Service Desk 4.5 web console server cannot be installed onto the same system as HP OpenView Service Information Portal (SIP). The Service Desk 4.5 web console will overwrite SIP files and render the SIP installation unusable.

---

## **Verifying Sufficient Disk Space**

The Service Desk 4.5 web console server installation process unpacks files into a temporary directory. You need approximately 100 MB of disk space available in this directory for the Service Desk 4.5 web console server software to successfully install. This amount of disk space is only necessary during the installation process:

*Windows:* \temp

*UNIX:* /tmp

Please verify that a sufficient amount of disk space is available to your system's temporary directory before proceeding with the Service Desk 4.5 web console installation.

## Verifying that a Port Is Available

During installation of the Service Desk 4.5 web console server, you need to specify an available port for the web server. The default is port 80.

To verify that port 80 is available on the machine where you plan to install the Service Desk 4.5 web console:

1. Open a browser window.
2. Type the following into the address field:

**`http://<address-or-hostname>:80`**

*address-or-hostname* = the machine where you plan to install the Service Desk 4.5 web console server.

3. Port 80 is available if you see the message:

The page cannot be found

If you do not see this message, continue with the next step.

4. You need to do *one* of the following:
  - Repeat step 3 using other port numbers until you find an available port to use while installing the Service Desk 4.5 web console server.
  - Identify which process or program is using port 80 and either disable or reconfigure that process. For example:

On Windows operating systems, often the Internet Information Services (IIS) process is running on port 80 by default.

## Assigning the “User and Group” (UNIX only)

On UNIX systems, you must decide which *user* and *group* to assign to the Service Desk 4.5 web console services/daemons:

- Apache HTTP Server (*ovapache*)
- Apache Tomcat Servlet/JSP Container (*ovtomcat*)

The user and group must be configured before you install the Service Desk 4.5 web console server, because you need to provide this information during installation.

First set up the *user*, and then configure that user as part of the *group*.

**For security reasons, the Service Desk 4.5 web console server should not run as root.**

For example, you could set up the following user and group:

- *HP-UX*:  
user = *www*  
group = *www*
- *Solaris*:  
user = *nobody*  
group = *nogroup*

---

### NOTE

*Windows*: The Service Desk 4.5 web console server runs under the standard Local System account. There is no need to specify user or group during installation.

---



---

# 3

## Installing the Service Desk 4.5 Web Console Server

- “On Windows Operating Systems” on page 26
- “On HP-UX or Solaris Operating Systems” on page 32

## On Windows Operating Systems

This procedure explains how to install the Service Desk 4.5 web console server onto a local machine.

---

### NOTE

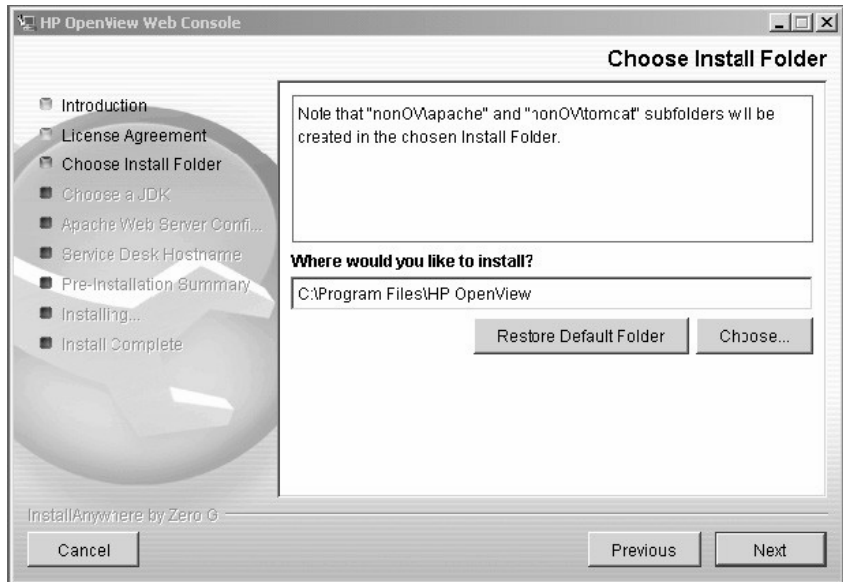
Before you proceed, carefully follow the directions in Chapter 2, “Pre-Installation Tasks,” on page 19.

---

1. Locate the directory where you downloaded the Service Desk patch (see “Obtaining the Required Service Pack” on page 20).
2. Move the files to the system where you plan to install the Service Desk 4.5 web console, if you have not already done so:  
  
webconsole\_install.exe  
OVWeb\_Console\_Install\_Guide.pdf  
README.htm (release notes)
3. Review the information in the release notes and the installation guide.
4. Log in using an account that has Administrator privileges, and run the **webconsole\_install.exe** file.

5. Choose the installation directory when prompted.

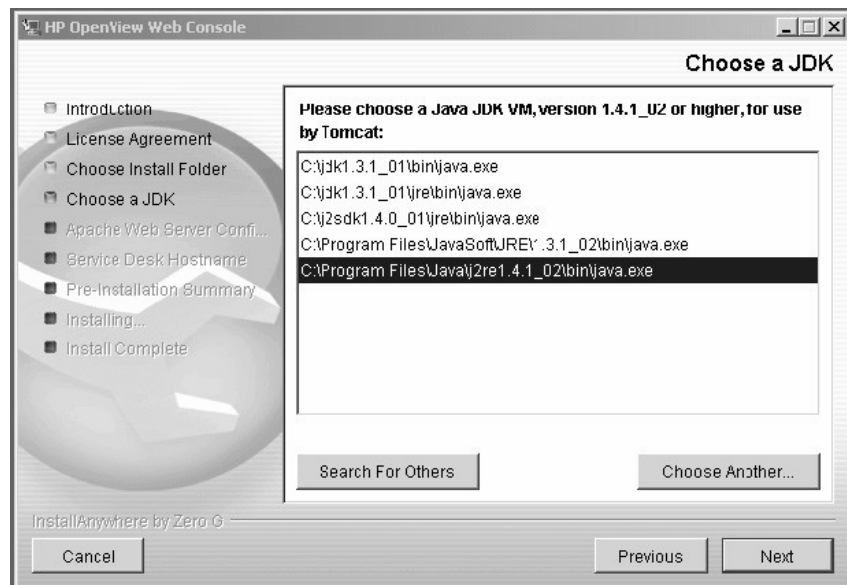
Select a location that has sufficient disk space (approximately 103 megabytes).



6. Specify your Java Virtual Machine.

Choose a Java Virtual Machine that is a Java Developer's Kit (JDK, *not JRE*) 1.4.1\_02 (or greater); one that is able to run the Apache Tomcat Servlet. See "Checking System Requirements" on page 21:

- To choose a Java Virtual Machine that is not on the auto-detected list, click **Choose Another**.
- To search for Java Virtual Machines a second time, click **Search For Others**.



7. Configure the Apache HTTP Server.

- **Host**

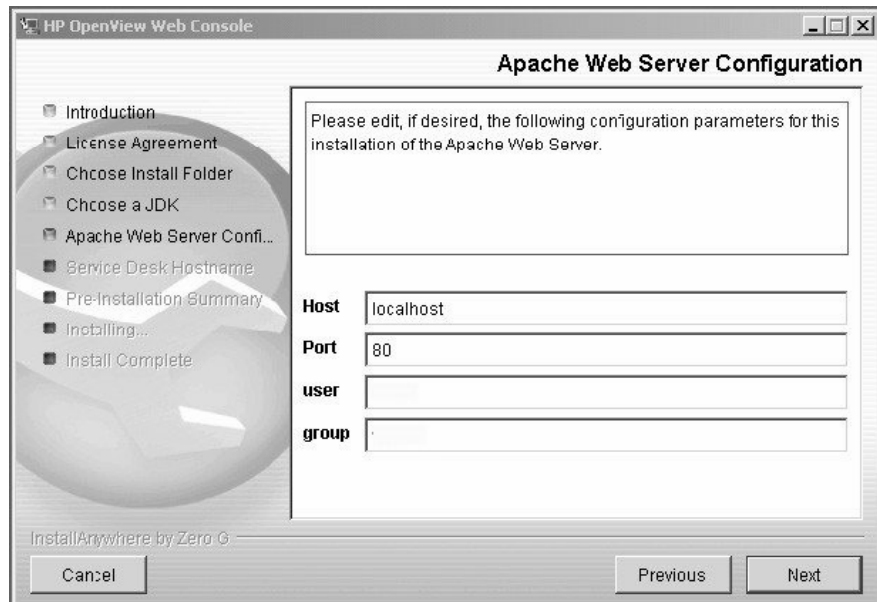
The default value of “localhost” should be sufficient for the vast majority of installations. You can, however, enter a different host, such as the server’s DNS alias (if you want users to log into the Service Desk 4.5 web console using the DNS name instead).

- **Port**

The default port is 80. However, if another web server (such as IIS) is already using port 80, choose a different port, such as 8880. See “Verifying that a Port Is Available” on page 23.

- **user / group**

On Windows, the Apache HTTP Server automatically runs as a system server using the Local System account, so you can ignore the user and group entries on this dialog.

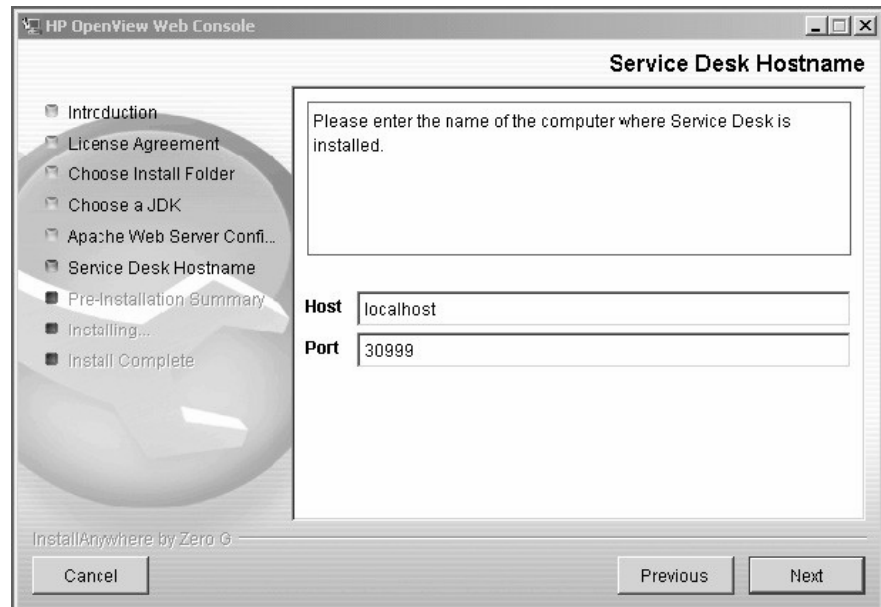


## On Windows Operating Systems

8. *Optional:* Specify your Service Desk server hostname and port. If you do not enter a Service Desk hostname or if your Service Desk server cannot be contacted, a dialog prompts you with the following choices:

- Continue anyway?
- Postpone?
- Select a different server and port?

If you want to postpone this step, you must later configure the Service Desk hostname and port by editing an XML file. For more information, see “Connecting to a Service Desk 4.5 Server After Installation” on page 58.



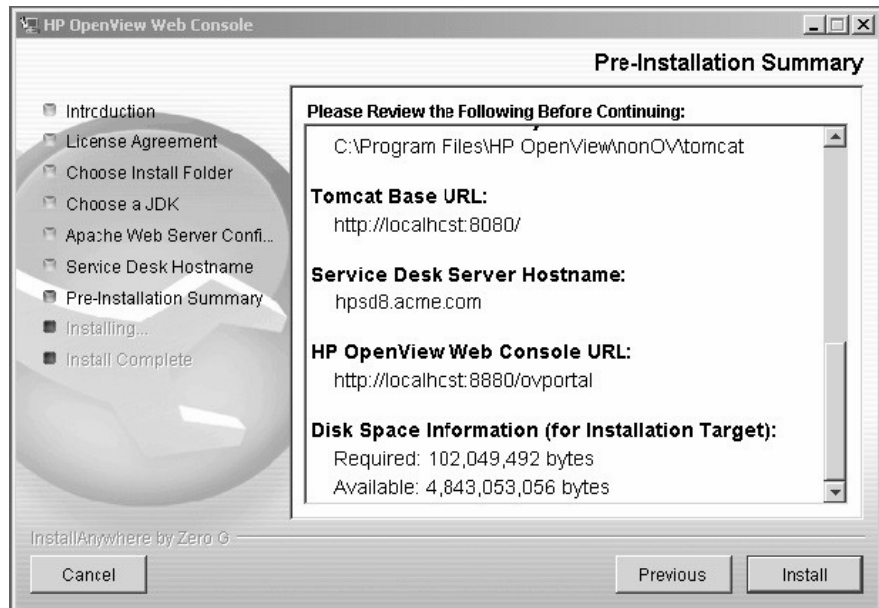
9. Before the installation begins, a summary screen appears with the selections you made. Review your selections. If you are satisfied with them, click **Install**.

---

## CAUTION

In rare cases, pressing “Cancel” during the install phase of the installation (after the Install Summary screen) may leave the Uninstaller in an incomplete state, where it won't be able to uninstall the partial installation. This is a known issue. If you decide to not install the HP Service Desk 4.5 web console after the Install Summary screen, let the installation complete, and then uninstall the Service Desk 4.5 web console.

---



10. When the installation is complete, go to Chapter 4, “Post-Installation Tasks,” on page 37. Carefully follow the directions to verify that the installation was successful.

## On HP-UX or Solaris Operating Systems

This procedure explains how to install the Service Desk 4.5 web console server onto a local UNIX system.

---

### CAUTION

Before you proceed, carefully follow the directions in Chapter 2, “Pre-Installation Tasks,” on page 19.

---

1. Locate the directory where you downloaded the Service Desk patch (see “Obtaining the Required Service Pack” on page 20).
2. Move the files to the system where you plan to install the Service Desk 4.5 web console, if you have not already done so:
  - *HP-UX:*  
webconsole\_install\_hpux.bin  
vnc\_setup\_info.tar  
OVWeb\_Console\_Install\_Guide.pdf  
README.htm (release notes)
  - *Solaris:*  
webconsole\_install\_solaris.bin  
vnc\_setup\_info.tar  
OVWeb\_Console\_Install\_Guide.pdf  
README.htm (release notes)
3. Review the information in the release notes and the installation guide.
4. You must now set the `DISPLAY` variable to point to an active X11 window for the interactive software installation process.

---

### NOTE

If your system does not have a graphics card (cannot run X11), use the *virtual X* window server provided. See “Ensuring that an X11 Display Is Always Available (UNIX only)” on page 39.

---



5. Log in as `root` (or `sudo` if required by your security setup) from within the active X11 window, and launch the appropriate `*.bin` file. At the command prompt, type the following:

*HP-UX:*

```
sh webconsole_install_hpux.bin
```

*Solaris:*

```
sh webconsole_install_solaris.bin
```

6. Specify your Java Virtual Machine.

*HP-UX:* Choose the Java Software Developer's Kit (SDK, *not JRE*) 1.4.1\_02 (or greater); one that is able to run the Apache Tomcat Servlet. See "Checking System Requirements" on page 21.

*Solaris:* Choose the Java Developer's Kit (JDK, *not JRE*) 1.4.1\_02 (or greater); one that is able to run the Apache Tomcat Servlet. See "Checking System Requirements" on page 21.

- To choose a Java Virtual Machine that is not on the auto-detected list, click **Choose Another**.
- To search for Java Virtual Machines a second time, click **Search For Others**.



## 7. Configure the Apache HTTP Server.

- **Host**

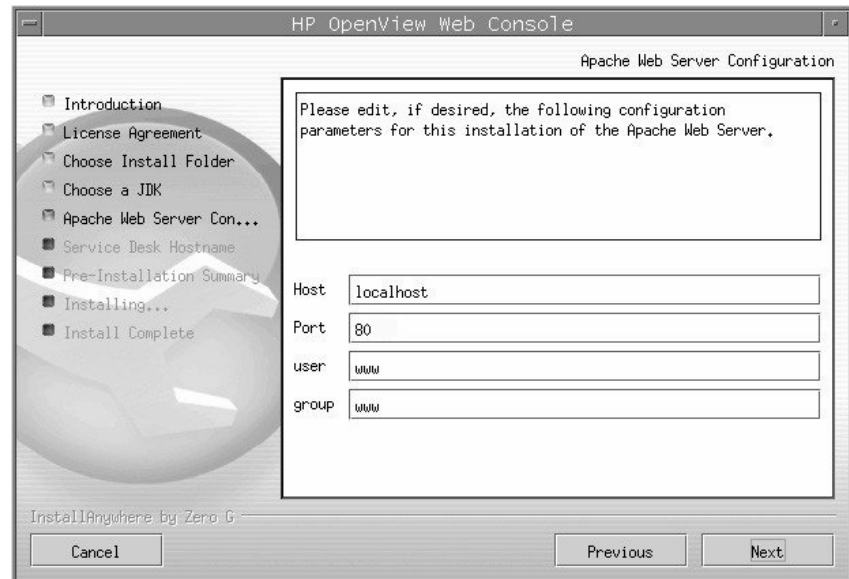
The default value of “localhost” should be sufficient for the vast majority of installations. You can, however, enter a different host, such as the server’s DNS alias (if you want users to log into the Service Desk 4.5 web console using the DNS name instead).

- **Port**

The default port is 80. However, if another web server is already using port 80, choose a different port, such as 8880. See “Verifying that a Port Is Available” on page 23.

- **user / group**

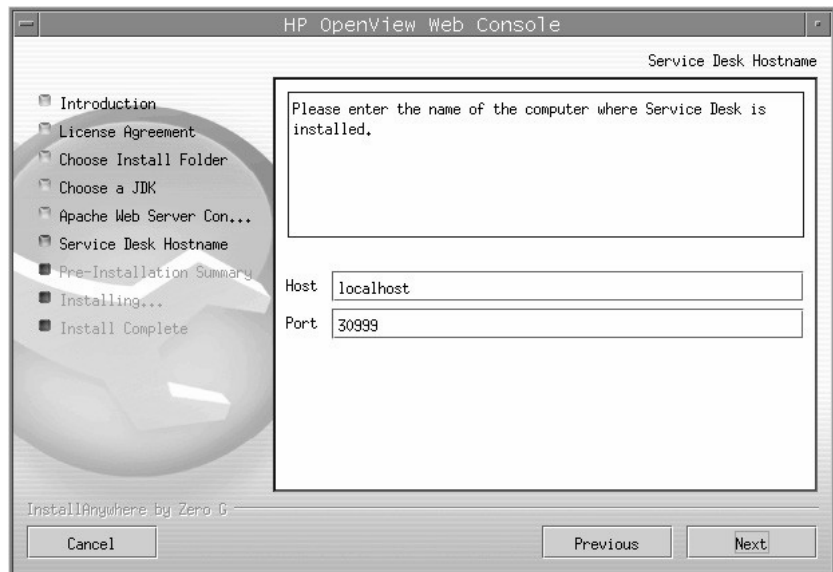
Enter the names of the *user* and *group* that you want the Apache HTTP Server and Apache Tomcat Servlet to use. See “Assigning the “User and Group” (UNIX only)” on page 24.



8. *Optional*: Specify your Service Desk server hostname and port. If you want to postpone this step, you must later configure the Service Desk hostname and port by editing an XML file. For more information, see “Connecting to a Service Desk 4.5 Server After Installation” on page 58.

If you do not enter a Service Desk hostname or if your Service Desk server cannot be contacted, a dialog prompts you with the following choices:

- Continue anyway?
- Postpone?
- Select a different server and port?



Installing the Service Desk 4.5 Web Console Server  
On HP-UX or Solaris Operating Systems

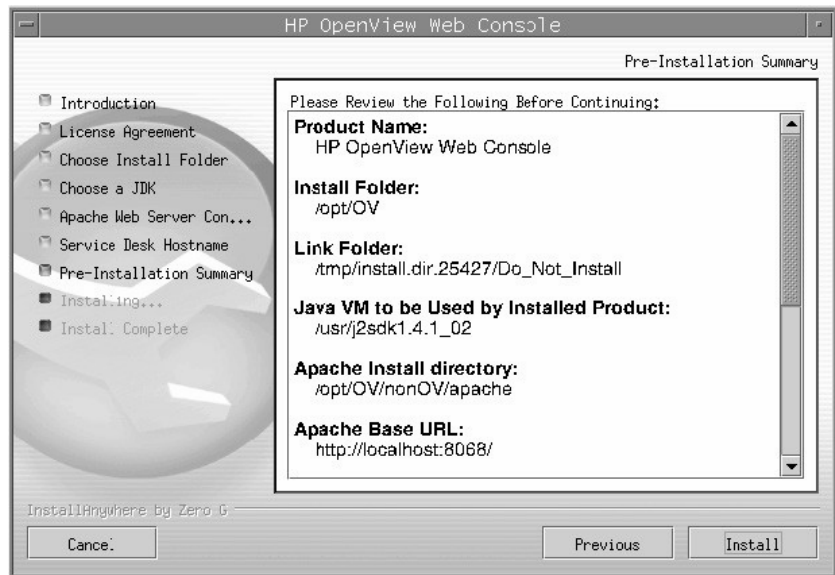
9. Before the installation begins, a summary screen appears with your selections. Review your selections. If you are satisfied with them, click **Install**.

---

**CAUTION**

In rare cases, pressing “Cancel” during the install phase of the installation (after the Install Summary screen) may leave the Uninstaller in an incomplete state, where it won't be able to uninstall the partial installation. This is a known issue. If you decide to not install the Service Desk 4.5 web console after the Install Summary screen, let the installation complete, and then uninstall the Service Desk 4.5 web console.

---



10. When the installation is complete, go to Chapter 4, “Post-Installation Tasks,” on page 37. Carefully follow the directions to complete the installation and to verify that the installation was successful.

- UNIX-only tasks:
  - “Increasing Kernel Parameters (HP-UX only)” on page 38
  - “Ensuring that an X11 Display Is Always Available (UNIX only)” on page 39
- “Verifying the Installation” on page 41
  - “Starting the Service Desk 4.5 Web Console” on page 41
  - “Stopping the Service Desk 4.5 Web Console” on page 44

## Increasing Kernel Parameters (HP-UX only)

On HP-UX 11.00, the kernel configuration parameter `max_thread_proc` determines the number of Service Desk 4.5 web console users who can simultaneously log into the web console (the number of concurrent Service Desk 4.5 web console sessions).

The `max_thread_proc` default is 64.

It is recommended that you increase the kernel parameter `max_thread_proc` to 2048.

---

### TIP

Your `max_thread_proc` value might be constrained by your `nproc` configuration. To increase `nproc`, modify the `maxusers` parameter to approximately 200.

---

## Ensuring that an X11 Display Is Always Available (UNIX only)

The Service Desk 4.5 web console server uses Java's Abstract Windows Toolkit (AWT) to generate graphical images. On UNIX, this means that the Apache Tomcat Servlet requires access to a running X11 display at all times. If the specified X window locks or goes into a modal state, the Service Desk 4.5 web console server is no longer available. For this reason, it may be advisable to use a dedicated virtual X11 server.

Make sure that the Apache Tomcat Servlet configuration file (`/etc/rc.config.d/ovtomcat`) includes one of the following:

- A `DISPLAY` environment variable that points to an active X11 server. For example:

```
export DISPLAY=localhost:0
```

- Or when using a *virtual X11 server*, a `DISPLAY` environment variable that points to an active virtual X11 server. For example:

```
export DISPLAY=<hostname>:<#>
```

*hostname*            The system where the virtual X11 server is running.

*#*                    The `DISPLAY` number associated with the virtual X11 server process.

---

### NOTE

If you plan to use a virtual X11 server, the latest version of the Xvnc (Virtual Network Computing) server is available from the following web site:

<http://www.realvnc.com/>

---

The `vnc_setup_info.tar` file is included with the Service Desk 4.5 web console software.

## Ensuring that an X11 Display Is Always Available (UNIX only)

Inside of the `tar` file, you will find the following:

- `README.txt` (Describes how to install the `Xvnc` server, and how to configure the `Xvnc` server to automatically run whenever your UNIX system is restarted.)
- `vnc.env` (Used when configuring the `Xvnc` server.)
- `vnc.sh` (Used when configuring the `Xvnc` server.)

---

### NOTE

Do not simply add the `Xvnc` command to the `ovtomcat` startup script. This file will be overwritten should the Service Desk 4.5 web console server be reinstalled. Alternately, you can add an entry for `Xvnc` to the `/etc/inittab` file, specifying the `respawn` action. This restarts the virtual window process should it ever terminate. See the *inittab(4)* manpage.

---



---

## Verifying the Installation

After installing the software, verify that it was successful by starting the Service Desk 4.5 web console.

### Starting the Service Desk 4.5 Web Console

1. Start the Service Desk 4.5 web console by opening a browser window and entering the URL that starts the Service Desk 4.5 web console:  
**`http://<yourhostname>/ovportal`**

---

#### NOTE

If you configured the Apache HTTP Server to a port other than 80, use the following URL instead, where port is the configured Apache HTTP Server port for the Service Desk 4.5 web console:

**`http://<yourhostname:port>/ovportal`**

2. On the Service Desk 4.5 web console login page, enter a valid Service Desk name and password, and click **Login**, as shown in Figure 4-1.

---

#### NOTE

Only “Application account” users (named and concurrent users) can log into Service Desk 4.5 web console, “SP Account” users cannot.

---

**Figure 4-1** Login Page



## Verifying the Installation

After logging in, the Service Desk 4.5 web console shown in Figure 4-2 on page 43 appears.

---

### NOTE

If you do not get the login page, or if the Service Desk 4.5 web console does not appear after you log in, check the installation log file for messages and clues:

*Windows:*

```
<install_dir>\install\HP_OpenView_Web_Console_InstallLog.log
```

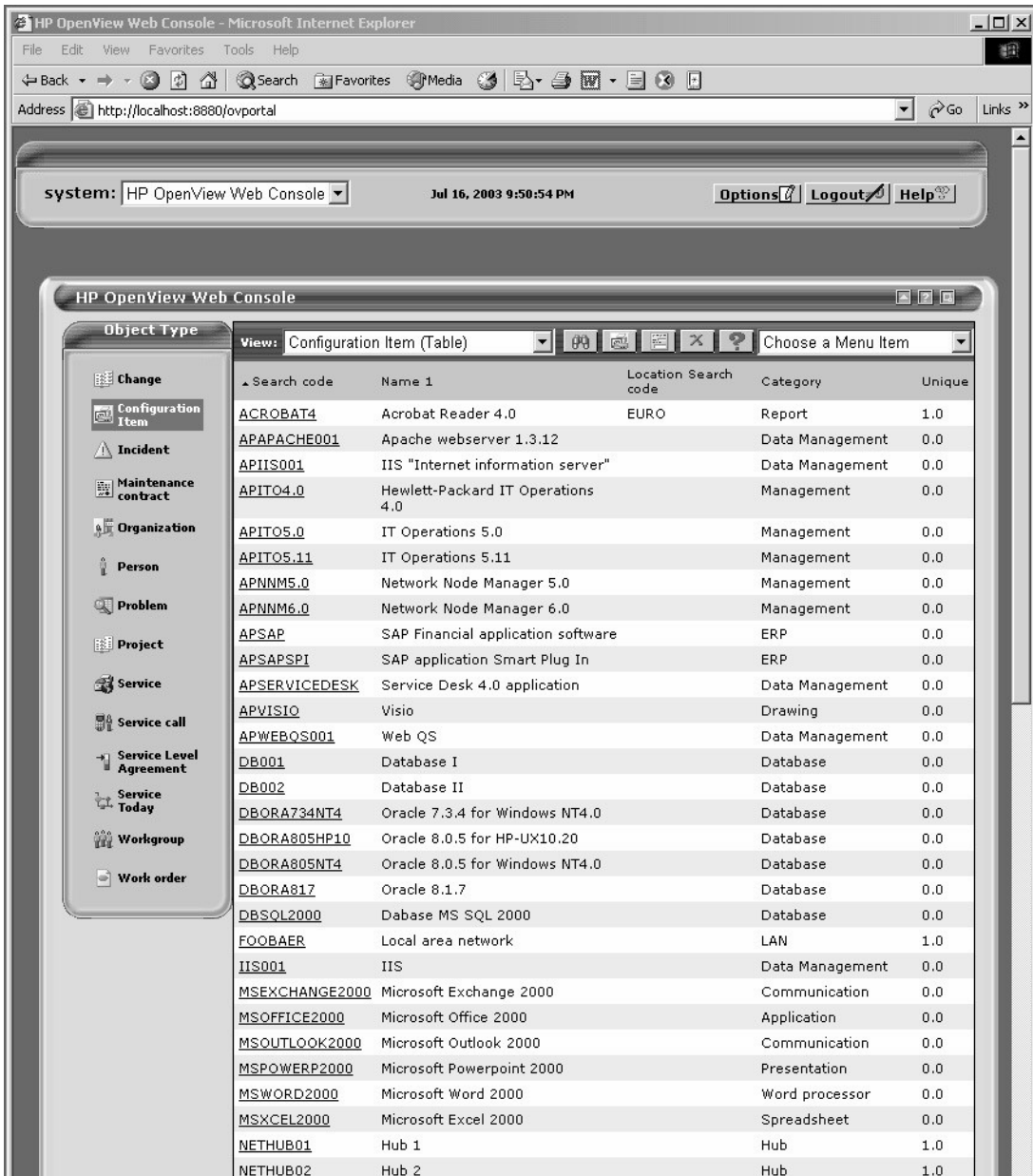
*UNIX:*

```
/opt/OV/install/HP_OpenView_Web_Console_InstallLog.log
```

For help with troubleshooting an installation problem, see Appendix A, “Troubleshooting the Service Desk 4.5 Web Console,” on page 79.

---

Figure 4-2 Service Desk 4.5 Web Console with “system” Login



## **Stopping the Service Desk 4.5 Web Console**

When you are finished using the Service Desk 4.5 web console, log off:

1. In the upper right-hand corner of the Service Desk 4.5 web console main window, click the **Logout** button,
2. Close your Web browser.

---

# 5

# Essential Concepts

- “Service Desk 4.5 Web Console Data Security” on page 46
- “Refresh Model for Modified Configuration and Data Files” on page 47
- “Service Desk 4.5 Web Console Windowing Behavior” on page 50
- “Configuration Options” on page 53
- “Start Up Options” on page 55

## Service Desk 4.5 Web Console Data Security

The Service Desk 4.5 web console provides a secure environment for your managed data through authorization and authentication mechanisms.

### Authorization

Authorization is the granting of access privileges to an authenticated user. This determines what each user can see and do.

The Service Desk 4.5 web console recognizes established Service Desk roles. Users logging into the Service Desk 4.5 web console use their role permissions as defined in Service Desk.

A user logging into the Service Desk 4.5 web console as “system” user also gets access to the Web Console Administrator page, where certain administrative tasks can be performed. The Web Console Administrator page is accessed by selecting **Web Console Administrator** from a drop-down list on the Service Desk 4.5 web console button bar.

### Authentication

Authentication is the process by which users identify and validate themselves to the system.

Authentication is performed for the Service Desk 4.5 web console using login accounts configured in Service Desk. Only “Application account” users (named and concurrent users) can log into Service Desk 4.5 web console, “SP Account” users cannot.

---

## Refresh Model for Modified Configuration and Data Files

Changes take effect in the Service Desk 4.5 web console in one of four ways, depending upon the type of configuration or data change:

- When you **access** the information by displaying or refreshing the Service Desk 4.5 web console.
- When you **log out** and log in again to the Service Desk 4.5 web console. (For more information, see the note on page 48.)
- On a scheduled, **periodic** basis, based on a configurable timer that determines the refresh rate for the information.
- When you **restart** the Apache Tomcat Servlet.  
Certain data is loaded when the Service Desk 4.5 web console is first initialized. This data not refreshed unless the Apache Tomcat Servlet is stopped and restarted.

Table 5-1 lists each refresh method described above, and indicates the type of configuration or data that uses each method. It also indicates the procedure for refreshing the data or file.

**Table 5-1 Refresh Model for Configuration and Data Files**

<b>Refresh Method</b>	<b>Configuration or Data</b>	<b>How to Refresh the Data or File</b>
Access	User preferences, such as Service Desk 4.5 web console skin, and user name in the Service Desk 4.5 web console title bar.	Display or refresh the Service Desk 4.5 web console window.

**Table 5-1 Refresh Model for Configuration and Data Files (Continued)**

<b>Refresh Method</b>	<b>Configuration or Data</b>	<b>How to Refresh the Data or File</b>
Logout	<p>Service Desk server changes, such as:</p> <ul style="list-style-type: none"> <li>• Modifying a Service Desk role definition</li> <li>• Creating or modifying a Service Desk view</li> <li>• Creating, changing, or assigning a template</li> <li>• Creating and modifying an action</li> <li>• Creating and modifying an application</li> <li>• Activating a custom field and adding it to a form</li> <li>• Creating and modifying a form</li> <li>• Changing fields that are visible on the simple page of the Advanced Find dialog</li> <li>• Changing UI rules</li> <li>• Changing icon for an item type</li> <li>• Adding a calculated field, i.e., adding a calculated field and adding that field to a form</li> </ul> <p><b>NOTE:</b> Some things are cached for the duration of a session (for example, views, forms, and icons), and changes made on the Service Desk server only take effect when the user logs out of that session and logs in again.</p> <p>All other changes take effect the next time <i>anyone</i> performs a login. For example: User A is logged in. The Service Desk administrator makes a change to the UI rules. When user B logs in, user A will see the changes to the UI rules without logging out and logging in again.</p>	Log out and log in again to the Service Desk 4.5 web console.



**Table 5-1 Refresh Model for Configuration and Data Files (Continued)**

<b>Refresh Method</b>	<b>Configuration or Data</b>	<b>How to Refresh the Data or File</b>
Restart	<p>Modifying the size of log files (<code>maxLogSize</code> value) in the <code>OVPortalConfig.xml</code> file, installed with Service Desk 4.5 web console. For more information, see “Controlling the Size of the Log Files and Trace Files” on page 69.</p> <p>Changing the Service Desk server that is connected to the Service Desk 4.5 web console by editing the <code>mgmtStations.xml</code> file, installed with Service Desk 4.5 web console. For more information, see “Changing the Specified Service Desk 4.5 Server” on page 59.</p> <p>Configuring applications exposed through Service Desk 4.5 web console and configured through the <code>Applications.xml</code> file, installed with Service Desk 4.5 web console. For more information, see “Configuring Supported Applications for Smart Actions” on page 61.</p>	<p>Stop and restart the Apache Tomcat Servlet. For instructions, see “Restarting the Apache Tomcat Servlet” on page 70.</p>
Periodic	<p>Configuring the maximum number of forms to cache (<code>maxCachedForms</code> value) in the <code>WebConsoleConfig.xml</code> file, installed with Service Desk 4.5 web console. For more information, see “Configuring the Maximum Number of Forms in Cache” on page 74.</p>	<p>Changes take effect automatically within the time limit defined by the <code>configFileReloadInterval</code> parameter value in the <code>WebConsoleConfig.xml</code> file. By default, this occurs every 30 minutes. For more information, see “Configuring the Maximum Number of Forms in Cache” on page 74.</p>

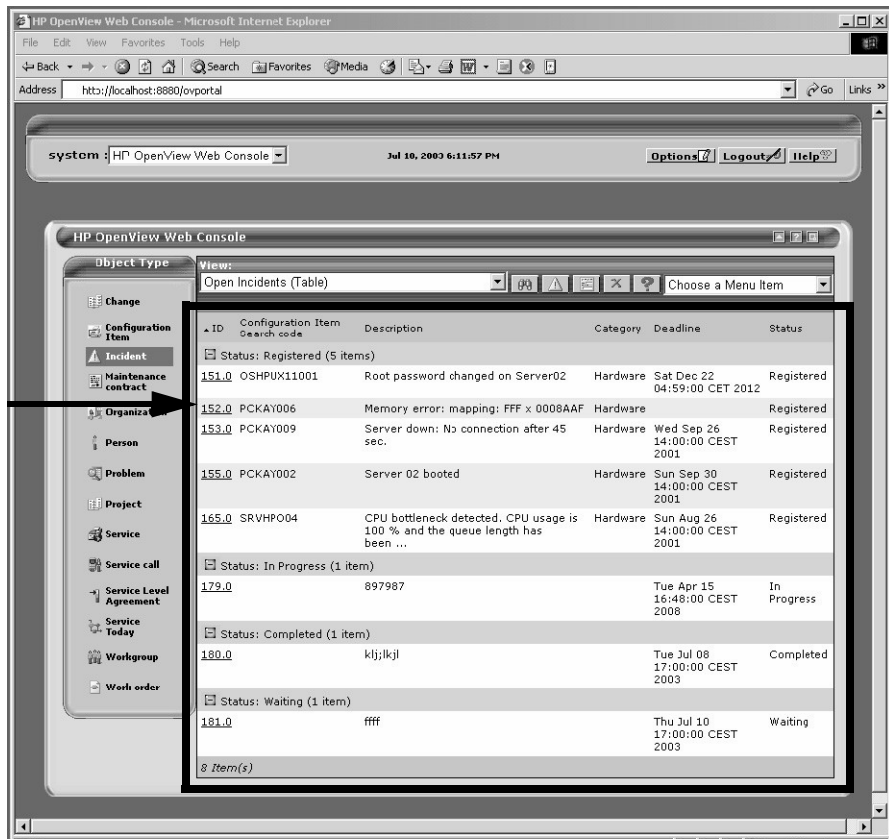
## Service Desk 4.5 Web Console Windowing Behavior

The main window of the Service Desk 4.5 web console has a view display panel in which various views of data can be displayed. The window behavior differs when you activate a link from the view display panel on the main window, versus when you activate a link from a menu, tool bar, or secondary window.

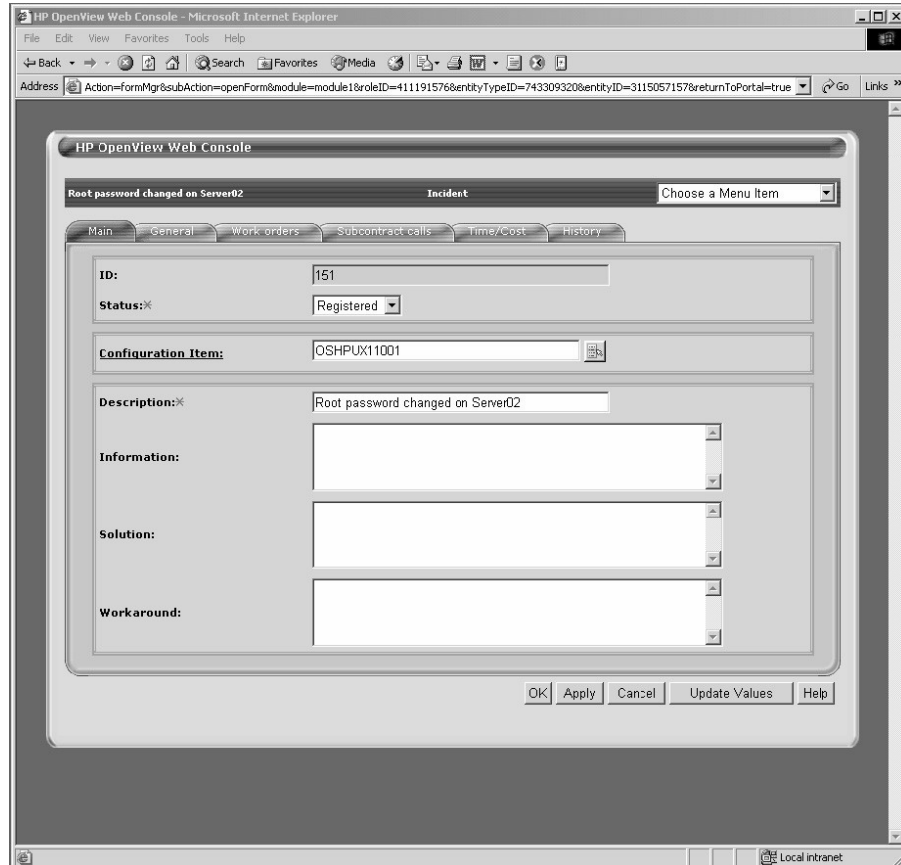
Links in the first column of a table view (as shown in Figure 5-1) provide drill-down to additional data. When you follow these links, the main window content is replaced (as shown in Figure 5-2 on page 51).

**Figure 5-1** Service Desk 4.5 Web Console with Object Browser Outlined

When you click a link in the view display panel, the console page is replaced



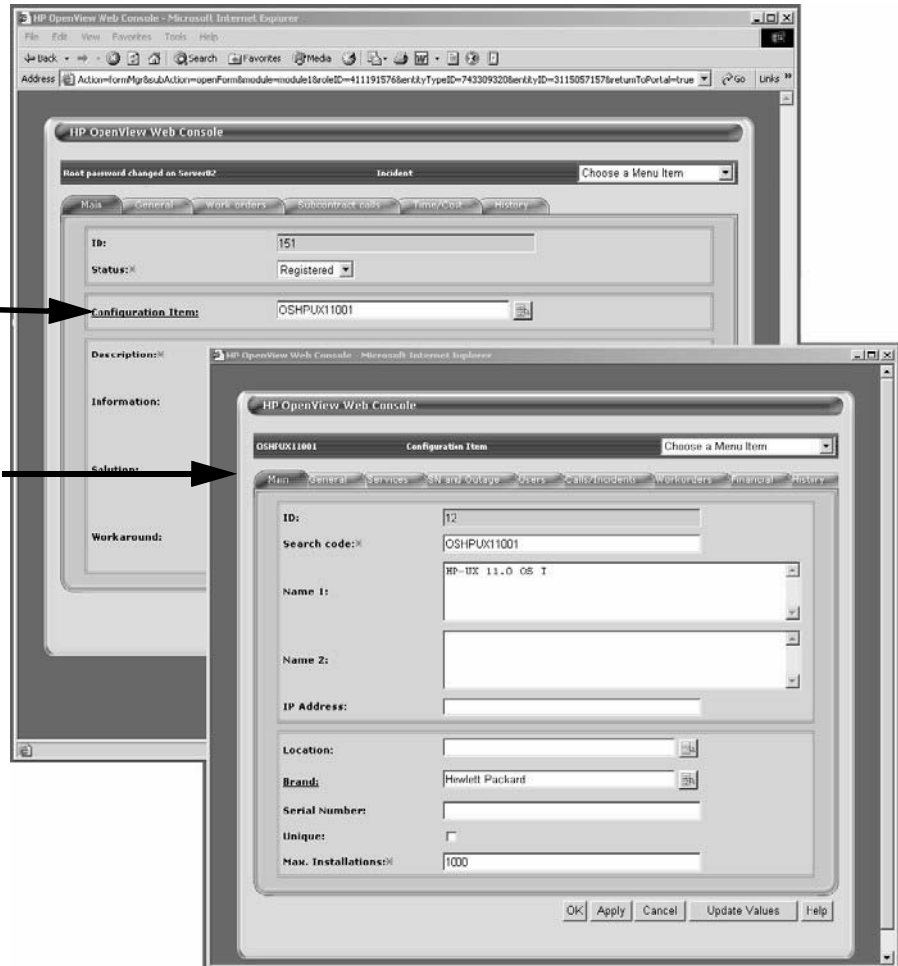
**Figure 5-2** Service Desk 4.5 Web Console after Link Is Selected



Activating a link from a menu, tool bar, or secondary window causes the requested content to be displayed in a separate window, as shown in Figure 5-3.

**Figure 5-3** Link from Secondary Window Resulting in Separate Window

When you activate a link from a menu, tool bar, form or dialog box, the content is displayed in a secondary window



## Configuration Options

The Service Desk 4.5 web console offers configuration options that range from personalizing the look and feel of the Service Desk 4.5 web console to specifying the rate at which the data is refreshed.

Some configuration options are available to all users and others are only available to administrators of the Service Desk 4.5 web console. Some choices are specified through the Service Desk 4.5 web console, and others must be specified by editing XML files.

### User Configuration Options

Two personalization options are available to users and explained in the online help:

- Display name in the title bar
- Preferred skin (look and feel)

To access these settings, click the **Options** button in the upper right corner of the Service Desk 4.5 web console main window.

### Administrator Configuration Options

Several configuration choices are available to the Service Desk 4.5 web console administrator. Some are configured through the Web Console Administrator page and others are configured by editing XML files.

#### The Web Console Administrator page settings:

- Set logging and tracing levels (see “Logging and Tracing” on page 67).
- Restart the Apache Tomcat Servlet (see “Restarting the Apache Tomcat Servlet” on page 70).

#### The mgmtStations.xml file settings:

- Specify which Service Desk server communicates with the Service Desk 4.5 web console (see “Configuring Communication with Your Service Desk 4.5 Server” on page 58).

**The Applications.xml file settings:**

- Enable smart actions for the web console (see “Configuring Supported Applications for Smart Actions” on page 61).

**The WebConsoleConfig.xml file settings:**

- Specify the maximum number of forms to be cached per session, defined by the `maxCachedForms` parameter (see “Configuring the Maximum Number of Forms in Cache” on page 74).
- Specify the rate at which the changes to the `WebConsoleConfig.xml` file take effect, defined by the `configFileReloadInterval` parameter. By default every 30 minutes (see “Configuring the Maximum Number of Forms in Cache” on page 74).
- Display a list of currently unsupported fields, controlled by the `displayUnsupportedFieldInfo` parameter. This is useful to verify that an attribute is not showing up in the web console because it is not supported (see “Troubleshooting Missing Form Fields” on page 91).

**The OVPortalConfig.xml file settings:**

- Specify the size of the log files, defined by the `maxLogSize` parameter (see “Controlling the Size of the Log Files and Trace Files” on page 69).

---

**NOTE**

Many of your configuration settings on the Service Desk server are honored on the Service Desk 4.5 web console. If you change the settings on the Service Desk server, they are automatically reflected on the web console. For example, the time zone settings for each user.

---

## Start Up Options

Any user can open the Service Desk web console to a specific view or form (rather than the default, Configuration Items view).

1. In a web browser, access the Service Desk web console:  
`http://localhost/ovportal`
2. Log in with your user name and password.
3. Navigate to the desired view or form; for example, the Service Today view.
4. Access the URL information:
  - *Views*: In the **Object Types** list, right click the name of the currently highlighted view (that you displayed in the previous step), and select **Copy Shortcut**.
  - *Forms*: Copy the URL from the Address field of the Web Browser.
5. Copy the URL information.

Use this URL in step one the next time you want to access the Service Desk web console.

---

### NOTE

The view- or form-specific URL contains object identifiers that *only* apply to your current Object Server database. If the Object Server changes, repeat this procedure.

---





---

# 6

# Configuration Tasks

- “Configuring Communication with Your Service Desk 4.5 Server” on page 58
- “Configuring Supported Applications for Smart Actions” on page 61
- “Configuring Object Attachments” on page 63
- “Setting the JAVA\_HOME Environment Variable” on page 64

---

## Configuring Communication with Your Service Desk 4.5 Server

Before you can view data through the Service Desk 4.5 web console, you must establish a connection between the Service Desk 4.5 web console and your Service Desk server. This is done either during the installation process by identifying the Service Desk machine (object server station) and port, or this is done after installation by manually configuring an XML file.

Before editing XML configuration files, you should be familiar with the rules for doing so. For detailed information, see Appendix B, “Rules for Direct Editing of XML Files,” on page 97.

### Connecting to a Service Desk 4.5 Server After Installation

If during the installation process you chose to postpone the configuration of your Service Desk server and port, and you want to connect the server now, follow these steps:

1. Make a copy of this file. Then open the original file for editing:

*Windows:*

```
<install_dir>\SIP\conf\share\stations\mgmtStations.xml
```

*UNIX:*

```
/opt/OV/SIP/conf/share/stations/mgmtStations.xml
```

2. Enter or modify the `hostname`, `id`, and `title` attributes of the `ManagementStation` element, and the `port` attribute of the `ObjectServerStation` element, as shown in the following code:

```
<?xml version="1.0" encoding="UTF-8"?>
<!DOCTYPE ManagementStations SYSTEM "mgmtStations.dtd">
<ManagementStations configCheckTimer="300">
  <ManagementStation hostname="kali.acme.com" id="kali"
title="kali">
    <ObjectServerStation port="30999"/>
  </ManagementStation>
</ManagementStations>
```

---

**NOTE**

---

When multiple object server stations are listed, the first one in the list is used.

3. After modifying the XML, validate that the syntax is correct. For information about validating XML syntax, see “Validating XML Files” on page 99.
4. After making changes to the `mgmtStations.xml` file you must stop and restart the Apache Tomcat Servlet. For information, see “Restarting the Apache Tomcat Servlet” on page 70.

## Changing the Specified Service Desk 4.5 Server

If you want to configure a different Service Desk server to communicate with the Service Desk 4.5 web console, use the following steps:

---

**NOTE**

---

Connecting to a different Service Desk server in a server pool happens automatically and does not require modification to `mgmtStation.xml`, as described in the following steps.

1. Stop the Apache Tomcat Servlet. For information on doing so, see “Restarting the Apache Tomcat Servlet” on page 70.
2. Clear the Service Desk 4.5 web console cache by removing the following directory:

*Windows:* `<install_dir>\SIP\tmp\ObjectServer`

*UNIX:* `/opt/OV/SIP/tmp/ObjectServer`

3. Make a copy of this file. Then open the original file for editing:

*Windows:*

```
<install_dir>\SIP\conf\share\stations\mgmtStations.xml
```

*UNIX:*

```
/opt/OV/SIP/conf/share/stations/mgmtStations.xml
```

4. Enter or modify the `hostname`, `id`, and `title` attributes of the `ManagementStation` element, and the `port` attribute of the `ObjectServerStation` element, as shown in the following code:

```
<?xml version="1.0" encoding="UTF-8"?>
<!DOCTYPE ManagementStations SYSTEM "mgmtStations.dtd">

<ManagementStations configCheckTimer="300">
  <ManagementStation hostname="kali.acme.com" id="kali"
    title="kali">
    <ObjectServerStation port="30999"/>
  </ManagementStation>
</ManagementStations>
```

---

**NOTE**

---

When multiple object server stations are listed, the first one in the list is used.

5. After making changes to the `mgmtStations.xml` file restart the Apache Tomcat Servlet. For information on doing so, see “Restarting the Apache Tomcat Servlet” on page 70.
6. After modifying the XML, validate that the syntax is correct. For information on doing so, see “Validating XML Files” on page 99.

---

## Configuring Supported Applications for Smart Actions

Service Desk 4.5 web console provides a way to filter which smart actions are made available through the Service Desk 4.5 web console. A smart action is available in the Service Desk 4.5 web console only if the smart action is first configured on your Service Desk server, and then that same smart action's *name* and *type* is listed in the Service Desk 4.5 web console's `Applications.xml` file.

1. Make a copy of this file. Then open the original file for editing:

*Windows:*

```
<install_dir>\SIP\conf\share\modules\console\Applications.xml
```

*UNIX:*

```
/opt/OV/SIP/conf/share/modules/console/Applications.xml
```

2. In the XML file, specify the following three attributes for each application, as shown in the following example code:

- Application name as configured in the Service Desk Administrator Console, such as “Internet Explorer” or “Ping”
- Type of application, either “WebBrowser” where the command string is used as a URL opened in a Web browser window or a “Command” where the command string is a terminal command executed on the server.
- Timeout value for the “Command” type applications. This value is the time in seconds to wait before displaying the contents. Without this, a command could cause the Service Desk 4.5 web console to hang indefinitely.

```
<Applications>  
  <Application name="Internet Explorer" type="WebBrowser"/>  
  <Application name="Netscape" type="WebBrowser"/>  
  <Application name="Ping" type="Command" timeout="5"/>  
</Applications>
```

3. After modifying the XML, validate that the syntax is correct. For information about validating XML syntax, see “Validating XML Files” on page 99.

## Configuring Supported Applications for Smart Actions

4. After making changes to the `Applications.xml` file you must stop and restart the Apache Tomcat Servlet. For information, see “Restarting the Apache Tomcat Servlet” on page 70.

---

### NOTE

For HP-UX, if you want to execute multiple commands that include piping the output (for example, `/bin/tail -n12 /tmp/log | mail www@localhost`), you can do the following:

1. In Service Desk, define an application 'Shell' that has a command line `/bin/sh` and a starting directory `/tmp`
2. In Service Desk, create a smart action 'Mail' which uses the 'Shell' application, with the parameters `/bin/tail -n12 /tmp/log | mail www@localhost` (no quotes around parameter string).
3. In the Service Desk 4.5 web console `Applications.xml` file, define the application name as Mail, as shown below:

```
<Application name="Mail" type="Command" timeout="5"/>
```

When this smart action is invoked, mail is sent to the user `www@localhost` (or whatever you set up the web user to be) with the last 12 lines of `/tmp/log` as the contents of the message.

---

## Configuring Object Attachments

The Web Console supports the attachment of files to objects.

Before users can work with attachments on the Service Desk 4.5 web console, you must enable the Attachment options on the Service Desk server administrator console under **Tools->System** (select **System Panel**, double-click **Attachment Settings**). Configure an FTP server in this window. For configuration instructions, see Service Desk 4.5 administrator documentation.

## Setting the JAVA\_HOME Environment Variable

Set the `JAVA_HOME` environment variable so that it points to the location where you installed the required Java version for your operating system (see “Checking System Requirements” on page 21).

`JAVA_HOME` needs to be set before running various Service Desk 4.5 web console commands (such as `create_role_db` and `xmlvalidate`).

### *Windows:*

1. In the **Control Panel**, select **System**.
2. On the **Advanced** tab, click **Environment Variables**.
3. Create a `JAVA_HOME` environment variable pointing to the required Java version.

### *UNIX:*

Follow the standard procedure required by your shell type. Create a `JAVA_HOME` environment variable pointing to the required Java version.



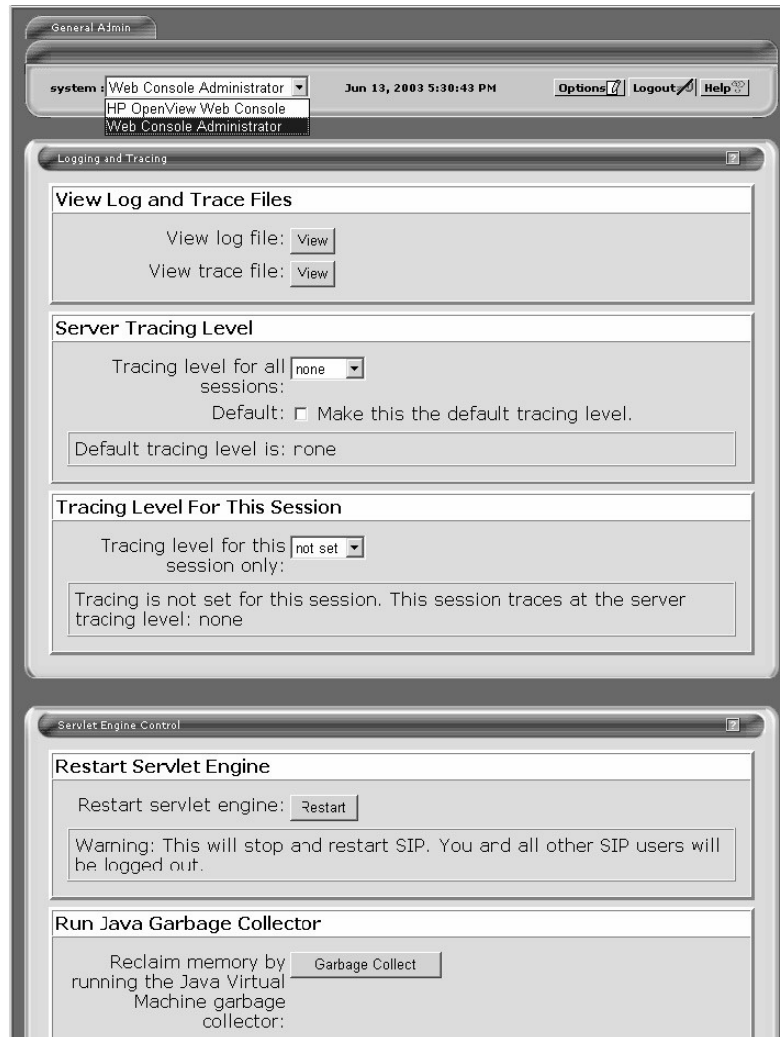
# Performing Routine Administration Tasks

- “Access the Web Console Administrator Page” on page 66
- “Logging and Tracing” on page 67
- “Restarting the Apache Tomcat Servlet” on page 70
- “Restarting the Apache HTTP Server” on page 72
- “Running the JVM Garbage Collector” on page 73
- “Configuring the Maximum Number of Forms in Cache” on page 74
- “Determining which Service Desk 4.5 Server” on page 76

## Access the Web Console Administrator Page

Log in using the user name `system` to gain Administrator privileges. Then in the role selection list, select **Web Console Administrator**. The Administrator can set logging and tracing and control the Apache Tomcat Servlet.

**Figure 7-1** Administration Page



---

## Logging and Tracing

A console log file is available to help you troubleshoot problems with the Service Desk 4.5 web console. The log file contains warning and error entries:

- A warning is logged to indicate that a problem occurred, but the console framework or a module was able to continue, possibly using a default value or some assumption. The warning is issued because the assumption may have been wrong and you might want to fix the problem.
- An error is logged when a problem prevents the console framework or a module from completing a task.

Console tracing is primarily intended for use by HP support. It supplies a large amount of extra data that may be used to debug problems. You are advised to turn on console tracing only if instructed to do so by support personnel. For instructions on fixing errors, read the error description.

You have the following choices:

- “Viewing Log Files” on page 67
- “Setting Trace Level and Viewing Trace Files” on page 68
- “Controlling the Size of the Log Files and Trace Files” on page 69

### Viewing Log Files

1. Log into the Service Desk 4.5 web console using a role that includes *Administrator* privileges. For more information, see “Access the Web Console Administrator Page” on page 66.
2. In the role selection list, select **Web Console Administrator**.
3. To see “warning” and “error” messages, go to the **Logging and Tracing** segment and click the log file **View** button.

Click the **Help** button for more information about log file entries.

---

#### NOTE

The last 500 kb of the log file are displayed in the Service Desk 4.5 web console interface. If you want to examine the contents of the entire file, open the following file:

*Windows:* <install\_dir>\SIP\log\sip.log

*UNIX:* /opt/OV/SIP/log/sip.log

---

## Setting Trace Level and Viewing Trace Files

Turn on tracing only if instructed to do so by support personnel. To turn on tracing, perform the following steps:

1. Log into the Service Desk 4.5 web console using a role that includes *Administrator* privileges. For more information, see “Access the Web Console Administrator Page” on page 66.
2. In the role selection list, select **Web Console Administrator**.
3. In the **Logging and Tracing** segment of the page, set the trace level.

Tracing can be turned on for all web console sessions on the server or for the current session only.

Setting the trace level to greater than “none” causes entries to be written to the trace file. Click the **Help** button for more information.

4. Click **Apply** at the bottom of the page.
5. Display the trace file by clicking the View trace file **View** button.

A trace level of “tracing” results in entries that record important steps during the web console’s execution.

A trace level of “verbose” does the same but with greater detail.

---

### NOTE

Only the last 500 kb of the trace file is displayed in the Service Desk 4.5 web console interface. If you want to examine the contents of the entire file, see the following:

*Windows:* <install\_dir>\SIP\log\sip.trace

*UNIX:* /opt/OV/SIP/log/sip.trace

---

## Controlling the Size of the Log Files and Trace Files

The default size for the log file and the trace file is approximately 10 MB. When that size is reached, the file is archived to `sip.log.old` or `sip.trace.old`, and a new file is started. It is possible to lose information when the `sip.<trace/log>.old` file already exists and is overwritten.

To change the size of the log and trace files, do the following:

1. Make a copy of this file. Then open the original file for editing:

*Windows:*

```
<install_dir>\SIP\conf\framework\OVPortalConfig.xml
```

*UNIX:* /opt/OV/SIP/conf/framework/OVPortalConfig.xml

2. Modify the `maxLogSize` attribute value (bytes) of the `OVPortalConfig` element, as shown in the following code:

```
<OVPortalConfig
  tracingLevel="none"
  maxLogSize="10000000"
  portalHeader=" "
  portalFooter=" "
  showHeader="yes"
  showFooter="yes"
  showTabs="no"
  cacheXSL="yes">
```

The `maxLogSize` attribute controls the size of the following files:

```
sip.log
sip.log.old
sip.trace
sip.trace.old
```

3. After modifying the XML, validate that the syntax is correct. For information about validating XML syntax, see “Validating XML Files” on page 99.
4. After validating your changes to the `OVPortalConfig.xml` file, restart the Apache Tomcat Servlet to make your change take effect. For information on doing so, see “Restarting the Apache Tomcat Servlet” on page 70.

## Restarting the Apache Tomcat Servlet

The Service Desk 4.5 web console is a Java servlet that is accessed through the Apache Tomcat Servlet. After making certain configuration changes in the web console, you must restart the Apache Tomcat Servlet before changes take effect. This happens when:

- You change which Service Desk server is connected to the Service Desk 4.5 web console.
- You are specifically instructed to do so.

### From the Web Console Administrator Page

Be aware that you and all other Service Desk 4.5 web console users will be logged out when you restart the Apache Tomcat Servlet.

1. Log into the Service Desk 4.5 web console using a role that includes *Administrator* privileges. For more information, see “Access the Web Console Administrator Page” on page 66.
2. In the role selection list, select **Web Console Administrator**.
3. In the **Servlet Engine Control** segment, click **Restart**.

### From Outside of the Service Desk 4.5 Web Console

Be aware that you and all other Service Desk 4.5 web console users will be logged out when you restart the Apache Tomcat Servlet.

*Windows:*

1. In the **Control Panel**, select **Administrative Tools->Services**.
2. Stop and then start the OVTomcat service.

---

#### TIP

Alternatively, at the command prompt, type:

```
net stop OVTomcat  
net start OVTomcat
```

---

*UNIX:*

1. As `root`, stop the Apache Tomcat Servlet by running the following commands:

*HP-UX:*

```
/sbin/init.d/ovtomcat stop
```

*Solaris:*

```
/etc/init.d/ovtomcat stop
```

2. Verify that the `DISPLAY` variable is set properly. See “Ensuring that an X11 Display Is Always Available (UNIX only)” on page 39.
3. As `root`, start the Apache Tomcat Servlet by running the following commands:

*HP-UX:*

```
/sbin/init.d/ovtomcat start
```

*Solaris:*

```
/etc/init.d/ovtomcat start
```

## Restarting the Apache HTTP Server

The Apache HTTP Server is a fully featured web server (the Apache Tomcat servlet is an Application Server). Apache HTTP Server receives requests from Service Desk 4.5 web console clients, processes html and image requests, and forwards appropriate requests to the Apache Tomcat servlet. You can restrict access to web pages using Apache HTTP Server configurations. You can implement load balancing across multiple installations to create a solution suited to your security needs. If you need to restart the Apache HTTP Server, do the following:

*Windows:*

1. In the **Control Panel**, select **Administrative Tools->Services**.
2. Stop and then start the `OVApache` service.

---

### TIP

Alternatively, at the command prompt, type:

```
net stop OVApache  
net start OVApache
```

---

*UNIX:*

1. As `root`, stop the Apache HTTP Server by running the following commands:

*HP-UX:*

```
/sbin/init.d/ovapache stop
```

*Solaris:*

```
/etc/init.d/ovapache stop
```

2. Verify that the `DISPLAY` variable is set properly. See “Ensuring that an X11 Display Is Always Available (UNIX only)” on page 39.

3. As `root`, start the Apache HTTP Server by running the following commands:

*HP-UX:*

```
/sbin/init.d/ovapache start
```

*Solaris:*

```
/etc/init.d/ovapache start
```



## **Running the JVM Garbage Collector**

The Service Desk 4.5 web console can force your Java Virtual Machine (JVM) to free up any previously requested *system memory* that is currently not being used:

1. Log into the Service Desk 4.5 web console using a role that includes *Administrator* privileges. For more information, see “Access the Web Console Administrator Page” on page 66.
2. In the role selection list, select **Web Console Administrator**.
3. In the **Servlet Engine Control** segment, click **Garbage Collect**.

---

## Configuring the Maximum Number of Forms in Cache

If virtual memory becomes a problem you can change the cache size attribute value that controls how many forms per session are stored in cache memory. Each time a user closes a web console secondary window without using the **OK** or **Cancel** button, the cache memory is not released. The cache can fill up. The cache size attribute puts an upper limit on the number of forms stored in memory per session.

The `WebConsoleConfig.xml` file settings apply to each Service Desk 4.5 web console user session running on your Service Desk 4.5 web console server. To change the cache file usage, do the following:

1. Make a copy of this file. Then open the original file for editing:

*Windows:*

```
<install_dir>\SIP\conf\share\modules\console\WebConsoleConfig.xml
```

*UNIX:*

```
/opt/OV/SIP/conf/share/modules/console/WebConsoleConfig.xml
```

2. The first attribute `maxCachedForms` is the maximum number of forms that can be cached for each user session. The value must be greater than or equal to 5.

```
<WebConsoleConfig maxCachedForms="30"  
                  configFileReloadInterval="30"  
                  displayUnsupportedFieldInfo="false"/>
```

3. The second attribute `configFileReloadInterval` is the time (in minutes) before changes to this file take effect. The value must be greater than or equal to 0. If set to zero, changes take effect immediately. Default value is 30 minutes.
4. The third attribute `displayUnsupportedFieldInfo` displays a list of Service Desk fields that are unsupported in the Service Desk 4.5 web console. For more information, see “Troubleshooting Missing Form Fields” on page 91

---

**NOTE**

---

This `displayUnsupportedFieldInfo` feature is designed for system administrators only. Do not set it to `True` in a production environment. This feature displays code in the user interface that may cause confusion among end users and result in support calls.

5. You can make your changes take effect in one of two ways:
  - Immediately, by restarting the Apache Tomcat Servlet. Be aware that all current Service Desk 4.5 web console sessions are terminated when you restart the Apache Tomcat Servlet. For more information, see “Restarting the Apache Tomcat Servlet” on page 70.
  - Wait for the time specified in the `configFileReloadInterval` attribute to pass, after saving the `WebConsoleConfig.xml` file.
6. After modifying the XML, validate that the syntax is correct. For information about validating XML syntax, see “Validating XML Files” on page 99.

## Determining which Service Desk 4.5 Server

There may be times when you need to bring down a Service Desk server and want to identify which server is connected to the Service Desk 4.5 web console. This can be determined in one of two ways, depending upon whether the server that you connected to the Service Desk 4.5 web console is part of a server pool or not.

### When Service Desk Server is Part of a Server Pool

Due to server pooling the Service Desk server that is actually connected to the Service Desk 4.5 web console may not be the one specified in the `mgmtStations.xml` file.

Assume, for example, that servers A, B, and C are connected to the same database and “Join Multiple Servers” (in the Server Settings Editor) is enabled. If the host A is specified in `mgmtStations.xml`, it will connect to host A the first time it starts, but on subsequent restarts of the Apache Tomcat Servlet, it could connect to any one of A, B, or C.

If you suspect this to be the case, follow these steps to find out which server the Service Desk 4.5 web console is connect to:

1. Set the tracing level to “tracing”. For more information, see “Setting Trace Level and Viewing Trace Files” on page 68.
2. In the trace file look for a line like the following:

```
tracing Console Thread-8          2003.07.01.10:48:24:187 Object Server login  
succeeded: user "system" connected to server "server.acme.com"
```

### When Service Desk Server is NOT Part of a Server Pool

If you know that the Service Desk server is not part of a server pool, you can look in an XML file to determine which Service Desk server is connected to the Service Desk 4.5 web console.

1. Make a copy of this file. Then open the original file for editing:

*Windows:*  
`<install_dir>\SIP\conf\share\stations\mgmtStations.xml`

*UNIX:*

/opt/OV/SIP/conf/share/stations/mgmtStations.xml

2. Look at the `hostname` attribute of the `ManagementStation` element to determine which server is connected, as shown in the following code example:

```
<?xml version="1.0" encoding="UTF-8"?>
<!DOCTYPE ManagementStations SYSTEM "mgmtStations.dtd">
<ManagementStations configCheckTimer="300">
  <ManagementStation hostname="kali.acme.com" id="kali"
    title="kali">
    <ObjectServerStation port="30999"/>
  </ManagementStation>
</ManagementStations>
```

---

**NOTE**

---

When multiple object server stations are listed, the first one in the list is used.



---

# A

## Troubleshooting the Service Desk 4.5 Web Console

- “Resolving Installation Problems” on page 80
- “Fixing Server-to-Server Communication Problems” on page 86
- “Responding to Routine Error Messages” on page 88
- “Troubleshooting Missing Form Fields” on page 91
- “Understanding Display Differences” on page 92
- “Understanding Lookup Field Behavior” on page 93
- “Understanding the Timezone Field on the Login Page” on page 94
- “Resolving out of Memory Errors” on page 95
- “Reporting and Monitoring Resolution of Problems” on page 96

## Resolving Installation Problems

If the Service Desk 4.5 web console does not run as expected after installation, begin troubleshooting by following the steps in this section.

### NOTE

Upon installation, the Service Desk 4.5 web console configures the Apache HTTP Server to run on the port that you specified in the installation process. The Apache Tomcat Servlet's internal web server is automatically assigned to port 8080.

1. Check the installation log file for messages or clues:

*Windows:*

```
<install_dir>\install\HP_OpenView_Web_Console_InstallLog.log
```

*UNIX:*

```
/opt/OV/install/HP_OpenView_Web_Console_InstallLog.log
```

2. Verify that the Apache Tomcat Servlet is running.

Type the following URL into a web browser to contact the Apache Tomcat Servlet through the assigned port 8080 (bypassing the Apache HTTP Server):

**http://<yourhostname>:8080/ovportal**

- a. If a page is displayed, then the Apache Tomcat Servlet is functioning properly. The page will look odd because you are contacting the Apache Tomcat Servlet directly, rather than through the Apache HTTP Server that usually renders the graphics. Go to step 3.
- b. If no page is displayed, do the following:

*Windows:*

- i. Check the Apache Tomcat Servlet log file for messages or clues:

```
<install_dir>\nonOV\tomcat\logs\localhost_log.<yyyy-mm-dd>.txt
```



- ii. In the **Control Panel**, select **Administrative Tools->Services**. Check the status of `OVTomcat`. If the process is not running, right-click `OVTomcat` and click **Start**. Alternatively, you can use the command line and type:

```
net stop OVTomcat  
net start OVTomcat
```

- iii. If this fails, you can attempt to start it with a `.bat` file from a command window, and observe the troubleshooting messages displayed in the command window.

Navigate to the following directory:

```
<install_dir>\nonOV\tomcat\bin
```

At the command prompt, type **startup.bat**

*UNIX:*

- i. Check the Apache Tomcat Servlet log file for messages or clues:

```
/opt/OV/nonOV/tomcat/logs/localhost_log.<yyyy-mm-dd>.txt
```

- ii. As `root`, stop the Apache Tomcat Servlet by running the following command:

*HP-UX:*

```
/sbin/init.d/ovtomcat stop
```

*Solaris:*

```
/etc/init.d/ovtomcat stop
```

- iii. Verify that the `DISPLAY` variable is set properly. See “Ensuring that an X11 Display Is Always Available (UNIX only)” on page 39.

- iv. As `root`, start the Apache Tomcat Servlet by running the following command:

*HP-UX:*

```
/sbin/init.d/ovtomcat start
```

*Solaris:*

```
/etc/init.d/ovtomcat start
```

## Resolving Installation Problems

3. Verify that the Apache HTTP Server is running.

Type one of the following URLs into a web browser to Apache HTTP Server:

**`http://<yourhostname>`**

**`http://<yourhostname>:<port>`**

<port> = port assigned to the Apache HTTP Server during installation (other than 80)

If the Apache HTTP Server page is not displayed, but instead you receive an error, see “Troubleshooting the Apache HTTP Server” on page 84.

4. Verify that authorization and authentication are working.

Try logging into the Service Desk 4.5 web console once again.

Type one of the following URLs into a web browser to launch the Service Desk 4.5 web console:

**`http://<yourhostname>/ovportal`**

**`http://<yourhostname>:<port>/ovportal`**

<port> = port assigned to the Apache HTTP Server during installation (other than 80)

---

### NOTE

Make sure that you are logging in with a valid user ID and password. Only established Service Desk “*Application account*” users (named and concurrent users) can log into Service Desk 4.5 web console, “*SP Account*” users cannot. The user ID and password are case sensitive.

---

If you cannot log in, but instead receive an authorization error (such as “You have been logged out with the following message: You have no authorization”). Do the following:

- Verify that your `JAVA_HOME` is set (see “Setting the `JAVA_HOME` Environment Variable” on page 64).
- Check the `roles.log` file for any messages or clues:

*Windows:* `<install_dir>\SIP\log\roles.log`

*UNIX:* `/opt/OV/SIP/log/roles.log`

- Regenerate the Service Desk 4.5 web console role database by typing the following at a command prompt:

*Windows:* **<install\_dir>\SIP\bin\create\_role\_db**

*UNIX* (as a user with write permission to the /opt/OV/SIP/bin directory): **/opt/OV/SIP/bin/create\_role\_db**

---

**TIP**

For the `create_role_db` command to work from outside the `bin` directory, add the following to your `PATH` variable:

*Windows:* **<install\_dir>\SIP\bin**

*UNIX:* **/opt/OV/SIP/bin**

---

5. Verify that the connection to your Service Desk server is running.

Try logging into the Service Desk 4.5 web console once again.

Type one of the following URLs into a web browser to launch the Service Desk 4.5 web console:

**http://<yourhostname>/ovportal**

**http://<yourhostname>:<port>/ovportal**

<port> = port assigned to the Apache HTTP Server during installation (other than 80)

If you are still unable to log into the Service Desk web console, review the information in “Fixing Server-to-Server Communication Problems” on page 86.

6. If you are still unable to log into the Service Desk 4.5 web console, call HP support.

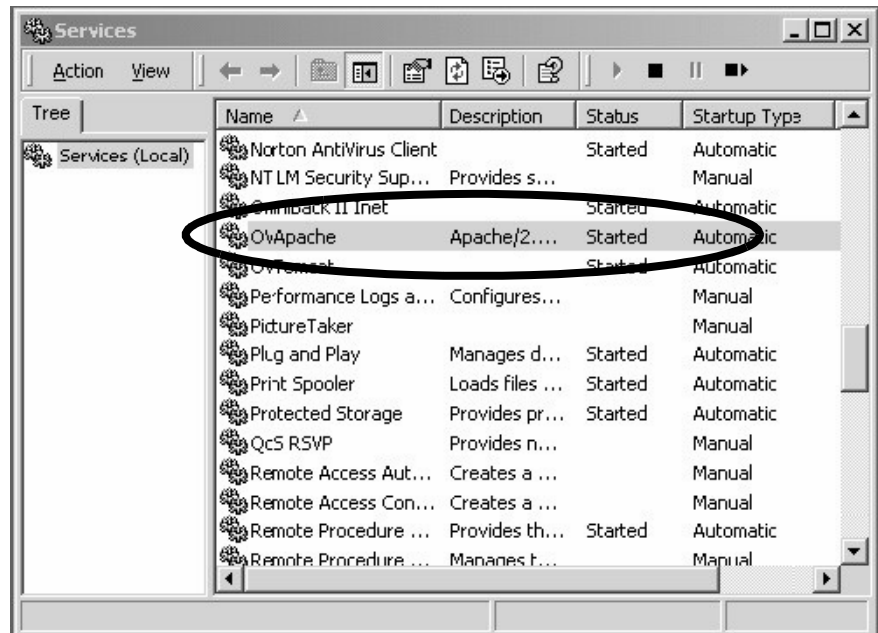
---

## Troubleshooting the Apache HTTP Server

You tried to start the Service Desk 4.5 web console, but got an error message indicating that the server is not responding and may be down. You need to start the Apache HTTP Server:

*Windows:*

1. In the **Control Panel**, select **Administrative Tools->Services**. Check the status of OVApache, as shown in the following sample screen:



2. If the process is not running, select OVApache and click **Start**. Alternatively, you can use the command line: **net stop OVApache** and **net start OVApache**.
3. Try to log into the Service Desk 4.5 web console.

If it still does not display, check the Apache HTTP Server log file for messages or clues:

```
<install_dir>\nonOV\apache\logs\error.log
```

*UNIX:*

1. Check to see if the Apache HTTP Server is running by typing the following at the command prompt:

```
ps -ef | grep httpd
```

If the output lists `/opt/OV/nonOV/apache/bin/httpd`, the Apache HTTP Server is running.

2. If the Apache HTTP Server is not running, type the following command at a command prompt:

*HP-UX:*

```
/sbin/init.d/ovapache start
```

*Solaris:*

```
/etc/init.d/ovapache start
```

If you get the following message, the Apache HTTP Server is functioning correctly:

```
# /sbin/init.d/ovapache start
Attempting to start Apache Web Server...

Apache Web Server has been started.
```

3. Try to log into the Service Desk 4.5 web console.

If it still does not display, check the Apache HTTP Server log file for messages or clues:

```
/opt/OV/nonOV/apache/logs/error.log
```

## Fixing Server-to-Server Communication Problems

### Error Message 1: Check Application Server

You get a login page and try to log on but get the following message:

“Cannot connect to server. Please contact your administrator. Failed to connect with server. Check that the application server is running”

#### Problem and Solution:

First verify that the Service Desk server is running on the host and port specified in the `mgmtStations.xml` file. For more information about this file, see “Configuring Communication with Your Service Desk 4.5 Server” on page 58.

1. If necessary, start the Service Desk server on the specified host.
2. Alternately, change the host and port values in the `mgmtStation.xml` file, clear the cache (see NOTE), and restart the Apache Tomcat Servlet (“Restarting the Apache Tomcat Servlet” on page 70).

---

#### NOTE

Clear the Service Desk 4.5 web console cache by removing the following directory:

*Windows:* `<install_dir>\SIP\tmp\ObjectServer`  
*UNIX:* `/opt/OV/SIP/tmp/ObjectServer`

---

If you believe the Service Desk server is already running on the correct host, log into the Service Desk 4.5 web console as the web console Administrator:

- If not successful, start or restart the Service Desk server.
- If successful, clear the virtual cache (“Running the JVM Garbage Collector” on page 73), and restart the Apache Tomcat Servlet (“Restarting the Apache Tomcat Servlet” on page 70).

## **Error Message 2: Upgrade Your Software**

You get a login page and try to log on but get the following message:

“Cannot connect to server. Please contact your administrator. You need to upgrade your software.”

### **Problem and Solution:**

The Service Desk 4.5 web console supports only Service Desk 4.5 with Service Pack 9. You must upgrade your Service Desk 4.5 server to Service Pack 9 to use the Service Desk 4.5 web console.

## **Error Message 3: Login Incorrect**

You get a login page and try to log on but get the following message:

“Login incorrect.”

### **Problem and Solution:**

The name or password you entered is incorrect.

Login names and passwords are case sensitive.

Enter your login information once again.

Make sure you are using a valid Service Desk “Application Account” (named and concurrent user account) and not a “SP Account.” Only Application Accounts can be used with the Service Desk 4.5 web console.

## **Responding to Routine Error Messages**

Following are three error messages you may get while using the Service Desk 4.5 web console. They appear here in alphabetical order.

### **“Maximum # concurrent users can log in at one time”**

This error message can occur when:

- A user is logging into the Service Desk 4.5 web console, or
- A user is already logged in, and the Service Desk server session times out and tries to reconnect but there are no longer any concurrent user licenses available.

#### **Problem**

The basic problem is that too many users are logged in.

If a user is logged in to the Service Desk 4.5 web console, but has been idle for a while, and in the meantime other concurrent users log in, the above message can be displayed.

The Service Desk 4.5 web console has a default session time-out value of 9 hours (set in `OVPortalConfig.xml`). The Service Desk server has a default session time-out value of 2 hours and is set in the Service Desk “Server Settings Editor.”

After the 2-hour session time-out value is reached, the Service Desk 4.5 web console automatically attempts to reconnect to Service Desk server upon the next user request to update the web page. If in the meantime, other concurrent users log in and the “Concurrent Users” limit of your Service Desk license is exceeded (that is, the total number of “sessions” allowed for all accounts designated as concurrent users), the above error message appears.

#### **Solution**

Wait until someone else logs out and then log in. Alternately, if this happens regularly, you may need more Service Desk 4.5 licenses.



## **“The maximum of logins with the same user has been reached”**

This error message can occur when:

- A user is logging into the Service Desk 4.5 web console, or
- A user is already logged in and the Service Desk server session times out and tries to reconnect but there are no more active sessions available for this user.

### **Problem and Solution**

The basic problem is that a named user of Service Desk has exceeded the fixed number of active sessions granted to them. When this number is exceeded the above error message appears in the Service Desk 4.5 web console.

The Service Desk 4.5 web console has a default session time-out value of 9 hours (set in `OVPortalConfig.xml`). The Service Desk server has a default session time-out value of 2 hours and is set in the Service Desk “Server Settings Editor.”

After the 2-hour session time-out value is reached, the Service Desk 4.5 web console automatically attempts to reconnect to Service Desk server upon the next user request to update the web page. If in the meantime, the same named user logs in again and the number of active sessions allowed for Service Desk is exceeded, the above error message appears.

### **Solution**

Stay within the fixed number of active sessions granted to a named user. This is configured on your Service Desk server. Contact the Service Desk Administrator if you need a change.

## **“You have been logged out...You have no authorization”**

When starting the Service Desk 4.5 web console, you get a login page but cannot log in and then receive an authorization error such as “You have been logged out with the following message: You have no authorization.”

**Problem and Solution**

The Service Desk 4.5 web console role database may not be working properly. Regenerate the Service Desk 4.5 web console role database as described in step 4 on page 82.

## **Troubleshooting Missing Form Fields**

Sometimes a field appears on a form in Service Desk, but when that same form is accessed using the Service Desk 4.5 web console, the field is missing. Several Service Desk form fields are not supported in this release of the Service Desk 4.5 web console.

By editing an XML file, you can enable a feature that will help you determine or confirm which fields are unsupported.

---

### **CAUTION**

This feature is designed for Service Desk web console Administrators only. Do not enable it in a production environment. This feature displays code in the user interface, that may cause confusion among end users and result in support calls.

---

You need to edit the `WebConsoleConfig.xml` file. Please follow the directions in “Configuring the Maximum Number of Forms in Cache” on page 74.

## Understanding Display Differences

### **The “New” button is missing from Service Today views**

The “New” button is not available on Service Today views. And “New” is not available on the **Choose a Menu Item** drop-down list. However, if you use a Service Today view in table format, you can right click on any row and display the shortcut menu. The **New** menu item is available on the shortcut menu.

### **The “New” button is missing from Configuration Item views**

The “New” button is not available on Configuration Item views. And “New” is not available on the **Choose a Menu Item** drop-down list. However, if you use a Configuration Item view in table format, you can right click on any row and display the shortcut menu. The **New** menu item is available on the shortcut menu.

### **There is no way to determine which filter is currently active in any view**

The Service Desk 4.5 web console does not have any filter manipulation features. The Service Desk 4.5 web console does not show current filter selection, nor allow the user to apply filters. If there are any filters applied to a view at the Service Desk Server, then the Service Desk 4.5 web console honors them (filtering the data appropriately), but there is no indication in the view that a filter is applied. There is no work around at this time.

## **Understanding Lookup Field Behavior**

Lookup field behavior on within Service Desk may not match the lookup field behavior in the Service Desk 4.5 web console.

### **Lookup field behavior with multiple matches**

In Service Desk, you can type part of an item's search text into a Lookup field; and if the entered text matches more than one object, a list of those matches automatically appears once you move focus to the next field.

In the Service Desk 4.5 web console, if there are multiple matches, the list *is not automatically displayed*. When multiple matches exist, the form validation will fail. You must click the Quick Find button next to that Lookup field to display the list and make a selection.

## **Understanding the Timezone Field on the Login Page**

On the Service Desk 4.5 web console login page, a Timezone selection field appears sometimes, but not at other times.

This is expected behavior. Whenever the Apache Tomcat Servlet is restarted, the Timezone selection field does not appear on the login page until *after the first successful login has occurred*. With each additional login, the Timezone field appears on the login page (unless, of course, the Apache Tomcat Servlet has been restarted again).

## Resolving out of Memory Errors

The Apache Tomcat Servlet fails to start because the Java Virtual Machine is not running. You receive #147 and #148 out of memory errors.

### **Problem and Solution:**

You need to increase the Java Virtual Machine memory limit.

#### *Windows:*

1. Launch regedit.
2. Navigate to  
HKEY\_LOCAL\_MACHINE\System\CurrentControlSet\Services\OVT  
omcat\Parameters
3. Select \JVM Option Number 1
4. Increase the value (default is -Xmx512M)
5. Restart the Apache Tomcat Servlet. See “Restarting the Apache Tomcat Servlet” on page 70.

#### *UNIX:*

1. Increase MAX\_HEAP\_SIZE in /etc/rc.config.d/ovtomcat (default is 512m).
2. Restart Apache Tomcat Servlet. See “Restarting the Apache Tomcat Servlet” on page 70.

## **Reporting and Monitoring Resolution of Problems**

Errors can be reported through the HP Support website.

To view the most recent information about errors and the status of available fixes, check the HP Support website.

Issues that are encountered after the release of the Service Desk 4.5 web console are registered on the HP Support site.

See “Support” on page 9.



---

# B

## Rules for Direct Editing of XML Files

- “Backing Up XML Files” on page 98
- “Validating XML Files” on page 99

---

## **Backing Up XML Files**

Make a backup of XML configuration files before you customize them. If you edit the file and use incorrect XML syntax, you can revert to the previous version of this file.

## Validating XML Files

The Service Desk 4.5 web console can detect and report an invalid XML configuration file. However, after you make modifications to XML files, you need to validate your XML syntax.

The `xmlvalidate` command, provided with Service Desk 4.5 web console, checks the XML file to see if it is well-formed and valid. This command uses the same XML parser as the Service Desk 4.5 web console, so if `xmlvalidate` validates the XML file, it will work with the Service Desk 4.5 web console.

`JAVA_HOME` must be set to run `xmlvalidate`. For more information, see “Setting the `JAVA_HOME` Environment Variable” on page 64.

---

### NOTE

For the command to work from outside the `bin` directory, add the following to your `PATH` variable:

*Windows:* `<install_dir>\SIP\bin`  
*UNIX:* `/opt/OV/SIP/bin`

---

The correct usage of the `xmlvalidate` command is:

```
xmlvalidate <xml filename>
```

An XML file is well formed if it conforms to a minimal set of rules defined for all XML documents. It is “valid” if it conforms to the DTD listed at the beginning of the XML file.

Sometimes an error reported by `xmlvalidate` may not clearly indicate how to fix the problem. For example, a message like “Attribute `<name>` must be declared for element type `<name>`” is an indication that the attribute ‘name’ may have been misspelled.

As an alternative to `xmlvalidate`, you can find an XML validation tool for Windows at [www.xmlspy.com](http://www.xmlspy.com).



---

# C

## Uninstalling Service Desk 4.5 Web Console

- “On Windows Operating Systems” on page 102
- “On UNIX Operating Systems” on page 103

## On Windows Operating Systems

1. From the **Control Panel**, select **Add/Remove Programs**.  
Click **HP OpenView Web Console**.  
Click the **Change/Remove** button.

---

### NOTE

The Uninstaller may incorrectly report that some directories were not able to be removed. This warning can be ignored.

2. Navigate to the directory where you installed the software (c:\Program Files\HP OpenView\ by default).
3. If the only thing left is the `<install_dir>\UninstallerData\*` directory, manually remove all remaining files:

---

### NOTE

If you have other OpenView software installed, do not delete everything in this directory. You can delete the `Uninstall HP OpenView Web Console.exe` file, but call HP support to make sure that no other programs are depending on files inside of the `UninstallerData` directory before deleting them.

---

## On UNIX Operating Systems

1. As root and from the root directory, run the following command:

```
/opt/OV/UninstallerData/Uninstall_HP_OpenView_Web_Console
```

---

### NOTE

The Uninstaller may incorrectly report that some directories were not able to be removed. This warning can be ignored.

---

2. Navigate to the directory where you installed the software (`/opt/OV/` by default).
3. If the only thing left is the `/opt/OV/UninstallerData/*` directory, manually remove all remaining files:

---

### NOTE

If you have other OpenView software installed, do not delete everything in this directory. You can delete the `Uninstall_HP_OpenView_Web_Console` script file and the `Uninstall_HP_OpenView_Web_Console.lax` file, but call HP support to make sure that no other programs are depending on files inside of the `UninstallerData` directory before deleting them.

---

Uninstalling Service Desk 4.5 Web Console  
**On UNIX Operating Systems**



**A**

- actions
  - system (not supported), 17
- administration
  - forcing JVM to free up system memory, 73
  - increasing size of log file, 69
  - restarting the Apache Tomcat Servlet, 70, 72
  - setting logging and tracing, 67
  - viewing log files, 67, 68
- administrator role, 66

**C**

- cache
  - clearing Service Desk 4.5 web console cache, 86
- commands
  - create\_role\_db, 83
  - xmlvalidate, 99
- configuration
  - refresh model, 47
- configuring
  - DISPLAY variable, 32
  - JAVA\_HOME environment variable, 64
- create\_role\_db, 83

**D**

- DISPLAY variable, 32, 39

**F**

- features
  - Service Desk 4.5 web console, 16
- forms
  - missing fields, 91

**G**

- Garbage Collector
  - running, 73

**H**

- hardware requirements, 21
- HP Passport, 9
- HP-UX
  - DISPLAY variable, 32, 39
  - max\_thread\_proc, 38

- Service Desk 4.5 web console, 32

**I**

- installation
  - HP-UX and Solaris, 32
  - port requirements, 23
  - system requirements, 21
  - troubleshooting, 80
  - verifying, 41
  - Windows, 26

**J**

- JAVA\_HOME environment variable, 64

**L**

- log file
  - increasing the size, 69
  - viewing, 67, 68
- logging and tracing, 67
- login
  - problems, 87
  - procedures, 41
- logout, 44

**P**

- port requirements, 23
- prerequisites, 19

**R**

- refresh model, 47
- restarting
  - Tomcat from Administrator page, 70
  - Tomcat from outside of Service Desk 4.5 web console, 70, 72
- roles
  - understanding console administrator role, 66

**S**

- server connection problems, 86
- Service Desk
  - in OpenView Web Console limitations, 17
- Service Desk 4.5 web console
  - benefits, 16

---

# Index

- documentation, 15
- features, 16
- installation HP-UX and Solaris, 32
- installation Windows, 26
- starting, 41
- stopping, 44
- Service Desk server
  - determining which is connected to the web console, 76
- servlet engine
  - restarting from Administrator page, 70
  - restarting from outside of Service Desk 4.5 web console, 70, 72
- software requirements, 21
- Solaris
  - DISPLAY variable, 39
  - Service Desk 4.5 web console installation, 32
- support, 9
- system memory
  - freeing up, 73
- system requirements, 21

## T

- timezone entry
  - does not appear on login page, 94
- Tomcat (Apache Tomcat Servlet)
  - restarting from Administrator page, 70
  - restarting from outside of Service Desk 4.5 web console, 70, 72
- trace files
  - setting the level, 68
  - viewing, 68
- troubleshooting
  - installation problems, 80
  - setting portal logging and tracing, 67

## V

- variable
  - DISPLAY, 32, 39
  - JAVA\_HOME, 64
- verifying installation, 41

## W

- Windows

- Service Desk 4.5 web console installation, 26

## X

- X11 Server requirements, 32
- XML
  - editing XML files, 98
  - rules for editing XML, 98
- XML files
  - backing up, 98
  - rules for editing, 97
  - validating, 99
- xmlvalidate command, 99