

Managing the Element Manager Windows

The 6400 SCM Element Manager add custom windows to the standard Cisco EMF system in order to allow the management of the Cisco 6400 UAC. For example, the Cisco 6400 Chassis Management window has four tabbed sections: **Faults**, **Status**, **Configuration**, and **Inventory**. Each tab displays specific information about the current state of the system or allows you to change various 6400 UAC settings without the need to use IOS commands.

Multiple Element Managers can be installed onto a single Cisco EMF Server, thereby allowing multi-device and multi-vendor management from a single system.

Table 4-1 displays the Element Manager windows that can be launched from each node/object type. For example, to Manage the 6400 Chassis you should select the **Cisco 6400 UAC**, **Manage**, **Chassis** option from a **Manager**, **Site**, **Chassis** or **NSP** object.

Table 4-1 Element Manager Window Access

Task	Launch Point							
	Manager	Site	Chassis	NSP	NRP	NRP Port	Line Card	Line Card Port
Manage 6400 Chassis	Yes	Yes	Yes	Yes	No	No	No	No
Manage NSP	Yes	Yes	Yes	Yes	No	No	No	No
View NSP Logs	Yes	Yes	Yes	Yes	No	No	No	No
Manage NRP	Yes	Yes	Yes	Yes	Yes	No	No	No
View NRP Logs	Yes	Yes	Yes	Yes	Yes	No	No	No
Manage NRP ATM Port	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes
Manage Line Card	Yes	Yes	Yes	Yes	No	No	Yes	No
Manage Line Card ATM Port	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes
Manage Redundancy	Yes	Yes	Yes	Yes	No	No	No	No
Manage SONET APS	Yes	Yes	Yes	Yes	No	No	No	No
Admin, Download NSP IOS Image	Yes	Yes	Yes	Yes	No	No	No	No
Admin, Download NRP IOS Image	Yes	Yes	Yes	Yes	Yes	No	No	No
Performance Manager	No	No	No	Yes	Yes	Yes	No	Yes

Table 4-1 Element Manager Window Access (continued)

Telnet Session	No	No	No	Yes	Yes	No	No	No
WebConsole	No	No	No	Yes	No	No	No	No

Chassis Management

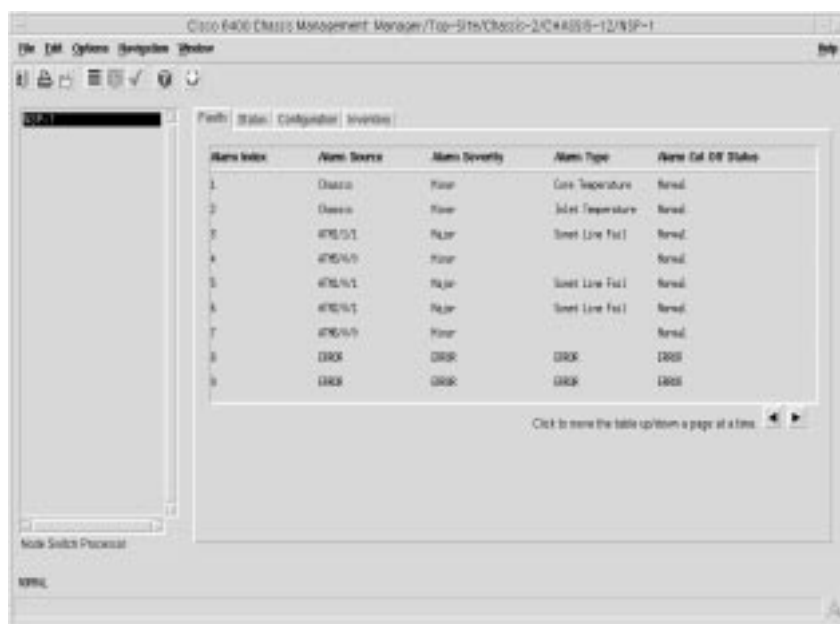
The Cisco 6400 Chassis Management window is divided into four tabbed sections, as shown in the “Cisco 6400 Chassis Management Window” section on page 4-2.

Viewing the Cisco 6400 Chassis Management Window

Select the **Cisco 6400 UAC, Manage, Chassis** option from a relevant network map, a relevant object in the object manager or by using an object pick list on an open Element Manager window. Refer to Table 4-1 on page 4-1 for information on which maps nodes or objects allow you to launch the Cisco 6400 Chassis Management window.

The Cisco 6400 Chassis Management window appears with the **Faults** tab displayed.

Figure 4-1 Cisco 6400 Chassis Management Window



Faults Tab

The **Faults** tab allows you to view a log of alarms raised against the selected chassis. Refer to the “Faults Tab” section on page 5-1 for further information.

Status Tab

To view the **Status** tab:

- Step 1** Open the Cisco 6400 Chassis Management window.

Step 2 Select the **Status** tab.

The status information for the selected chassis appears. Refer to the “Status Tab” section on page 5-3 for further information.

Configuration Tab

To view the **Configuration** tab:

Step 1 Open the Cisco 6400 Chassis Management window.

Step 2 Select the **Configuration** tab.

The Cisco 6400 Chassis configuration information appears.

Step 3 Alter the information as required using the menus and data entry boxes.

Step 4 Save the changes.

Refer to the “Configuration Tab” section on page 5-4 for further information.

Note Change the displayed value and click the toggle button to enable any of the disabled temperature thresholds.

Inventory Tab

To view the **Inventory** tab:

Step 1 Open the Cisco 6400 Chassis Management window.

Step 2 Select the **Inventory** tab.

The **Inventory** tab appears. Refer to the “Inventory Tab” section on page 5-6 for further information.

NSP Management

The NSP Management window allows you to monitor and configure installed NSPs.

Viewing the Cisco 6400 NSP Management Window

The Cisco 6400 NSP Management window is divided into five tabbed sections.

To view the Cisco 6400 NSP Management window, proceed as follows:

Select the **Cisco 6400 UAC, Manage, NSP** option from a relevant network map, a relevant object in the object manager or by using an object pick list on an open Element Manager window.

Refer to Table 4-1 on page 4-1 for information on which maps nodes or objects allow you to launch the Cisco 6400 NSP Management window.

The Cisco 6400 NSP Management window appears with the **Faults** tab displayed as default.

Figure 4-2 Cisco 6400 NSP Management Window



Faults Tab

To view the **Faults** tab:

- Step 1** Open the Cisco 6400 NSP Management window. Refer to the “Viewing the Cisco 6400 NSP Management Window” section on page 4-3 for further details.
The **Faults** tab appears by default.
- Step 2** Select the relevant NSP in the **Node Switch Processor** list.
The fault information for the selected NSP appears. Refer to the “Faults Tab” section on page 5-7 for further information.

Status Tab

To view the **Status** tab:

- Step 1** Open the Cisco 6400 NSP Management window. Refer to the “Viewing the Cisco 6400 NSP Management Window” section on page 4-3 for further details.
- Step 2** Select the **Status** tab.
- Step 3** Select the relevant NSP.
The status information for the selected NSP appears. Refer to the “Status Tab” section on page 5-7 for further information.

Performance Tab

To view the **Performance** tab:

- Step 1** Open the Cisco 6400 NSP Management window. Refer to the “Viewing the Cisco 6400 NSP Management Window” section on page 4-3 for further details.
- Step 2** Select the **Performance** tab.
- Step 3** Select the relevant NSP.
The performance information for the selected NSP appears. Refer to the “Performance Tab” section on page 5-9 for further information.

Configuration Tab

To view the **Configuration** tab:

- Step 1** Open the Cisco 6400 NSP Management window. Refer to the “Viewing the Cisco 6400 NSP Management Window” section on page 4-3 for further details.
- Step 2** Select the **Configuration** tab.
- Step 3** Select the relevant NSP.
The configuration information for the selected NSP appears.
- Step 4** Edit the information in the **Configuration** tab, as required.
- Step 5** Save the changes.
Refer to the “Configuration Tab” section on page 5-9 for further information.

Inventory Tab

To view the **Inventory** tab:

- Step 1** Open the Cisco 6400 NSP Management window. Refer to the “Viewing the Cisco 6400 NSP Management Window” section on page 4-3 for further details.
- Step 2** Select the **Inventory** tab.
- Step 3** Select the relevant NSP.
The **Inventory** tab appears.
Refer to the “Inventory Tab” section on page 5-11 for further information.

NSP Logs

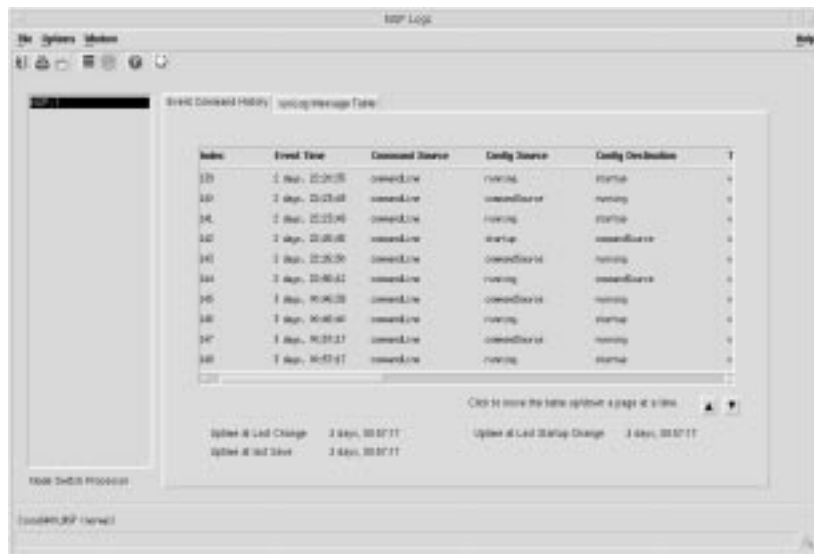
The NSP Logs window allows you to view the event commands stored in the Event command history table and the system log messages stored in the syslog Message table for the selected NSP.

Viewing the Cisco 6400 NSP Logs Window

Select the **Cisco 6400 UAC, View, NSP Logs** option from a relevant network map, a relevant object in the object manager or by using an object pick list on an open Element Manager window. Refer to Table 4-1 on page 4-1 for information on which maps nodes or objects allow you to launch the NSP Logs window.

The NSP Logs window appears with the **Event Command History** tab displayed.

Figure 4-3 NSP Logs Window



The NSP Logs window is divided into two tabbed sections: the **Event Command History** tab and the **sysLog Message Table** tab.

Event Command History Tab

To view the **Event Command History** tab:

Step 1 Open the NSP Logs window. Refer to the “Viewing the Cisco 6400 NSP Logs Window” section on page 4-5 for further details.

The **Event Command History** tab appears by default.

Step 2 Select the relevant NSP.

The **Event Command History** table appears for the selected NSP. Refer to the “Event Command History Tab” section on page 5-12 for further information on the attributes.

Step 3 Scroll through the list of event commands (using the arrow keys) until the relevant event command appears. The down arrow displays the next ten entries and the up arrow displays the previous ten entries. Use the horizontal scroll bar to view all the table entries. Drag the scroll bar until the relevant information appears. You can change the width of each column if necessary to view fault strings clearly (see below).

Changing Column Width

To change the width of a column:

Step 1 Open the relevant window displaying a table.

Step 2 Place the cursor to the left of a column heading and move the cursor until it changes to a double arrow.

Step 3 Click and hold the left mouse button when the cursor changes.

Step 4 Drag the cursor until the column is at the required width.

Step 5 Release the mouse button.

Any text wider than the column is truncated. The columns widths return to the default widths when you close this window.

SysLog Message Table Tab

To view the **sysLog Message Table** tab:

Step 1 Open the NSP Logs window. Refer to the “Viewing the Cisco 6400 NSP Logs Window” section on page 4-5 for further details.

Step 2 Select the **sysLog Message Table** tab.

Step 3 Select the relevant NSP.

The **sysLog Message Table** appears for the selected NSP. Refer to the “SysLog Message Table Tab” section on page 5-14 for further information.

Step 4 Scroll through the list of system messages using the arrow keys until the you find the information you want. The right arrow displays the next ten entries and the left arrow displays the previous ten entries.

You can view all the table entries by using the horizontal scroll bar. Click and drag the scroll bar until you see the information you want. You can change the width of each column if necessary (refer to the “Changing Column Width” section on page 4-6).

NRP Management

The NRP Management window is divided into five tabbed sections: **Faults, Status, Performance, Configuration, Inventory**.

Viewing the Cisco 6400 NRP Management Windows

Select the **Cisco 6400 UAC, Manage, NRP** option from a relevant network map, a relevant object in the object manager or by using an object pick list on an open Element Manager window. Refer to Table 4-1 on page 4-1 for information on which maps nodes or objects you can select to launch the Cisco 6400 NRP Management window.

The Cisco 6400 NRP Management window appears with the **Faults** tab displayed.

Figure 4-4 Cisco 6400 NRP Management Window



Faults Tab

To view the **Faults** tab:

- Step 1** Open the Cisco 6400 NRP Management window. Refer to the “Viewing the Cisco 6400 NRP Management Windows” section on page 4-7 for further details.
- Step 2** The **Faults** tab appears by default.
- Step 3** Select the relevant **NSP** and **NRP**.

The fault information for the selected NRP appears. Refer to the “Faults Tab” section on page 5-15 for further information.

Status Tab

To view the **Status** tab:

- Step 1** Open the Cisco 6400 NRP Management window. Refer to the “Viewing the Cisco 6400 NRP Management Windows” section on page 4-7 for further details.
- Step 2** Select the **Status** tab.
- Step 3** Select the relevant **NSP** and **NRP**.

The status information for the selected NRP appears. Refer to the “Status Tab” section on page 5-15 for further information.

Performance Tab

To view the **Performance** tab:

- Step 1** Open the Cisco 6400 NRP Management window. Refer to the “Viewing the Cisco 6400 NRP Management Windows” section on page 4-7 for further details.
- Step 2** Select the **Performance** tab.
- Step 3** Select the relevant **NSP** and **NRP**.
The performance information for the selected NRP appears. Refer to the “Performance Tab” section on page 5-17 for further information.

Configuration Tab

To view the **Configuration** tab:

- Step 1** Open the Cisco 6400 NRP Management window. Refer to the “Viewing the Cisco 6400 NRP Management Windows” section on page 4-7 for further details.
- Step 2** Select the **Configuration** tab.
- Step 3** Select the relevant NSP and NRP.
The configuration information for the selected NRP appears.
- Step 4** Change the information as required in the drop down lists and data entry boxes.
- Step 5** Save the changes.
Refer to the “Configuration Tab” section on page 5-17 for further information.

Commissioning an NRP

- Step 1** Open the Cisco 6400 NRP Management window. Refer to the “Viewing the Cisco 6400 NRP Management Windows” section on page 4-7 for further details.
- Step 2** Select the **Configuration** tab.
- Step 3** Select the relevant **NSP** and **NRP**.
The state of the selected card appears at the bottom left-hand-corner of the window.
- Step 4** Click **Commission** when **Decommissioned** appears (at the bottom left-hand-corner of the window).
The **NRP** is now commissioned and its state changes to **Normal**.

Decommissioning an NRP

- Step 1** Open the Cisco 6400 NRP Management window. Refer to the “Viewing the Cisco 6400 NRP Management Windows” section on page 4-7 for further details.
The **Line Card** tab appears by default.
- Step 2** Select the relevant **NSP** and **NRP**.
The state of the selected card appears at the bottom left-hand-corner of the window.
- Step 3** Click **Decommission** when **Commissioned** appears.
The selected NRP is now decommissioned and the state changes to **Decommissioned**.

SSG Configuration Tab

To view the **Inventory** tab:

- Step 1** Open the Cisco 6400 NRP Management window. Refer to the “Viewing the Cisco 6400 NRP Management Windows” section on page 4-7 for further details.
- Step 2** Select the **SSG Configuration** tab.
- Step 3** Select the relevant **NSP** and **NRP**.
Refer to the “SSG Configuration Tab” section on page 5-20 for further information.

More SSG Configuration Tab

To view the **More SSG Configuration** tab:

- Step 1** Open the Cisco 6400 NRP Management window. Refer to the “Viewing the Cisco 6400 NRP Management Windows” section on page 4-7 for further details.
- Step 2** Select the **More SSG Configuration** tab.
- Step 3** Select the relevant **NSP** and **NRP**.
Refer to the “More SSG Configuration Tab” section on page 5-21 for further information.

Inventory Tab

To view the **Inventory** tab:

- Step 1** Open the Cisco 6400 NRP Management window. Refer to the “Viewing the Cisco 6400 NRP Management Windows” section on page 4-7 for further details.
- Step 2** Select the **Inventory** tab.
- Step 3** Select the relevant **NSP** and **NRP**.
Refer to the “Inventory Tab” section on page 5-24 for further information.

NRP Logs Management

The NRP Logs window allows you to view commands stored in the Event Command History table and the system log messages stored in the syslog Message table for the selected NRP.

Viewing the Cisco 6400 NRP Logs Window

Select the **Cisco 6400 UAC, View, NRP Logs** option from a relevant network map, a relevant object in the object manager or by using an object pick list on an open Element Manager window.

Refer to Table 4-1 on page 4-1 for information on which maps nodes or objects allow you to launch the NRP Logs window.

The NRP Logs window appears with the **Event Command History** tab displayed.

Figure 4-5 Cisco 6400 NRP Logs Window



Event Command History Tab

To view the **Event Command History** tab:

Step 1 Open the Cisco 6400 NRP Logs window. Refer to the “Viewing the Cisco 6400 NRP Logs Window” section on page 4-10 for further details.

The **Event Command History** tab appears by default.

Step 2 Select the relevant **NSP** and **NRP**.

The **Event Command History** table for the selected NRP appears. Refer to the “Event Command History Tab” section on page 5-25 for further information.

Step 3 Scroll through the list of event commands until the you find the event command you want using the arrow keys. The down arrow displays the next ten entries; the up arrow displays the ten previous entries. To view all the table entries, you need to use the horizontal scroll bar. Drag the scroll bar until the relevant information appears. You can change the width of each column (refer to the “Changing Column Width” section on page 4-6).

SysLog Message Table Tab

To view the **sysLog Message Table** tab:

Step 1 Open the Cisco 6400 NRP Logs window. Refer to the “Viewing the Cisco 6400 NRP Logs Window” section on page 4-10 for further details.

Step 2 Select the **sysLog Message Table** tab.

Step 3 Select the relevant **NSP** and **NRP**.

The sysLog Message table for the selected NRP appears. Refer to the “SysLog Message Table Tab” section on page 5-27 for further information.

- Step 4** Scroll through the list of system messages until you find the messages you want, using the arrow keys. The right arrow displays the next ten entries and the left arrow displays the ten previous entries. To view all the table entries you need to use the horizontal scroll bar. Drag the scroll bar until the relevant information appears. You can change the width of each column (refer to the “Changing Column Width” section on page 4-6).

NRP ATM Port Management

The NRP ATM Port Management window is divided into six tabbed sections: **Faults**, **Status**, **Performance**, **Configuration**, **More Configuration**, and **Inventory**.

Viewing the Cisco 6400 NRP ATM Port Management Window

Select the **Cisco 6400 UAC**, **Manage**, **NRP ATM Port** option from a relevant network map, a relevant object in the object manager or by using an object pick list on an open Element Manager window. Refer to Table 4-1 on page 4-1 for information on which maps nodes or objects allow you to launch the Cisco 6400 NRP ATM Port Management window.

The Cisco 6400 NRP ATM Port Management window appears with the **Faults** tab displayed.

Figure 4-6 Cisco 6400 NRP ATM Port Management Window



Faults Tab

To view the **Faults** tab:

Step 1 Open the Cisco 6400 NRP ATM Port Management window. Refer to the “Viewing the Cisco 6400 NRP ATM Port Management Window” section on page 4-13 for further details.

The **Faults** tab appears by default.

Step 2 Select the relevant **NSP**, **NRP** and **ATM Port**.

The fault information for the selected **ATM Port** appears. Refer to the “Faults Tab” section on page 5-28 for further information.

Status Tab

To view the **Status** tab:

- Step 1** Open the Cisco 6400 NRP ATM Port Management window. Refer to the “Viewing the Cisco 6400 NRP ATM Port Management Window” section on page 4-13 for further details.
- Step 2** Select the **Status** tab.
- Step 3** Select the relevant **NSP, NRP** and **ATM Port**.
The status information for the selected **ATM Port** appears. Refer to the “Status Tab” section on page 5-28 for further information.

Performance Tab

To view the **Performance** tab:

- Step 1** Open the Cisco 6400 NRP ATM Port Management window. Refer to the “Viewing the Cisco 6400 NRP ATM Port Management Window” section on page 4-13 for further details.
- Step 2** Select the **Performance** tab.
- Step 3** Select the relevant **NSP, NRP** and **ATM Port**.
The performance information for the selected NRP appears. Refer to the “Performance Tab” section on page 5-30 for further information.

Configuration Tab

To view the **Configuration** tab:

- Step 1** Open the Cisco 6400 NRP ATM Port Management window. Refer to the “Viewing the Cisco 6400 NRP ATM Port Management Window” section on page 4-13 for further details.
- Step 2** Select the **Configuration** tab.
- Step 3** Select the relevant **NSP, NRP** and **ATM Port**.
The configuration information for the selected **ATM Port** appears. Refer to the “Configuration Tab” section on page 5-36 for further information.
- Step 4** Change the information displayed, as required.
- Step 5** Save the changes.

More Configuration Tab

To view the **More Configuration** tab:

- Step 1** Open the Cisco 6400 NRP ATM Port Management window. Refer to the “Viewing the Cisco 6400 NRP ATM Port Management Window” section on page 4-13 for further details.
- Step 2** Select the **More Configuration** tab.
- Step 3** Select the relevant **NSP, NRP** and **ATM Port**.

The configuration information for the selected ATM port appears. Refer to the “More Configuration Tab” section on page 5-39 for further information.

- Step 4** Change the information as required.
- Step 5** Save the changes.

Commissioning an NRP ATM Port

- Step 1** Open the Cisco 6400 NRP ATM Port Management window. Refer to the “Viewing the Cisco 6400 NRP ATM Port Management Window” section on page 4-13 for further details.
- Step 2** Select the **More Configuration** tab.
- Step 3** Select the relevant **NSP, NRP** and **ATM Port**.
The state of the selected card appears at the bottom left-hand-corner of the window.
- Step 4** Click **Commission** when **Decommissioned** appears.
The NRP ATM Port is now commissioned and the state changes to **Normal**.

Decommissioning an NRP ATM Port

- Step 1** Open the Cisco 6400 NRP ATM Port Management window. Refer to the “Viewing the Cisco 6400 NRP ATM Port Management Window” section on page 4-13 for further details.
- Step 2** Select the **More Configuration** tab.
- Step 3** Select the relevant **NSP, NRP** and **ATM Port**.
The state of the selected card appears at the bottom left-hand corner of the window.
- Step 4** Click **Decommission**.
The NRP ATM port is now **Decommissioned** and the state changes to **Decommissioned**.

Inventory Tab

To view the **Inventory** tab:

- Step 1** Open the Cisco 6400 NRP ATM Port Management window. Refer to the “Viewing the Cisco 6400 NRP ATM Port Management Window” section on page 4-13 for further details.
- Step 2** Select the **Inventory** tab.
- Step 3** Select the relevant **NSP, NRP** and **ATM Port**.
The **Inventory** tab appears for the selected **ATM Port**. Refer to the “Inventory Tab” section on page 5-41 for further information.

Line Card Management

The Cisco 6400 Line Card Management window has a single tabbed section.

Note The Cisco 6400 SCM supports both OC3 and DS3 line cards.

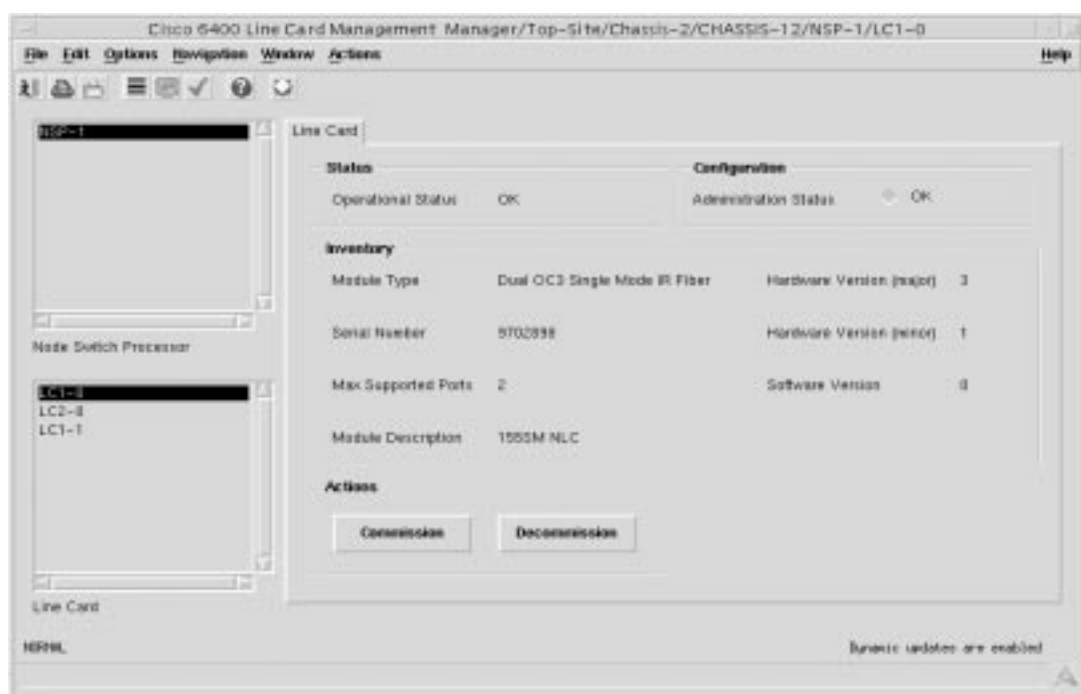
Viewing the Cisco 6400 Line Card Management Window

Select the **Cisco 6400 UAC, Manage, Line Card** option from a relevant network map, a relevant object in the object manager or by using an object pick list on an open Element Manager window.

Refer to Table 4-1 on page 4-1 for information on which maps nodes or objects allow you to launch the Cisco 6400 Line Card Management window.

The Cisco 6400 Line Card Management window appears with the **Line Card** tab displayed.

Figure 4-7 Cisco 6400 Line Card Management Window



Line Card Tab

To view the **Line Card** tab:

- Step 1** Open the Cisco 6400 Line Card Management window. Refer to the “Viewing the Cisco 6400 Line Card Management Window” section on page 4-16 for further details.
- Step 2** Select the relevant **NSP** and **Line Card**. Status information for the selected **Line Card** appears. Refer to the “Line Card Tab” section on page 5-42 for further information.

Commissioning a Line Card

- Step 1** Open the Cisco 6400 Line Card Management window. Refer to the “Viewing the Cisco 6400 Line Card Management Window” section on page 4-16 for further details.
- Step 2** Select the relevant **NSP** and **Line Card**.
The state of the selected **Line Card** appears at the bottom left-hand-corner of the window.
- Step 3** Click **Commission**. The state of the **Line Card** changes to **Commissioned**.

Decommissioning a Line Card

- Step 1** Open the Cisco 6400 Line Card Management window. Refer to the “Viewing the Cisco 6400 Line Card Management Window” section on page 4-16 for further details.
- Step 2** Select the relevant **NSP** and **Line Card**.
The state of the selected card appears at the bottom left-hand-corner of the window.
- Step 3** Click **Decommission**. The state of the Line Card changes to **Decommissioned**.

Line Card ATM Port Management

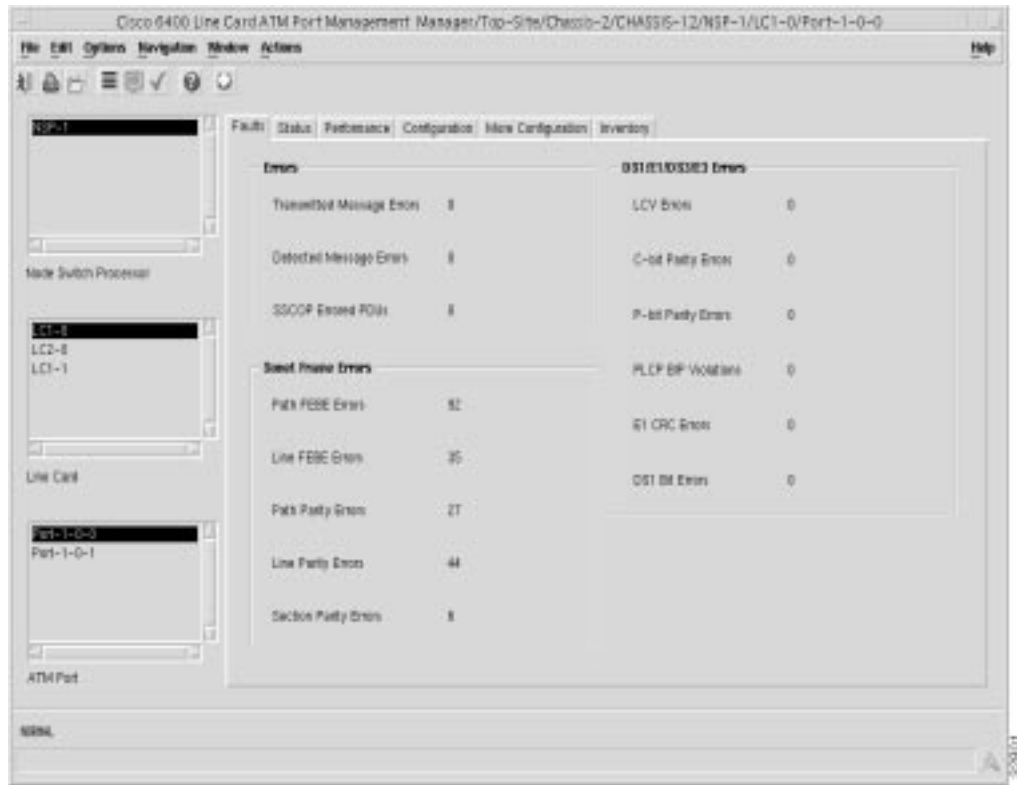
The Cisco 6400 Line Card ATM Port Management window is divided into six tabbed sections: **Faults**, **Status**, **Performance**, **Configuration**, **More Configuration**, and **Inventory**.

Viewing the Cisco 6400 Line Card ATM Port Management Window

Select the **Cisco 6400, Manage, Line Card ATM Port** option from a relevant network map, a relevant object in the object manager or by using an object pick list on an open Element Manager window.

The Cisco 6400 Line Card ATM Port Management window appears with the **Faults** tab displayed. Refer to Table 4-1 on page 4-1 for information on which maps nodes or objects allow you to launch the Cisco 6400 Line Card ATM Port Management window.

Figure 4-8 Cisco 6400 Line Card ATM Port Management Window



Faults Tab

To view the **Faults** tab:

Step 1 Open the Cisco 6400 Line Card ATM Port Management window. Refer to the “Viewing the Cisco 6400 Line Card ATM Port Management Window” section on page 4-17 for further details.

The **Faults** tab appears.

Step 2 Select the relevant **NSP**, **Line Card** and **ATM Port**. The fault information for the selected **ATM Port** appears. Refer to the “Faults Tab” section on page 5-43 for further information.

Status Tab

To view the **Status** tab:

Step 1 Open the Cisco 6400 Line Card ATM Port Management window. Refer to the “Viewing the Cisco 6400 Line Card ATM Port Management Window” section on page 4-17 for further details.

Step 2 Select the **Status** tab.

Step 3 Select the relevant **NSP**, **Line Card** and **ATM Port**. The status information for the selected ATM port appears. Refer to the “Status Tab” section on page 5-44 for further information.

Performance Tab

To view the **Performance** tab:

- Step 1** Open the Cisco 6400 Line Card ATM Port Management window. Refer to the “Viewing the Cisco 6400 Line Card ATM Port Management Window” section on page 4-17 for further details.
- Step 2** Select the **Performance** tab.
- Step 3** Select the relevant **NSP, Line Card** and **ATM Port**. The performance information for the selected **ATM Port** appears. Refer to the “Performance Tab” section on page 5-46 for further information.

Configuration Tab

To view the **Configuration** tab:

- Step 1** Open the Cisco 6400 Line Card ATM Port Management window. Refer to the “Viewing the Cisco 6400 Line Card ATM Port Management Window” section on page 4-17 for further details.
- Step 2** Select the **Configuration** tab.
- Step 3** Select the relevant **NSP, Line Card** and **ATM Port**. The configuration information for the selected **ATM Port** appears.
- Step 4** Change the information as required using the drop down lists.
- Step 5** Save the changes. Refer to the “Configuration Tab” section on page 5-52 for further information.

More Configuration Tab

To view the **More Configuration** tab:

- Step 1** Open the Cisco 6400 Line Card ATM Port Management window. Refer to the “Viewing the Cisco 6400 Line Card ATM Port Management Window” section on page 4-17 for further details.
- Step 2** Select the **More Configuration** tab.
- Step 3** Select the relevant **NSP, Line Card** and **ATM Port**. The configuration information for the selected **ATM Port** appears. Refer to the “More Configuration Tab” section on page 5-55 for further information.
- Step 4** Change the information as required.
- Step 5** Save the changes.

Commissioning a Line Card ATM Port

- Step 1** Open the Cisco 6400 Line Card ATM Port Management window. Refer to the “Viewing the Cisco 6400 Line Card ATM Port Management Window” section on page 4-17 for further details.
- Step 2** Select the **More Configuration** tab.
- Step 3** Select the relevant **NSP, Line Card** and **ATM Port**. The state of the selected port appears at the bottom left-hand-corner of the window.

Step 4 Click **Commission**.

The line card ATM Port is commissioned and the state changes to **Normal**.

Decommissioning a Line Card ATM Port

Step 1 Open the Cisco 6400 Line Card ATM Port Management window. Refer to the “Viewing the Cisco 6400 Line Card ATM Port Management Window” section on page 4-17 for further details.

Step 2 Select the **More Configuration** tab.

Step 3 Select the relevant **NSP, Line Card** and **ATM Port**.

The state of the selected port appears at the bottom left-hand-corner of the window.

Step 4 Click **Decommission**. The line card ATM Port is now **Decommissioned**.

Inventory Tab

To view the **Inventory** tab:

Step 1 Open the Cisco 6400 Line Card ATM Port Management window.

Step 2 Select the **Inventory** tab.

Step 3 Select the relevant **NSP, Line Card**, and **ATM Port**. The Inventory information appears for the selected **ATM Port**. Refer to the “Inventory Tab” section on page 5-59 for further information.

Redundancy

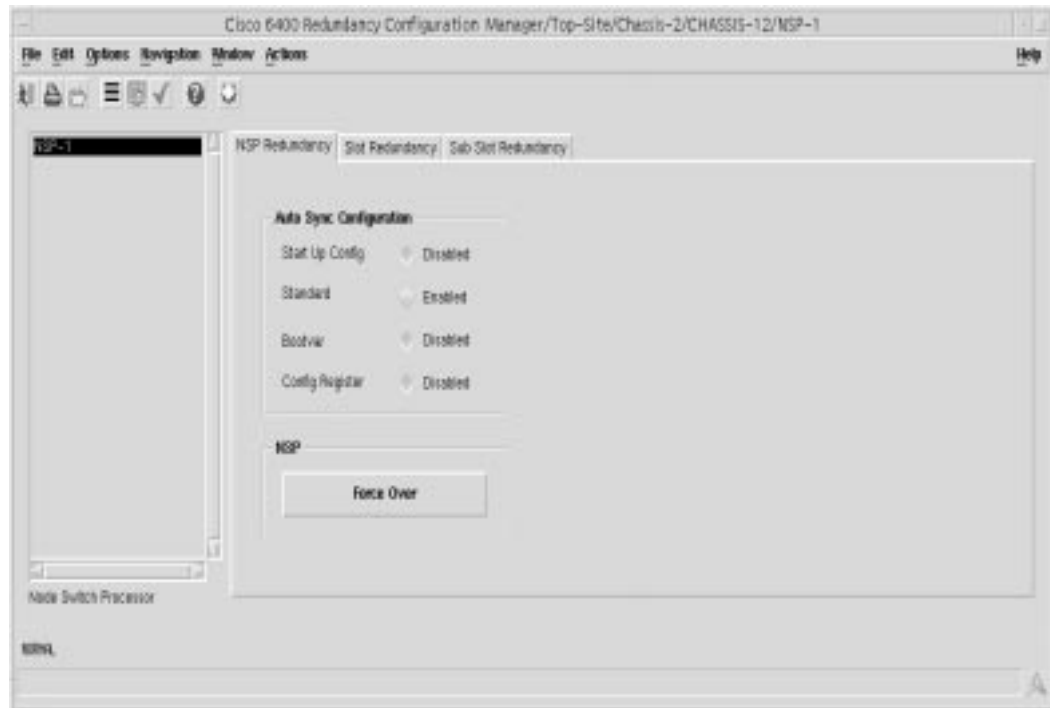
The Redundancy window allows you to specify the redundancy pairings for CPUs (NSPs), slots (NRPs), and sub-slots (line cards). The Redundancy window is divided into three tabbed sections: **NSP Redundancy**, **Slot Redundancy**, and **Sub-Slot Redundancy**.

Viewing the Cisco 6400 Redundancy Configuration Window

Select the **Cisco 6400 UAC, Manage, Redundancy** option from a relevant network map, a relevant object in the object manager or by using an object pick list on an open Element Manager window. Refer to Table 4-1 on page 4-1 for information on which maps nodes or objects allow you to launch the Cisco 6400 Redundancy Configuration window.

The Cisco 6400 Redundancy Configuration window appears with the **NSP Redundancy** tab displayed.

Figure 4-9 Cisco 6400 Redundancy Configuration Window



NSP Redundancy Tab

To set up NSP Redundancy pairings:

- Step 1** Open the Cisco 6400 Redundancy Configuration window. Refer to the “Viewing the Cisco 6400 Redundancy Configuration Window” section on page 4-20 for further details.
The **NSP Redundancy** tab appears.
- Step 2** Select the relevant **NSP**.
- Step 3** Change the information, as required. Refer to the “NSP Redundancy Tab” section on page 5-60 for further information.
- Step 4** Press **Force Over** to switch between the active NSP and the secondary NSP.
- Step 5** Save any changes made.

Slot Redundancy Tab

To set up Slot Redundancy pairings:

- Step 1** Open the Cisco 6400 Redundancy Configuration window. Refer to the “Viewing the Cisco 6400 Redundancy Configuration Window” section on page 4-20 for further details.
- Step 2** Select the **Slot Redundancy** tab. Refer to the “Slot Redundancy Tab” section on page 5-61 for further information.
- Step 3** Select the relevant **NSP**.
- Step 4** Change the information, as required.

Step 5 Save any changes made.

Sub-Slot Redundancy Pairings Tab

To set up Sub-Slot Redundancy pairings:

Step 1 Open the Cisco 6400 Redundancy Configuration window. Refer to the “Viewing the Cisco 6400 Redundancy Configuration Window” section on page 4-20 for further details.

Step 2 Select the **Sub Slot Redundancy** tab.

Step 3 Select the relevant **NSP**.

Step 4 Change the information displayed as required. Refer to the “Sub Slot Redundancy Tab” section on page 5-62 for further information.

Step 5 Save any changes made.

SONET APS Management

The SONET APS Management window is divided into two tabbed sections: **Statistics** and **Configuration**. These tabs allow you to view the statistics for SONET devices and configure the SONET automatic protection switching between SONET devices.

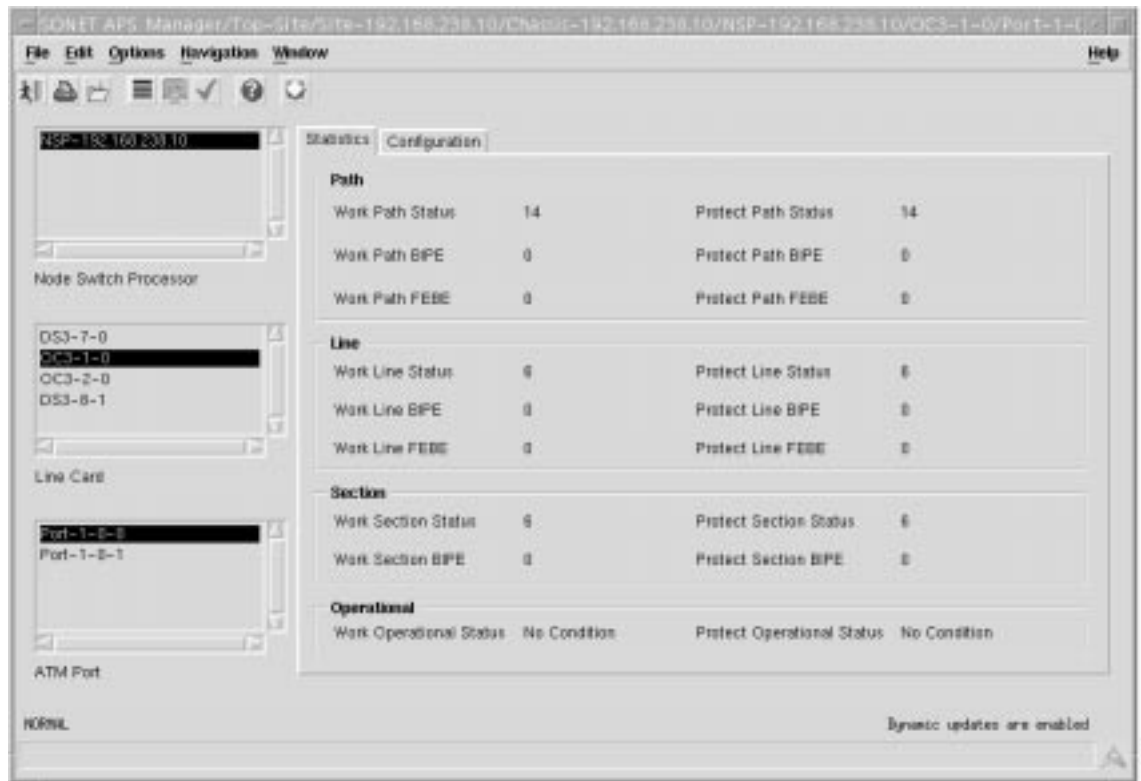
Viewing the SONET APS Manager Window

Select the **Cisco 6400 UAC, Manage, SONET APS** option from a relevant network map, a relevant object in the object manager or by using an object pick list on an open Element Manager window.

Refer to Table 4-1 on page 4-1 for information on which maps nodes or objects allow you to launch the SONET APS window.

The SONET APS window appears with the **Statistics** tab displayed.

Figure 4-10 SONET APS Window (Statistics Tab)



Statistics Tab

To view the SONET APS statistics for a specified port:

- Step 1** Open the SONET APS window. Refer to the “Viewing the SONET APS Manager Window” section on page 4-22 for further details.
- Step 2** Select the relevant **NSP**, **Line Card** and **ATM Port**.

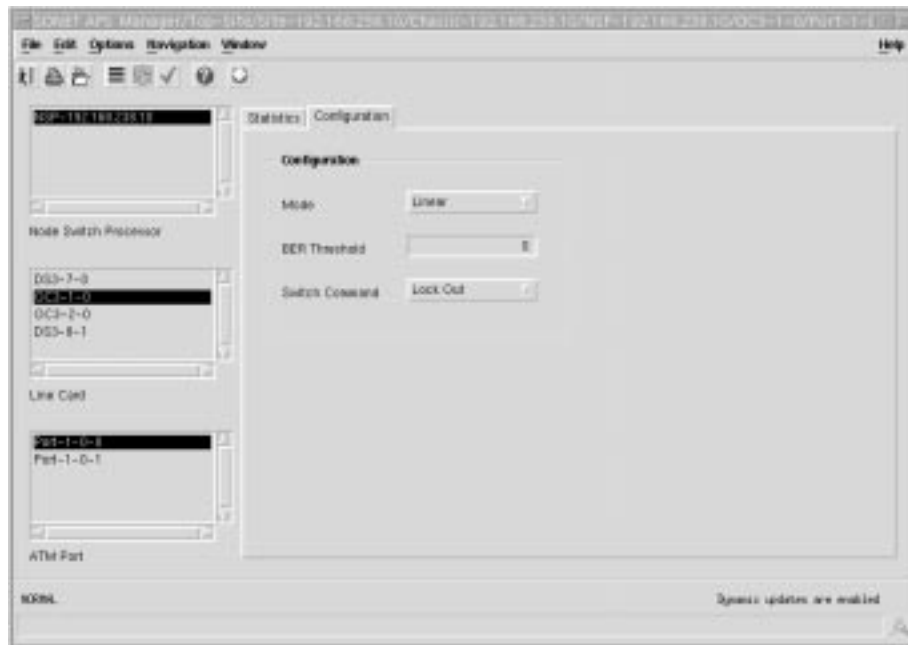
The statistics for the selected **ATM Port** appear. Refer to the “Statistics Tab” section on page 5-64 for further information.

Configuration Tab

To change SONET APS configuration information for a specified port:

- Step 1** Open the SONET APS window. Refer to the “Viewing the SONET APS Manager Window” section on page 4-22 for further details.

Figure 4-11 SONET APS Window (Configuration Tab)



- Step 2** Select the **Configuration** tab.
- Step 3** Select the relevant **NSP**, **Line Card** and **ATM Port**.
The configuration information for the selected **ATM Port** appears.
- Step 4** Alter the information displayed as required.
- Step 5** Save the changes made. Refer to the “Configuration Tab” section on page 5-68 for further information.

Backup/Restore Manager

The Backup/Restore Manager window has one tabbed section that allows you to upload the current Cisco 6400 SCM running configuration from a specified 6400 and save it as a file to any Trivial File Transfer Program (TFTP) server. This file can later be downloaded from the specified TFTP server to a user specified 6400.

Regular configuration backups allow recovery in the unlikely event of a hardware failure. For example, if an NPR were to fail, a replacement NPR could be inserted into the chassis and the configuration data would be restored. Changes in configuration data between the last backup and the time of the failure would be lost.

Note The backup/restore mechanism is not intended as a “configuration upload and manipulation” facility permitting configuration of the 6400 (for example, through IOS, followed by subsequent management by the 6400 SCM).

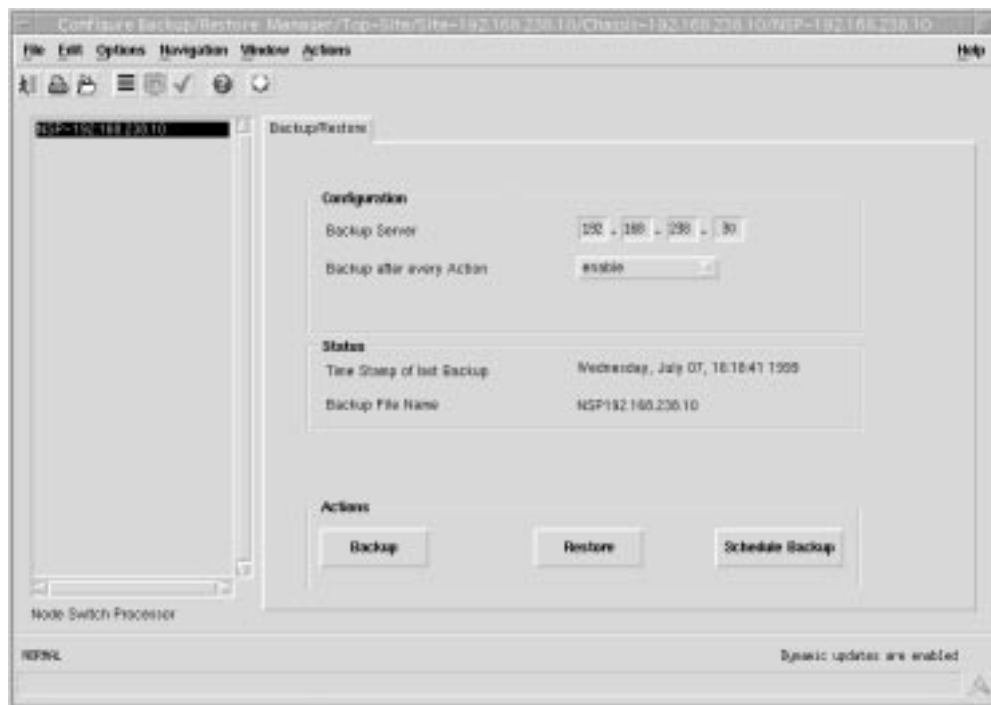
Viewing the Backup/Restore Manager Window

Select the **Cisco 6400 UAC, Admin, Backup/Restore** option from a relevant network map, a relevant object in the object manager or by using an object pick list on an open Element Manager window.

Refer to Table 4-1 on page 4-1 for information on which maps nodes or objects allow you to launch the Backup/Restore Manager window.

The Backup/Restore Manager window appears with the **Backup/Restore** tab displayed.

Figure 4-12 Backup/Restore Manager Window



Backup/Restore Tab

To view the **Backup/Restore** tab:

Step 1 Open the Backup/Restore window. Refer to the “Viewing the Backup/Restore Manager Window” section on page 4-25 for further details.

Step 2 Select the relevant NSP.

The backup/restore information for the Cisco 6400 SCM appears. Refer to the “Backup/Restore Tab” section on page 5-69 for further information.

IOS Image Download for NSP/NRP Manager

The IOS Image Download for NSP/NRP Management window has a single tabbed section which allows a 6400 firmware/IOS release to one or more user-selected NSPs and NRPs at a user specified time.

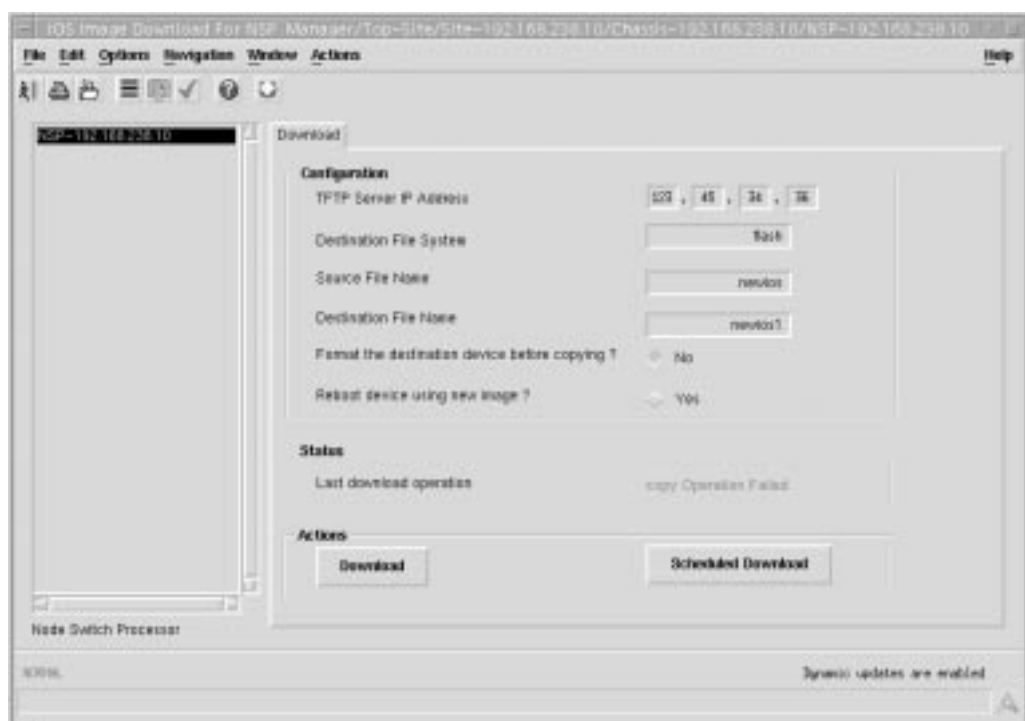
Viewing the IOS Image Download for NSP Window

Select the **Cisco 6400 UAC, Admin, Download, NSP/NRP IOS Image** option from a relevant network map, a relevant object in the object manager or by using an object pick list on an open Element Manager window.

Refer to Table 4-1 on page 4-1 for information on which map nodes or objects allow you to launch the IOS Image Download for NSP/NRP window.

The IOS Image Download for NSP window appears with the **Download** tab displayed.

Figure 4-13 IOS Image Download for NSP Manager



Download Tab

To view the **Download** tab:

- Step 1** Open the IOS Image Download for NSP window. Refer to the “Viewing the IOS Image Download for NSP Window” section on page 4-26 for further details.
- Step 2** Select the relevant **NSP**.

The download information for the Cisco 6400 SCM appears. Refer to the “Download Tab” section on page 5-71 for further information.

Launching Telnet on NSPs and NRPs

You can launch a telnet session from an icon representing an NSP or NRP in the **MapView** or **Object Manager**.

To launch a telnet session:

- Step 1** Place the cursor over an icon representing an NSP or NRP.
- Step 2** Press and hold the right mouse button.
- Step 3** Drag the cursor until the **Technology Specific Tools, Initiate Telnet Session** option is highlighted.
- Step 4** Release the mouse button. A telnet window appears.
- Step 5** Enter the required password. Refer to the Cisco 6400 UAC Software Configuration Guide Text Part Number: 78-5785-01 for further telnet information.

Launching NSP Web Console Application

You can launch Netscape and open the URL representing the home page of the embedded NSP HTTP server application (known as the WebConsole) from an icon representing an NSP in the MapViewer or the **Object Manager**.

- Step 1** Place the cursor over an icon representing an NSP.
- Step 2** Press and hold the right mouse button.
- Step 3** Drag the cursor until the **Technology Specific Tools, WebConsole** option is highlighted.
- Step 4** Release the mouse button.

A password window appears. Enter the required user ID and password.

A window appears providing access to the Cisco WebConsole product. For further information on WebConsole, refer to the Cisco 6400 UAC Software Configuration Guide Text Part Number: 78-5785-01.

Site Information

The Cisco 6400 SCM allows you to enter Site and Contact information for each site object. To enter or edit information, proceed as follows:

To view and edit **Site Information**, proceed as follows:

Step 1 Select a **Site** object in the Map Viewer or Object Manager application with the right mouse button, a pop-up menu appears.

Step 2 Select the **Site Information** option.

The **Site Information** screen appears:

Figure 4-14 Site Information Screen (Site Information Tab)



The Site Information screen has three tabbed sections, as follows:

- Site Information
- Contact One
- Contact Two

Site Information Tab

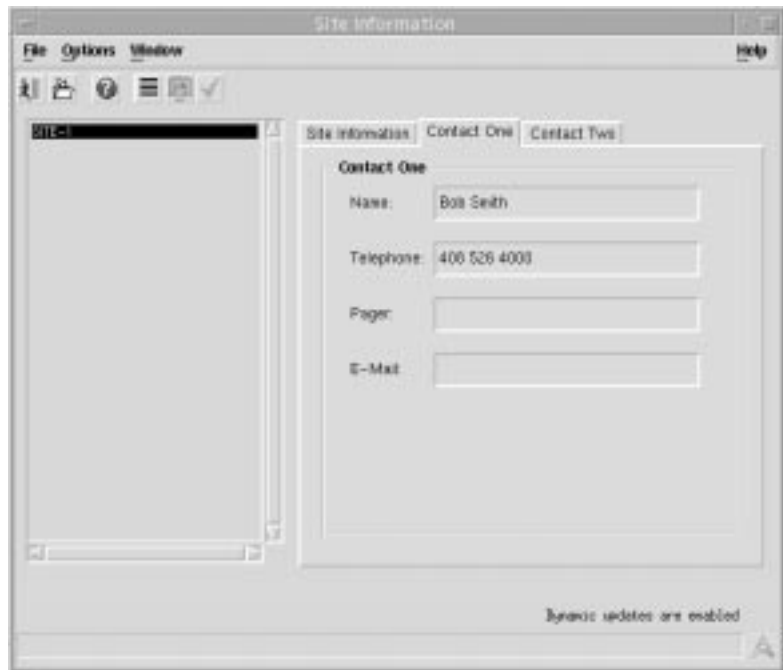
Step 3 Enter information into each of the data entry boxes (as required) in the **Site Information** tab to identify the location of the site.

Contact One Tab

Step 4 Select the **Contact One** tab.

A screen similar to Figure 4-15 appears:

Figure 4-15 Site Information Screen (Contact One Tab)



Step 5 Enter information into each of the data entry boxes as required, to provide personal contact details for an individual at the site.

Contact Two Tab

Step 6 Select the **Contact Two** tab.

Step 7 Enter the details of a second contact person at the selected site.

Step 8 Select the **Save** option from the **File** menu to save the Site Information.

Note To edit any of the information contained in the **Site Information** window, select the appropriate tab and enter/change the information in the appropriate data entry box then select the **Save** option from the **File** menu to save the changes.

Step 9 Click the **Close** icon.

Site Notes

The Cisco 6400 SCM allows you to enter Notes for each site object. To enter or edit information, proceed as follows:

Step 1 Select a **Site** object in **MapView** or **Objects** manager application with the right mouse button, a pop-up menu appears.

Step 2 Select the **Notes** option.

The **Notes** screen appears:

Figure 4-16 Notes Screen



Step 3 Enter information into the **Notes** section.

Step 4 Click the **Save** icon to save changes.

Step 5 Click the **Close** icon.

Performance Manager

An important component of efficient network management is the ability to receive performance information on a large network of many devices. This performance information can assist you to pro-actively manage your network elements.

Performance Manager is a powerful, flexible tool able to view general and performance specific attributes in one application and in a variety of formats (for example, graphs and tables). You define the attributes or parameters, choose the objects you want to view, select the date and time of the view, and set the summary interval.

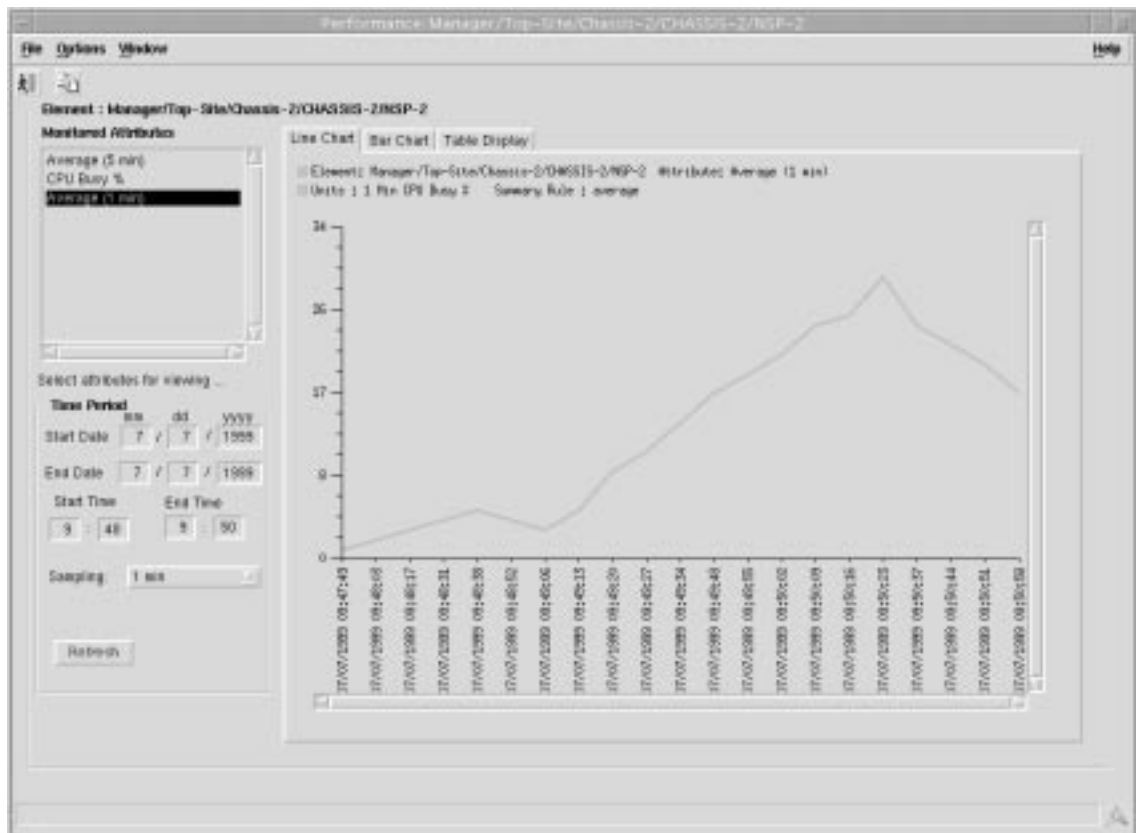
Note Refer to the *Cisco Element Management Framework User Guide* for further details on using **Performance Manager**, if required.

Viewing the Performance Manager Window

Performance Manager can be accessed from map objects, events listed in the Event Browser and objects listed in any containment tree that represent an object type included in the relevant data file. Performance Manager can be accessed from NSP, NRP, NRP port or line card port objects by right-clicking on an object.

- Step 1** Open the appropriate window to display a relevant element.
- Step 2** Place the cursor over the element.
- Step 3** Press and hold the right mouse button. A menu appears.
- Step 4** Drag the cursor until the **AV Tools, Open Performance Manager** option is highlighted.
- Step 5** Release the right mouse button. The Performance Manager window appears.

Figure 4-17 Performance Manager Window



From the Performance Manager window you can:

- identify all monitored attributes on a selected managed object
- identify all time periods configured for sampling each monitored attribute
- identify all summary methods configured for selected monitored attributes and selected summary periods
- view historical performance data over a requested period of time (in tabular or graphical format)
- print performance data to a printer or file

Viewing Performance Statistics

To view performance statistics: select the attributes' performance statistics to be displayed; the time period that the performance statistics were gathered; and the format you want to use to display the results. Refer to the following steps for details.

- Step 1** Open **Performance Manager**. Refer to the “Viewing the Performance Manager Window” section on page 4-31 for further details.
- Step 2** Select the attribute you want to monitor from the **Monitored Attributes** list.

Note You can select multiple attributes in a list by holding down the **Shift** key and selecting attributes in the list. You can select multiple individual attributes by holding down the **Ctrl** key and clicking individual items. The information for all selected attributes is shown in the Table Display. Only the first selected attribute is shown in the Line Chart or Bar Chart.

Step 3 Enter the date to start viewing the performance statistics from in the **Start Date** data entry box. Use the **mm/dd/yyyy** format.

Step 4 To set the **End Date** you have two options:

In the **End Date** data entry boxes, enter the date the view of the performance statistics has to stop at. The format must be `<mm>/<dd>/<yyyy>`

or

select the **Now** check box to view the data from the selected start date to the current time. By selecting this option, you do not have to update the **End Date** and **End Time** fields.

Note **Now** is the current time, and remains current.

Step 5 Enter the time that the view of the performance statistics has to start on the **Start Date** in the **Start Time** data entry boxes.

Step 6 Enter the time that the view of the performance statistics has to stop on the **Stop Date** in the **Stop Time** data entry boxes.

Step 7 Select the summary period you want to use in the **Sampling** list.

Step 8 Click **Refresh**. The **Refresh** button is blue when it is available for selection. It is greyed out when not available. The **Refresh** button is available for selection when **Now** is selected, or when any criteria has changed and you have moved the cursor away from the changed value by pressing the **Tab** key or by using the mouse.

The performance information appears as a line chart by default. You can view performance information as either a line chart, a bar chart, or a table display.

The performance information corresponds to the attributes' value returned during the raw sampling period. When a summary period other than raw is selected, the information appears according to the summary rule.

Note In some circumstances (possibly due to the Cisco 6400 SCM being shut down or a heavy network load), polls can be missed. **Performance Manager** deals with this problem by displaying missed polls in red. The missed poll value is replaced by the last valid value collected.

Viewing a Chart

You can zoom in, zoom out and move around the displayed charts using the key presses detailed in Table 4-2. You must first select the chart before using the key presses detailed in Table 4-2.

Table 4-2 Table of Key Presses

Press	Action
Right arrow key	Moves the chart one unit to the right
Left arrow key	Moves the chart one unit to the left
Up arrow key	Moves the chart to the bottom
Down arrow key	Moves the chart to the top
Shift and Z key	Zooms in on the chart's x axis
Shift and U key	Zooms out on the chart's x axis
Z key	Zooms in on the chart's y axis
U key	Zooms out on the chart's y axis
Shift and F key	Fits all information on the x axis in window
F key	Fits all information on the y axis in window

Printing a Performance File

You can print performance statistics from the Performance Manager, either as a chart or as a table. A chart prints out the information which can be seen in the window. A Table prints out all of the performance statistics in a plain text format.

The output is printed by the default printer set up on your network.

- Step 1** Open the Performance Manager and select the desired performance statistics.
- Step 2** From the **File** menu, select **Print**. Choose either **As Chart** or **As Table**.

Saving Performance Data to a File

No performance data is saved automatically. If you want to save data, you must select **Export to File** to save the current data to a file.

- Step 1** Open the Performance Manager and view the performance statistics you want to save.
- Step 2** From the **File** menu, select **Export to File**
or
click the Save As icon from the Toolbar.
- Step 3** The File Chooser window is displayed. The left hand panel displays the directories and the right hand panel displays the files. Use the scroll bars to locate the desired file. Click **Filter** to expand the list of options.
- Step 4** Select the file. The full path name of the selected file is displayed in the **File Filter** box, as well as the **Choice** box.

Note You can save the data to a new location or to a new file. Type in the new names as required in the **Choice** boxes.

- Step 5** Click **Apply** to save the file or **Cancel** to return to the Performance Manager window.

Archiving

Collected data is archived each day to <AVROOT>/logs by default. The applied file name is generated automatically using the format mm-dd-yyyy.log. When entries are archived, they are purged from the database. By default, only raw data is archived.

Note If more than one purge is carried out in a day, the original log file is overwritten and the information stored is lost. After a purge, only the information in the current sample period is available for display.
