Huawei eSight

V200R002C00

Software Installation Guide

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HUAWEI TECHNOLOGIES CO., LTD.

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Contents

1 About This Document

Product Version

The following table lists the product version related to this document.

Product Name	Product Version
eSight	V200R002C00

Intended Audience

This document describes how to install different eSight editions (compact, standard, and professional), eSight service components, SUSE Linux operating system, SQL Server database, and obtain references required for the installation.

This document is intended for:

- Technical support engineers
- Maintenance engineers
- Installation and commissioning engineers

Symbol Conventions

The symbols that may be found in this document are defined as follows.

Symbol	Description
⚠ DANGER	Alerts you to a high risk hazard that could, if not avoided, result in serious injury or death.
⚠ WARNING	Alerts you to a medium or low risk hazard that could, if not avoided, result in moderate or minor injury.

Symbol	Description
⚠ CAUTION	Alerts you to a potentially hazardous situation that could, if not avoided, result in equipment damage, data loss, performance deterioration, or unanticipated results.
☞ TIP	Provides a tip that may help you solve a problem or save time.
📖 NOTE	Provides additional information to emphasize or supplement important points in the main text.

Command Conventions

The command conventions that may be found in this document are defined as follows.

Convention	Description
Boldface	The keywords of a command line are in **boldface**.
Italic	Command arguments are in *italics*.
[ ]	Items (keywords or arguments) in square brackets [ ] are optional.
{ x | y | ... }	Alternative items are grouped in braces and separated by vertical bars. One is selected.
[x | y | ...]	Alternative items are grouped in square brackets and separated by vertical bars. One or none is selected.
{ x | y | ... } *	Alternative items are grouped in braces and separated by vertical bars. A minimum of one or a maximum of all can be selected.
[x | y | ...] *	Alternative items are grouped in square brackets and separated by vertical bars. Several or none can be selected.

GUI Conventions

The GUI conventions that may be found in this document are defined as follows.

Convention	Description
Boldface	Buttons, menus, parameters, tabs, windows, and dialog titles are in **boldface**. For example, click **OK**.
>	Multi-level menus are in boldface and separated by the ">" signs. For example, choose **File** > **Create** > **Folder**.

Change History

Changes between document issues are cumulative. The latest document issue contains all the changes made in earlier issues.

Updates in Issue 01 (2011-12-30)

This issue is used for first office application (FOA).

2 Overview

eSight is a new-generation network management system targeting enterprise parks and branch networks. eSight supports unified management and intelligent interaction for enterprise resources, services, and users. In addition, eSight can manage IT devices, IP devices, and non-Huawei devices in a unified manner. eSight provides a flexible open platform, based on which enterprises can build their own intelligent network management systems.

3 Installing the eSight AppBase Express Edition

About This Chapter

This topic describes how to install the eSight AppBase Express edition on Windows 7.

3.1 Installation Process

3.2 Preparing for the Installation
This topic describes how to prepare for the installation, including software and hardware configuration requirements, and how to obtain required software.

3.3 Installing the eSight Server
This topic describes how to install the eSight server.

3.4 Logging In to eSight
This topic describes how to log in to eSight from a client.

3.5 Uninstalling eSight
This topic describes how to uninstall eSight.

3.1 Installation Process

Figure 3-1 shows the eSight installation process.

Figure 3-1 eSight installation process
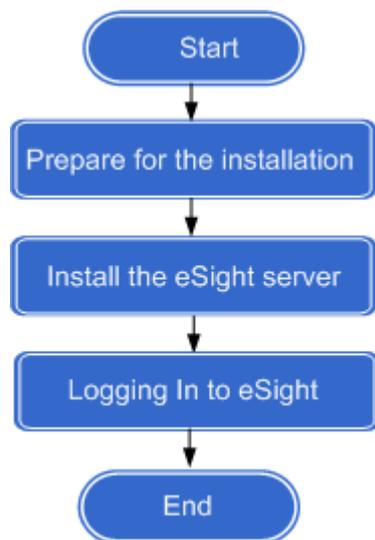
Table 3-1 describes the process of installing eSight in full installation mode.

Table 3-1 Process of installing eSight in full installation mode

No.	Installation Description	Reference
1	Describes how to prepare for the installation, including software and hardware configuration requirements, and how to obtain required software.	**3.2 Preparing for the Installation**
2	Describes how to install the eSight server.	**3.3 Installing the eSight Server**
3	Describes how to log in to eSight from a client.	**3.4 Logging In to eSight**

3.2 Preparing for the Installation

This topic describes how to prepare for the installation, including software and hardware configuration requirements, and how to obtain required software.

3.2.1 Configuration Requirements

This topic describes the configuration requirements on the eSight server.

Table 3-2 lists configuration requirements on the eSight server (express edition).

Table 3-2 Configuration requirements on the eSight server (express edition)

Server Configuration	Factory Configuration	Management Capacity (Number of NEs)	Java Heap Size	Operating System	Client Configuration
CPU: 1 x dual-core 2 GHz or above Memory: 2GB Disk space: 20 GB	Desktop-I3 2100 or above-2G-320G or above-DVDRW	40	1G	Windows 7 (32 bits) Chinese simplified or English version	● Internet Explorer 8 ● Firefox 3.6 **NOTE** Use either of the preceding browsers.

◫ **NOTE**

> The eSight installation package contains MySQL 5.5. MySQL 5.5 is automatically installed along with eSight.

3.2.2 Obtaining Required Software

This topic describes how to obtain required software.

eSight express can be installed only using installation packages.

Using Installation Packages

Method of obtaining installation packages:

Go to the enterprise network website **http://enterprise.huawei.com/cn/**.

Choose **SUPPORT** > **SoftWare Download** > **Network Management** > **eSight** to download the installation package.

Obtain the following installation packages listed in Table 3-3:

◫ **NOTE**

> In an installation package, *version* indicates the detailed version number of the eSight.

Table 3-3 Installation package list

Software	Name	Description
eSight installation software of the trial edition	eSight_AppBase_*version*_Express_Win.zip	This software is mandatory and is used to install eSight of express edition.

3.3 Installing the eSight Server

This topic describes how to install the eSight server.

Prerequisites

- The operating system has been installed on an eSight server host.
- Installation software has been obtained. For details, see **3.2.2 Obtaining Required Software**.
- The network adapter is enabled.
- The eSight server has assigned a static IP address.

Context

The MySQL database will be installed along with the eSight software. Therefore, you do not need to install the MySQL database. The system will install a new MySQL database in the eSight installation directory, which does not affect the existing MySQL database.

⚠ **CAUTION**

The eSight installation files must be placed on the local PC.

Procedure

Step 1 Log in to the Windows operating system as the **administrator** user.

Step 2 Double-click the **setup** file to start eSight installation.

The following describes how to use an installation package to install the eSight server.

1. Decompress all installation packages to a same directory. Take WinRAR files as an example. Select all required packages, right-click, and choose **Extract Here** from the shortcut menu.

⚠ **CAUTION**

To ensure successful eSight server installation, verify that all installation path names (installation package path and eSight installation path) contain only the following characters: letters, digits, and underscores (_).

2. Double-click the **setup** file in the installation package directory.
3. The **Select Language** dialog box is displayed.

Step 3 Select **English** and click **OK**.

The **Introduction** dialog box is displayed.

NOTE

> The system automatically checks whether the current environment meets requirements for installing eSight software. If the current environment does not meet the requirements, the associated message is displayed.

Step 4 Click **Next**.

The **Copyright Notice** dialog box is displayed.

Step 5 Select **I accept these terms**, and click **Next**.

The **Server Parameters** dialog box is displayed, as shown in **Figure 3-2**.

Figure 3-2 Server Parameters
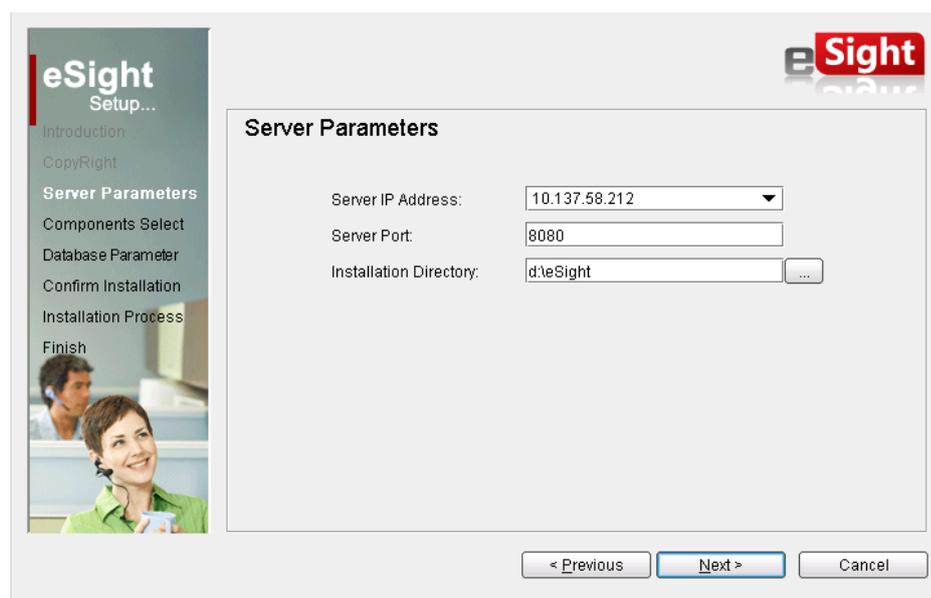
NOTE

- **IP Address**: Default IP address of the eSight server host. If the server has multiple IP addresses, select a public IP address from the drop-down list box.

- **Port**: The default port number is **8080**. If the port is in use, change it to another port number.

- **Installation Directory**: eSight server installation directory, which can be manually changed.

⚠️ **CAUTION**

To ensure successful eSight server installation, verify that the eSight server installation directory is empty before the installation.

Step 6 Click **Next**.

The **Select Software Components** dialog box is displayed, as shown in **Figure 3-3**.

Figure 3-3 Select Software Components
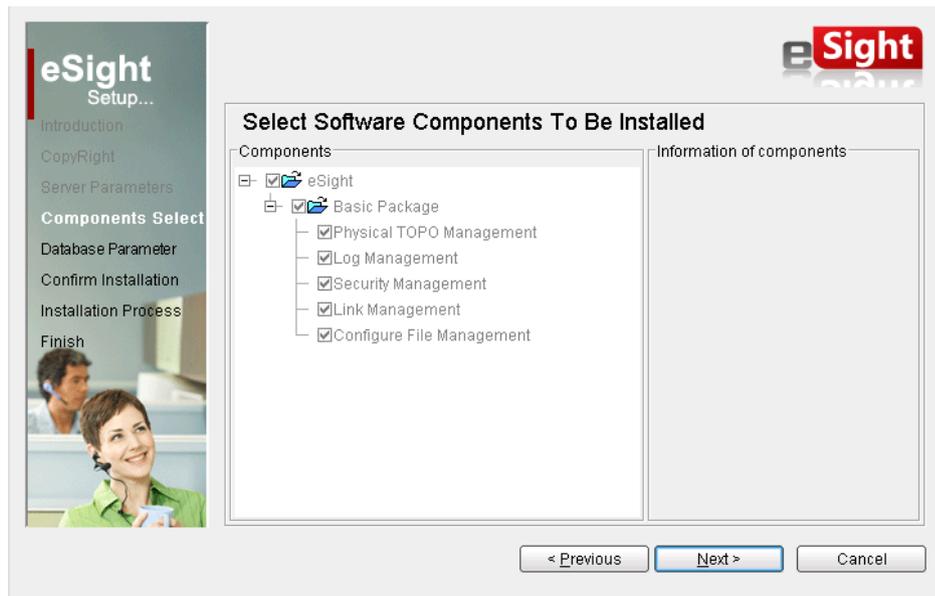
NOTE

> Components under **Basic Package** are in gray by default, and must be installed.

Step 7 Click **Next**.

The **Database Parameters** dialog box is displayed, as shown in **Figure 3-4**.

Figure 3-4 Database Parameters
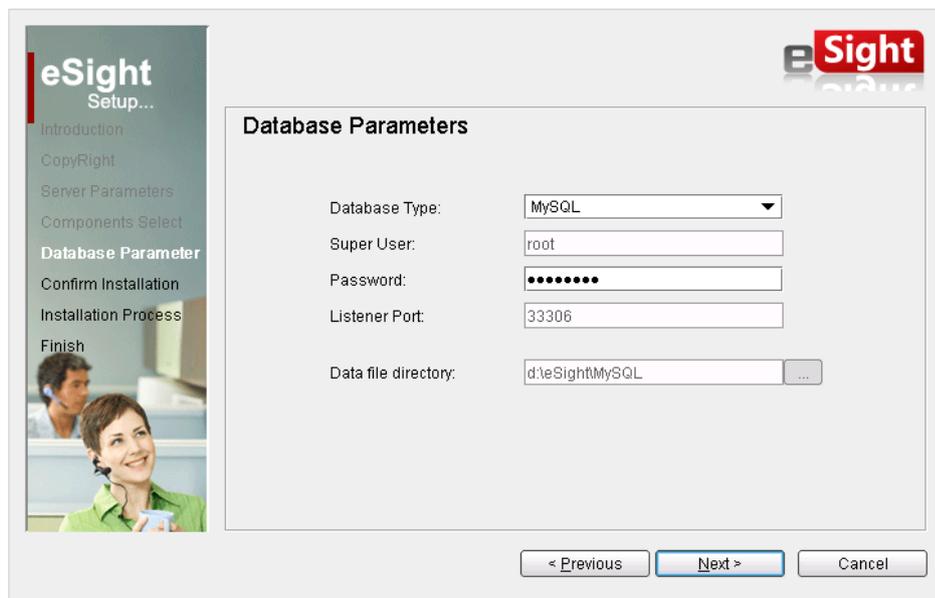
Step 8 Enter the password of the user **root**, and click **Next**.

📖 **NOTE**

> The **Database Type** value is **MySql** for the express edition, and the system uses the default password **MySQL123**.

Step 9 Verify the installation information, and click **Next**.

📖 **NOTE**

> If the installation information is incorrect, click **Previous** to reset installation information.

Step 10 The system starts to install the eSight server. After about 5 minutes, the **Installation Completed** dialog box is displayed.

📖 **NOTE**

> In the **Installation Completed** dialog box, **Start eSight immediately** is unselected by default. Retain the default settings.

Step 11 Click **Finish**. The eSight server installation is complete.

----End

3.4 Logging In to eSight

This topic describes how to log in to eSight from a client.

Prerequisites

The eSight server installation has been completed.

The IP addresses of eSight and eSight server have been synchronized. If IP addresses are not synchronized, synchronize the eSight IP address with the eSight server IP address. For details, see **14.5.1 Synchronizing the eSight Server IP Address to eSight**.

Procedure

Step 1 Verify that the following shortcut icons are displayed on the desktop:

- start eSight
- shutdown eSight

Step 2 Check whether the eSight service has started. If the eSight service has not started, perform the following steps to start it:

Double-click the **start eSight** shortcut icon on the desktop or choose **Start** > **All Programs** > **eSight** > **start eSight**.

If **Daemon is already running** is displayed, the eSight service has been started. Otherwise, wait until the eSight service starts. When the status of every process is **started** and **Finished** is displayed, the eSight service has been started.

Step 3 Log in to the eSight server from the client.

- Log in to the eSight server from the Window Internet Explorer 8.

    1. Open the Internet Explorer.
    2. Choose **Tools** from the main menu.
    3. Select **Compatibility View Settings**.

4. In the **Compatibility View Settings** dialog box, clear the **Display intranet sites in Compatibility View** and **Display all websites in Compatibility View** check boxes.

5. Click **Close**.

6. Choose **Tools** > **Internet Options** > **Security** > **Custom Level** from the main menu.

7. Locate the **Downloads** node. In **Automatic prompting for file downloads**, select **Enable**.

8. Click **OK**.

9. In the address box, enter **http://*eSight server IP address*:*port number***, and press **Enter**.

⚠ **CAUTION**

If the server has multiple IP addresses, enter the IP address selected during eSight server installation in the address box. If another IP address is entered, access to the server fail.

If you enter **localhost** or **127.0.0.1** as the eSight server IP address, the security certificate cannot be installed.

10. **Optional:**

    If you log in to the eSight server for the first time, the message "There is a problem with this website's security certificate." is displayed. Click **Continue to this website (not recommended).**, as shown in **Figure 3-5**.

Figure 3-5 There is a problem with this website's security certificate
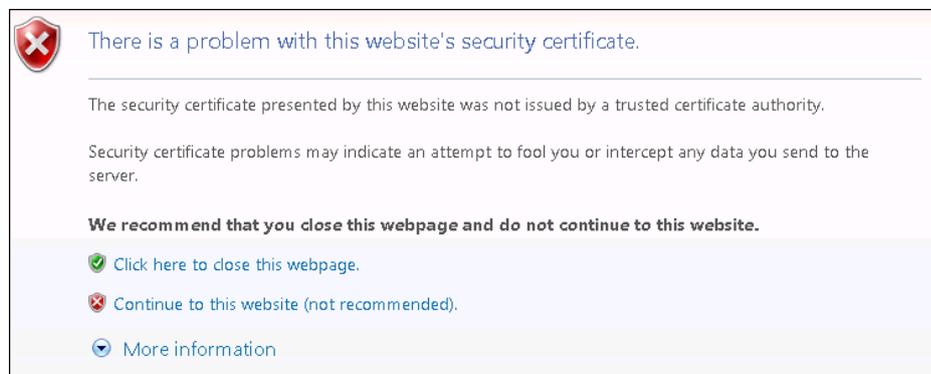
11. **Optional:**

    On the left of the address bar, click **Certificate Error**.

12. In the **Untrusted Certificate** dialog box, click **View certificates**, as shown in **Figure 3-6**.

Figure 3-6 Untrusted Certificate
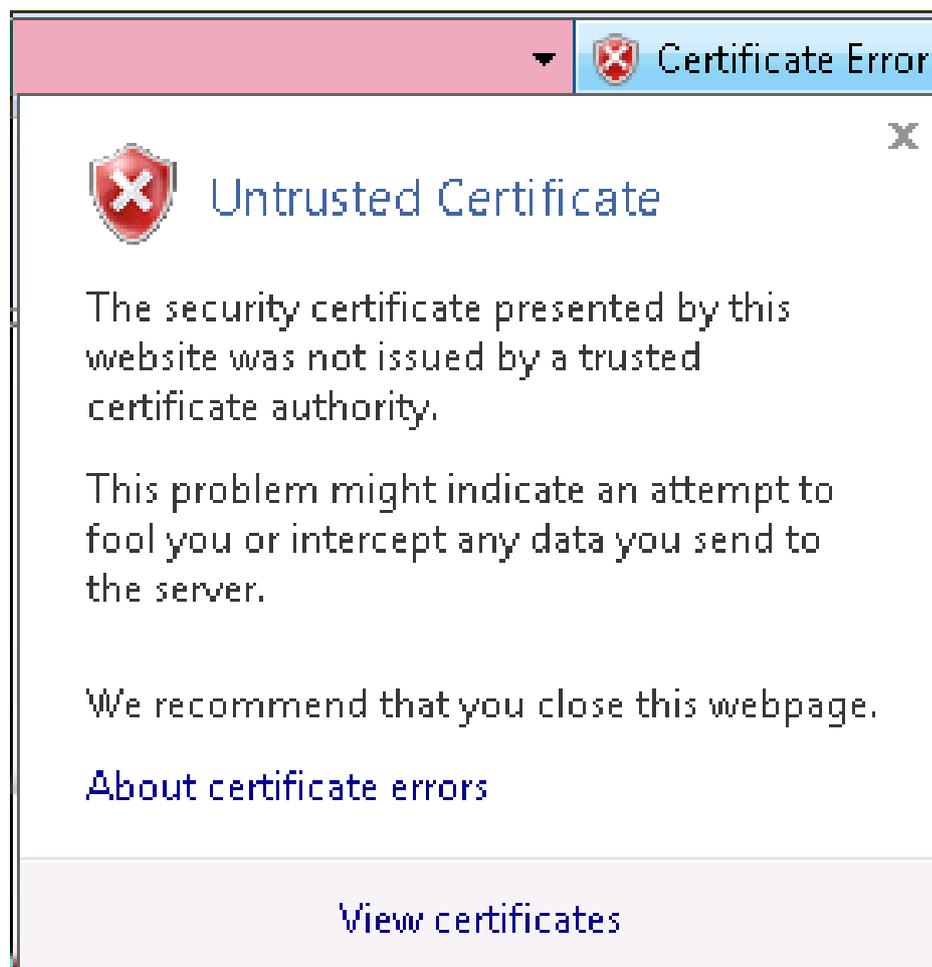
13. In the **Certificate** dialog box, select the **General** tab and click **Install Certificate...**, as shown in **Figure 3-7**.

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Figure 3-7 Certificate
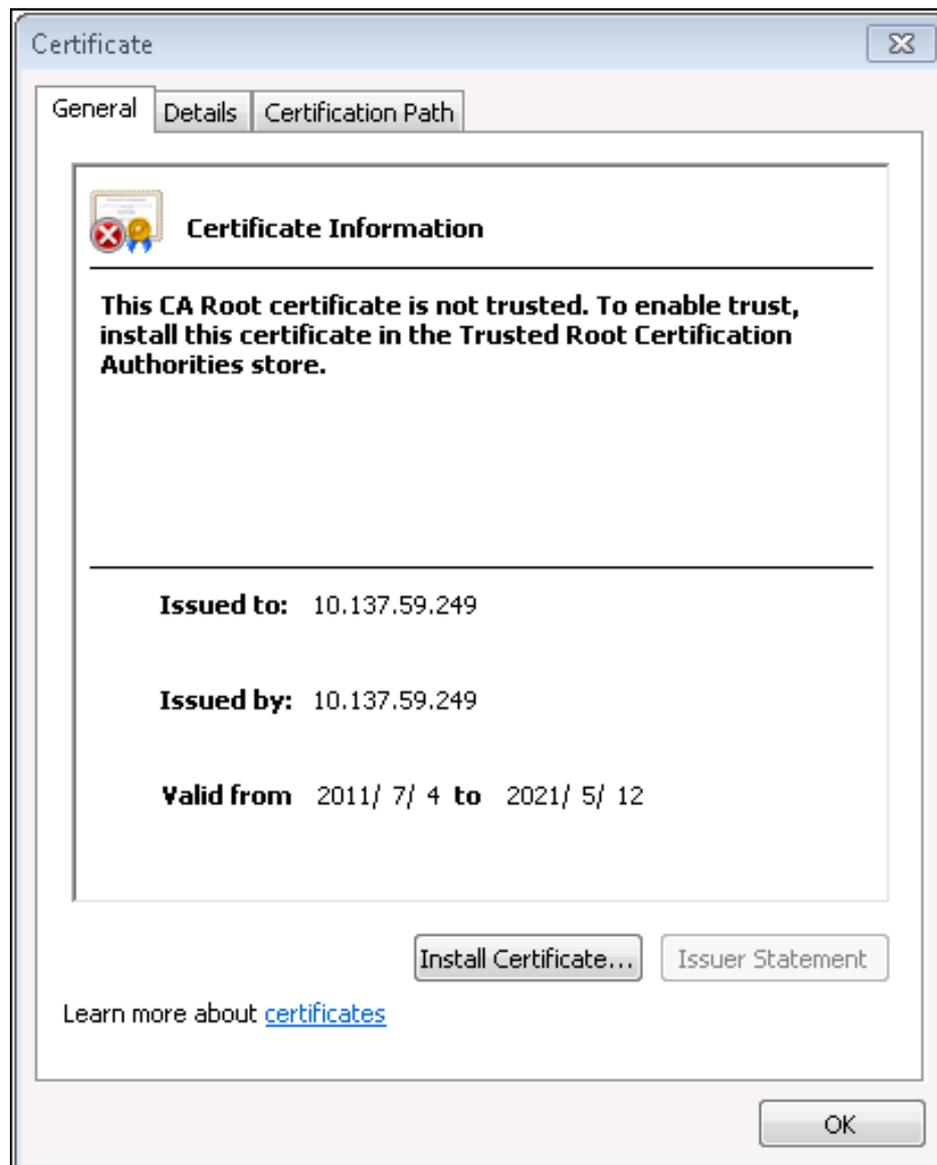
14. In the **Certificate Import Wizard** dialog box, click **Next**, as shown in **Figure 3-8**.

Figure 3-8 Certificate Import Wizard

15. In the **Certificate Store** dialog box, choose **Place all certificates in the following store**, as shown in **Figure 3-9**.

Figure 3-9 Certificate Store
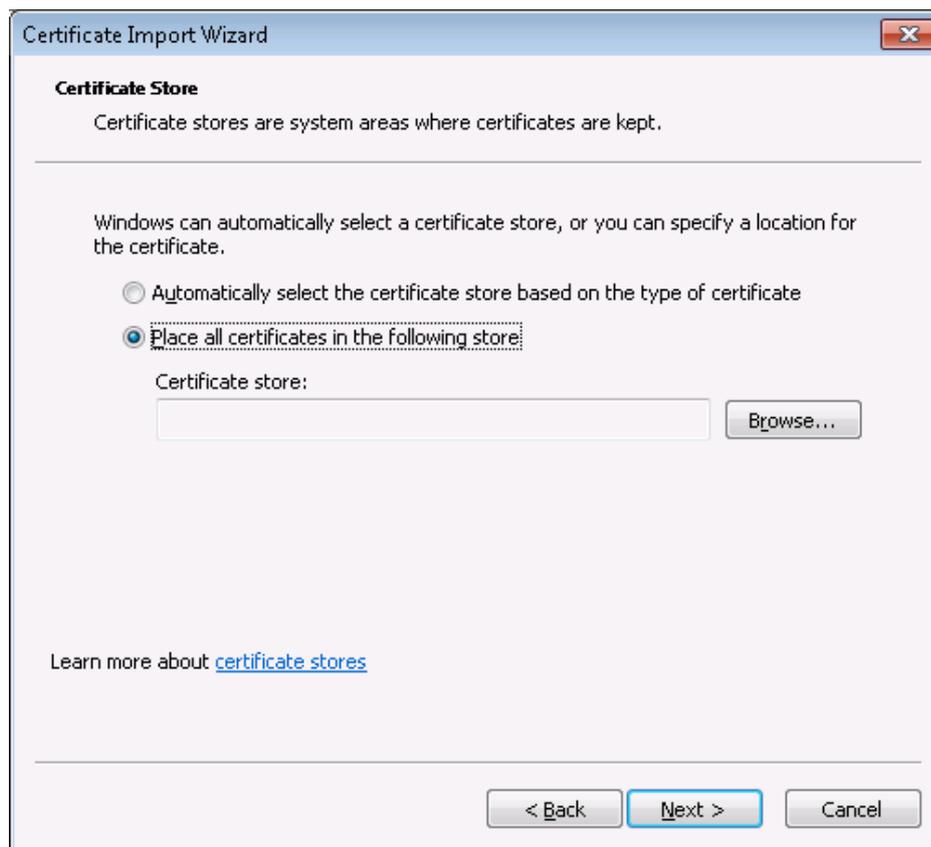
16. Click **Browse**, choose **Trusted Root Certification Authorities**, as shown in **Figure 3-10**.

Figure 3-10 Select Certificate Store

17. **Optional:** Click **OK**.

18. **Optional:** Click **Next**.

19. **Optional:** Click **Finish**.

20. **Optional:** In the **Security Warning** dialog box, click **Yes**.

21. **Optional:** Click **OK** to complete certificate import.

22. **Optional:** Restart the Window Internet Explorer 8, enter **http://***eSight server IP address***:***port number*** in the address box, and press **Enter**.

23. Enter the user name **admin** and the default password **Changeme123**, and click **Log In**.

● Log in to the eSight server from the Firefox 3.6.

1. In the address box, enter **http://***eSight server IP address***:***port number***, and press **Enter**.

2. **Optional:** If you log in to the eSight server for the first time, the message "This Connection is Untrusted" is displayed. Click **I Understand the Risks**.

3. **Optional:** Click **Add Exception...**.

4. **Optional:** Select **Permanently store this exception** and click **Confirm Security Exception**.

5. Enter the user name **admin** and the default password **Changeme123**, and click **Log In**.

----End

3.5 Uninstalling eSight

This topic describes how to uninstall eSight.

Context

When eSight is uninstalled, the eSight database is uninstalled.

Procedure

Step 1 Choose **Start** > **All Programs** > **eSight** > **shutdown eSight**.

Step 2 Choose **Start** > **All Programs** > **eSight** > **Shutdown Maintenance Tools**.

Step 3 Choose **Start** > **All Programs** > **eSight** > **uninstall**.

Step 4 In the dialog box that is displayed, select the component to uninstall, and click **Next**.

Step 5 In the **Confirm** dialog box that is displayed, click **Yes**.

Step 6 In the **Uninstallation Completed** dialog box that is displayed, click **Finish**.

----End

Follow-up Procedure

1. Verify that the eSight shortcut icon on the desktop has been deleted.

2. Verify that the eSight installation directory has been deleted.

4 Installing the eSight AppBase Compact Edition

About This Chapter

This topic describes how to install the eSight AppBase Compact edition in the Windows 7 operating system.

4.1 Installation Process

The **Figure 4-1** shows the eSight server installation process.

Figure 4-1 eSight server installation process
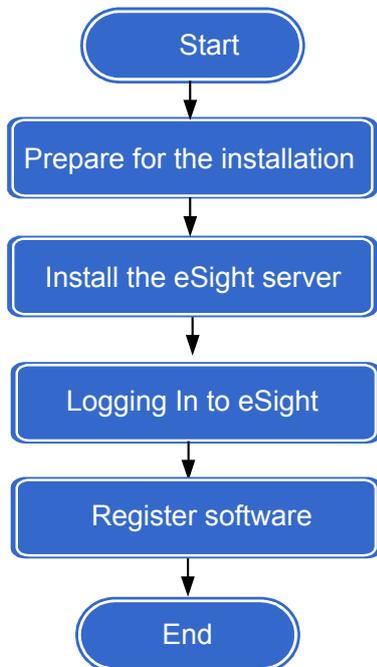
Table 4-1 lists installation stages.

Table 4-1 Installation process description

No.	Installation Description	Reference
1	Describes how to prepare for the installation, including software and hardware configuration requirements, and how to obtain required software.	**4.2 Preparing for the Installation**
2	Describes how to install the eSight server.	**4.3 Installing the eSight Server**
3	Describes how to log in to eSight from a client.	**4.4 Logging In to eSight**
4	Describes how to apply for and load an eSight license.	**4.5 Registering Software**

4.2 Preparing for the Installation

This topic describes how to prepare for the installation, including software and hardware configuration requirements, and how to obtain required software.

4.2.1 Configuration Requirements

This topic describes the configuration requirements on the eSight server.

Table 4-2 lists configuration requirements on the eSight server (compact edition).

Table 4-2 Configuration requirements on the eSight server (compact edition)

Server Configuration	Factory Configuration	Management Capacity (Number of NEs)	Java Heap Size	Operating System	Client Configuration
CPU: 1*dual-core 2 GHz or above Memory: 2 GB Disk space: 20 GB	Desktop-I3 2100 or above-2G-3 20G or above-DVDRW	60	1 GB	Windows 7 (32 bits) Chinese simplified or English version	● Internet Explorer 8 ● Firefox 3.6 **NOTE** Use either of the preceding browsers.

□ NOTE

The eSight installation package contains MySQL 5.5. MySQL 5.5 is automatically installed along with eSight.

4.2.2 Obtaining Required Software

This topic describes how to obtain required software.

The eSight server can be installed in either of the following ways:

● Using CD-ROMs: Obtain the required CD-ROMs.
● Using installation packages: Obtain the required installation packages.

Using CD-ROMs

Obtain the following CD-ROMs listed in Table 4-3:

Table 4-3 CD-ROM list

Software	CD-ROM
eSight software of compact edition	eSight application platform (compact edition)

📖 **NOTE**

> Use the Windows 7 installation DVD provided by Microsoft to install the Windows operating system.

Using Installation Packages

Method of obtaining installation packages:

Go to the enterprise network website **http://enterprise.huawei.com/cn/**.

Choose **SUPPORT** > **Software Download** > **Network Management** > **eSight** to download the software package.

Obtain the following installation packages listed in Table 4-4:

📖 **NOTE**

> In an installation package, *version* indicates the detailed version number of the eSight.

Table 4-4 Installation package list

Software	Name	Description
eSight installation software of compact edition	eSight_AppBase_*version*_ Compact_Win.zip	(Mandatory) It is used to install the eSight of compact edition.

4.3 Installing the eSight Server

This topic describes how to install the eSight server.

Prerequisites

- The operating system has been installed on an eSight server host.
- Installation software has been obtained. For details, see **4.2.2 Obtaining Required Software**.
- The network adapter is enabled.
- The eSight server has assigned a static IP address.

Context

The MySQL database will be installed along with the eSight software. Therefore, you do not need to install the MySQL database. The system will install a new MySQL database in the eSight installation directory, which does not affect the existing MySQL database.

> **⚠ CAUTION**
>
> The eSight installation files must be placed on the local PC.

Procedure

Step 1 Log in to the Windows operating system as the **administrator** user.

Step 2 Double-click the **setup.exe** file to start eSight installation.

- Method one: Use CD-ROMs.

  1. Put the CD-ROM into the CD-ROM drive, and double-click the **setup** file in the CD-ROM root directory.

  2. The **Select Language** dialog box is displayed.

- Method two: Use installation packages.

  1. Decompress all installation packages to a same directory. Take WinRAR files as an example. Select all required packages, right-click, and choose **Extract Here** from the shortcut menu.

> **⚠ CAUTION**
>
> To ensure successful eSight server installation, verify that all installation path names (installation package path and eSight installation path) contain only the following characters: letters, digits, and underscores (_).

  2. Double-click the **setup** file in the installation package directory.

  3. The **Select Language** dialog box is displayed.

Step 3 Select **English** and click **OK**.

The **Introduction** dialog box is displayed.

> **📖 NOTE**
>
> The system automatically checks whether the current environment meets requirements for installing eSight software. If the current environment does not meet the requirements, the associated message is displayed.

Step 4 Click **Next**.

The **Copyright Notice** dialog box is displayed.

Step 5 Select **I accept these terms**, and click **Next**.

The **Server Parameters** dialog box is displayed, as shown in **Figure 4-2**.

Figure 4-2 Server Parameters
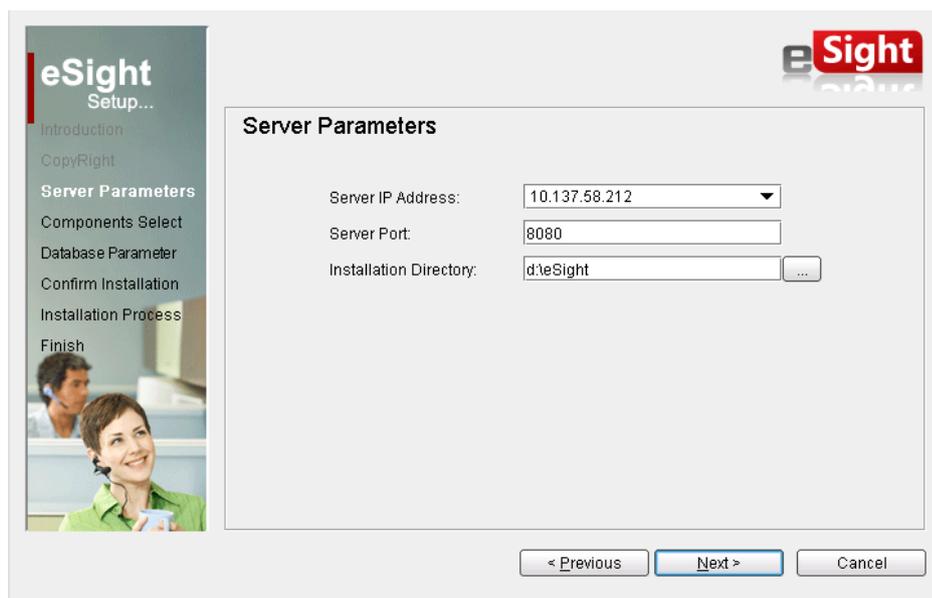
📖 **NOTE**

- **IP Address**: Default IP address of the eSight server host. If the server has multiple IP addresses, select a public IP address from the drop-down list box.

- **Port**: The default port number is **8080**. If the port is in use, change it to another port number.

- **Installation Directory**: eSight server installation directory, which can be manually changed.

⚠ **CAUTION**

To ensure successful eSight server installation, verify that the eSight server installation directory is empty before the installation.

Step 6 Click **Next**.

The **Select Software Components** dialog box is displayed, as shown in **Figure 4-3**.

Figure 4-3 Select Software Components
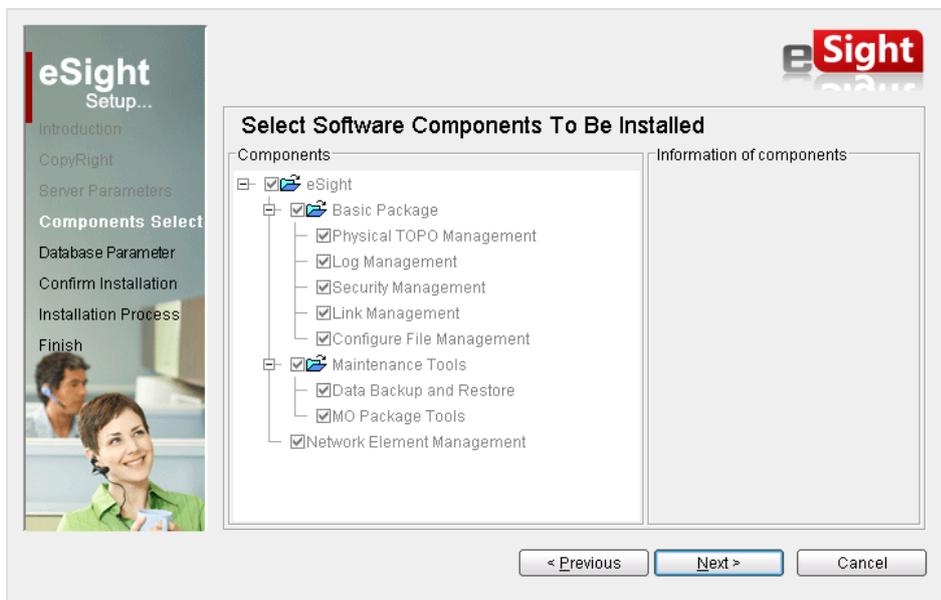
> 📖 **NOTE**
>
> Components under **Basic Package** are in gray by default, and must be installed.

Step 7 Click **Next**.

The **Database Parameters** dialog box is displayed, as shown in **Figure 4-4**.

Figure 4-4 Database Parameters
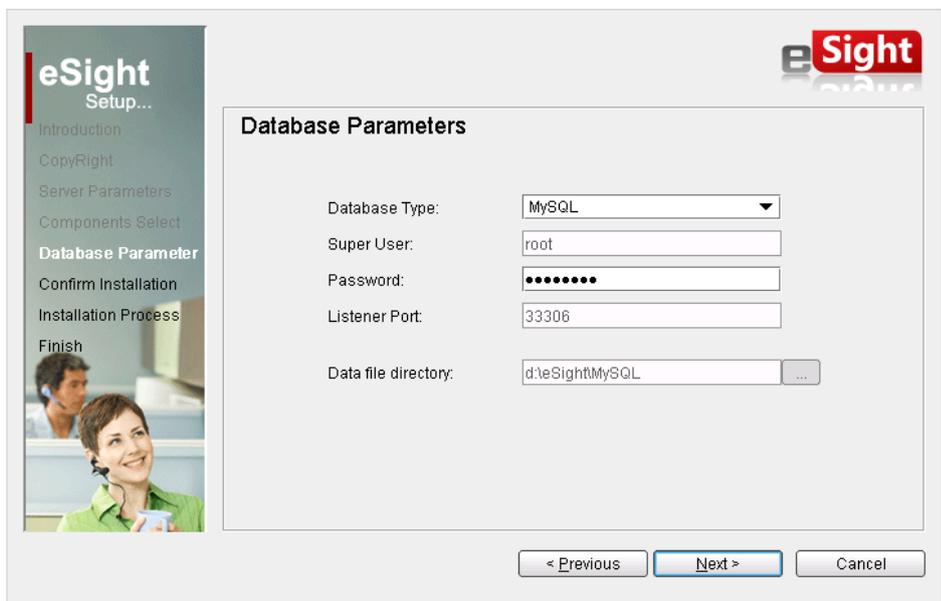
Step 8 Enter the password of the user **root**, and click **Next**.

The **Confirm Installation** dialog box is displayed.

☐ **NOTE**

> If the **Database Type** value is **MySql** for the compact edition, the system uses the default password
> **MySQL123**.

Step 9 Verify the installation information, and click **Next**.

☐ **NOTE**

> If the installation information is incorrect, click **Previous** to reset installation information.

Step 10 The system starts to install the eSight server. After about 5 minutes, the **Installation Completed** dialog box is displayed.

☐ **NOTE**

> In the **Installation Completed** dialog box, **Start eSight immediately** and **Start backup server** are
> unselected by default. Keep the default settings.

Step 11 Click **Finish**. The eSight server installation is complete.

----End

4.4 Logging In to eSight

This topic describes how to log in to eSight from a client.

Prerequisites

The eSight server installation has been completed.

The IP addresses of eSight and eSight server have been synchronized. If IP addresses are not synchronized, synchronize the eSight IP address with the eSight server IP address. For details, see **14.5.1 Synchronizing the eSight Server IP Address to eSight**.

Procedure

Step 1 Verify that the following shortcut icons are displayed on the desktop:

- start eSight
- shutdown eSight

Step 2 Check whether the eSight service has started. If the eSight service has not started, perform the following steps to start it:

Double-click the **start eSight** shortcut icon on the desktop or choose **Start** > **All Programs** > **eSight** > **start eSight**.

If **Daemon is already running** is displayed, the eSight service has been started. Otherwise, wait until the eSight service starts. When the status of every process is **started** and **Finished** is displayed, the eSight service has been started.

Step 3 Log in to the eSight server from the client.

- Log in to the eSight server from the Window Internet Explorer 8.

    1. Open the Internet Explorer.
    2. Choose **Tools** from the main menu.
    3. Select **Compatibility View Settings**.

4. In the **Compatibility View Settings** dialog box, clear the **Display intranet sites in Compatibility View** and **Display all websites in Compatibility View** check boxes.

5. Click **Close**.

6. Choose **Tools** > **Internet Options** > **Security** > **Custom Level** from the main menu.

7. Locate the **Downloads** node. In **Automatic prompting for file downloads**, select **Enable**.

8. Click **OK**.

9. In the address box, enter **http://*eSight server IP address:port number***, and press **Enter**.

⚠ **CAUTION**

If the server has multiple IP addresses, enter the IP address selected during eSight server installation in the address box. If another IP address is entered, access to the server fail.

If you enter **localhost** or **127.0.0.1** as the eSight server IP address, the security certificate cannot be installed.

10. **Optional:**

If you log in to the eSight server for the first time, the message "There is a problem with this website's security certificate." is displayed. Click **Continue to this website (not recommended).**, as shown in **Figure 4-5**.

Figure 4-5 There is a problem with this website's security certificate
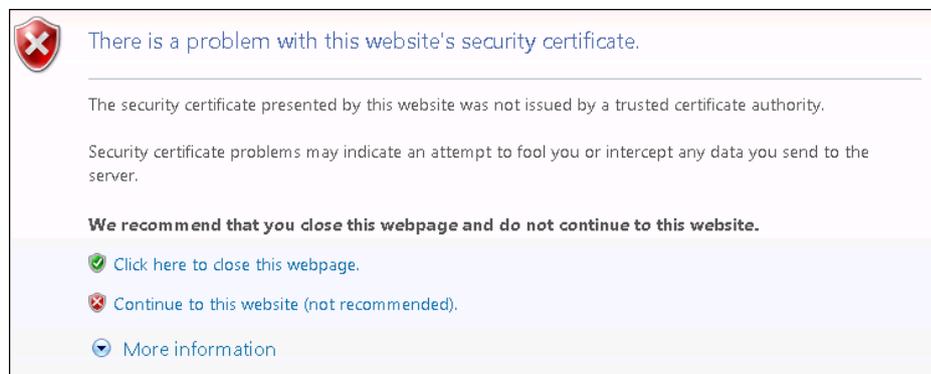
11. **Optional:**

On the left of the address bar, click **Certificate Error**.

12. **Optional:**

In the **Untrusted Certificate** dialog box, click **View certificates**, as shown in **Figure 4-6**.

Figure 4-6 Untrusted Certificate
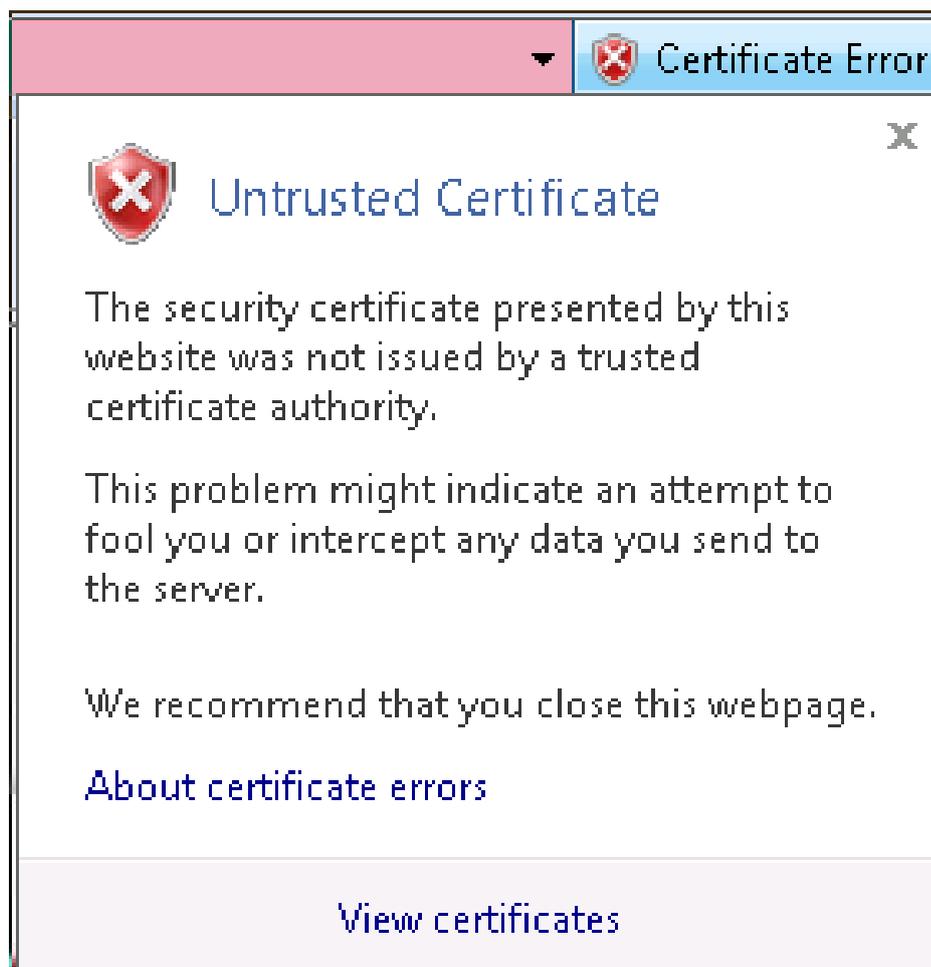
13. **Optional:**

In the **Certificate** dialog box, select the **General** tab and click **Install Certificate...**, as shown in **Figure 4-7**.

Figure 4-7 Certificate
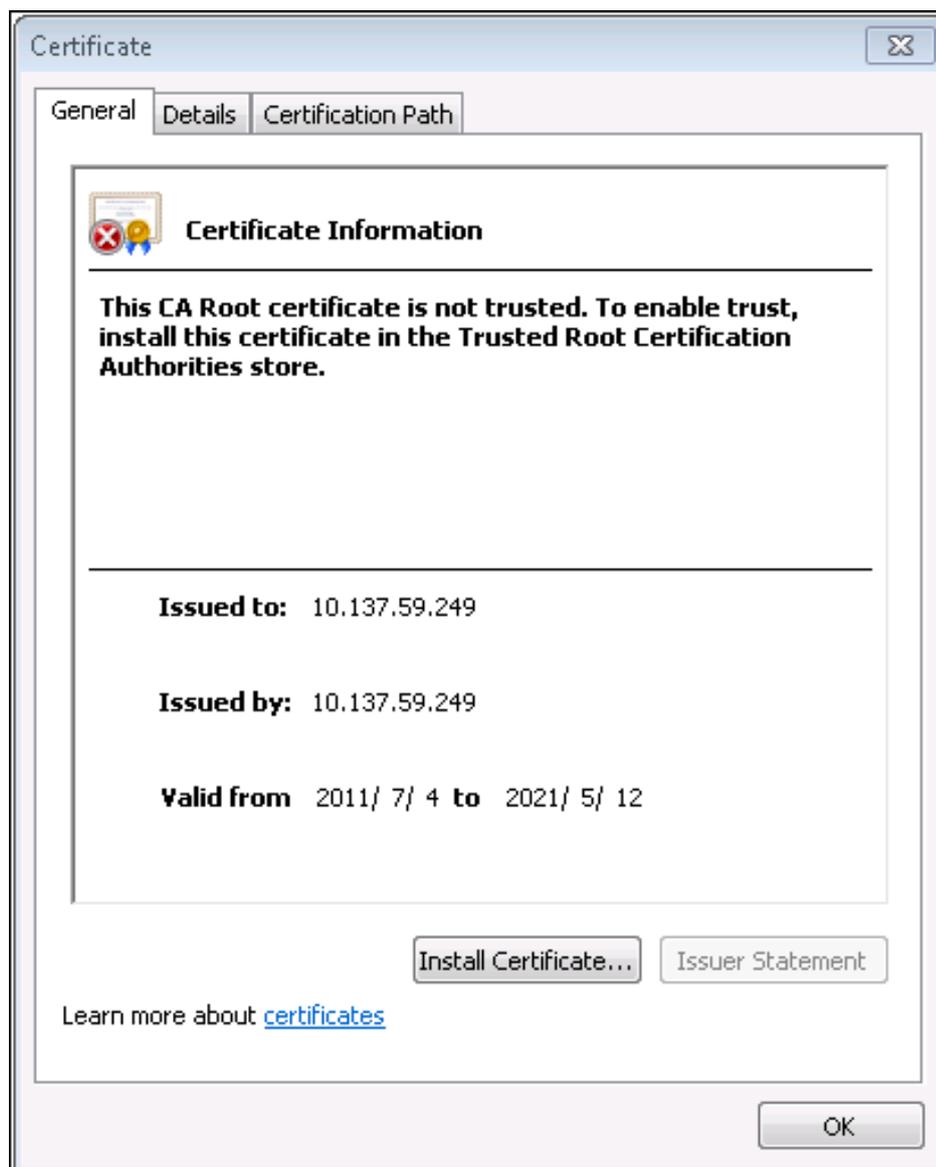
14. **Optional:**

In the **Certificate Import Wizard** dialog box, click **Next**, as shown in **Figure 4-8**.

Figure 4-8 Certificate Import Wizard

15. **Optional:**

In the **Certificate Store** dialog box, choose **Place all certificates in the following store**, as shown in **Figure 4-9**.

Figure 4-9 Certificate Store
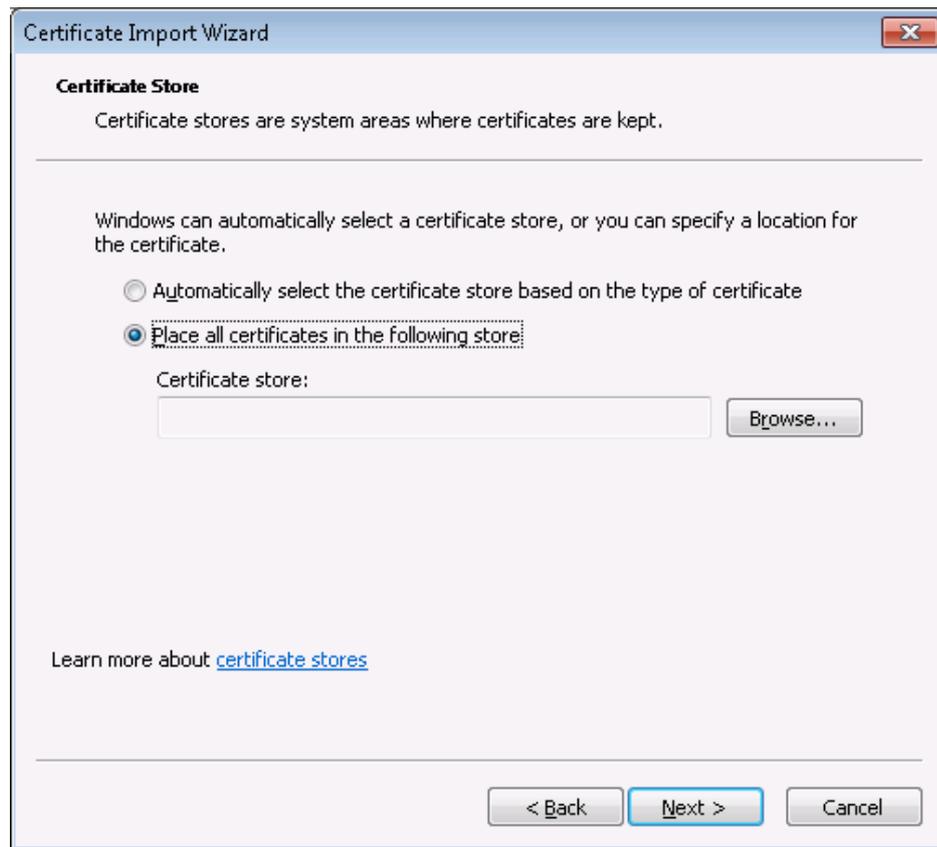
16. **Optional:**

    Click **Browse**, choose **Trusted Root Certification Authorities**, as shown in **Figure 4-10**.

Figure 4-10 Select Certificate Store

17. **Optional:** Click **OK**.

18. **Optional:** Click **Next**.

19. **Optional:** Click **Finish**.

20. **Optional:** In the **Security Warning** dialog box, click **Yes**.

21. **Optional:** Click **OK** to complete certificate import.

22. **Optional:** Restart the Window Internet Explorer 8, enter **http://***eSight server IP address***:***port number*** in the address box, and press **Enter**.

23. Enter the user name **admin** and the default password **Changeme123**, and click **Log In**.

● Log in to the eSight server from the Firefox 3.6.

1. In the address box, enter **http://***eSight server IP address***:***port number***, and press **Enter**.

2. **Optional:** If you log in to the eSight server for the first time, the message "This Connection is Untrusted" is displayed. Click **I Understand the Risks**.

3. **Optional:** Click **Add Exception...**.

4. **Optional:** Select **Permanently store this exception** and click **Confirm Security Exception**.

5. Enter the user name **admin** and the default password **Changeme123**, and click **Log In**.

----End

4.5 Registering Software

This topic describes how to apply for and load an eSight license.

4.5.1 Applying for an eSight License

This topic describes how to apply for an eSight license. A license file is an authentication file that a special encryption tool generates based on the information about the contract that a user signs with Huawei and the information about the server where the eSight is installed. After obtaining a license file, load it to eSight manually to obtain permission to use eSight.

Procedure

Step 1 Obtain the contract information.

A Huawei-authorized electronic license certificate is delivered to a customer at the same time when Huawei delivers eSight to the customer. The customer can obtain the contract number, product name, and product model from the license certificate, as shown in **Figure 4-11**.

Figure 4-11 eSight license certificate

Step 2 Obtain the server equipment serial number (ESN).

An ESN is a string that uniquely identifies a device. It is used to ensure that the license is granted to the specified device.

1. Access the eSight login page, and log in to eSight as an administrator, as shown in **Figure 4-12**.

Figure 4-12 eSight login page

2. When logged in to eSight as an administrator, choose **System** > **License Management**.

3. Click **Obtain ESN**.

4. Generate an ESN.

   ● Method one: Select the network adapter on the eSight server, and click **Generate ESN**.

   eSight automatically obtains the network adapter information on the eSight server. Record ESN information.

   ● Method two: Enter the Media Access Control (MAC) address of the eSight server, and click **Generate ESN**.

   ◫ **NOTE**

   If the server is equipped with multiple network adapters, record the ESNs for all the network adapters.

Step 3 Apply for an eSight license.

1. Visit **https://app.huawei.com/flexnet/operationsportal**. Click **With Activation Id:** on the left to switch the login mode, and log in to the enterprise service FlexNet Operations System (FNO) with the activation ID in the license certificate to activate and download the license.

   ◫ **NOTE**

   You can also click the link in the license certificate email to log in to the enterprise service FNO and activate and download the license.

2. On the **manage entitlements** page, select the required activation ID, and click **Activate**.

   ◫ **NOTE**

   If the remaining number of times for activating the activation ID is **0**, the activation ID cannot be activated.

3. Select the required activation ID, enter the ESN, and click **Next**.

   ◫ **NOTE**

   In the Datacom Enterprise Network Product Line, an activation ID maps an ESN. Here you are required to enter an ESN, not an ESN range.

4. Click **Submit** to generate a license file.

5. Select the generated license file, and click **Download** to download the license file.

6. In the dialog box that is displayed, click **Save** to save the license file to your computer.

----End

4.5.2 Loading an eSight License

This topic describes how to load an eSight license.

Prerequisites

A correct eSight license file must have been obtained.

◫ **NOTE**

The license file name cannot contain any space. If the name contains a space, uploading or updating the license file will fail. If the name of the obtained license file contains spaces, delete the spaces or change them to _ before using the license file.

Procedure

Step 1 Access the eSight login page, and log in to eSight as an administrator, as shown in **Figure 4-13**.

Figure 4-13 eSight login page
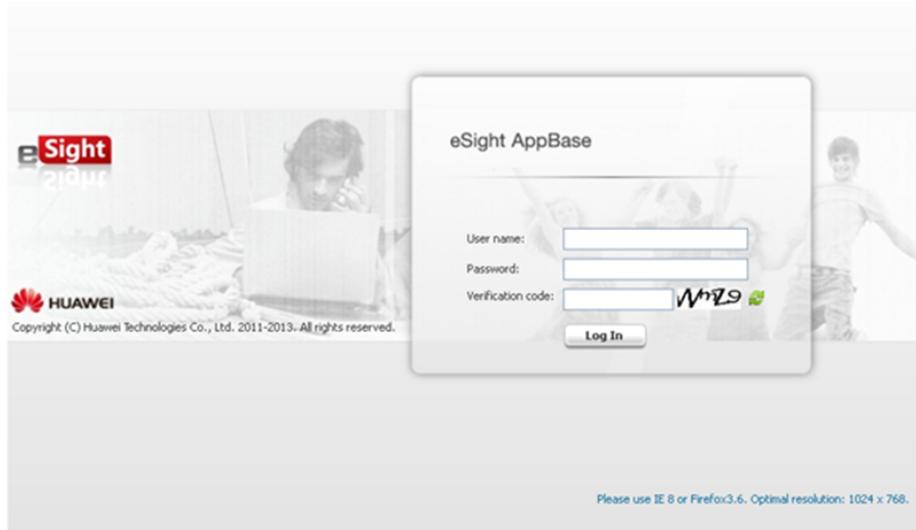
Step 2 Choose **System** > **License Management**, and click **Import License**, as shown in **Figure 4-14**.

Figure 4-14 License Management page

Step 3 Select a license file and click **Import**, as shown in **Figure 4-15**.

Figure 4-15 Import License page
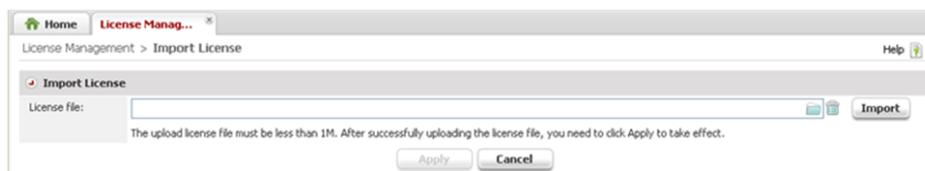
Step 4 When the license file is imported, preview the content of the license file and click **Apply**.

To finish loading the license, re-log in to eSight.

----End

Follow-up Procedure

After the license file is loaded, log in to the eSight as an administrator. Choose **System** > **License Management**, view the license expiration date, and check the license items and resource items.

4.6 Uninstalling eSight

This topic describes how to uninstall eSight.

Context

When eSight is uninstalled, the eSight database is uninstalled. To save the eSight database data, back up files in the **backupdata\history** directory that is in the same directory as the eSight installation directory in advance.

Procedure

Step 1 Choose **Start** > **All Programs** > **eSight** > **shutdown eSight**.

Step 2 Choose **Start** > **All Programs** > **eSight** > **Shutdown Maintenance Tools**.

Step 3 Choose **Start** > **All Programs** > **eSight** > **uninstall**.

Step 4 In the dialog box that is displayed, select the component to uninstall, and click **Next**.

Step 5 In the **Confirm** dialog box that is displayed, click **Yes**.

Step 6 In the **Uninstallation Completed** dialog box that is displayed, click **Finish**.

----End

Follow-up Procedure

1. Verify that the eSight shortcut icon on the desktop has been deleted.
2. Verify that the eSight installation directory has been deleted.

5 Installing the eSight AppBase Standard Editions

About This Chapter

This topic describes how to install the eSight AppBase standard editions in the Windows Server 2008 operating systems.

5.1 Installation Process

5.2 Preparing for the Installation
This topic describes how to prepare for the installation, including software and hardware configuration requirements, and how to obtain required software.

5.3 Installing the SQL Server Database
Before installing eSight of the standard edition on Windows Server 2008, you must manually install the SQL Server 2008 R2 database if you select this database type.

5.4 Installing the eSight Server
This topic describes how to install the eSight server.

5.5 Security Hardening
This topic describes how to harden the security of the operating system on the eSight server after the operating system, database, and eSight are installed.

5.6 Logging In to eSight
This topic describes how to log in to eSight from a client.

5.7 Registering Software
This topic describes how to apply for and load an eSight license.

5.8 Uninstalling eSight
This topic describes how to uninstall eSight.

5.1 Installation Process

- Preinstallation scheme: The operating system and eSight system has been preinstalled on the eSight server delivered to the site. For details about the default information configured before the delivery, see **5.2.2 Installation Plan**.

- Full-installation scheme: If you use a self-purchased server or the eSight system needs to be reinstalled, see the installation process described in this document.

Figure 5-1 shows the eSight server installation process.

Figure 5-1 eSight server installation process
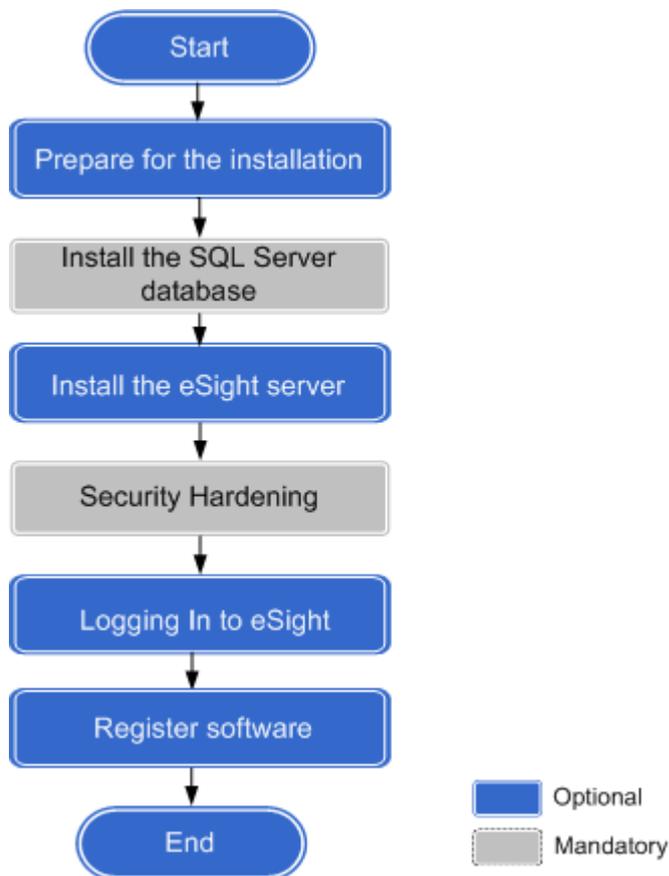
NOTE

Windows Server 2008 supports the following types of databases:

- MySQL: The MySQL database is automatically installed along with eSight.

- SQL Server 2008: If the SQL Server 2008 database is used, manually install it following the installation manual delivered with the database before installing the eSight server. If the installation manual is unavailable, refer to **13 Installing the SQL Server Database** to install the SQL Server 2008 database.

Table 5-1 lists installation stages.

Table 5-1 Installation process description

No.	Installation Description	Reference
1	Describes how to prepare for the installation, including software and hardware configuration requirements, and how to obtain required software.	**5.2 Preparing for the Installation**
2	Describes how to install the SQL Server 2008 database for the eSight server.	**6.3 Installing the SQL Server Database**
3	Describes how to install the eSight server.	**5.4 Installing the eSight Server**
4	This topic describes how to harden the security of the operating system on the eSight server after the operating system, database, and eSight are installed.	**5.5 Security Hardening**
5	Describes how to log in to eSight from a client.	**5.6 Logging In to eSight**
6	Describes how to apply for and load an eSight license.	**5.7 Registering Software**

5.2 Preparing for the Installation

This topic describes how to prepare for the installation, including software and hardware configuration requirements, and how to obtain required software.

5.2.1 Configuration Requirements

This topic describes the configuration requirements on the eSight server.

Table 5-2 lists configuration requirements on the eSight server (standard edition).

Table 5-2 Configuration requirements on the eSight server (standard edition)

Server Configuration	Factory Configuration	Management Capacity (Number of NEs)	Java Heap Size	Operating System	Database	Client Configuration
CPU: 1*dual-core 2 GHz or above Memory: 4 GB Disk space: 40 GB	PC server-IBM X3650M3-Xeon quadri-core E5506 2.13G or above-4G (1x4G)-2*300GB	0-200	1.5 GB	Windows Server 2008R2 standard (64 bits) Chinese simplified or English version	MySQL 5.5 or Microsoft SQL Server 2008 R2	● Internet Explorer 8 ● Firefox 3.6 **NOTE** Use either of the preceding browsers.
CPU: 2*dual-core 2 GHz or above Memory: 4 GB Disk space: 60 GB		200-500				
CPU: 2*quadri-core 2 GHz or above Memory: 8 GB Disk space: 120 GB	PC server-IBM X3650M3-2* Xeon quadri-core E5506 2.13G or above-8G (2x4G)-3*300GB	500-2000	3 GB			

Server Config uration	Factory Configurati on	Mana geme nt Capac ity (Num ber of NEs)	Java Heap Size	Operating System	Database	Client Configurat ion
CPU: 2*quadr i-core 2 GHz or above Memory : 16 GB Disk space: 250 GB	PC server-IBM X3650M3-2* Xeon quadri-core E5620 2.4G or above-16G (2*8G)-3*30 0GB	2000-5 000	8 GB			

📖 **NOTE**

The eSight installation package contains MySQL 5.5.

● If you set the database type to **MySql** during eSight installation, the system installs MySQL 5.5 automatically.

● If you set the database type to **SQLServer** during eSight installation, the system does not install MySQL 5.5.

5.2.2 Installation Plan

This topic describes how to plan installation information, such as the IP address, host name, and password, to help correctly install eSight.

● When the preinstallation scheme is used, information such as the IP address and password described in this topic is the default information after the preinstallation. Modify the information based on your site environment.

● When the full installation scheme is used, information such as the IP address and password described in this topic is for your reference. Modify the information based on your site environment.

Plan for User Names and Passwords

Table 5-3 Plan for user names and passwords

Item	User Name	Password
Windows operating system	administrator	Changeme123
eSight software	admin	Changeme123

Plan for Host Names and IP Addresses

Table 5-4 Plan for host names and IP addresses

Item	Setting
Host name	eSightServer **NOTE** When the eSight server is delivered to the site, change the server host name based on your site environment.
IP address	129.9.1.1 **NOTE** When the eSight server is delivered to the site, change the operating system IP address based on your site environment. Then synchronize the operating system IP address to the eSight server by referring to **14.5.1 Synchronizing the eSight Server IP Address to eSight**.
Subnet mask	255.255.255.0
Default gateway	129.9.1.254

Plan for Disk Partitions

Before installing the operating system, you must plan disk partitions. **Table 5-5** describes the server disk partition plan.

📖 **NOTE**

- Three 300 GB hard disks are configured for a standard PC server. If RAID 5 is created, you do not need to partition the disks.
- RAID 5 has been created for IBM X3650M3 servers that are preinstalled with operating systems. You do not need to change the RAID settings.
- You must create RAID 5 for IBM X3650M3 servers that are not preinstalled with any operating systems before operating system installation. For details, see **14.5.8 How Do I Create RAID 5 for Three or More Hard Disks on an IBM X3650 M3 Server**.

Table 5-5 Plan for disk partitions

Disk	Partition Size	Used To
Drive C	100 GB	Install the operating system.
Drive D	Remaining space	Install the database and eSight.

Plan for the Installation Path

Table 5-6 Plan for the installation path

Software	Installation Path
eSight	D:\eSight

Plan for the Time Zone

Table 5-7 Plan for the time zone

Item	Setting
Time zone	GMT+08:00 **NOTE** When the eSight server is delivered to the site, change the time zone and time based on your site environment.

5.2.3 Obtaining Required Software

This topic describes how to obtain required software.

The eSight server can be installed in either of the following ways:

- Using CD-ROMs: Obtain the required CD-ROMs.
- Using installation packages: Obtain the required installation packages.

Using CD-ROMs

Obtain the following CD-ROMs listed in Table 5-8:

Table 5-8 CD-ROM list

Software	CD-ROM
Windows installation software	Windows Server 2008 R2 Standard
eSight installation software of standard edition	eSight application platform (standard edition)

Using Installation Packages

Method of obtaining installation packages:

Go to the enterprise network website **http://enterprise.huawei.com/cn/**.

To download eSight installation software of standard edition, choose **SUPPORT** > **Software Download** > **Network Management** > **eSight**.

Obtain the following installation packages listed in Table 5-9:

📕 **NOTE**

In an installation package, *version* indicates the detailed version number of the eSight.

Table 5-9 Installation package list (standard edition)

Software	Name	Description
eSight installation software of standard edition	eSight_AppBase_*version*_Standard_Win.zip	(Mandatory) It is used to install the eSight of standard edition. The MySQL or SQL Server database is used.

5.3 Installing the SQL Server Database

Before installing eSight of the standard edition on Windows Server 2008, you must manually install the SQL Server 2008 R2 database if you select this database type.

Procedure

Step 1 If the SQL Server 2008 R2 database is not installed, install it following the installation manual delivered with the database. If the installation manual is unavailable, refer to **13 Installing the SQL Server Database** to install the SQL Server 2008 R2 database.

----End

5.4 Installing the eSight Server

This topic describes how to install the eSight server.

Prerequisites

- The SQL Server 2008 R2 database has been installed if you select this database type. If the SQL Server 2008 R2 database is not installed, install it following the installation manual delivered with the database. If the installation manual is unavailable, refer to **13 Installing the SQL Server Database** to install the SQL Server 2008 R2 database.
- The operating system has been installed on an eSight server host.
- Installation software has been obtained. For details, see **5.2.3 Obtaining Required Software**.
- The network adapter is enabled.
- The eSight server has assigned a static IP address.

Context

The MySQL database will be installed along with the eSight software. Therefore, you do not need to install the MySQL database. The system will install a new MySQL database in the eSight installation directory, which does not affect the existing MySQL database.

⚠ **CAUTION**

The eSight installation files must be placed on the local PC.

Procedure

Step 1 Log in to the Windows operating system as the **administrator** user.

Step 2 Double-click the **setup.exe** file to start eSight installation.

- Method one: Use CD-ROMs.

    1. Put the CD-ROM into the CD-ROM drive, and double-click the **setup** file in the CD-ROM root directory.

    2. The **Select Language** dialog box is displayed.

- Method two: Use installation packages.

    1. Decompress all installation packages to a same directory. Take WinRAR files as an example. Select all required packages, right-click, and choose **Extract Here** from the shortcut menu.

⚠ **CAUTION**

To ensure successful eSight server installation, verify that all installation path names (installation package path and eSight installation path) contain only the following characters: letters, digits, and underscores (_).

---

    2. Double-click the **setup** file in the installation package directory.

    3. The **Select Language** dialog box is displayed.

Step 3 Select **English** and click **OK**.

The **Introduction** dialog box is displayed.

📖 **NOTE**

The system automatically checks whether the current environment meets requirements for installing eSight software. If the current environment does not meet the requirements, the associated message is displayed.

Step 4 Click **Next**.

The **Copyright Notice** dialog box is displayed.

Step 5 Select **I accept these terms**, and click **Next**.

The **Server Parameters** dialog box is displayed, as shown in **Figure 5-2**.

Figure 5-2 Server Parameters
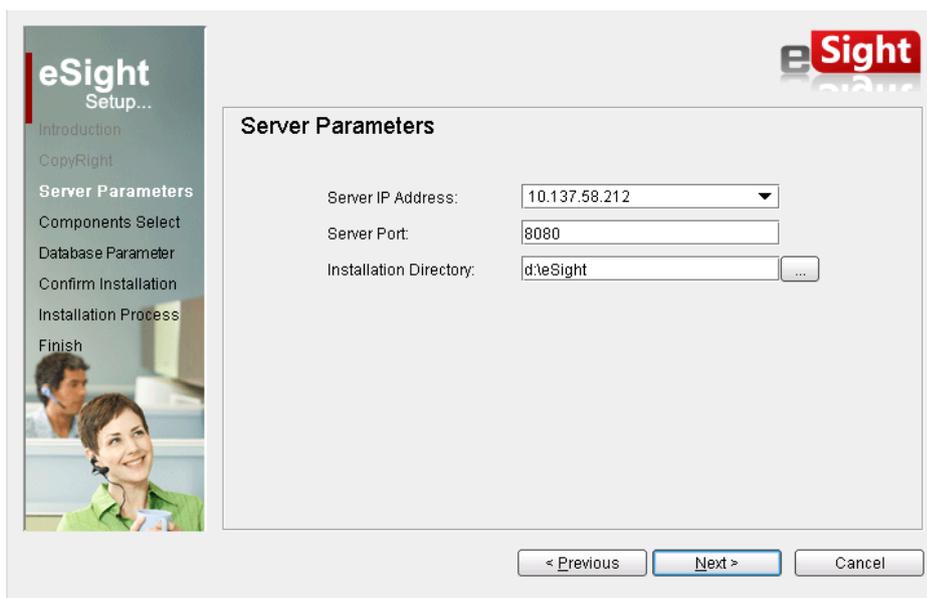
📖 **NOTE**

- **IP Address**: Default IP address of the eSight server host. If the server has multiple IP addresses, select a public IP address from the drop-down list box.
- **Port**: The default port number is **8080**. If the port is in use, change it to another port number.
- **Installation Directory**: eSight server installation directory, which can be manually changed.

⚠️ **CAUTION**

To ensure successful eSight server installation, verify that the eSight server installation directory is empty before the installation.

Step 6 Click **Next**.

The **Select Software Components** dialog box is displayed, as shown in **Figure 5-3**.

Figure 5-3 Select Software Components
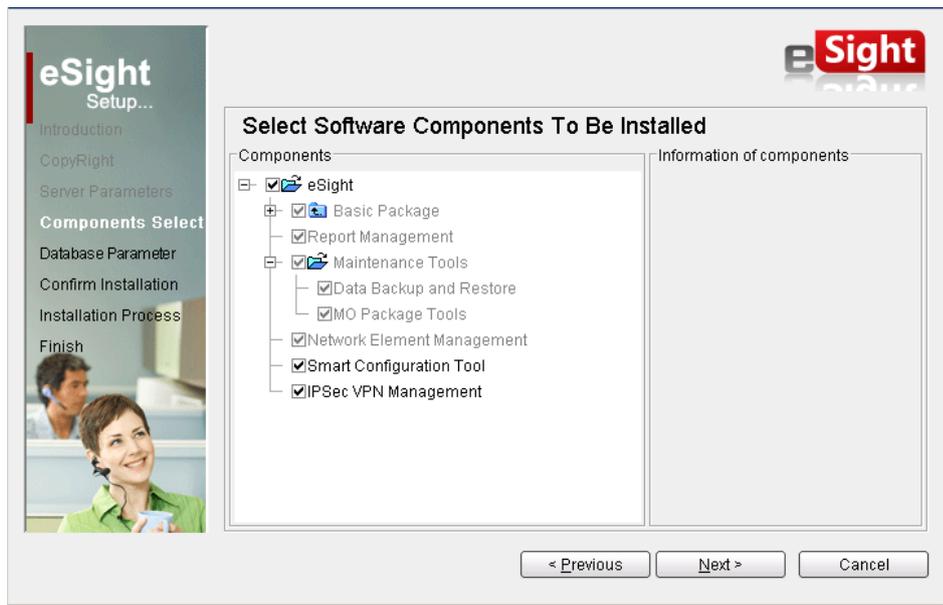
☐ **NOTE**

● Components under **Basic Package** are dimmed by default, and must be installed.

● Select required components under **Business Component**. eSight components support incremental installation. If a component is not installed during the first eSight server installation, it can be installed during the next eSight server installation.

Step 7 Click **Next**.

The **Database Parameters** dialog box is displayed, as shown in **Figure 5-4**.

Figure 5-4 Database Parameters

Step 8 Enter the password of the **root** user, and click **Next**.

Set **Database Type** based on your site environment.

▣ **NOTE**

> If the **Database Type** value is **MySql**, the system uses the default password **MySQL123**.
>
> If the **Database Type** value is **SQLServer**, and eSight is installed for the first time, enter the **root** user password. During incremental installation, the password text box is dimmed and you do not need to enter the password.

The **Confirm Installation** dialog box is displayed.

Step 9 Verify the installation information, and click **Next**.

▣ **NOTE**

> If the installation information is incorrect, click **Previous** to reset installation information.

Step 10 The system starts to install the eSight server. After about 5 minutes, the **Installation Completed** dialog box is displayed.

▣ **NOTE**

> In the **Installation Completed** dialog box, **Start eSight immediately** and **Start backup server** are unselected by default. Keep the default settings.

Step 11 Click **Finish**. The eSight server installation is complete.

----End

5.5 Security Hardening

This topic describes how to harden the security of the operating system on the eSight server after the operating system, database, and eSight are installed.

5.5.1 Security Hardening Background

This topic describes the security hardening purpose and prerequisites.

Security Hardening Purpose

The eSight server has the following potential security risks:

- During the installation of the operating system, many services and ports are enabled by default. In this situation, the operating system is prone to malicious attacks.

- System file properties and environment variables have some defects, which increase system security risks.

The operating system can be hardened by using technologies to add, modify, or tailor system modules and components.

Security hardening removes system defects and security vulnerabilities and ensures secure and stable system running.

Security Hardening Prerequisites

- The operating system parameters have been set or modified.
- eSight has been installed or upgraded.

5.5.2 Obtaining Required Software

This topic describes how to obtain required software.

Obtain the SetWin installation package, install the SetWin on your computer, and use the SetWin to harden the security of the operating system.

Obtaining the SetWin Installation Package

Visit **http://enterprise.huawei.com/en/** to obtain the SetWin installation package **iPSI SEK SetWin.exe**.

5.5.3 Hardening the Security of the Operating System

This topic describes how to use the SetWin to harden the security of the operating system.

5.5.3.1 Preparing for Security Hardening

This topic describes how to prepare for security hardening.

Procedure

Step 1 Obtain the security hardening configuration file of the operating system.

Visit **http://enterprise.huawei.com/en/** to obtain the security hardening configuration file **I2000_win2008_V003R002_SetWin.zip**.

----End

5.5.3.2 Hardening the Security of the Operating System

This topic describes how to harden the security of the operating system.

Prerequisites

- The SetWin has been installed.
- The security hardening configuration file of the operating system has been obtained.

Procedure

Step 1 Right-click SetWin and choose **Run as administrator**. The **Initial** dialog box is displayed.

Step 2 Select the path where the system backup status is stored in a file, and click **OK**.

Step 3 When the system displays the message "Backup completed", click **OK**.

Step 4 If no configuration file is imported, the system displays the message "Configuration file is not present or corrupted. Please import a valid configuration file." Click **OK**.

By default, the SetWin is started in online mode. If no security hardening configuration file is imported when you install the SetWin, no security hardening policy is displayed.

Step 5 Choose **Configuration** > **Import Configuration File**.

Step 6 Select the security hardening configuration file of the operating system, and click **Open** to import the security hardening configuration file into the SetWin.

Step 7 Choose **Policy** > **Execute**.

Step 8 When the system displays the message "Do you want to create a backup point?", click **Yes** and select the backup path.

⚠ **CAUTION**

Save the security hardening policy and create a file to store the security hardening policy that will be used in rollback. Otherwise, the operating system cannot be rolled back to the pre-hardened state.

Step 9 When the system displays the message "Backup completed", click **OK**.

Step 10 In the **Policy(s) Configured** dialog box that is displayed, click **Yes** to harden the security of the operating system.

Step 11 After hardening the security of the operating system is completed, the system displays the message "Execution completed". Click **OK**. Restart the system as prompted to make the security hardening policy take effect.

⚠ **CAUTION**

After the security hardening policy takes effect, the administrator account changes from **Administrator** to **SWMaster** and the password remains unchanged.

----End

5.5.4 Rolling Back the Operating System to the Pre-hardened State

This topic describes how to roll back the operating system to the pre-hardened state. After the operating system is rolled back to the pre-hardened state, system parameters restore to the values before security hardening.

Prerequisites

- The SetWin has been installed.
- The operating system has been backed up before security hardening.

Context

Before reinstalling or upgrading eSight, roll back the operating system of the eSight server to the pre-hardened state. Otherwise, reinstalling or upgrading eSight may fail.

Procedure

Step 1 Run the SetWin.

Step 2 Choose **Policy** > **Rollback**.

Step 3 Select the backup file and roll back the operating system of the eSight server to the pre-hardened state.

Step 4 When the system displays the message "Rollback completed", click **OK**. Restart the system as prompted to make the security hardening policy take effect.

⚠ **CAUTION**

After the security of the operating system is rolled back, the administrator account restores to be **Administrator** and the password remains unchanged.

----End

5.6 Logging In to eSight

This topic describes how to log in to eSight from a client.

Prerequisites

The eSight server installation has been completed.

The IP addresses of eSight and eSight server have been synchronized. If IP addresses are not synchronized, synchronize the eSight IP address with the eSight server IP address. For details, see **14.5.1 Synchronizing the eSight Server IP Address to eSight**.

Procedure

Step 1 Verify that the following shortcut icons are displayed on the desktop:

- start eSight
- shutdown eSight

Step 2 Check whether the eSight service has started. If the eSight service has not started, perform the following steps to start it:

Double-click the **start eSight** shortcut icon on the desktop or choose **Start** > **All Programs** > **eSight** > **start eSight**.

If **Daemon is already running** is displayed, the eSight service has been started. Otherwise, wait until the eSight service starts. When the status of every process is **started** and **Finished** is displayed, the eSight service has been started.

Step 3 Log in to the eSight server from the client.

- Log in to the eSight server from the Window Internet Explorer 8.

    1. Open the Internet Explorer.
    2. Choose **Tools** from the main menu.

3. Select **Compatibility View Settings**.

4. In the **Compatibility View Settings** dialog box, clear the **Display intranet sites in Compatibility View** and **Display all websites in Compatibility View** check boxes.

5. Click **Close**.

6. Choose **Tools** > **Internet Options** > **Security** > **Custom Level** from the main menu.

7. Locate the **Downloads** node. In **Automatic prompting for file downloads**, select **Enable**.

8. Click **OK**.

9. In the address box, enter **http://*eSight server IP address:port number***, and press **Enter**.

⚠ **CAUTION**

If the server has multiple IP addresses, enter the IP address selected during eSight server installation in the address box. If another IP address is entered, access to the server fail.

If you enter **localhost** or **127.0.0.1** as the eSight server IP address, the security certificate cannot be installed.

---

10. **Optional:**

    If you log in to the eSight server for the first time, the message "There is a problem with this website's security certificate." is displayed. Click **Continue to this website (not recommended).**, as shown in **Figure 5-5**.

Figure 5-5 There is a problem with this website's security certificate
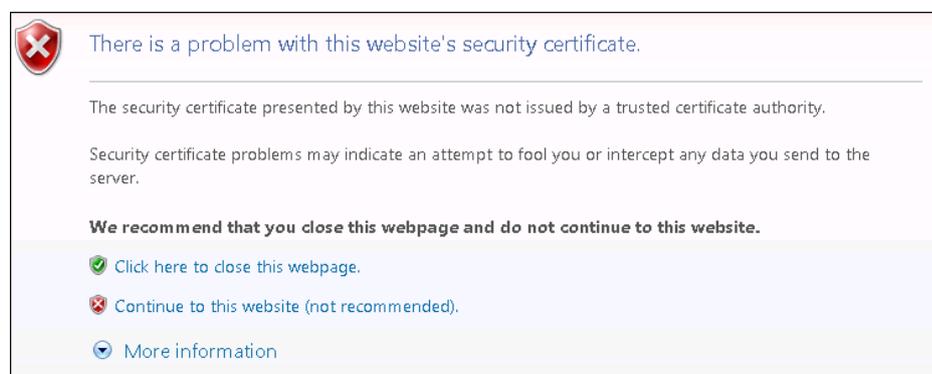
11. **Optional:**

    On the left of the address bar, click **Certificate Error**.

12. In the **Untrusted Certificate** dialog box, click **View certificates**, as shown in **Figure 5-6**.

Figure 5-6 Untrusted Certificate
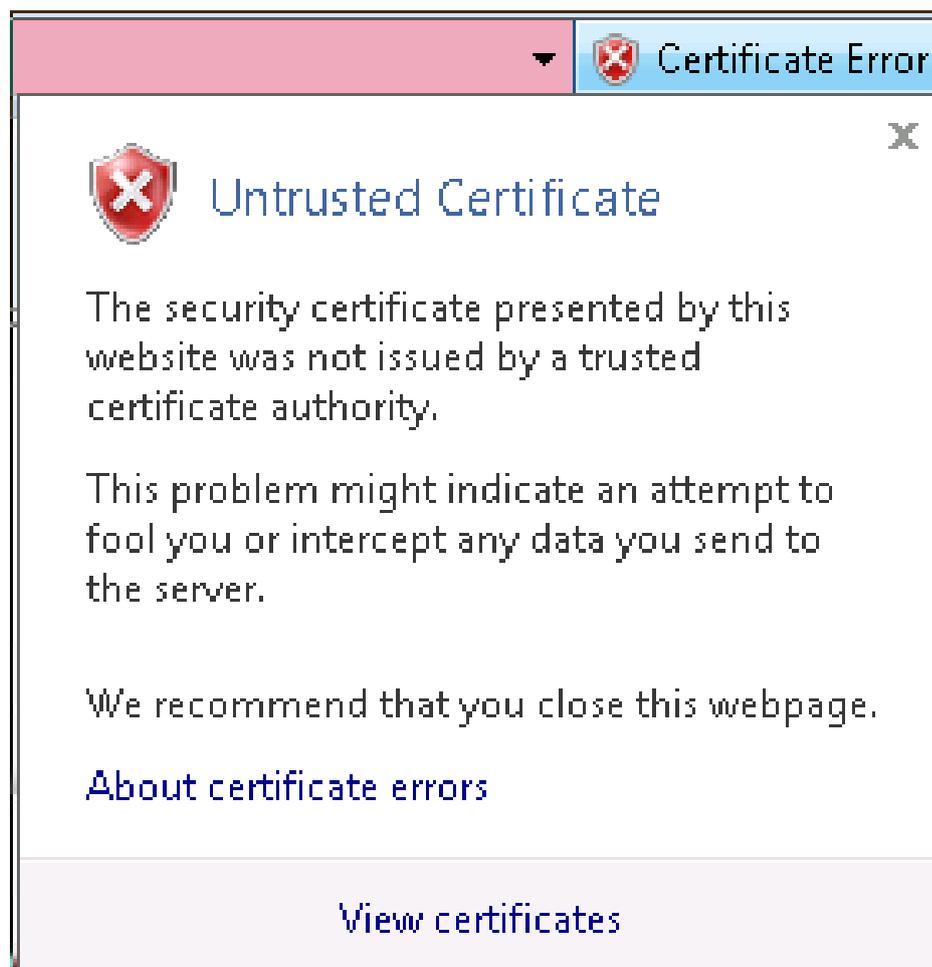
13. In the **Certificate** dialog box, select the **General** tab and click **Install Certificate...**, as shown in **Figure 5-7**.

Figure 5-7 Certificate
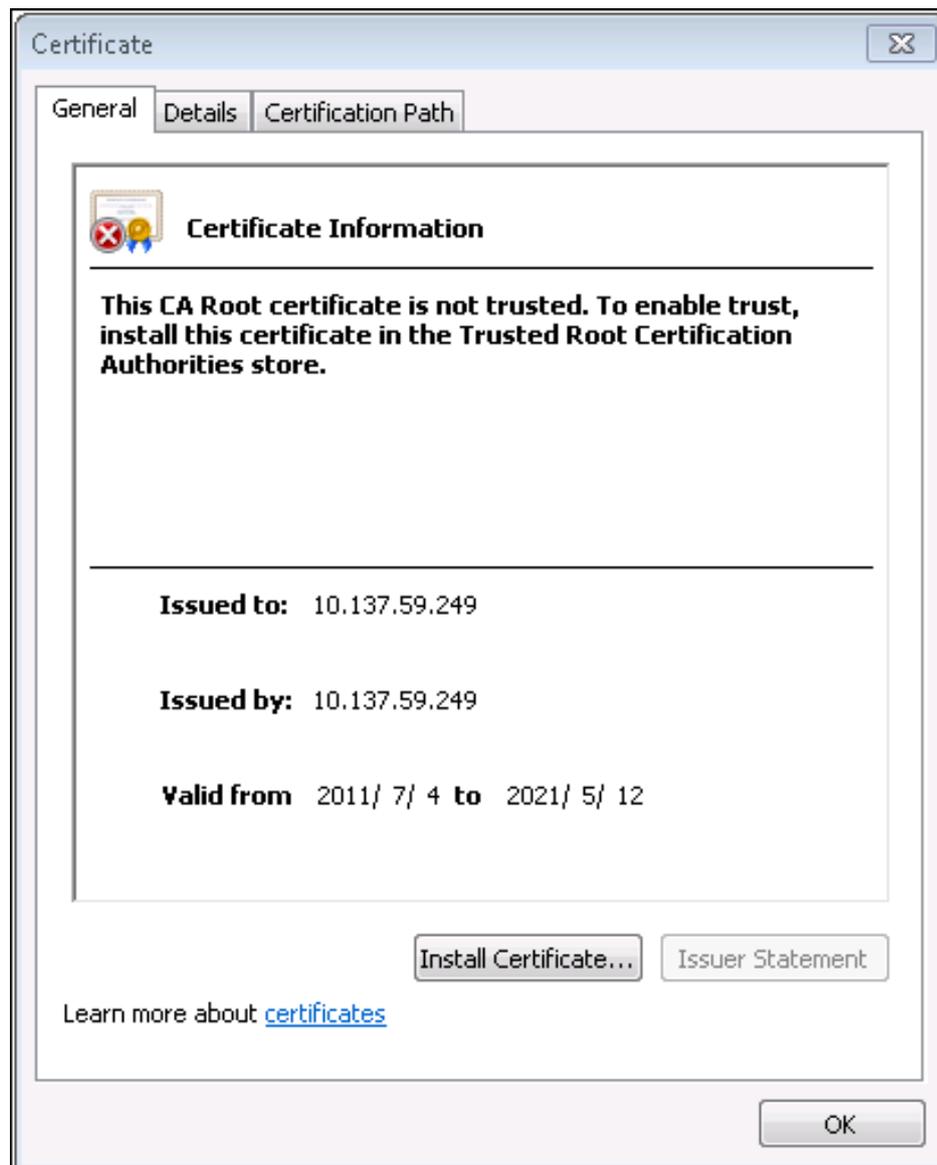
14. In the **Certificate Import Wizard** dialog box, click **Next**, as shown in **Figure 5-8**.

Figure 5-8 Certificate Import Wizard

15. In the **Certificate Store** dialog box, choose **Place all certificates in the following store**, as shown in **Figure 5-9**.

Figure 5-9 Certificate Store
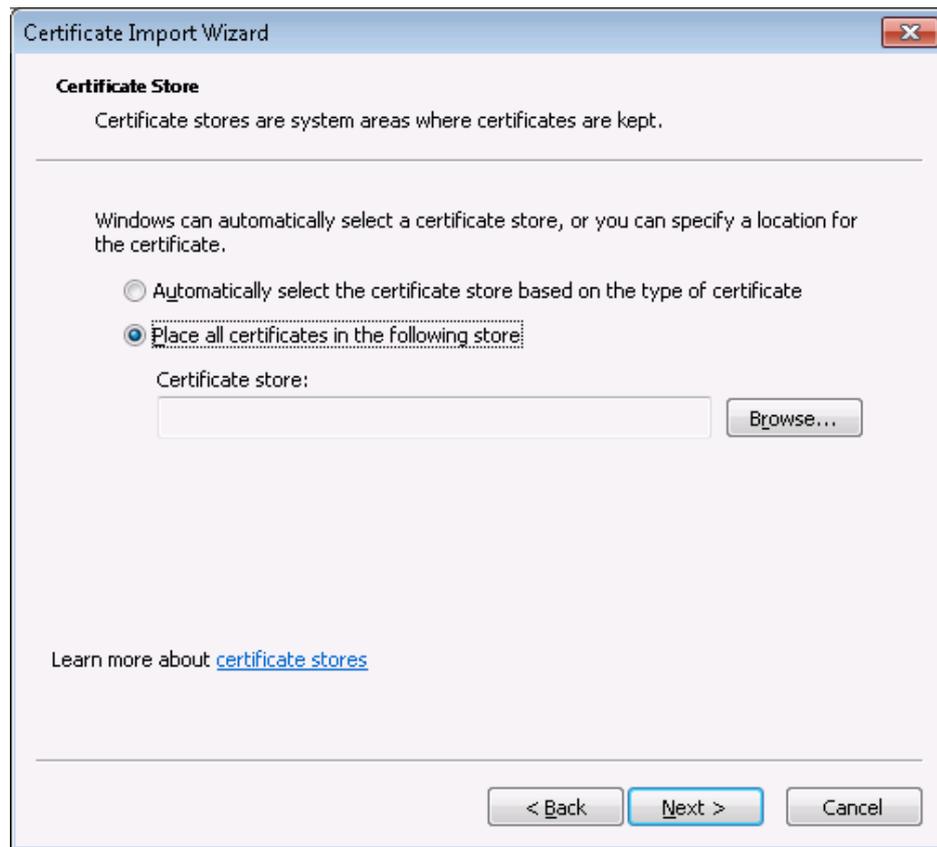
16. Click **Browse**, choose **Trusted Root Certification Authorities**, as shown in **Figure 5-10**.

Figure 5-10 Select Certificate Store

17. **Optional:** Click **OK**.

18. **Optional:** Click **Next**.

19. **Optional:** Click **Finish**.

20. **Optional:** In the **Security Warning** dialog box, click **Yes**.

21. **Optional:** Click **OK** to complete certificate import.

22. **Optional:** Restart the Window Internet Explorer 8, enter **http://***eSight server IP address***:***port number* in the address box, and press **Enter**.

23. Enter the user name **admin** and the default password **Changeme123**, and click **Log In**.

- Log in to the eSight server from the Firefox 3.6.

  1. In the address box, enter **http://***eSight server IP address***:***port number*, and press **Enter**.

  2. **Optional:** If you log in to the eSight server for the first time, the message "This Connection is Untrusted" is displayed. Click **I Understand the Risks**.

  3. **Optional:** Click **Add Exception...**.

  4. **Optional:** Select **Permanently store this exception** and click **Confirm Security Exception**.

  5. Enter the user name **admin** and the default password **Changeme123**, and click **Log In**.

  ----End

5.7 Registering Software

This topic describes how to apply for and load an eSight license.

5.7.1 Applying for an eSight License

This topic describes how to apply for an eSight license. A license file is an authentication file that a special encryption tool generates based on the information about the contract that a user signs with Huawei and the information about the server where the eSight is installed. After obtaining a license file, load it to eSight manually to obtain permission to use eSight.

Procedure

Step 1 Obtain the contract information.

A Huawei-authorized electronic license certificate is delivered to a customer at the same time when Huawei delivers eSight to the customer. The customer can obtain the contract number, product name, and product model from the license certificate, as shown in **Figure 5-11**.

Figure 5-11 eSight license certificate

Step 2 Obtain the server equipment serial number (ESN).

An ESN is a string that uniquely identifies a device. It is used to ensure that the license is granted to the specified device.

1. Access the eSight login page, and log in to eSight as an administrator, as shown in **Figure 5-12**.

Figure 5-12 eSight login page

2. When logged in to eSight as an administrator, choose **System** > **License Management**.

3. Click **Obtain ESN**.

4. Generate an ESN.

   ● Method one: Select the network adapter on the eSight server, and click **Generate ESN**.

   eSight automatically obtains the network adapter information on the eSight server. Record ESN information.

   ● Method two: Enter the Media Access Control (MAC) address of the eSight server, and click **Generate ESN**.

   📖 **NOTE**

   If the server is equipped with multiple network adapters, record the ESNs for all the network adapters.

Step 3 Apply for an eSight license.

1. Visit **https://app.huawei.com/flexnet/operationsportal**. Click **With Activation Id:** on the left to switch the login mode, and log in to the enterprise service FlexNet Operations System (FNO) with the activation ID in the license certificate to activate and download the license.

   📖 **NOTE**

   You can also click the link in the license certificate email to log in to the enterprise service FNO and activate and download the license.

2. On the **manage entitlements** page, select the required activation ID, and click **Activate**.

   📖 **NOTE**

   If the remaining number of times for activating the activation ID is **0**, the activation ID cannot be activated.

3. Select the required activation ID, enter the ESN, and click **Next**.

   📖 **NOTE**

   In the Datacom Enterprise Network Product Line, an activation ID maps an ESN. Here you are required to enter an ESN, not an ESN range.

4. Click **Submit** to generate a license file.

5. Select the generated license file, and click **Download** to download the license file.

6. In the dialog box that is displayed, click **Save** to save the license file to your computer.

----End

5.7.2 Loading an eSight License

This topic describes how to load an eSight license.

Prerequisites

A correct eSight license file must have been obtained.

📖 **NOTE**

The license file name cannot contain any space. If the name contains a space, uploading or updating the license file will fail. If the name of the obtained license file contains spaces, delete the spaces or change them to _ before using the license file.

Procedure

Step 1   Access the eSight login page, and log in to eSight as an administrator, as shown in **Figure 5-13**.

Figure 5-13 eSight login page
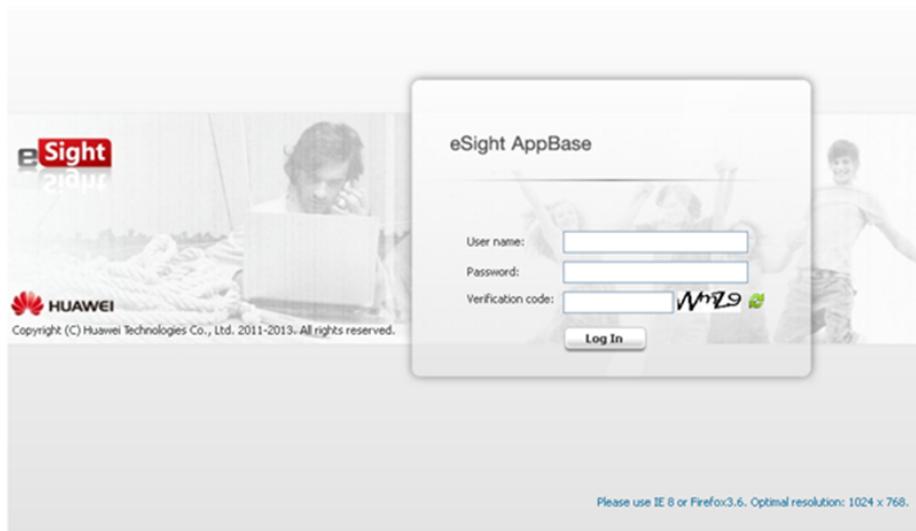
Step 2   Choose **System** > **License Management**, and click **Import License**, as shown in **Figure 5-14**.

Figure 5-14 License Management page

Step 3   Select a license file and click **Import**, as shown in **Figure 5-15**.

Figure 5-15 Import License page
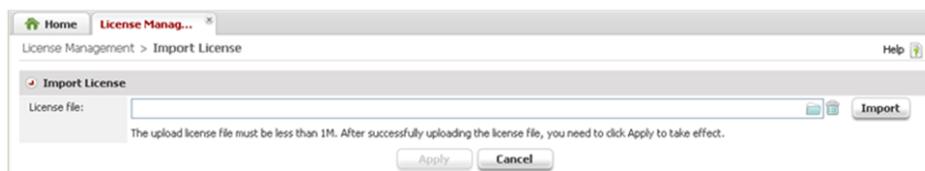
Step 4 When the license file is imported, preview the content of the license file and click **Apply**.

To finish loading the license, re-log in to eSight.

----End

Follow-up Procedure

After the license file is loaded, log in to the eSight as an administrator. Choose **System** > **License Management**, view the license expiration date, and check the license items and resource items.

5.8 Uninstalling eSight

This topic describes how to uninstall eSight.

Prerequisites

Before reinstalling or upgrading eSight, roll back the operating system of the eSight server to the pre-hardened state. Otherwise, reinstalling or upgrading eSight may fail. For details, see **5.5.4 Rolling Back the Operating System to the Pre-hardened State**.

Context

When eSight is uninstalled, the eSight database is uninstalled. To save the eSight database data, back up files in the **backupdata\history** directory that is in the same directory as the eSight installation directory in advance.

Procedure

Step 1 Choose **Start** > **All Programs** > **eSight** > **shutdown eSight**.

Step 2 Choose **Start** > **All Programs** > **eSight** > **Shutdown Maintenance Tools**.

Step 3 Choose **Start** > **All Programs** > **eSight** > **uninstall**.

Step 4 In the dialog box that is displayed, select the component to uninstall, and click **Next**.

Step 5 In the **Confirm** dialog box that is displayed, click **Yes**.

Step 6 In the **Uninstallation Completed** dialog box that is displayed, click **Finish**.

----End

Follow-up Procedure

1. Verify that the eSight shortcut icon on the desktop has been deleted.
2. Verify that the eSight installation directory has been deleted.

6 Installing the eSight AppBase Professional Editions (Windows)

About This Chapter

This topic describes how to install the eSight AppBase professional editions in the Windows Server 2008 operating systems.

6.1 Installation Process

- Preinstallation scheme: The operating system and eSight system has been preinstalled on the eSight server delivered to the site. For details about the default information configured before the delivery, see **6.2.2 Installation Plan**.

- Full-installation scheme: If you use a self-purchased server or the eSight system needs to be reinstalled, see the installation process described in this document.

Figure 6-1 shows the eSight server installation process.

Figure 6-1 eSight server installation process
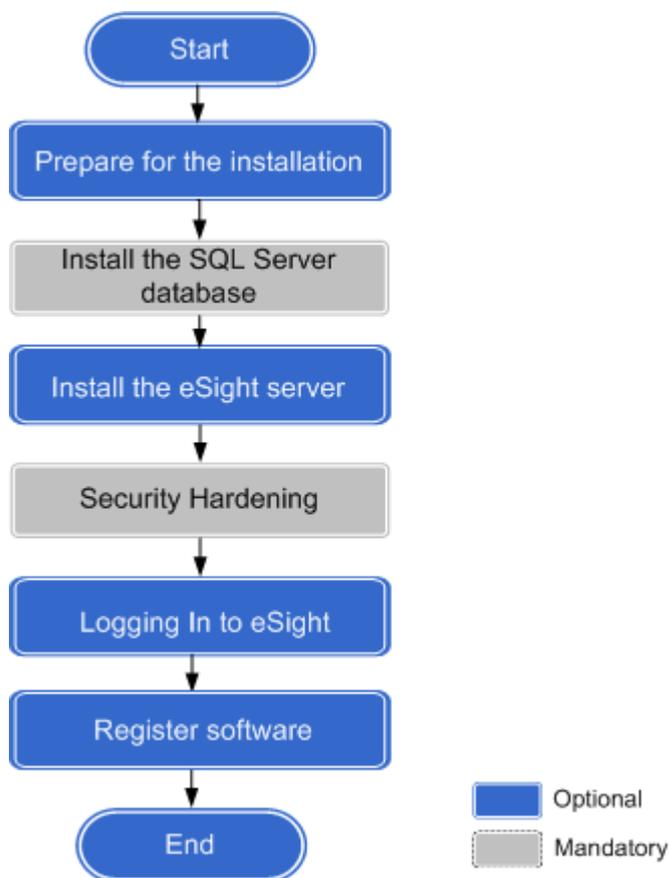
□ NOTE

Windows Server 2008 supports the following types of databases:

- MySQL: The MySQL database is automatically installed along with eSight.

- SQL Server 2008: If the SQL Server 2008 database is used, manually install it following the installation manual delivered with the database before installing the eSight server. If the installation manual is unavailable, refer to **13 Installing the SQL Server Database** to install the SQL Server 2008 database.

Table 6-1 lists installation stages.

Table 6-1 Installation process description

No.	Installation Description	Reference
1	Describes how to prepare for the installation, including software and hardware configuration requirements, and how to obtain required software.	**6.2 Preparing for the Installation**
2	Describes how to install the SQL Server 2008 database for the eSight server.	**6.3 Installing the SQL Server Database**
3	Describes how to install the eSight server.	**6.4 Installing the eSight Server**
4	This topic describes how to harden the security of the operating system on the eSight server after the operating system, database, and eSight are installed.	**6.5 Security Hardening**
5	Describes how to log in to eSight from a client.	**6.6 Logging In to eSight**
6	Describes how to apply for and load an eSight license.	**6.7 Registering Software**

6.2 Preparing for the Installation

This topic describes how to prepare for the installation, including software and hardware configuration requirements, and how to obtain required software.

6.2.1 Configuration Requirements

This topic describes the configuration requirements on the eSight server.

Table 6-2 lists configuration requirements on the eSight server (professional edition).

Table 6-2 Configuration requirements on the eSight server (professional edition)

Server Configuration	Factory Configuration	Management Capacity (Number of NEs)	Java Heap Size	Operating System	Database	Client Configuration
CPU: 1 x dual-core 2 GHz or above Memory: 4 GB Disk space: 40 GB	PC server-IBM X3650M3-Xeon quadri-core E5506 2.13G or above-4G (1x4G)-2*300GB	0-200	1.5 GB	Windows Server 2008 R2 standard (64-bit) Chinese simplified or English version	MySQL 5.5 or Microsoft SQL Server 2008 R2	● Internet Explorer 8 ● Firefox 3.6 **NOTE** Use either of the preceding browsers.
CPU: 2 x dual-core 2 GHz or above Memory: 4 GB Disk space: 60 GB		200-500				
CPU: 2 x quadri-core 2 GHz or above Memory: 8 GB Disk space: 120 GB	PC server-IBM X3650M3-2*Xeon quadri-core E5506 2.13G or above-8G (2x4G)-3*300GB	500-2000	3 GB			
CPU: 2 x quadri-core 2 GHz or above Memory: 16 GB Disk space: 250 GB	PC server-IBM X3650M3-2*Xeon quadri-core E5620 2.4G or above-16G (2x8G)-3*300GB	2000-5000	8 GB			

📖 **NOTE**

The eSight installation package contains MySQL 5.5.

- If you set the database type to **MySql** during eSight installation, the system installs MySQL 5.5 automatically.
- If you set the database type to **SQLServer** during eSight installation, the system does not install MySQL 5.5.

6.2.2 Installation Plan

This topic describes how to plan installation information, such as the IP address, host name, and password, to help correctly install eSight.

- When the preinstallation scheme is used, information such as the IP address and password described in this topic is the default information after the preinstallation. Modify the information based on your site environment.
- When the full installation scheme is used, information such as the IP address and password described in this topic is for your reference. Modify the information based on your site environment.

Plan for User Names and Passwords

Table 6-3 Plan for user names and passwords

Item	User Name	Password
Windows operating system	administrator	Changeme123
eSight software	admin	Changeme123

Plan for Host Names and IP Addresses

Table 6-4 Plan for host names and IP addresses

Item	Setting
Host name	eSightServer **NOTE** When the eSight server is delivered to the site, change the server host name based on your site environment.
IP address	129.9.1.1 **NOTE** When the eSight server is delivered to the site, change the operating system IP address based on your site environment. Then synchronize the operating system IP address to the eSight server by referring to **14.5.1 Synchronizing the eSight Server IP Address to eSight**.
Subnet mask	255.255.255.0
Default gateway	129.9.1.254

Plan for Disk Partitions

Before installing the operating system, you must plan disk partitions. **Table 6-5** describes the server disk partition plan.

📖 **NOTE**

- Three 300 GB hard disks are configured for a standard PC server. If RAID 5 is created, you do not need to partition the disks.

- RAID 5 has been created for IBM X3650M3 servers that are preinstalled with operating systems. You do not need to change the RAID settings.

- You must create RAID 5 for IBM X3650M3 servers that are not preinstalled with any operating systems before operating system installation. For details, see **14.5.8 How Do I Create RAID 5 for Three or More Hard Disks on an IBM X3650 M3 Server**.

Table 6-5 Plan for disk partitions

Disk	Partition Size	Used To
Drive C	100 GB	Install the operating system.
Drive D	Remaining space	Install the database and eSight.

Plan for the Installation Path

Table 6-6 Plan for the installation path

Software	Installation Path
eSight	D:\eSight

Plan for the Time Zone

Table 6-7 Plan for the time zone

Item	Setting
Time zone	GMT+08:00 **NOTE** When the eSight server is delivered to the site, change the time zone and time based on your site environment.

6.2.3 Obtaining Required Software

This topic describes how to obtain required software.

The eSight server can be installed in either of the following ways:

- Using CD-ROMs: Obtain the required CD-ROMs.

● Using installation packages: Obtain the required installation packages.

Using CD-ROMs

Obtain the following CD-ROMs listed in Table 6-8:

Table 6-8 CD-ROM list

Software	CD-ROM
Windows installation software	Windows Server 2008 R2 Standard
eSight installation software of professional edition	eSight application platform (professional edition)

Using Installation Packages

Method of obtaining installation packages:

Go to the enterprise network website **http://enterprise.huawei.com/cn/**.

To download eSight installation software of professional edition, choose **SUPPORT** > **Software Download** > **Network Management** > **eSight**.

Obtain the following installation packages listed in Table 6-9:

📖 **NOTE**

In an installation package, *version* indicates the detailed version number of the eSight.

Table 6-9 Software list (professional edition)

Software	Name	Description
eSight installation software (professional edition)	eSight_AppBase_*version*_ Professional_Win.zip	This software is mandatory and is used to install the eSight professional edition. The MySQL or SQL Server database is used.

6.3 Installing the SQL Server Database

Before installing eSight of the professional edition on Windows Server 2008, you must manually install the SQL Server 2008 R2 database if you select this database type.

Procedure

Step 1 If the SQL Server 2008 R2 database is not installed, install it following the installation manual delivered with the database. If the installation manual is unavailable, refer to **13 Installing the SQL Server Database** to install the SQL Server 2008 R2 database.

----End

6.4 Installing the eSight Server

This topic describes how to install the eSight server.

Prerequisites

- The SQL Server 2008 R2 database has been installed if you select this database type. If the SQL Server 2008 R2 database is not installed, install it following the installation manual delivered with the database. If the installation manual is unavailable, refer to **13 Installing the SQL Server Database** to install the SQL Server 2008 R2 database.

- The operating system has been installed on an eSight server host.

- Installation software has been obtained. For details, see **6.2.3 Obtaining Required Software**.

- The network adapter is enabled.

- The eSight server has assigned a static IP address.

Context

The MySQL database will be installed along with the eSight software. Therefore, you do not need to install the MySQL database. The system will install a new MySQL database in the eSight installation directory, which does not affect the existing MySQL database.

⚠ **CAUTION**

The eSight installation files must be placed on the local PC.

Procedure

Step 1 Log in to the Windows operating system as the **administrator** user.

Step 2 Double-click the **setup.exe** file to start eSight installation.

- Method one: Use CD-ROMs.

    1. Put the CD-ROM into the CD-ROM drive, and double-click the **setup** file in the CD-ROM root directory.

    2. The **Select Language** dialog box is displayed.

- Method two: Use installation packages.

    1. Decompress all installation packages to a same directory. Take WinRAR files as an example. Select all required packages, right-click, and choose **Extract Here** from the shortcut menu.

⚠ **CAUTION**

To ensure successful eSight server installation, verify that all installation path names (installation package path and eSight installation path) contain only the following characters: letters, digits, and underscores (_).

2. Double-click the **setup** file in the installation package directory.

3. The **Select Language** dialog box is displayed.

Step 3 Select **English** and click **OK**.

The **Introduction** dialog box is displayed.

📖 **NOTE**

The system automatically checks whether the current environment meets requirements for installing eSight software. If the current environment does not meet the requirements, the associated message is displayed.

Step 4 Click **Next**.

The **Copyright Notice** dialog box is displayed.

Step 5 Select **I accept these terms**, and click **Next**.

The **Server Parameters** dialog box is displayed, as shown in **Figure 6-2**.

Figure 6-2 Server Parameters
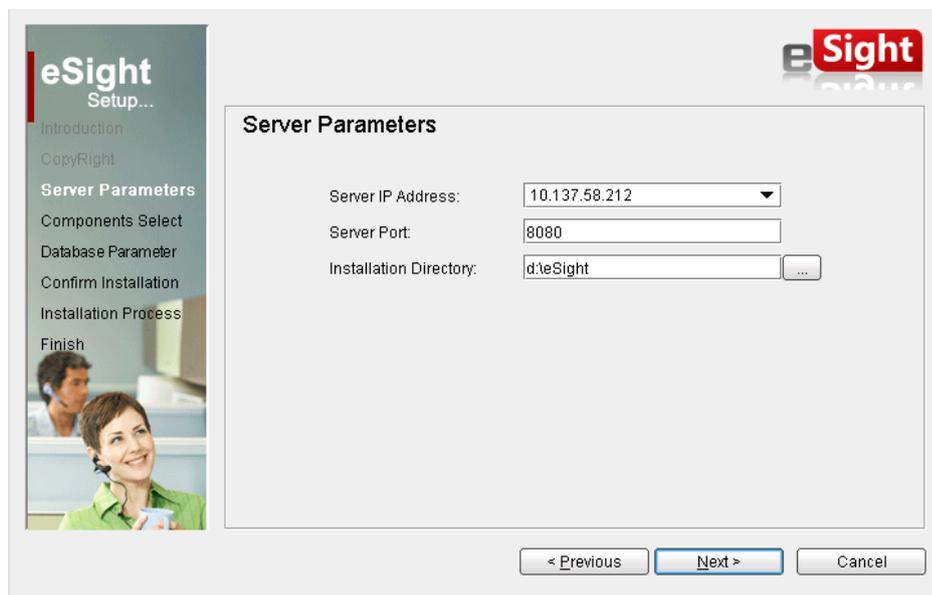
📖 **NOTE**

- **IP Address**: Default IP address of the eSight server host. If the server has multiple IP addresses, select a public IP address from the drop-down list box.
- **Port**: The default port number is **8080**. If the port is in use, change it to another port number.
- **Installation Directory**: eSight server installation directory, which can be manually changed.

⚠ **CAUTION**

To ensure successful eSight server installation, verify that the eSight server installation directory is empty before the installation.

Step 6 Click **Next**.

The **Select Software Components** dialog box is displayed, as shown in **Figure 6-3**.

Figure 6-3 Select Software Components
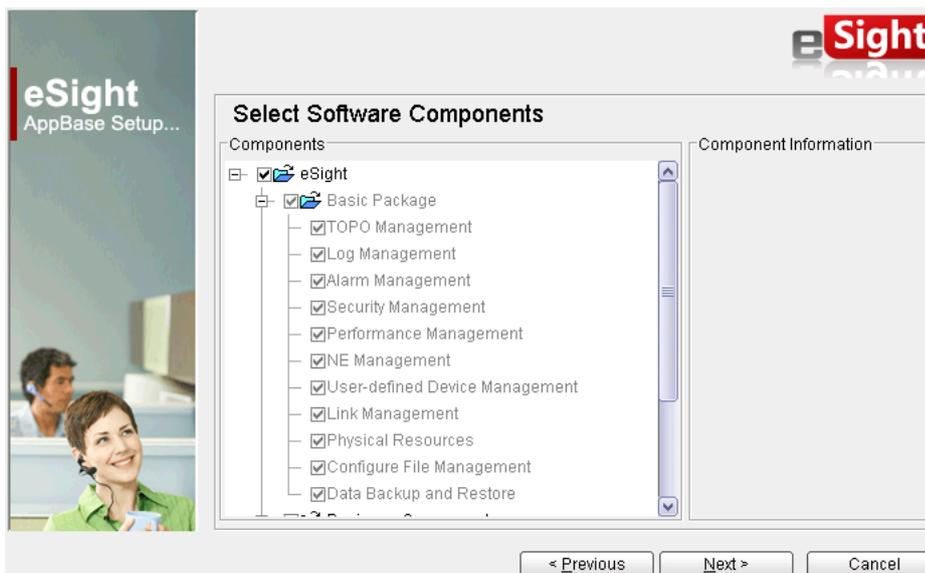
📖 **NOTE**

- Components under **Basic Package** are dimmed by default, and must be installed.

- Select required components under **Business Component**. eSight components support incremental installation. If a component is not installed during the first eSight server installation, it can be installed during the next eSight server installation.

- To install the eSight server professional edition, select **Hierarchical OSS Manager**.

Step 7 Click **Next**.

The **Database Parameters** dialog box is displayed, as shown in **Figure 6-4**.

Figure 6-4 Database Parameters

Step 8 Enter the password of the **root** user, and click **Next**.

Set **Database Type** based on your site environment.

📖 **NOTE**

> If the **Database Type** value is **MySql**, the system uses the default password **MySQL123**.
>
> If the **Database Type** value is **SQLServer**, and eSight is installed for the first time, enter the **root** user password. During incremental installation, the password text box is dimmed and you do not need to enter the password.

The **Confirm Installation** dialog box is displayed.

Step 9 Verify the installation information, and click **Next**.

📖 **NOTE**

> If the installation information is incorrect, click **Previous** to reset installation information.

Step 10 The system starts to install the eSight server. After about 5 minutes, the **Installation Completed** dialog box is displayed.

📖 **NOTE**

> In the **Installation Completed** dialog box, **Start eSight immediately** and **Start backup server** are unselected by default. Keep the default settings.

Step 11 Click **Finish**. The eSight server installation is complete.

----End

6.5 Security Hardening

This topic describes how to harden the security of the operating system on the eSight server after the operating system, database, and eSight are installed.

6.5.1 Security Hardening Background

This topic describes the security hardening purpose and prerequisites.

Security Hardening Purpose

The eSight server has the following potential security risks:

- During the installation of the operating system, many services and ports are enabled by default. In this situation, the operating system is prone to malicious attacks.
- System file properties and environment variables have some defects, which increase system security risks.

The operating system can be hardened by using technologies to add, modify, or tailor system modules and components.

Security hardening removes system defects and security vulnerabilities and ensures secure and stable system running.

Security Hardening Prerequisites

- The operating system parameters have been set or modified.
- eSight has been installed or upgraded.

6.5.2 Obtaining Required Software

This topic describes how to obtain required software.

Obtain the SetWin installation package, install the SetWin on your computer, and use the SetWin to harden the security of the operating system.

Obtaining the SetWin Installation Package

Visit **http://enterprise.huawei.com/en/** to obtain the SetWin installation package **iPSI SEK SetWin.exe**.

6.5.3 Hardening the Security of the Operating System

This topic describes how to use the SetWin to harden the security of the operating system.

6.5.3.1 Preparing for Security Hardening

This topic describes how to prepare for security hardening.

Procedure

Step 1 Obtain the security hardening configuration file of the operating system.

Visit **http://enterprise.huawei.com/en/** to obtain the security hardening configuration file **I2000_win2008_V003R002_SetWin.zip**.

----End

6.5.3.2 Hardening the Security of the Operating System

This topic describes how to harden the security of the operating system.

Prerequisites

- The SetWin has been installed.
- The security hardening configuration file of the operating system has been obtained.

Procedure

Step 1 Right-click SetWin and choose **Run as administrator**. The **Initial** dialog box is displayed.

Step 2 Select the path where the system backup status is stored in a file, and click **OK**.

Step 3 When the system displays the message "Backup completed", click **OK**.

Step 4 If no configuration file is imported, the system displays the message "Configuration file is not present or corrupted. Please import a valid configuration file." Click **OK**.

    📖 **NOTE**

By default, the SetWin is started in online mode. If no security hardening configuration file is imported when you install the SetWin, no security hardening policy is displayed.

Step 5 Choose **Configuration** > **Import Configuration File**.

Step 6 Select the security hardening configuration file of the operating system, and click **Open** to import the security hardening configuration file into the SetWin.

Step 7 Choose **Policy** > **Execute**.

Step 8 When the system displays the message "Do you want to create a backup point?", click **Yes** and select the backup path.

> ⚠ **CAUTION**
>
> Save the security hardening policy and create a file to store the security hardening policy that will be used in rollback. Otherwise, the operating system cannot be rolled back to the pre-hardened state.

Step 9 When the system displays the message "Backup completed", click **OK**.

Step 10 In the **Policy(s) Configured** dialog box that is displayed, click **Yes** to harden the security of the operating system.

Step 11 After hardening the security of the operating system is completed, the system displays the message "Execution completed". Click **OK**. Restart the system as prompted to make the security hardening policy take effect.

⚠ **CAUTION**

After the security hardening policy takes effect, the administrator account changes from **Administrator** to **SWMaster** and the password remains unchanged.

----**End**

6.5.4 Rolling Back the Operating System to the Pre-hardened State

This topic describes how to roll back the operating system to the pre-hardened state. After the operating system is rolled back to the pre-hardened state, system parameters restore to the values before security hardening.

Prerequisites

- The SetWin has been installed.
- The operating system has been backed up before security hardening.

Context

Before reinstalling or upgrading eSight, roll back the operating system of the eSight server to the pre-hardened state. Otherwise, reinstalling or upgrading eSight may fail.

Procedure

Step 1 Run the SetWin.

Step 2 Choose **Policy** > **Rollback**.

Step 3 Select the backup file and roll back the operating system of the eSight server to the pre-hardened state.

Step 4 When the system displays the message "Rollback completed", click **OK**. Restart the system as prompted to make the security hardening policy take effect.

⚠ **CAUTION**

After the security of the operating system is rolled back, the administrator account restores to be **Administrator** and the password remains unchanged.

----**End**

6.6 Logging In to eSight

This topic describes how to log in to eSight from a client.

Prerequisites

The eSight server installation has been completed.

The IP addresses of eSight and eSight server have been synchronized. If IP addresses are not synchronized, synchronize the eSight IP address with the eSight server IP address. For details, see **14.5.1 Synchronizing the eSight Server IP Address to eSight**.

Procedure

Step 1 Verify that the following shortcut icons are displayed on the desktop:

- start eSight
- shutdown eSight

Step 2 Check whether the eSight service has started. If the eSight service has not started, perform the following steps to start it:

Double-click the **start eSight** shortcut icon on the desktop or choose **Start** > **All Programs** > **eSight** > **start eSight**.

If **Daemon is already running** is displayed, the eSight service has been started. Otherwise, wait until the eSight service starts. When the status of every process is **started** and **Finished** is displayed, the eSight service has been started.

Step 3 Log in to the eSight server from the client.

- Log in to the eSight server from the Window Internet Explorer 8.

    1. Open the Internet Explorer.

    2. Choose **Tools** from the main menu.

    3. Select **Compatibility View Settings**.

    4. In the **Compatibility View Settings** dialog box, clear the **Display intranet sites in Compatibility View** and **Display all websites in Compatibility View** check boxes.

    5. Click **Close**.

    6. Choose **Tools** > **Internet Options** > **Security** > **Custom Level** from the main menu.

    7. Locate the **Downloads** node. In **Automatic prompting for file downloads**, select **Enable**.

    8. Click **OK**.

    9. In the address box, enter **http://*eSight server IP address:port number***, and press **Enter**.

    ⚠ **CAUTION**

    If the server has multiple IP addresses, enter the IP address selected during eSight server installation in the address box. If another IP address is entered, access to the server fail.

    If you enter **localhost** or **127.0.0.1** as the eSight server IP address, the security certificate cannot be installed.

    ---

    10. **Optional:**

    If you log in to the eSight server for the first time, the message "There is a problem with this website's security certificate." is displayed. Click **Continue to this website (not recommended).**, as shown in **Figure 6-5**.

Figure 6-5 There is a problem with this website's security certificate
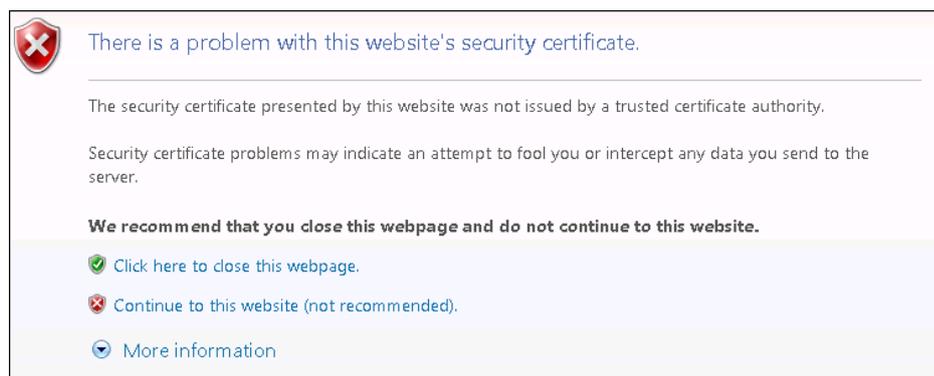
11. **Optional:**

    On the left of the address bar, click **Certificate Error**.

12. In the **Untrusted Certificate** dialog box, click **View certificates**, as shown in **Figure 6-6**.

Figure 6-6 Untrusted Certificate
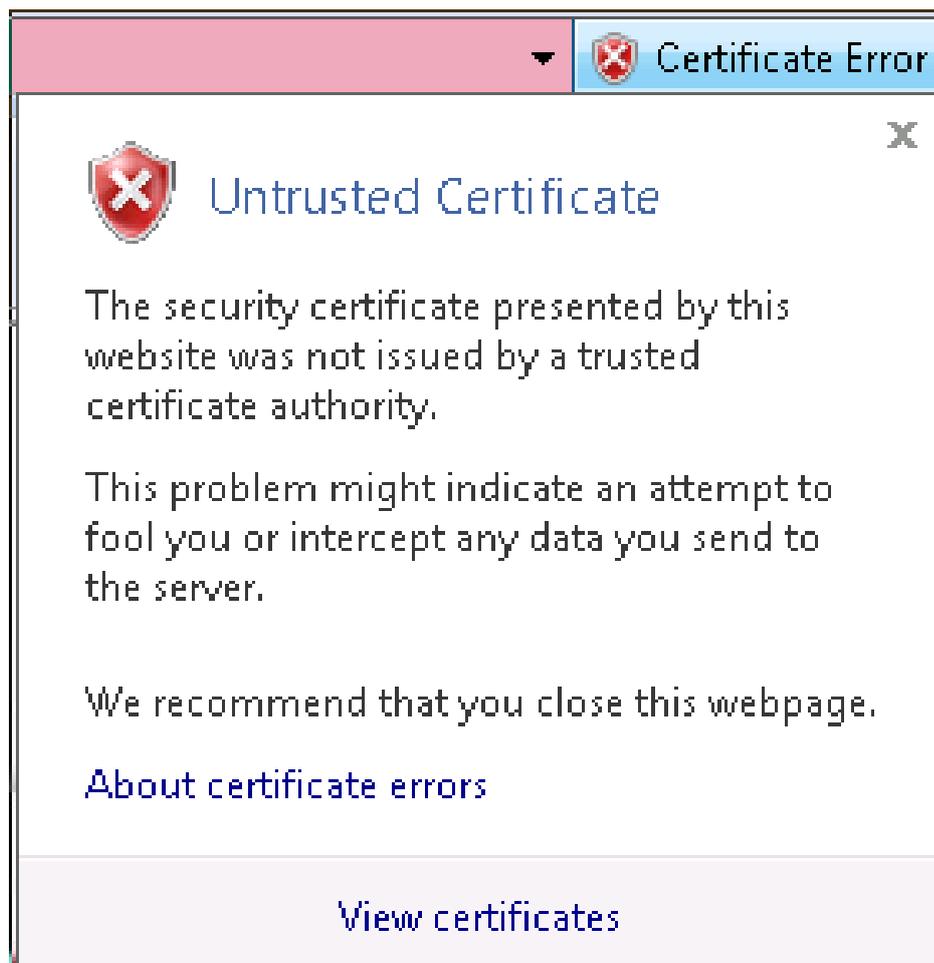
13. In the **Certificate** dialog box, select the **General** tab and click **Install Certificate...**, as shown in **Figure 6-7**.

Figure 6-7 Certificate
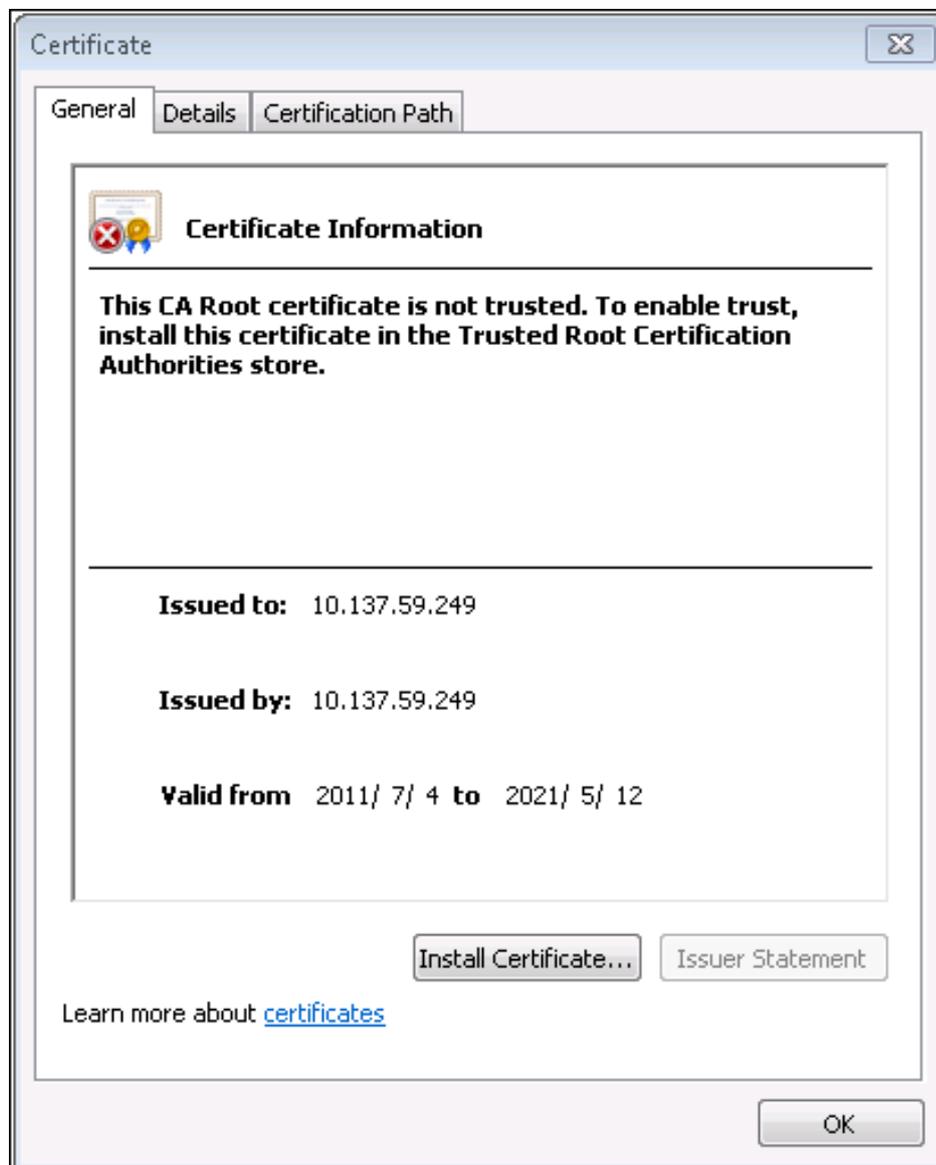
14. In the **Certificate Import Wizard** dialog box, click **Next**, as shown in **Figure 6-8**.

Figure 6-8 Certificate Import Wizard

15. In the **Certificate Store** dialog box, choose **Place all certificates in the following store**, as shown in **Figure 6-9**.

Figure 6-9 Certificate Store
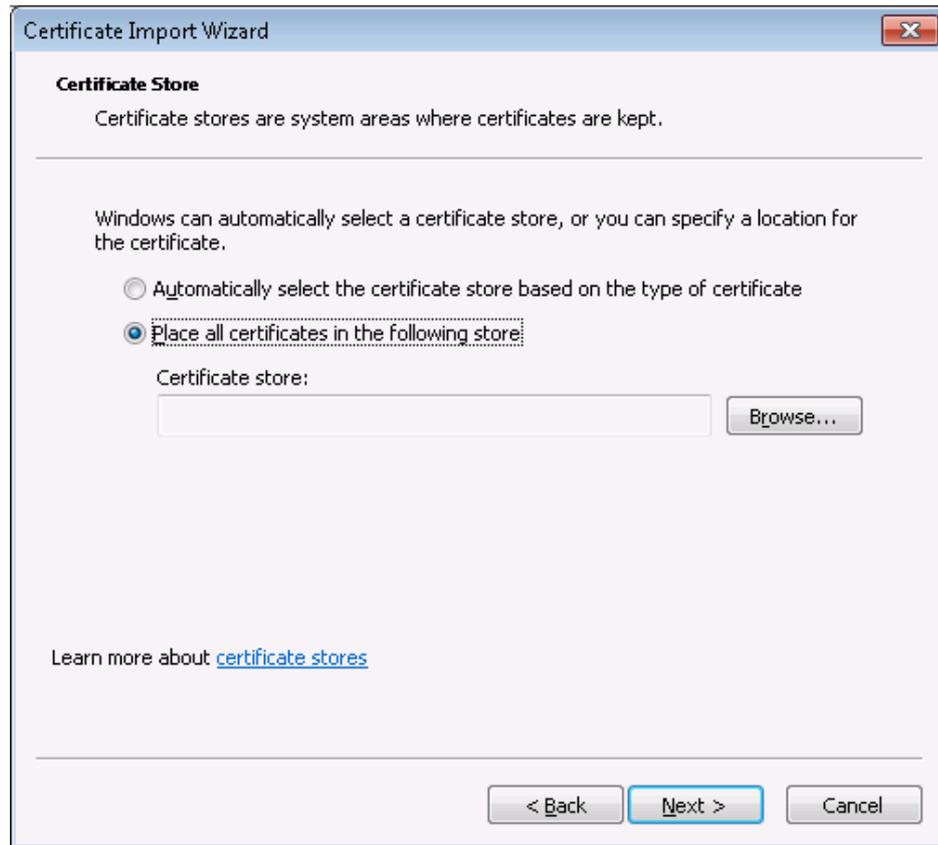
16. Click **Browse**, choose **Trusted Root Certification Authorities**, as shown in **Figure 6-10**.

Figure 6-10 Select Certificate Store

17. **Optional:** Click **OK**.

18. **Optional:** Click **Next**.

19. **Optional:** Click **Finish**.

20. **Optional:** In the **Security Warning** dialog box, click **Yes**.

21. **Optional:** Click **OK** to complete certificate import.

22. **Optional:** Restart the Window Internet Explorer 8, enter **http://***eSight server IP address***:***port number* in the address box, and press **Enter**.

23. Enter the user name **admin** and the default password **Changeme123**, and click **Log In**.

- Log in to the eSight server from the Firefox 3.6.

    1. In the address box, enter **http://***eSight server IP address***:***port number*, and press **Enter**.

    2. **Optional:** If you log in to the eSight server for the first time, the message "This Connection is Untrusted" is displayed. Click **I Understand the Risks**.

    3. **Optional:** Click **Add Exception...**.

    4. **Optional:** Select **Permanently store this exception** and click **Confirm Security Exception**.

    5. Enter the user name **admin** and the default password **Changeme123**, and click **Log In**.

    ----End

6.7 Registering Software

This topic describes how to apply for and load an eSight license.

6.7.1 Applying for an eSight License

This topic describes how to apply for an eSight license. A license file is an authentication file that a special encryption tool generates based on the information about the contract that a user signs with Huawei and the information about the server where the eSight is installed. After obtaining a license file, load it to eSight manually to obtain permission to use eSight.

Procedure

Step 1 Obtain the contract information.

A Huawei-authorized electronic license certificate is delivered to a customer at the same time when Huawei delivers eSight to the customer. The customer can obtain the contract number, product name, and product model from the license certificate, as shown in **Figure 6-11**.

Figure 6-11 eSight license certificate

Step 2 Obtain the server equipment serial number (ESN).

An ESN is a string that uniquely identifies a device. It is used to ensure that the license is granted to the specified device.

1. Access the eSight login page, and log in to eSight as an administrator, as shown in **Figure 6-12**.

Figure 6-12 eSight login page

2. When logged in to eSight as an administrator, choose **System** > **License Management**.

3. Click **Obtain ESN**.

4. Generate an ESN.

- Method one: Select the network adapter on the eSight server, and click **Generate ESN**.

  eSight automatically obtains the network adapter information on the eSight server. Record ESN information.

- Method two: Enter the Media Access Control (MAC) address of the eSight server, and click **Generate ESN**.

☐ **NOTE**

If the server is equipped with multiple network adapters, record the ESNs for all the network adapters.

Step 3 Apply for an eSight license.

1. Visit **https://app.huawei.com/flexnet/operationsportal**. Click **With Activation Id:** on the left to switch the login mode, and log in to the enterprise service FlexNet Operations System (FNO) with the activation ID in the license certificate to activate and download the license.

☐ **NOTE**

You can also click the link in the license certificate email to log in to the enterprise service FNO and activate and download the license.

2. On the **manage entitlements** page, select the required activation ID, and click **Activate**.

☐ **NOTE**

If the remaining number of times for activating the activation ID is **0**, the activation ID cannot be activated.

3. Select the required activation ID, enter the ESN, and click **Next**.

☐ **NOTE**

In the Datacom Enterprise Network Product Line, an activation ID maps an ESN. Here you are required to enter an ESN, not an ESN range.

4. Click **Submit** to generate a license file.

5. Select the generated license file, and click **Download** to download the license file.

6. In the dialog box that is displayed, click **Save** to save the license file to your computer.

----End

6.7.2 Loading an eSight License

This topic describes how to load an eSight license.

Prerequisites

A correct eSight license file must have been obtained.

☐ **NOTE**

The license file name cannot contain any space. If the name contains a space, uploading or updating the license file will fail. If the name of the obtained license file contains spaces, delete the spaces or change them to _ before using the license file.

Procedure

Step 1 Access the eSight login page, and log in to eSight as an administrator, as shown in **Figure 6-13**.

Figure 6-13 eSight login page
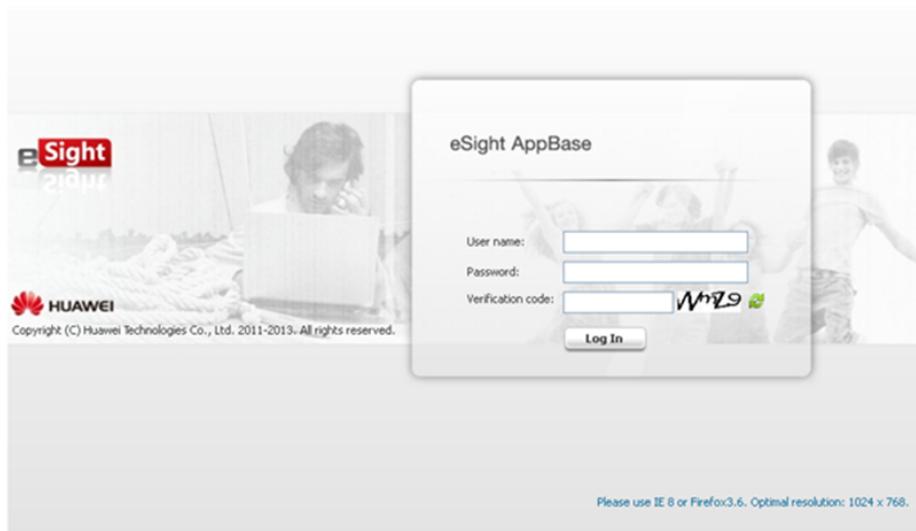
Step 2 Choose **System** > **License Management**, and click **Import License**, as shown in **Figure 6-14**.

Figure 6-14 License Management page

Step 3 Select a license file and click **Import**, as shown in **Figure 6-15**.

Figure 6-15 Import License page
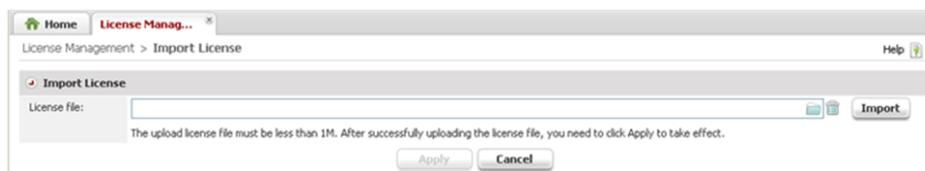
Step 4 When the license file is imported, preview the content of the license file and click **Apply**.

To finish loading the license, re-log in to eSight.

----End

Follow-up Procedure

After the license file is loaded, log in to the eSight as an administrator. Choose **System** > **License Management**, view the license expiration date, and check the license items and resource items.

6.8 Uninstalling eSight

This topic describes how to uninstall eSight.

Prerequisites

Before reinstalling or upgrading eSight, roll back the operating system of the eSight server to the pre-hardened state. Otherwise, reinstalling or upgrading eSight may fail. For details, see **6.5.4 Rolling Back the Operating System to the Pre-hardened State**.

Context

When eSight is uninstalled, the eSight database is uninstalled. To save the eSight database data, back up files in the **backupdata\history** directory that is in the same directory as the eSight installation directory in advance.

Procedure

Step 1 Choose **Start** > **All Programs** > **eSight** > **shutdown eSight**.

Step 2 Choose **Start** > **All Programs** > **eSight** > **Shutdown Maintenance Tools**.

Step 3 Choose **Start** > **All Programs** > **eSight** > **uninstall**.

Step 4 In the dialog box that is displayed, select the component to uninstall, and click **Next**.

Step 5 In the **Confirm** dialog box that is displayed, click **Yes**.

Step 6 In the **Uninstallation Completed** dialog box that is displayed, click **Finish**.

----End

Follow-up Procedure

1.   Verify that the eSight shortcut icon on the desktop has been deleted.
2.   Verify that the eSight installation directory has been deleted.

7 Installing the eSight AppBase Professional Editions (SUSE Linux)

About This Chapter

This topic describes how to install the eSight AppBase professional editions in the SUSE Linux operating systems.

7.1 Installation Process

- Preinstallation scheme: The operating system and eSight system has been preinstalled on the eSight server delivered to the site. For details about the default information configured before the delivery, see **7.2.2 Installation Plan**, to change the IP address and route on the preinstalled SUSE Linux operating system, see**12.1 Configuring the Preinstalled Operating System**.

- Full-installation scheme: If you use a self-purchased server or the eSight system needs to be reinstalled, see the installation process described in **12.2 Installing the SUSE Linux Operating System Manually**.

Figure 7-1 shows the eSight server installation process.

Figure 7-1 eSight server installation process
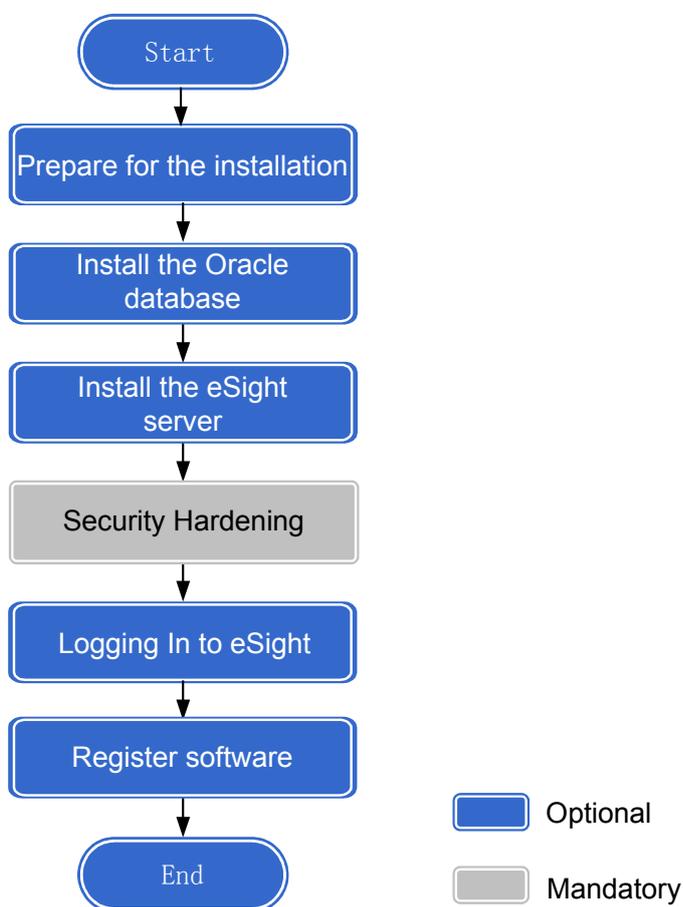
NOTE

In SUSE Linux, you must manually install the Oracle database before installing the eSight server. See the *Oracle 11g Database Installation Guide* to install the database.

Table 7-1 lists installation stages.

Table 7-1 Installation process description

No.	Installation Description	Reference
1	Describes how to prepare for the installation, including software and hardware configuration requirements, and how to obtain required software.	**7.2 Preparing for the Installation**
2	Install the Oracle database.	**7.3 Installing the Oracle Database**
3	Describes how to install the eSight server.	**7.4 Installing the eSight Server**
4	This topic describes how to harden the security of the operating system on the eSight server after the operating system, database, and eSight are installed.	**7.5 Security Hardening**
5	Describes how to log in to eSight from a client.	**7.6 Logging In to eSight**
6	Describes how to apply for and load an eSight license.	**7.7 Registering Software**

7.2 Preparing for the Installation

This topic describes how to prepare for the installation, including software and hardware configuration requirements, and how to obtain required software.

7.2.1 Configuration Requirements

This topic describes the configuration requirements on the eSight server.

Table 7-2 lists configuration requirements on the eSight server (professional edition).

Table 7-2 Configuration requirements on the eSight server (professional edition)

Server Configuration	Factory Configuration	Management Capacity (Number of NEs)	Java Heap Size	Operating System	Database	Client Configuration
CPU: 1*dual-core 2 GHz or above Memory: 4 GB Disk space: 40 GB	PC server-IBM X3650M3-Xeon quadri-core E5506 2.13G or above-4G (1x4G)-2*300GB	0-200	1.5 GB	SUSE11 Linux SP1 Chinese simplified or English version	Oracle 11g standard	● Internet Explorer 8 ● Firefox 3.6 **NOTE** Use either of the preceding browsers.
CPU: 2*dual-core 2 GHz or above Memory: 4 GB Disk space: 60 GB		200-500				
CPU: 2*quadri-core 2 GHz or above Memory: 8 GB Disk space: 120 GB	PC server-IBM X3650M3-2*Xeon quadri-core E5506 2.13G or above-8G (2x4G)-3*300GB	500-2000	3 GB			
CPU: 2*quadri-core 2G or above Memory: 16 GB Disk space: 250 GB	PC server-IBM X3650M3-2*Xeon quadri-core E5620 2.4 or above-16G (2x8G)-3*300GB	2000-5000	8 GB			

Server Configuration	Factory Configuration	Management Capacity (Number of NEs)	Java Heap Size	Operating System	Database	Client Configuration
CPU: 4*quadri-core 2G or above Memory: 32 GB Disk space: 320 GB	PC server-IBM X3850X5-4*Xeon Octa-core E7-4820 2.0G or above-32G (8x4G)-8*300GB	5000-20000	16 GB			

7.2.2 Installation Plan

This topic describes how to plan installation information, such as the IP address, host name, and password, to help correctly install eSight.

● When the preinstallation scheme is used, information such as the IP address and password described in this topic is the default information after the preinstallation. Modify the information based on your site environment.

● When the full installation scheme is used, information such as the IP address and password described in this topic is for your reference. Modify the information based on your site environment.

Plan for User Names and Passwords

Table 7-3 Plan for user names and passwords

Item	User Name	Password
SUSE Linux operating system	root	Changeme123
eSight software	admin	Changeme123

Plan for Host Names and IP Addresses

Table 7-4 Plan for host names and IP addresses

Item	Setting
Host name	eSightServer **NOTE** When the eSight server is delivered to the site, change the server host name based on your site environment.
IP address	129.9.1.1 **NOTE** When the eSight server is delivered to the site, change the operating system IP address based on your site environment. Then synchronize the operating system IP address to the eSight server by referring to **14.5.1 Synchronizing the eSight Server IP Address to eSight**.
Subnet mask	255.255.255.0
Default gateway	129.9.1.254

Plan for Disk Partitions

Before installing the operating system, you must plan disk partitions. **Table 7-5** describes the server disk partition plan.

📕 **NOTE**

- Three 300 GB hard disks are configured for a standard PC server. If RAID 5 is created, you do not need to partition the disks.
- RAID 5 has been created for IBM X3650M3 servers that are preinstalled with operating systems. You do not need to change the RAID settings.
- You must create RAID 5 for IBM X3650M3 servers that are not preinstalled with any operating systems before operating system installation. For details, see **14.5.8 How Do I Create RAID 5 for Three or More Hard Disks on an IBM X3650 M3 Server**.

Table 7-5 Plan for disk partitions

Disk	Partition Size	Used To
/	50 GB	Install the operating system.
/opt	Remaining space	Install the database and eSight system.

Plan for Installation Paths

Table 7-6 Plan for installation paths

Software	Installation Path
eSight	/opt/eSight

Software	Installation Path
Oracle	/opt/oracle

Plan for the Time Zone

Table 7-7 Plan for the time zone

Item	Setting
Time zone	Asia > Beijing **NOTE** Change the time zone and time based on your site environment.

7.2.3 Obtaining Required Software

This topic describes how to obtain required software.

The eSight server can be installed in either of the following ways:

- Using CD-ROMs: Obtain the required CD-ROMs.
- Using installation packages: Obtain the required installation packages.

Using CD-ROMs

Obtain the following CD-ROMs listed in Table 7-8:

Table 7-8 CD-ROM list

Software	CD-ROM
eSight installation software of professional edition	eSight application platform (professional edition)

Using Installation Packages

Method of obtaining installation packages:

Go to the enterprise network website **http://enterprise.huawei.com/cn/**.

To download eSight installation software of professional edition, choose **SUPPORT** > **Software Download** > **Network Management** > **eSight**.

Obtain the following installation packages listed in Table 7-9:

☐ **NOTE**

   In an installation package, *version* indicates the detailed version number of the eSight.

Table 7-9 Software list (professional edition)

Software	Name	Description
eSight installation software (professional edition)	eSight_AppBase_*version*_ Professional_SUSE.zip	This software is mandatory and is used to install eSight of the professional edition. The Oracle database is used.

7.2.4 Uploading and Decompressing Installation Packages

This topic describes how to upload installation packages to the eSight server and decompress them.

Prerequisites

The installation packages have been obtained. For details, see **7.2.3 Obtaining Required Software**.

Procedure

Step 1 Run the following command to create the **/opt/install** directory:

```
# mkdir /opt/install
```

Step 2 Log in to the computer where the software packages reside.

Step 3 Choose **start** > **Run**. Then, enter **ftp** *the_system_IP_address_of_server* and click **OK**.

□ **NOTE**

Before starting the transfer, enable the FTP service on the server. For details, see **14.2.1 How to Start/ Stop the FTP, TFTP, SFTP, and Telnet Services**.

Step 4 Enter **root** as the user name of the server.

```
User (IP address:(none)):root
```

Step 5 Enter the password of the **root** user.

```
Password:
```

Step 6 Set the FTP transmission mode to **binary**.

```
ftp> bin
```

Step 7 Enter the path where the software packages are stored on the computer.

```
ftp> lcd the_path_where_the_software_packages_are_stored_on_the_computer
```

Step 8 Enter the **/opt/install** directory.

```
ftp> cd /opt/install
```

Step 9 Run the **put** command to upload all required software packages to the server:

```
ftp> put Name_of_software_package
```

Wait for a moment. When the software packages are uploaded, a message is displayed, indicating that the transfer is complete.

> ⚠ **CAUTION**
>
> Upload all of the needed software packages to the server.
>
> After the transfer is complete, disable the FTP service. For details, see **14.2.1 How to Start/ Stop the FTP, TFTP, SFTP, and Telnet Services**.

Step 10 Run the following command to exit from FTP:

```
ftp> quit
```

Step 11 Run the following commands to switch to the directory where the software packages reside, and then run the **unzip** command to decompress the uploaded software packages on the server.

```
# cd /opt/install
# unzip Software_package_name -d Directory_name_after_decompression
```

----End

7.3 Installing the Oracle Database

Before installing eSight professional edition on SUSE Linux, install the Oracle database.

Procedure

Step 1 See the *Oracle 11g Database Installation Guide* to install the database.

> ⚠ **CAUTION**
>
> ● When installing the Oracle database, set the character set to **UTF-8** to support globalization.
>
> ● The Oracle 11g database password is valid for 180 days by default. If a password expires, eSight is unavailable. Change the password validity period before it expires. For details, see **14.4.2 How to Change the Oracle Password Validity Period**.
>
> ● The Oracle SGA cannot be smaller than 800 MB and its recommended size is 1.6 GB. If the size is smaller than 800 MB, the database performance cannot meet the requirements of eSight.

Step 2 Configure the Oracle database to ensure that it runs properly. For details, see **14.4.3 How to Set Some Important Parameters During the Creation of an Oracle Database**.

----End

7.4 Installing the eSight Server

This topic describes how to install the eSight server.

Prerequisites

- The Oracle database has been installed. If the Oracle database is not installed, refer to the Oracle database installation guide to install it.

- The server IP address monitored by the Oracle database is the same as the IP address set during eSight installation. For details, see **14.4.1 How to Check the Server IP Address Monitored by the Oracle Database**.

- The host names in the configuration files for the SUSE Linux operating system are the same. For details, see **14.2.2 How to Check Whether Host Names in the SUSE Linux System File Are the Same**.

- The network adapter is enabled.

- The eSight server IP address has been set.

- The FTP service has been disabled after the installation package is uploaded using FTP. For details, see **14.2.1 How to Start/Stop the FTP, TFTP, SFTP, and Telnet Services**.

Context

⚠ **CAUTION**

The eSight installation files must be stored on the local computer.

Procedure

Step 1 Run the **setup.sh** file to start eSight installation.

- Method one: Use a CD-ROM.

    1. Insert the CD-ROM into the CD-ROM drive, and run the following commands in the CD-ROM root directory:
       ```
       # cd /opt/install
       # chmod u+x setup.sh
       # ./setup.sh
       ```
    2. The **Select Language** dialog box is displayed.

- Method two: Use installation packages.

    1. Decompress all installation packages to a same directory. Use WinRAR files as an example. Select all required packages, right-click, and choose **Extract Here** from the shortcut menu.

    ⚠ **CAUTION**

    To ensure successful eSight server installation, verify that all installation path names (installation package path and eSight installation path) contain only the following characters: letters, digits, underscores (_), and space characters.

    2. Run the following commands in the installation package directory:
       ```
       # cd /opt/install/Directory names after decompression
       # chmod u+x setup.sh
       # ./setup.sh
       ```

3.   The **Select Language** dialog box is displayed.

Step 2   Select **English** and click **OK**.

The **Introduction** dialog box is displayed.

📖 **NOTE**

> The system automatically checks whether the current environment meets requirements for installing eSight
> software. If the current environment does not meet the requirements, the associated message is displayed.

Step 3   Click **Next**.

The **Copyright Notice** dialog box is displayed.

Step 4   Select **I accept these terms**, and click **Next**.

The **Server Parameters** dialog box is displayed, as shown in **Figure 7-2**.

Figure 7-2 Server Parameters
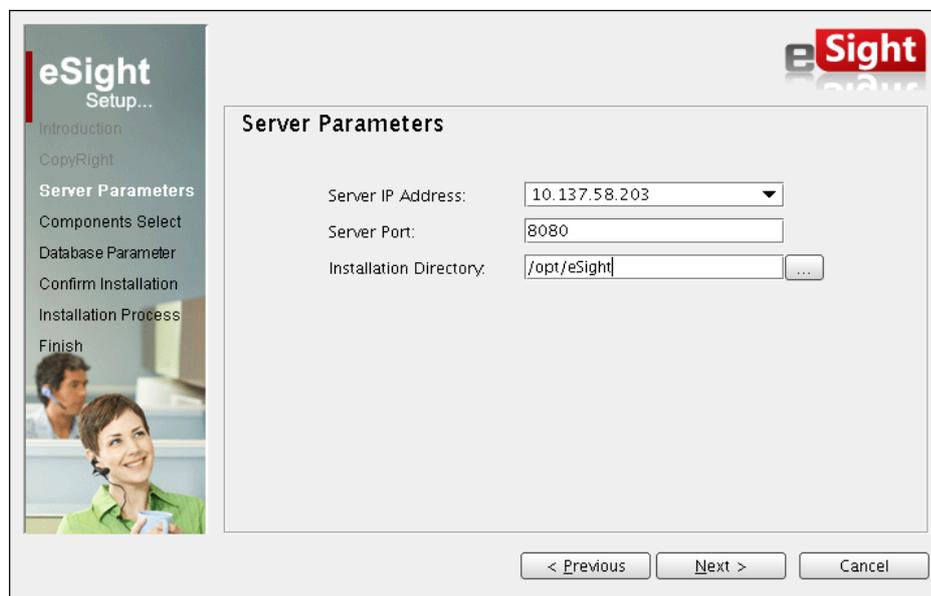
📖 **NOTE**

- **Server IP Address**: Default IP address of the eSight server host. If the server has multiple IP addresses, select a public IP address from the drop-down list box.
- **Port**: The default port number is **8080**. Change the value based on your site environment.
- **Installation Directory**: eSight server installation directory, which can be manually changed.

⚠ **CAUTION**

To ensure successful eSight server installation, verify that the eSight server installation directory is empty before the installation.

Step 5   Click **Next**.

The **Select Software Components** dialog box is displayed, as shown in **Figure 7-3**.

Figure 7-3 Select Software Components
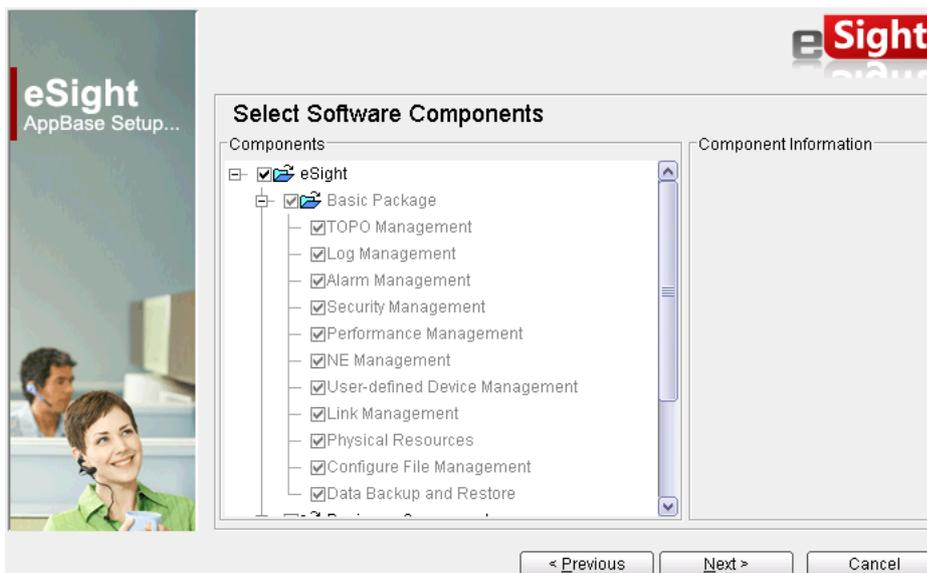
🕮 **NOTE**

- Components under **Basic Package** are dimmed by default, and must be installed.
- Select required components under **Business Component**. eSight components support incremental installation. If a component is not installed during the first eSight server installation, it can be installed during the next eSight server installation.
- To install the eSight server professional edition, select **Hierarchical OSS Manager**.

Step 6 Click **Next**.

The **Database Parameters** dialog box is displayed, as shown in **Figure 7-4**.

Figure 7-4 Database Parameters
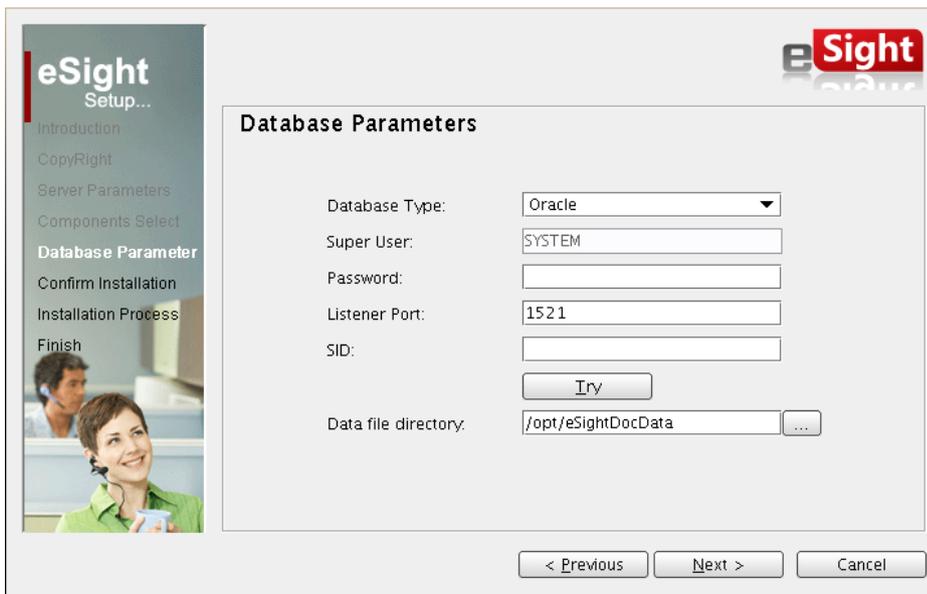
📖 **NOTE**

- **Super User**: Retain the default value **SYSTEM**.
- **Password**: Set it to the password of the super user specified during Oracle database installation.
- **Listener Port**: The default port number is **1521**. Change the value based on your site environment.
- **SID**: Set it to the instance name specified during Oracle database installation.
- **Data file directory**: Data file installation directory, which can be manually changed.

After setting the preceding parameters, click **Try**. If **Successful** is displayed, parameters are set correctly; otherwise, reset the parameters.

📖 **NOTE**

If you click **Try** and **Next**, the system automatically checks the current database charterer set. If the character set is not UTF-8, a message is displayed.

Step 7 Click **Next**.

The **Confirm Installation** dialog box is displayed.

Step 8 Verify the installation information, and click **Next**.

📖 **NOTE**

If the installation information is incorrect, click **Previous** to reset installation information.

Step 9 The system starts to install the eSight server. After about 5 minutes, the **Installation Completed** dialog box is displayed.

📖 **NOTE**

In the **Installation Completed** dialog box, **Start eSight immediately** and **Start backup server** are unselected by default. Keep the default settings.

Step 10 Click **Finish**. The eSight server installation is complete.

----End

7.5 Security Hardening

This topic describes how to harden the security of the operating system on the eSight server after the operating system, database, and eSight are installed.

7.5.1 Security Hardening Background

This topic describes the security hardening purpose and prerequisites.

Security Hardening Purpose

The eSight server has the following potential security risks:

- During the installation of the operating system, many services and ports are enabled by default. In this situation, the operating system is prone to malicious attacks.
- System file properties and environment variables have some defects, which increase system security risks.

The operating system can be hardened by using technologies to add, modify, or tailor system modules and components.

Security hardening removes system defects and security vulnerabilities and ensures secure and stable system running.

Security Hardening Prerequisites

- The operating system parameters have been set or modified.
- eSight has been installed or upgraded.

7.5.2 Obtaining Required Software

This topic describes how to obtain required software.

Obtain the MainAst installation package, install the MainAst on your computer, and use the MainAst to harden the security of the operating system.

⚠️ **CAUTION**

Do not install the MainAst on the eSight server.

Obtaining the MainAst Installation Package

Visit **http://enterprise.huawei.com/en/** to obtain the MainAst installation package **Breeze MainAst-1_1_16-win.exe**.

7.5.3 Hardening the Security of the Operating System

This topic describes how to use the MainAst to harden the security of the operating system.

7.5.3.1 Security Hardening Process

Figure 7-5 shows the security hardening process.

Figure 7-5 Security hardening process
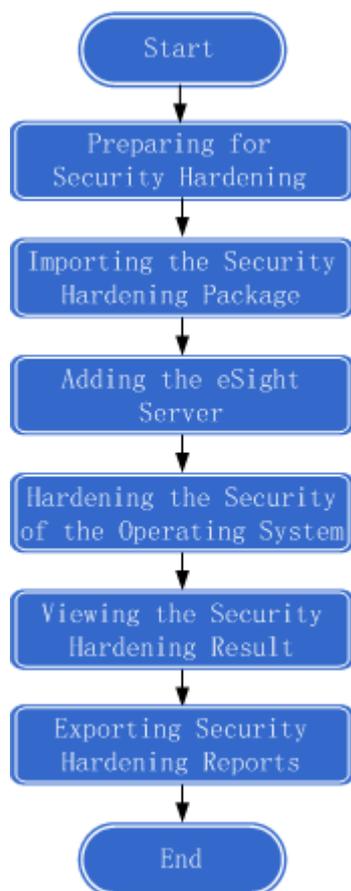
7.5.3.2 Preparing for Security Hardening

This topic describes how to prepare for security hardening.

Procedure

Step 1 Obtain the security hardening package of the operating system.

Visit **http://enterprise.huawei.com/en/** to obtain the security hardening package of the operating system **ESIGHT_SUSE11_PACKAGEV200R002C00.zip**.

----End

7.5.3.3 Importing the Security Hardening Package

This topic describes how to import the security hardening package into the MainAst before security hardening.

Procedure

Step 1 Double-click the MainAst icon on the desktop to start the MainAst. The MainAst login page is displayed.

Step 2 Enter the user name and password, and click **Login**.

The default user name and password are both **admin**.

The **Tip of the Day** dialog box is displayed at your first login, with information about software structure and usage. Set whether to display the dialog box at your later logins.

Step 3 Set parameters in the **Initial Setting** window.

When you close the **Tip of the Day** dialog box, the **Initial Setting** window is displayed.

1. Select products.

2. In the **Set Connection** area, enter the user name and password for logging in to **http://support.huawei.com/**.

   If you do not obtain the user name and password, contact Huawei technical support or register at **http://support.huawei.com/**.

3. In the **Office Setting** area, configure office information.

4. Click **OK**.

Step 4 Double-click the **iSecBox** icon on the **Toolkit** tab page.

Step 5 In the **Enter the toolbox for security hardening** dialog box that is displayed, enter **yes** or **YES** and click **OK**.

Step 6 Choose **Security Reinforcement** > **Manage Device Info** > **Import Package** on the left of the **iSecBox** page.

Step 7 In the **Select the Compressed File of the Service Type Package** dialog box that is displayed, select the security hardening package of the operating system, and click **Open** to import the package into the MainAst.

If the security hardening package is imported successfully, the system displays a message indicating import success.

Step 8 Click **OK** to finish importing the security hardening package of the operating system into the MainAst.

----End

7.5.3.4 Adding the eSight Server

This topic describes how to add the eSight server to the iSecBox and associate the security hardening package with the eSight server.

Prerequisites

The following information has been obtained:

● eSight server IP address

● User name and password of the Secure Shell (SSH) and Secure File Transfer Protocol (SFTP) protocols for security hardening

Procedure

Step 1 Choose **Security Reinforcement** > **Manage Device Info** > **Device Manager** on the left of the **iSecBox** page.

Step 2 Choose **Add Device** on the left of the **Device Manager** page.

Step 3 Set parameters on the **Add Device** page that is displayed, as shown in **Table 7-10**.

Table 7-10 Add Device page

Parameter	Setting
Group Name	Set this parameter based on your site scenario. If no option is available, click ![icon], and add a group in the **Add Group** dialog box that is displayed.
Device name	Set this parameter based on your site scenario. Device names must be unique in the MainAst.
Single/Dual	Set this parameter to **Single Host**.
Host type	Set this parameter to **SUSE**.
IP address	Set this parameter based on your site scenario.
Multihop	If connecting to a target host requires multihop, select **Multihop**, click **Setting**, and configure host information involved in multihop in the window that is displayed.

Step 4 On the **User Info** tab page, configure user information.

1. Click **Next**.

2. Configure user information on the **User Info** tab page, as shown in **Table 7-11**.

Table 7-11 Configuring user information

Parameter	Setting
User Name	Add the **root** and **oracle** users.
Password/ Key	Set this parameter to the password or key for logging in to the eSight server.
Protocol	Select **SSH** and **SFTP**, and set port numbers.
Switch User	● Select **oracle** for the **root** user. ● Ignore this parameter for the **oracle** user.

3. Click **Test** to test the connection between the MainAst and the eSight server.

   ● If the MainAst is connected to the eSight server, the account is in the **Connect success** state.

   ● If the MainAst is disconnected from the eSight server, the account is in the **Connect failed** state. Verify that the eSight server information and protocol information are correct and the eSight server is running properly.

4. Click **Next**.

Step 5 On the **Service Info** tab page, configure service information.

1. Click next to **Service Type**.

2. In the **Add service** dialog box that is displayed, select the security hardening package of the operating system.

3. Click **OK**.

Step 6 Click **Finish**.

Step 7 Click **OK** in the dialog box that is displayed.

----End

7.5.3.5 Hardening the Security of the Operating System

This topic describes how to harden the security of the operating system.

Procedure

Step 1 Choose **Security Reinforcement** on the left of the **iSecBox** page.

Step 2 On the **Device** tab page on the right, select the security hardening package of the operating system on the eSight server.

Step 3 Choose **Configure** > **Reinforcement Items**.

Step 4 In the **Reinforcement Items** window that is displayed, select subitems under **Uninstall**.

$$\triangle$$ **CAUTION**

- Items except **Uninstall** are selected by default. You are advised to retain the default settings.

- Select subitems under **Uninstall** based on your site scenario. Subitems selected here cannot be rolled back to the pre-hardened state.

- The graphical user interface (GUI) service of items other than **Uninstall** is unavailable after security hardening and cannot be rolled back. You must run the **xdm restart** command to start the GUI service.

Step 5 Click **OK**.

Step 6 Choose **Security Reinforcement** > **Reinforcement** > **Start Reinforce** on the left; or right-click the security hardening package of the operating system on the eSight server, and choose **Start Reinforce** from the shortcut menu.

The MainAst hardens the security of the operating system on the target host. When the progress reaches 100%, hardening the security of the operating system is complete.

----End

7.5.3.6 Viewing the Security Hardening Result

This topic describes how to view the security hardening result.

Procedure

Step 1 Choose **Security Reinforcement** on the left of the **iSecBox** page.

Step 2 Select the security hardening package on the device where security hardening has been performed, choose **Reinforcement Result** > **View Results** in the navigation tree; or right-click the security hardening package, and choose **View Results** from the shortcut menu.

Step 3 Click the **Summary Info** tab, and view security hardening summary.

Step 4 Click the **Detail Info** tab, and view details of each hardening item.

- ☑: indicates that the hardening result meets the hardening criteria.

- ☒: indicates that the hardening result does not meet the hardening criteria.

- NA: indicates that a hardening item is not involved in security hardening.

📖 **NOTE**

When **Reference**, **Result**, and **Message** contain much content, some information may be not displayed in the text box. Click 🔍 to view complete information.

----End

7.5.3.7 Exporting Security Hardening Reports

This topic describes how to export and view security hardening reports.

Procedure

Step 1 Choose **Security Reinforcement** on the left of the **iSecBox** page.

Step 2 Select the security hardening package on the device where security hardening has been performed, choose **Reinforcement Result** > **Generate Reports** in the navigation tree; or right-click the security hardening package, and choose **Generate Reports** from the shortcut menu.

Step 3 Select the path where security hardening report files are saved and click **OK**.

Step 4 Click **OK** to export security hardening reports.

----End

Follow-up Procedure

1. Access the **test** folder on the computer where you harden the security of the operating system.
2. Open **index.html** in the **test** folder to view security hardening reports.

7.5.4 Rolling Back the Operating System to the Pre-hardened State

This topic describes how to roll back the operating system to the pre-hardened state. After the operating system is rolled back to the pre-hardened state, system parameters restore to default settings before security hardening, but the selected subitems under **Uninstall** cannot be rolled back to the pre-hardened state.

Context

Before reinstalling or upgrading eSight, roll back the operating system of the eSight server to the pre-hardened state. Otherwise, reinstalling or upgrading eSight may fail.

Procedure

Step 1 Log in to the operating system as the **oracle** user.

Step 2 Switch to the **root** user.

> **su - root**

Enter the password of the **root** user.

Step 3 Modify the **/etc/ssh/ssh_config** file.

vi /etc/ssh/ssh_config

Set **PasswordAuthentication** to **yes**.

PasswordAuthentication yes

Step 4 Modify the **/etc/ssh/sshd_config** file.

vi /etc/ssh/sshd_config

● Set **PermitRootLogin** to **yes**.

● Set **PasswordAuthentication** to **yes**.

PermitRootLogin yes

PasswordAuthentication yes

Step 5 Restart the sshd.

service sshd restart

Step 6 Before using the MainAst to roll back the operating system to the pre-hardened state, perform the following operations:

1. Double-click the MainAst icon on the desktop to start the MainAst. The MainAst login page is displayed.

2. Enter the user name and password, and click **Login**.

   The default user name and password are both **admin**.

3. Double-click the **iSecBox** icon on the **Toolkit** tab page.

4. In the **Enter the toolbox for security hardening** dialog box that is displayed, enter **yes** or **YES** and click **OK**. The **iSecBox** page is displayed.

5. Roll back the operating system to the pre-hardened state.

   On the **iSecBox** page, select the service package on the eSight server and choose **Security Reinforcement** > **Reinforcement** > **Roll Back** to roll back the operating system to the pre-hardened state.

📖 **NOTE**

If the value of **state** is **Rollback success**, the operating system is rolled back to the pre-hardened state.

----End

7.6 Logging In to eSight

This topic describes how to log in to eSight from a client.

Prerequisites

The eSight server installation has been completed.

The IP addresses of eSight and eSight server have been synchronized. If IP addresses are not synchronized, synchronize the eSight IP address with the eSight server IP address. For details, see **14.5.1 Synchronizing the eSight Server IP Address to eSight**.

The server IP address monitored by the Oracle database and eSight server IP address have been synchronized. For details, see **14.4.1 How to Check the Server IP Address Monitored by the Oracle Database**.

Procedure

Step 1 Check whether the eSight service has started. If the eSight service has not started, perform the following steps to start it:

\# **cd /opt/eSight/AppBase/bin**

\# **./run.sh**

If **Loading kernel** is displayed, the eSight service has been started. Otherwise, wait until the eSight service starts. When the status of every process is **started** and **System start completely** is displayed, the eSight service has been started.

Step 2 Log in to the eSight server from the client.

- Log in to the eSight server from the Window Internet Explorer 8.

    1. Open the Internet Explorer.

    2. Choose **Tools** from the main menu.

    3. Select **Compatibility View Settings**.

    4. In the **Compatibility View Settings** dialog box, clear the **Display intranet sites in Compatibility View** and **Display all websites in Compatibility View** check boxes.

    5. Click **Close**.

    6. Choose **Tools** > **Internet Options** > **Security** > **Custom Level** from the main menu.

    7. Locate the **Downloads** node. In **Automatic prompting for file downloads**, select **Enable**.

    8. Click **OK**.

    9. In the address box, enter **http://*eSight server IP address*:*port number***, and press **Enter**.

⚠ **CAUTION**

If the server has multiple IP addresses, enter the IP address selected during eSight server installation in the address box. If another IP address is entered, access to the server fail.

If you enter **localhost** or **127.0.0.1** as the eSight server IP address, the security certificate cannot be installed.

10. **Optional:**

If you log in to the eSight server for the first time, the message "There is a problem with this website's security certificate." is displayed. Click **Continue to this website (not recommended).**, as shown in **Figure 7-6**.

Figure 7-6 There is a problem with this website's security certificate
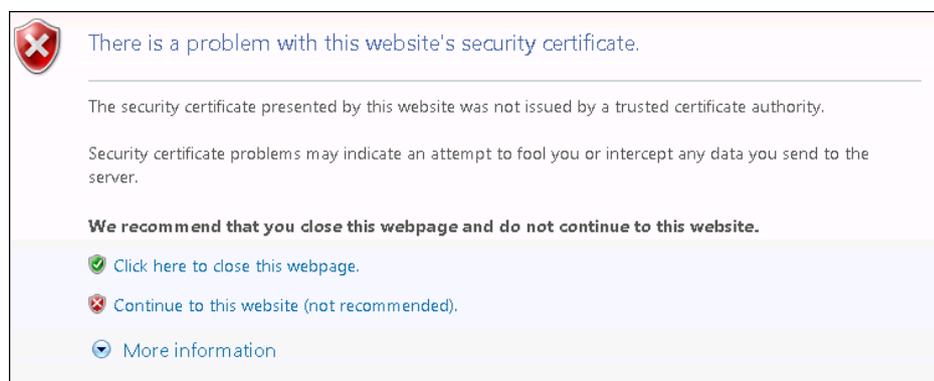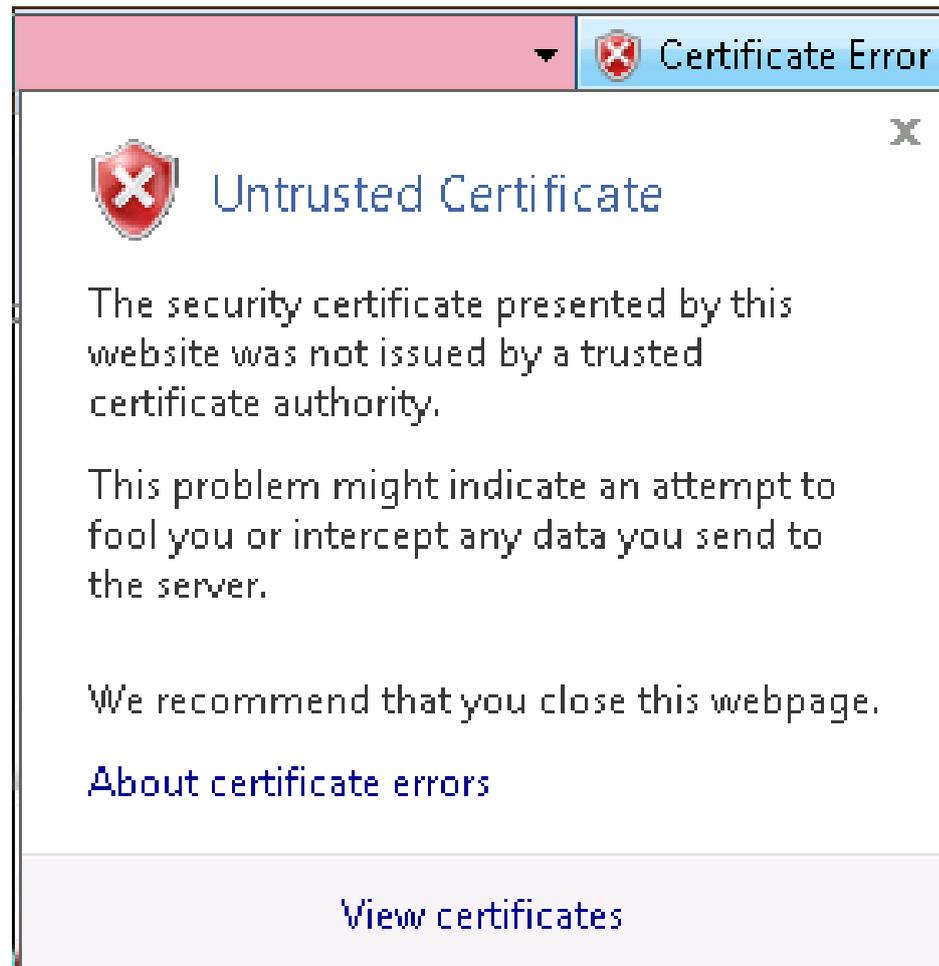

11. **Optional:**

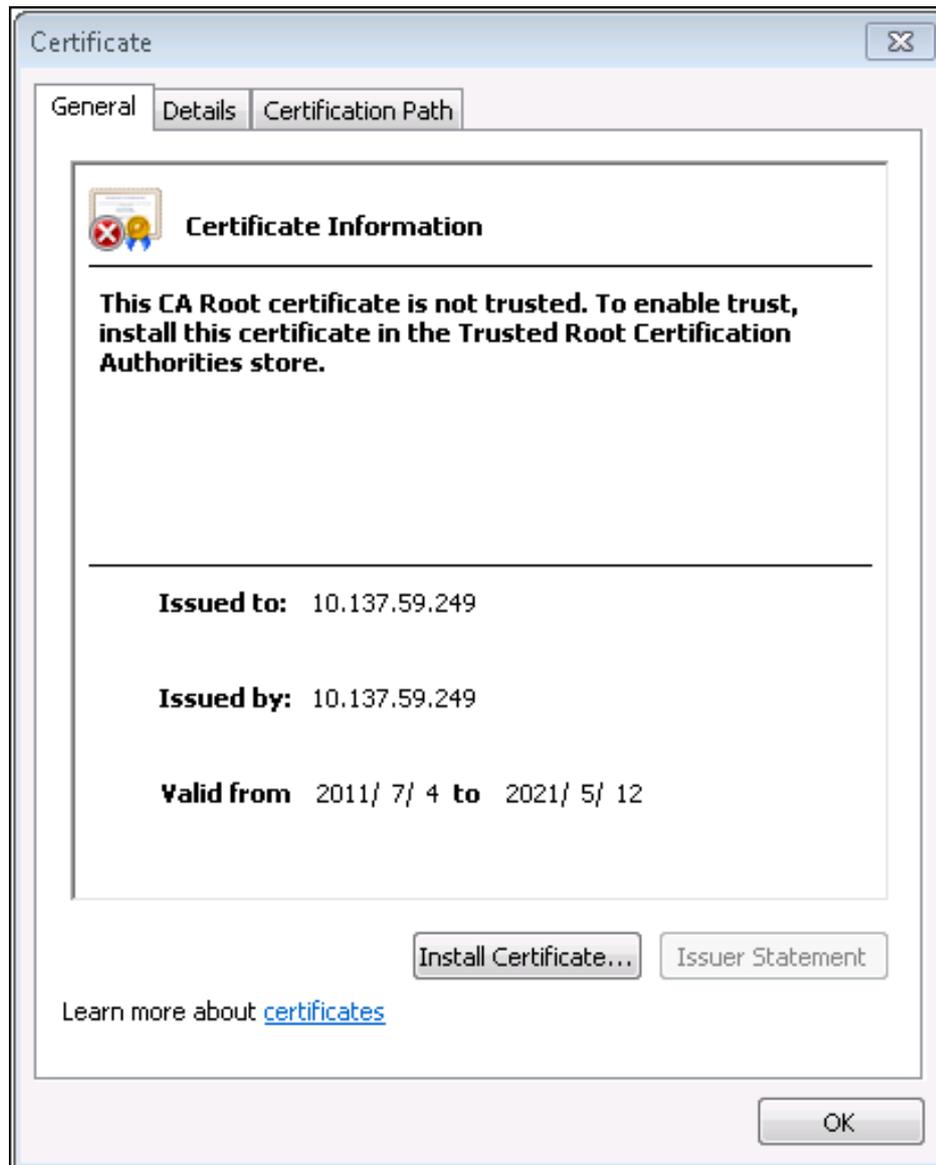On the left of the address bar, click **Certificate Error**.

12. In the **Untrusted Certificate** dialog box, click **View certificates**, as shown in **Figure 7-7**.
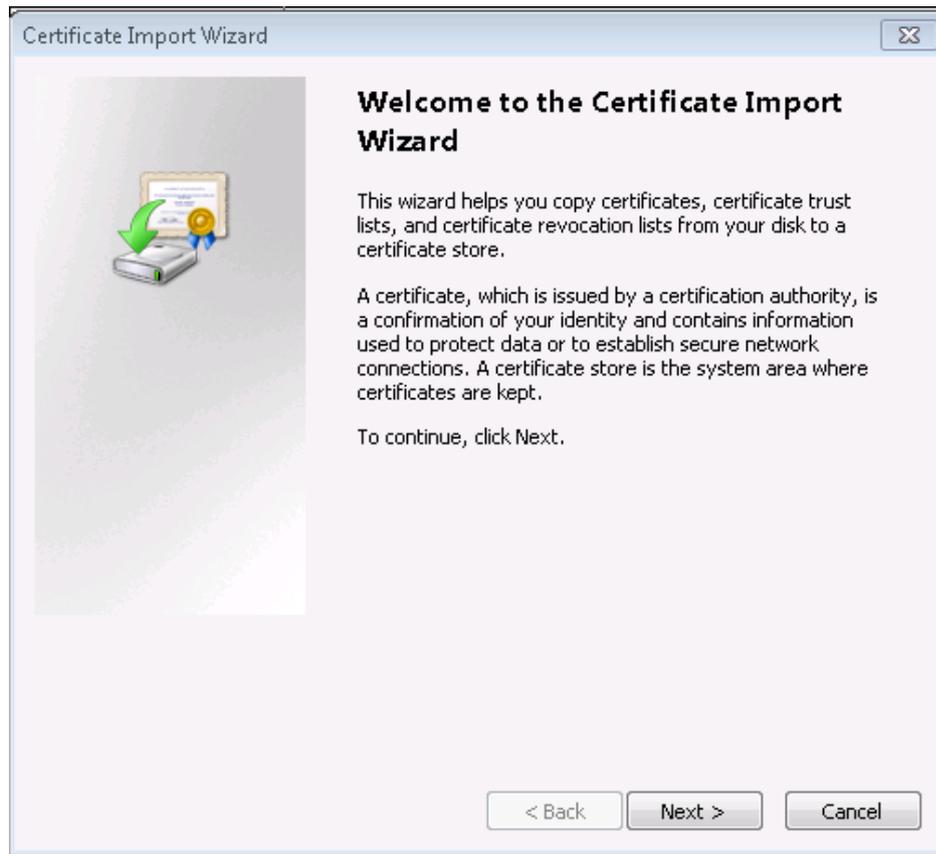
Figure 7-7 Untrusted Certificate

13. In the **Certificate** dialog box, select the **General** tab and click **Install Certificate...**, as shown in **Figure 7-8**.
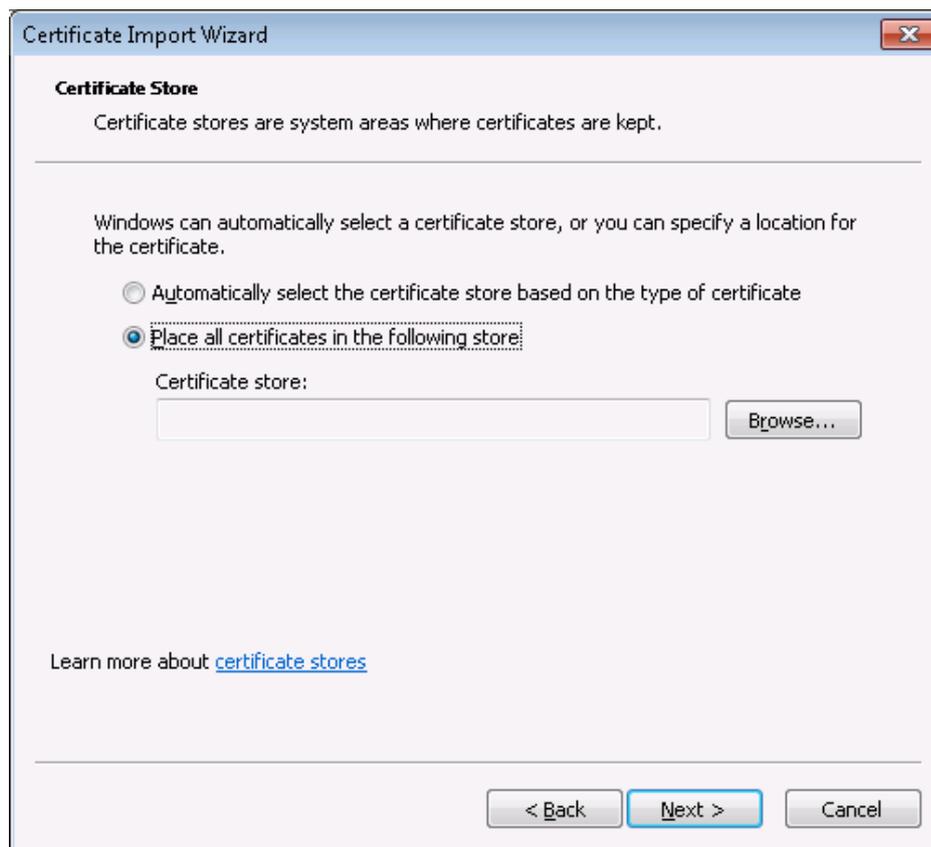
Figure 7-8 Certificate

14. In the **Certificate Import Wizard** dialog box, click **Next**, as shown in **Figure 7-9**.

Figure 7-9 Certificate Import Wizard

15. In the **Certificate Store** dialog box, choose **Place all certificates in the following store**, as shown in **Figure 7-10**.

Figure 7-10 Certificate Store

16. Click **Browse**, choose **Trusted Root Certification Authorities**, as shown in **Figure 7-11**.

Figure 7-11 Select Certificate Store

17. **Optional:** Click **OK**.

18. **Optional:** Click **Next**.

19. **Optional:** Click **Finish**.

20. **Optional:** In the **Security Warning** dialog box, click **Yes**.

21. **Optional:** Click **OK** to complete certificate import.

22. **Optional:** Restart the Window Internet Explorer 8, enter **http://***eSight server IP address***:***port number* in the address box, and press **Enter**.

23. Enter the user name **admin** and the default password **Changeme123**, and click **Log In**.

● Log in to the eSight server from the Firefox 3.6.

1. In the address box, enter **http://***eSight server IP address***:***port number*, and press **Enter**.

2. **Optional:** If you log in to the eSight server for the first time, the message "This Connection is Untrusted" is displayed. Click **I Understand the Risks**.

3. **Optional:** Click **Add Exception...**.

4. **Optional:** Select **Permanently store this exception** and click **Confirm Security Exception**.

5. Enter the user name **admin** and the default password **Changeme123**, and click **Log In**.

----End

7.7 Registering Software

This topic describes how to apply for and load an eSight license.

# 7.7.1 Applying for an eSight License

This topic describes how to apply for an eSight license. A license file is an authentication file that a special encryption tool generates based on the information about the contract that a user signs with Huawei and the information about the server where the eSight is installed. After obtaining a license file, load it to eSight manually to obtain permission to use eSight.

Procedure

Step 1 Obtain the contract information.

A Huawei-authorized electronic license certificate is delivered to a customer at the same time when Huawei delivers eSight to the customer. The customer can obtain the contract number, product name, and product model from the license certificate, as shown in **Figure 7-12**.
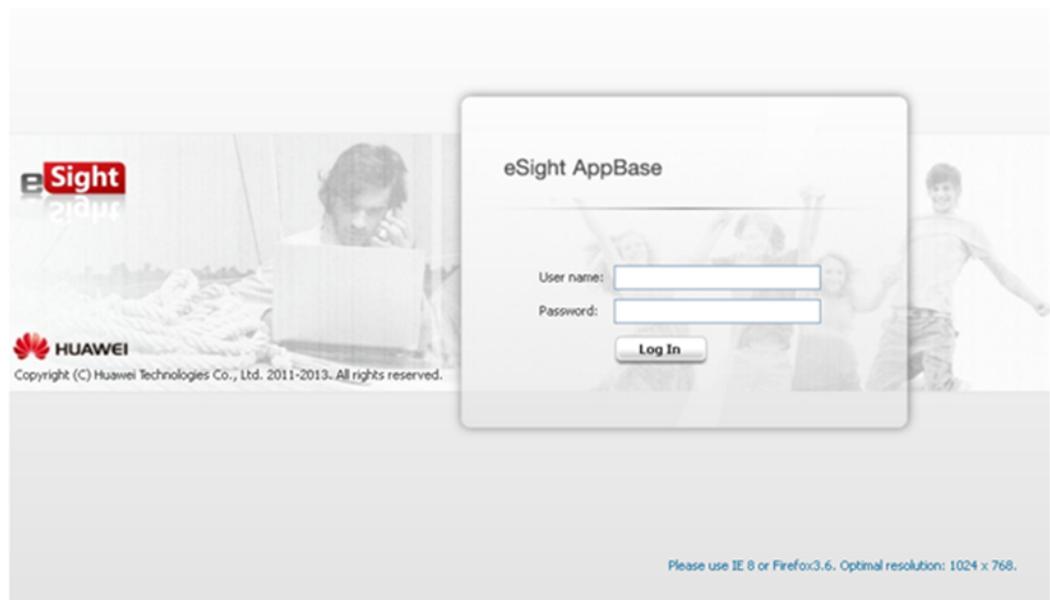
Figure 7-12 eSight license certificate
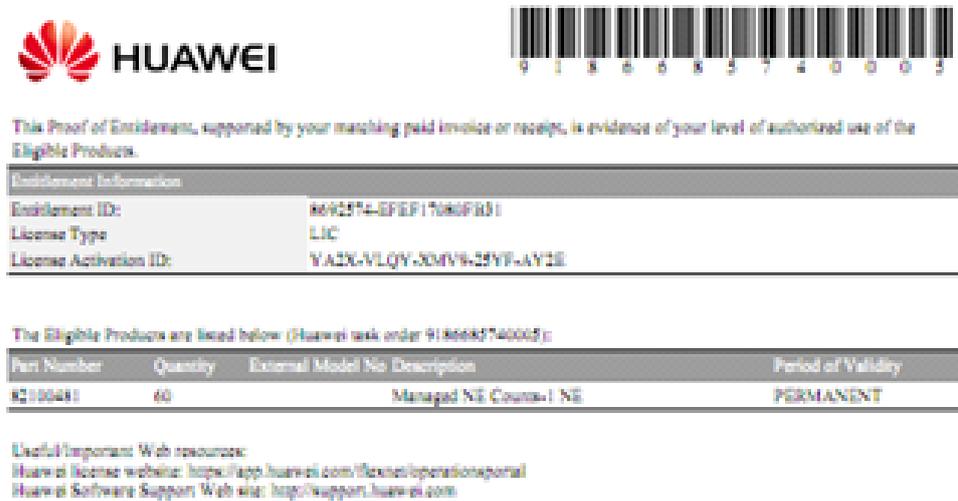
Step 2 Obtain the server equipment serial number (ESN).

An ESN is a string that uniquely identifies a device. It is used to ensure that the license is granted to the specified device.

1. Access the eSight login page, and log in to eSight as an administrator, as shown in **Figure 7-13**.

Figure 7-13 eSight login page

2. When logged in to eSight as an administrator, choose **System** > **License Management**.

3. Click **Obtain ESN**.

4. Generate an ESN.

    ● Method one: Select the network adapter on the eSight server, and click **Generate ESN**.

      eSight automatically obtains the network adapter information on the eSight server. Record ESN information.

    ● Method two: Enter the Media Access Control (MAC) address of the eSight server, and click **Generate ESN**.

    📖 **NOTE**

      If the server is equipped with multiple network adapters, record the ESNs for all the network adapters.

Step 3 Apply for an eSight license.

1. Visit **https://app.huawei.com/flexnet/operationsportal**. Click **With Activation Id:** on the left to switch the login mode, and log in to the enterprise service FlexNet Operations System (FNO) with the activation ID in the license certificate to activate and download the license.

    📖 **NOTE**

    You can also click the link in the license certificate email to log in to the enterprise service FNO and activate and download the license.

2. On the **manage entitlements** page, select the required activation ID, and click **Activate**.

    📖 **NOTE**

    If the remaining number of times for activating the activation ID is **0**, the activation ID cannot be activated.

3. Select the required activation ID, enter the ESN, and click **Next**.

    📖 **NOTE**

    In the Datacom Enterprise Network Product Line, an activation ID maps an ESN. Here you are required to enter an ESN, not an ESN range.

4. Click **Submit** to generate a license file.

5. Select the generated license file, and click **Download** to download the license file.

6. In the dialog box that is displayed, click **Save** to save the license file to your computer.

    ----End

7.7.2 Loading an eSight License

This topic describes how to load an eSight license.

Prerequisites

A correct eSight license file must have been obtained.

📖 **NOTE**

The license file name cannot contain any space. If the name contains a space, uploading or updating the license file will fail. If the name of the obtained license file contains spaces, delete the spaces or change them to _ before using the license file.

Procedure

Step 1 Access the eSight login page, and log in to eSight as an administrator, as shown in **Figure 7-14**.

Figure 7-14 eSight login page

Step 2 Choose **System** > **License Management**, and click **Import License**, as shown in **Figure 7-15**.

Figure 7-15 License Management page

Step 3 Select a license file and click **Import**, as shown in **Figure 7-16**.

Figure 7-16 Import License page
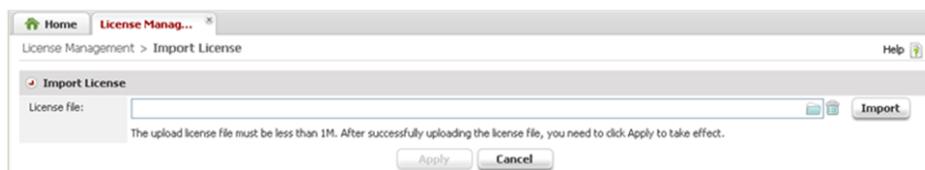
Step 4 When the license file is imported, preview the content of the license file and click **Apply**.

To finish loading the license, re-log in to eSight.

----End

Follow-up Procedure

After the license file is loaded, log in to the eSight as an administrator. Choose **System** > **License Management**, view the license expiration date, and check the license items and resource items.

7.8 Uninstalling eSight

This topic describes how to uninstall eSight.

Prerequisites

Before reinstalling or upgrading eSight, roll back the operating system of the eSight server to the pre-hardened state. Otherwise, reinstalling or upgrading eSight may fail. For details, see **7.5.4 Rolling Back the Operating System to the Pre-hardened State**.

Context

When eSight is uninstalled, the eSight database is uninstalled. To save the eSight database data, back up files in the **backupdata\history** directory that is in the same directory as the eSight installation directory in advance.

Procedure

Step 1 Stop eSight.

cd /opt/eSight/AppBase/bin

./stop.sh

Step 2 Stop the maintenance tool.

cd /opt/eSight/mttools/bin

./stop.sh

Step 3 Start the eSight uninstallation program.

cd /opt/eSight/uninstall

./uninstall.sh

Step 4 In the dialog box that is displayed, select the component to uninstall, and click **Next**.

Step 5 In the **Confirm** dialog box that is displayed, click **Yes**.

Step 6 In the **Uninstallation Completed** dialog box that is displayed, click **Finish**.

----End

Follow-up Procedure

1. Verify that the eSight shortcut icon on the desktop has been deleted.
2. Verify that the eSight installation directory has been deleted.

8 Installing MPLS VPN Components

About This Chapter

This topic describes how to install MPLS VPN components.

8.1 Installation Process

- Preinstallation scheme: The operating system, eSight AppBase, and eSight components have been preinstalled on the eSight server delivered to the site. For details about the default information configured before the delivery, see **6.2.2 Installation Plan**.

- Full installation scheme: If you use a self-purchased server or AppBase or eSight components need to be reinstalled, see the installation process described in this document.

Figure 8-1 shows the eSight component installation process.

Figure 8-1 eSight component installation process
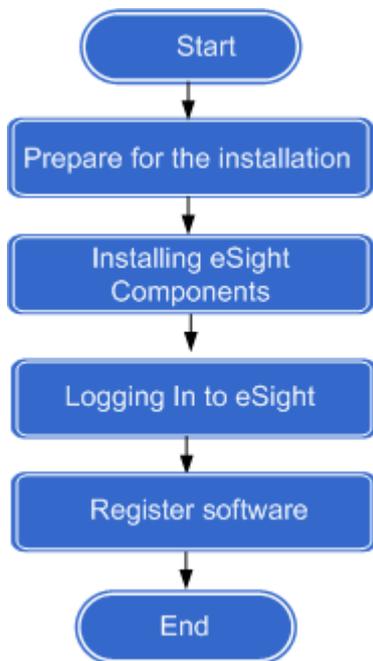
Table 8-1 describes the process of installing eSight components in full installation mode.

Table 8-1 Process of installing eSight components in full installation mode

No.	Installation Description	Reference
1	Prepare for the installation, including understanding the software and hardware configuration requirements and obtaining required software.	**8.2 Preparing for the Installation**
2	Install eSight components.	**8.3 Installing eSight Components**
3	log in to eSight.	**8.4 Logging In to eSight**
4	Apply for and load an eSight license file.	**8.5 Registering Software**

8.2 Preparing for the Installation

This topic describes how to prepare for the installation, including understanding the software and hardware configuration requirements and obtaining required software.

8.2.1 Configuration Requirements

This topic describes the eSight component requirements on server configurations.

eSight components can be installed only on AppBase of the standard or professional edition. eSight component requirements on server configurations are the same as those of AppBase. **Table 8-2** lists eSight component configuration requirements.

Table 8-2 eSight component configuration requirements

AppBase Edition	Configuration Requirements
Standard edition (Windows)	**5.2.1 Configuration Requirements**
Professional edition (Windows)	**6.2.1 Configuration Requirements**
Professional edition (SUSE Linux)	**7.2.1 Configuration Requirements**

8.2.2 Obtaining Required Software

This topic describes how to obtain software required for installing eSight components.

eSight can be installed in the following ways:

- Using CD-ROMs: Required CD-ROMs must be obtained.
- Using installation packages: Required installation packages must be obtained.

Using CD-ROMs

Obtain the following CD-ROMs listed in Table 8-3:

Table 8-3 CD-ROM list

Software	CD-ROM
eSight MPLS VPN component installation software	eSight MPLS VPN management component

Using Installation Packages

Method of obtaining installation packages:

Go to the enterprise network website **http://enterprise.huawei.com/cn/**.

Choose **SUPPORT** > **SoftWare Download** > **Network Management** > **eSight** to download the installation package.

Obtain the following installation packages listed in Table 8-4:

📖 **NOTE**

> In an installation package, *version* indicates the detailed version number of eSight.

Table 8-4 Installation package list

Software	Operating System	Name	Description
eSight MPLS VPN component installation software	Windows	eSight_MPLS_VPN_*version*_Win.zip	This software is mandatory and is used to install eSight components on the Windows operating system.
	SUSE Linux	eSight_MPLS_VPN_*version*_SUSE.zip	This software is mandatory and is used to install eSight components on the SUSE Linux operating system.

8.3 Installing eSight Components

This topic describes how to install eSight components.

Prerequisites

- The operating system has been installed on an eSight server host.
- AppBase has been installed on the eSight server host.
- Installation software has been obtained. For details, see **8.2.2 Obtaining Required Software**.
- The network adapter is enabled.
- The eSight server has assigned a static IP address.
- eSight has stopped.

Context

eSight components can be installed only on AppBase of the standard or professional edition.

⚠ **CAUTION**

The eSight installation files must be stored on the local computer.

Procedure

Step 1 Log in to the operating system as the **administrator** user.

Step 2 Double-click the **setup.exe** file to start eSight component installation.

Windows operating system：

- Method one: Use CD-ROMs.

    1. Put the CD-ROM into the CD-ROM drive, and double-click the **setup** file in the CD-ROM root directory.

    2. The **Select Language** dialog box is displayed.

- Method two: Use installation packages.

    1. Decompress all installation packages to a same directory. Take WinRAR files as an example. Select all required packages, right-click, and choose **Extract Here** from the shortcut menu.

    ⚠ **CAUTION**

    To ensure successful eSight server installation, verify that all installation path names (installation package path and eSight installation path) contain only the following characters: letters, digits, and underscores (_).

    2. Double-click the **setup** file in the installation package directory.

    3. The **Select Language** dialog box is displayed.

Linux operating system：

- Method one: Use a CD-ROM.

    1. Insert the CD-ROM into the CD-ROM drive, and run the following commands in the CD-ROM root directory:
       ```
       # cd /opt/install
       # chmod u+x setup.sh
       # ./setup.sh
       ```

    2. The **Select Language** dialog box is displayed.

- Method two: Use installation packages.

    1. Decompress all installation packages to a same directory. Use WinRAR files as an example. Select all required packages, right-click, and choose **Extract Here** from the shortcut menu.

    ⚠ **CAUTION**

    To ensure successful eSight server installation, verify that all installation path names (installation package path and eSight installation path) contain only the following characters: letters, digits, underscores (_), and space characters.

    2. Run the following commands in the installation package directory:
       ```
       # cd /opt/install/Directory names after decompression
       ```

```
# chmod u+x setup.sh
# ./setup.sh
```

3. The **Select Language** dialog box is displayed.

Step 3 Click **Yes**.

The **Introduction** dialog box is displayed.

📖 **NOTE**

> The system automatically checks whether the current environment meets requirements for installing eSight software. If the current environment does not meet the requirements, the associated message is displayed.
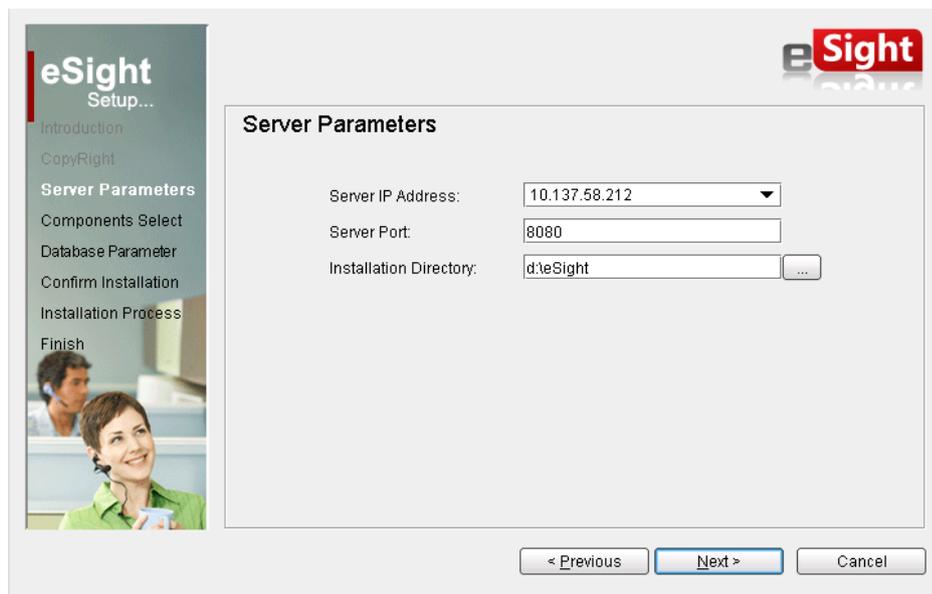
Step 4 Click **Next**.

The **Copyright Notice** dialog box is displayed.

Step 5 Select **I accept these terms**, and click **Next**.

The **Set Installation Parameters** dialog box is displayed, as shown in **Figure 8-2**.

Figure 8-2 Set Installation Parameters

📖 **NOTE**

- **Server IP Address**: Default IP address of the eSight server host. Do not change the IP address.

- **Port**: The default port number is **8080**. If the port is in use, change it to another port number.

- **Installation Directory**: eSight server installation directory, which can be manually changed.


⚠️ **CAUTION**

To ensure successful eSight server installation, verify that all installation path names (installation package path and eSight installation path) contain only the following characters: letters, digits, and underscores (_).

Step 6 Click **Next**.

The **Select Software Components To Be Installed** dialog box is displayed, as shown in **Figure 8-3**.

Figure 8-3 Select Software Components To Be Installed
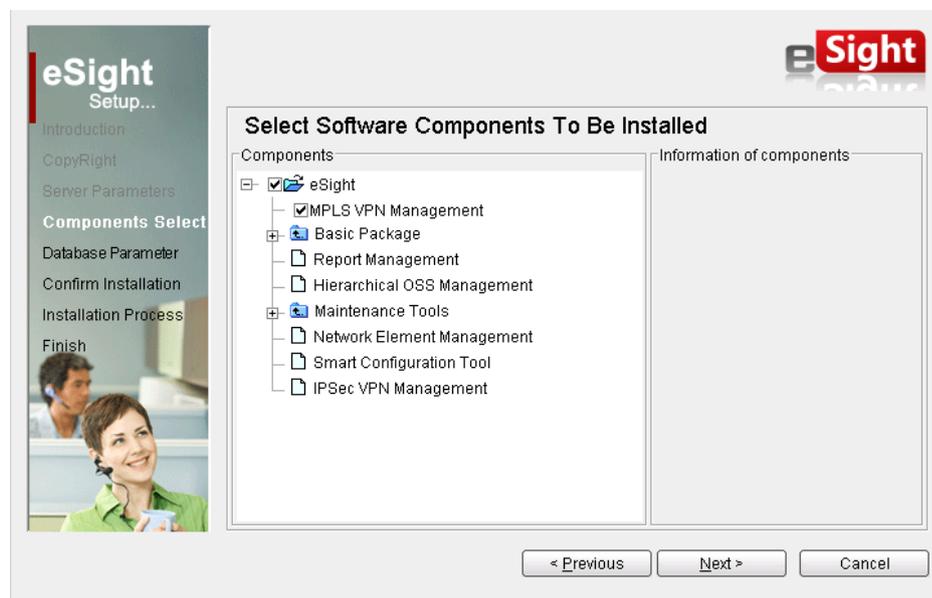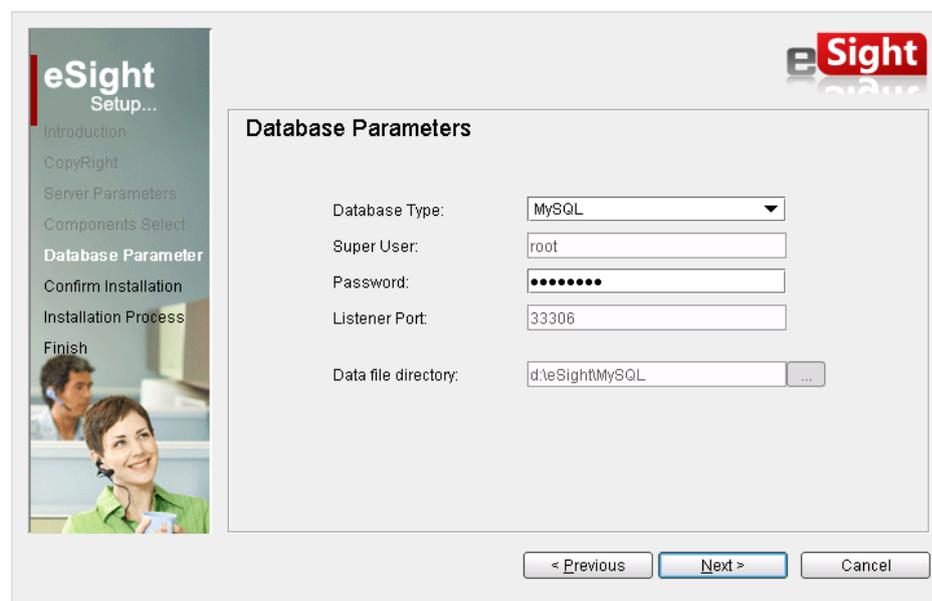

◫ **NOTE**

Components under **Basic Package** are dimmed by default, and must be installed.

Step 7 Click **Next**.

The **Database Parameters** dialog box is displayed, as shown in **Figure 8-4**. Windows supports MySQL and SQL server installation, and Linux supports Oracle installation.

Figure 8-4 Database Parameters

> **NOTE**

  In incremental installation mode, the password is dimmed. You do not need to enter the password.

Step 8 Click **Next**.

The **Confirm Installation** dialog box is displayed.

Step 9 Verify the installation information, and click **Next**.

> **NOTE**

  If the installation information is incorrect, click **Previous** to reset installation information.

Step 10 When eSight components are installed, the **Installation Completed** dialog box is displayed.

> **NOTE**

  In the **Installation Completed** dialog box, **Start eSight immediately** and **Start backup server** are unselected by default. Retain the default settings.

Step 11 Click **Finish**.

----End

8.4 Logging In to eSight

This topic describes how to log in to eSight.

eSight components can be installed only on AppBase of the standard or professional edition. **Table 8-5** describes the procedures for logging in to the eSight server after eSight components are installed.

Table 8-5 Procedures for logging in to the eSight server

AppBase Edition	Reference
Standard edition (Windows)	**5.6 Logging In to eSight**
Professional edition (Windows)	**6.6 Logging In to eSight**
Professional edition (SUSE Linux)	**7.6 Logging In to eSight**

8.5 Registering Software

This topic describes how to apply for and load an eSight license.

8.5.1 Applying for an eSight License

This topic describes how to apply for an eSight license. A license file is an authentication file that a special encryption tool generates based on the information about the contract that a user signs with Huawei and the information about the server where the eSight is installed. After obtaining a license file, load it to eSight manually to obtain permission to use eSight.

Procedure

Step 1 Obtain the contract information.

A Huawei-authorized electronic license certificate is delivered to a customer at the same time when Huawei delivers eSight to the customer. The customer can obtain the contract number, product name, and product model from the license certificate, as shown in **Figure 8-5**.
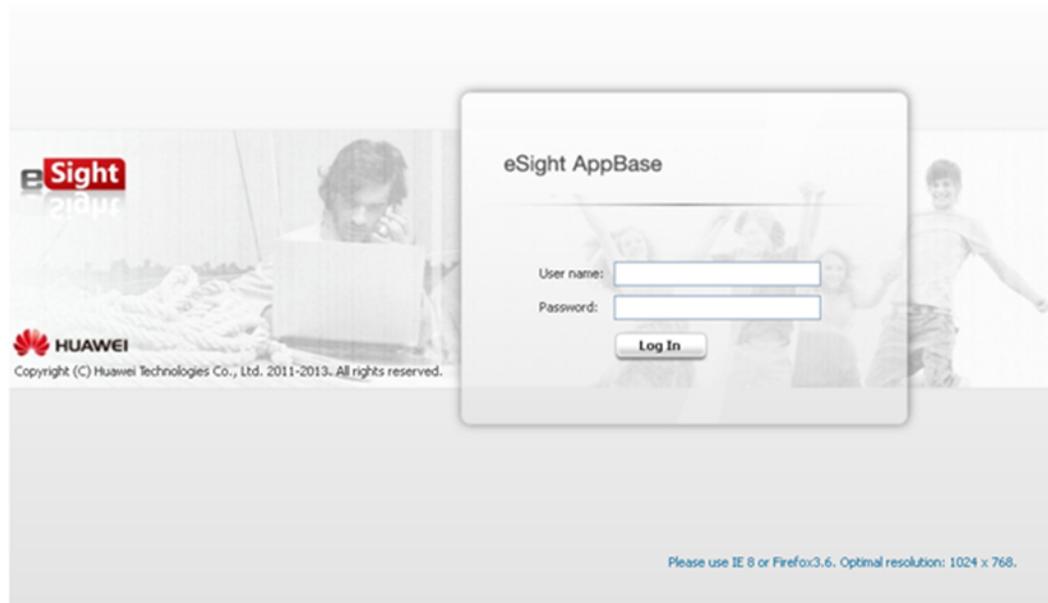
Figure 8-5 eSight license certificate

Step 2 Obtain the server equipment serial number (ESN).

An ESN is a string that uniquely identifies a device. It is used to ensure that the license is granted to the specified device.

1. Access the eSight login page, and log in to eSight as an administrator, as shown in **Figure 8-6**.

Figure 8-6 eSight login page

2. When logged in to eSight as an administrator, choose **System** > **License Management**.

3. Click **Obtain ESN**.

4. Generate an ESN.

   ● Method one: Select the network adapter on the eSight server, and click **Generate ESN**.

   eSight automatically obtains the network adapter information on the eSight server. Record ESN information.

   ● Method two: Enter the Media Access Control (MAC) address of the eSight server, and click **Generate ESN**.

   📖 **NOTE**

   If the server is equipped with multiple network adapters, record the ESNs for all the network adapters.

Step 3 Apply for an eSight license.

1. Visit **https://app.huawei.com/flexnet/operationsportal**. Click **With Activation Id:** on the left to switch the login mode, and log in to the enterprise service FlexNet Operations System (FNO) with the activation ID in the license certificate to activate and download the license.

   📖 **NOTE**

   You can also click the link in the license certificate email to log in to the enterprise service FNO and activate and download the license.

2. On the **manage entitlements** page, select the required activation ID, and click **Activate**.

   📖 **NOTE**

   If the remaining number of times for activating the activation ID is **0**, the activation ID cannot be activated.

3. Select the required activation ID, enter the ESN, and click **Next**.

📖 **NOTE**

> In the Datacom Enterprise Network Product Line, an activation ID maps an ESN. Here you are required to enter an ESN, not an ESN range.

4. Click **Submit** to generate a license file.

5. Select the generated license file, and click **Download** to download the license file.

6. In the dialog box that is displayed, click **Save** to save the license file to your computer.

----End

8.5.2 Loading an eSight License File

This topic describes how to load an eSight license.

Prerequisites

A correct eSight license file must have been obtained.

📖 **NOTE**

> The license file name cannot contain any space. If the name contains a space, uploading or updating the license file will fail. If the name of the obtained license file contains spaces, delete the spaces or change them to _ before using the license file.
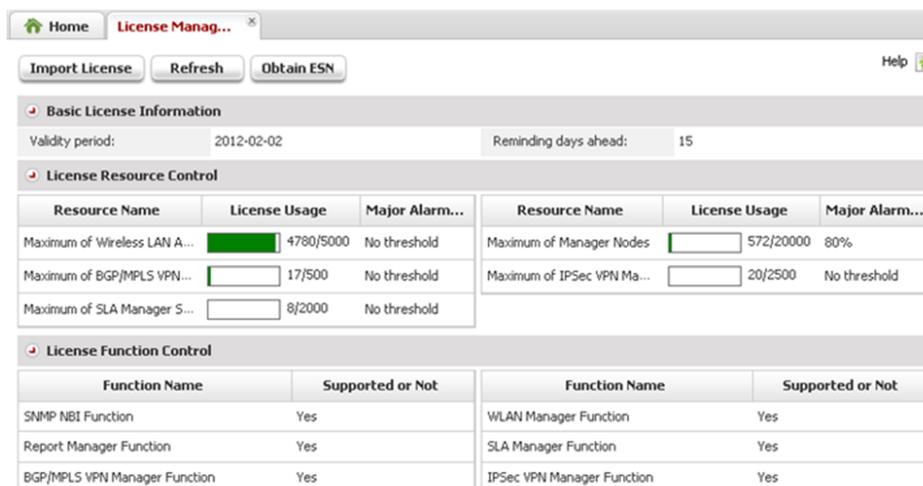
Procedure

Step 1 Access the eSight login page, and log in to eSight as an administrator, as shown in **Figure 8-7**.
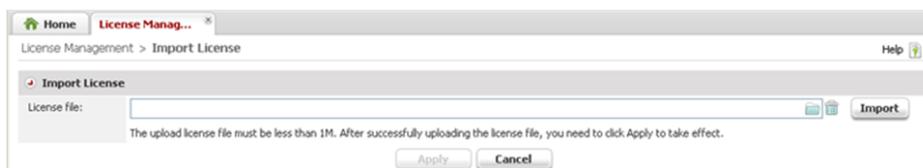
Figure 8-7 eSight login page

Step 2 Choose **System** > **License Management**, and click **Import License**, as shown in **Figure 8-8**.

Figure 8-8 License Management page

Step 3 Select a license file and click **Import**, as shown in **Figure 8-9**.

Figure 8-9 Import License page

Step 4 When the license file is imported, preview the content of the license file and click **Apply**.

To finish loading the license, re-log in to eSight.

----End

Follow-up Procedure

After the license file is loaded, log in to the eSight as an administrator. Choose **System** > **License Management**, view the license expiration date, and check the license items and resource items.

8.6 Uninstalling eSight Components

This topic describes how to uninstall eSight components.

eSight components can only be uninstalled together with AppBase. The procedure for uninstalling eSight components is the same as that for uninstalling AppBase. **Table 8-6** lists the procedures for uninstalling eSight components for AppBases of different editions.

Table 8-6 Procedures for uninstalling eSight components

| AppBase Edition	Reference
Standard edition (Windows)	**5.8 Uninstalling eSight**
Professional edition (Windows)	**6.8 Uninstalling eSight**
Professional edition (SUSE Linux)	**7.8 Uninstalling eSight**

9 Installing WLAN Components

About This Chapter

This topic describes how to install WLAN components.

9.1 Installation Process

- Preinstallation scheme: The operating system, eSight AppBase, and eSight components have been preinstalled on the eSight server delivered to the site. For details about the default information configured before the delivery, see **6.2.2 Installation Plan**.

- Full installation scheme: If you use a self-purchased server or AppBase or eSight components need to be reinstalled, see the installation process described in this document.

Figure 9-1 shows the eSight component installation process.

Figure 9-1 eSight component installation process
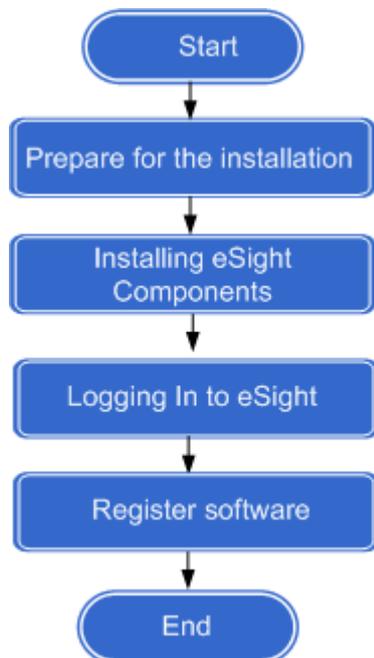
Table 9-1 describes the process of installing eSight components in full installation mode.

Table 9-1 Process of installing eSight components

No.	Installation Description	Reference
1	Prepare for the installation, including understanding the software and hardware configuration requirements and obtaining required software.	**9.2 Preparing for the Installation**
2	Install eSight components.	**9.3 Installing eSight Components**
3	log in to eSight.	**9.4 Logging In to eSight**
4	Apply for and load an eSight license file.	**9.5 Registering Software**

9.2 Preparing for the Installation

This topic describes how to prepare for the installation, including understanding the software and hardware configuration requirements and obtaining required software.

9.2.1 Configuration Requirements

This topic describes the eSight component requirements on server configurations.

eSight components can be installed only on AppBase of the standard or professional edition. eSight component requirements on server configurations are the same as those of AppBase. **Table 9-2** lists eSight component configuration requirements.

Table 9-2 eSight component configuration requirements

AppBase Edition	Configuration Requirements
Standard edition (Windows)	**5.2.1 Configuration Requirements**
Professional edition (Windows)	**6.2.1 Configuration Requirements**
Professional edition (SUSE Linux)	**7.2.1 Configuration Requirements**

9.2.2 Obtaining Required Software

This topic describes how to obtain software required for installing eSight components.

eSight can be installed in the following ways:

- Using CD-ROMs: Required CD-ROMs must be obtained.
- Using installation packages: Required installation packages must be obtained.

Using CD-ROMs

Obtain the following CD-ROMs listed in Table 9-3:

Table 9-3 CD-ROM list

Software	CD-ROM
eSight WLAN component installation software	eSight WLAN Manager

Using Installation Packages

Method of obtaining installation packages:

Go to the enterprise network website **http://enterprise.huawei.com/cn/**.

Choose **SUPPORT** > **SoftWare Download** > **Network Management** > **eSight** to download the installation package.

Obtain the following installation packages listed in Table 9-4:

◫ **NOTE**

In an installation package, *version* indicates the eSight version number.

Table 9-4 Installation package list

Software	Operating System	Name	Description
eSight WLAN component installation software	Windows	eSight_WLAN_*version*_Win.zip	This software is mandatory and is used to install eSight WLAN components on the Windows operating system.
	SUSE Linux	eSight_WLAN_*version*_SUSE.zip	This software is mandatory and is used to install eSight WLAN components on the SUSE Linux operating system.

9.3 Installing eSight Components

This topic describes how to install eSight components.

Prerequisites

- The operating system has been installed on an eSight server host.
- AppBase has been installed on the eSight server host.
- Installation software has been obtained. For details, see **8.2.2 Obtaining Required Software**.
- The network adapter is enabled.
- The eSight server has assigned a static IP address.
- eSight has stopped.

Context

eSight components can be installed only on AppBase of the standard or professional edition.

⚠ **CAUTION**

The eSight installation files must be stored on the local computer.

Procedure

Step 1 Log in to the operating system as the **administrator** user.

Step 2 Double-click the **setup.exe** file to start eSight component installation.

Windows operating system：

- Method one: Use CD-ROMs.

  1. Put the CD-ROM into the CD-ROM drive, and double-click the **setup** file in the CD-ROM root directory.

  2. The **Select Language** dialog box is displayed.

- Method two: Use installation packages.

  1. Decompress all installation packages to a same directory. Take WinRAR files as an example. Select all required packages, right-click, and choose **Extract Here** from the shortcut menu.

  ⚠ **CAUTION**

  To ensure successful eSight server installation, verify that all installation path names (installation package path and eSight installation path) contain only the following characters: letters, digits, and underscores (_).

  2. Double-click the **setup** file in the installation package directory.

  3. The **Select Language** dialog box is displayed.

Linux operating system：

- Method one: Use a CD-ROM.

  1. Insert the CD-ROM into the CD-ROM drive, and run the following commands in the CD-ROM root directory:
     ```
     # cd /opt/install
     # chmod u+x setup.sh
     # ./setup.sh
     ```

  2. The **Select Language** dialog box is displayed.

- Method two: Use installation packages.

  1. Decompress all installation packages to a same directory. Use WinRAR files as an example. Select all required packages, right-click, and choose **Extract Here** from the shortcut menu.

  ⚠ **CAUTION**

  To ensure successful eSight server installation, verify that all installation path names (installation package path and eSight installation path) contain only the following characters: letters, digits, underscores (_), and space characters.

  2. Run the following commands in the installation package directory:
     ```
     # cd /opt/install/Directory names after decompression
     ```

```
# chmod u+x setup.sh
# ./setup.sh
```

3. The **Select Language** dialog box is displayed.

Step 3 Select **English** and click **OK**.

The **Introduction** dialog box is displayed.

📖 **NOTE**

> The system automatically checks whether the current environment meets requirements for installing eSight software. If the current environment does not meet the requirements, the associated message is displayed.
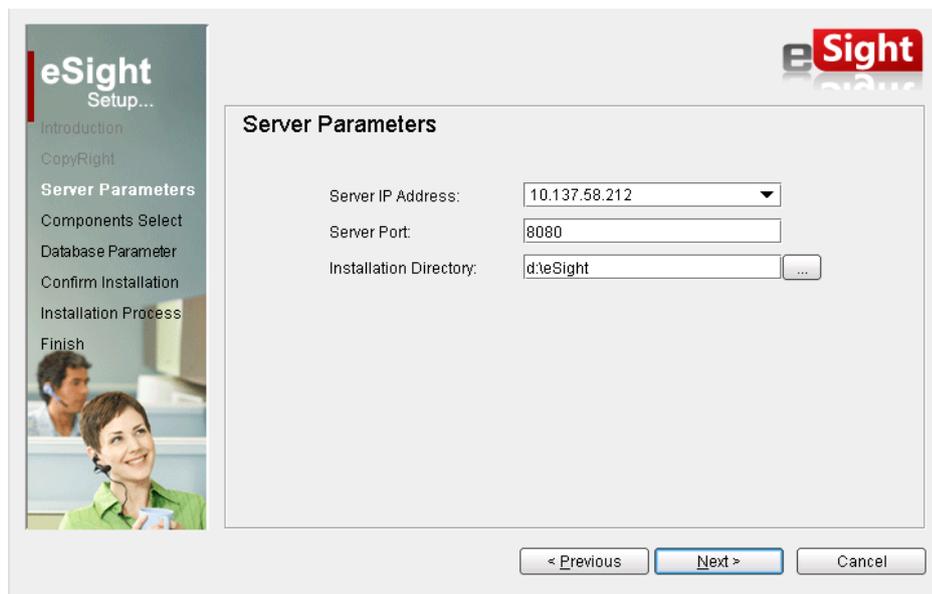
Step 4 Click **Next**.

The **Copyright Notice** dialog box is displayed.

Step 5 Select **I accept these terms**, and click **Next**.

The **Server Parameters** dialog box is displayed, as shown in **Figure 9-2**.

Figure 9-2 Server Parameters

📖 **NOTE**

- **Server IP Address**: Default IP address of the eSight server host. Do not change the IP address.
- **Port**: The default port number is **8080**. If the port is in use, change it to another port number.
- **Installation Directory**: eSight server installation directory, which can be manually changed.

⚠ **CAUTION**

To ensure successful eSight server installation, verify that all installation path names (installation package path and eSight installation path) contain only the following characters: letters, digits, and underscores (_).

Step 6 Click **Next**.

The **Select Software Components To Be Installed** dialog box is displayed, as shown in **Figure 9-3**.

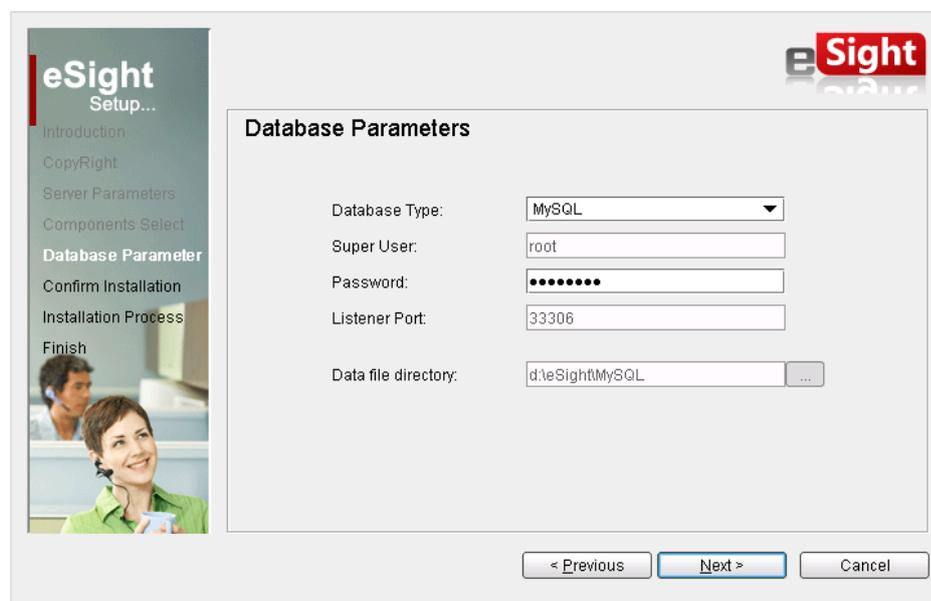**Figure 9-3** Select Software Components To Be Installed
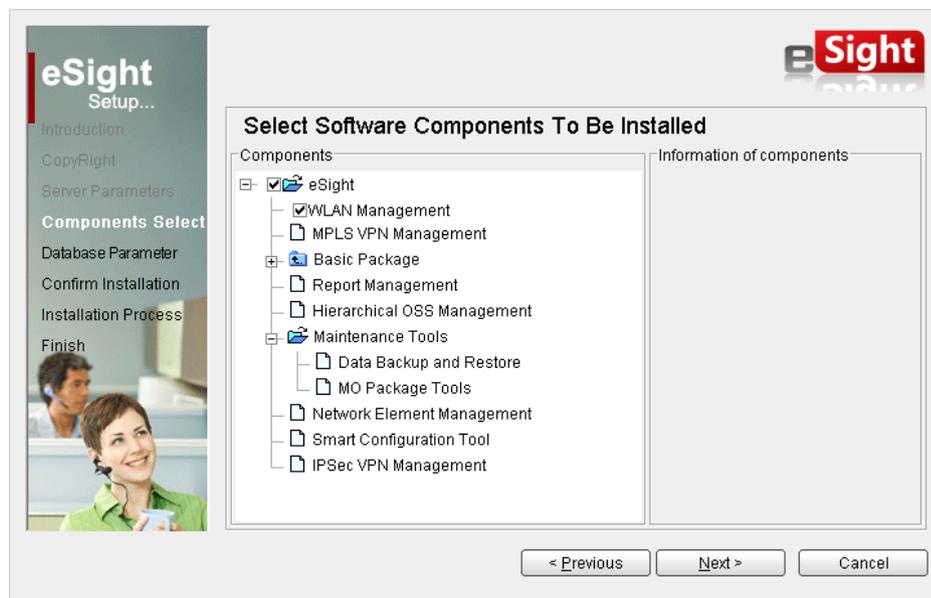
◻ **NOTE**

Components under **Basic Package** are dimmed by default, and must be installed.

Step 7 Click **Next**.

The **Database Parameters** dialog box is displayed, as shown in **Figure 9-4**. Windows supports MySQL and SQL server installation, and Linux supports Oracle installation.
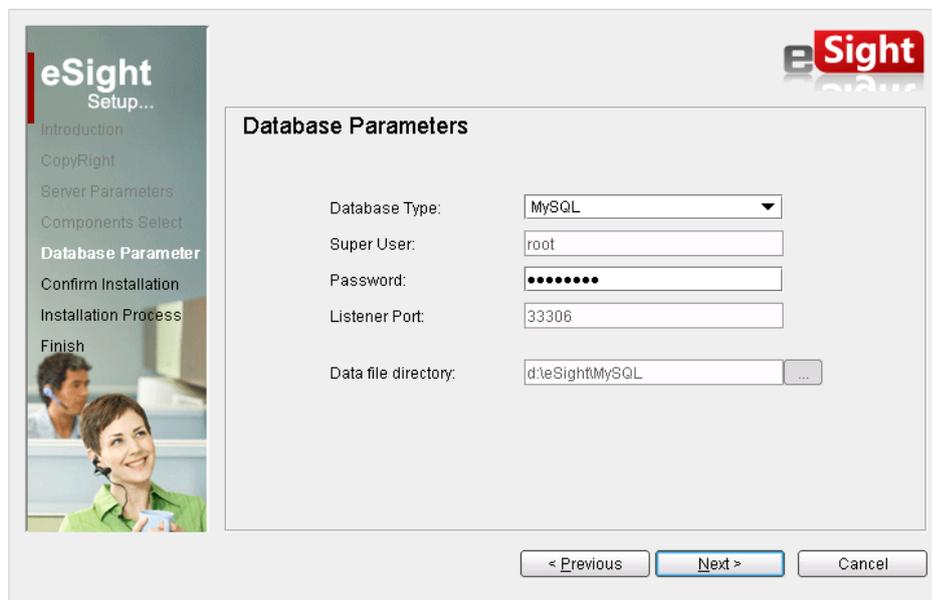
Figure 9-4 Database Parameters

Step 8 Click **Next**.

The **Database Parameters** dialog box is displayed, as shown in **Figure 9-5**.

Figure 9-5 Database Parameters

Step 9 Click **Next**.

The **Confirm Installation** dialog box is displayed.

Step 10 Verify the installation information, and click **Next**.

📖 **NOTE**

If the installation information is incorrect, click **Previous** to reset installation information.

Step 11 When eSight components are installed, the **Installation Completed** dialog box is displayed.

📖 **NOTE**

In the **Installation Completed** dialog box, **Start eSight immediately** and **Start backup server** are unselected by default. Retain the default settings.

Step 12 Click **Finish**.

----End

9.4 Logging In to eSight

This topic describes how to log in to eSight.

eSight components can be installed only on AppBase of the standard or professional edition. **Table 9-5** describes the procedures for logging in to the eSight server after eSight components are installed.

Table 9-5 Procedures for logging in to the eSight server

AppBase Edition	Reference
Standard edition (Windows)	**5.6 Logging In to eSight**
Professional edition (Windows)	**6.6 Logging In to eSight**
Professional edition (SUSE Linux)	**7.6 Logging In to eSight**

9.5 Registering Software

This topic describes how to apply for and load an eSight license.

9.5.1 Applying for an eSight License

This topic describes how to apply for an eSight license. A license file is an authentication file that a special encryption tool generates based on the information about the contract that a user signs with Huawei and the information about the server where the eSight is installed. After obtaining a license file, load it to eSight manually to obtain permission to use eSight.

Procedure

Step 1 Obtain the contract information.

A Huawei-authorized electronic license certificate is delivered to a customer at the same time when Huawei delivers eSight to the customer. The customer can obtain the contract number, product name, and product model from the license certificate, as shown in **Figure 9-6**.

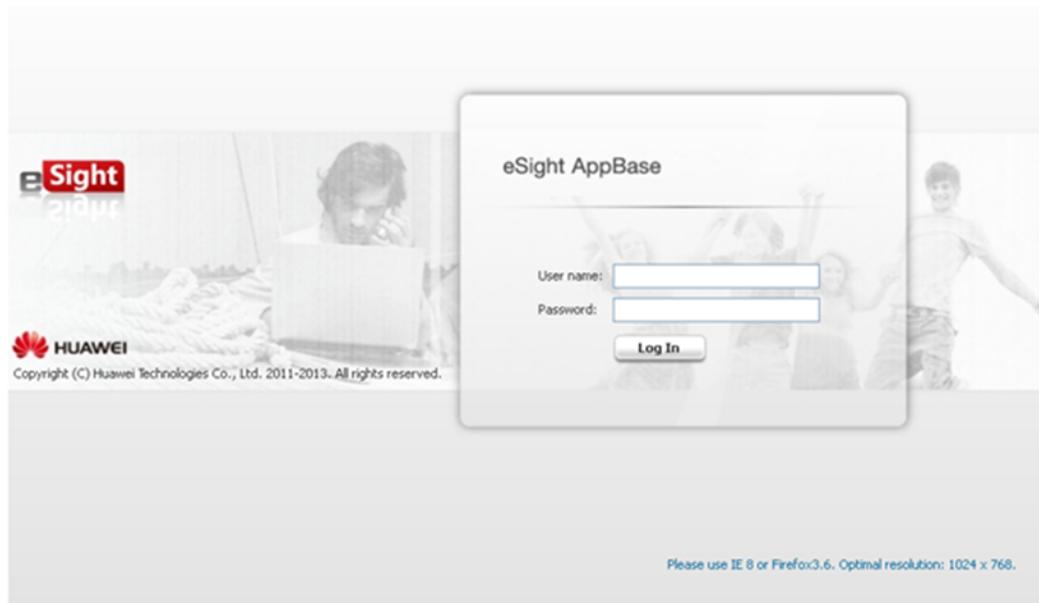**Figure 9-6** eSight license certificate
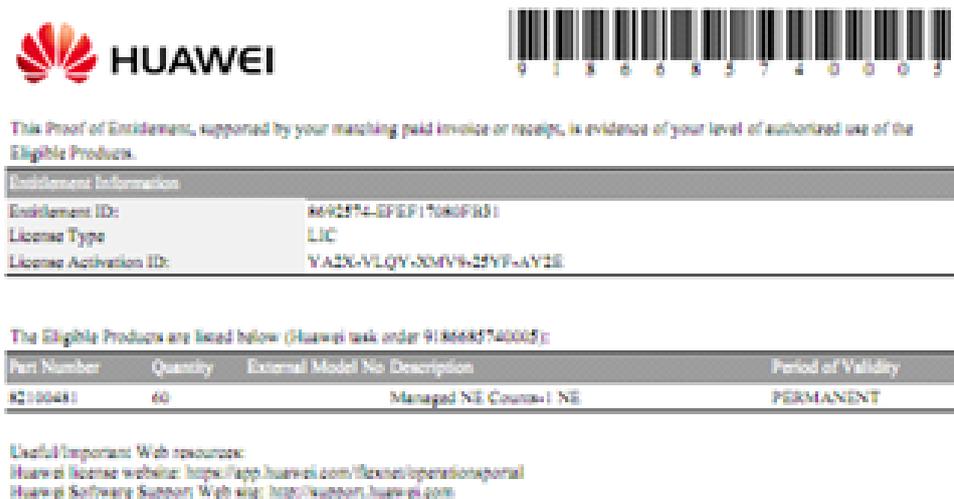
Step 2 Obtain the server equipment serial number (ESN).

An ESN is a string that uniquely identifies a device. It is used to ensure that the license is granted to the specified device.

1. Access the eSight login page, and log in to eSight as an administrator, as shown in **Figure 9-7**.

Figure 9-7 eSight login page

2. When logged in to eSight as an administrator, choose **System** > **License Management**.
3. Click **Obtain ESN**.
4. Generate an ESN.

   - Method one: Select the network adapter on the eSight server, and click **Generate ESN**.

     eSight automatically obtains the network adapter information on the eSight server. Record ESN information.

   - Method two: Enter the Media Access Control (MAC) address of the eSight server, and click **Generate ESN**.

   📖 **NOTE**

   If the server is equipped with multiple network adapters, record the ESNs for all the network adapters.

Step 3 Apply for an eSight license.

1. Visit **https://app.huawei.com/flexnet/operationsportal**. Click **With Activation Id:** on the left to switch the login mode, and log in to the enterprise service FlexNet Operations System (FNO) with the activation ID in the license certificate to activate and download the license.

   📖 **NOTE**

   You can also click the link in the license certificate email to log in to the enterprise service FNO and activate and download the license.

2. On the **manage entitlements** page, select the required activation ID, and click **Activate**.

   📖 **NOTE**

   If the remaining number of times for activating the activation ID is **0**, the activation ID cannot be activated.

3. Select the required activation ID, enter the ESN, and click **Next**.

   📖 **NOTE**

   In the Datacom Enterprise Network Product Line, an activation ID maps an ESN. Here you are required to enter an ESN, not an ESN range.

4. Click **Submit** to generate a license file.

5. Select the generated license file, and click **Download** to download the license file.

6. In the dialog box that is displayed, click **Save** to save the license file to your computer.

   ----End

9.5.2 Loading an eSight License File

This topic describes how to load an eSight license.

Prerequisites

A correct eSight license file must have been obtained.

📖 **NOTE**

The license file name cannot contain any space. If the name contains a space, uploading or updating the license file will fail. If the name of the obtained license file contains spaces, delete the spaces or change them to _ before using the license file.
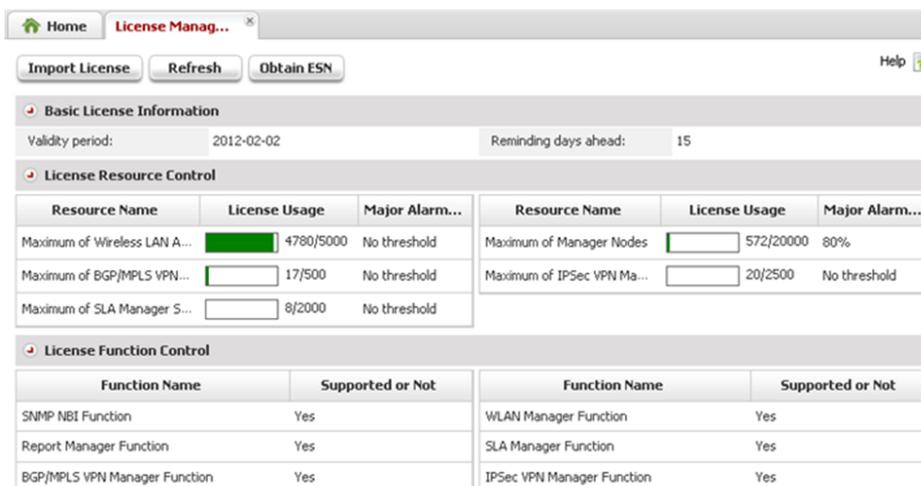
Procedure

Step 1 Access the eSight login page, and log in to eSight as an administrator, as shown in **Figure 9-8**.
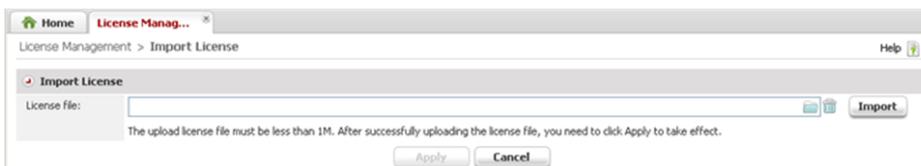
Figure 9-8 eSight login page

Step 2 Choose **System** > **License Management**, and click **Import License**, as shown in **Figure 9-9**.

Figure 9-9 License Management page

Step 3 Select a license file and click **Import**, as shown in **Figure 9-10**.

Figure 9-10 Import License page

Step 4 When the license file is imported, preview the content of the license file and click **Apply**.

To finish loading the license, re-log in to eSight.

----End

Follow-up Procedure

After the license file is loaded, log in to the eSight as an administrator. Choose **System** > **License Management**, view the license expiration date, and check the license items and resource items.

9.6 Uninstalling eSight Components

This topic describes how to uninstall eSight components.

eSight components can only be uninstalled together with AppBase. The procedure for uninstalling eSight components is the same as that for uninstalling AppBase. **Table 9-6** lists the procedures for uninstalling eSight components for AppBases of different editions.

Table 9-6 Procedures for uninstalling eSight components

AppBase Edition	Reference
Standard edition (Windows)	**5.8 Uninstalling eSight**
Professional edition (Windows)	**6.8 Uninstalling eSight**
Professional edition (SUSE Linux)	**7.8 Uninstalling eSight**

10 Installing SLA Components

About This Chapter

This topic describes how to install SLA components.

10.1 Installation Process

- Preinstallation scheme: The operating system, eSight AppBase, and eSight components have been preinstalled on the eSight server delivered to the site. For details about the default information configured before the delivery, see **6.2.2 Installation Plan**.

- Full installation scheme: If you use a self-purchased server or AppBase or eSight components need to be reinstalled, see the installation process described in this document.

Figure 10-1 shows the eSight component installation process.

Figure 10-1 eSight component installation process
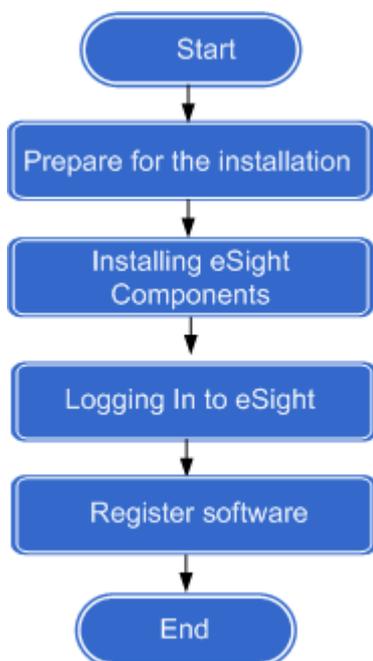

Table 10-1 describes the process of installing eSight components in full installation mode.

Table 10-1 Process of installing eSight components

No.	Installation Description	Reference
1	Prepare for the installation, including understanding the software and hardware configuration requirements and obtaining required software.	**10.2 Preparing for the Installation**
2	Install eSight components.	**10.3 Installing eSight Components**
3	log in to eSight.	**10.4 Logging In to eSight**
4	Apply for and load an eSight license file.	**10.5 Registering Software**

10.2 Preparing for the Installation

This topic describes how to prepare for the installation, including understanding the software and hardware configuration requirements and obtaining required software.

10.2.1 Configuration Requirements

This topic describes the eSight component requirements on server configurations.

eSight components can be installed only on AppBase of the standard or professional edition. eSight component requirements on server configurations are the same as those of AppBase. **Table 10-2** lists eSight component configuration requirements.

Table 10-2 eSight component configuration requirements

AppBase Edition	Configuration Requirements
Standard edition (Windows)	**5.2.1 Configuration Requirements**
Professional edition (Windows)	**6.2.1 Configuration Requirements**
Professional edition (SUSE Linux)	**7.2.1 Configuration Requirements**

10.2.2 Obtaining Required Software

This topic describes how to obtain software required for installing eSight components.

eSight can be installed in the following ways:

- Using CD-ROMs: Required CD-ROMs must be obtained.
- Using installation packages: Required installation packages must be obtained.

Using CD-ROMs

Obtain the following CD-ROMs listed in Table 10-3:

Table 10-3 CD-ROM list

Software	CD-ROM
eSight SLA component installation software	eSight SLA Management Component

Using Installation Packages

Method of obtaining installation packages:

Go to the enterprise network website **http://enterprise.huawei.com/cn/**.

Choose **SUPPORT** > **SoftWare Download** > **Network Management** > **eSight** to download the installation package.

Obtain the following installation packages listed in Table 10-4:

📖 **NOTE**

> In an installation package, *version* indicates the eSight version number.

Table 10-4 Installation package list

Software	Operating System	Name	Description
eSight SLA component installation software	Windows	eSight_SLA_*version*_Win.zip	This software is mandatory and is used to install eSight SLA components on the Windows operating system.
	SUSE Linux	eSight_SLA_*version*_SUSE.zip	This software is mandatory and is used to install eSight SLA components on the SUSE Linux operating system.

10.3 Installing eSight Components

This topic describes how to install eSight components.

Prerequisites

- The operating system has been installed on an eSight server host.
- AppBase has been installed on the eSight server host.
- Installation software has been obtained. For details, see **8.2.2 Obtaining Required Software**.
- The network adapter is enabled.
- The eSight server has assigned a static IP address.
- eSight has stopped.

Context

eSight components can be installed only on AppBase of the standard or professional edition.

⚠ **CAUTION**

The eSight installation files must be stored on the local computer.

Procedure

Step 1 Log in to the operating system as the **administrator** user.

Step 2 Double-click the **setup.exe** file to start eSight component installation.

Windows operating system：

- Method one: Use CD-ROMs.

    1. Put the CD-ROM into the CD-ROM drive, and double-click the **setup** file in the CD-ROM root directory.

    2. The **Select Language** dialog box is displayed.

- Method two: Use installation packages.

    1. Decompress all installation packages to a same directory. Take WinRAR files as an example. Select all required packages, right-click, and choose **Extract Here** from the shortcut menu.

        ⚠ **CAUTION**

        To ensure successful eSight server installation, verify that all installation path names (installation package path and eSight installation path) contain only the following characters: letters, digits, and underscores (_).

    2. Double-click the **setup** file in the installation package directory.

    3. The **Select Language** dialog box is displayed.

Linux operating system：

- Method one: Use a CD-ROM.

    1. Insert the CD-ROM into the CD-ROM drive, and run the following commands in the CD-ROM root directory:

        ```
        # cd /opt/install
        # chmod u+x setup.sh
        # ./setup.sh
        ```

    2. The **Select Language** dialog box is displayed.

- Method two: Use installation packages.

    1. Decompress all installation packages to a same directory. Use WinRAR files as an example. Select all required packages, right-click, and choose **Extract Here** from the shortcut menu.

        ⚠ **CAUTION**

        To ensure successful eSight server installation, verify that all installation path names (installation package path and eSight installation path) contain only the following characters: letters, digits, underscores (_), and space characters.

    2. Run the following commands in the installation package directory:

        ```
        # cd /opt/install/Directory names after decompression
        ```

```
# chmod u+x setup.sh
# ./setup.sh
```

3. The **Select Language** dialog box is displayed.

Step 3 Select **English** and click **OK**.

The **Introduction** dialog box is displayed.

📖 **NOTE**

> The system automatically checks whether the current environment meets requirements for installing eSight software. If the current environment does not meet the requirements, the associated message is displayed.
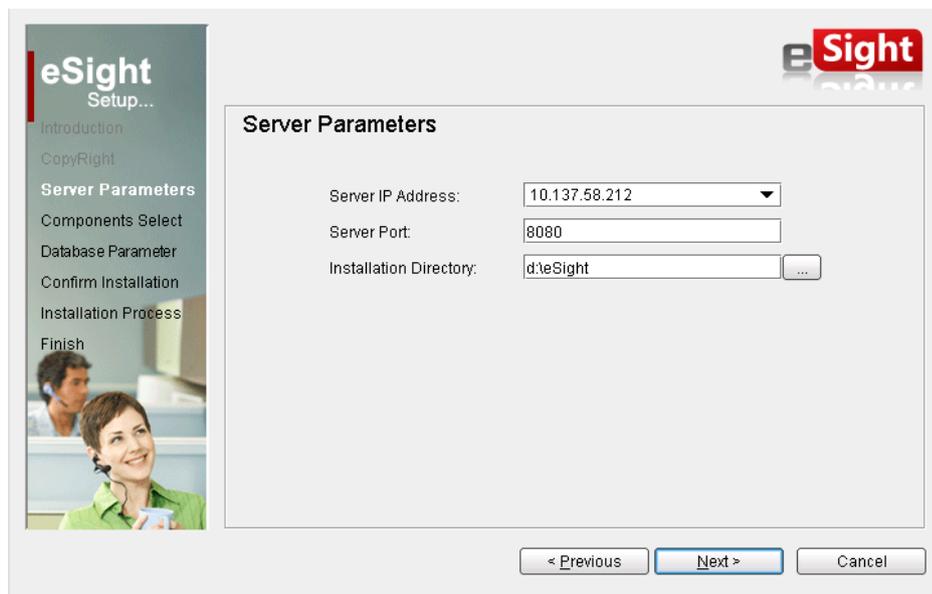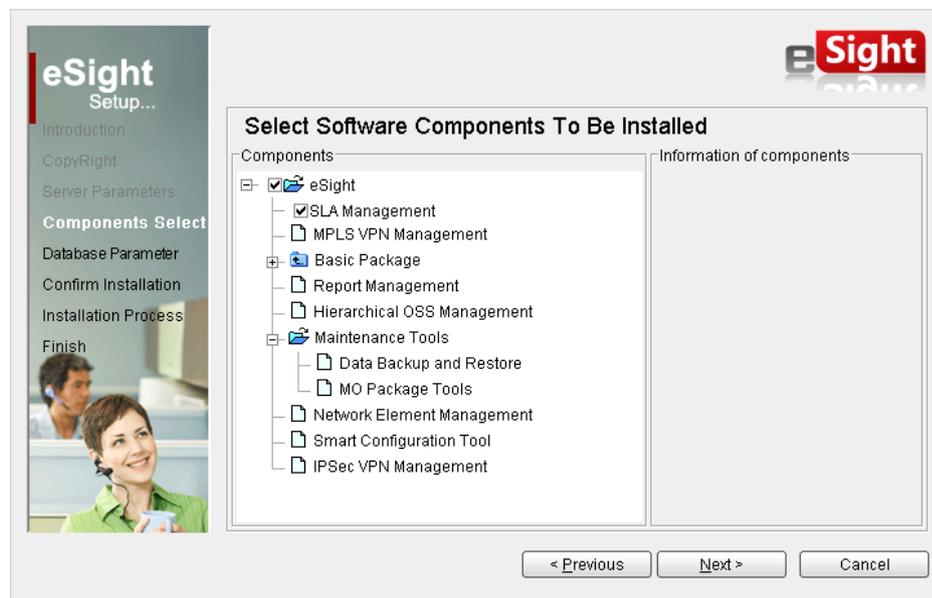
Step 4 Click **Next**.

The **Copyright Notice** dialog box is displayed.

Step 5 Select **I accept these terms**, and click **Next**.

The **Server Parameters** dialog box is displayed, as shown in **Figure 10-2**.

Figure 10-2 Server Parameters

📖 **NOTE**

- **Server IP Address**: Default IP address of the eSight server host. Do not change the IP address.

- **Port**: The default port number is **8080**. If the port is in use, change it to another port number.

- **Installation Directory**: eSight server installation directory, which can be manually changed.

⚠️ **CAUTION**

To ensure successful eSight server installation, verify that all installation path names (installation package path and eSight installation path) contain only the following characters: letters, digits, and underscores (_).

Step 6 Click **Next**.

The **Select Software Components To Be Installed** dialog box is displayed, as shown in **Figure 10-3**.

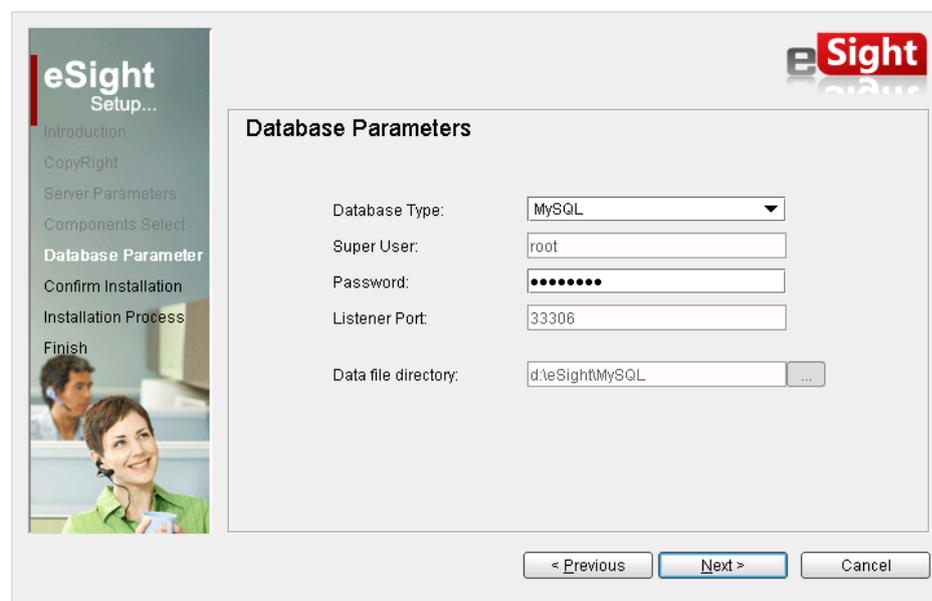**Figure 10-3** Select Software Components To Be Installed

☐ **NOTE**

Components under **Basic Package** are dimmed by default, and must be installed.

Step 7 Click **Next**.

The **Database Parameters** dialog box is displayed, as shown in **Figure 10-4**. Windows supports MySQL and SQL server installation, and Linux supports Oracle installation.

Figure 10-4 Database Parameters

Step 8 Click **Next**.

The **Confirm Installation** dialog box is displayed.

Step 9 Verify the installation information, and click **Next**.

📖 **NOTE**

If the installation information is incorrect, click **Previous** to reset installation information.

Step 10 When eSight components are installed, the **Installation Completed** dialog box is displayed.

📖 **NOTE**

In the **Installation Completed** dialog box, **Start eSight immediately** and **Start backup server** are unselected by default. Retain the default settings.

Step 11 Click **Finish**.

----End

10.4 Logging In to eSight

This topic describes how to log in to eSight.

eSight components can be installed only on AppBase of the standard or professional edition. **Table 10-5** describes the procedures for logging in to the eSight server after eSight components are installed.

Table 10-5 Procedures for logging in to the eSight server

AppBase Edition	Reference
Standard edition (Windows)	**5.6 Logging In to eSight**
Professional edition (Windows)	**6.6 Logging In to eSight**
Professional edition (SUSE Linux)	**7.6 Logging In to eSight**

10.5 Registering Software

This topic describes how to apply for and load an eSight license.

## 10.5.1 Applying for an eSight License

This topic describes how to apply for an eSight license. A license file is an authentication file that a special encryption tool generates based on the information about the contract that a user signs with Huawei and the information about the server where the eSight is installed. After obtaining a license file, load it to eSight manually to obtain permission to use eSight.

Procedure

Step 1 Obtain the contract information.

A Huawei-authorized electronic license certificate is delivered to a customer at the same time when Huawei delivers eSight to the customer. The customer can obtain the contract number, product name, and product model from the license certificate, as shown in **Figure 10-5**.
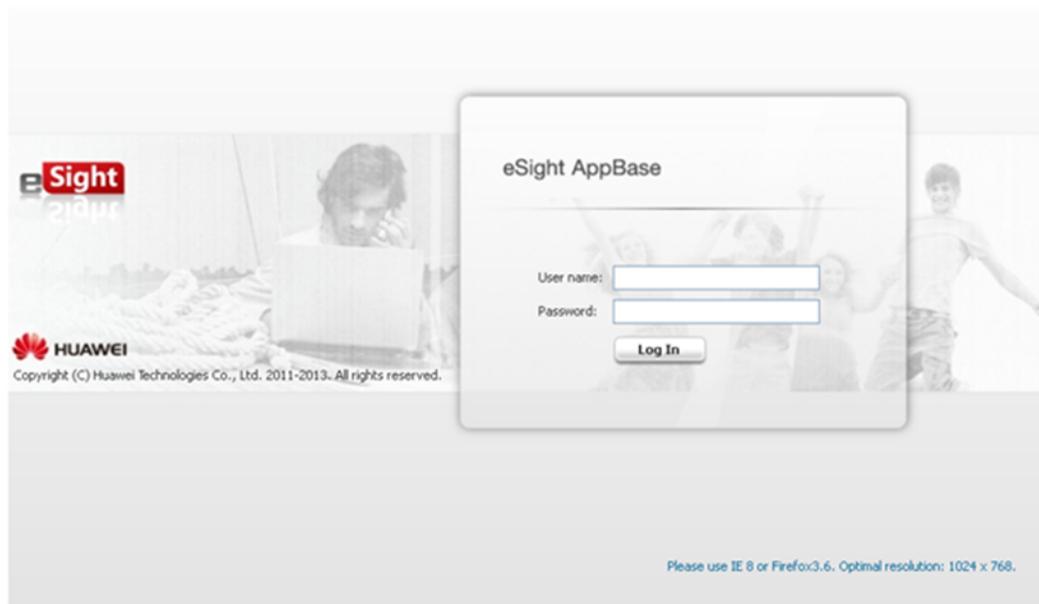
Figure 10-5 eSight license certificate
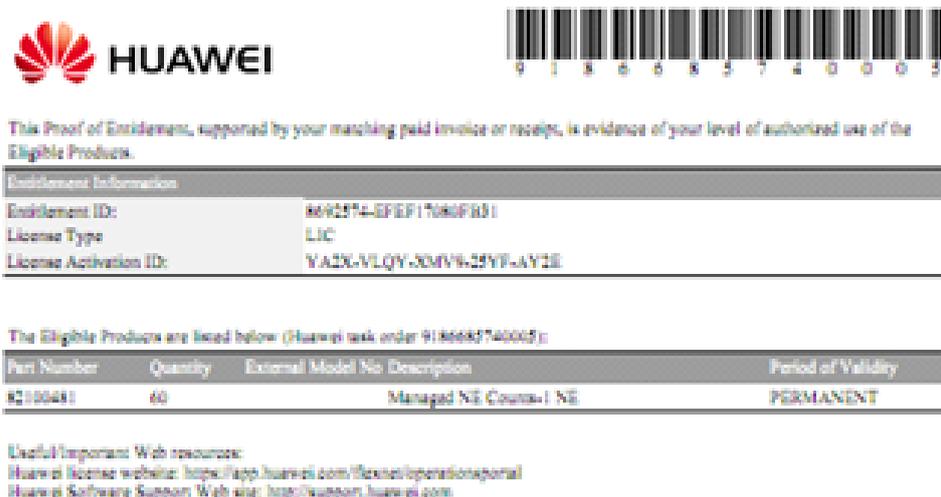
Step 2 Obtain the server equipment serial number (ESN).

An ESN is a string that uniquely identifies a device. It is used to ensure that the license is granted to the specified device.

1. Access the eSight login page, and log in to eSight as an administrator, as shown in **Figure 10-6**.

Figure 10-6 eSight login page

2. When logged in to eSight as an administrator, choose **System** > **License Management**.

3. Click **Obtain ESN**.

4. Generate an ESN.

   ● Method one: Select the network adapter on the eSight server, and click **Generate ESN**.

   eSight automatically obtains the network adapter information on the eSight server. Record ESN information.

   ● Method two: Enter the Media Access Control (MAC) address of the eSight server, and click **Generate ESN**.

   📖 **NOTE**

   If the server is equipped with multiple network adapters, record the ESNs for all the network adapters.

**Step 3** Apply for an eSight license.

1. Visit **https://app.huawei.com/flexnet/operationsportal**. Click **With Activation Id:** on the left to switch the login mode, and log in to the enterprise service FlexNet Operations System (FNO) with the activation ID in the license certificate to activate and download the license.

   📖 **NOTE**

   You can also click the link in the license certificate email to log in to the enterprise service FNO and activate and download the license.

2. On the **manage entitlements** page, select the required activation ID, and click **Activate**.

   📖 **NOTE**

   If the remaining number of times for activating the activation ID is **0**, the activation ID cannot be activated.

3. Select the required activation ID, enter the ESN, and click **Next**.

> **📖 NOTE**
>
> In the Datacom Enterprise Network Product Line, an activation ID maps an ESN. Here you are required to enter an ESN, not an ESN range.

4. Click **Submit** to generate a license file.

5. Select the generated license file, and click **Download** to download the license file.

6. In the dialog box that is displayed, click **Save** to save the license file to your computer.

----End

10.5.2 Loading an eSight License File

This topic describes how to load an eSight license.

Prerequisites

A correct eSight license file must have been obtained.

> **📖 NOTE**
>
> The license file name cannot contain any space. If the name contains a space, uploading or updating the license file will fail. If the name of the obtained license file contains spaces, delete the spaces or change them to _ before using the license file.

Procedure

Step 1 Access the eSight login page, and log in to eSight as an administrator, as shown in **Figure 10-7**.

Figure 10-7 eSight login page
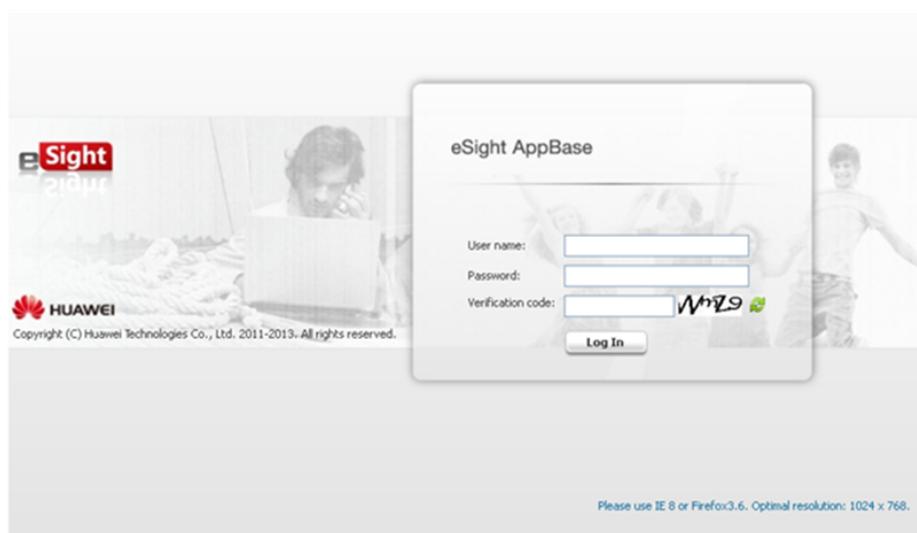
Step 2 Choose **System** > **License Management**, and click **Import License**, as shown in **Figure 10-8**.

Figure 10-8 License Management page
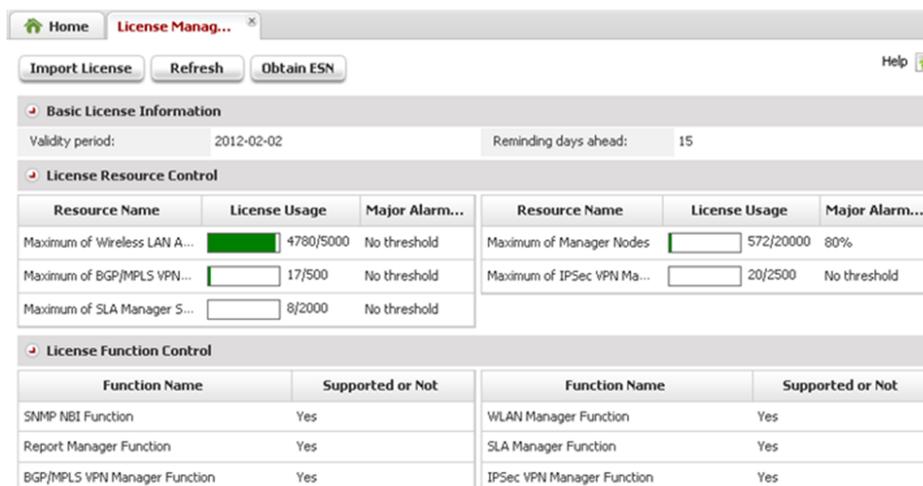
Step 3   Select a license file and click **Import**, as shown in **Figure 10-9**.

Figure 10-9 Import License page
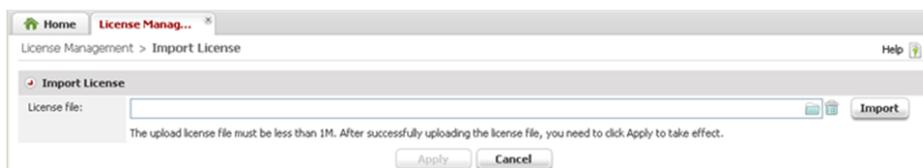
Step 4   When the license file is imported, preview the content of the license file and click **Apply**.

To finish loading the license, re-log in to eSight.

----End

Follow-up Procedure

After the license file is loaded, log in to the eSight as an administrator. Choose **System** > **License Management**, view the license expiration date, and check the license items and resource items.

10.6 Uninstalling eSight Components

This topic describes how to uninstall eSight components.

eSight components can only be uninstalled together with AppBase. The procedure for uninstalling eSight components is the same as that for uninstalling AppBase. **Table 10-6** lists the procedures for uninstalling eSight components for AppBases of different editions.

Table 10-6 Procedures for uninstalling eSight components

AppBase Edition	Reference
Standard edition (Windows)	**5.8 Uninstalling eSight**
Professional edition (Windows)	**6.8 Uninstalling eSight**
Professional edition (SUSE Linux)	**7.8 Uninstalling eSight**

11 Installing Antivirus Software

This topic describes how to install antivirus software.

The installation disk of antivirus software Office Scan, provided by Trend Micro, is delivered with the eSight installation disk.

For details on how to install Office Scan, see the installation guide in the installation disk.

12 Installing and Configuring the SUSE Linux Operating System

About This Chapter

This topic describes how to install and configure the SUSE Linux operating system.

12.1 Configuring the Preinstalled Operating System

Huawei servers have been preinstalled with the SUSE Linux operating system before delivery. Before installing eSight, you must modify parameters for the preinstalled operating system to meet onsite requirements. This topic describes how to change the IP address and route on the preinstalled SUSE Linux operating system.
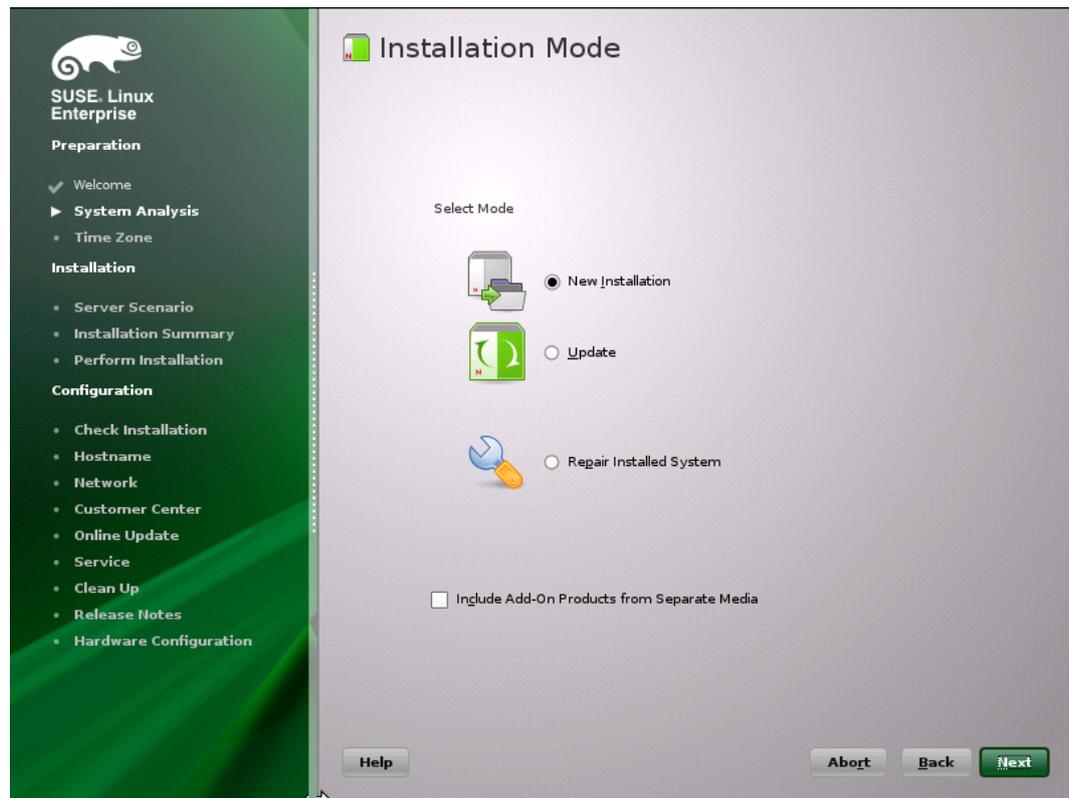
12.2 Installing the SUSE Linux Operating System Manually

This topic describes how to install the SUSE Linux Enterprise Server 11 SP1 operating system.

12.1 Configuring the Preinstalled Operating System

Huawei servers have been preinstalled with the SUSE Linux operating system before delivery. Before installing eSight, you must modify parameters for the preinstalled operating system to meet onsite requirements. This topic describes how to change the IP address and route on the preinstalled SUSE Linux operating system.

Procedure

Step 1 Log in to the preinstalled SUSE Linux operating system as the **root** user, and start the command-line interface.

Step 2 Start YaST2 Control Center.

 # yast2

Step 3 In YaST2 Control Center, choose **Network Devices** > **Network Settings**.

Step 4 On the **Global Options** tab page in the **Network Settings** window, click **Traditional Method with ifup**.

Step 5 On the **Overview** tab page, select the network adapter to be configured, and click **Edit**.

Step 6 On the **Address** tab page in the **Network Card Setup** window, select **Statically assigned IP Address**, set **IP Address**, **Subnet Mask**, and **Hostname**, and click **Next**.

 📖 **NOTE**

  The **Hostname** value must be the same as the host name set during the operating system installation.

Step 7 On the **Routing** tab page in the **Network Settings** window, set **Default Gateway**, and click **OK**.

----End

12.2 Installing the SUSE Linux Operating System Manually

This topic describes how to install the SUSE Linux Enterprise Server 11 SP1 operating system.

Procedure

Step 1 Insert the SUSE Linux Enterprise Server CD-ROM into the drive, restart the server, and boot from CD-ROM.

Step 2 On the **SUSE Linux Enterprise Server** screen that is displayed, select **Installation**, and press **Enter** to load the Linux kernel.

Step 3 On the **Welcome** screen, perform the following operations:

1. In the **Language** area, select **English**.

2. Read the license agreement, select **I Agree to the License Terms**, and click **Next**.

Step 4 On the **Installation Mode** screen, select an installation mode, and click **Next**, as shown in **Figure 12-1**.

Figure 12-1 Installation mode

📖 **NOTE**

- To install the SUSE Linux Enterprise Server operating system, select **New Installation**.
- To upgrade the SUSE Linux Enterprise Server operating system, select **Update**.
- To repair the SUSE Linux Enterprise Server operating system, select **Repair Installed System**.

Step 5 On the **Clock and Time Zone** screen, as shown in **Table 12-1** set the parameters, and click **Next**.

Table 12-1 Parameter settings

Parameter	Setting
Region	Asia
Time Zone	Shanghai
Hardware Clock	Hardware Clock Set To UTC
Date and Time	Current date and time

📖 **NOTE**

The preceding table lists the default settings. Set the parameters based on the site scenario.

Step 6 On the **Server Base Scenario** screen, set the installation scheme based on the server type, and click **Next**.

Step 7 On the **Installation Settings** screen, view the proposed installation and partitioning options, and change your desired options if necessary. Click **Install**.

Step 8 Read the agreement on the **Confirm Package** screen, and click **I Agree**.

Step 9 Click **Install**.

The operating system installation progress is displayed. The installation takes about 30 minutes. When the basic settings are configured and the selected packages are installed, the server automatically restarts. After restart, the page shown in **Figure 12-2** is displayed.

Figure 12-2 Password for the system administrator
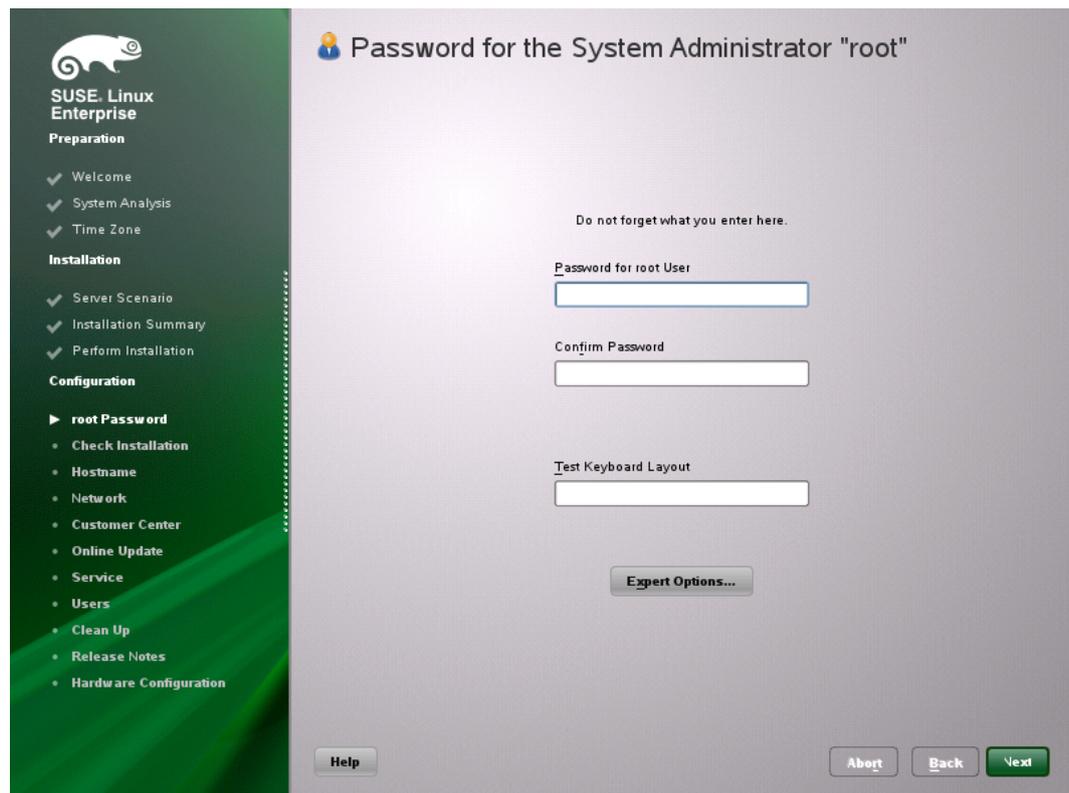
Step 10 On the **Password for the Systems Administrator "root"** screen, enter the password of the system administrator **root**, and click **Next**.

📖 **NOTE**

For security reasons, the password must be a string of at least eight characters consisting of uppercase and lowercase letters and digits. The password can contain a maximum of 72 characters and is case-sensitive.

Do not forget your password. After you set the password, you cannot query it. The password can only be reset with administrative assistance.

Step 11 Enter the local computer name and DNS domain. Click **Next**.

Step 12 On the **Network Configuration** screen, view or change the network connections for your system. Click **Next**.

📖 **NOTE**

SUSE Linux Enterprise Server can search for and download the latest installation package. If there are network devices such as wired or wireless network adapters, Digital Subscriber Line (DSL) devices, integrated services digital network (ISDN) adapters, or modems, set network parameters on the **Network Configuration** screen.

Step 13 On the **Test Internet Connection** screen, select **Yes, Test Connection to the Internet** to test the connection to the Internet. This option also checks for the latest SUSE Linux Enterprise Server release notes. Click **Next**.

Step 14 View the test results on the **Running Internet Connection Test** screen. Click **Next**.

Step 15 On the **Novell Customer Center Configuration** screen, select **Configure Now** and click **Next**.

To skip this step and proceed with the installation, select **Configure Later** and click **Next**. You can configure this option after the operating system is installed.

Step 16 On the **Network Services Configuration** screen, determine whether to create a certificate for the system. By default, SUSE Linux Enterprise Server creates a certificate for the system. If the certificate does not need to be created, select **Skip Configuration**, and click **Next**.

Step 17 On the **User Authentication Method** screen, select **Local(/etc/passwd)**, and click **Next**.

Step 18 Enter your first and last name in **User's Full Name**, your login name in **Username**, and your password in **Password** and **Confirm Password**. Click **Next**.

☐ NOTE

> For security reasons, the password must be a string of at least eight characters consisting of uppercase and lowercase letters and digits. The password can contain a maximum of 72 characters and is case-sensitive.

Step 19 View the release notes when the system configuration is complete, and click **Next**.

Step 20 On the **Hardware Configuration** screen, view or configure your graphics card and other hardware devices. Click **Next**.

Step 21 On the **Installation Completed** screen, click **Finish**. The login screen is displayed.

Step 22 Enter the user name and password, and press **Enter**.

----End

Follow-up Procedure

After installing the SUSE Linux operating system, you must manually install the FTP service component package to ensure that eSight can be installed properly. To manually install the FTP service component package, proceed as follows:

1. Insert the SUSE Linux Enterprise Server CD-ROM into the drive.

2. Choose **Computer** > **YaST**.

3. In YaST2 Control Center, choose **Network Services** > **FTP Server**.

4. Select **vsftpd** or **pure-ftpd**.

13 Installing the SQL Server Database

This topic describes how to install the SQL Server 2008 R2 database.

Prerequisites

- The operating system has been installed on the server.
- Microsoft .NET Framework 3.5 or later has been installed on the server. For details, see **14.3.1 How Do I Install Microsoft .NET Framework**.

Context

The following describes the procedure for installing the SQL Server database on Windows Server 2008 R2 Standard (64-bit).

Procedure

Step 1 Run the **setup.exe** file.

If Microsoft .NET Framework 3.5 or later has not been configured, the **Microsoft SQL Server 2008 R2 Setup** dialog box is displayed.

Step 2 **Optional:** Click **OK**. The system automatically configures Microsoft .NET Framework 3.5.

The **SQL Server Installation Center** dialog box is displayed.

Step 3 Choose **Installation** > **New installation or add features to an existing installation**, as shown in **Figure 13-1**.

Figure 13-1 SQL Server Installation Center-Installation
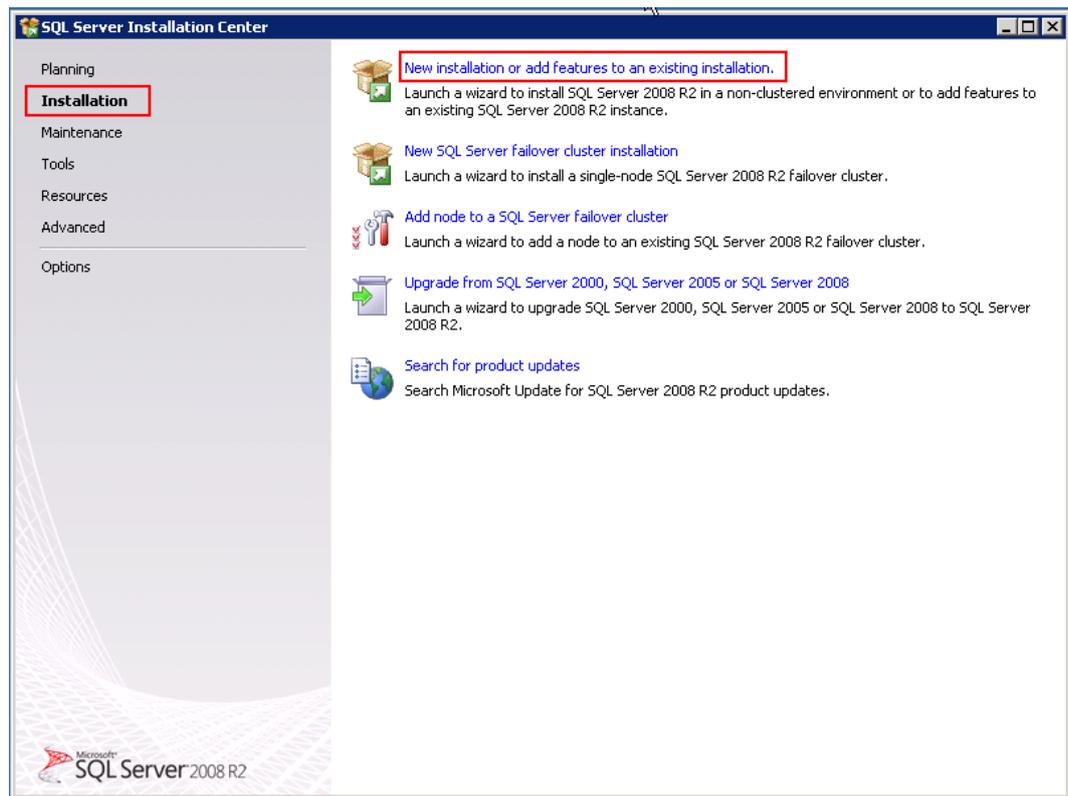
The **SQL Server 2008 R2 Setup-Setup Support Rules** dialog box is displayed.

Step 4   Click **OK**.

The **SQL Server 2008 R2 Setup-Product Key** dialog box is displayed.

Step 5   Select **Enter the product key:**, enter the serial number, and click **Next**.

The **SQL Server 2008 R2 Setup-License Terms** dialog box is displayed.

Step 6   Select **I accept the license terms.** and click **Next**.

The **SQL Server 2008 R2 Setup-Setup Support Files** dialog box is displayed.

Step 7   Click **Install**.

The **SQL Server 2008 R2 Setup-Setup Support Rules** dialog box is displayed.

Step 8   Click **Next**.

The **SQL Server 2008 R2 Setup-Setup Role** dialog box is displayed.

Step 9   Select **SQL Server Feature Installation** and click **Next**.

The **SQL Server 2008 R2 Setup-Feature Selection** dialog box is displayed.

Step 10   Select **Database Engine Services** and **Client Tools Connectivity**, and click **Next**, as shown in
Figure 13-2.

Figure 13-2 SQL Server 2008 R2 Setup-Feature Selection
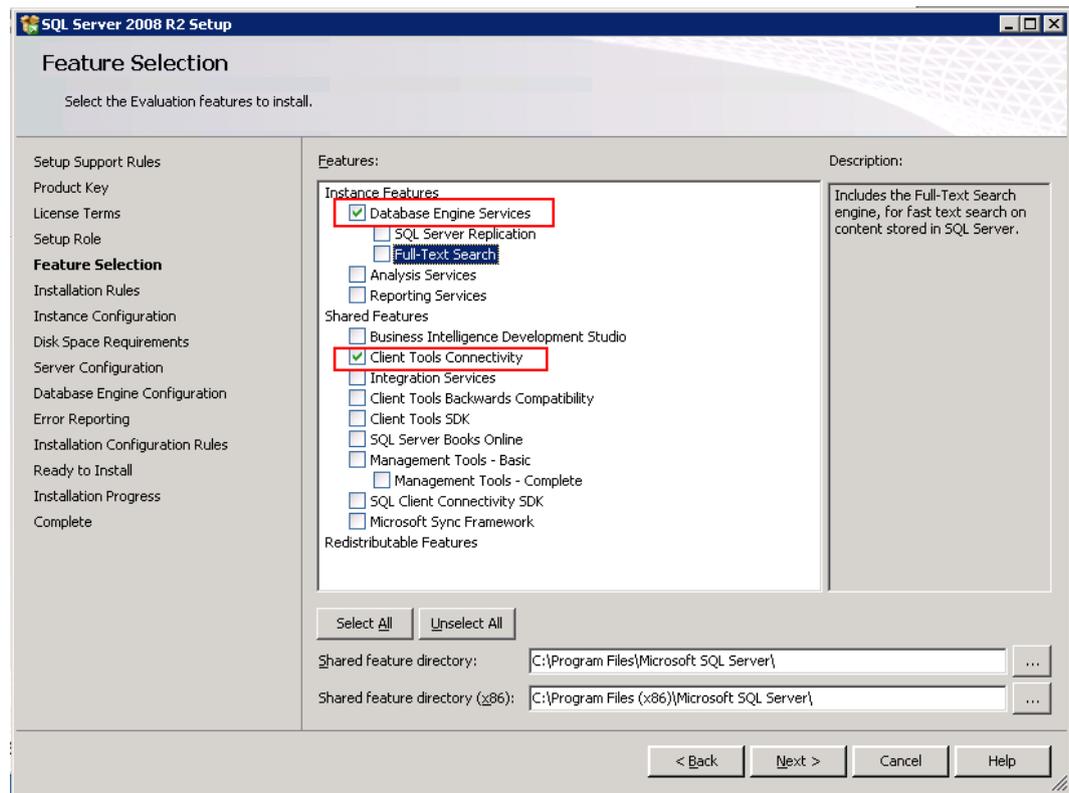
☐ **NOTE**

> To change the installation directory, modify the **Shared feature directory** parameter.

The **SQL Server 2008 R2 Setup-Installation Rules** dialog box is displayed.

Step 11 Click **Next**.

The **SQL Server 2008 R2 Setup-Instance Configuration** dialog box is displayed.

Step 12 Click **Next**.

The **SQL Server 2008 R2 Setup-Disk Space Requirements** dialog box is displayed.

Step 13 Click **Next**.

The **SQL Server 2008 R2 Setup-Server Configuration** dialog box is displayed.

Step 14 Set **Account Name** to **NT AUTHORITY\NETWORK SERVICE** for **SQL Server Agent** and **SQL Server Database Engine**, and click **Next**, as shown in **Figure 13-3**.

Figure 13-3 SQL Server 2008 R2 Setup-Server Configuration
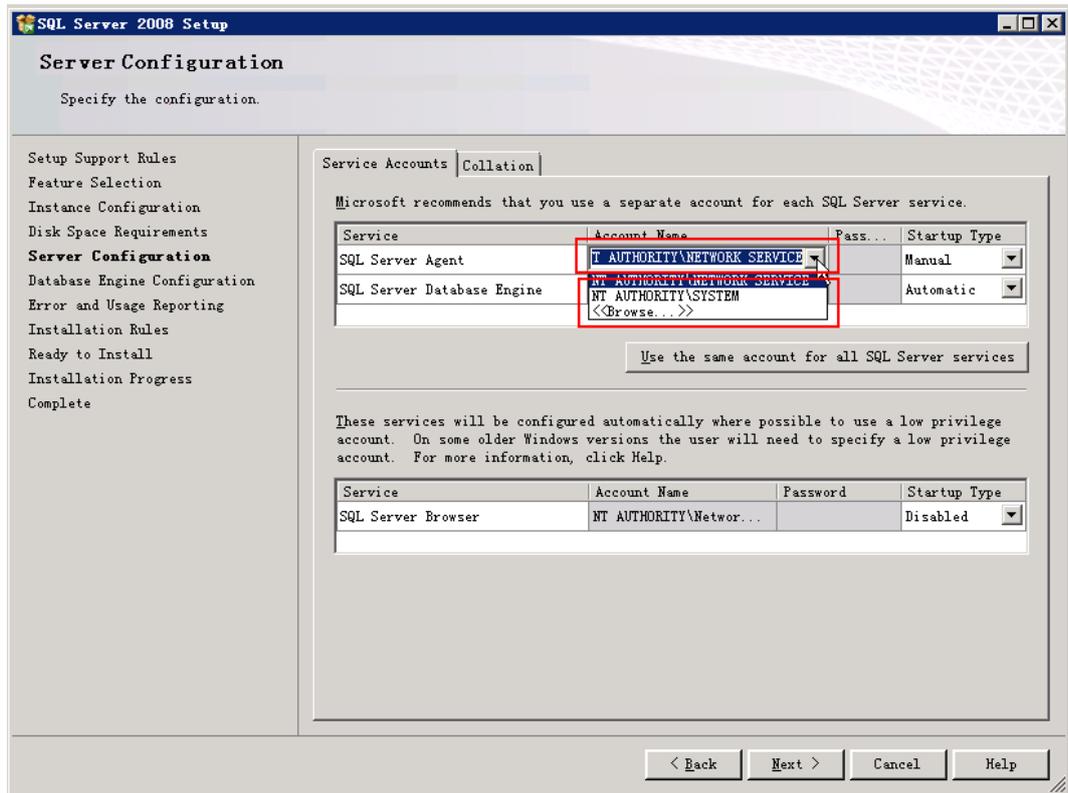
The **SQL Server 2008 R2 Setup-Database Engine Configuration** dialog box is displayed.

Step 15 Select **Mixed Mode (SQL Server authentication and Windows authentication)** in the **Authentication Mode** area, and set **Enter password** and **Confirm password**. Then click **Add Current User** to add the user to the **Specify SQL Server administrators** area, as shown in **Figure 13-4**.

Figure 13-4 SQL Server 2008 R2 Setup-Database Engine Configuration
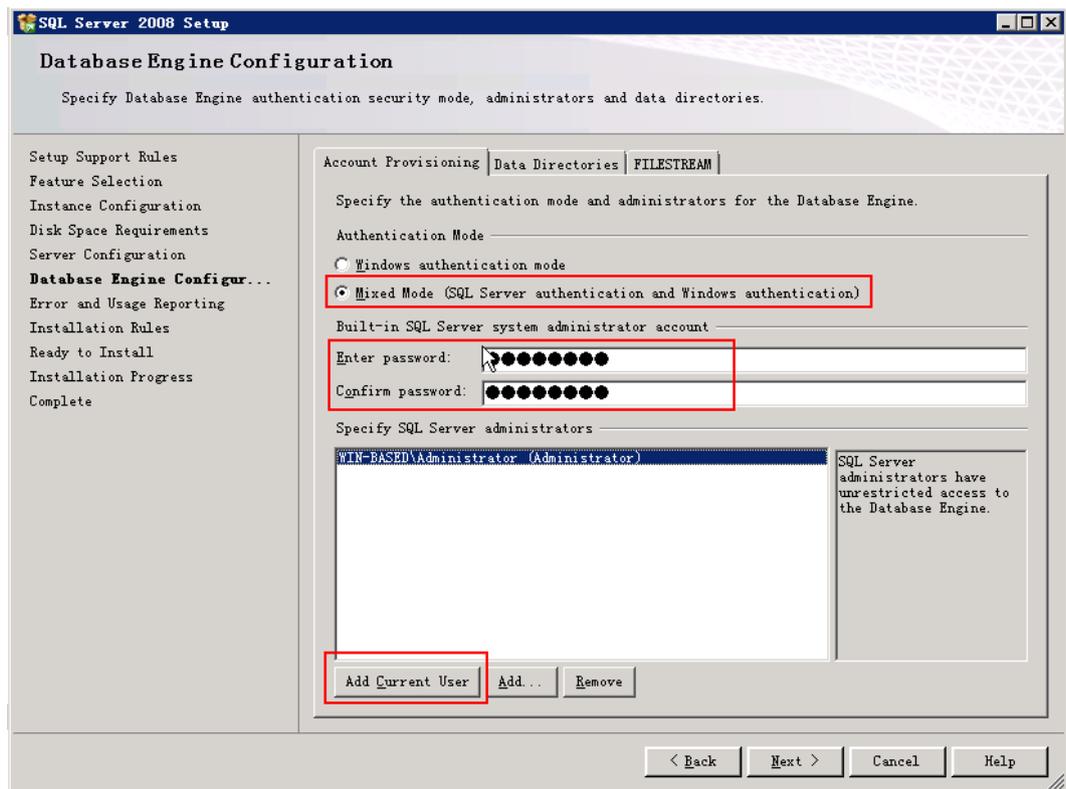
📖 **NOTE**

> The passwords must consist of uppercase letters, lowercase letters, and digits.

Step 16 Click **Next**.

The **SQL Server 2008 R2 Setup-Error Reporting** dialog box is displayed.

Step 17 Click **Next**.

The **SQL Server 2008 R2 Setup-Installation Configuration Rules** dialog box is displayed.

Step 18 Click **Next**.

The **SQL Server 2008 R2 Setup-Ready to Install** dialog box is displayed.

Step 19 Click **Install**.

The **SQL Server 2008 R2 Setup-Installation Progress** dialog box is displayed, showing the installation progress.

When the installation is complete, the **SQL Server 2008 R2 Setup-Complete** dialog box is displayed.

Step 20 Click **Close**.

----End

Follow-up Procedure

To verify the SQL Server 2008 R2 database installation, proceed as follows:

1. Choose **Start** > **All Programs** > **Microsoft SQL Server 2008 R2** > **Configuration Tools** > **SQL Server Configuration Manager**.

   The **SQL Server Configuration Manager** window is displayed.

2. Click **SQL Server Services**. If **Running** is displayed for **SQL Server (MSSQLSERVER)** in the **State** column, the SQL Server 2008 R2 database is installed successfully.

Figure 13-5 SQL Server Configuration Manager
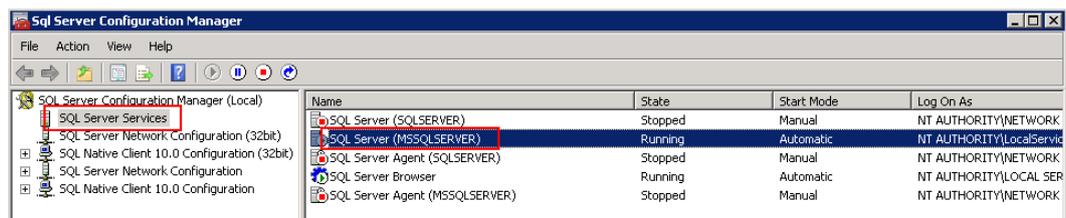
After installing the SQL Server 2008 R2 database, you must configure the SQL Server network to ensure that eSight can access the database.

1. Choose **Start** > **All Programs** > **Microsoft SQL Server 2008 R2** > **Configuration Tools** > **SQL Server Configuration Manager**.

   The **SQL Server Configuration Manager** window is displayed.

2. Choose **SQL Server Network Configuration** > **protocols for MSSQLSERVER**, right-click **TCP/IP**, and choose **Enable**. Right-click **TCP/IP** and choose **Properties**. In the **TCP/IP Properties** page, enable the port with the eSight server IP address.

After installing the SQL Server 2008 R2 database, you must configure built-in accounts; otherwise, eSight cannot be installed properly.

1. Choose **Start** > **All Programs** > **Microsoft SQL Server 2008 R2** > **Configuration Tools** > **SQL Server Configuration Manager**.

   The **SQL Server Configuration Manager** window is displayed.

2. Click **SQL Server Network Configuration**. In the right pane, right-click **SQL Server (MSSQLSERVER)**, and choose **Properties**.

   The **SQL Server (MSSQLSERVER) Properties** window is displayed.

3. In the **Log on as** area on the **Log On** tab page, select **Built-in account** and select **Local System** from the drop-down list box.

   Click **OK**.

14 FAQ

About This Chapter

14.1 Windows Operating System FAQs

This topic describes Windows operating system FAQs.

14.1.1 How Do I Change the Password for the Super User administrator

Question

How do I change the password for the super user **administrator** on the Windows operating system?

Answer

Step 1 Log in to the Windows operating system as the **administrator** user.

Step 2 Press **Ctrl+Alt+Delete**.

Step 3 In the dialog box that is displayed, click **Change a password**.

Step 4 Enter the old password, new password, and confirm password for the **administrator** user.

Step 5 Click **OK**.

----End

14.1.2 How Do I Solve the Problem When the SetWin Installation Package Fails to Be Installed in the Windows Server English Operating System Due to Chinese Characters in the Installation Package Path

Symptom

The SetWin installation package fails to be installed in the Windows Server English operating system because the installation package path contains Chinese characters.

Possible Causes

The English operating system cannot resolve the SetWin installation package path that contains Chinese characters.

Procedure

Step 1 Change the Chinese characters in the installation package path to English characters.

----End

14.2 SUSE Linux Operating System

This topic describes SUSE Linux operating system FAQs.

14.2.1 How to Start/Stop the FTP, TFTP, SFTP, and Telnet Services

Question

How to start/stop the FTP, TFTP, SFTP, and Telnet services in the SUSE Linux OS?

Answer

● Perform the following operations for the FTP, TFTP and Telnet services:

1. Run the following command in the **YaST2 Control Center** window as user **root** to enter the **Network Service Configuration** window:

   # **yast2 inetd**

2. In the **Currently Available Services** list, select the FTP, TFTP, and Telnet services respectively, **Figure 14-1** is displayed.

Figure 14-1 Starting the FTP, TFTP, and Telnet services
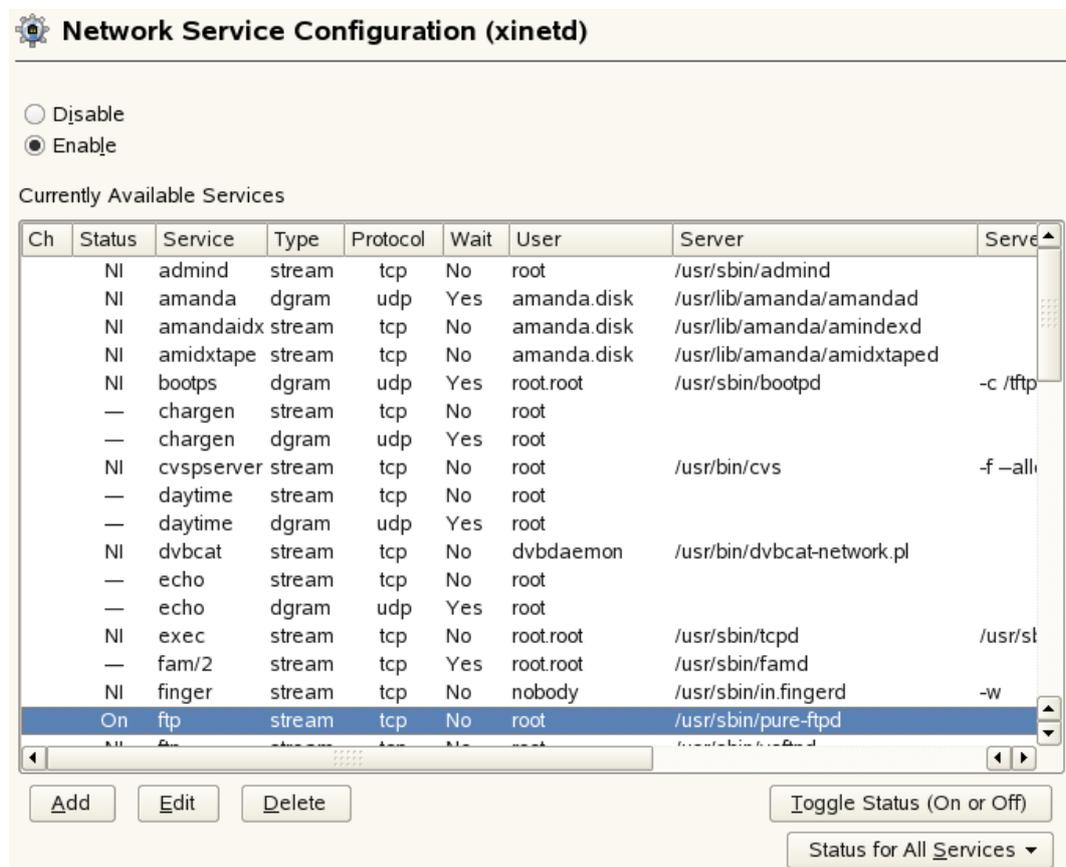
3. Click **Toggle Status (On or Off)** to configure the FTP, TFTP, and Telnet services respectively.

📖 **NOTE**

- If **Status** is **On**, the FTP service is started; if **Status** is **-**, the FTP service is configured but not started; if **Status** is **NI**, the FTP service is not configured.
- When starting the FTP service, insert the OS disk and then click **OK** if the system prompts you to insert the OS disk.

4. Click **Finish**.

5. Run the following command to enable or disable the FTP permission of the **root** user:

    # **vi /etc/ftpusers**

    Locate the **root** line and add **#** to the beginning to comment out the line, which indicates that the FTP permission of the **root** user is enabled. To disable the FTP permission of the **root** user, delete **#**.

- Perform the following operations for the SFTP service:
    - Run the following command to start the SFTP service:

        # **service sshd start**
    - Run the following command to stop the SFTP service:

        # **service sshd stop**

    ----End

14.2.2 How to Check Whether Host Names in the SUSE Linux System File Are the Same

Question

If the server host name is modified incompletely before or after the eSight system is installed, the host names in the SUSE Linux system files will be different.

The host names in the SUSE Linux system files must be the same to ensure that the eSight server runs properly.

How do I check whether the host names in the SUSE Linux system files are the same?

Answer

Step 1 Log in to the SUSE Linux server and run the following command to view the host name in the system files:

uname -a

Information similar to the following is displayed:

```
Linux linux-eSight1 2.6.32.12-0.7-default #1 SMP 2010-05-20 11:14:20 +0200 x86_64
x86_64 x86_64 GNU/Linux
```

The host name is **linux-eSight1**.

Step 2 Run the following command to view the host name in the system files:

more /etc/hosts

Information similar to the following is displayed:

```
#
# hosts          This file describes a number of hostname-to-address
```

```
#              mappings for the TCP/IP subsystem.  It is mostly
#              used at boot time, when no name servers are running.
#              On small systems, this file can be used instead of a
#              "named" name server.
# Syntax:
#
# IP-Address  Full-Qualified-Hostname  Short-Hostname
#

127.0.0.1       localhost

# special IPv6 addresses
::1             localhost ipv6-localhost ipv6-loopback

fe00::0         ipv6-localnet

ff00::0         ipv6-mcastprefix
ff02::1         ipv6-allnodes
ff02::2         ipv6-allrouters
ff02::3         ipv6-allhosts
10.137.59.36    linux-eSight1.site linux-eSight1
```

The host name is **linux-eSight1**.

Step 3 Check whether the two host names are the same. If they are different, contact SUSE Linux system administrator.

----End

14.3 SQL Server Database

This topic describes SQL Server database FAQs.

14.3.1 How Do I Install Microsoft .NET Framework

Question

How do I install Microsoft .NET Framework?

Answer

> 📖 **NOTE**
>
> The Microsoft .NET Framework version must be 3.5 or later. This topic describes how to install Microsoft .NET Framework 4.0.

Step 1 Obtain the Microsoft .NET Framework installation software.

1. Visit http://www.microsoft.com.

2. Download the Microsoft .NET Framework installation software.

Step 2 Run the Microsoft .NET Framework installation file.

The **Microsoft .NET Framework 4 Setup** dialog box is displayed.

Step 3 Select **I have read and accept the license terms.** and click **Install**.

The **Installation Progress** dialog box is displayed, showing the installation progress.

When the installation is complete, the **Installation Is Complete** dialog box is displayed.

Step 4 Click **Finish**.

The **Restart your computer** dialog box is displayed.

Step 5 Click **Restart Now**.

----End

14.3.2 How Do I Start the SQL Server Database

Question

How do I start the SQL Server database?

Answer

Step 1 Choose **Start** > **All Programs** > **Microsoft SQL Server 2008 R2** > **Configuration Tools** > **SQL Server Configuration Manager**.

The **SQL Server Configuration Manager** window is displayed.

Step 2 Click **SQL Server Services**. In the right pane, right-click **SQL Server (MSSQLSERVER)**, and choose **Start**.

----End

14.3.3 How Do I Stop the SQL Server Database

Question

How do I stop the SQL Server database?

Answer

Step 1 Choose **Start** > **All Programs** > **Microsoft SQL Server 2008 R2** > **Configuration Tools** > **SQL Server Configuration Manager**.

The **SQL Server Configuration Manager** window is displayed.

Step 2 Click **SQL Server Services**. In the right pane, right-click **SQL Server (MSSQLSERVER)**, and choose **Stop**.

----End

14.3.4 How Do I Uninstall the SQL Server Database Manually

Question

How do I uninstall the SQL Server database manually?

Answer

Step 1 Uninstall the SQL Server database.

1. Choose **Start** > **Control Panel** > **Programs and Features**. The **All Control Panel Items** page is displayed.

📕 **NOTE**

If **Programs and Features** is not displayed in Control Panel, click **Programs**.

2. Right-click **Microsoft SQL Server 2008 R2(64-bit)**, and choose **Uninstall/Change**.

📕 **NOTE**

If the computer fails to be restarted during the uninstallation, refer to **Step 3** to delete the key value **PendingFileRenameOperations**.

3. Uninstall Microsoft SQL Server 2008 R2 (64-bit) as prompted.

4. Right-click the blank area on the **All Control Panel Items** page, and choose **Refresh**. Then right-click the other SQL Server programs and choose **Uninstall**.

5. Delete the **MSSQL2008**, **MSSQL2008X**, and **MSDATA** folders from the SQL Server database installation directory.

6. Delete the **Microsoft SQL Server** folder from **Program files** in the operating system installation directory.

7. Delete the **Microsoft SQL Server** and **Microsoft SQL Server Compact Edition** folders from **Program files (x86)** in the operating system installation directory.

8. Choose **Start** > **All Programs**, and verify that the Microsoft SQL Server 2008 program has been deleted. If it still exists, right-click **Microsoft SQL Server 2008**, and choose **Delete**.

9. Choose **Start** > **Run**, enter **regedit** in the **Open** combo box, and press **Enter**. Delete the following registry information in the Registry Editor:

   a. HKEY_LOCAL_MACHINE\SOFTWARE\Microsoft\MSSQLServer

   b. HKEY_LOCAL_MACHINE\SOFTWARE\Microsoft\Microsoft SQL Server

   c. HKEY_LOCAL_MACHINE\SOFTWARE\Microsoft\Microsoft SQL Server 2005 Redist

   d. HKEY_LOCAL_MACHINE\SOFTWARE\Microsoft\Microsoft SQL Server 2008 Redist

   e. HKEY_LOCAL_MACHINE\SOFTWARE\Microsoft\Microsoft SQL Server Native Client 10.0

   f. HKEY_LOCAL_MACHINE\SYSTEM\CurrentControlSet\services \MSSQLSERVER

   g. HKEY_LOCAL_MACHINE\SYSTEM\CurrentControlSet\services \SQLSERVERAGENT

   h. HKEY_LOCAL_MACHINE\SYSTEM\CurrentControlSet\services \MSSQLServerADHelper

   i. HKEY_LOCAL_MACHINE\SYSTEM\CurrentControlSet\services \MSSQLServerADHelper100

   j. HKEY_LOCAL_MACHINE\SYSTEM\CurrentControlSet\Control\Session Manager\PendingFileRenameOperations

   k. HKEY_LOCAL_MACHINE\SYSTEM\CurrentControlSet\services\MSDTC

   l. HKEY_LOCAL_MACHINE\SOFTWARE\Microsoft\Windows\CurrentVersion \Setup\ExceptionComponents

   m. HKEY_LOCAL_MACHINE\SOFTWARE\Microsoft\Windows\CurrentVersion \App Paths\setup.exe\RunAsOnNonAdminInstall

   n. HKEY_LOCAL_MACHINE\SOFTWARE\Microsoft\Windows\CurrentVersion \App Paths\setup.exe\BlockOnTSNonInstallMode

Step 2 Restart the operating system.

Step 3 Verify that the key value **PendingFileRenameOperations** does not exist in the registry.

1. Choose **Start** > **Run**, enter **regedit** in the **Open** combo box, and press **Enter**. The Registry Editor starts.

2. Choose **Edit** > **Find**, enter **PendingFileRenameOperations**, and click **Find Next**.

3. Verify that the key value **PendingFileRenameOperations** does not exist. If the key value still exists, right-click it, and choose **Delete**.

----End

14.3.5 How Do I Restart the SQL Server Service

Question

How do I restart the SQL Server service?

Answer

If you fail to connect to the SQL Server database when the database is running properly, restart the SQL Server service.

In the **SQL Server Configuration Manager** window, choose **SQL Server Services** > **SQL Server (MSSQLSERVER)**, and click **Restart** on the toolbar, as shown in **Figure 14-2**.

Figure 14-2 SQL Server Configuration Manager
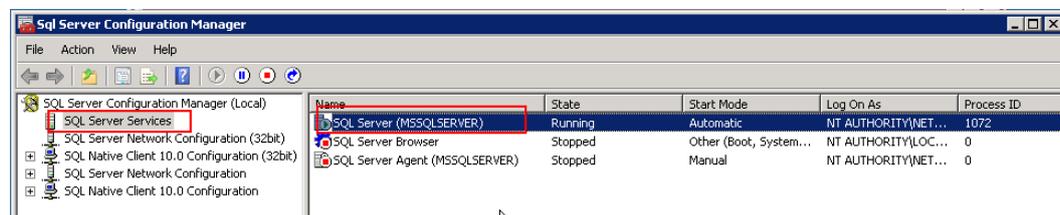
14.3.6 How Do I Change the Computer Name Stored in the SQL Server Database

Question

How Do I Change the Computer Name Stored in the SQL Server Database?

Answer

Certain database operations may fail if the computer name is changed.

To change the computer name from **SERVER_OLD** to **SERVER_NEW**, proceed as follows:

Step 1 Start the command-line interface, log in to the SQL Server database as the **sa** user (the password is **password**), and view the computer name.

```
osql –Usa -Ppassword
select @@SERVERNAME
go
```

The original computer name **SERVER_OLD** is displayed.

Step 2 Run the following commands to delete the original computer name **SERVER_OLD** and add the new computer name **SERVER_NEW**:

```
sp_dropserver @server='SERVER_OLD', @droplogins=NULL
go
sp_addserver @server='SERVER_NEW', @local='local',
@duplicate_ok='duplicate_OK'
go
exit
```

Step 3 In the **SQL Server Configuration Manager** window, restart the SQL Server service.

----End

14.4 Oracle Database FAQs

This topic describes Oracle database FAQs.

14.4.1 How to Check the Server IP Address Monitored by the Oracle Database

Question

How do I check the server IP address monitored by the Oracle database?

Answer

Step 1 Log in to the OS of the server as the **root** user.

Step 2 Run the following command to check the server IP address monitored by the Oracle database:

su - oracle

> **more $ORACLE_HOME/network/admin/listener.ora**

Step 3 Check whether the server IP address monitored by the Oracle database is the same as the IP address selected during eSight server installation. If they are different, contact the Oracle database administrator to change them to the same.

----End

14.4.2 How to Change the Oracle Password Validity Period

Question

The Oracle 11g database password is valid for 180 days by default. If a password expires for more than 7 days, the password is locked and eSight is unavailable. How do I change the Oracle password validity period?

Answer

Step 1 Log in to SUSE Linux as the **root** user.

Step 2 Run the following command to log in to the Oracle database:

su - oracle

sqlplus system/_password_

📖 **NOTE**

> The variable _password_ is set during Oracle database installation. Enter the actual password.

Step 3 Run the following commands to change the Oracle password validity period to an unlimited validity period:

SQL> **ALTER PROFILE DEFAULT LIMIT PASSWORD_LIFE_TIME UNLIMITED;**

SQL> **exit**

----End

14.4.3 How to Set Some Important Parameters During the Creation of an Oracle Database

Question

I do not know how to set some important parameters during the creation of an Oracle database. These important parameters can ensure that the Oracle database works properly.

Answer

Step 1 In the **Recovery Configuration** step, leave all check boxes unselected, and click **Next**, as shown in **Figure 14-3**.

Figure 14-3 Choose the recovery options for the database
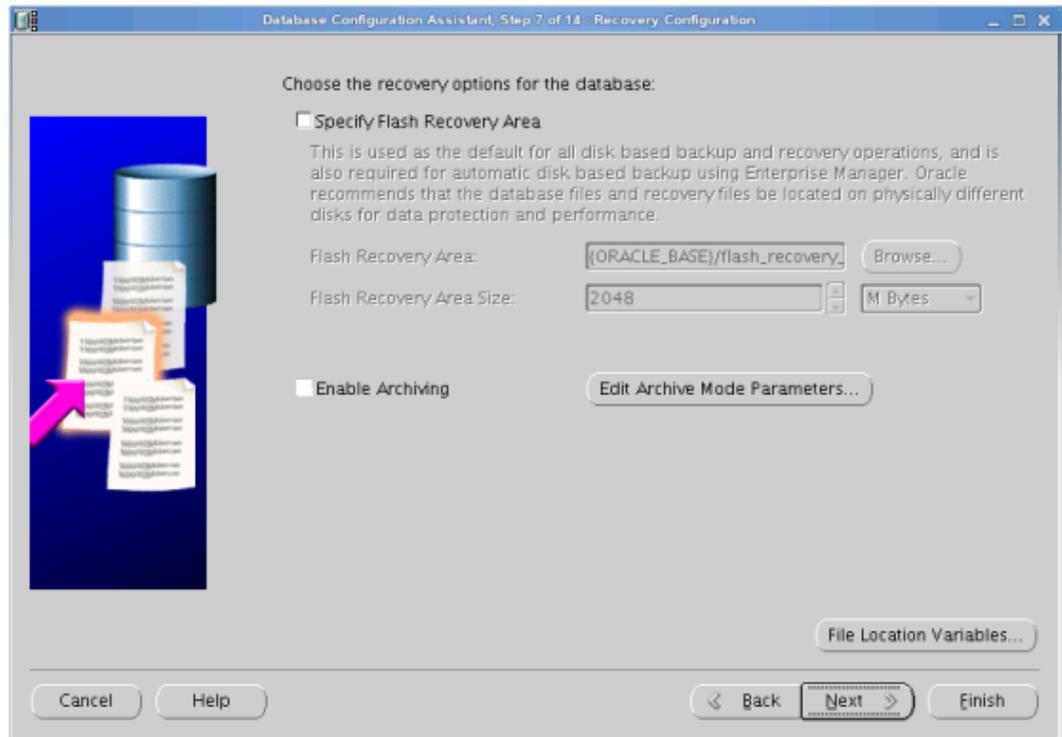
Step 2 In the **Database Storage** step, click **Create** to add six redo log group files, and set the value of **File Size** for each file to **500**. Retain the default values for other parameters, as shown in **Figure 14-4**.

Figure 14-4 Redo Log Groups
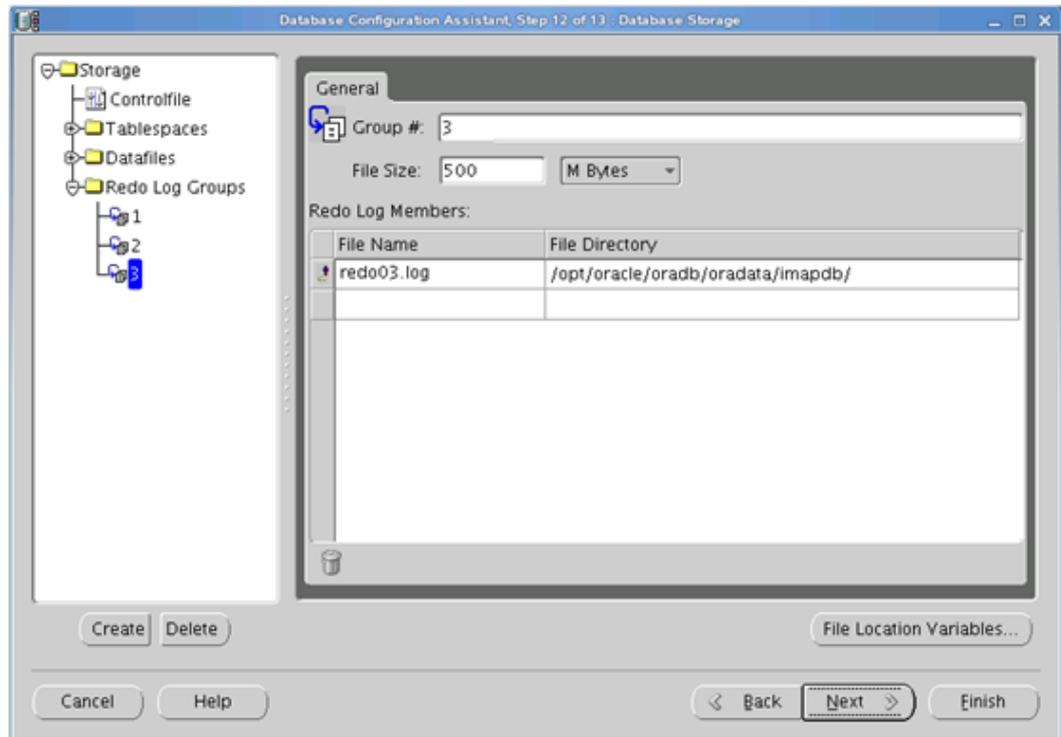
----End

14.5 eSight FAQs

This topic describes eSight FAQs.

14.5.1 Synchronizing the eSight Server IP Address to eSight

Question

This topic describes how to synchronize the eSight server IP address to eSight after the eSight server IP address is changed.

Answer

Step 1 Stop network management services on the eSight server.

- Windows: Choose **Start** > **All Programs** > **eSight** > **Shutdown eSight**.
- Linux: Run the following command:

  # **cd /opt/eSight/AppBase/bin**

  # **./stop.sh**

Step 2 Use the IP address change tool to synchronize the eSight IP address.

1. Start the IP address change tool.

   - Windows: Choose **Start** > **All Programs** > **eSight** > **tools** > **IP address changed Tool**.

● Linux: Run the following command:

cd /opt/eSight/AppBase/bin/runtime.center/bin

./ipchange.sh

2. In the **IP Address Tool** dialog box that is displayed, select an eSight server IP address and click **Modify**.

3. In the dialog box that is displayed, click **Yes**.

4. In the dialog box that is displayed, click **OK**.

Step 3 Start the network management services on the eSight server.

● Windows: Choose **Start** > **All Programs** > **eSight** > **start eSight**.

● Linux: Run the following command:

cd /opt/eSight/AppBase/bin

./run.sh

----End

14.5.2 How to Rectify the Failure in Logging In to the eSight Server Using a Browser

Question

After the eSight server starts properly, the login to the eSight server using a browser fails and a message indicating access failure is displayed. How do I rectify this failure?

Answer

Step 1 Check whether the firewall is enabled on the eSight server. If the firewall is enabled, disable it.

Step 2 Log in to the eSight server using the browser and check whether the login is successful.

----End

14.5.3 How Do I Solve the Problem When Data Fails to Be Downloaded from eSight?

Question

Files fail to be downloaded from eSight. A current eSight page is redirected to the home page in an attempt to download ActiveX controls.

Answer

The problem occurs because the **Automatic prompting for file downloads** function of Internet Explorer is disabled. To solve the problem, enable the function.

Step 1 Open the Internet Explorer.

Step 2 Choose **Tools** > **Internet Options** > **Security** > **Custom Level**, as shown in **Figure 14-5**.

Figure 14-5 Internet Options
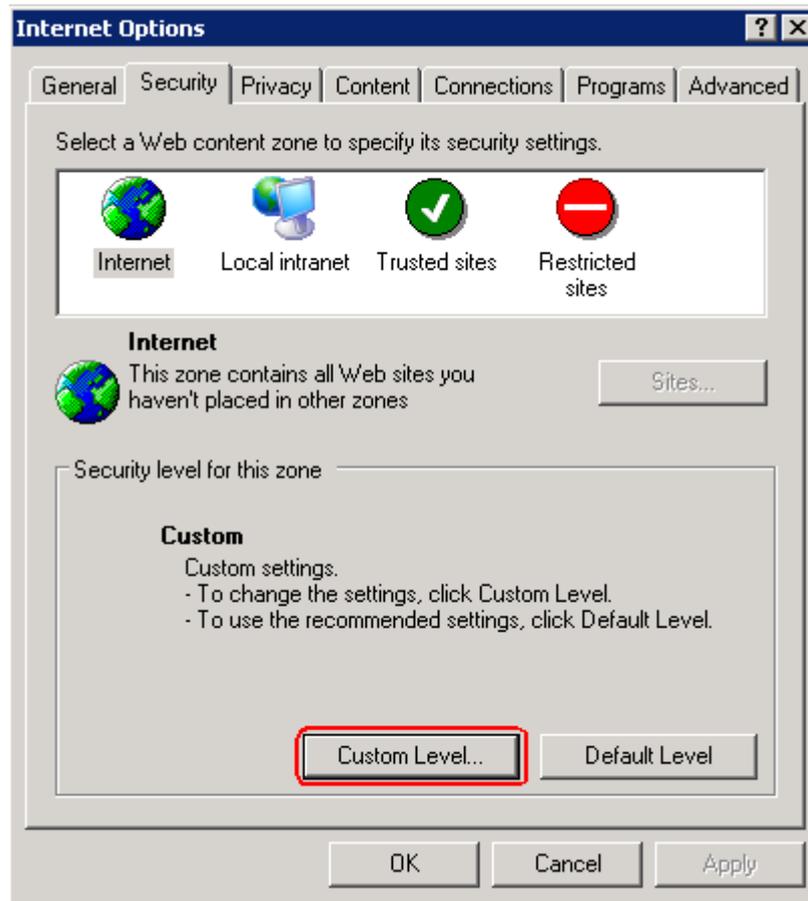
Step 3 Choose **Downloads** > **Automatic prompting for file downloads** > **Enable**, as shown in **Figure 14-6**.

Figure 14-6 Security Settings
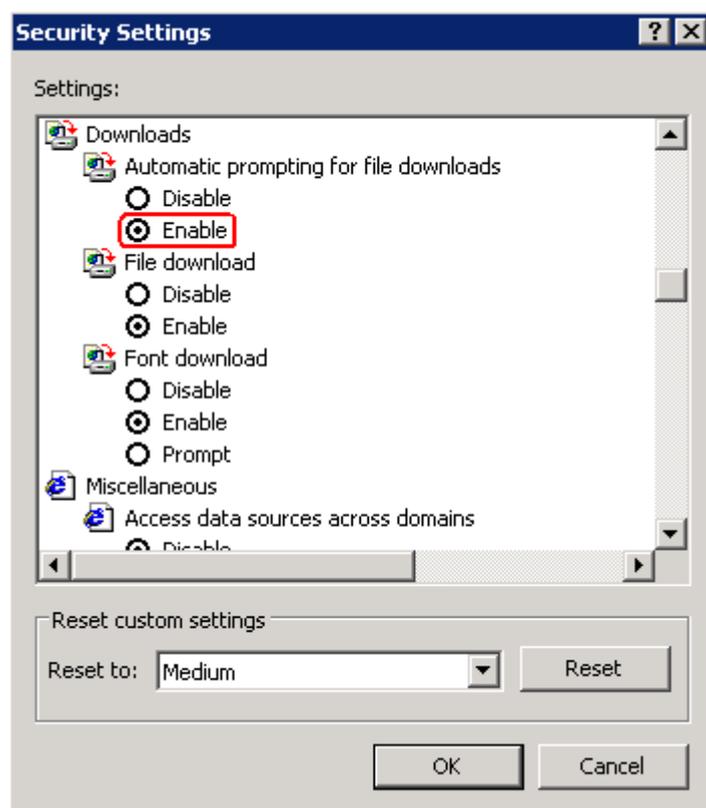
Step 4 Click **OK**.

Step 5 Log in to eSight again.

----End

14.5.4 How to Close All Open Windows in One-Click Mode

Question

How to close all open windows in one-click mode?

Answer

Step 1 Press **F5** to close all open windows.

----End

14.5.5 How to Modify Settings If the Web Browser Displays Pages Abnormally and Functions Are Unavailable

Question

When you log in to eSight client using the Internet Explorer, Web pages are displayed abnormally and the Internet Explorer's functions are unavailable.

Answer

Step 1 If you use the Internet Explorer:

1. On the menu bar, choose **Tools** > **Internet Options**.

2. Click the **General** tab and click **Delete**, as shown in **Figure 14-7**.

Figure 14-7 Internet Options
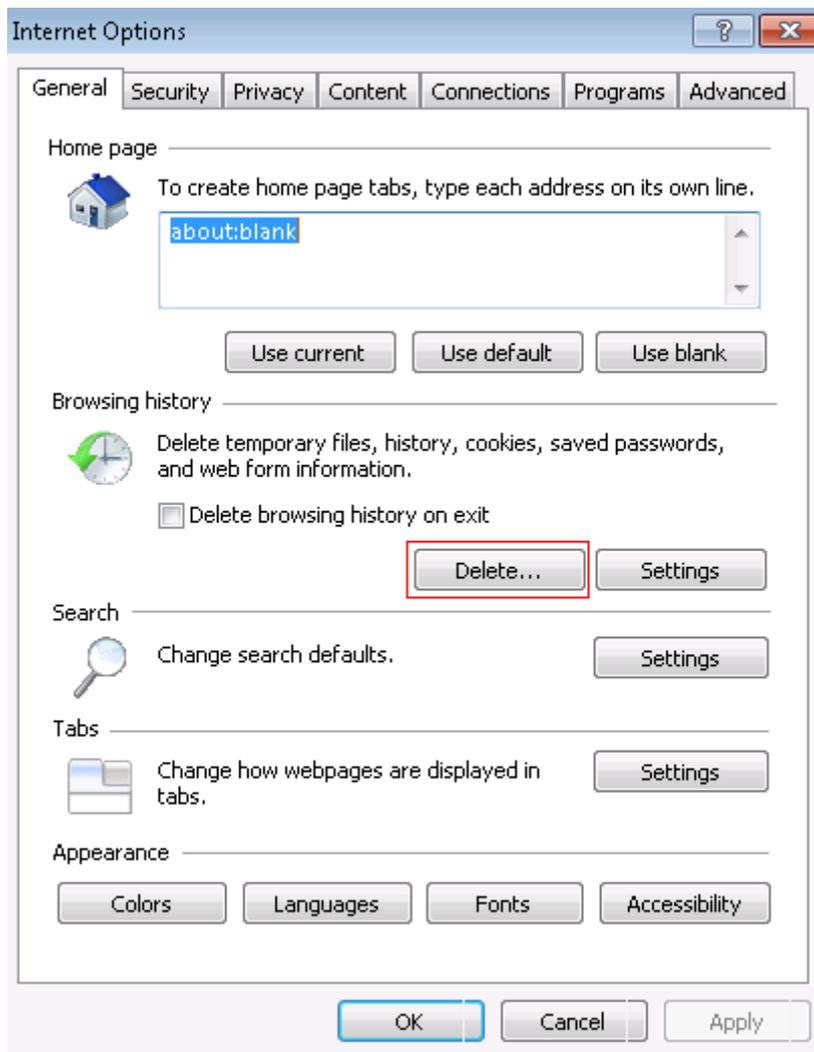
3. The **Delete Browsing History** dialog box is displayed. Click **Delete**, as shown in **Figure 14-8**.

Figure 14-8 Delete Browsing History
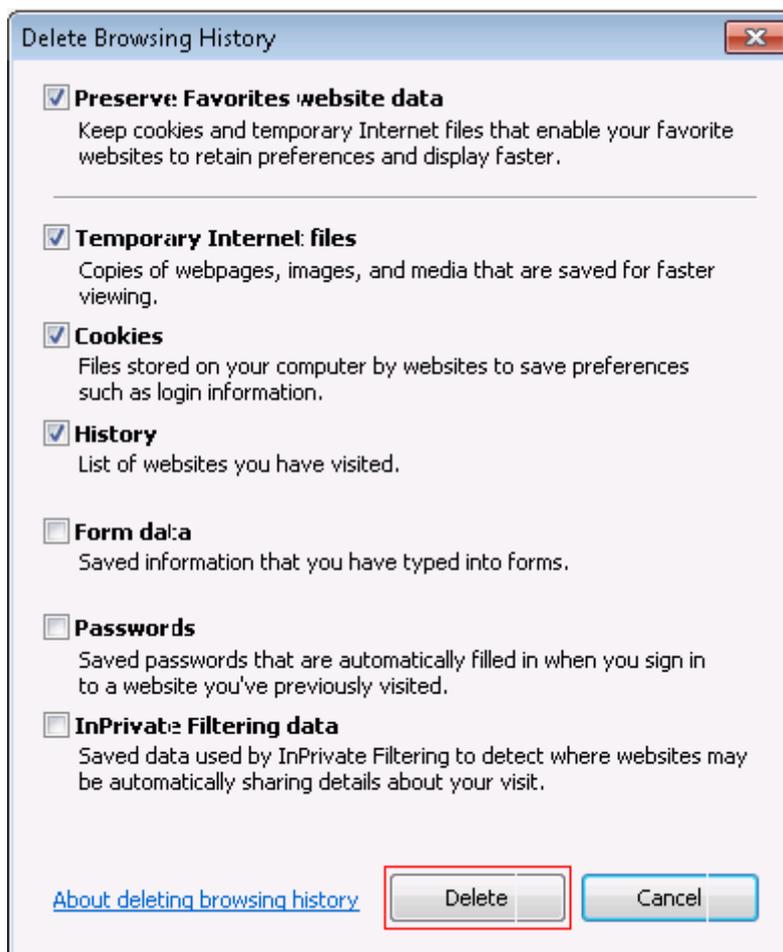
Step 2 If you use the Firefox 3.6:

1. On the menu bar, choose **Tools** > **Internet Options**, as shown in **Figure 14-9**.

Figure 14-9 Tools
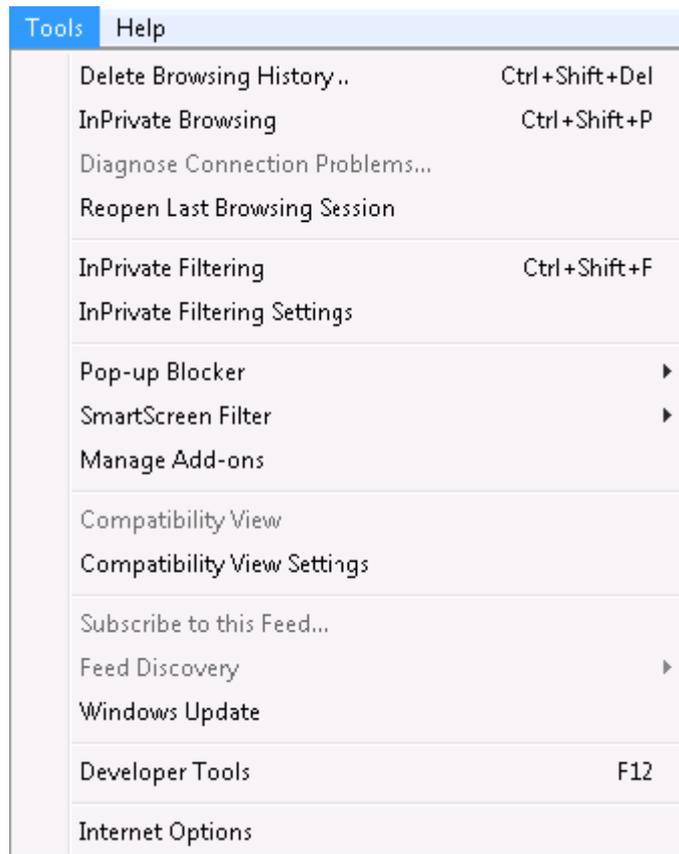
2. In the **Options** dialog box that is displayed, click the **Privacy** tab, as shown in **Figure 14-10**.

Figure 14-10 Options
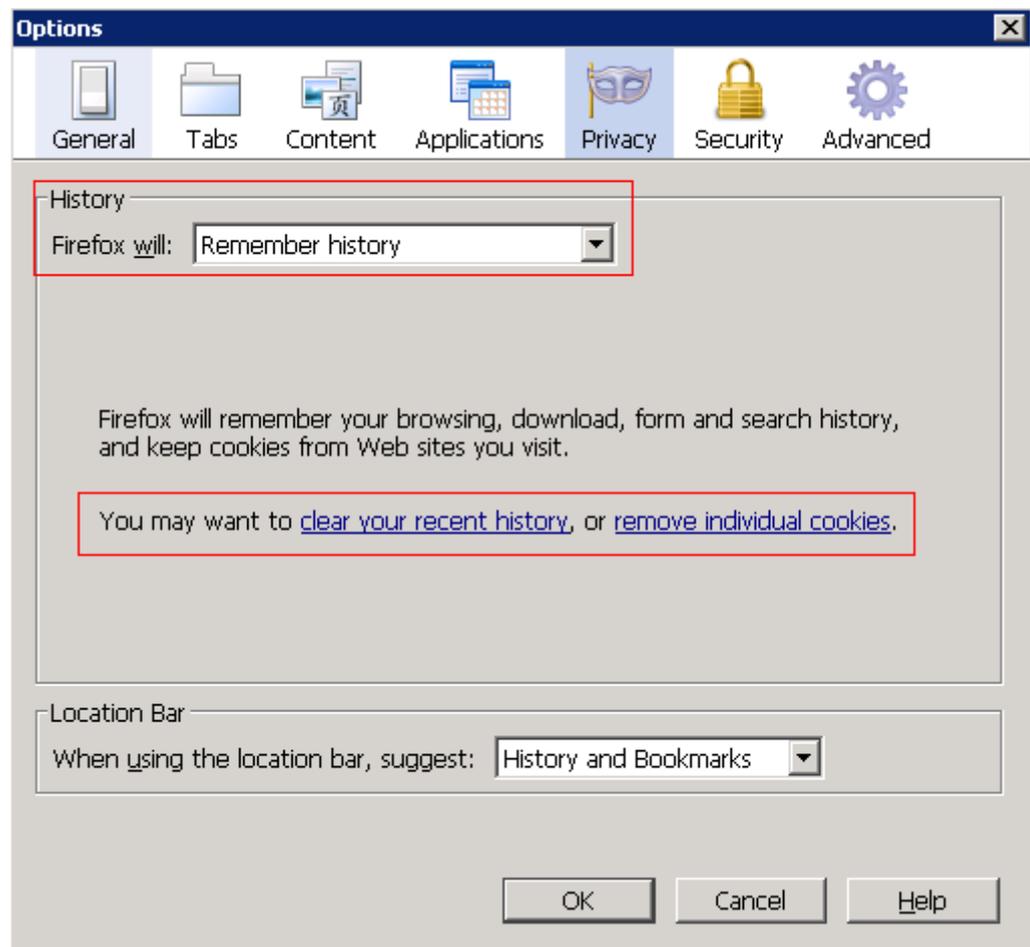
3. Click **clear your recent history**. In the dialog box that is displayed, click **Clear Now**.

----End

14.5.6 How to Solve the Problem That the Web Browser Displays a Message Indicating That the Security Certificate Is Incorrect During Login to the eSight.

Symptom

Internet Explorer or Mozilla Firefox displays a message indicating that the security certificate is incorrect when you log in to the eSight.

- The following figure shows the security certificate error prompted by Internet Explorer, as shown in **Figure 14-11**.

Figure 14-11 Error message (IE)
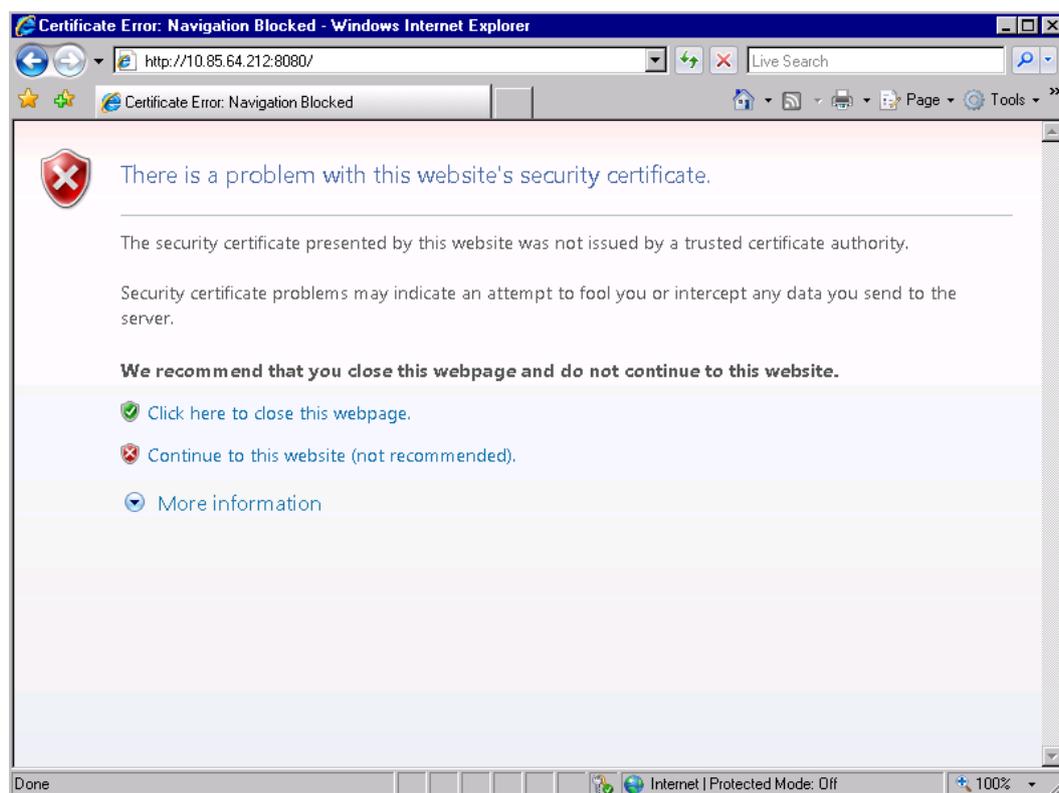
- The following figure shows the security certificate error prompted by Firefox, as shown in **Figure 14-12**.

Figure 14-12 Error message (Firefox)
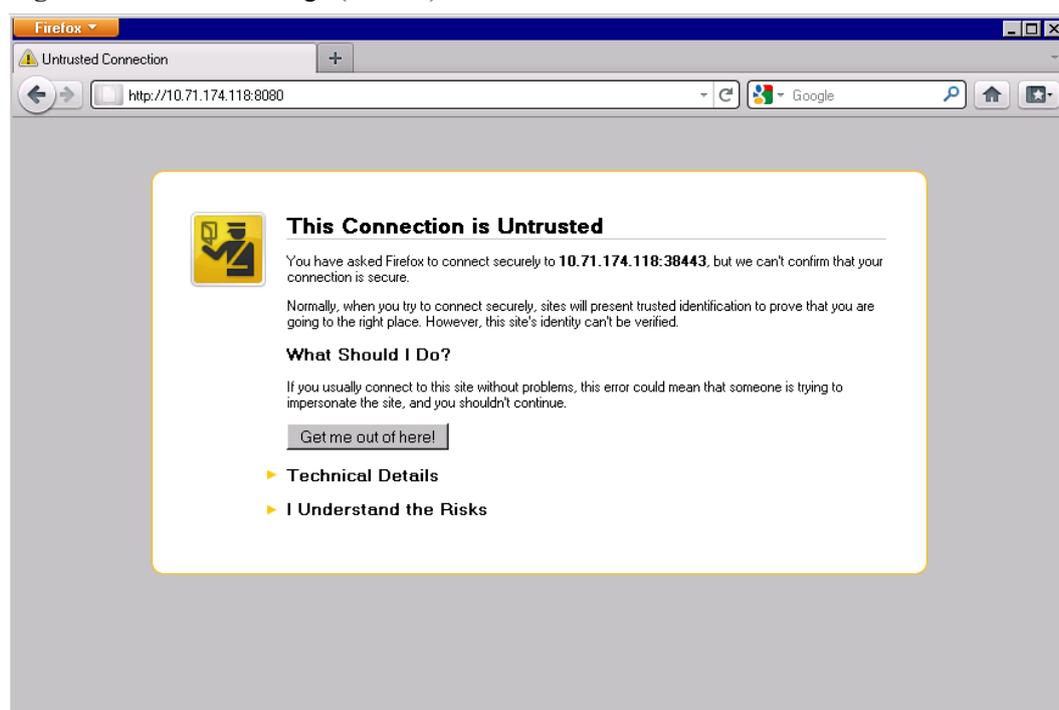
Possible Causes

You need to install a security certificate.

Procedure

- Solution 1: Installing a Security Certificate (Internet Explorer)
    1. On the error message page, click **Continue to this website (not recommended)**, as shown in **Figure 14-13**.

Figure 14-13 Error message (IE)
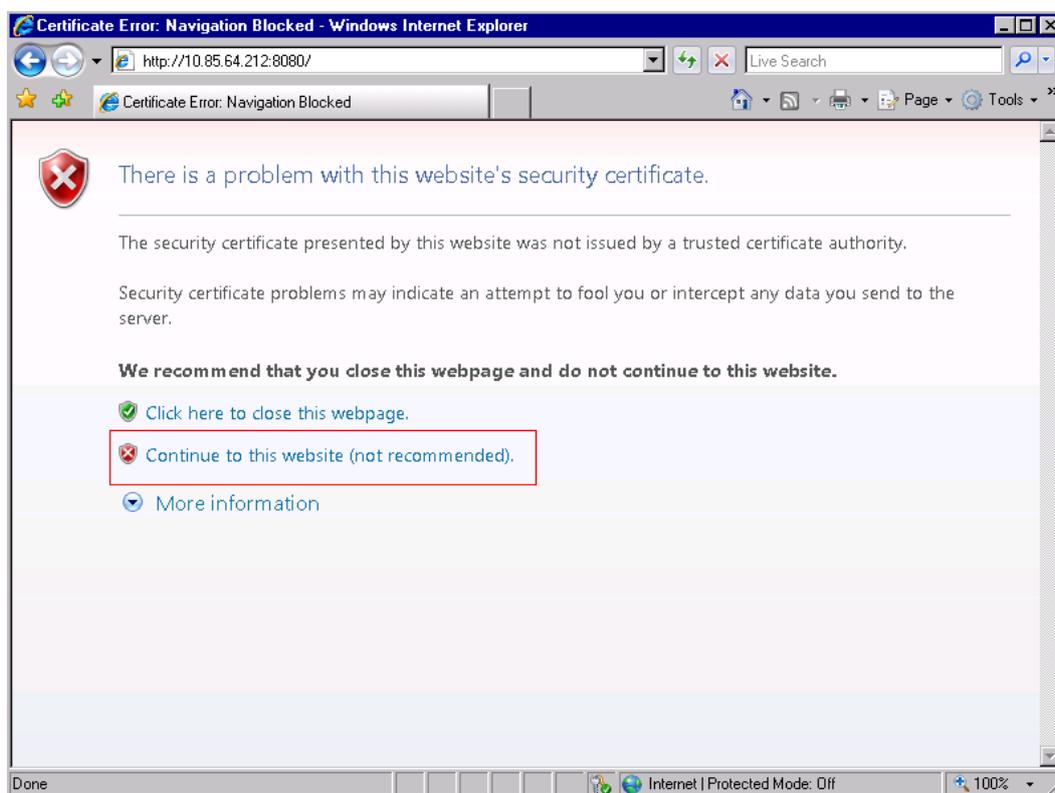
2. Click **Certificate Error**. In the **Untrusted Certificate** dialog box, click **View certificates**, as shown in **Figure 14-14**.

Figure 14-14 Untrusted Certificate
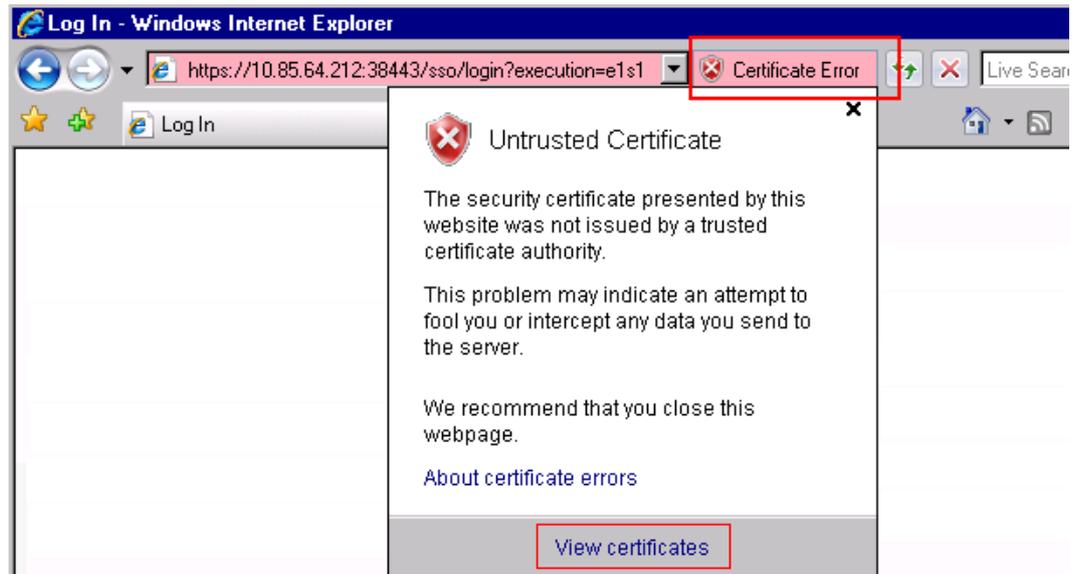
3. On the **General** tab page, click **Install Certificate**, as shown in **Figure 14-15**.

Figure 14-15 Certificate Information

4. In the **Certificate Import Wizard** dialog box, click **Next**, as shown in **Figure 14-16**.

Figure 14-16 Certificate Import Wizard
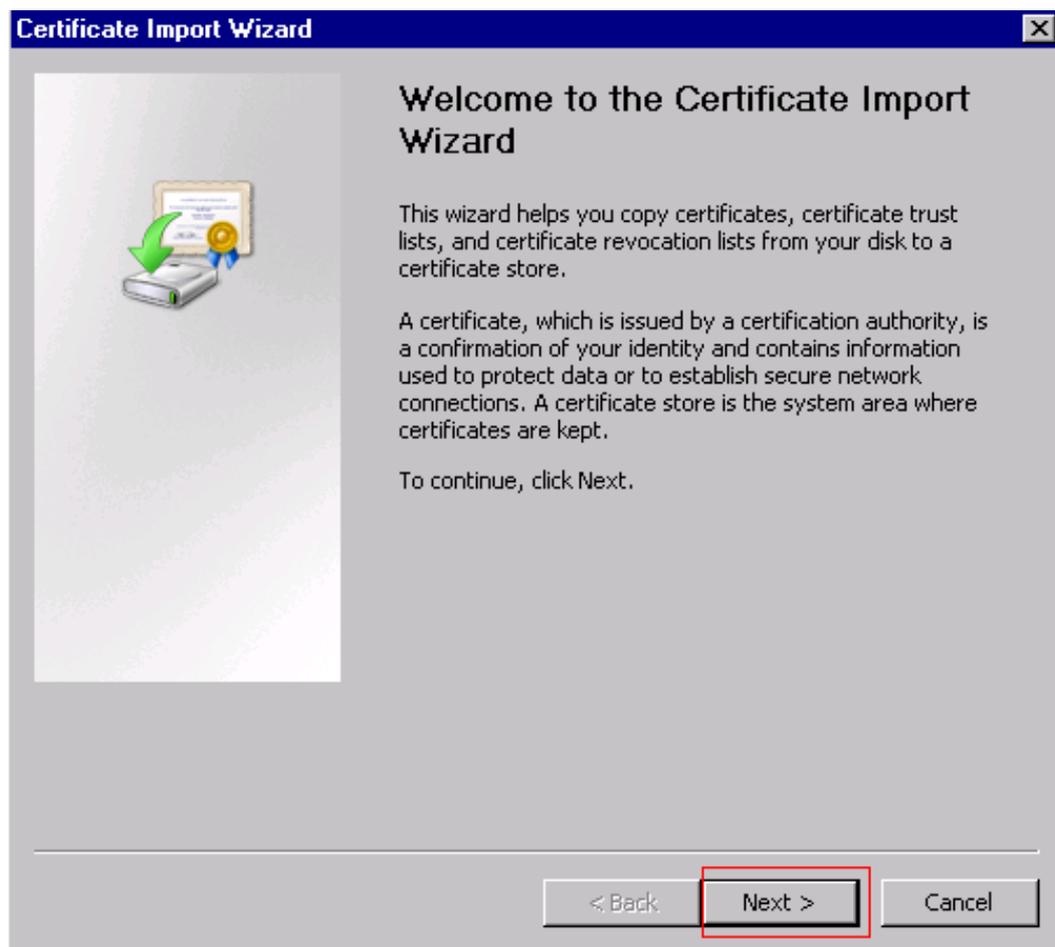
5. Select **Please all certificates in the following store** and click **Browse**, as shown in **Figure 14-17**.

Figure 14-17 Import Certificate
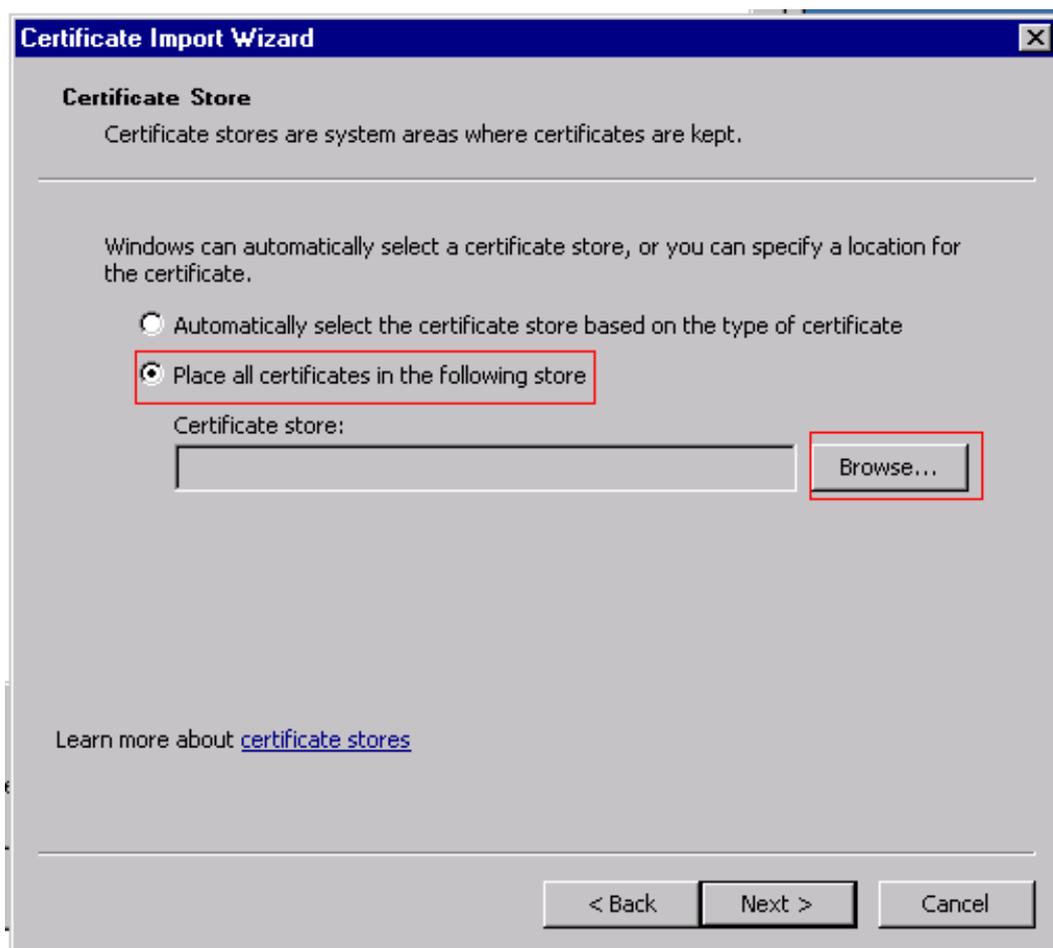
6. In the **Select Certificate Store** dialog box, select **Trusted Root Certification Authorities** and click **OK**, as shown in **Figure 14-18**.

Figure 14-18 Select Certificate Store

7.   Click **Next**, as shown in **Figure 14-19**.

Figure 14-19 Certificate Store
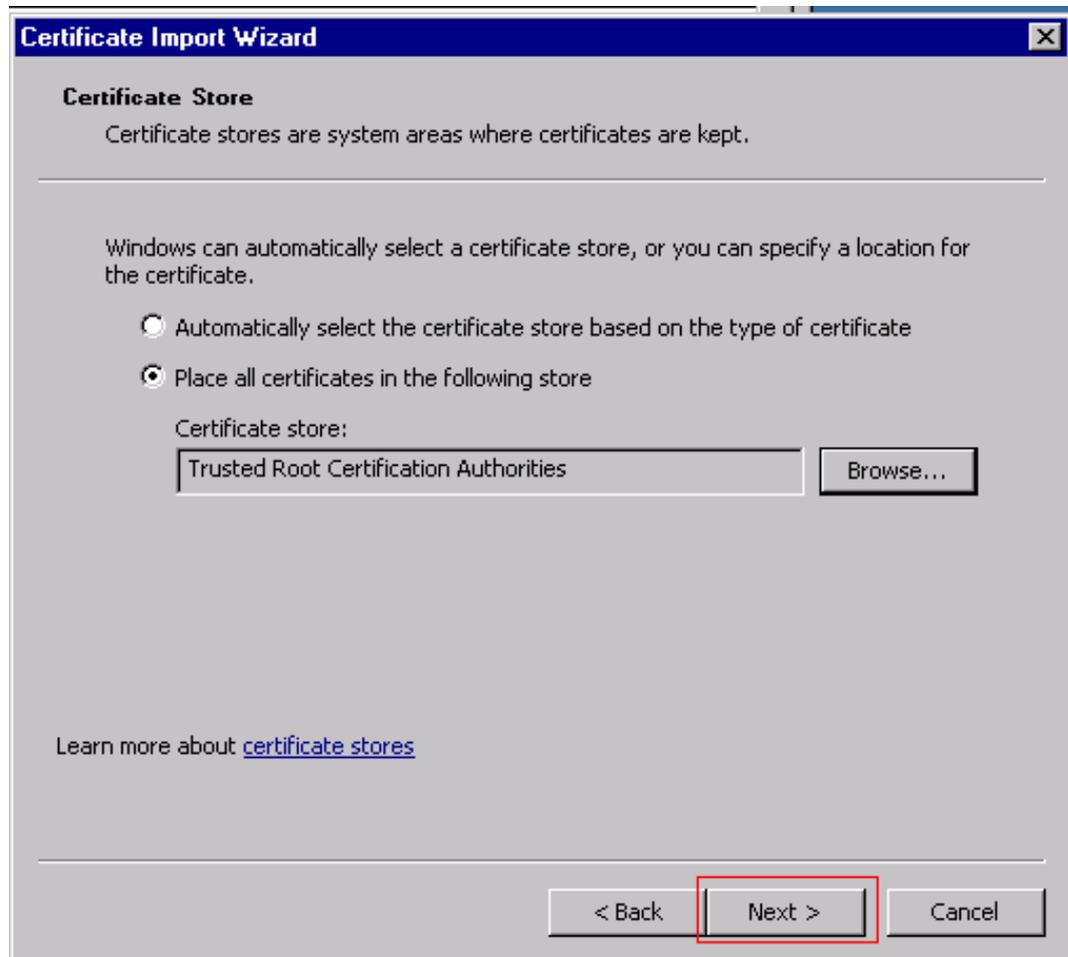
8.   In the **Certificate Import Wizard** dialog box, click **Finish**, as shown in **Figure 14-20**.

Figure 14-20 Complete the Certificate Import Wizard
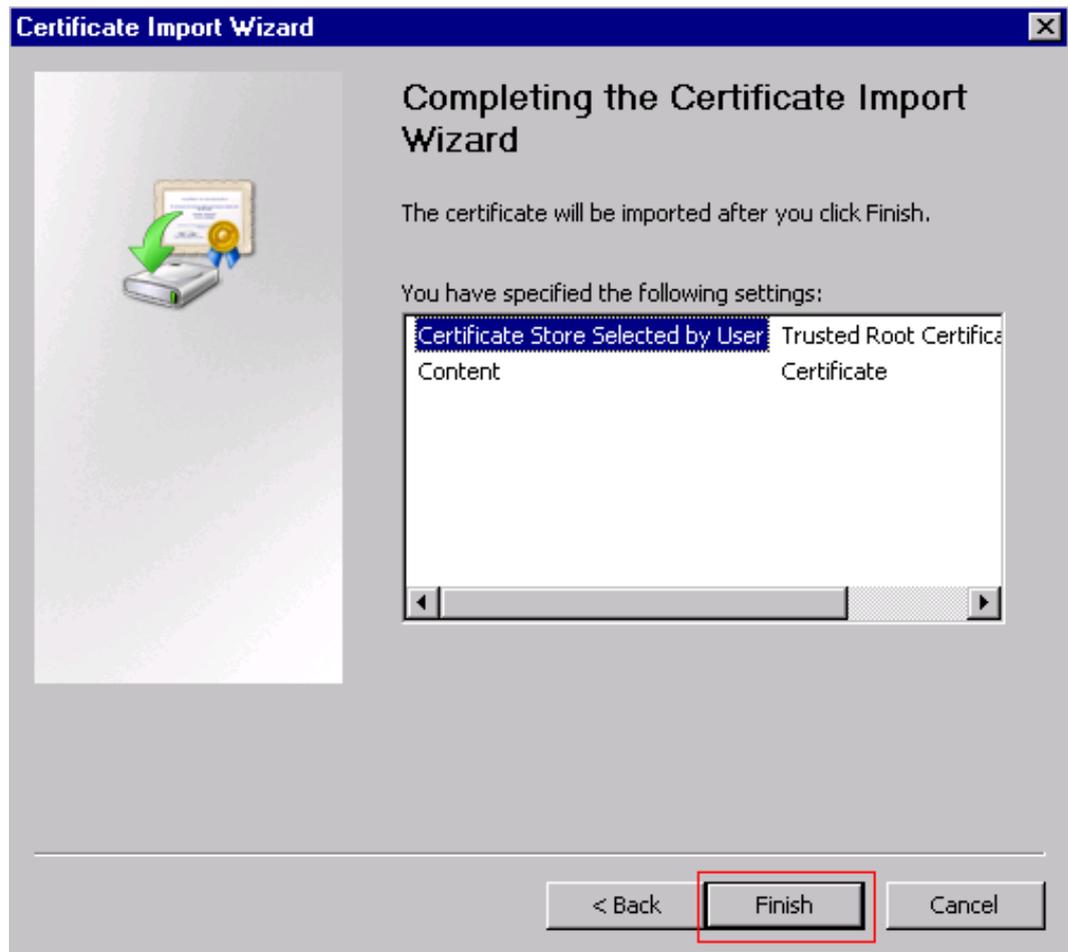
9.   In the **Security Warning** dialog box, click **Yes**, as shown in **Figure 14-21**.

Figure 14-21 Install Certificate
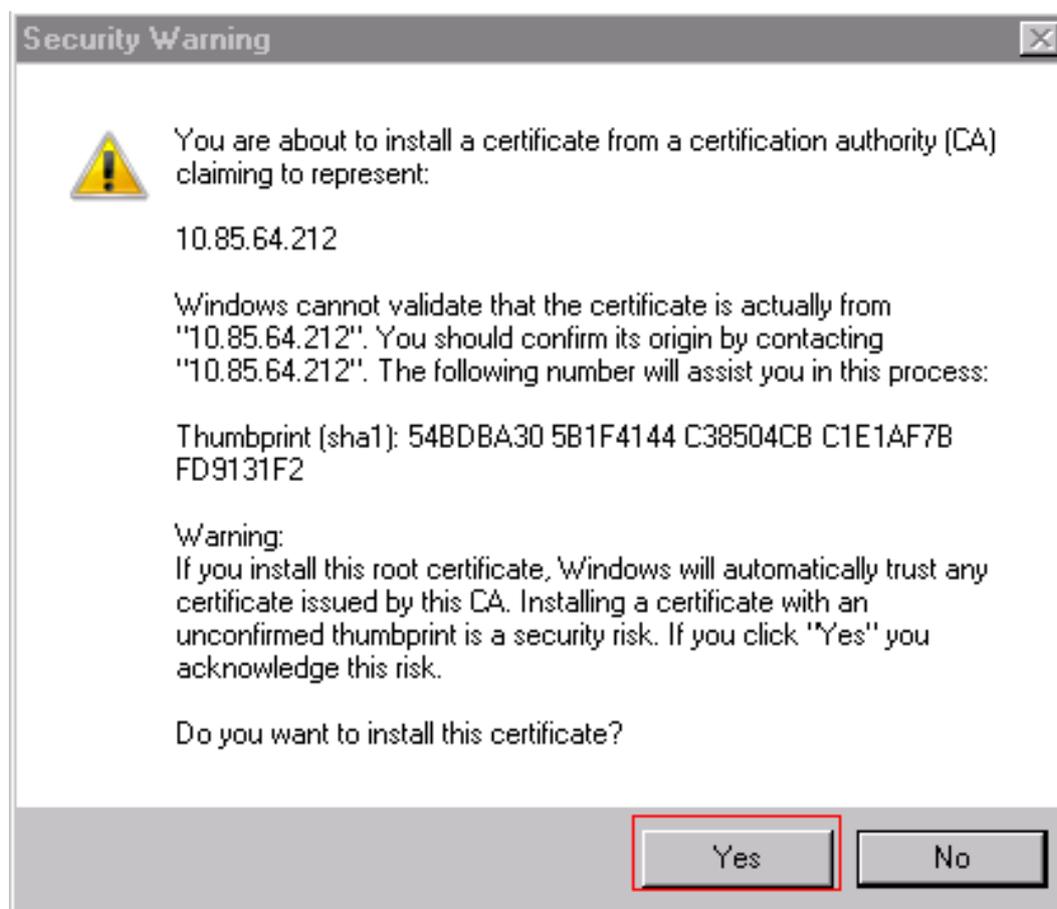
10. In the **Certificate Import Wizard** dialog box, click **OK**, as shown in **Figure 14-22**.

Figure 14-22 Certificate importing succeeded

11. Close Internet Explorer and open it again to log in to the eSight.

● Solution 2: Installing a Security Certificate (Mozilla Firefox)

1. On the error message page, expand **I Understand the Risks** and click **Add Exception**, as shown in **Figure 14-23**.

Figure 14-23 Add Exception
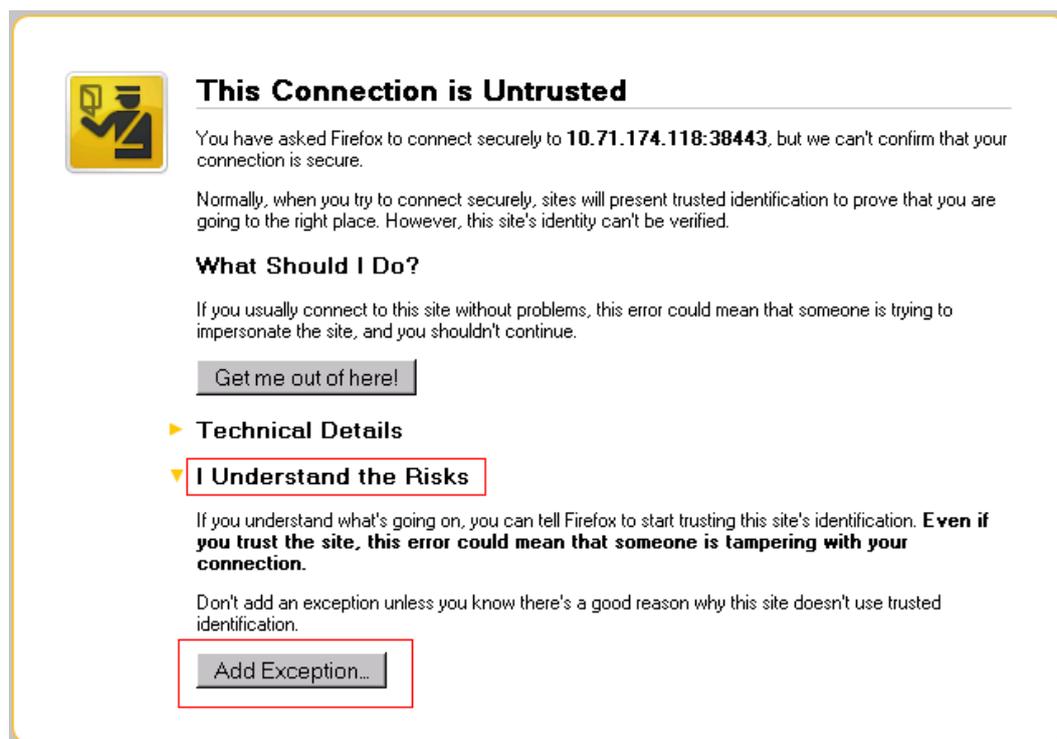
2. In the **Add Security Exception** dialog box, click **Confirm Security Exception**, as shown in **Figure 14-24**.

Figure 14-24 Confirm Security Exception
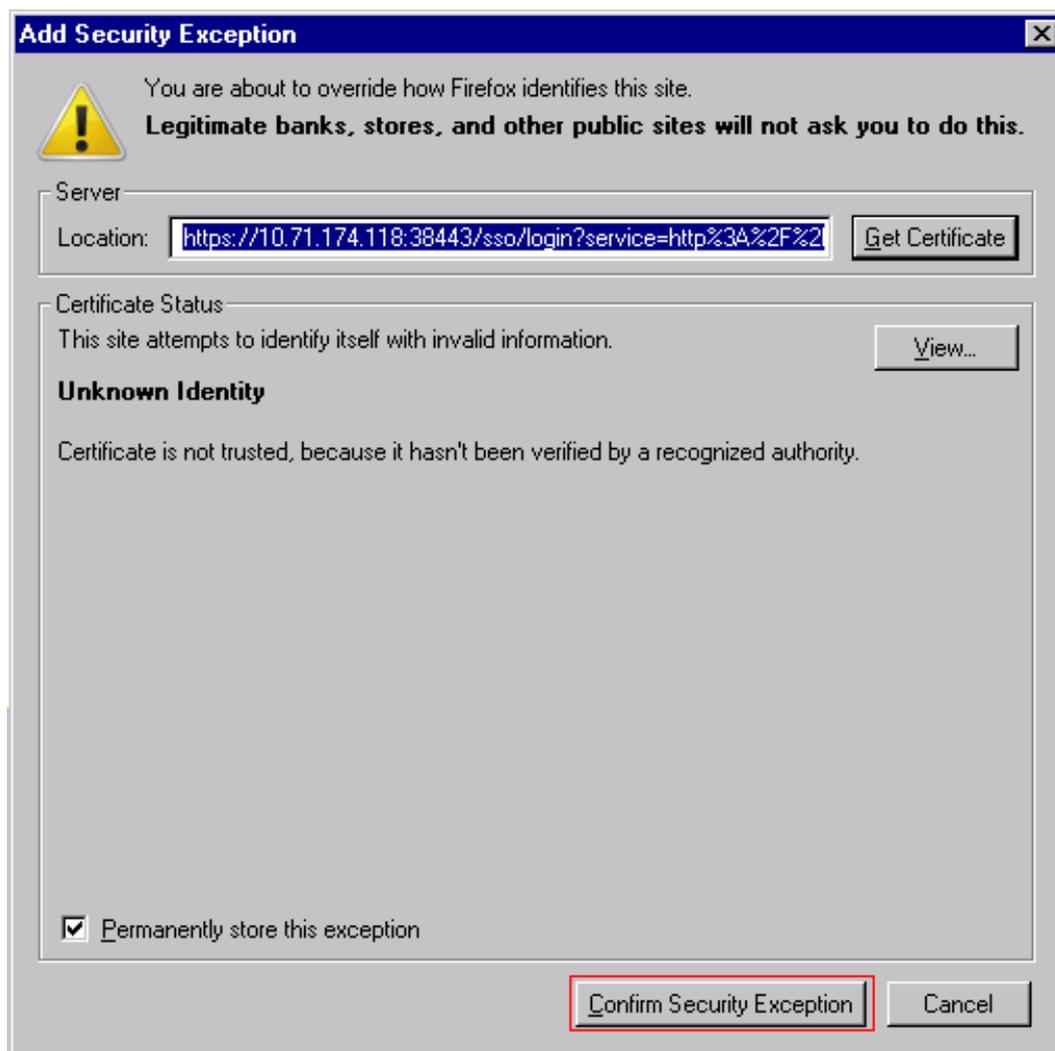
3.   Close Mozilla Firefox and open it again to log in to the eSight.

----End

14.5.7 How to Start Dtabase Backup and Recovery Tool

Question

How to Start Dtabase Backup and Recovery Tool?

Answer

Step 1 Enable the database backup and restoration tool on eSight server.

- On a Windows OS, choose **Start** > **All Programs** > **eSight** > **tools** > **Launch Database Backup And Recovery Tool**.
- On a Linux OS, execute the **run.sh** file in the **/opt/eSight/backuptool/bin** directory.

Step 2 Connect to the URL for logging in to the database backup and restoration tool by means of the client explorer.

URL example: http://10.135.23.61:8130/backup

Step 3 Click **Back Up**, set **Description**, and click **Backup**.

Step 4 **Optional:** Click 🖉 as required to restore the database.

Step 5 **Optional:** Select a backup task and click **Delete** to delete the backup task and the corresponding backed up files.

----End

14.5.8 How Do I Create RAID 5 for Three or More Hard Disks on an IBM X3650 M3 Server

Question

How do I create RAID 5 for three or more hard disks on an IBM X3650 M3 server?

Answer

📖 **NOTE**

The following describes how to create RAID 5 for six hard disks on an IBM X3650 M3 server.

The procedure for creating RAID 5 varies according to the number of hard disks.

Step 1 Power on an IBM X3650 M3 server to execute self-check. When the page shown in **Figure 14-25** is displayed, press **Ctrl+H**.

The **Adapter Selection** page is displayed, as shown in **Figure 14-26**.

Figure 14-25 WebBIOS

Figure 14-26 Adapter Selection page
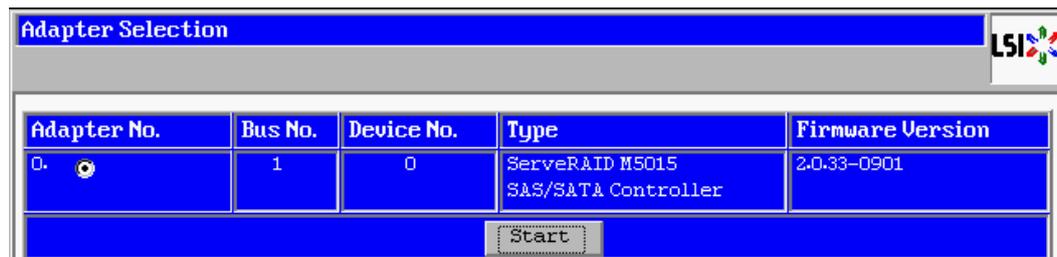
Step 2 Click **Start**.

The **MegaRAID BIOS Config Utility Virtual Configuration** window is displayed, as shown in **Figure 14-27**.
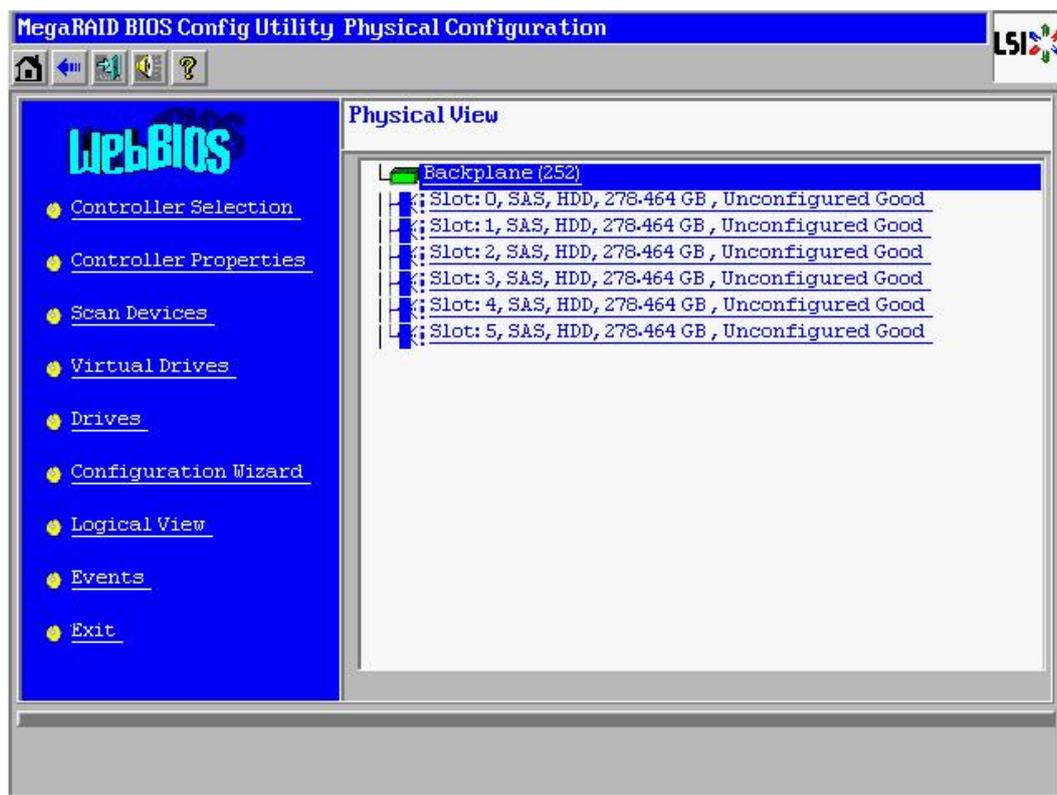
Figure 14-27 MegaRAID BIOS Config Utility Virtual Configuration window
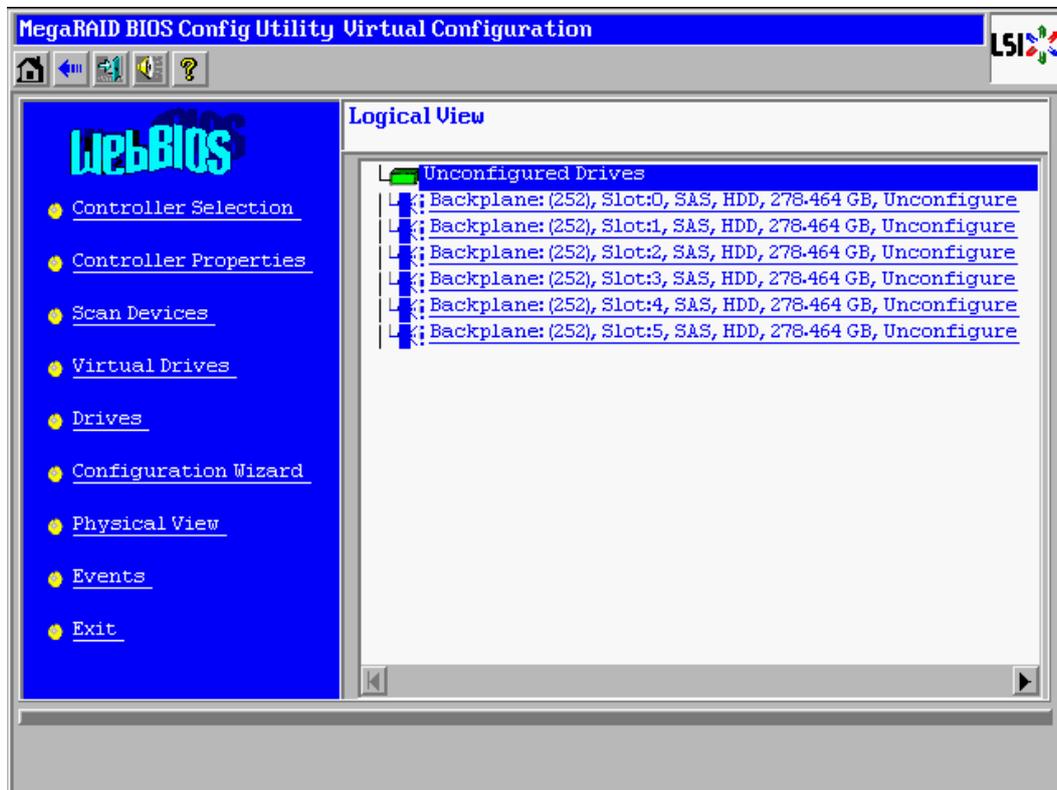
Step 3 In the navigation tree, click **Physical View**.

The **MegaRAID BIOS Config Utility Physical Configuration** window is displayed, as shown in **Figure 14-28**.

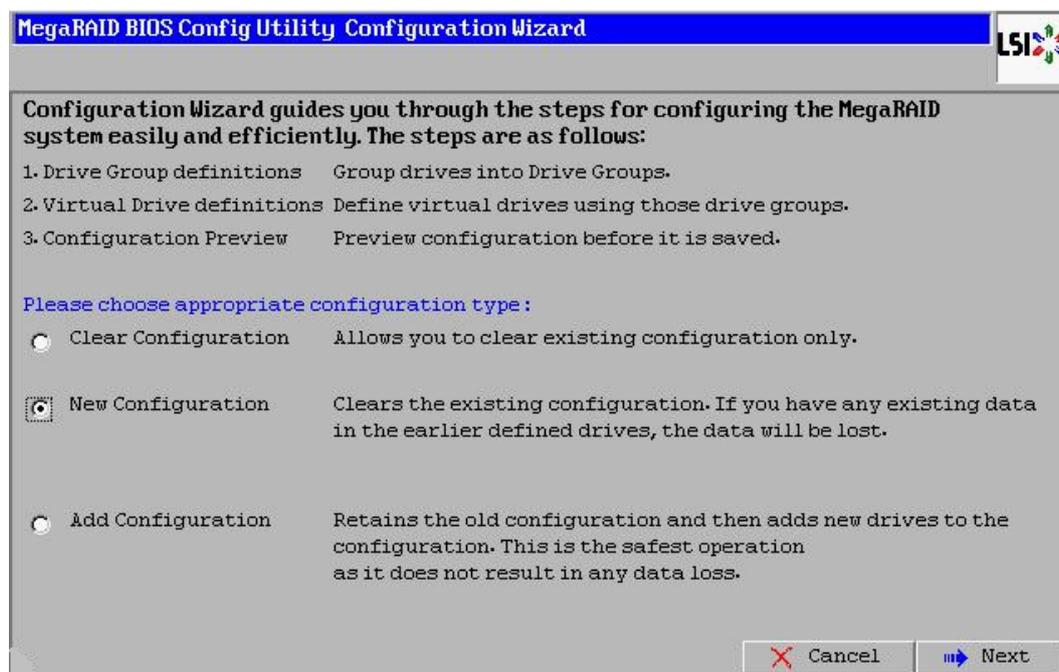**Figure 14-28** MegaRAID BIOS Config Utility Physical Configuration window

Step 4   In the navigation tree, click **Configuration Wizard**.

The **MegaRAID BIOS Config Utility Configuration Wizard** window is displayed.

Step 5   Select **New Configuration**, as shown in **Figure 14-29**.

Figure 14-29 Selecting New Configuration

Step 6 Click **Next**.

The **Confirm Page** window is displayed.

Step 7 Click **Yes**.

The **Select Configuration Method** window is displayed.

Step 8 Select **Manual Configuration**, as shown in **Figure 14-30**.

Figure 14-30 Selecting Manual Configuration
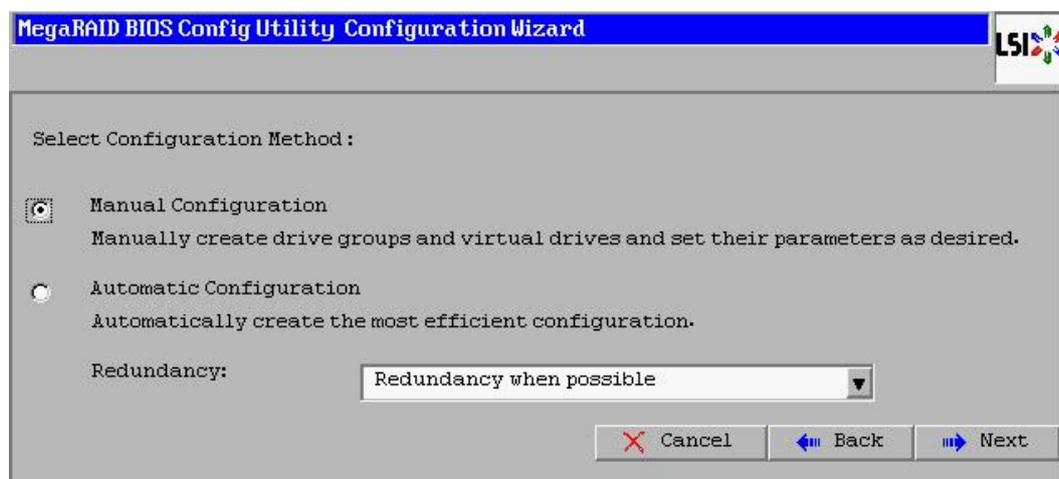
Step 9 Click **Next**.
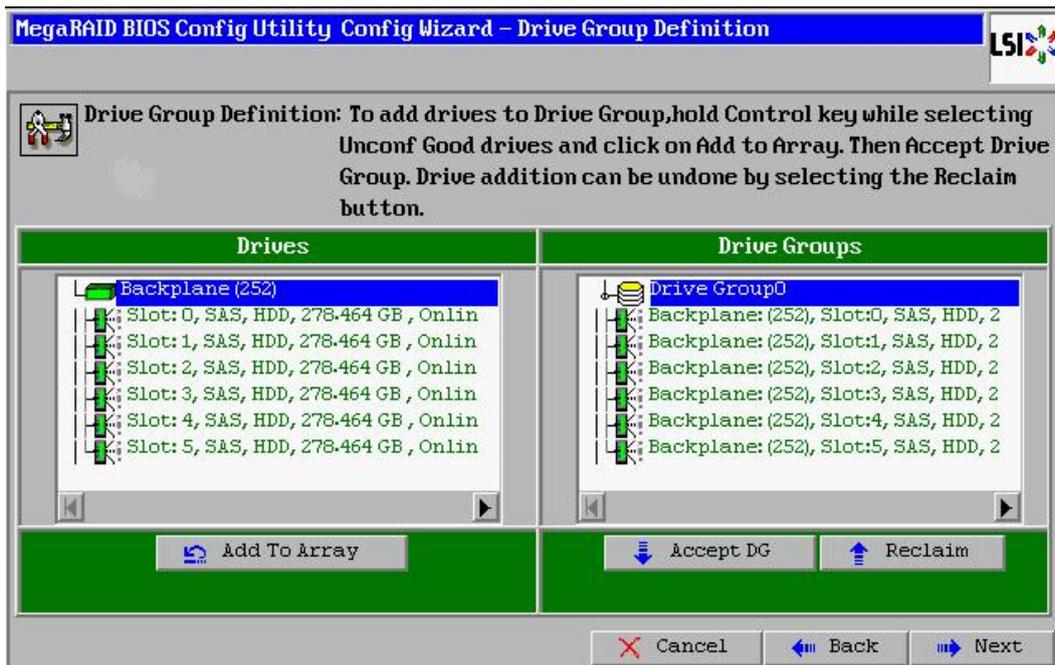
The **Drive Group Definition** window is displayed.

Step 10 Hold down **Ctrl**, and click all slots in the **Drives** area, as shown in **Figure 14-31**.

Figure 14-31 Creating RAID 5 (1)
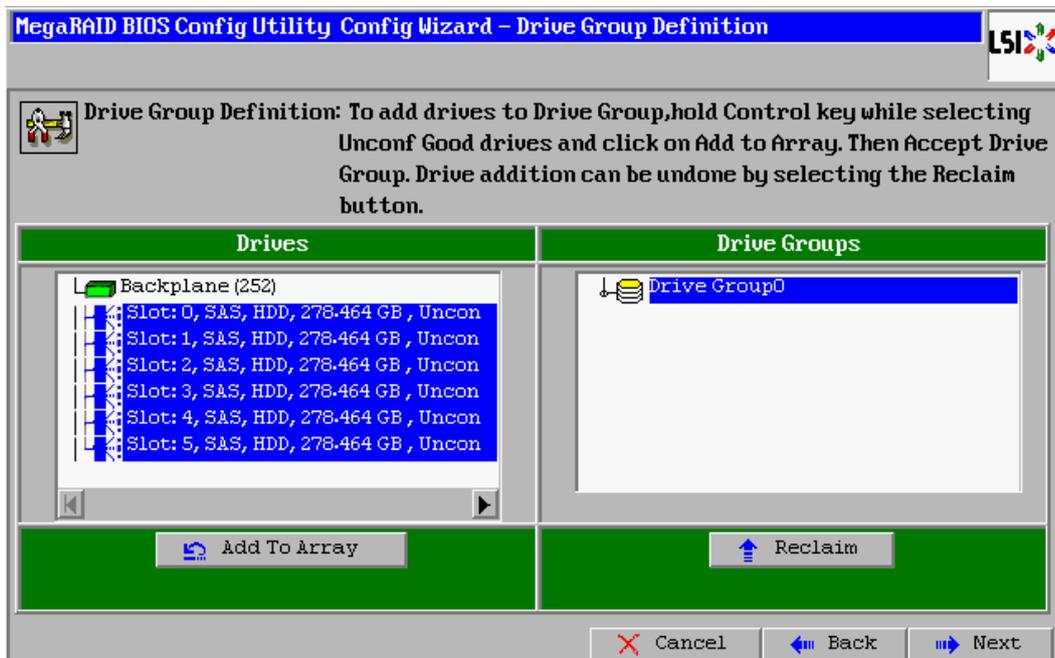
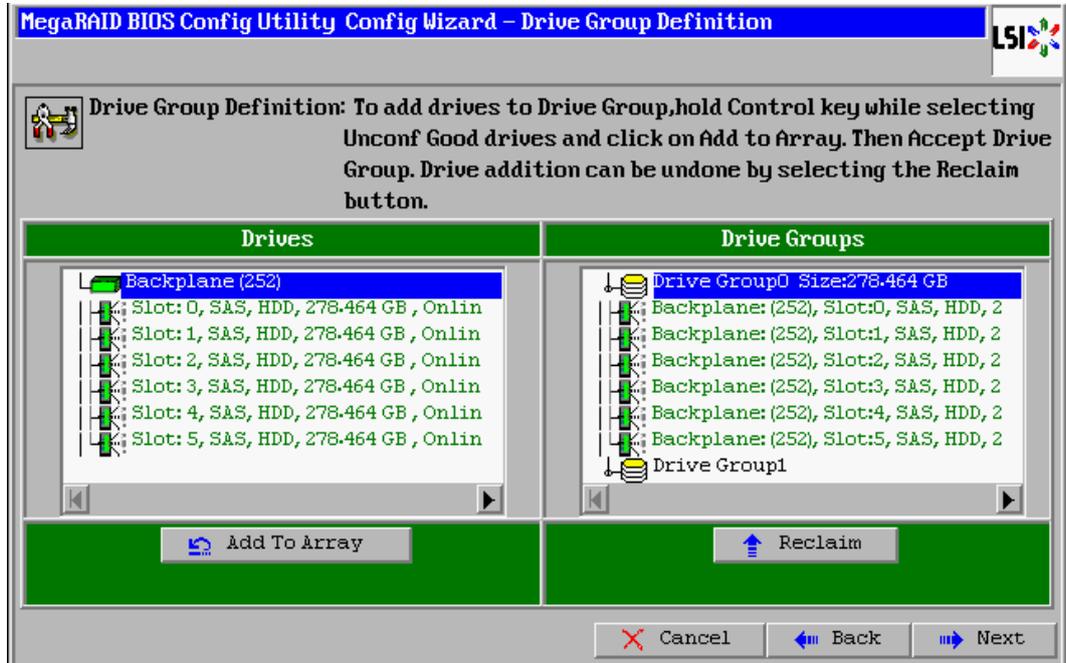**Step 11** Click **Add to Array** to add the selected slots to **Drive Group0**, as shown in **Figure 14-32**.

Figure 14-32 Creating RAID 5 (2)

Step 12 Click **Accept DG**, as shown in **Figure 14-33**.

**Figure 14-33** Creating RAID 5 (3)

Step 13 Click **Next**.

The **Span Definition** window is displayed, as shown in **Figure 14-34**.

Figure 14-34 Creating RAID 5 (4)

Step 14 Select **Drive Group:0,Hole:0,R0,R1,R5,1.631TB** from the **Array With Free Space** drop-down list box, and click **Add to SPAN** to add **Drive Group:0,Hole:0,R0,R1,R5,1.631TB** to the **Span** area, as shown in **Figure 14-35**.
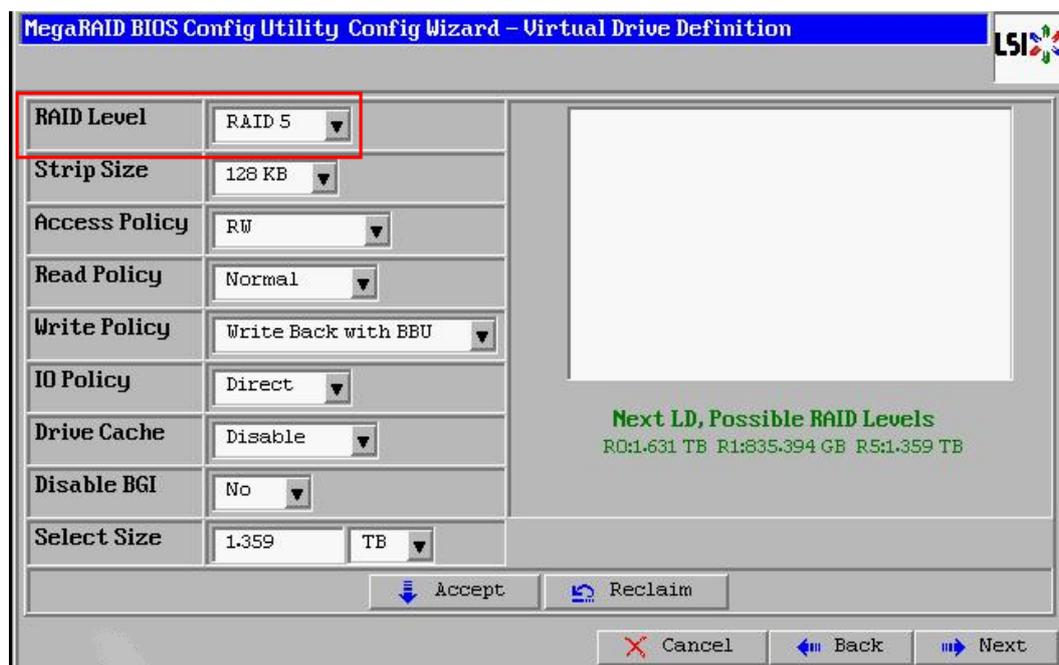
Figure 14-35 Creating RAID 5 (5)
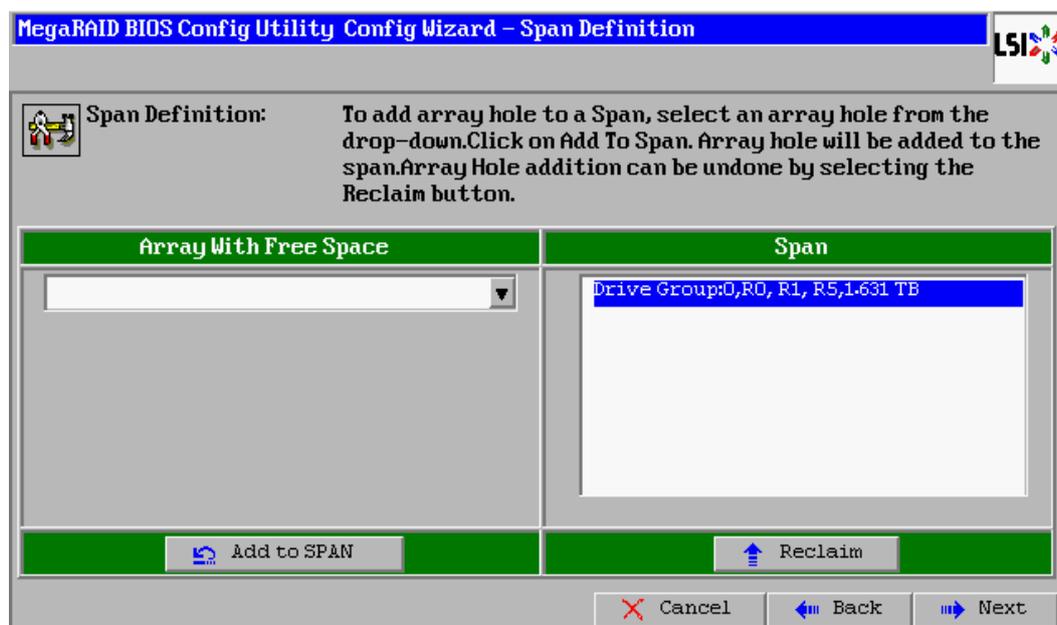
Step 15 Click **Next**.

The **Virtual Drive Definition** window is displayed.

Step 16 Set **RAID Level** to **RAID 5**, as shown in **Figure 14-36**.

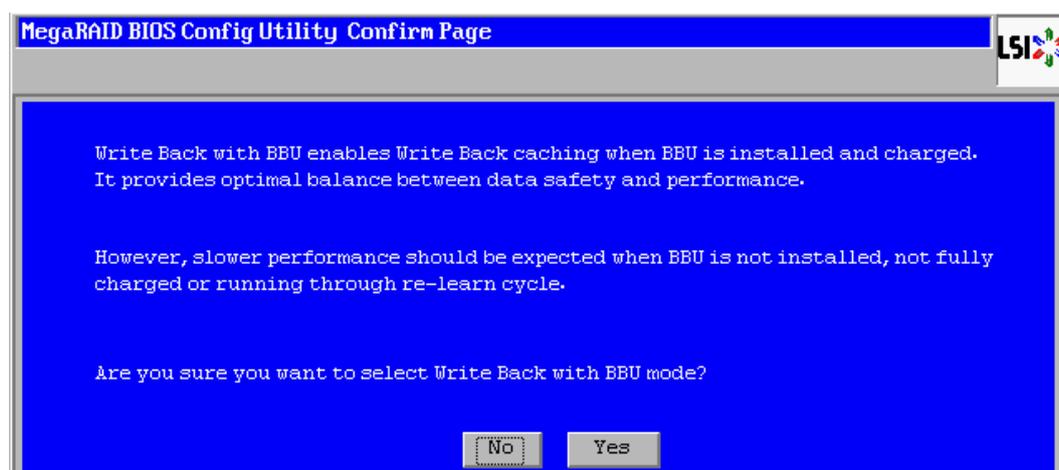**Figure 14-36** Setting the RAID level

Step 17 Click **Accept**.

The **MegaRAID BIOS Config Utility Confirm Page** window is displayed, as shown in **Figure 14-37**.
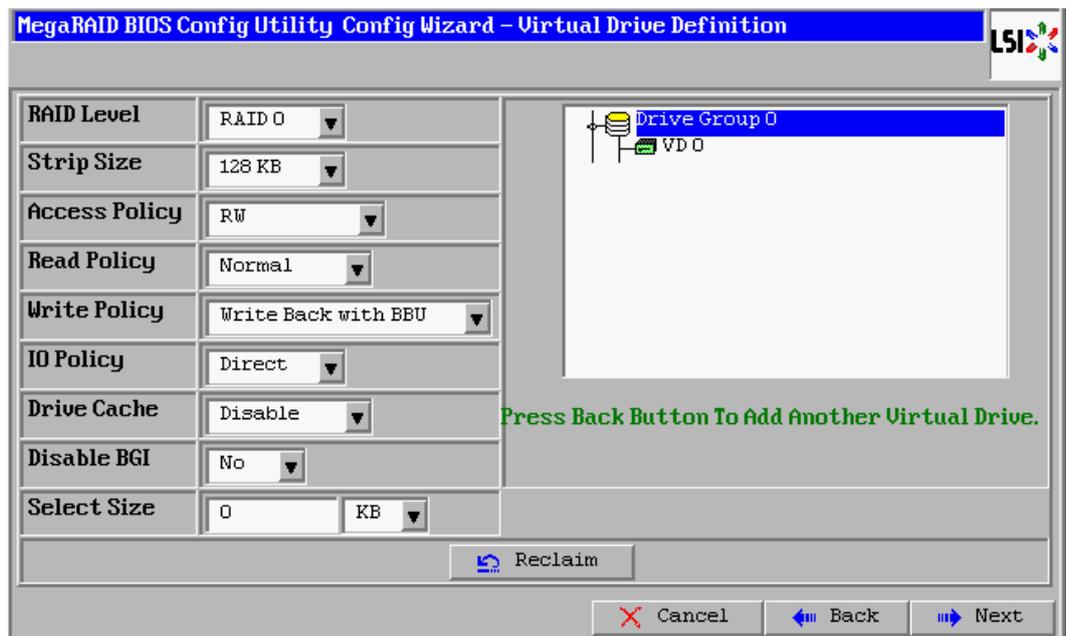
Figure 14-37 MegaRAID BIOS Config Utility Confirm Page window

Step 18 Click **Yes**.

The **MegaRAID BIOS Config Utility Config Wizard-Virtual Drive Definition** window is displayed, as shown in **Figure 14-38**.
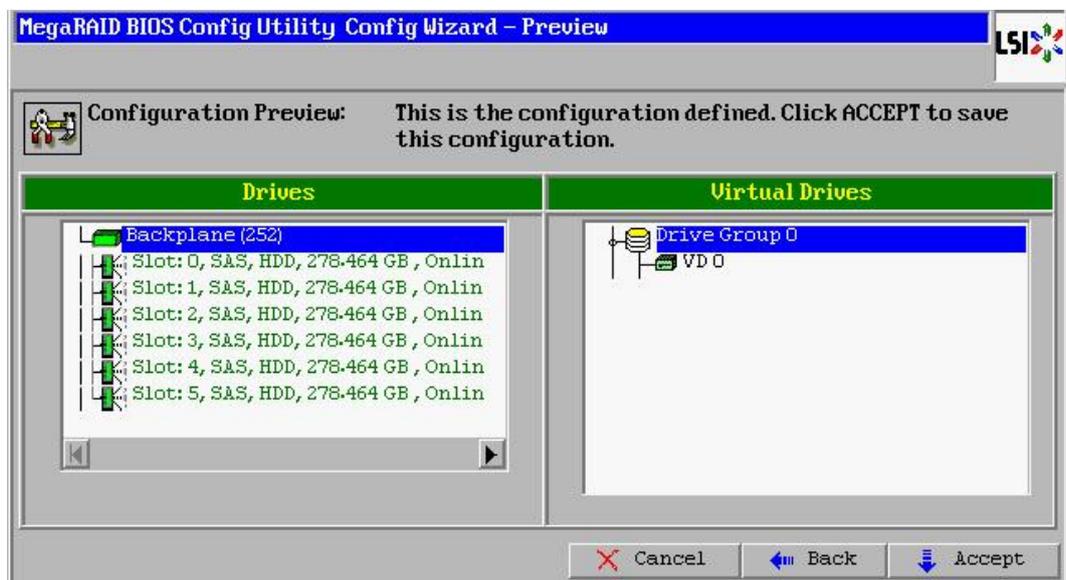
Figure 14-38 MegaRAID BIOS Config Utility Config Wizard-Virtual Drive Definition window

Step 19   Click **Next**.

The **MegaRAID BIOS Config Utility Config Wizard-Preview** window is displayed, as shown in **Figure 14-39**.

Figure 14-39 MegaRAID BIOS Config Utility Config Wizard-Preview window

Step 20   Click **Accept**.

The **MegaRAID BIOS Config Utility Confirm Page** window is displayed, as shown in **Figure 14-40**.

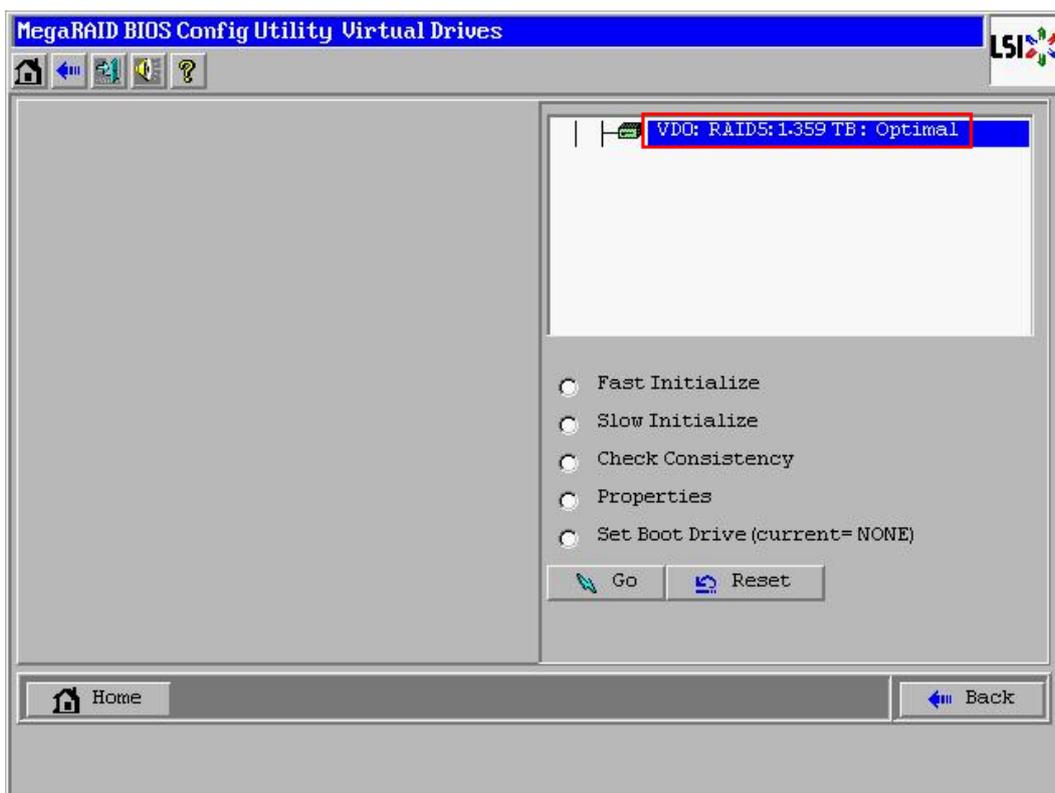**Figure 14-40** MegaRAID BIOS Config Utility Confirm Page window

Step 21 Click **Yes**.

Step 22 Click **Yes**.

The initialization page is displayed, as shown in **Figure 14-41**.

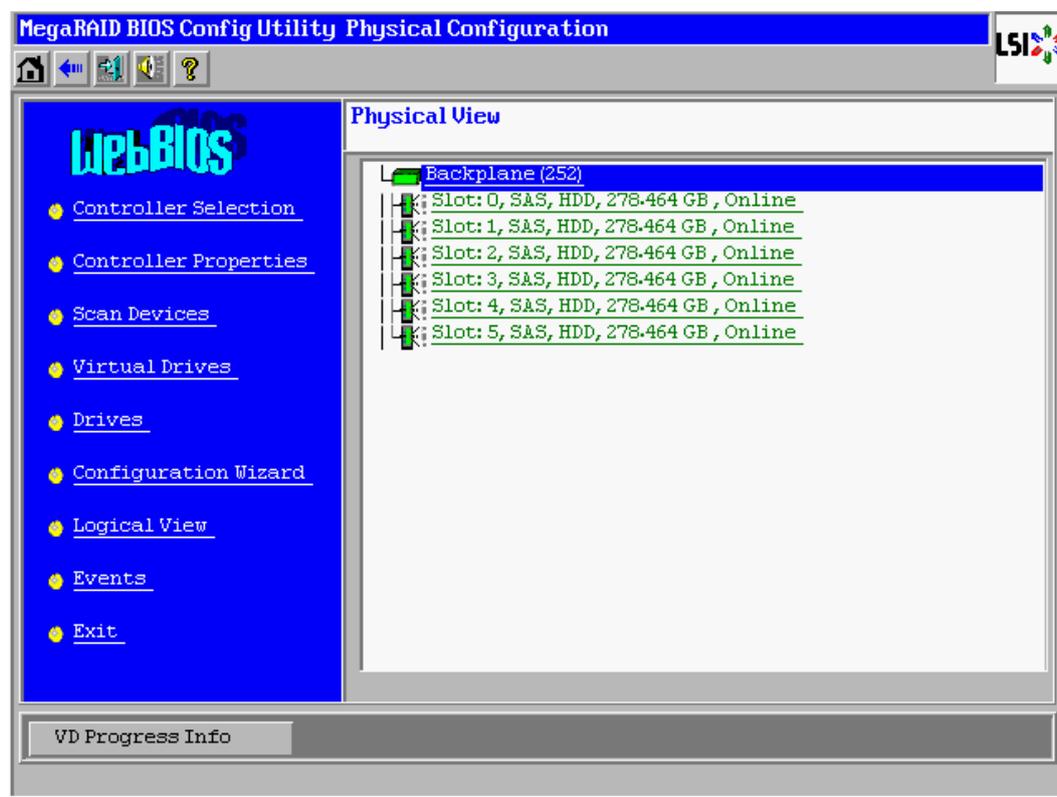**Figure 14-41** Initialization page

 NOTE

  If the disk is in the **VD0: RAID5: 1.359 TB: Optimal** state, RAID 5 is created successfully.

Step 23 Click **Home**. The **MegaRAID BIOS Config Utility Physical Configuration** window is
displayed, as shown in **Figure 14-42**.

Figure 14-42 MegaRAID BIOS Config Utility Physical Configuration window

Step 24 Click **Exit**.

The **Exit Confirmation** window is displayed.

Step 25 Click **Yes**.

The **Reset Page** window is displayed.

Step 26 Restart the IBM X3650 M3 server.

----End

14.5.9 What Do I Do When Data Cannot Be Dumped?

Symptom

Data cannot be dumped if I change the maximum size of the database tablespace to a value indicating no upper limit by using a database tool.

Possible Causes

After the maximum size of the database tablespace is changed to a value indicating no upper limit, the database usage threshold cannot be reached. This causes a failure to dump data.

⚠ **CAUTION**

You cannot change the maximum size of the database tablespace to a value indicating no upper limit by using a database tool.

Procedure

Step 1 Use a database tool to change the maximum size of the database tablespace to a proper value.

The default maximum size of the database tablespace is provided after you install the eSight, and the default maximum size is recommended.

----End

14.5.10 How Do I Modify the JVM Startup Parameters of the eSight ?

Question

How do I modify the JVM startup parameters of the eSight ?

Answer

- On Linux:
    1. Use the text editor to open the file in **$eSight_ROOT/AppBase/bin/runtime.center/bin/run.sh**.
    2. Modify the JVM startup parameters in the **run.sh** file.

       The parameters for starting the JVM are:
       - **JVM_MEM**.
       - **JVM_MN**.
       - **JVM_PS**.

- On Windows:
    1. Use the text editor to open the file in **$eSight_ROOT\AppBase\etc\oms.core\oms.runtime.start.setting.properties**.
    2. Modify the JVM startup parameters in the **oms.runtime.start.setting.properties** file.

       The parameters for starting the JVM are:
       - **set.JVM_MEM**.
       - **set.JVM_MN**.
       - **set.JVM_CMS_THRESHOLD**.
       - **set.JVM_PS**.
       - **set.JVM_CodeCache**.

----End

14.5.11 How to Calculate the Dump Tablespace Usage?

Question

How to calculate the dump tablespace usage?

Answer

- Oracle database: The size of an Oracle database is automatically increased. The tablespace usage is the actual tablespace divided by the Oracle database size.
- MySQL database: The maximum size of a MySQL database is configured by using the **mySqlDBTableMaxSize** parameter in the **oms.xml** file. The tablespace usage is the actual tablespace divided by the value for **mySqlDBTableMaxSize**.

  📖 **NOTE**

  The **oms.xml** file path is as follows:
  - Windows operating system: **D:\eSight\AppBase\etc**
  - Linux operating system: **/opt/eSight/AppBase/etc**

- SQL SERVER database: The tablespace usage is the actual tablespace divided by the maximum size which is allocated when you create the SQL SERVER database.

14.5.12 How Do I Solve the Problem When Images and Characters Overlap on the eSight Login Page

Question

If the eSight server URL is not configured as a trusted site, images and characters may overlap on the eSight login page accessed using Internet Explorer on Windows Server 2008, as shown in **Figure 14-43**.

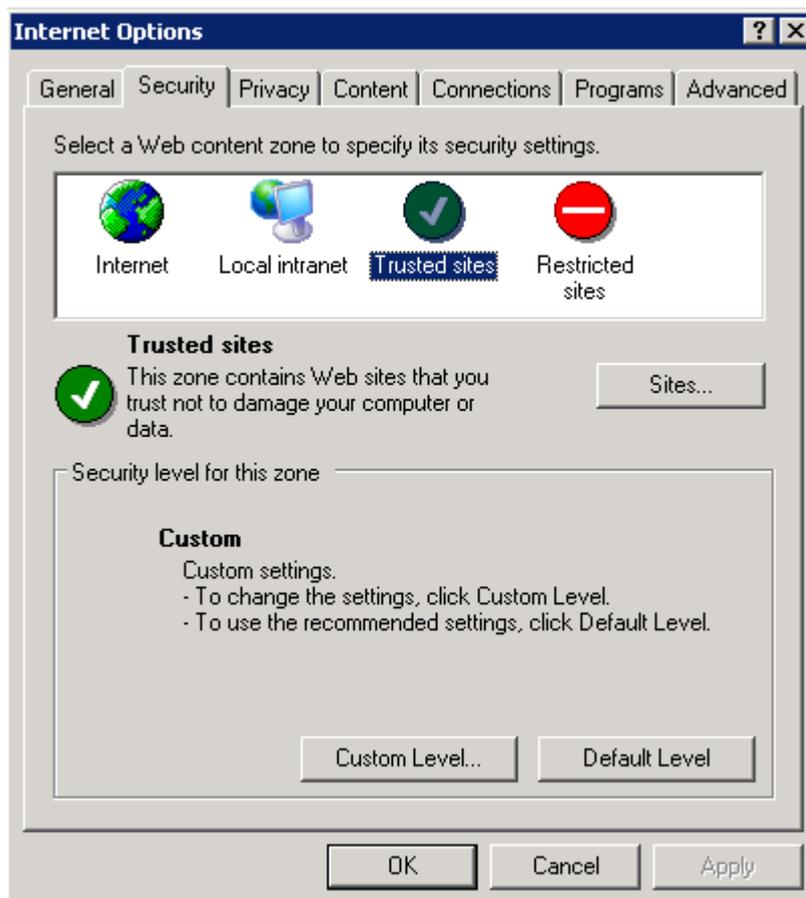**Figure 14-43** Overlapping images and characters
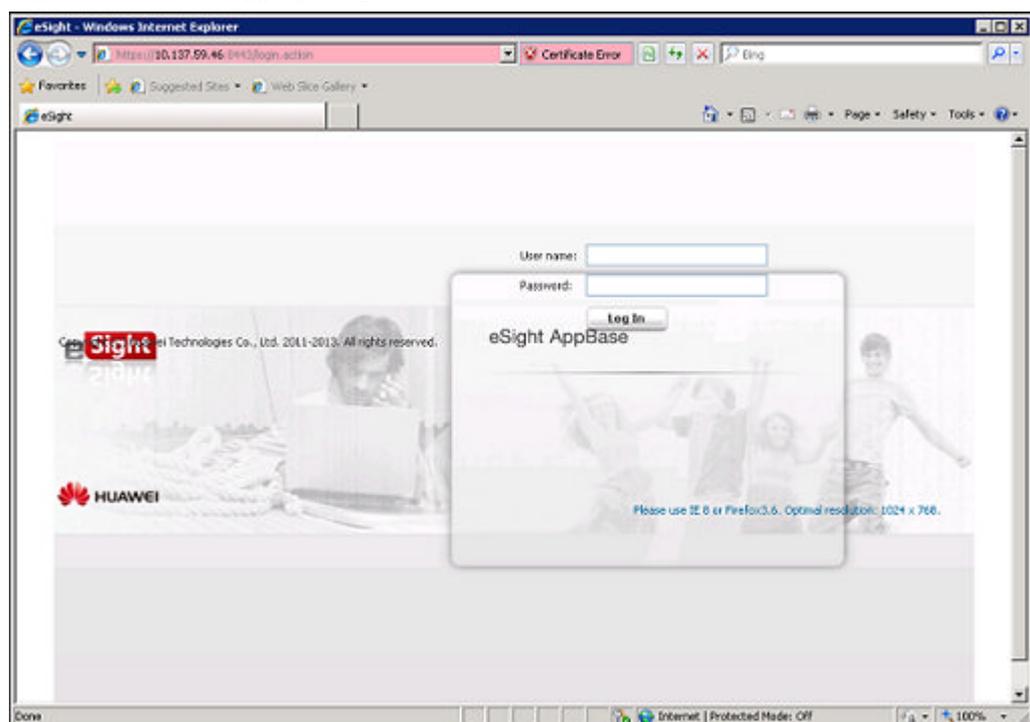
Answer

> **Step 1** Choose **Tools** > **Internet Options**.

> **Step 2** Click **Security** tab, and select **Trusted sites**, as shown in **Figure 14-44**.

Figure 14-44 Internet Options

> **Step 3** Click **Sites**.

> **Step 4** Click **Add**, and add the eSight server URL.

> **Step 5** Click **Close**.

> **Step 6** Click **OK**.

> **Step 7** Log in to eSight again.

> **----End**

14.5.13 How Do I Solve the Problem When eSight Fails to Be Installed in an English Operating System Due to Chinese Characters in the Installation Package Path

Symptom

When the eSight installation package path contains Chinese characters, eSight fails to be installed in an operating system that is not installed with the Chinese language package.

Possible Causes

The English operating system that is not installed with the Chinese language package cannot resolve the installation package path that contains Chinese characters.

Procedure

Step 1 Change the Chinese characters in the installation package path to English characters.

----End

14.5.14 How Do I Solve the Problem of Garbled Characters When Chinese-Version eSight Is Installed in an English Operating System?

Symptom

When Chinese-version eSight is installed in an English windows operating system, some Chinese characters are garbled characters.

Possible Causes

When an English operating system is not installed with the Chinese language package, Chinese characters cannot be properly displayed.

Procedure

Step 1 Download the Chinese language installation program at **http://www.microsoft.com/download/en/default.aspx**.

Step 2 Double-click the Chinese language installation program. The system then restarts after the installation.

Step 3 Choose **Start** > **Control Panel**.

Step 4 In **Control Panel**, click **Change display Language**, as shown in **Figure 14-45**.

Figure 14-45 Control Panel
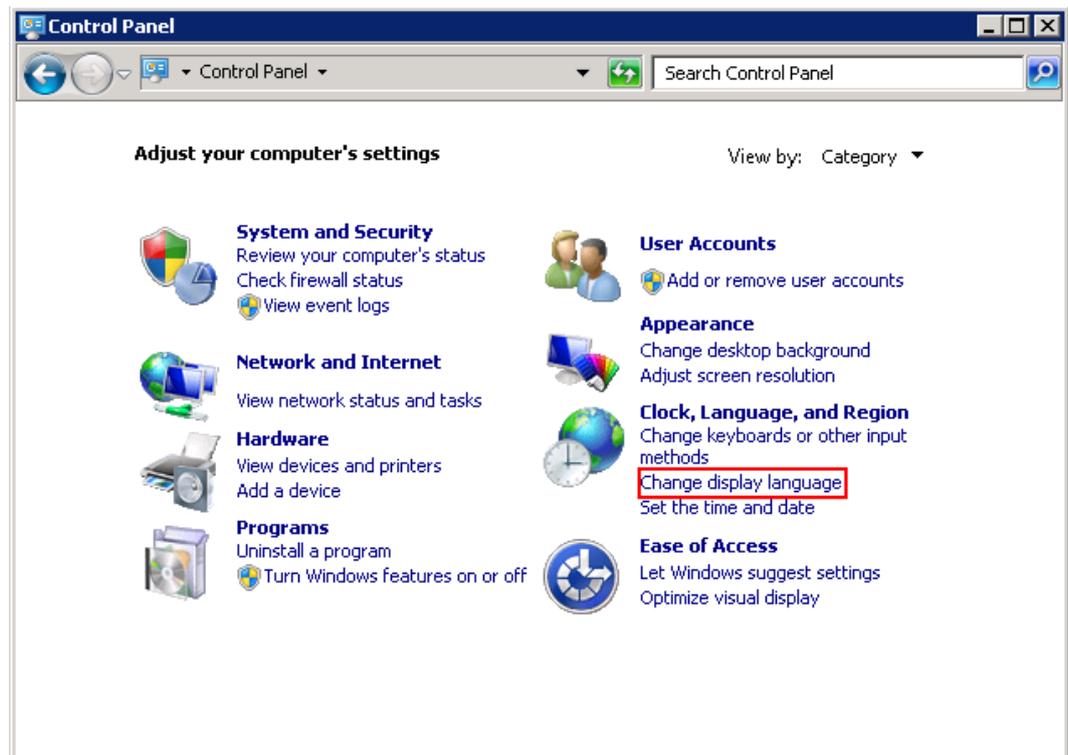
Step 5 On the **Region and Language** screen, click **Formats**.

Step 6 In the **Format** area, select **Chinese (Simplified, PRC)**.

Step 7 On the **Region and Language** screen, click **Location**.

Step 8 In the **Current location** area, select **China**.

Step 9 On the **Region and Language** screen, click **Administrative**.

Step 10 Click **Change System locale**, the **Change Regional Options** dialog box is displayed.

Step 11 Click **Apply**.

Step 12 On the **Region and Language Settings** screen, select **Chinese (Simplified, PRC)**.

Step 13 Click **OK**, the **Change System Locale** dialog box is displayed.

Step 14 Click **Restart now** to restart the system.

----End