NodeView

This chapter describes the EMS NodeView, and includes the following sections:

About NodeView

The EMS NodeView provides a graphical representation of an NE, complete with installed cards and LEDs. (See Figure 6-1, Figure 6-2, and Figure 6-3.) Use NodeView to provision all slots, cards, and lines in the NE. See Chapter 4, "Initial Node Provisioning," for provisioning information.
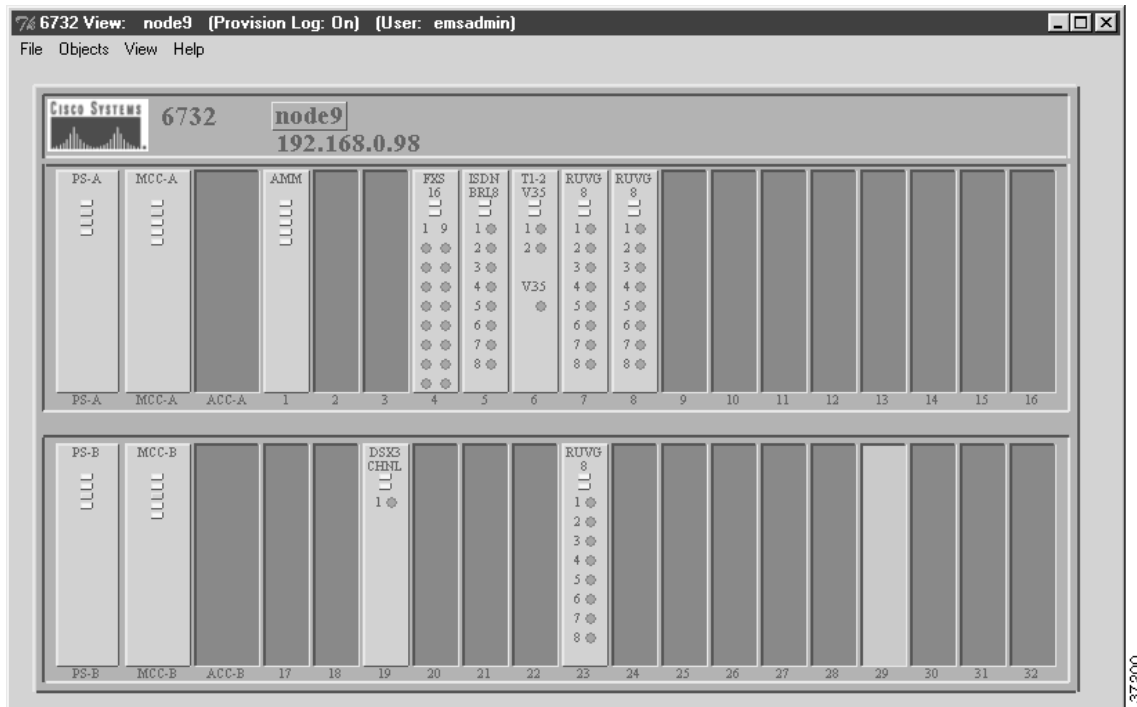
Launching NodeView

From NetView, open the NodeView of an NE using one of the following methods:

- Double-click the **Node** icon
- Right-click the **Node** icon, and select **Provision** from the popup menu.

Figure 6-1, Figure 6-2, and Figure 6-3 show the NodeView of the Cisco 6732, Cisco 6705, and Cisco IAD1101, respectively.
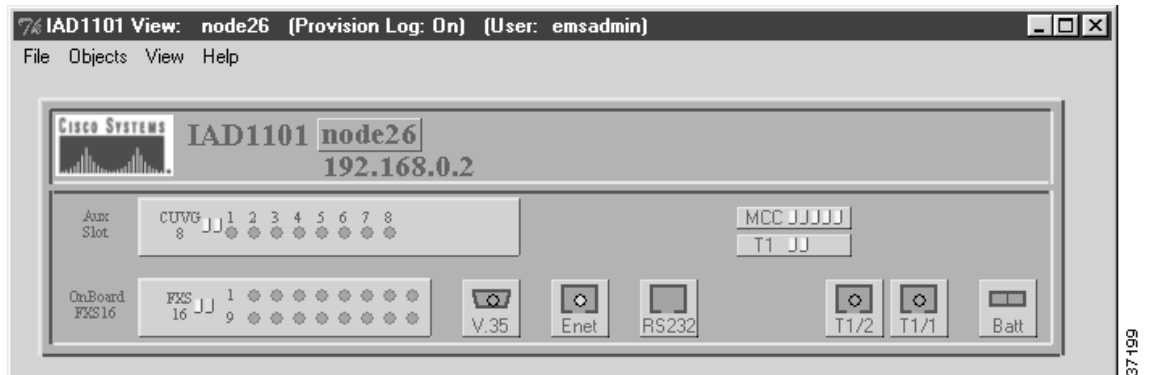
Figure 6-1   Cisco 6732 NodeView

Figure 6-2   Cisco 6705 NodeView

Figure 6-3   Cisco IAD1101 NodeView

Adding a Card

**Step 1**   From Cisco 6700 NodeView, insert a card in the desired chassis slot. For detailed card and slot information, consult the appropriate hardware installation guide.

Step 2   Select **View > Refresh Card Display** from the menu bar. EMS refreshes the NodeView display to reflect newly inserted cards.

Provisioning Slots

This procedure describes how to provision a slot for a specific card in a Cisco 6732, Cisco 6705, or Cisco IAD1101 chassis (this example shows the Cisco IAD1101).

Step 1   From Cisco 6700 NodeView, double-click the empty slot to be provisioned. EMS launches the plugin slot provisioning window. (See Figure 6-4.)

Figure 6-4   Plugin Slot Provisioning Window
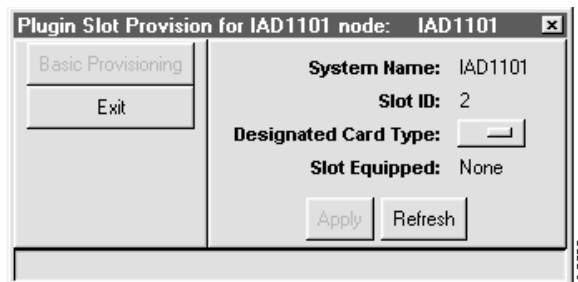
Step 2   In the **Designated Card Type** field, select the desired card type from the pull-down list. EMS displays only the cards that are compatible with the selected slot.

For more information about slot and card compatibility, consult the hardware installation guide for your NE. (See "Obtaining Documentation" on page xv of the Preface).

Step 3   Click **Apply** to provision the slot.

Step 4   Select **View > Refresh Card Display** from the menu bar. EMS refreshes the display to reflect newly provisioned slots.

The following modules can be provisioned in EMS. This example refers to the Cisco IAD1101 NodeView (see Figure 6-3 on page 6-3):

- **Main Control Card**—located in the upper right portion of the window. The indicator turns orange, along with the Ethernet, RS-232, and Battery connectors.

- **Integrated T1 with V.35**—located below the MCC indicator.

- **Integrated FXS**—located in the lower left portion of the window.

- **Expansion Slot**—located above the FXS/16 module indicator.

About Placing Cards In Service

EMS provides both individual and batch procedures for placing cards in service. This section includes the following procedures:

- Provisioning Individual Cards, page 6-5
- Batch Provisioning Cards, page 6-6

After placing a card in service, refresh the window to confirm the provisioning.

Provisioning Individual Cards

Step 1   From Cisco 6700 NodeView, double-click the card to be placed in service. EMS launches the plugin card provisioning window. (See Figure 6-5.)

*Figure 6-5   Plugin Card Provisioning Window*
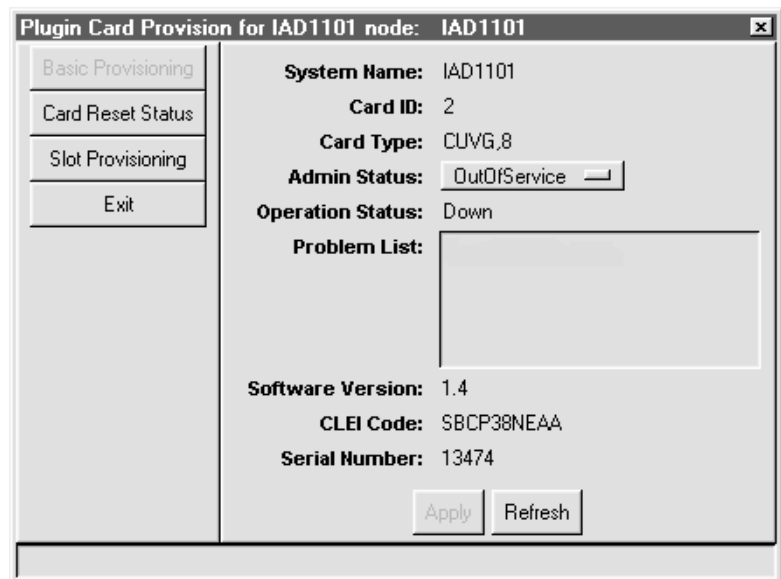
Step 2   Set the **Admin Status** field to **InService**.

Step 3   Click **Apply** to place the card in service.

Step 4   Click the **Exit** button on the left side of the window to return to Cisco 6700 NodeView.

Step 5   Select **View > Refresh Card Display** from the menu bar. EMS refreshes the display to reflect the provisioning.

Batch Provisioning Cards

Step 1   From Cisco 6700 NodeView, select **Objects > Card Batch Provisioning** from the NodeView menu bar. EMS displays the card batch provisioning window. (See Figure 6-6.) The **Card List** lists all cards that the NE has detected as installed.

Figure 6-6   Card Batch Provisioning Window
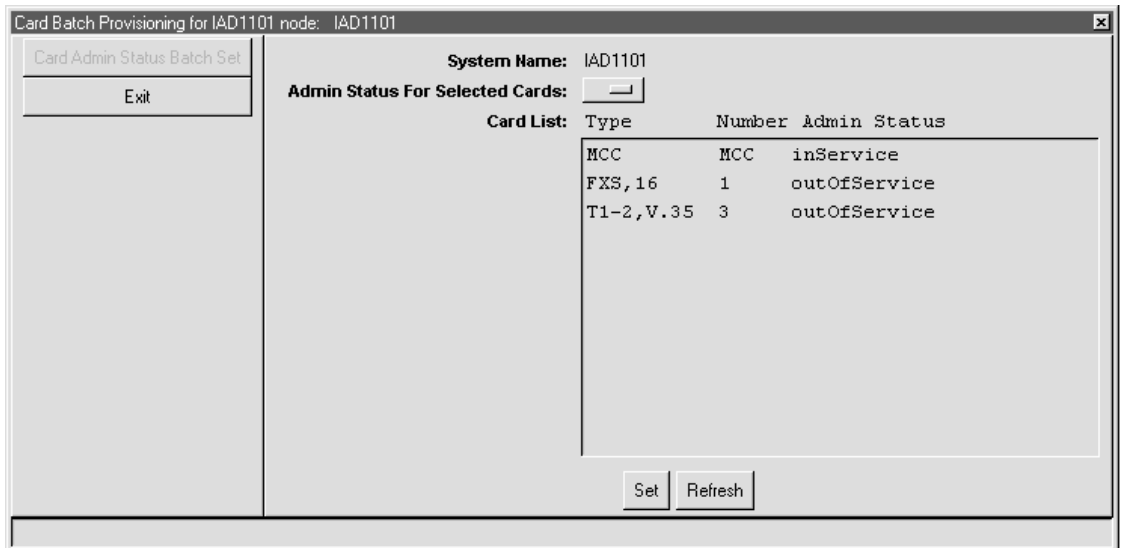
Step 2   In the **Admin Status for Selected Cards** field, select **inService**.

Step 3   In the **Card List** window, select the line cards to be placed in service.

Step 4   Click the **Set** button to put the cards in service. EMS works down the list, changing each **outOfService** card to **inService**.

Step 5   Click the **Exit** button on the left side of the window to return to Cisco 6700 NodeView.

Step 6   Select **View > Refresh Card Display** from the menu bar. EMS refreshes the display to reflect the provisioning.

Provisioning Broadband Cards with 1:1 Protection

EMS allows one-to-one (1:1) protection of the following broadband cards

- DSX3-CHNL
- STSX1-CHNL

Note   One-to-one protection only applies to cards installed in the Cisco 6732 chassis.

If one card fails, the second card automatically restores the traffic through the chassis to the backplane. This ensures greater dependability in the event of a hardware failure.

Broadband protection can be provisioned only on designated broadband slots. The following pairs of slots in the Cisco 6732 chassis are designated for broadband protection:

- Slots 17 and 18
- Slots 19 and 20

In addition to provisioning broadband protection with EMS, the protected cards require a special cable, provided with the card, which is designed specifically for joining the two cards. For more information, see the *Cisco 6732 Full Access Device Hardware Installation Guide*.

Note   Extended Super Frame (ESF) connections and inter-node data links (INDL) are not protected with broadband line card protection.

Step 1   From Cisco 6700 NodeView, select **Objects > Protection Group** from the NodeView menu. EMS launches the protection group provisioning window. (See Figure 6-7.)

Figure 6-7   Protection Group Provisioning Window

Step 2   Set the following fields to provision broadband 1:1 protection:

- **Protected Switch Direction**—Select **ProtectingToProtected**, which allows the protecting card to take over for the protected card.

- **Protection Group ID**—Select **1** for slots 17 and 18, or **2** for slots 19 and 20.

- **Protected Card**—Enter the slot number of the active card. This is the card that remains active during normal operation.

- **Protecting Card**—Enter the slot number of the standby card. This is the card that becomes active in the event of an active card failure.

- **Protect Revertive**—Select **Yes**. This allows the active card to switch back into service automatically when fully functional.

- **Protect Switch Request**—Select **Release**. This allows the switch request to be established.

Step 3   Click **Apply** to activate broadband 1:1 protection.

Step 4   Select **View > Refresh Card Display** from the menu bar. EMS refreshes the display to reflect the provisioning.

Step 5   Repeat this procedure to provision another protection group.

Note   See Chapter 7, "Provisioning Lines," for line provisioning procedures.

Provisioning Node Attributes

The NE provision window is used to provision important node attributes and parameters. To open the NE provision window, double-click the **Node Nameplate** in Cisco 6700 NodeView. (See Figure 6-8. and Figure 6-9).
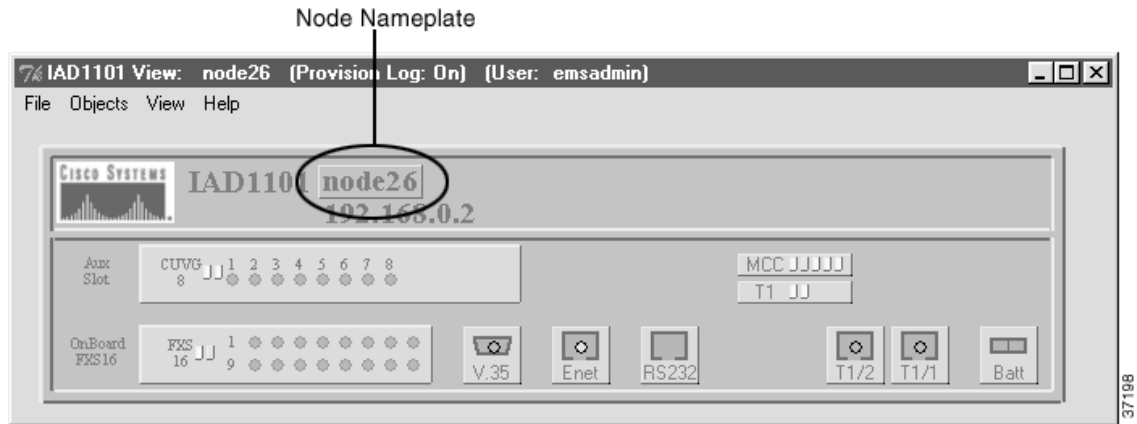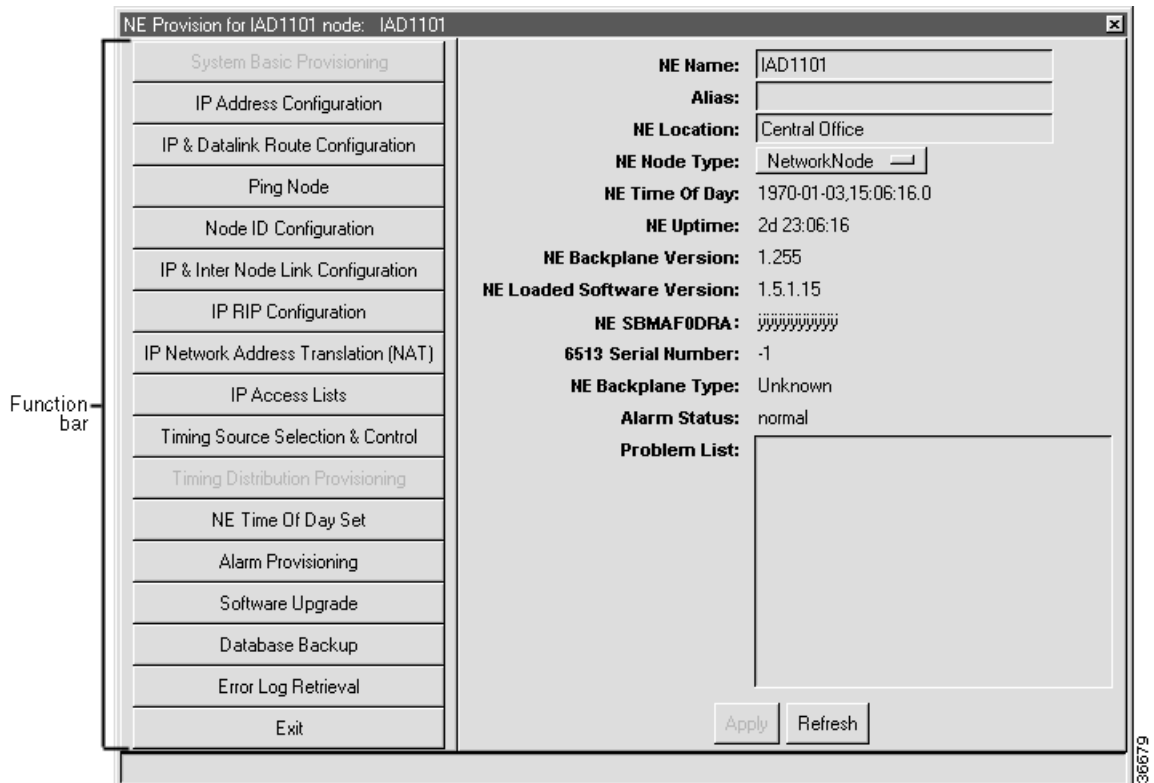
Figure 6-8   Node Nameplate

Figure 6-9   NE Provision Window and Function Bar

In Figure 6-9, the left side of the window contains the function bar, a group of buttons used to navigate through the provisioning process. The **System Basic Provisioning** button is grayed out in the function bar. This indicates that the system basic provisioning window is open. To open a different provisioning window, click one of the buttons in the function bar. Click **Exit** to return to Cisco 6700 NodeView.

You can find information and procedures for the following provisioning windows (launched by clicking the corresponding button on the function bar) in the following chapters:

- IP Address Configuration: page 4-9
- IP & Datalink Route Configuration: page 8-3
- Ping Node: page 15-5
- Node ID Configuration: page 8-3
- IP & Inter Node Link Configuration: page 8-12
- Timing Source Selection & Control: page 4-15
- NE Time Of Day Set: page 4-14
- Alarm Provisioning: page 4-13
- Software Upgrade: page 14-5 through page 14-18, and page 15-11
- Database Backup/Restore: page 14-2 (Backup) and page 14-24 (Restore)

About Placing Cards In Service