



Overview

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About EMS

The Cisco 6700 series element management system (EMS) is a powerful operations and management tool with a graphical user interface. EMS enables users to provision, manage, and monitor up to 2,500 nodes within the network.

EMS Terms

Table 1-1 describes some of the terms used throughout this EMS guide.

Table 1-1 EMS Terms

Term	Definition
NE	Network element—The physical Cisco 6705, Cisco 6732, or Cisco IAD1101 chassis.
node	The EMS representation of an NE in the network (shown as an icon in the EMS NetView).
slot	A space in the NE chassis used to house a card.
card	A modular element placed in a slot of the chassis. A card that provides one or more user traffic interfaces (lines) is called a line card; a card that does not offer user traffic interfaces is called a common card.
line	An interface designed to carry user traffic (data or voice) across the network.
port	An interface designed to carry nonuser traffic (such as management traffic) from the NE to a network device or workstation.

EMS Views

Table 1-2 describes the different EMS windows (views). Each view is detailed in the sections that follow.

Table 1-2 EMS Views

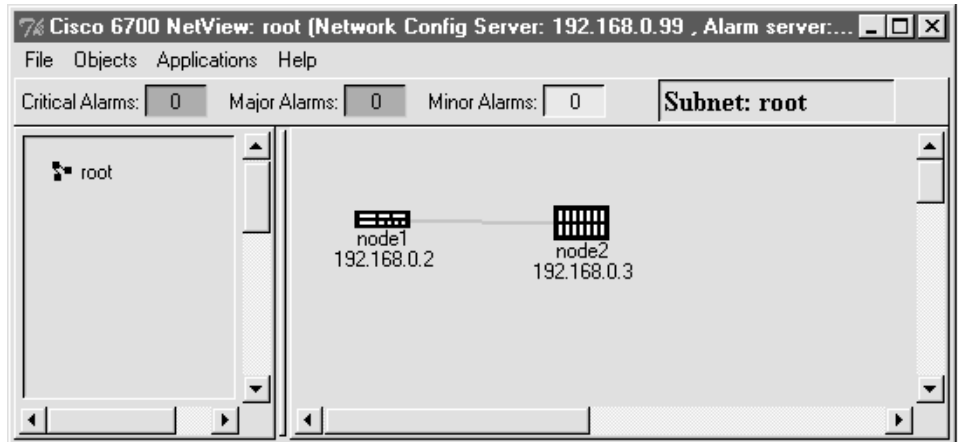
View	Description	How to Open	How to Close
NetView	A view of the network, using icons to represent installed nodes. Individual nodes are created and modified in NetView.	NetView appears when EMS is initially launched.	Select File > Exit from the menu bar. This closes EMS.
Inter node provision window	A special display used to configure connections between nodes.	From NetView, click the Inter Node Provision button at the top right of the window.	Select File > Exit from the menu bar to return to NetView.
NodeView	A graphic representation of a Cisco network element chassis, complete with installed cards. Lines and cards are provisioned from NodeView.	From NetView, double-click a node, or right-click a node and select NodeView from the popup menu.	Select File > Exit from the menu bar to return to NetView.
NE provision window	A window used to set important NE parameters such as IP address, timing source, and node ID.	From NodeView, double-click the node nameplate (located at the top of the screen).	Select Exit from the function bar to return to NodeView.
Plugin slot provision window	A window used to provision a slot for a particular card.	From NodeView, double-click any empty slot.	Select Exit from the function bar to return to NodeView.
Plugin card provision window	A window used to set individual card settings.	From NodeView, double-click any card.	Select Exit from the function bar to return to NodeView.
Line provision window	A window used to set individual line settings and parameters.	From NodeView, double-click any line.	Select Exit from the function bar to return to NodeView.

Defining EMS Views

NetView

Cisco 6700 series NetView appears when EMS is initially launched and displays the topology of the network. (See Figure 1-1.) From NetView, all nodes, subnets, and end node lists can be created or modified. (See Chapter 5, “NetView” for provisioning information.)

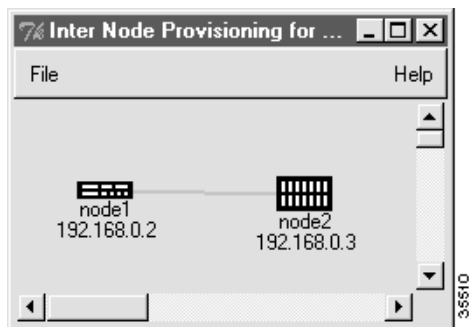
Figure 1-1 NetView



Inter Node Provisioning Window

The inter node provisioning window is used to provision connections between two or more NEs. (See Figure 1-2.) By clicking the visual links drawn between nodes, you can create, modify, or delete internode connections. (See “Inter Node Data Link Procedure” on page 8-12 for provisioning information.)

Figure 1-2 Internode Provisioning Window



NodeView

The EMS NodeView provides a graphical representation of an NE, complete with installed cards and LEDs. (See Figure 1-3, Figure 1-4, and Figure 1-5.) Use NodeView to provision all slots, cards, and lines in the NE. (See “Provisioning Slots” on page 6-4 for provisioning information.)

Figure 1-3 Cisco 6732 NodeView

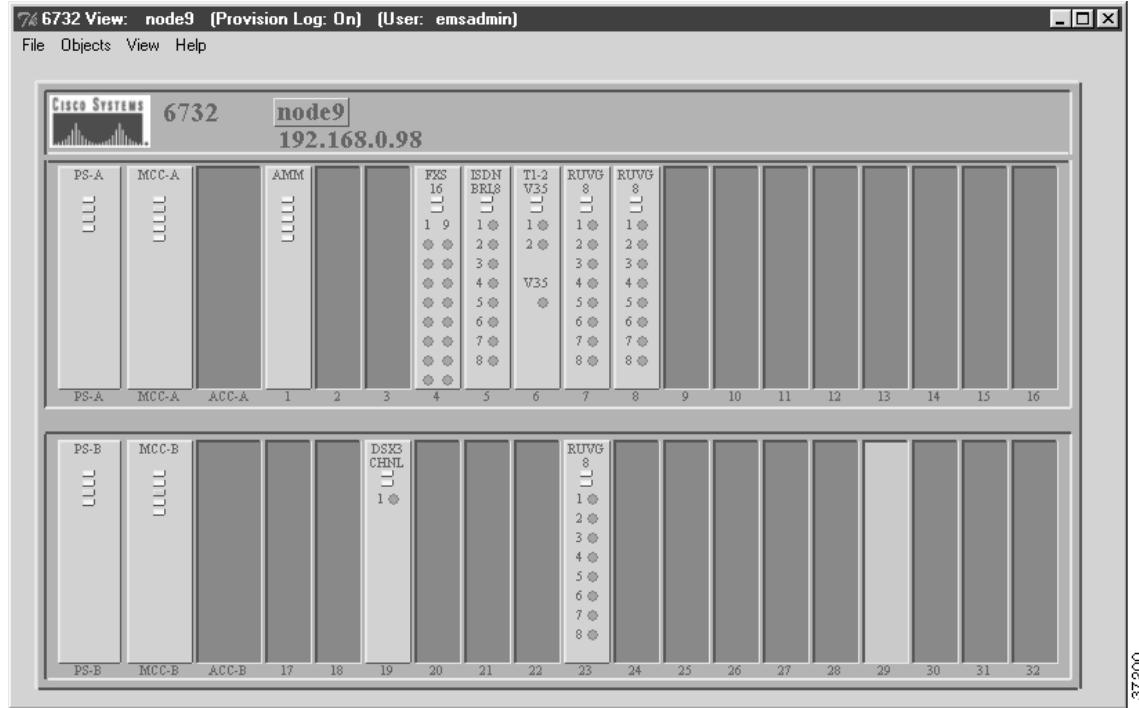
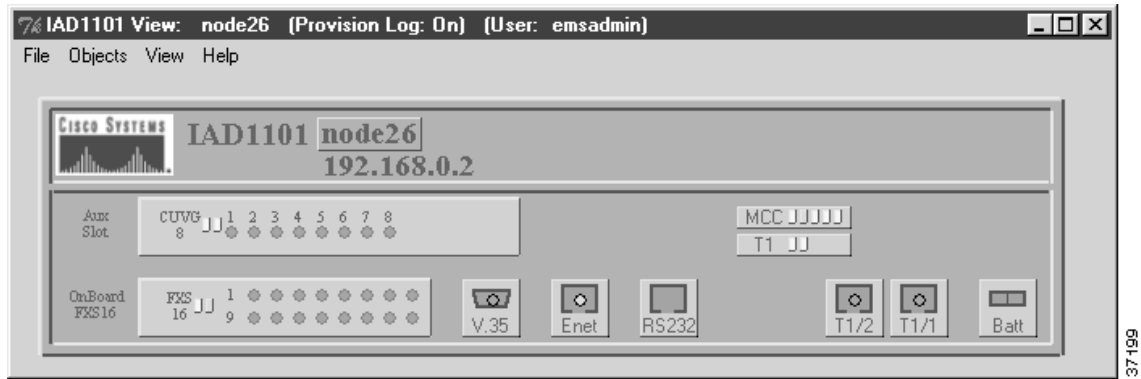


Figure 1-4 Cisco 6705 NodeView



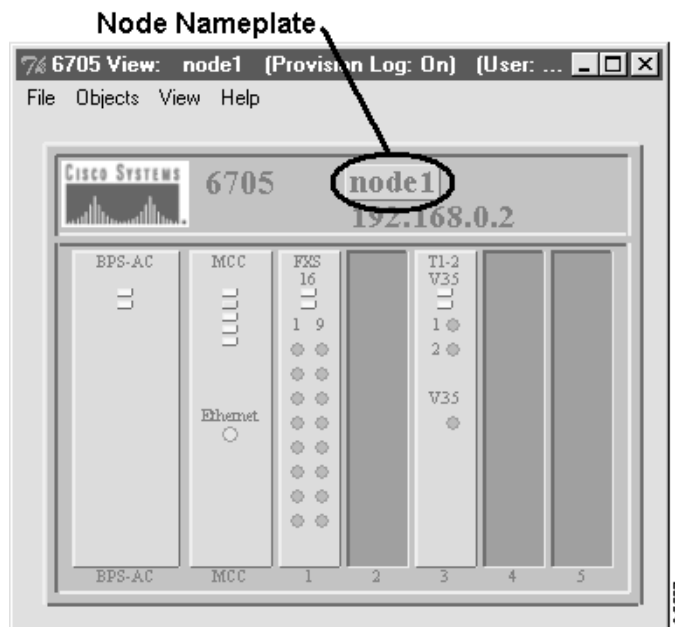
Figure 1-5 Cisco IAD1101 NodeView



NE Provision Window

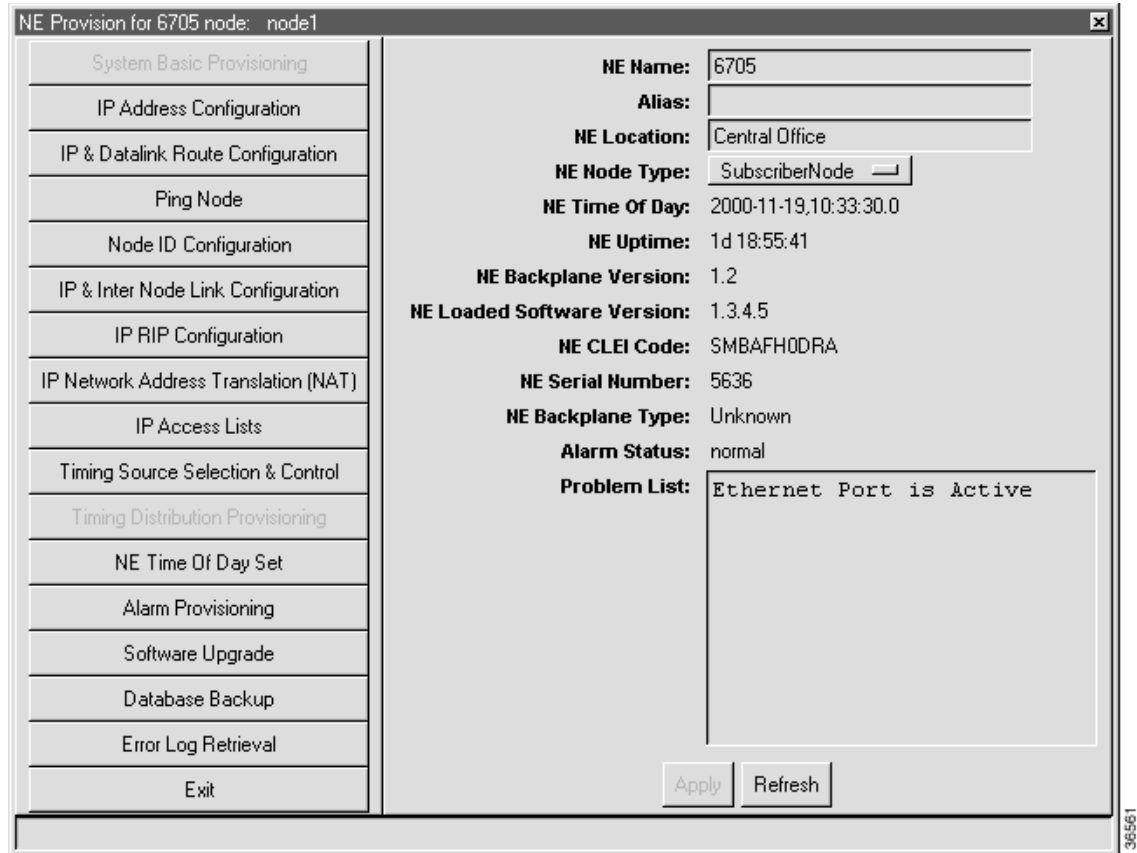
The NE provision window is used to provision important NE parameters. To open the NE provision window, double-click the **node nameplate** in NodeView. (See Figure 1-6.) See Chapter 4, “Initial Node Provisioning,” and Chapter 6, “NodeView,” for provisioning information.

Figure 1-6 Node Nameplate



Double-clicking the **node nameplate** launches the NE provision window. (See Figure 1-7.) The left side of the display contains the function bar, a group of buttons used to navigate the NE provision window.

Figure 1-7 NE Provision Window and Function Bar

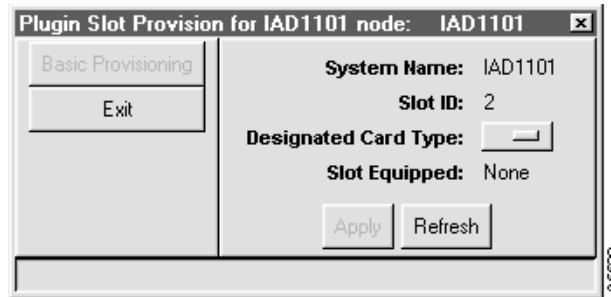


In Figure 1-7, note that two buttons are grayed out in the button bar: **System Basic Provisioning** and **Timing Distribution Provisioning**. The **System Basic Provisioning** button is grayed to indicate that the system basic provisioning window is open. To open a different provisioning window, click one of the other buttons in the function bar.

Plugin Slot Provision Window

The plugin slot provision window (see Figure 1-8) is used to provision a slot for a particular type of card. See “Provisioning Slots” on page 6-4 for provisioning information.

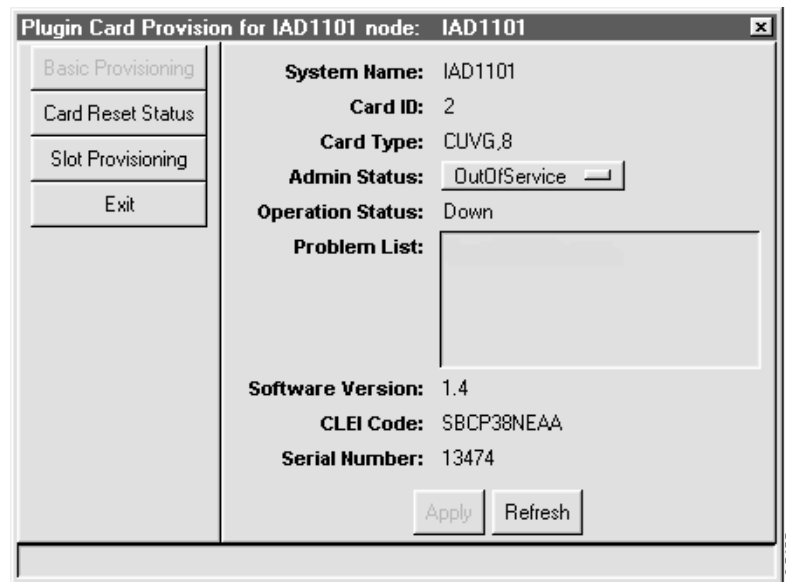
Figure 1-8 Plugin Slot Provisioning Window



Plugin Card Provision Window

The plugin card provision window (see Figure 1-9) is used to set slot and card parameters, such as card type and administrative status (in service or out of service). See “About Placing Cards In Service” on page 6-5, for provisioning information. After setting parameters, refresh the window to confirm the action.

Figure 1-9 Plugin Card Provision Window



Line Provision Window

The line provision window (see Figure 1-10) is used to provision individual line parameters. Each type of line card uses a different line provision window; Figure 1-10 shows the line provision window for a FSX/16 card. (See Chapter 7, “Provisioning Lines,” for provisioning information.) After provisioning parameters, refresh the window to confirm the action.

Figure 1-10 DSX1/8 Line Provision Window

The screenshot shows a window titled "FXS_16 Line Provision for IAD1101 node: IAD1101". On the left side, there is a vertical menu with "Basic Provisioning" and "Exit" buttons. The main area contains the following fields and values:

- IAD1101 Name:** IAD1101
- Card Number:** 1
- Line Number:** 1
- Admin Status:** OutOfService
- Operation Status:** Down
- Interface Group Type:** TR008
- Interface Group ID:** 1
- CRV:** 0
- Generic Signal Function:** ls
- On Hook:** Fulltime
- Line Test:** Off
- Termination Mode:** ohm600And2dB
- Red Lined:** false

At the bottom of the window, there are "Apply" and "Refresh" buttons. A small vertical number "38517" is visible on the right edge of the window frame.

Confirming Your Work

During any procedure, you can confirm your work by clicking the **Refresh** button at the bottom of the window. The displayed values should conform to the newly entered parameters or most recent action.

EMS Navigation and Interaction

The following sections describe the basic navigational techniques used to enter data and provision the NE.

Using the Mouse

The following terms are used in this guide to describe actions involving the mouse:

- **Highlight**—Position the cursor over an icon and press the left mouse button.
- **Click**—Press the left mouse button once.
- **Double-click**—Press the left mouse button twice in rapid succession.
- **Right-click**—Press the right mouse button once.
- **Click and drag**—Press and hold the left mouse button while moving (dragging) the cursor.

Selecting Icons

To select an individual icon, position the cursor over the icon. The icon turns orange when the cursor is positioned over the icon. Click, right-click, or double-click the highlighted icon.

Highlighting List Entries

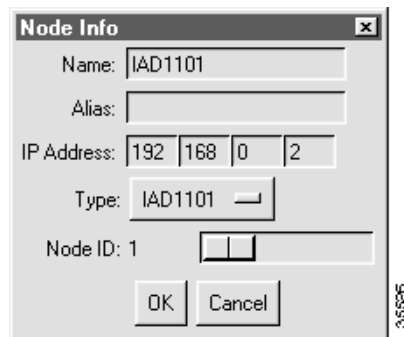
Selecting one or more entries from an EMS list is referred to as highlighting the entries.

- To highlight one entry in a list, position the cursor over the entry and press the left mouse button.
- To highlight multiple entries in a list, complete the following steps:
 - Position the cursor over the first entry in the list.
 - Press and hold the left mouse button.
 - Drag the cursor to the last entry in the list.
 - Release the left mouse button.

Entering Data

The node information window (see Figure 1-11) is used to describe several methods of entering data in EMS.

Figure 1-11 Node Information Window



- **Text box**—The **Name**, **Alias**, and **IP Address** fields use text boxes for data entry. Position the cursor in the text field and enter text. You can move from one text box to the next by pressing the <Tab> key. For example, in the **IP Address** field, enter the first number, then press <Tab> to move to the next text box.
- **Pull-down list**—The **Type** field uses a pull-down list for data entry. Click the small rectangle at the right side of the list. EMS displays a list of choices; click the desired entry in the list.
- **Slider bar**—The **Node ID** field uses a slider bar for data entry. There are two ways to enter data in a slider bar field:
 - Click and drag the slider bar. The number (to the left of the bar) changes according to the position of the slider bar. Release the bar to set the desired entry.
 - Highlight the number to the left of the slider bar, and type the desired entry.

Using Common Buttons

The following buttons appear in many EMS windows:

- **Clear**—Erases all text in the user-definable fields of a provisioning window.
- **Dismiss**—Closes the current window, without making provisioning changes.
- **Refresh**—Updates the display. After provisioning a node, slot, card, or line, press **Refresh** to redraw the current display and reflect all provisioning changes.

