Configuring with the Manager

This chapter tells you how to use the Cisco 6200 Manager to configure a Cisco 6200 DSLAM. This chapter includes the following sections:

- Using the Server Polling Status Window

- Using the Element Status Display Window

- Provisioning Cards

- Provisioning Subscribers

Two Cisco 6200 Manager windows are central to the task of adding, deleting, or accessing a Cisco 6200 element: the Server Polling Status window and the Element Status Display window.

4.1 Using the Server Polling Status Window

After you log in to the Cisco 6200 Manager, the Server Polling Status window is displayed (Figure 4-1). From this window, you can set server options, add and delete servers, and display the DSLAMs associated with a server process application. You can also monitor server status in this window; for more information, see Chapter 5, "Monitoring and Testing."

On the left side of the window are the Application Support buttons.The **Options** button is described below. For more information about the other buttons, refer to Chapter 3, "Managing the Manager."

Figure 4-1   Server Polling Status Window

4.1.1 Setting Server Options

You can set three options from the Server Options window: the server polling rate (how often the server software polls the Cisco 6200 DSLAM), an audible alarm, and a flashing display that indicates the presence of a new alarm in the system. These settings affect how the local server process application displays or updates information received from the Cisco 6200 DSLAM.

The flashing display is enabled by default, the audible alarm is turned off by default. The default for the network polling rate interval is 30 seconds; this option is set globally. Consider increasing the polling rate interval if you need to reduce the amount of network traffic.

To set network options, follow these steps:

Step 1   From the Server Polling Status window, click **Options**.

The Server Options window is displayed (see Figure 4-2).

Figure 4-2   Server Options Window
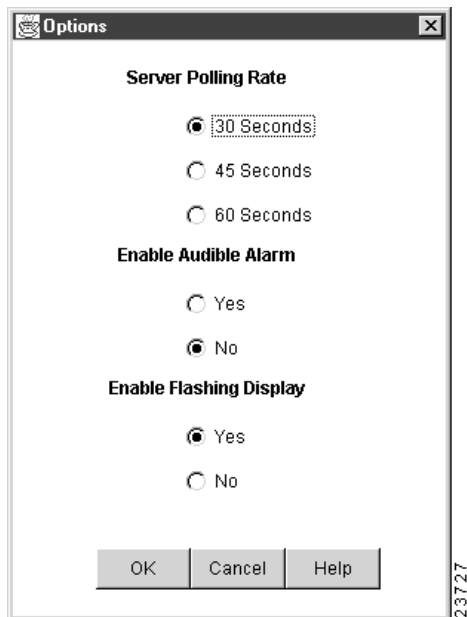
Step 2   Change one or more of the items as follows:

- Click **30**, **45**, or **60 Seconds** to set the network polling rate.

- If you want the element list entry to flash when a new alarm occurs, click **Yes** for flashing.

- If you want the workstation to beep when a new alarm occurs, click **Yes** for audible.

> **Note** The audible alarm and flashing display continue to beep and flash until you open the component display. They stop at that point unless there is a new alarm in the system.

Step 3 Click **OK** to set new options or click **Cancel** to cancel the operation and return to the Server Polling Status window.

4.1.2 Adding, Deleting, and Displaying Servers

Table 4-1 describes the buttons found at the bottom of the Server Polling Status window (Figure 4-1).
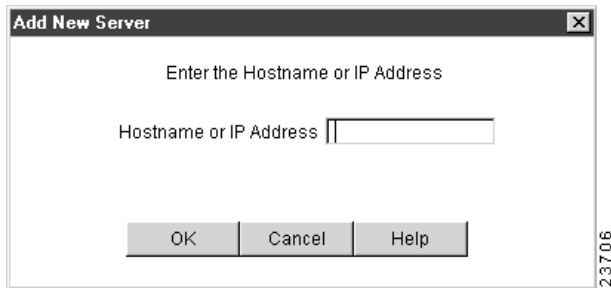
Table 4-1   Server Polling Status Window Buttons

This Button...	Is Used to...
Display	Display the elements associated with the specified server process
Add	Add a PC that is running the server process application
Delete	Remove a PC that is running the server process application

Adding Servers

Before you can perform any configuration or monitoring tasks, you must specify the name or IP address of the Cisco 6200 Manager server process to which the Cisco 6200 DSLAMs are connected. To do this, follow these steps:

Step 1 From the Server Polling Status window (Figure 4-1), click **Add**.

The Add New Server window is displayed (Figure 4-3).

Step 2 Enter the host name or IP address of the PC that is running the server process.

Figure 4-3   Add New Server

Step 3   Click **OK**.

The new server process appears in the Server Polling Status window. Click twice on the server name to access the Cisco 6200 DSLAMs associated with that server.

Note   To restore a server after it has been deleted from the Server Polling Status window, you must reinstall the default password at the PC where that server process is running. To reinstall the default password, refer to the section "Custom Installation" in Chapter 2, "Getting Started."

Removing Servers

If an installation of the server process application is no longer in use or you no longer want to access it, you can remove it by following these steps:

Step 1   From the Server Polling Status window (Figure 4-1), click on the server you want to remove.

Step 2   Click **Delete**.

A Query window is displayed. You are asked if want to proceed with the removal of the server.

Step 3   Click **Yes** to remove the server, or click **No** to cancel the operation.

Displaying Servers

To display the contents of the server, double click on a server name in the Server Polling Status window (Figure 4-1). The Element Status Display window appears (Figure 4-4).

4.2 Using the Element Status Display Window

To display the Element Status Display window (Figure 4-4), click twice on a server process in the Server Polling Status window. From the Element Status Display window, you can set network options, monitor DSLAMs (described in Chapter 5, "Monitoring and Testing"), add and delete DSLAMs, and access the window for configuring and monitoring Cisco 6200 components.

On the left side of the window are the Application Support buttons. The **Options** button is described below. For information on the other buttons, refer to Chapter 3, "Managing the Manager."

Figure 4-4   **Element Status Display Window**
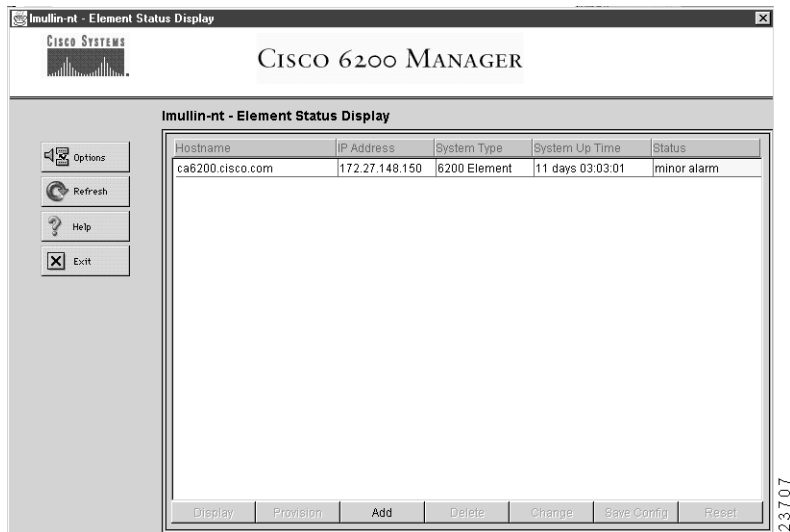
4.2.1 Setting Network Options

You can set three options from the Server Options window: the server polling rate (how often the client software polls the server software), an audible alarm, and a flashing display that indicates the presence of a new alarm in the system. These settings affect how the local copy of the GUI client displays or updates information received from the server processes.

The audible alarm and flashing display are enabled by default. The default for the network polling rate is 30 seconds; this option is set globally. Consider increasing the polling rate interval if you need to reduce the amount of network traffic.

To set network options, follow these steps:

Step 1   From the Element Status Display window, click **Options**.

The Network Options window is displayed (see Figure 4-5).

Figure 4-5   Network Options Window
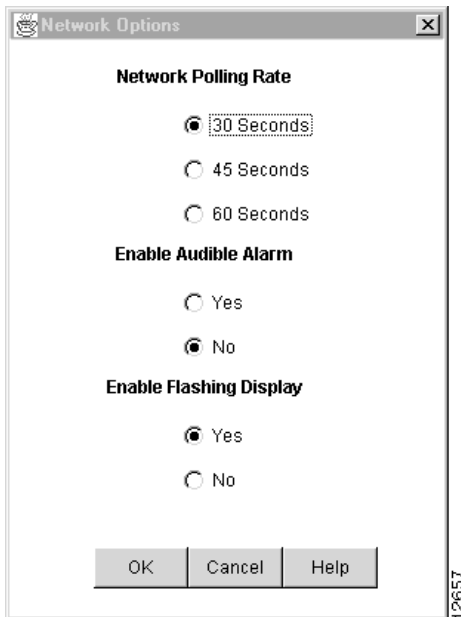
Step 2   Change one or more of the items as follows:

- Click **30**, **45**, or **60 Seconds** to set the network polling rate.

- If you want the element list entry to flash when a new alarm occurs, click **Yes** for flashing.

- If you want the workstation to beep when a new alarm occurs, click **Yes** for audible.

    The audible alarm and flashing display continue to beep and flash until you open the component display. They stop at that point unless there is a new alarm in the system.

Step 3   Click **OK** to set new options, or click **Cancel** to cancel the operation and return to the Element Status Display window.

4.2.2 Managing Cisco 6200 DSLAMs

Table 4-2 describes the buttons found at the bottom of the Element Status Display window (Figure 4-4). You can use these buttons to monitor and configure DSLAMs.

Table 4-2   Buttons for Managing Elements in the Element Status Display Window

This Button...	Is Used to...
Display	Monitor the selected element, test a subscriber line, and provision subscribers
Provision	Modify chassis card definition
Add	Add a new element to the Manager
Delete	Remove an element from the Manager
Change	Change the SNMP community string assigned to the selected element
Save Config	Save configuration data of an element to NVRAM
Reset	Reboot an element

The Element Status Display window buttons are described in greater detail below.

Displaying an Element to Provision Subscribers or Monitor a DSLAM

To monitor an element or provision subscribers, click on the **Display** button in the Element Status Display window to access the Component Status Display window. The procedure for provisioning subscribers is described below in the section "Provisioning Subscribers." For information on monitoring and testing, refer to Chapter 5, "Monitoring and Testing."

Provisioning Cards

To provision cards, click on the **Provision** button in the Element Status Display window to access the Provisioning window. The procedure for provisioning cards is described below in the section "Provisioning Cards."

Adding an Element

Before you can perform any configuration or monitoring tasks, you must add elements by specifying the names and community strings of the Cisco 6200 DSLAMs that you want the Cisco 6200 Manager to access. To do this, follow these steps:

Step 1   From the Element Status Display window (Figure 4-4), click **Add**.

The Add New Element window is displayed.

Step 2   Enter a host name or IP address and a community string.

> **Note**   Host name, IP address, and community string are listed in the running configuration of each Cisco 6200 DSLAM. If the Cisco 6200 DSLAM does not have a community string with read and write permission, you will need to assign one through the Cisco 6200 DSLAM CLI. For more information, refer to the *Cisco 6200 User Guide*.

Step 3   Click **OK**.

The new element appears in the Element Status Display window. That window lists managed elements and the name, IP address, system type, system up time, and status of each element.

For information about the status of each element, refer to Chapter 5,
"Monitoring and Testing."

Deleting an Element

If a Cisco 6200 DSLAM is no longer in use or you no longer want to access it through the
Cisco 6200, you can remove it by following these steps:

Step 1   From the Element Status Display window (Figure 4-4), click the Cisco 6200
DSLAM you want to remove.

Step 2   Click **Delete**.

A Query window is displayed. You are asked if you want to proceed with the
removal of the element.

Step 3   Click **Yes** to remove the element, or click **No** to cancel the operation.

Changing the SNMP Community String

To change an existing SNMP community string, click on the **Change** button in the Element
Status Display window (Figure 4-4) to display the Change Community String window. You
can enter a new community string name in this window.

If the Cisco 6200 DSLAM does not have a read/write community string, you need to add
one by using the IOS CLI. For more information, refer to the *Cisco 6200 User Guide*.

Saving the Configuration Settings

Configuration changes made with the Cisco 6200 Manager are implemented by default in
a Cisco 6200 DSLAM's volatile memory. After you make configuration changes in the
Element Status Display window, you can save or reject those changes.

In most cases, you will want to save your configuration settings to nonvolatile memory
(NVRAM). Typically, when a Cisco 6200 DSLAM is rebooted, it reads its configuration
information from NVRAM.

⚠ **Caution**   If you do not save the information to NVRAM, the information is lost
when the Cisco 6200 DSLAM is rebooted.

To save your configuration settings, follow these steps:

Step 1   From the Element Status Display window (Figure 4-4), click the element whose settings you want to save.

Step 2   Click **Save Config**.

A Query window is displayed. You are asked if want to save the configuration.

Step 3   Click **Yes** to save the configuration of the element, or click **No** to cancel the operation.

Resetting the Configuration

If you have not saved your configuration, you can restore the configuration values by clicking **Reset**.

Once you have saved the configuration, you cannot reset it. However, you can use the CLI **copy** command to write an old configuration file over the current configuration. For more information, refer to the *Cisco 6200 User Guide*.

⚠️ **Caution**   Resetting an element affects all subscribers connected to the chassis.

To reset the configuration settings of an element, follow these steps:

Step 1   From the Element Status Display window (Figure 4-4), highlight the element you want to reset.

Step 2   Click **Reset**.

The Query box is displayed.

**Step 3**   Click **Yes** to reset the element or **No** to cancel the operation.

4.3 Provisioning Cards

You can use the Cisco 6200 Manager to provision cards. When you provision an NTC or SLC, you reserve resources for it on the management processor card (MPC). The card itself does not have to be present for you to provision it. You should consider provisioning a card if you want to perform configuration tasks—such as setting up line rates and subscriber information—ahead of time.

To provision a new card or change a provisioned card to a different type, follow these steps:

Step 1   Click the Provision button in the Element Status Display window. The Card Provisioning window (Figure 4-6) is displayed.

Step 2   Click a slot or specify a slot number by selecting it from the Slot Number list at the bottom of the Provisioning window.

Figure 4-6   Card Provisioning Window
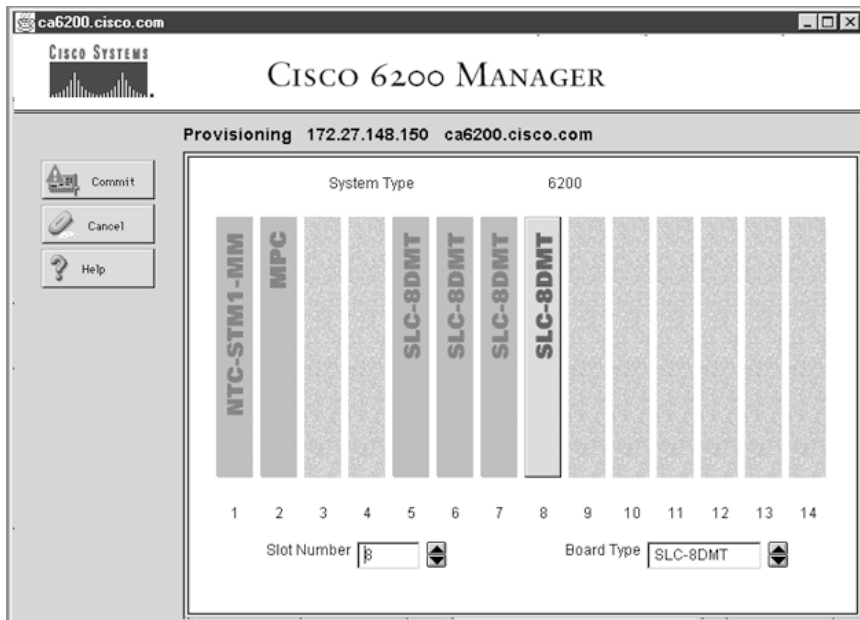
Step 3   Choose a board type from the Board Type list at the bottom of the window. Your options for board type are limited to those board types supported by the slot you selected:

- Slot 1
    — NTC-STM1-SM
    — NTC-STM1-MM
    — NTC-OC3-SM
    — NTC-OC3-MM
- Slot 2—MPC
- Slots 3 and 4—Not used
- Slots 5 to 14
    — SLC-8CAP
    — SLC-8DMT
    — Empty

Step 4   Click **Commit** in the upper left portion of the Provisioning window.

A warning window is displayed. It tells you that your changes will be written to volatile memory only.

Step 5   Click **Yes** to accept the changes, or click **No** to cancel the operation and close the warning window.

The changes you make to your configuration settings take effect immediately, but they are not saved permanently until you click the **Save Config** button.

4.4 Provisioning Subscribers

Subscriber provisioning involves configuring ports on an SLC. The Cisco 6200 Manager allows you to enable ports, assign subscriber names, and set subscriber line rates. You can also delete a subscriber.

The following sections provide the steps for these tasks.

4.4.1   Accessing the Subscriber Provisioning Window

Individual ports are configured from the Subscriber Provisioning window. To access this window, do the following:

Step 1   From the Element Status Display window, click **Display**.

The Component Status Display window is displayed.

Step 2   Click the **Subscriber Provisioning** button on the left side of the window to display the Subscriber Provisioning window (Figure 4-7).
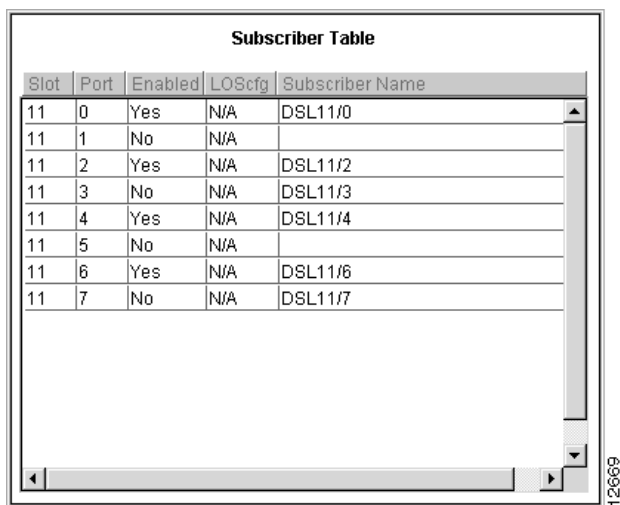
Figure 4-7   Subscriber Provisioning Window

The Subscriber Table pane and the Subscriber Detail pane are displayed at the bottom of the Subscriber Provisioning window. You use these panes to configure individual ports.

4.4.2 Configuring Ports

To configure a port, you select a subscriber from the Subscriber Table pane (Figure 4-8). This brings up the Subscriber Detail pane (Figure 4-9), which lists the current configuration for a subscriber and allows you to change that configuration.

Figure 4-8   Example of a Subscriber Table Pane

Subscriber Table

Slot	Port	Enabled	LOScfg	Subscriber Name
11	0	Yes	N/A	DSL11/0
11	1	No	N/A	
11	2	Yes	N/A	DSL11/2
11	3	No	N/A	DSL11/3
11	4	Yes	N/A	DSL11/4
11	5	No	N/A	
11	6	Yes	N/A	DSL11/6
11	7	No	N/A	DSL11/7

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When you click the **Change** button in the Subscriber Detail pane, the Subscriber Detail Entry Form displays (Figure 4-10). In this window, you can set the following:

• Enable—You must enable a port for it to be operational.

> **Note**   Disabling a port is not the same as deleting a subscriber. When you disable a port, the subscriber name field, the bit rate fields, and all other fields are unchanged. Typically, you disable a port if you want to temporarily disable the service for that port.

- Subscriber name—Use the Subscriber Name field to enter a subscriber's name, an account number, or any other information that will help you manage your accounts. The Subscriber Name field accepts a text string of up to 24 characters.

Figure 4-9   Example of a Subscriber Detail Pane

- Upstream (to the network) and downstream (from the network) bit rates—These fields specify the transmission rates for traffic between the customer premises equipment (CPE) and the central office (CO). The default bit rate for each is auto, which, in this case, means the maximum rate allowed by the line.

  When you configure a rate, the rate is used as a "not to exceed" number. If the line quality does not support the requested rate, the actual rate you get may be lower than the requested one.

  If the upstream rate is 272, 544, or 816 kbps, the hardware does not accept the top four downstream rates (2688, 4480, 6272, and 7168 kbps).

- LOS configuration—On DMT cards, use this selection to control the issuance of a minor alarm upon loss of signal (LOS), loss of frame (LOF), or loss of cell delineation (LOCD). By default, LOS, LOF, or LOCD causes a minor alarm. Setting the choice to No disables the alarm. This option is not applicable to CAP cards.

Use the following procedure to configure a port:

Step 1   To specify which port you want to change, select a row from the Subscriber Table pane. Each row specifies a slot number and a port number.

When you select a row in the Subscriber Table pane, the Subscriber Detail pane displays information specific to the row you selected.

Step 2   Click **Change** in the Subscriber Detail pane.

The Subscriber Detail Entry Form window is displayed (see Figure 4-10).

Figure 4-10   Subscriber Detail Entry Form Window

Step 3   In the Subscriber Name field, enter the name or alias assigned to the selected subscriber (length restricted to 24 characters). Press **Return**.

Step 4   In the LOS Config field, choose **Yes** to enable LOS Config alarms. This option applies only to DMT cards.

Step 5   In the Port Enabled field, choose **Yes** to enable a port or **No** to disable a port.

Step 6   In the Requested Stream Rate field, specify the upstream rate and downstream rate appropriate for the subscriber.

Step 7   Click **Commit** to save the changes or **Cancel** to cancel the operation.

When you click **Commit**, the changes are saved in active memory. To save them permanently in nonvolatile memory, click **Save Config**.

Caution If you do not save your changes to nonvolatile memory, your changes will be lost when the system is restarted.

4.4.3 Deleting a Subscriber

When you delete a subscriber, the Subscriber Name field in the Subscriber table is cleared, making it easy to identify a port that is not in use. In addition, when you delete a subscriber name, the upstream and downstream bit rate options are returned to their default values.

To delete a subscriber, follow these steps:

Step 1   Select a row from the Subscriber Table pane. Each row specifies a slot number and a port number.

When you select a row in the Subscriber Table pane, the Subscriber Detail pane displays information specific to the row you selected.

Step 2   Click the **Delete** button in the Subscriber Detail pane.

Step 3   A warning message asks you to confirm the deletion. Click **Confirm**.

A few seconds after you delete the subscriber name, the name is cleared from the Subscriber table.