NORTEL

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Installing and Using Security and Routing Element Manager (SREM)

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Preface

This document provides generic instructions for installing and using the Security & Routing Element Manager (SREM) software.

Security & Routing Element Manager (SREM) is a graphical user interface (GUI) that runs in an online, interactive mode. SREM allows the management of multiple devices (for example, the Nortel SNAS 4050) from one application. To use SREM, you must have network connectivity to a management station running SREM in one of the supported environments.

Before you begin

This guide is intended for network administrators who have the following background:

- basic knowledge of networks, Ethernet bridging, and IP routing
- familiarity with networking concepts and terminology
- experience with windowing systems or GUIs
- basic knowledge of network topologies

Before using this guide, you must complete the following procedures. For a new switch:

Step	Action
1	Install the switch. For installation instructions, see *Nortel Secure Network Access Switch 4050 Installation Guide (320846-A)*.
2	Connect the switch to the network. For more information, see *Nortel Secure Network Access Solution Guide (320817-A)*.
3	Complete the basic switch configuration using CLI commands. For more information, see *Nortel Secure Network Access Switch 4050 User Guide (320818-A)*.

—End—

Text conventions

This guide uses the following text conventions:

angle brackets (< >)	Enter text based on the description inside the brackets. Do not type the brackets when entering the command. Example: If the command syntax is `ping <ip_address>`, you enter `ping 192.32.10.12`
bold body text	Objects such as window names, dialog box names, and icons, as well as user interface objects such as buttons, tabs, and menu items.
`bold Courier text`	Command names, options, and text that you must enter. Example: Use the `dinfo` command. Example: Enter `show ip {alerts|routes}`.
braces ({})	Required elements in syntax descriptions where there is more than one option. You must choose only one of the options. Do not type the braces when entering the command. Example: If the command syntax is `show ip {alerts|routes}`, you must enter either `show ip alerts` or `show ip routes`, but not both.
brackets ([ ])	Optional elements in syntax descriptions. Do not type the brackets when entering the command. Example: If the command syntax is `show ip interfaces [-alerts]`, you can enter either `show ip interfaces` or `show ip interfaces -alerts`.
ellipsis points (. . .)	Repeat the last element of the command as needed. Example: If the command syntax is `ethernet/2/1[<parameter> <value>]...`, you enter `ethernet/2/1` and as many parameter-value pairs as needed.

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italic text	Variables in command syntax descriptions. Also indicates new terms and book titles. Where a variable is two or more words, the words are connected by an underscore.
	Example: If the command syntax is `show at <valid_route>`, `valid_route` is one variable and you substitute one value for it.
`plain Courier text`	Command syntax and system output, for example, prompts and system messages.
	Example: `Set Trap Monitor Filters`
separator (>)	Menu paths.
	Example: **Protocols > IP** identifies the **IP** command on the **Protocols** menu.
vertical line (|)	Options for command keywords and arguments. Enter only one of the options. Do not type the vertical line when entering the command.
	Example: If the command syntax is `show ip {alerts|routes}`, you enter either `show ip alerts` or `show ip routes`, but not both.

Related information

This section lists information sources that relate to this document.

Publications

Refer to the following publications for information on the Nortel SNA solution:

- *Nortel Secure Network Access Solution Guide (320817-A)*

- *Nortel Secure Network Access Switch 4050 Installation Guide (320846-A)*

- *Nortel Secure Network Access Switch 4050 User Guide (320818-A)*

- *Installing and Using the Security & Routing Element Manager (SREM) (320199-B)*

- *Release Notes for Nortel Ethernet Routing Switch 5500 Series, Software Release 4.3 (217468-B)*

- *Release Notes for the Ethernet Routing Switch 8300, Software Release 2.2.8 (316811-E)*

- *Release Notes for the Nortel Secure Network Access Solution, Software Release 1.0 (320850-A)*

- *Release Notes for Enterprise Switch Manager (ESM), Software Release 5.1 (209960-H)*

- *Using Enterprise Switch Manager Release 5.1 (208963-F)*

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If you purchased a Nortel service program, use the www.nortel.com/help web page to locate information to contact Nortel for assistance:

- To obtain Nortel Technical Support contact information, click the **CONTACT US** link on the left side of the page.

- To call a Nortel Technical Solutions Center for assistance, click the **CALL US** link on the left side of the page to find the telephone number for your region.

An Express Routing Code (ERC) is available for many Nortel products and services. When you use an ERC, your call is routed to a technical support person who specializes in supporting that product or service. To locate the ERC for your product or service, go to the www.nortel.com/help web page and follow these links:

Step	Action
1	Click **CONTACT US** on the left side of the **HELP** web page.
2	Click **Technical Support** on the **CONTACT US** web page.

3   Click **Express Routing Codes** on the **TECHNICAL SUPPORT**
web page.

—End—

Chapter 1
Installing SREM

The Security & Router Element Manager (SREM) is a graphical user interface that allows users to configure and monitor a variety of devices, including the Nortel Secure Network Access Switch 4050 (Nortel SNAS 4050) and the Nortel Secure Router 6200 Series.

SREM runs in an online, interactive mode, and allows the management of multiple devices from a single application.

This chapter includes the following topics:

Topic
"SREM installation precautions" (page 15)
"System requirements" (page 16)
"Removing previous versions of SREM" (page 16)
"Installing SREM on your system" (page 21)

SREM installation precautions

The following warnings apply to SREM on all operating environments:

- If you have other Nortel devices in your network, and are running earlier versions of SREM software, you must install the newest version of SREM in order to access the switches running the latest software.

- To maintain multiple versions of SREM on your system, choose a different installation folder for each new version of SREM.

To replace an existing version of SREM, you must complete the uninstall process first. The uninstall process is launched when:

— the SREM uninstall process is started manually (see "Accessing the uninstall application" (page 17) "Accessing the uninstall application" (page 17))

— the install folder selected during an SREM installation already contains a version of the software

• SREM saves the IP addresses that are visited to an encrypted network configuration (.xvn) file. Uninstalling SREM does not remove this settings file.

For details about creating a network configuration file, refer to "Saving a network configuration" (page 47) "Saving a network configuration" (page 47).

• The network configuration file containing IP addresses visited from a previous SREM version is automatically used by a newly installed SREM version. If you do not wish to use the existing network configuration file, rename or delete the network configuration file before starting the SREM.

System requirements

Before you install SREM, ensure that you have the current installation file and that your system meets the following minimum requirements:

• Java Runtime Environment 1.4.2_02 or later (www.java.com/)

• Win 2k, Win NT 4.0 or later, Windows XP

• Hardware: P3 1.2 GHz or higher

• Memory: 512 MB

• Hard drive space: 72.5 MB

Removing previous versions of SREM

Removing previous versions of SREM is an optional process. Multiple versions of SREM can exist on one system, as long as each version is installed in a separate location. If you decide to allow previous versions of SREM to remain, then you must choose a different folder to use during the installation process.

For details about the Uninstall process, refer to "Uninstalling SREM" (page 17) "Uninstalling SREM" (page 17).

Accessing the uninstall application

If you attempt to install SREM in a folder that already contains a version of the software, then you are prompted to uninstall the existing version automatically before completing the install process.

There are also two ways to access the SREM uninstall application manually:

Using the Start Menu shortcut

Remove existing versions of SREM software with the Uninstall Security & Routing Element Manager option, created in the Windows Start menu during installation.

For example, to remove SREM from a Windows XP system using the default program group, choose the following option from the Windows Start menu: **All Programs > Nortel Networks Device Manager > Uninstall Security & Routing Element Manager**.

Using Windows Explorer

If no program group was added to the Windows Start menu during installation, then complete the following steps to access the SREM uninstall software:

Step	Action
1	Navigate to the folder where the SREM software is installed using Windows Explorer.
2	Open the Uninstall_Security & Routing Element Manager sub-folder.
3	Run the *Uninstall Security & Routing Element Manager.exe* file.

—End—

Note: If more than one version of SREM software is installed, be sure that you select the correct software version to uninstall.

Uninstalling SREM

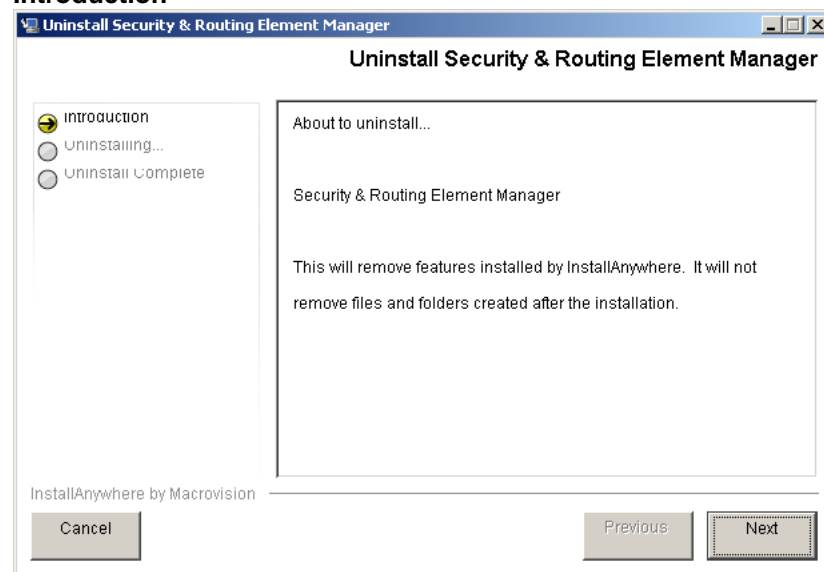Use the following procedure to remove SREM from your system.

Step	Action

1   Start the SREM uninstall application.

> *Note:* The uninstall process can be started using steps described in "Accessing the uninstall application" (page 17) "Accessing the uninstall application" (page 17), or by attempting to install SREM into a directory that contains an existing SREM installation.

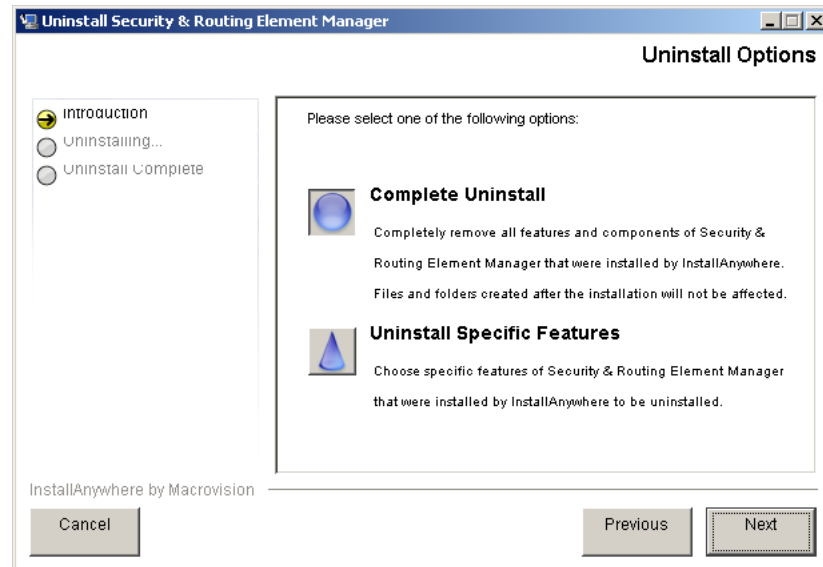The Uninstall Security & Routing Element Manager Introduction screen appears(Figure 1 "Introduction" (page 18)).

Figure 1
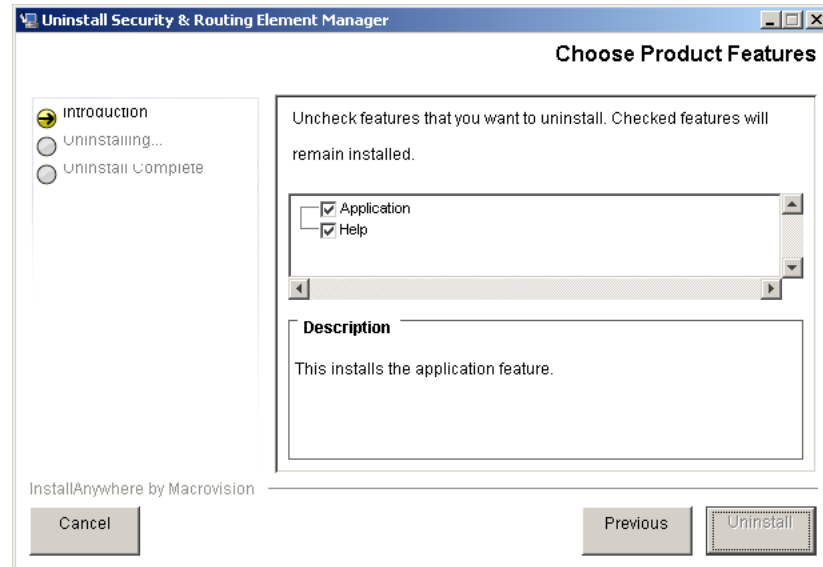**Introduction**

2   Click **Next**.

The Uninstall Options screen appears (Figure 2 "Uninstall Options" (page 19)).
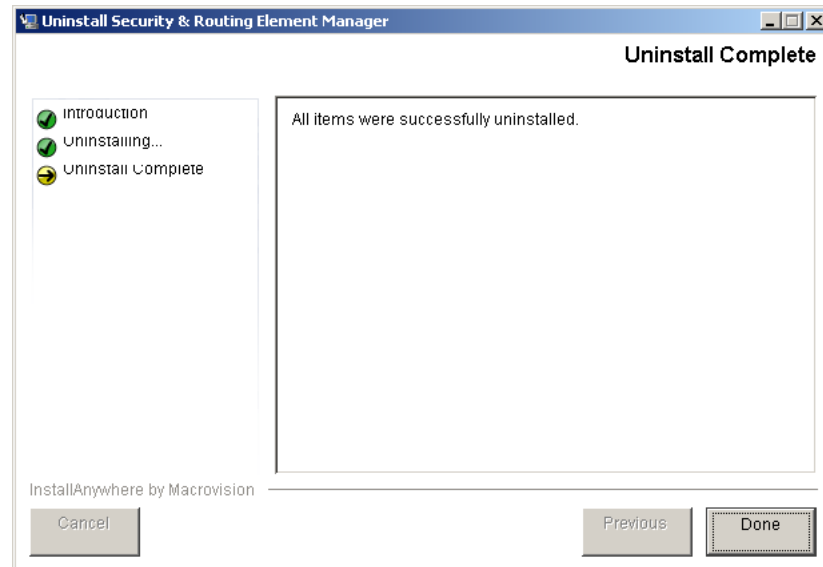
Figure 2
Uninstall Options

3   Select the uninstall type from the following options:

- **Complete Uninstall** — Remove the existing instance of SREM completely. Continue with step 6.

- **Uninstall Specific Features** — Remove only specific features from the existing SREM installation. Continue with step 4.

4   Click **Next**.

The Choose Product Features screen appears, listing specific features that can be removed (Figure 3 "Choose Product Features" (page 20)).

Figure 3
Choose Product Features

5   Select only the feature you wish to uninstall from the list.

A description of a feature appears when it is selected. To remove all
features, click Previous and select the Complete Uninstall option.

6   Click **Next** if beginning a complete uninstall, or **Uninstall** if only
removing selected features.

The uninstall progress is displayed as the application is uninstalled.
The Uninstall Complete window appears (Figure 4 "Uninstall
Complete" (page 21)) when the application had been completely
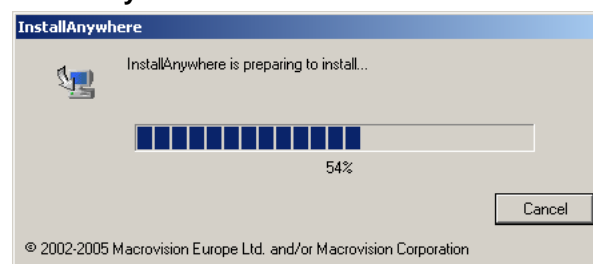uninstalled from your system.

Figure 4
Uninstall Complete

7   Click **Done** to exit the uninstall application.

—End—

Installing SREM on your system

Step	Action

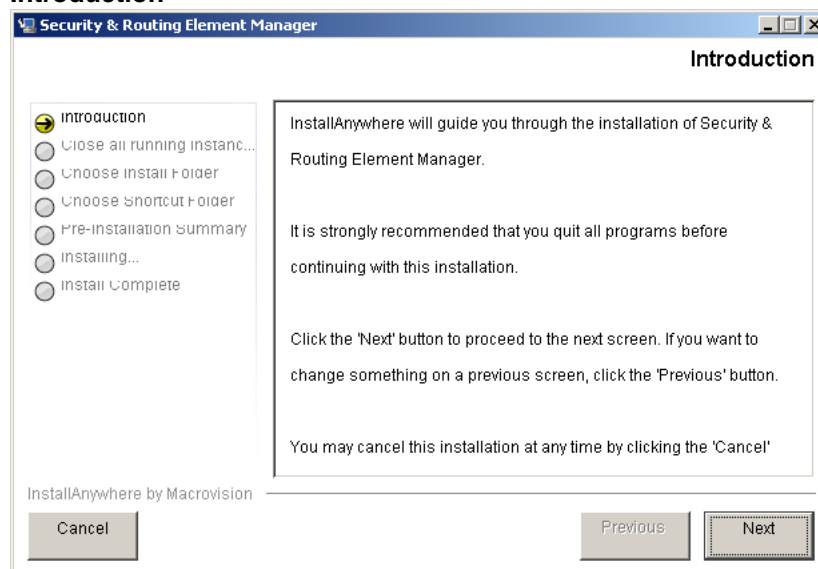**1**   Insert the Software Install CD, or download the Installation file on your system, and browse to the *srem_1.2.0.0_<build>.exe* file.

2   Double-click *srem_1.2.0.0_<build>.exe* to launch the **InstallAnywhere** application (Figure 5 "InstallAnywhere" (page 21)).

Figure 5
InstallAnywhere

After the InstallAnywhere application is installed, the Security & Routing Element Manager Introduction screen appears(Figure 6 "Introduction" (page 22)).
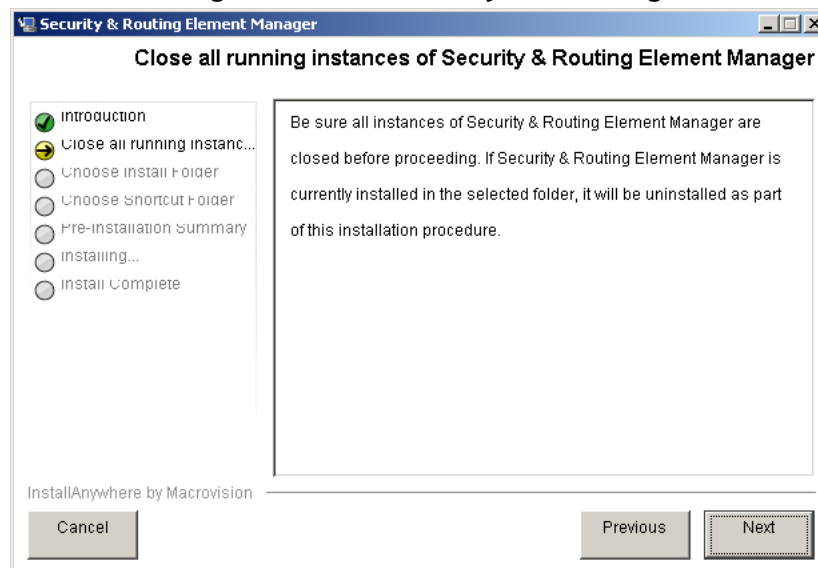
Figure 6
Introduction

3   Click **Next**.

The Close all running instances of Security & Routing Element Manager screen appears (Figure 7 "Close all running instances of Security and Routing Element Manager" (page 22)).
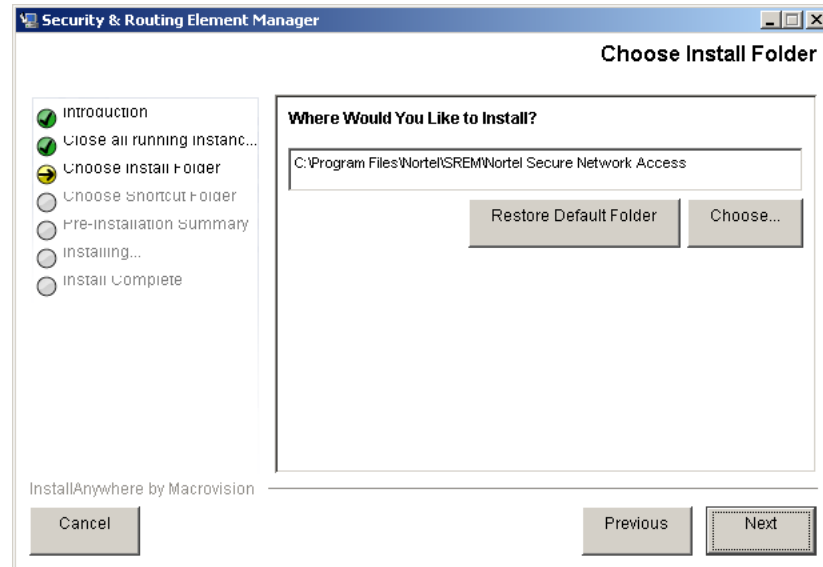
Figure 7
Close all running instances of Security and Routing Element Manager

4   Click **Next**.

The Choose Install Folder screen appears (Figure 8 "Choose Install Folder" (page 23)).

Figure 8
Choose Install Folder

5   Click **Restore Default Folder** to use the default location for SREM, or click **Choose** to select a different installation folder.

> *Note:* To replace an SREM installation on your computer, select the same storage path as the existing version. The existing SREM version will be uninstalled before the current installation is completed.
>
> To install multiple instances of SREM on your computer, choose a storage path that does not conflict with existing versions.

6   Click **Next**.

The Choose Shortcut Folder screen appears (Figure 9 "Choose Shortcut Folder" (page 24)).

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Figure 9
Choose Shortcut Folder

7 Confirm the default shortcut location, or select the shortcut path from the listed options.

8 Click **Next**.

If the selected install folder already contains a version of SREM, then the Launching uninstaller screen appears (Figure 10 "Launching uninstaller" (page 24)) and you are prompted to remove the existing version of SREM before continuing.

Figure 10
Launching uninstaller

For details about removing an existing SREM installation, see "Uninstalling SREM" (page 17) "Uninstalling SREM" (page 17).
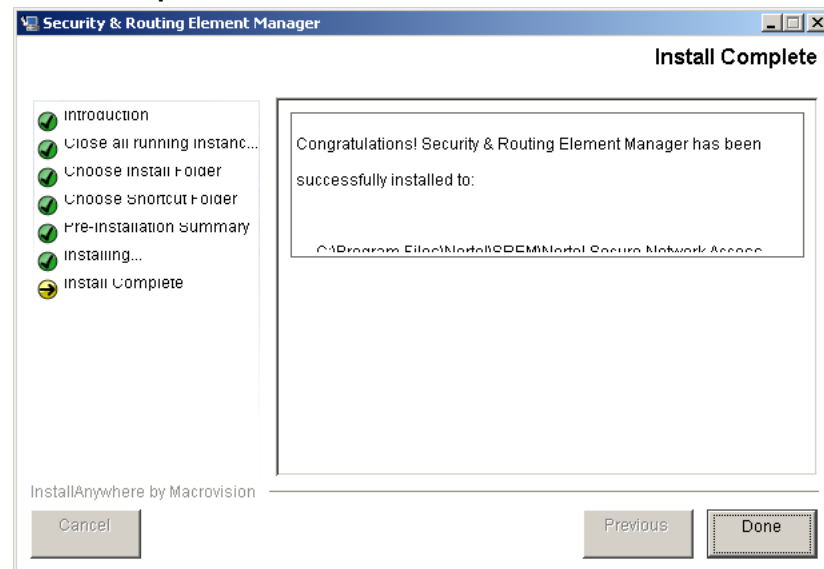
If the selected install folder is empty, or if you complete the required uninstall process, then the Pre-Installation Summary screen appears(Figure 11 "Pre-Installation Summary" (page 25)). This screen displays a summary of the installation choices you have made for confirmation.

Figure 11
Pre-Installation Summary

9   Review your choices in the **Pre-Installation Summary** screen.

If the install or shortcut folders are incorrect, click Previous to return to the appropriate screen and update that information.

10   Click **Install** to accept displayed information and install SREM.

The installation process begins. After a successful installation, the Install Complete screen(Figure 12 "Install Complete" (page 26)) appears.

Figure 12
Install Complete

11   Click **Done** to exit the installation.

SREM is now installed on your machine. For instructions on starting
the SREM software, see "Opening SREM" (page 38) "Opening
SREM" (page 38).

—End—

Chapter 2
SREM Screen Descriptions

This section is a quick tour of the SREM screens and menus. General procedures for opening and operating SREM can be found in .

This chapter includes the following topics:

Table 1
SREM Descriptions

SREM window areas
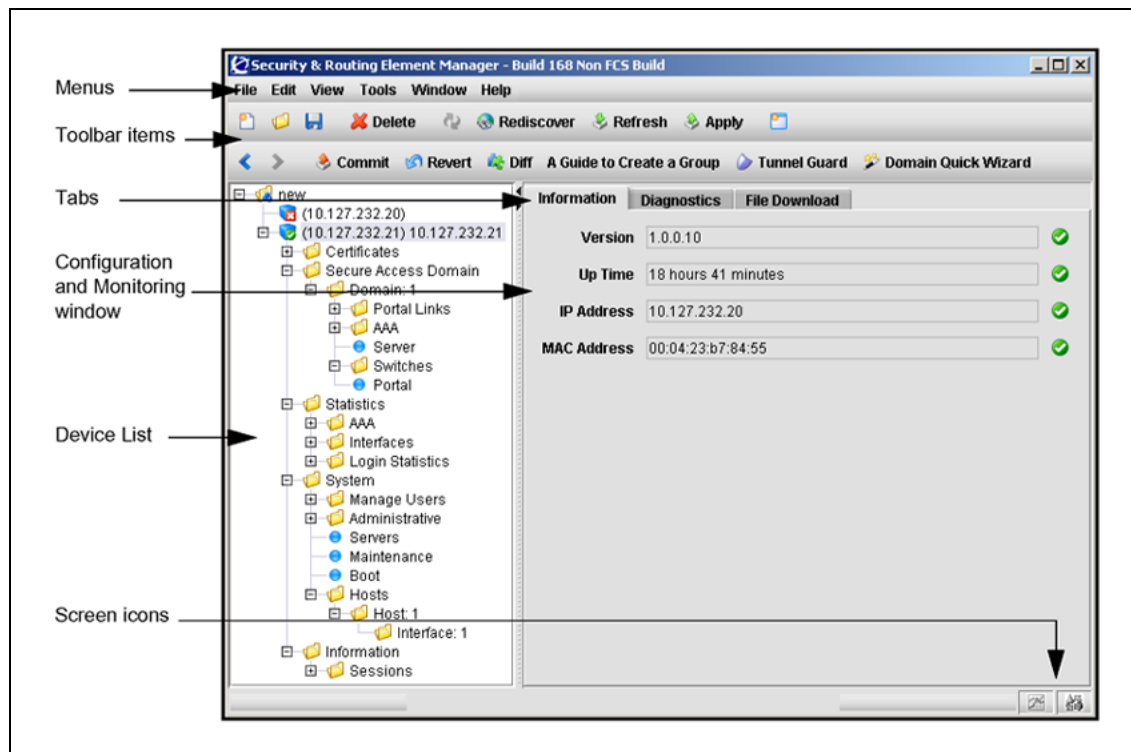
This section is an overview of the areas of the SREM screen. The following table Table 2 "Main SREM window" (page 27) describes the six key areas of the SREM interface, as shown in the figure below Figure 13 "Main SREM screen" (page 28).

Table 2
Main SREM window

Screen element	Description
Menus	See "Menus" (page 29) "Menus" (page 29).

Screen element	Description
Toolbar items	See "Toolbar items" (page 32) "Toolbar items" (page 32).
Tabs	Screen areas that the user can select to monitor and configure additional device options.
Configuration and Monitoring pane	Area where the user views, updates and configures device options. Required fields are marked with asterisk (*).
Device list	Allows you to select, view, expand, and collapse configured devices. When you expand a device, you see any devices or components configured under it in the device hierarchy. Devices with subdevices or components are referred to as "parents."
Screen icons	Allows quick access to some common screens.

Figure 13
Main SREM screen

Menus

This section describes the SREM menu available options.

- **File** — Used to manage network devices and configuration files. Refer to "File menu items" (page 29) "File menu items" (page 29) for details about the File menu items.

- **Edit** — Used to remove network devices from the current configuration. Refer to "Edit menu items" (page 30) "Edit menu items" (page 30) for details about the Edit menu items.

- **View** — Used to control and manage the SREM screens being viewed. Refer to "View menu items" (page 30) "View menu items" (page 30) for details about the View menu items.

- **Tools** — Used to access additional SREM options and built-in tools. Refer to "Tools menu items" (page 31) "Tools menu items" (page 31) for details about the Tools menu items.

- **Window** — Used to open additional instances of the SREM window. Refer to "Window menu items" (page 31) "Window menu items" (page 31) for details about the Window menu items.

- **Help** — Used to access information and details about the SREM. Refer to "Help menu items" (page 32) "Help menu items" (page 32) for details about the Help menu items.

File menu items

The menu items available from the File menu are described in the following table Table 3 "File menu" (page 29).

Table 3
File menu

Menu option	Description
New Sub Network	Create a Sub Network under the selected network.
New	Open the New Device screen.
Open	Open the Open window, which allows you to select network configuration files.
Save	Save a previously saved configuration, or opens the Save window to allow you to save a configuration in a user-defined location if no previously saved configuration exists.
Save As	Open the Save window to allow you to select a save location for the network configuration file.
Exit	Quit SREM.

Edit menu items

The menu items available from the Edit menu are described in the following table Table 4 "Edit menu" (page 30).

Table 4
Edit menu

Menu option	Description
Delete	Delete the highlighted device or attribute.

View menu items

The menu items available from the View menu are described in the following table Table 5 "View menu" (page 30).

Table 5
View menu

Menu option	Description
Back	Revert to the previous view.
Forward	Jump to the next view, if you reverted to a previous view.
Rediscover	Rediscover the selected device, or any discoverable component in the Device List if no device is selected.
Revert to Default	Revert all attributes on the selected screen to their default value.
Refresh	Refresh attributes displayed in the Configuration and Monitoring pane.
Apply	Apply changes made in SREM to the network access device.
Screens	Open any currently visible tab from the Configuration and Monitoring pane for the selected device. This option is only available after a device is configured.
Commit	Commit any configuration changes to the device.
Revert	Refresh attributes displayed in the Configuration and Monitoring pane
Diff	Open the Configuration Modifications screen, which lists all configuration changes made during this session.
Disconnect	Terminates connectivity to the selected device.
A Guide to Create a Group	Open a wizard that helps you quickly create a Group within an existing domain.

Menu option	Description
Tunnel Guard	Open the Nortel Networks TunnelGuard Software and Rule Definition Tool.
Domain Quick Wizard	Open a wizard that helps you quickly create a domain.

Tools menu items

The menu items available from the Tools menu are described in The following table Table 6 "Tools menu" (page 31).

Table 6
Tools menu

Menu option	Description
Options	Open the Options dialog box for setting generic SREM options. See "Configuring SREM settings" (page 40) "Configuring SREM settings" (page 40) for additional details.
SSH Known Hosts	View and delete SSH Known Hosts.
Launch Log Browser	Query trace options, statistics, alarms, account, and security audit logs. See "Using the Log Browser tool" (page 54) "Using the Log Browser tool" (page 54) for additional details.

Window menu items

The menu items available from the Window menu are described in The following table Table 7 "Window menu" (page 31).

Table 7
Window menu

Menu option	Description
New Window	Open a second, synchronized occurrence of SREM. Use this option to view configuration info for two devices at the same time.

Help menu items

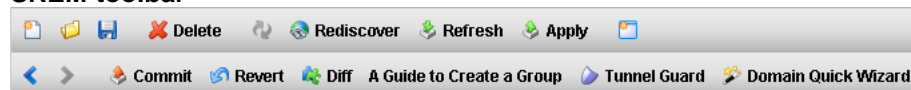The menu items available from the Help menu are described in The following table Table 8 "Help menu" (page 32).

Table 8
Help menu

Menu option	Description
Contents	Open the SREM help system. SREM help is divided into generic and device-specific sections. When this menu item is selected, context sensitive help appears for the current screen or device, as applicable.
About	Display details about the SREM software version.

Toolbar items

This section is an overview of the toolbar items available on the SREM screen, as shown in the figure below Figure 14 "SREM toolbar" (page 32).

Figure 14
SREM toolbar

The following table Table 9 "Toolbar items" (page 32) provides descriptions of each toolbar item.

Table 9
Toolbar items

Item	Description
First row	
New	Clear the Device List.
Open	Open the Device List.
Save	Save the Device List.
Delete	Delete currently selected devices/components.
Revert to Default	Revert all attributes on the selected screen to the default value.
Rediscover	Refresh the Device List hierarchy by clearing cached data.
Refresh	Refresh attributes on the Configuration and Monitoring Pane.

Item	Description
Apply	Update the selected device with new entries made on the Configuration and Monitoring Pane.
New Window	Open another SREM window with the same devices in the Device List.
Second row	
<	Open the previously displayed Configuration and Monitoring Pane.
>	Open the next Configuration and Monitoring Pane, if you opened a previous screen.
Commit	Commit configuration changes to the device.
Revert	Refresh attributes displayed in the Configuration and Monitoring pane
Diff	Open a screen that lists the existing configuration changes.
Disconnect	Terminates connectivity to the selected device.
A Guide to Create a Group	Open a wizard to help you quickly create a Group within a domain.
Tunnel Guard	Open the Nortel Networks TunnelGuard Software and Rule Definition Tool.
Domain Quick Wizard	Open a wizard to help you quickly create a domain.

Indicator icons

Icons that identify the status of an entered or displayed component or device are described in The following table Table 10 "Indicator icons" (page 33).

Table 10
Indicator icons

Icon	Name	Description
	Valid	Parameter values were successfully retrieved from the device and are in sync with the device.
	Modified	The parameter changed in SREM but has not yet been applied to the device.
	Error	The parameter changed in SREM and a failure occurred while applying it to the device.
	Unknown	The parameter value cannot be retrieved from the device.

Screen icons

Icons in the bottom, right corner of the SREM screen are described in The following table Table 11 "Screen icons" (page 34).

Table 11
Screen icons

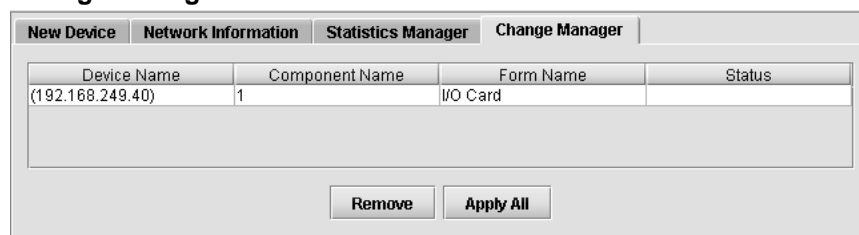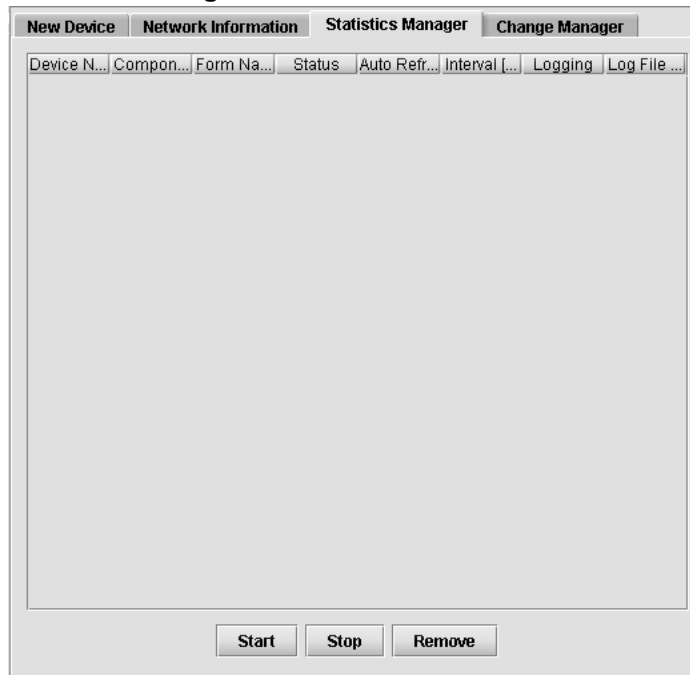| Icon	Name	Description
	Change Manager	Opens the Change Manager tab (Figure 15 "Change Manager tab" (page 34)) where you view, delete or apply unapplied configurations to the network access device. For details about using the Change Manager, see "Applying and saving groups of changes" (page 51) "Applying and saving groups of changes" (page 51).
	Statistics Manager	Opens the Statistics Manager tab (Figure 16 "Statistics Manager tab" (page 35)) where you view statistics gathered from the selected network access device. For details about using the Statistics Manager, see "Managing logs and statistics within the SREM" (page 52) "Managing logs and statistics within the SREM" (page 52).

Figure 15
Change Manager tab
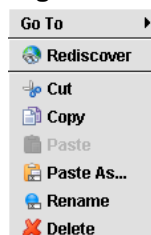
Figure 16
Statistics Manager tab

Right-click menu

Open the Right-click menu by highlighting a device or I/O and clicking the alternate, or secondary button on your mouse. The right-click menu varies according to the device or parameter selected. In addition to cut/paste and renaming functionality, the Right-click menu provides quick access to tabs in the Configuring and Monitoring pane and to buttons available on the toolbar for the selected equipment.

When you right-click a network access device in the Device List, the right-click menu also contains all toolbar options.

the figure below Figure 17 "Right-click menu example" (page 35) illustrates a generic right-click menu that is displayed when you click on devices and options in the Device List.

Figure 17
Right-click menu example

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For descriptions of each right-click menu item, refer to The following table
Table 12 "Right-click menu options" (page 36).

Table 12
Right-click menu options

Menu option	Description
Go To	Select to select an available tab from the Configuration and Monitoring pane.
Rediscover	Select to rediscover component changes on the device from this parent, down through the hierarchy.
Cut	Transfer configuration data from one parameter to be pasted to another parameter. See "Cutting, copying, and pasting data between devices" (page 49).
Copy	Copy configuration data from one parameter to be pasted to another parameter. See "Cutting, copying, and pasting data between devices" (page 49).
Paste	Copy configuration data that you have "cut" or "pasted" from another parameter. See "Cutting, copying, and pasting data between devices" (page 49).
Paste As	Operates like Paste, but allows you to change the name of the index attribute, so that the paste can be performed on the same device by changing only the name but keeping all other values.
Rename	Rename the selected equipment. For an I/O card, Rename allows you to change the slot number.
Delete	Delete the selected configuration.

Chapter 3
Using SREM

This section provides procedures for general or common SREM tasks. For more detailed SREM procedures and interface descriptions, refer to the online help.

This chapter includes the following topics:

Topic
"Accessing the SREM software" (page 37)
"Configuring SREM settings" (page 40)
"Managing network access devices from the SREM" (page 41)
"Changing information within the SREM" (page 48)
"Managing changes within the SREM" (page 50)
"Managing logs and statistics within the SREM" (page 52)
"Using the Log Browser tool" (page 54)

- "Accessing the SREM software" (page 37)
- "Configuring SREM settings" (page 40)
- "Managing network access devices from the SREM" (page 41)
- "Changing information within the SREM" (page 48)
- "Managing changes within the SREM" (page 50)
- "Managing logs and statistics within the SREM" (page 52)
- "Using the Log Browser tool" (page 54)

Accessing the SREM software
This section covers the following tasks:

- "Opening SREM" (page 38) "Opening SREM" (page 38)
- "Quitting SREM" (page 38) "Quitting SREM" (page 38)

Opening SREM

Several different methods exist to access the SREM software, depending on the options selected during installation. To open the SREM application on your local system, use one of the following directions:

- From the Windows Start menu, select **All Programs > Nortel > Security & Routing Element Manager**.

- From the desktop, click the SREM icon (if you installed icons on your workstation during the installation process).

- Using Windows Explorer, locate the SREM installation folder and run the *Security & Routing Element Manager.exe* file. The default folder location for this file is: C:\Program Files\Nortel\SREM\Nortel Secure Network Access.

Quitting SREM

Use the following procedure to quit the SREM application on your local system.

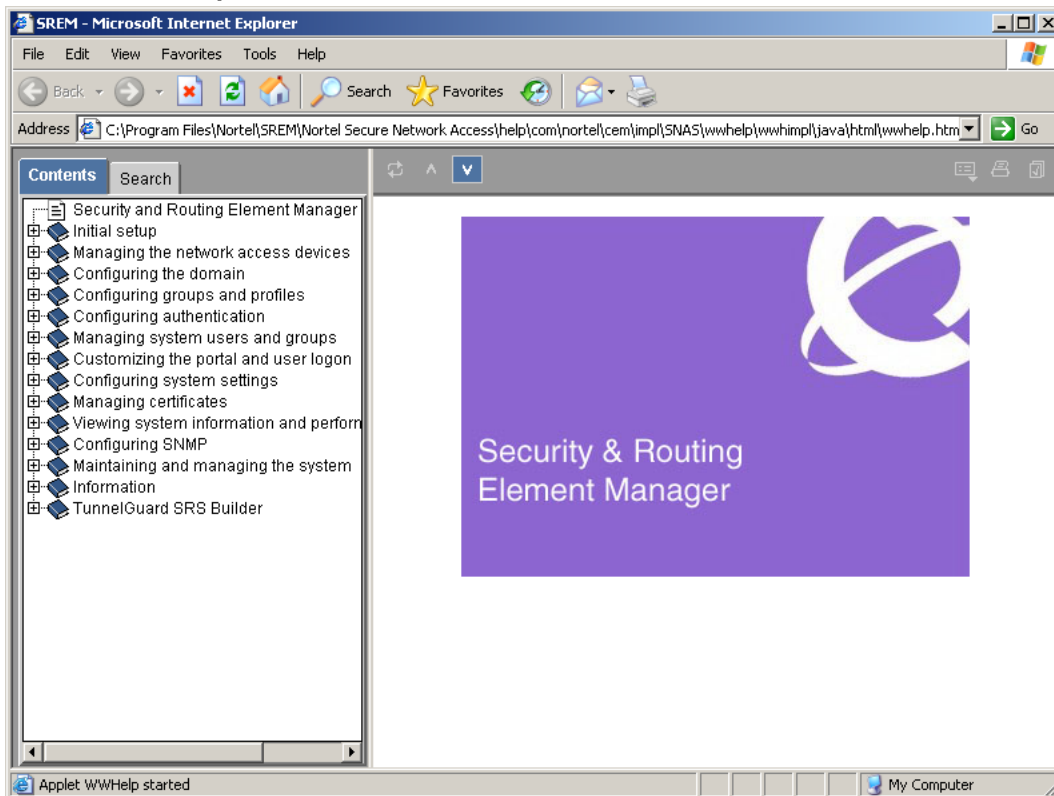| Step	Action
1	Apply and commit any unsaved changes. (See for details.)
2	Select **File > Exit**. A confirmation dialog box appears.
3	Click **Yes** to quit the SREM application.

—End—

Viewing SREM online help

The help system contains procedures for configuring and monitoring a network access device through SREM and context sensitive descriptions for each screen and window.

To open the SREM online help system, do one of the following:

- Click **Help > Contents** from the main menu.

- Press F1 on your keyboard.

The online help content appears in a new web browser instance (Figure 18 "SREM online help" (page 39)). If the SREM screen that is active when online help is opened has context sensitive help available, then the content displayed will related to that screen.

Figure 18
SREM online help

To view available online help content use either the navigation tree on the left side of the web browser or the toolbar icons described in the following table Table 13 "Online help icons" (page 39).

Table 13
Online help icons

Icon	Name	Description
	Show Navigation	Display the navigation tree.
		This icon is only available when viewing context sensitive help where the navigation tree is not already visible.

Icon	Name	Description
	Show in Contents	Show the displayed page in the navigation tree. This icon is only available when the navigation tree is already visible.
	Previous	Display the previous page of online help content.
	Next	Display the next page of online help content.
	Print	Print the currently displayed help content page. Using this icon will print only the content displayed in the actual help screen. Toolbar icons and the navigation tree are not printed.

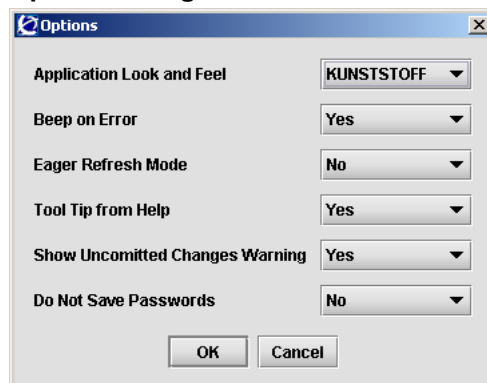## Configuring SREM settings

Use the following procedure to change general configuration settings for SREM.

Step	Action
1	Open SREM.
2	Select **Tools > Options** to open the **Options** dialog box ().

Figure 19
Options dialog box

3   Change the desired settings, as described in the following table .

Table 14
SREM Options

Option	Description
Application Look and Feel	Allows you to configure how the application looks. Configuration changes to the Application Look and Feel setting take effect only after you restart SREM.
Beep on Error	Select Yes from the list to have SREM beep when an error is made.
Eager Refresh Mode	Automatically refreshes the Configuration and Monitoring pane with changes applied to the device.
Tool Tip from Help	Select Yes to view tooltip help over certain fields and buttons.
Show Uncomm itted Changes Warning	Select Yes to have SREM prompt you that uncommitted changes exist before leaving the active screen. Click Yes on the prompt dialog to return to the screen with changes, or click No to continue to a new screen without saving the changes. Selecting the check box before closing the warning prompt changes this setting to No.
Do Not Save Passwords	Select Yes to force SREM to check passwords every time. **Important Note:** If you select No for this option, unauthorized users might gain access to the SREM. Use caution when you change this option.

4   Click **OK**.

—End—

Managing network access devices from the SREM

This section covers the following tasks:

-

-

Adding a new network access device

Use the following procedure to add a new network access device through SREM.

Step	Action
1	Open SREM.
2	Click **New** on the toolbar to open the **New Device** screen (Figure 20 "New Device screen" (page 43)).

Figure 20
New Device screen

3   Enter the connection details for this new device in the applicable
fields. the following table Table 15 "New Device fields" (page 43)
describes the New Device fields.

Table 15
New Device fields

Field	Description
Device	Specifies the IP address for the network access device you are adding.
User Name	Specifies the user name to connect with the specified device.
Password	Specifies the password to connect with the specified device.
Device Type	Specifies the type of network access device to connect to. The default value is Secure Network Access Switch. *Note:* This field is not editable for this release.
SNMP Community Name	Specifies the SNMP community name setting. This field is not used for Secure Network Access Switch device types.

Field	Description
	The default value is public. *Note:* This field is not editable in this release.

4   Click **Create**.

SREM will attempt to connect to the network access device. One of two results follows:

- If SREM connects to the network access device successfully, the network access device appears in the Device List.

- If SREM cannot connect to the specified device, check the IP and login information, and click **Try Again**.

—End—

Deleting a network access device

Use the following procedure to add a new network access device through SREM.

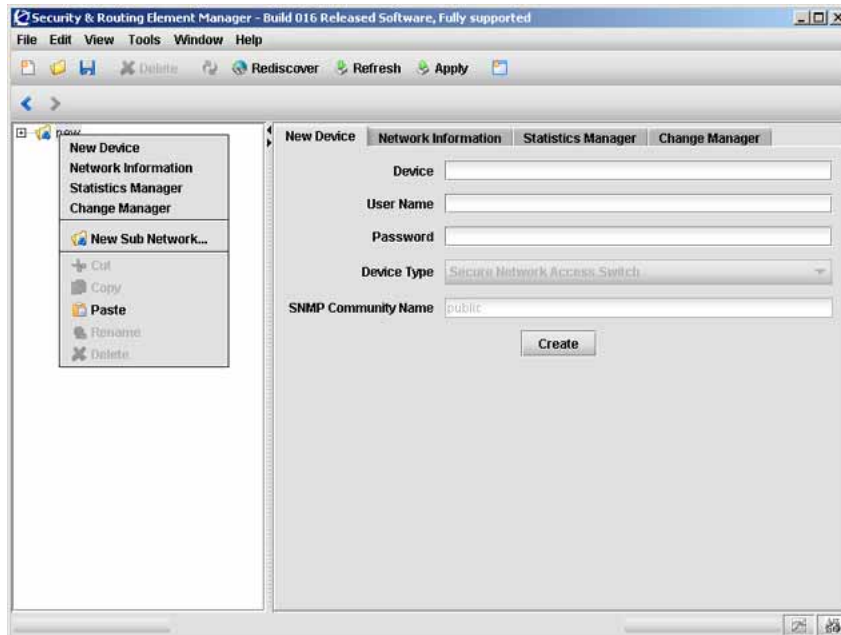| Step	Action
1	Open SREM.
2	Select the network access device you want to delete in the Device List.
3	Select **Edit > Delete**. The network access device disappears from the Device List.

—End—

Grouping network access devices in SREM

Use the following procedure to organize the SREM device list by creating Sub Networks of network access devices.
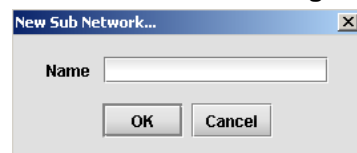
Step	Action
1	Right-click the **New** icon in the Device List, and select **New Sub Network** in the right-click menu (Figure 21 "Right-click menu" (page 45)).

Figure 21
Right-click menu

The New Sub Network dialog box (Figure 22 "New Sub Network dialog box" (page 45)) is displayed.

Figure 22
New Sub Network dialog box

2	Type the name of your Sub Network in the **Name** field.
3	Click **OK**.
4	Right-click the new Sub Network in the Device List, and select **New Device**. The New Device tab (Figure 20 "New Device screen" (page 43)) is displayed.
5	Type the IP address, User Name, and password for the new device.
6	Click **Create**.

SREM finds the new device and adds it to the Sub Network.

7 Continue configuring the new device and adding new devices to the Sub Network, as required.

—End—

Modifying network information

Use the following procedure to rename an existing network or Sub Network using the SREM.

Step	Action
1	Open SREM.
2	In the Device List, select the network or Sub Network to rename.
3	Select the **Network Information** tab. The Network File Name setting is displayed for that network element.
4	Edit the **Network File Name** for the device as desired.
5	Click **Apply**. The Device List is changed immediately to reflect the new name.

—End—

Logging into a network access device

Use the following procedure to log into a network access device through SREM, if SREM does not discover the device automatically at start up.

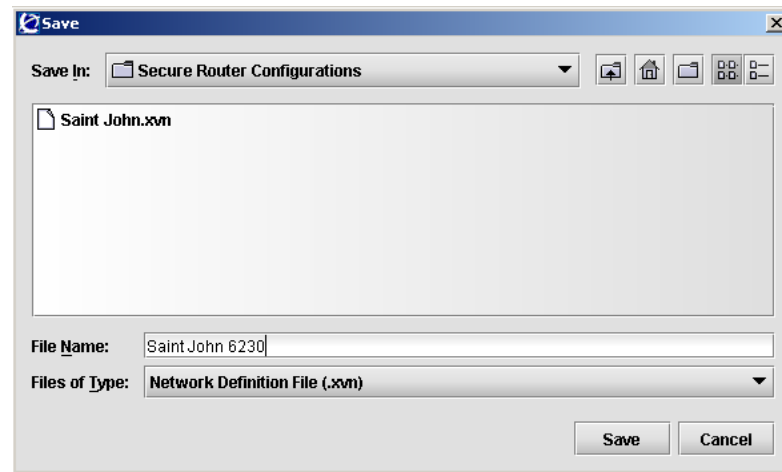| Step	Action
1	Open SREM.
2	In the Device List, highlight the IP for the device you want to log in to.
3	Click **Rediscover**. If SREM cannot rediscover the device, a Discovery Failed screen is displayed with an error message and the required login fields.
4	Type the User Name and Password for the device.
5	Click **Try Again**.

—End—

Saving a network configuration

Use the following procedure to save information you configured for a
network access device.

Step	Action
1	Configure the network access device as required.
2	Select **File > Save** As to open the **Save** dialog box ().

Figure 23
Save dialog box

3	Navigate to the folder where you want to save the configuration file.
4	Type a name for the configuration in the **File Name** field.
5	Ensure that Network Definition File (.xvn) is displayed in the **Files of Type** field.
6	Click **Save**.

—End—

Opening a network configuration

Use the following procedure to open a saved configuration for a network
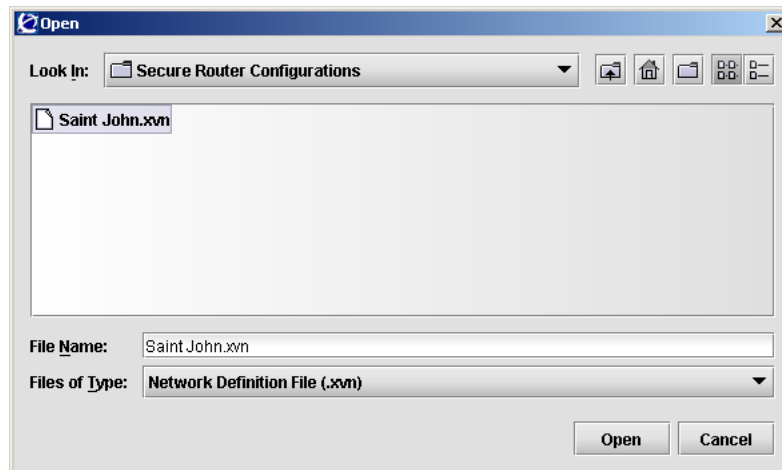access device or network element.

Step	Action
1	Open SREM.
2	Select **File > Open**.
	The **Open** dialog box appears (Figure 24 "Open dialog box" (page 48)).

Figure 24
Open dialog box

3	Navigate to the Network Configuration File (.xvn) you want to open.
4	Highlight the file you want to open.
5	Click **Open**.

—End—

Changing information within the SREM

This section covers the following tasks:

- "Cutting, copying, and pasting data between devices" (page 49)
- "Changing field values in the SREM" (page 50)
- "Cutting, copying, and pasting data between devices" (page 49)
- "Changing field values in the SREM" (page 50)

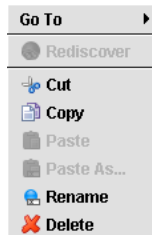## Cutting, copying, and pasting data between devices

Cut, copy and paste information between devices, such as interface cards, to save time when you enter data. If you are entering similar data for several devices, SREM allows you to cut, copy and paste information between devices.

If moving information between multiple network access devices, SREM allows you to cut and paste information from one device to another. Copying is not enabled between devices because you cannot have multiple network access devices in the Device List with the same configuration data.

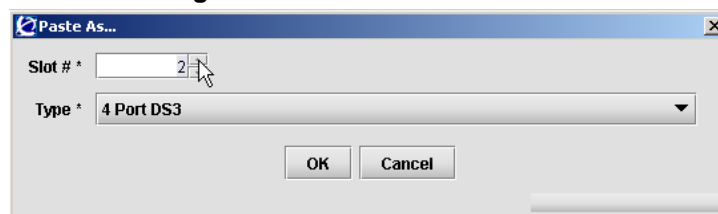| Step	Action
1	In the Device List, right-click the device with information that you want to cut or copy.
2	Select **Cut** or **Copy** in the right-click menu (Figure 21 "Right-click menu" (page 45)).

Figure 25
Right-click menu

Step	Action
3	In the Device List, right-click the device heading for the network access device where you want to paste the copied information.
4	Select **Paste As** in the right-click menu.
	The **Paste As** dialog box appears (Figure 26 "Paste As dialog box" (page 49)).

Figure 26
Paste As dialog box

Step	Action
5	Select the slot for the card to which you want to paste the copied data.

6   Click **OK**.

—End—

Changing field values in the SREM

SREM uses standard Windows components to display and edit information. The most common components includes editable text boxes, lists to select from, and checkboxes to select.

Some special actions to be aware of when using SREM include:

Selecting and deselecting table items

To select an item from a table in SREM, click on the table row to highlight that item. To select multiple items in a table, or to deselect a row that is highlighted, hold the Ctrl key and select the desired table row.

Copying, cutting, and pasting values

Fields that are editable can use the standard copy, cut, and paste short-cut keys, although these options are not present in the Edit menu.

- To copy selected values, press Ctrl-C.

- To cut selected values (where applicable), press Ctrl-X.

- To paste existing values into editable fields, press Ctrl-V.

Managing changes within the SREM

There are two ways to save and apply changes made in the SREM: individually for each screen, or as a group of all unapplied changes made during the session.

This section covers the following tasks:

Applying and saving individual changes

To apply apply and save individual changes in SREM immediately after they are made, complete the following process:

Step	Action
1	Click **Apply** on the toolbar to send changes to the device.
	Changes to the active SREM screen are sent to and stored on the device, but are not yet made permanent.
2	Click **Commit** on the toolbar to make all applied changes permanent on the device.
	Changes are now permanent and take full effect. In some cases, you may need press Rediscover to view updated information in SREM.

—End—

Applying and saving groups of changes

To apply and save many changes in the SREM at one time, update the values for fields on multiple screens or devices before accessing the Change Manager to view and apply the changes.

Note: If the Show Uncommited Changes option is enabled, a dialog box will appear each time you attempt to leave a screen with unapplied changes. For more information, see "Configuring SREM settings" (page 40) "Configuring SREM settings" (page 40).

Use the following procedure to open and access the Change Manager:

Step	Action
1	Open SREM.
2	Change network access device settings as necessary.
	When unapplied changes exist in the SREM, the Change Manager icon appears in color. See "Screen icons" (page 34) "Screen icons" (page 34) for more information about the Change Manager icon.
3	Click the **Change Manager** icon in the bottom-right corner of the SREM window to open the Change Manager tab (Figure 27 "Change Manager tab" (page 52)).

Figure 27
Change Manager tab

4   Review the pending changes, as described in the following table
Table 14 "SREM Options" (page 41).

Table 16
SREM Options

Option	Description
Device Name	Displays the device where the change was made.
Component Name	Displays the device list component where the change was made.
Form Name	Displays the particular form (or tab) within a component where the change was made.
Status	Displays the current status of a change, where applicable.

Note: To view further details for any listed change, double-click the Change Manager list item. SREM displays the screen where that change occured.

5   Remove any unwanted changes from the list using the following steps:

a.   Select the unwanted item from the Change Manager list.

b.   Click **Remove**.

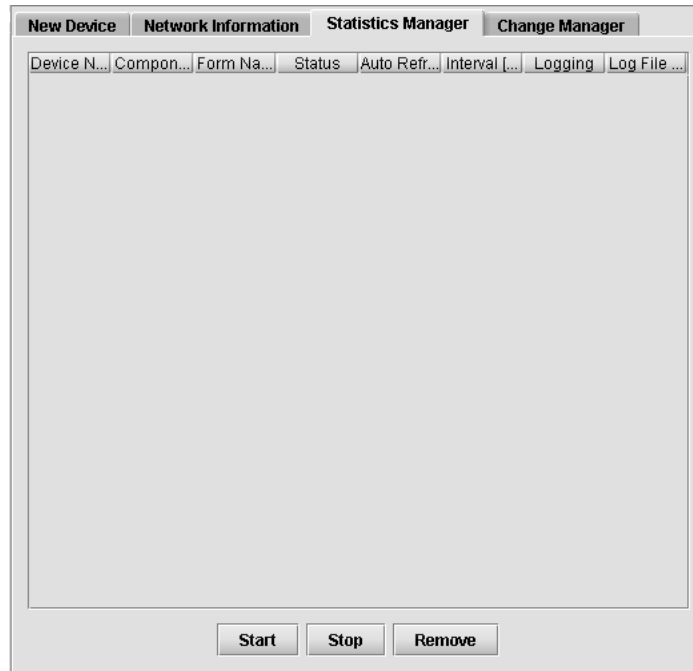**6**   Click **Apply All** to apply and commit all of the displayed changes.

———

—End—

Managing logs and statistics within the SREM

Use the following procedure to view and manage log files and statistic tracking using the Statistics Manager tab.

Step	Action
1	Open SREM.
2	Click the **Statistics Manager** icon in the bottom-right corner of the SREM window to open the Statistics Manager tab (Figure 28 "Statistics Manager tab" (page 53)).

Figure 28
Statistics Manager tab

The Statistics Manager icon appears in color if there are any log files or general statistics being tracked. See "Screen icons" (page 34) "Screen icons" (page 34) for more information about the Statistics Manager icon.

3   Each list entry in the Statistics Manager allows you to complete any of the following tasks:

- Click **Start** to enable Auto Refresh and Logging for the selected list item.

- Click **Stop** to disable Auto Refresh and Logging for the selected list item.

- Click **Remove** to disable Auto Refresh and Logging for the selected list item, and remove that item from the Statistics Manager.

- Select **Auto Refresh** or **Logging** for any list item to toggle that setting.

  Note: To view additional details about any of the statistics being tracked, double-click the Statistics Manager list item. SREM displays the screen where the selected statistic is tracked and configured.
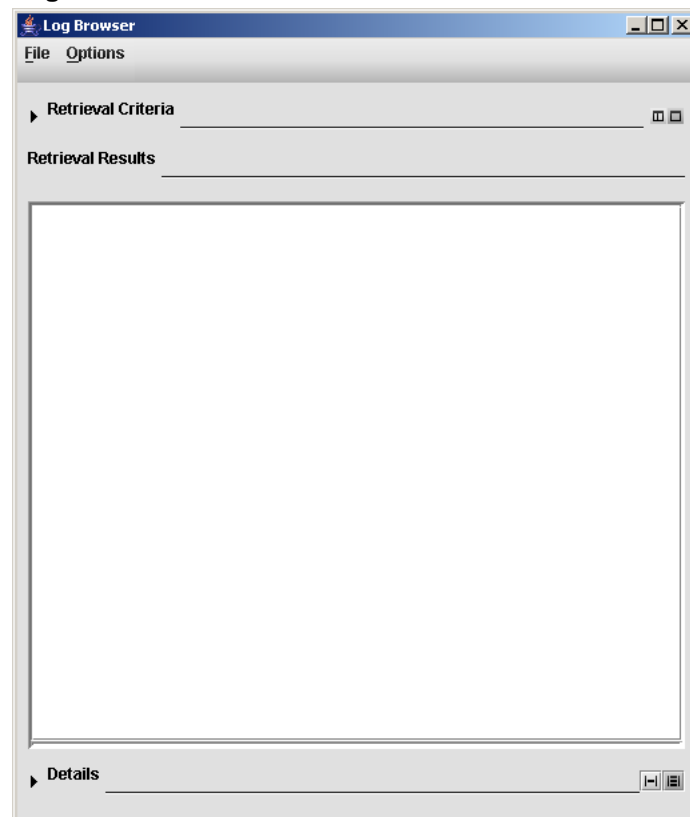

—End—

Using the Log Browser tool

To easily browse log files generated by SREM, a Log Browser tool is available. To access and use the Log Browser, perform the following steps:

Step	Action
1	Select **Tools > Launch Log Browser** from the SREM menu.

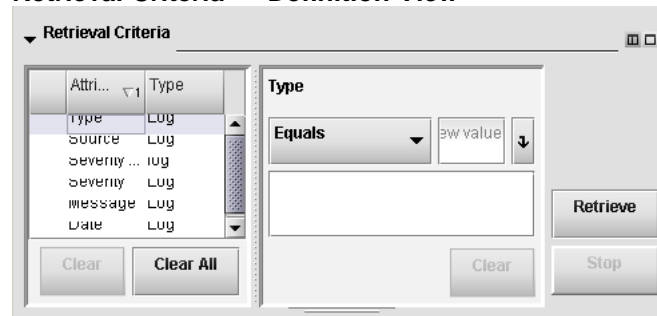The Log Browser tool appears (Figure 29 "Log Browser" (page 54)).

Figure 29
Log Browser

Note: When using Log Browser, the Retrieval Criteria and Details sections can be viewed or hidden by clicking the small arrows beside the section name. Hide these sections as necessary to see the entire Log Browser tool on systems with low screen resolution.

2   Select **File > Open > Open NSNAS Log File** from the Log Browser menu.

A dialog box appears, allowing you to specify a log file on the current system.

3   Select the Nortel SNAS 4050 log file to view.

The Retrieval Criteria list displays Attributes that can be used to limit log results that are displayed.

4   Check to ensure the Retrieval Criteria section is in **Definition View**.

The Definition View (shown in the figure below Figure 30 "Retrieval Criteria — Definition View" (page 55)) allows you to specify attributes and attribute values to sort and view the log entries.

Figure 30
Retrieval Criteria — Definition View

5   Select a criteria from the list, and set the desired values in the space available.

After a criteria has been added to the Retrieval list, a checkmark appears beside the name of that criteria.

6   Repeat step 5 for each criteria you want to use to sort log file entries.

7   Confirm the current list of criteria by changing the Retrieval Criteria section to **Summary View** (shown in the figure below Figure 31 "Retrieval Criteria — Summary View" (page 56)).

Figure 31
Retrieval Criteria — Summary View

8   Click Retrieve to display all log entries that match the specified criteria.

The Retrieval Results section displays the number of matches discovered, and lists all log entries in the retrieval table.

9   Select a log entry from the Retrieval Results section to view the details of that particular entry.

The log entry appears in the Details section.

—End—

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Installing and Using Security and Routing Element Manager (SREM)

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