CHAPTER 7

Provisioning Lines

This chapter describes the individual and batch procedures used to provision lines on the NE, and includes the following sections:

Individual Line Provisioning:

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- Provisioning Analog Lines (FXS/16, RPOTS/16, RUVG/8), page 7-3
- Provisioning ISDN,BRI/8 Lines, page 7-5
- Provisioning DSX1/8 Lines, page 7-6
  - DS0 Channel Provisioning, page 7-8
- Provisioning DSX3-CHNL Lines, page 7-9
  - Provisioning DSX3-CHNL M13, page 7-10
  - DS0 Channel Provisioning, page 7-11
  - Provisioning DSX3-CHNL Maintenance Lines, page 7-12
- Provisioning MSDSL-2W Lines, page 7-13
- Provisioning OC3c-UNI Lines, page 7-14
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- Provisioning VT-DS1 Lines, page 7-17
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Batch Line Provisioning:

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- Batch Provisioning DSX1 Lines, page 7-28
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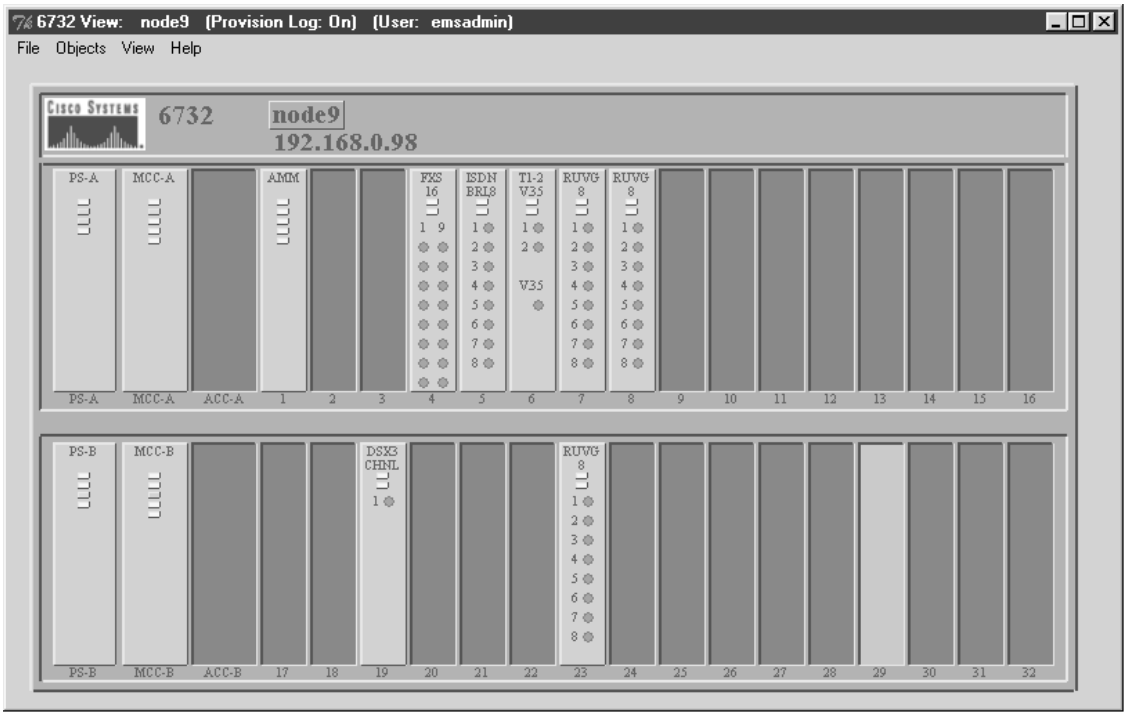
About Line Provisioning

You can provision lines from the line provision window.

Note While provisioning lines, confirm your most recent action by clicking the **Refresh** button at the bottom of the screen to refresh the window display.

To open this window from Cisco 6700 NodeView, double-click the LED in the icon of the line to be provisioned (the line icon turns orange when the mouse is positioned over it). (See Figure 7-1.)

Figure 7-1 Cisco 6700 NodeView

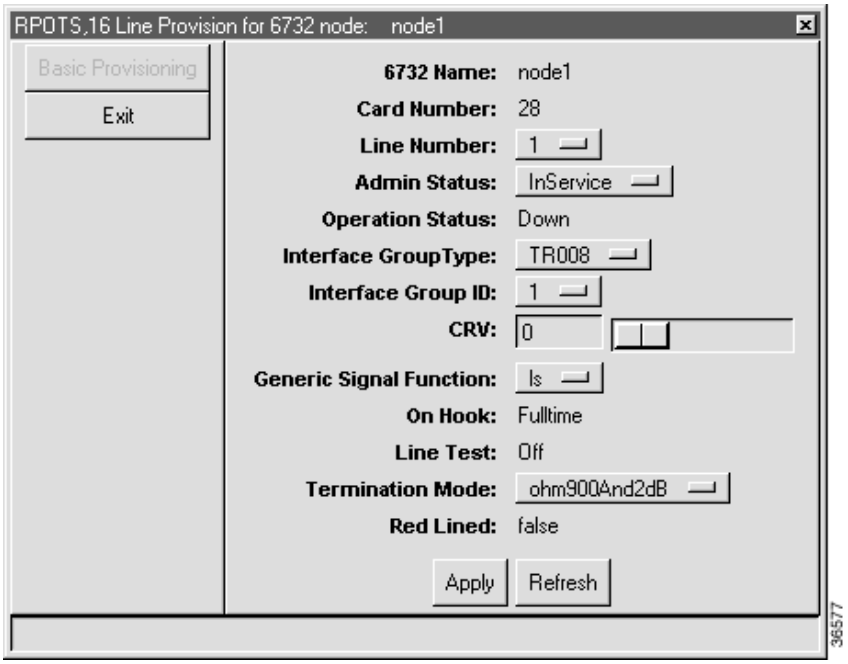


Provisioning Analog Lines (FXS/16, RPOTS/16, RUVG/8)

Note The FXS/16 and RUVG/8 line provisioning windows are identical in structure and appearance (with **FXS,16** or **RUVG,8** appearing in place of **RPOTS,16**).

Step 1 From Cisco 6700 NodeView (see Figure 7-1), double-click the LED in the appropriate icon to open the line provisioning window. (See Figure 7-2).

Figure 7-2 RPOTS/16 Line Provisioning Window



Step 2 In the **Line Number** field, select the analog line to be provisioned.

Step 3 Set the following parameters according to your application:

- **Admin Status**—Set the status of the individual line, **InService** or **OutOfService**.
- **Interface Group**—Select the interface group type used on the Class 5 switch:
  - For unconcentrated pass-through, select **None**.
  - For GR-303 applications, select **GR-303**. (See Chapter 10, "GR-303," for detailed procedures.)
  - For TR-008 pass-through, select **TR-008**.

  Note An NE can not provision TR-008, but it can pass TR-008 traffic to the switch.

- **Interface Group ID**—For GR-303 applications, select the interface group ID number (from 1 to 4) used on the Class 5 switch.
- **CRV—**For GR-303 applications, select a CRV for this line. Each GR-303 line must be provisioned with a unique CRV.

- **Generic Signal Function**—Select **ls** for loop start (default) or **gs** for ground start.
- **Termination Mode—**Select one of the following modes, expressed in ohms and digital-to-analog signal loss in dB:
  - **ohm600and0dB**
  - **ohm600and1dB** (default for RUVG/8)
  - **ohm600and2dB** (default for FXS/16)
  - **ohm600and5dB**
  - **ohm900andM2dB** (minus 2dB)
  - **ohm900and2dB** (default for RPOTS/16)
  - **ohm900and5dB**

Step 4 Click **Apply** to provision the line.

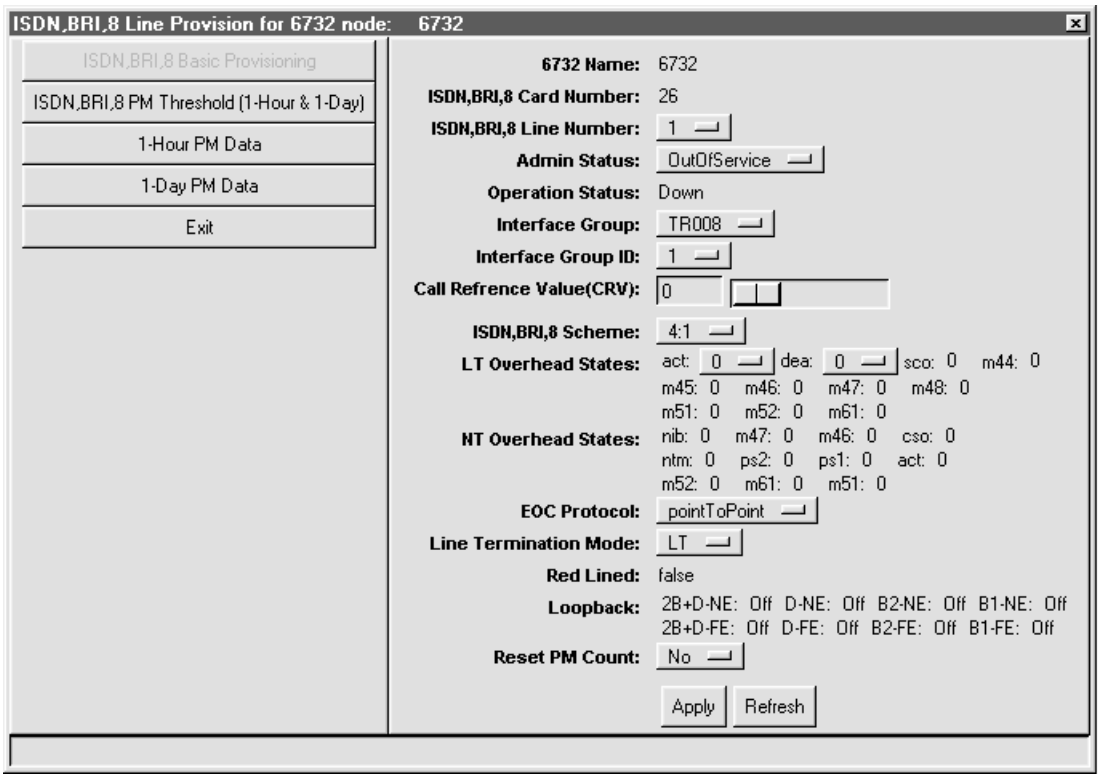
Step 5 Repeat this procedure to provision additional lines on the card.

For batch provisioning, see Batch Provisioning Analog Lines, page 7-27.

Provisioning ISDN,BRI/8 Lines

Step 1 From Cisco 6700 NodeView (see Figure 7-1 on page 7-2), double-click the LED in the appropriate icon to open the line provisioning window. (See Figure 7-3).

Figure 7-3 ISDN,BRI,8 Basic Provisioning Window



Step 2 In the **ISDN,BRI,8 Line Number** field, select the ISDN line to be provisioned.

Step 3 Set the following parameters according to your ISDN application:

- **Admin Status**—Set the status of the individual line, **InService** or **OutOfService**.
- **Interface Group**—Select the interface group type used on the Class 5 switch:
  - For GR-303 applications, select **GR-303**. (See Chapter 10, "GR-303," for detailed procedures.)
  - For TR-008 pass-through, select **TR-008**.

Note An NE can not provision TR-008, but it can pass TR-008 traffic to the switch.

- **Interface Group ID**—For GR-303 applications, select the interface group ID number (from 1 to 4) used on the Class 5 switch.
- **CRV—**For GR-303 applications, select a CRV for this line. Each GR-303 line must be provisioned with a unique CRV.
- **ISDN,BRI/8 Scheme—**Leave the default setting (**4:1**).
- **LT Overhead Status—**These parameters are set by the Class 5 switch. Do not change these values.

- **EOC Protocol—**Leave the default setting (**PointToPoint)**.
- **Line Termination Mode—**Leave the default setting (**LT)**.
- **Reset PM Count—**Select **Yes** to reset the performance monitoring data. (See Chapter 16, “System Maintenance and Monitoring,” for PM information and procedures.)

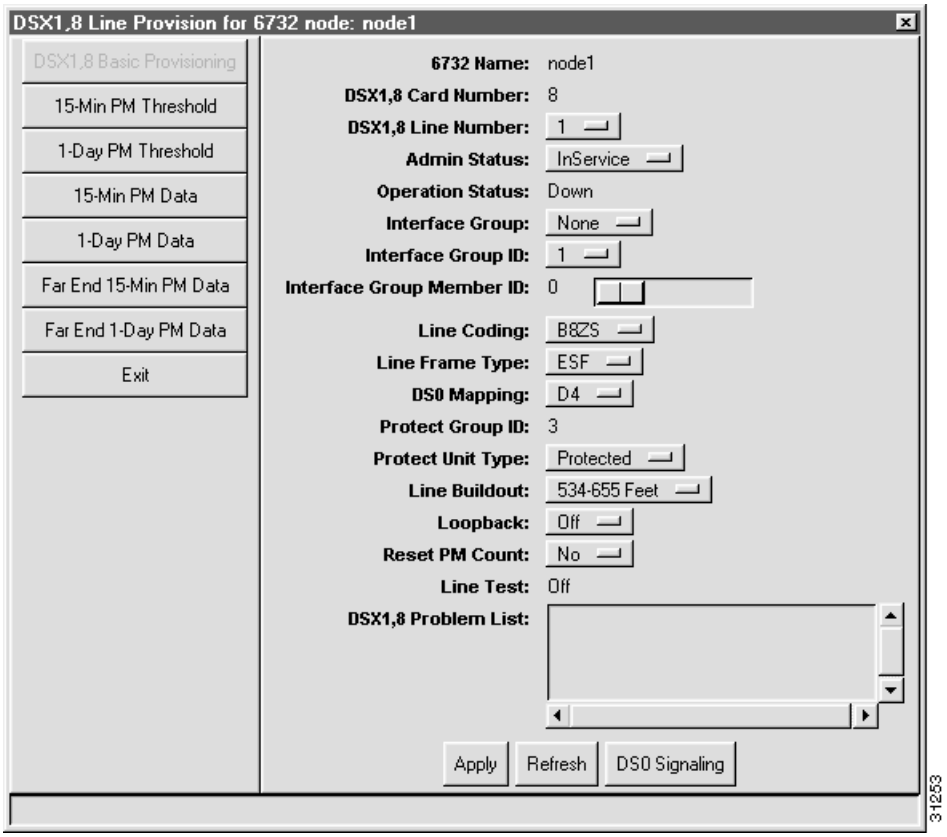
Step 4 Click **Apply** to provision the line.

Step 5 Repeat this procedure to provision additional lines on the card.

Provisioning DSX1/8 Lines

Step 1 From Cisco 6700 NodeView (see Figure 7-1 on page 7-2), double-click the LED in the appropriate icon to open the line provisioning window. (See Figure 7-4).

Figure 7-4 DSX1,8 Line Provisioning Window



Step 2 In the **DSX1,8 Line Number** field, select the DS1 line to be provisioned.

Step 3 Set the following parameters according to your DSX1 application:

- **Admin Status**—Set the status of the individual line, **InService** or **OutOfService**.
- **Interface Group**—Select the interface group type used on the Class 5 switch:
  - For unconcentrated pass-through, select **None**.
  - For GR-303 applications, select **GR-303**. (See Chapter 10, "GR-303," for detailed procedures.)
  - For TR-008 pass-through, select **TR-008**.

Note An NE can not provision TR-008, but it can pass TR-008 traffic to the switch.

- **Interface Group ID**—For GR-303 applications, select the interface group ID number (from 1 to 4) used on the Class 5 switch.
- **Interface Group Member ID**—For GR-303 applications, select a member ID for this DSX1.
- **Line Coding**—Select **B8ZS** (binary 8 zero substitution) or **AMI** (alternate mark inversion).
- **Line Frame Type**—Select **ESF** (extended superframe), **SF** (superframe), or **SLC96** (subscriber loop carrier, 96 lines).
- **DS0 Mapping**—Select **D1**, **SLC-D4** (for use with TR-008), or **D4** (for use with GR-303).
- **Protect Unit Type**—Not supported.
- **Line Buildout**—Select the transmit line length from the pulldown menu.
- **Loopback**—Select **Off** (disable loopback), **Line** (facing away from the NE), or **Equipment** (internal loopback).
- **Reset PM Count**—Select **Yes** to reset the performance monitoring data. (See Chapter 16, "System Maintenance and Monitoring," for PM information and procedures.)
- **DS0 Signaling**—Click this button to open the DS0 signaling window. (See Figure 7-5.)

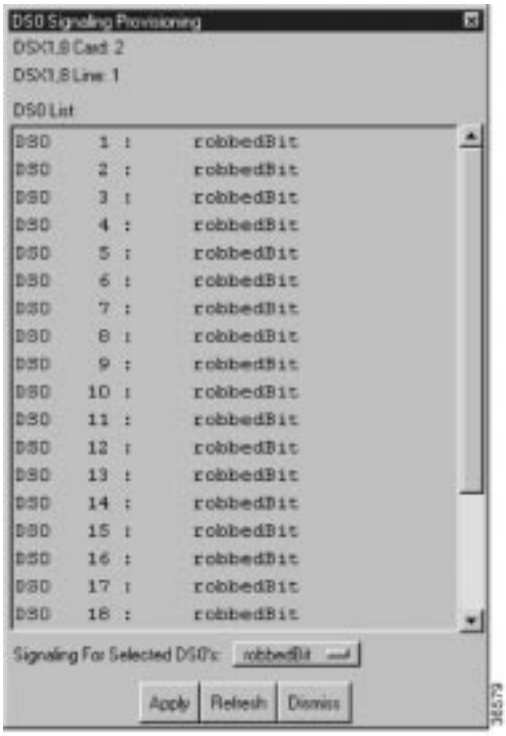
Step 4 Click **Apply** to provision the line.

Step 5 Repeat this procedure to provision additional lines on the card.

DS0 Channel Provisioning

Step 1 From the DSX1/8 line provisioning window (see Figure 7-4), click **DS0 Signaling** to open the DS0 signaling window. (See Figure 7-5.)

Figure 7-5 DS0 Signaling Window



Step 2 Highlight the DS0 channels to be modified.

Step 3 Set the signaling for selected DS0s:

- **robbedBit—**for all voice traffic.
- **clearChannel—**for all data traffic.

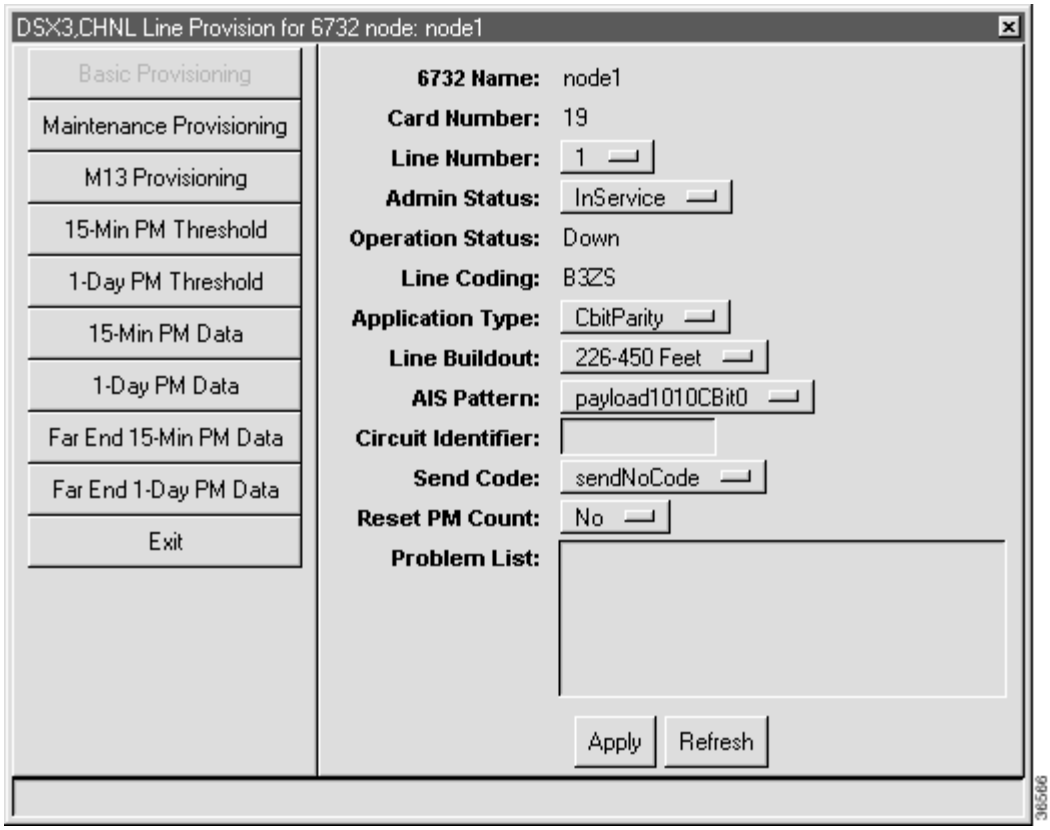
Step 4 Click **Apply** to provision the selected DS0 channels.

For batch provisioning, see Batch Provisioning DSX1 Lines, page 7-28.

Provisioning DSX3-CHNL Lines

Step 1 From Cisco 6700 NodeView (see Figure 7-1 on page 7-2), double-click the LED in the appropriate icon to open the line provisioning window. (See Figure 7-6).

Figure 7-6 DSX3,CHNL Basic Provisioning Window



Step 2 Set the following parameters according to your DSX3 application:

- **Admin Status**—Set the status of the individual line, **InService** or **OutOfService**.
- **Application Type**—Select the DS3 application type, **M13** (channelized) or **CBitParity** (straight-through).
- **Line Buildout**—Select the transmit line length.
- **AIS Pattern**—(Optional) Select one of the following alarm indicator signal (AIS) patterns:
  - payload1010CBit0
  - payload1010OHIgnored
  - payloadAllOnesOHIgnored
  - payloadIgnoredCBit0
  - unframedAllOnes
- **Circuit Identifier**—(Optional) For use with the previously selected AIS pattern.

- **Send Code**—Select **SendNoCode** or **SendTestPattern**.
- **Reset PM Count**—Select **Yes** to reset the performance monitoring data. (See Chapter 16, "System Maintenance and Monitoring," for PM information and procedures.)

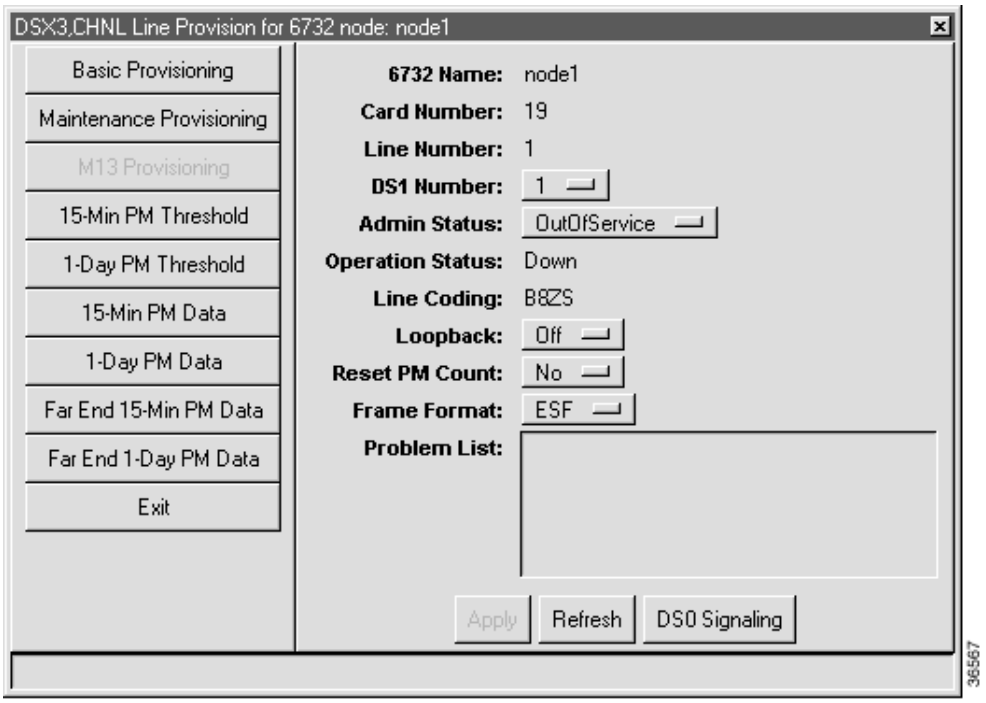
Step 3 Click **Apply** to provision the line.

Provisioning DSX3-CHNL M13

M13 is a multiplexer that interleaves up to 28 incoming DS1 channels to a single DS3 output channel.

Step 1 From Cisco 6700 NodeView (see Figure 7-1 on page 7-2), click **M13 Provisioning** in the function bar. EMS displays the M13 provisioning window. (See Figure 7-7.)

Figure 7-7 M13 Provisioning Window



Step 2 In the **DS1 Number** field, select the DS1 line to be provisioned.

Step 3 Set the following parameters according to your DSX1 application:

- **Admin Status**—Set the status of the individual line, **InService** or **OutOfService**.
- **Loopback**—Select **Off** (disable loopback), **Line** (facing away from the NE), or **Equipment** (internal loopback).
- **Reset PM Count**—Select **Yes** to reset the performance monitoring data. (See Chapter 16, "System Maintenance and Monitoring," for PM information and procedures.)

- **Frame Format**—Select **ESF** (extended superframe) or **SF** (superframe).
- **DS0 Signaling**—Click this button to open the DS0 signaling window. (See Figure 7-8.)

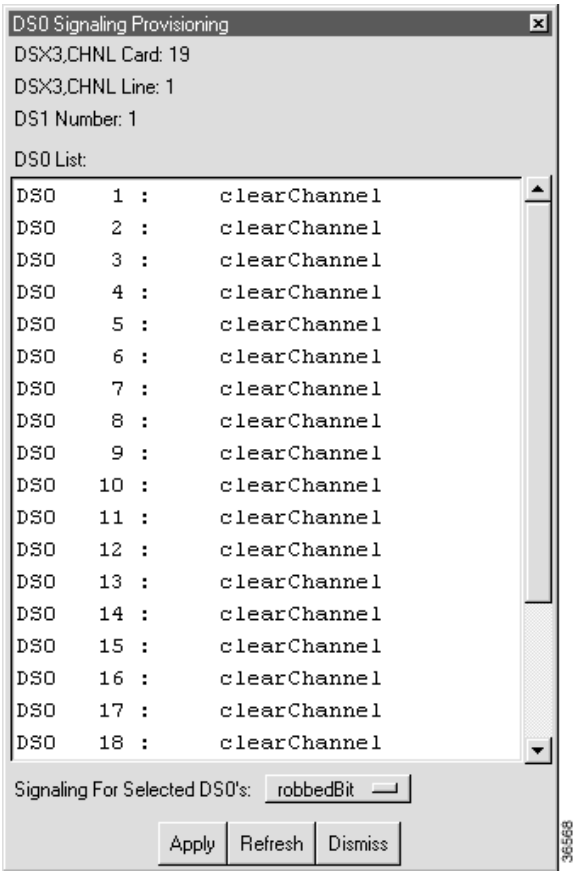
Step 4 Click **Apply** to provision the line.

Step 5 Repeat this procedure to provision additional lines on the card.

DS0 Channel Provisioning

Step 1 From the M13 line provisioning window, click **DS0 Signaling** to open the DS0 signaling window. (See Figure 7-8.)

Figure 7-8 DS0 Signaling Window



Step 2 Highlight the DS0 channels to be modified.

Step 3 Set the signaling for selected DS0s:

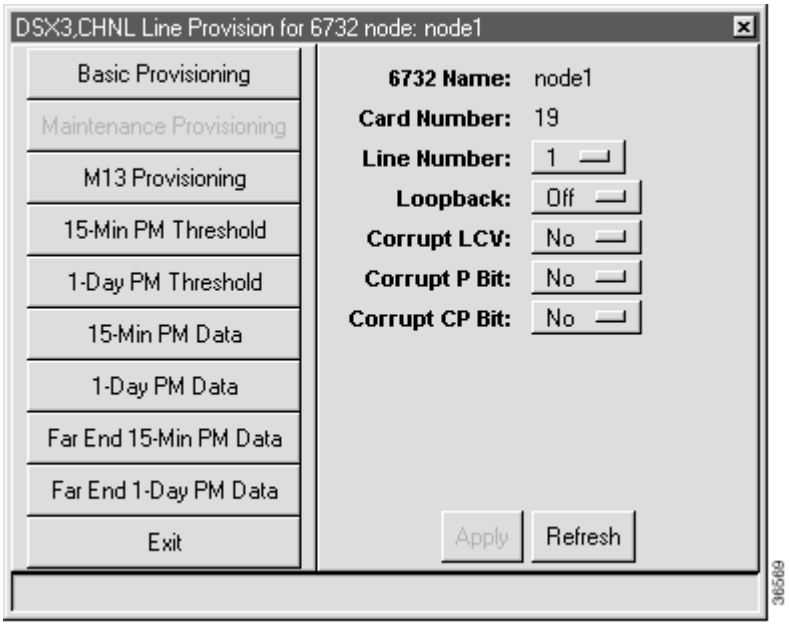
- **robbedBit**—for all voice traffic.
- **clearChannel**—for all data traffic.

Step 4 Click **Apply** to provision the selected DS0 channels.

Provisioning DSX3-CHNL Maintenance Lines

Step 1 From the M13 provisioning window (see Figure 7-7), click **DSX3,CHNL Maintenance Provisioning** to open the DSX3-CHNL maintenance window. (See Figure 7-9.)

Figure 7-9 DSX3-CHNL Maintenance Window



Step 2 Set the following parameters according to your testing application:

- **DSX3,CHNL Line Number**—Select the line number to be provisioned.
- **Loopback**—Select **Off** (disable loopback), **Line** (facing away from the NE), or **Equipment** (internal loopback).
- **Corrupt LCV**—Select **Yes** to force a corrupt LCV.
- **Corrupt P Bit**—Select **Yes** to force a corrupt P bit.
- **Corrupt CP Bit**—Select **Yes** to force a corrupt CP bit.

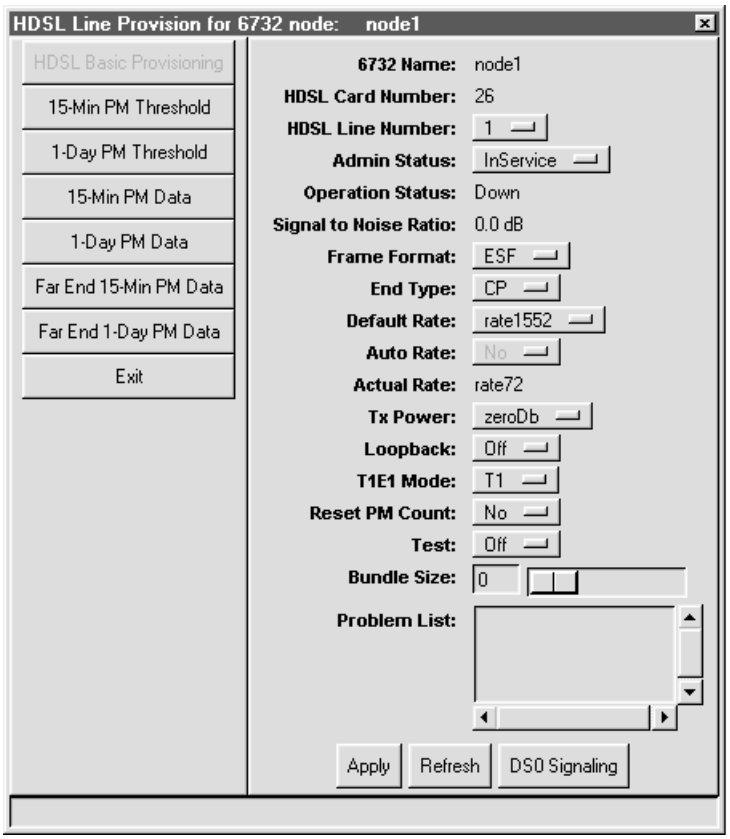
Step 3 Click **Apply** to provision the line.

For batch provisioning, see Batch Provisioning DSX3 Lines, page 7-29.

Provisioning MSDSL-2W Lines

Step 1 From Cisco 6700 NodeView (see Figure 7-1 on page 7-2), double-click the LED in the appropriate icon to open the line provisioning window. (See Figure 7-10.)

Figure 7-10 MSDSL Basic Provisioning Window



Step 2 In the **HDSL Line Number** field, select the line to be provisioned.

Step 3 Set the following parameters according to your MSDSL application:

- **Frame Format**—Select **ESF** (extended superframe), **SF** (superframe), **HDLU-C** (high-speed digital line unit, central node), or **HDLU-R** (high-speed digital line unit, remote node).
- **End Type**—Select **CP** (customer premises) or **CO** (central office) to set master/slave transceiver-level timing.
- **Default Rate**—Select the default line rate.
- **Auto Rate**—This parameter can not be manually set. EMS displays whether or not auto rate is active on the line.
- **Tx Power**—Select the adjustment factor for the transmit signal relative to the transceiver negotiated level. The default, **zeroDb**, makes no adjustment.
- **Loopback**—Select **Off** (disable loopback), **Line** (facing away from the NE), or **Equipment** (internal loopback).
- **T1E1 Mode**—Select the line mode, **T1** or **E1**.

- **Reset PM Count**—Select **Yes** to reset the performance monitoring data. (See Chapter 16, "System Maintenance and Monitoring," for PM information and procedures.)
- **Test**—Select **On**, **Off**, or **Monitor**.
- **Bundle Size**—Set the number of DS0 channels for use with dynamic bandwidth allocation (DBA). DBA allows data channels to be used for voice traffic when needed.

Note To enable DBA, you must select the T1 line mode and the HDLU frame format.

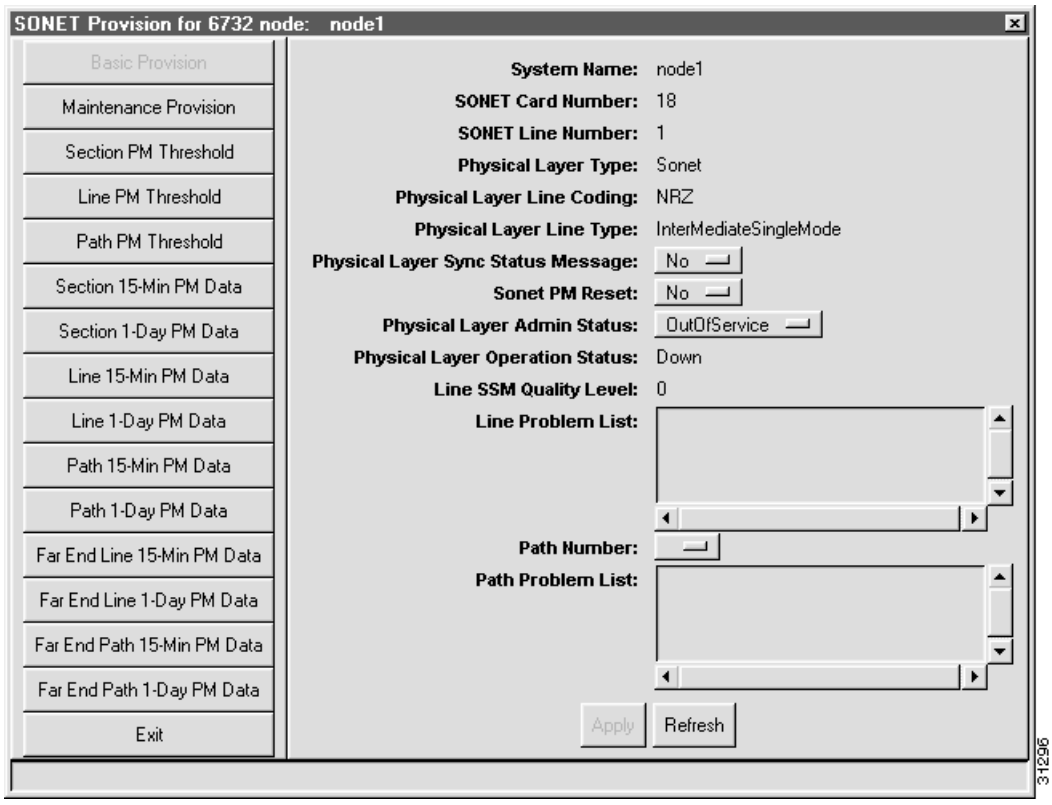
Step 4 Click **Apply** to provision the line.

Step 5 Repeat this procedure to provision additional lines on the card.

Provisioning OC3c-UNI Lines

Step 1 From Cisco 6700 NodeView (see Figure 7-1 on page 7-2), double-click the LED in the appropriate icon to open the line provisioning window. (See Figure 7-11.)

Figure 7-11 OC3c-UNI Basic Provisioning Window



Step 2 Set the following parameters according to your OC3 application:

- **Physical Layer Sync Status Message**—Leave as default.

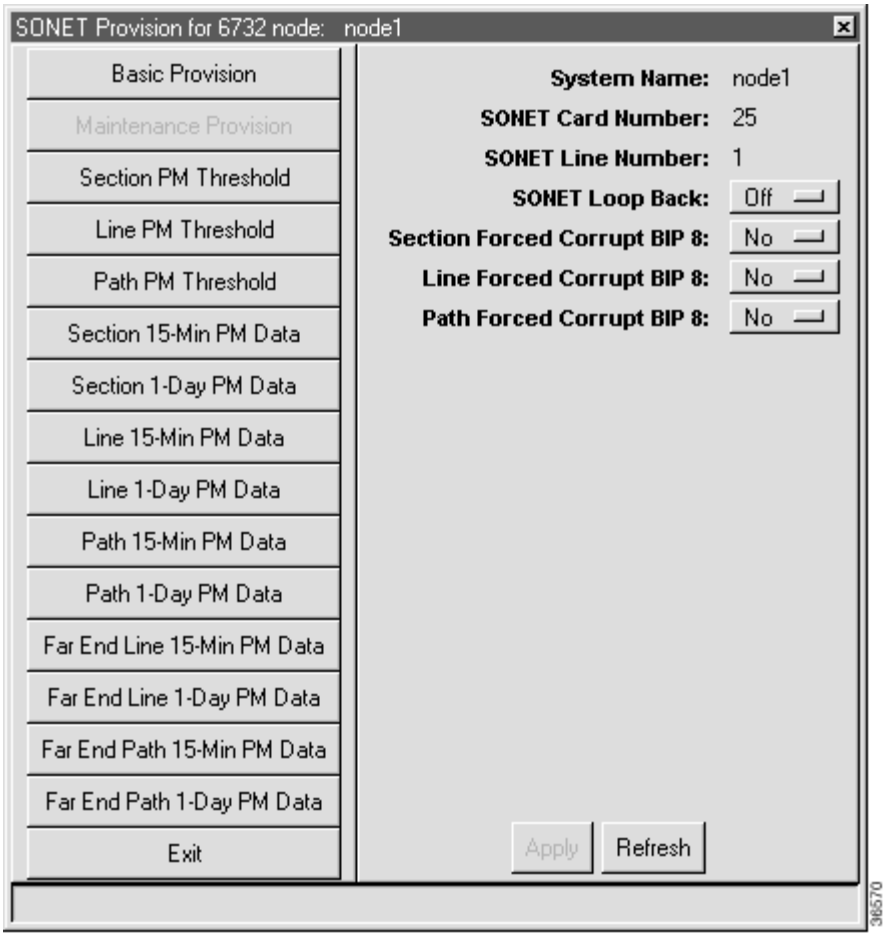
- **Sonet PM Reset**—Select **Yes** to reset the performance monitoring data. (See Chapter 16, "System Maintenance and Monitoring," for PM information and procedures.)
- **Physical Layer Admin Status**—Set the status of the physical line, **InService** or **OutOfService**.
- **Path Number**—Leave blank.

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

Provisioning OC3c-UNI Maintenance Lines

Step 1 From the function bar in the OC3c-UNI basic provisioning window (see Figure 7-11), click **Maintenance Provision** to open the line provisioning window. (See Figure 7-12.)L

Figure 7-12 OC3c-UNI Maintenance Provisioning Window



Step 2 Set the following parameters according to your testing application:

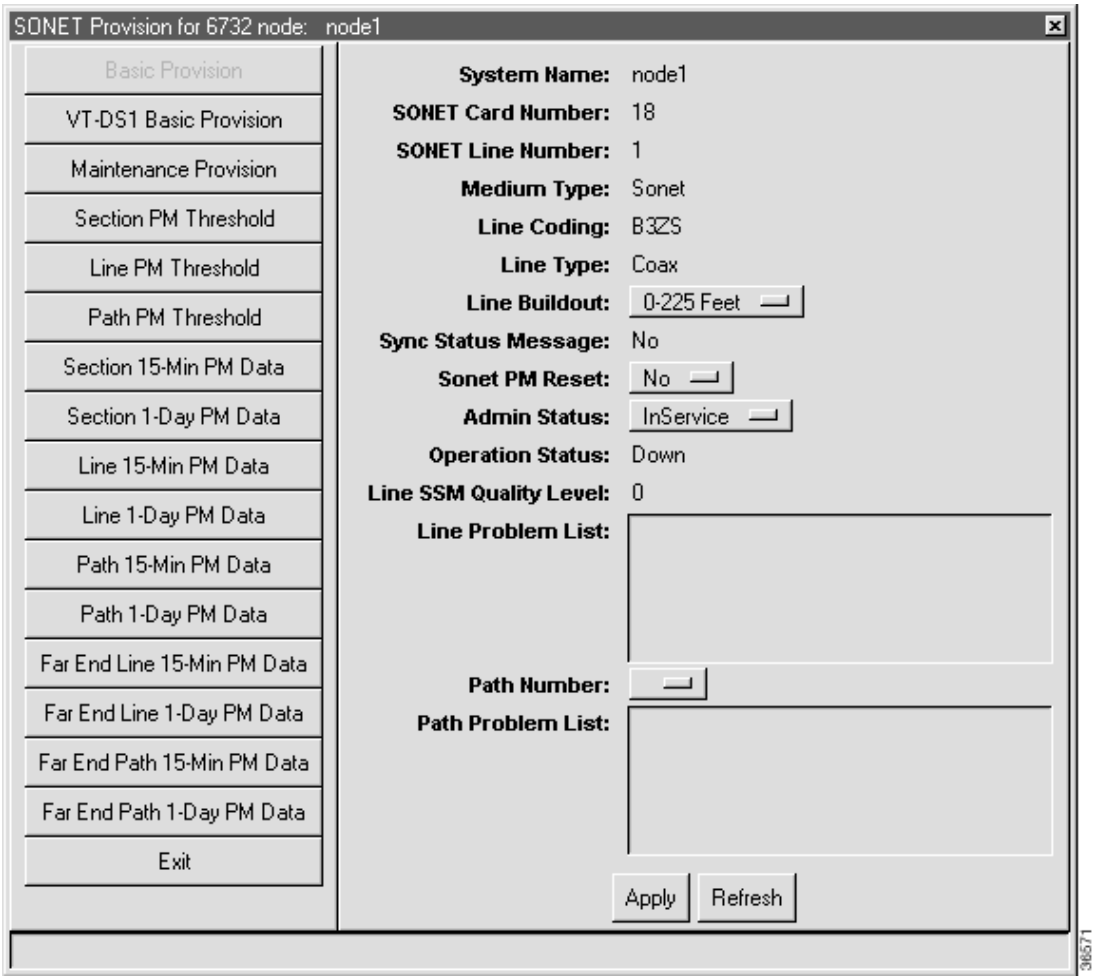
- **SONET Loop Back**—Select **Off** (disable loopback), **Line** (facing away from the NE), or **Equipment** (internal loopback).
- **Section Forced Corrupt BIP 8**—Select **Yes** to force a BIP 8 error at the section level.
- **Line Forced Corrupt BIP 8**—Select **Yes** to force a BIP 8 error at the line level.
- **Path Forced Corrupt BIP 8**—Select **Yes** to force a BIP 8 error at the path level.

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

Provisioning STSX1-CHNL Lines

Step 1 From Cisco 6700 NodeView (see Figure 7-1 on page 7-2), double-click the LED in the appropriate icon to open the line provisioning window. (See Figure 7-13.)

Figure 7-13 STSX1-CHNL Basic Provisioning Window



Step 2 Set the following parameters according to your STSX1,CHNL application:

- **Line Buildout**—Select the transmit line length.
- **Sonet PM Reset**—Select **Yes** to reset the performance monitoring data. (See Chapter 16, "System Maintenance and Monitoring," for PM information and procedures.)
- **Admin Status**—Set the status of the physical line, **InService** or **OutOfService**.
- **Path Number**—Leave blank.

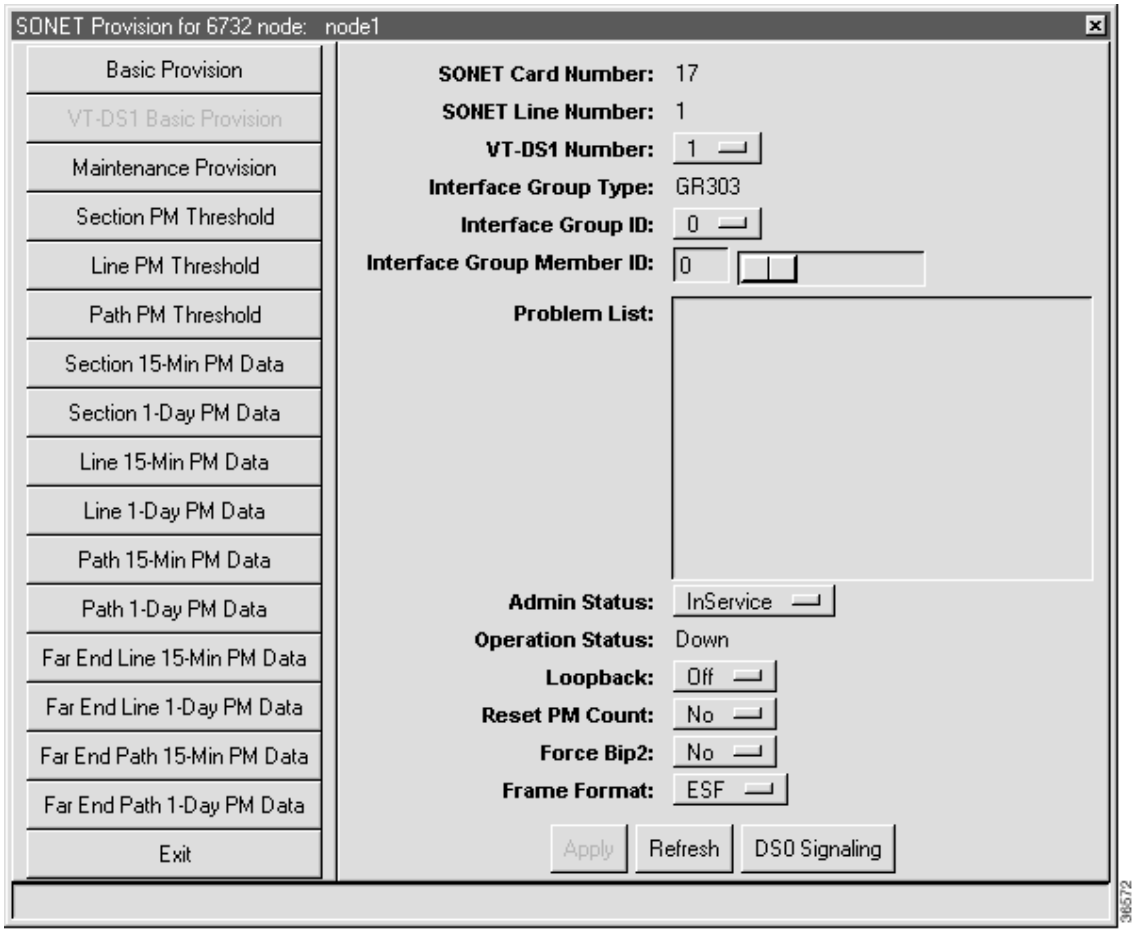
Step 3 Click **Apply** to provision the line.

For batch provisioning, see Batch Provisioning STSX1 Lines, page 7-31.

Provisioning VT-DS1 Lines

Step 1 From Cisco 6700 NodeView (see Figure 7-1 on page 7-2), double-click the LED in the appropriate icon to open the line provisioning window. (See Figure 7-14.)

Figure 7-14 STSX1,CHNL VT-DS1 Basic Provisioning Window



Step 2 In the **VT-DS1 Number** field, select the DS1 line to be provisioned.

Step 3 Set the following parameters according to your DSX1 application:

- **Interface Group ID**—For GR-303 applications, select the interface group ID number (from 1 to 4) used on the Class 5 switch. (See Chapter 10, "GR-303," for detailed procedures.)
- **Interface Group Member ID**—For GR-303 applications, select a member ID for this DSX1.
- **Admin Status**—Set the status of the individual line, **InService** or **OutOfService**.
- **Loopback**—Select **Off** (disable loopback), **Line** (facing away from the NE), or **Equipment** (internal loopback).
- **Reset PM Count**—Select **Yes** to reset the performance monitoring data. (See Chapter 16, "System Maintenance and Monitoring," for PM information and procedures.)
- **Force Bip2**—For testing purposes only. Select **Yes** to force an error in transmission.
- **Frame Format**—Select **ESF** (extended superframe) or **SF** (superframe).
- **DS0 Signaling**—Click this button to open the DS0 signaling window. (See Figure 7-16.)

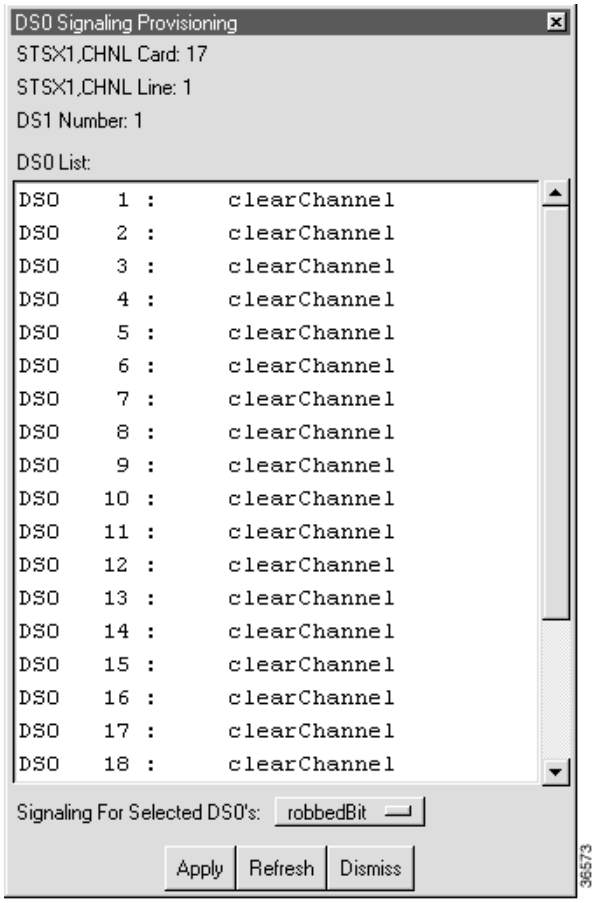
Step 4 Click **Apply** to provision the line.

Step 5 Repeat this procedure to provision additional DS1 lines on the card.

DS0 Channel Provisioning

Step 1 From the STSX1,CHNL line provisioning window, click **DS0 Signaling** to open the DS0 signaling window. (See Figure 7-15.)

Figure 7-15 DSO Signaling Window



Step 2 Highlight the DS0 channels to be modified.

Step 3 Set the signaling for selected DS0s:

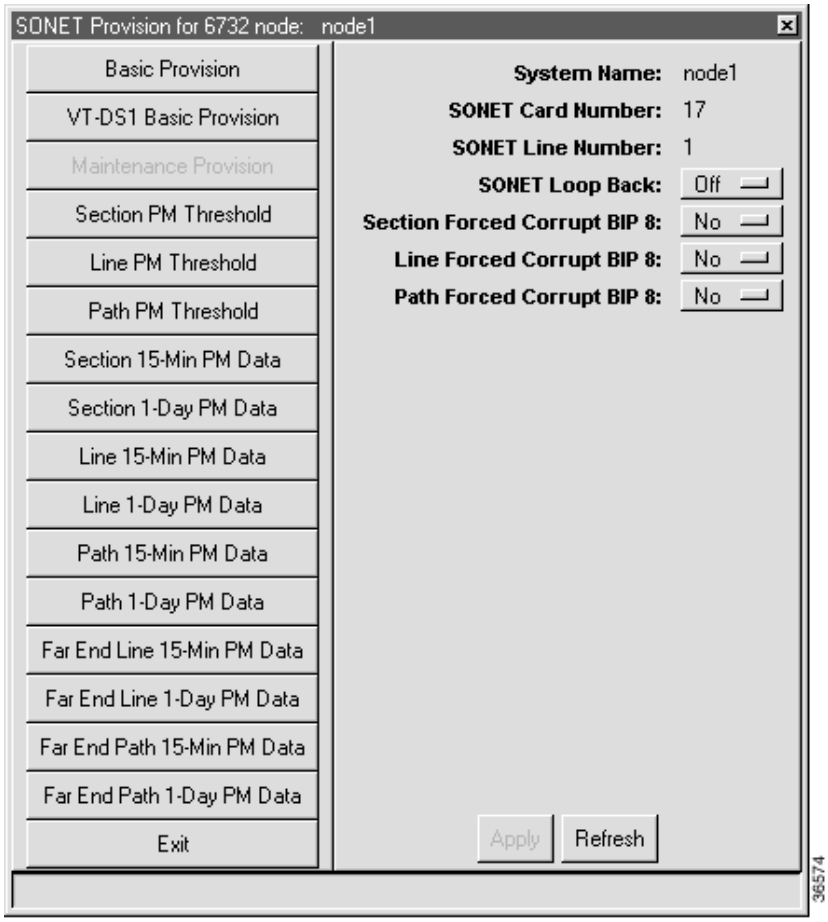
- **robbedBit**—for all voice traffic.
- **clearChannel**—for all data traffic.

Step 4 Click **Apply** to provision the selected DS0 channels.

Provisioning VT-DS1 Maintenance Lines

Step 1 From the function bar in the STSX1,CHNL VT-DS1 basic provisioning window (see Figure 7-14), click **Maintenance Provision** to open the line provisioning window. (See Figure 7-16.)

Figure 7-16 STSX1,CHNL Maintenance Provisioning Window



Step 2 Set the following parameters according to your testing application:

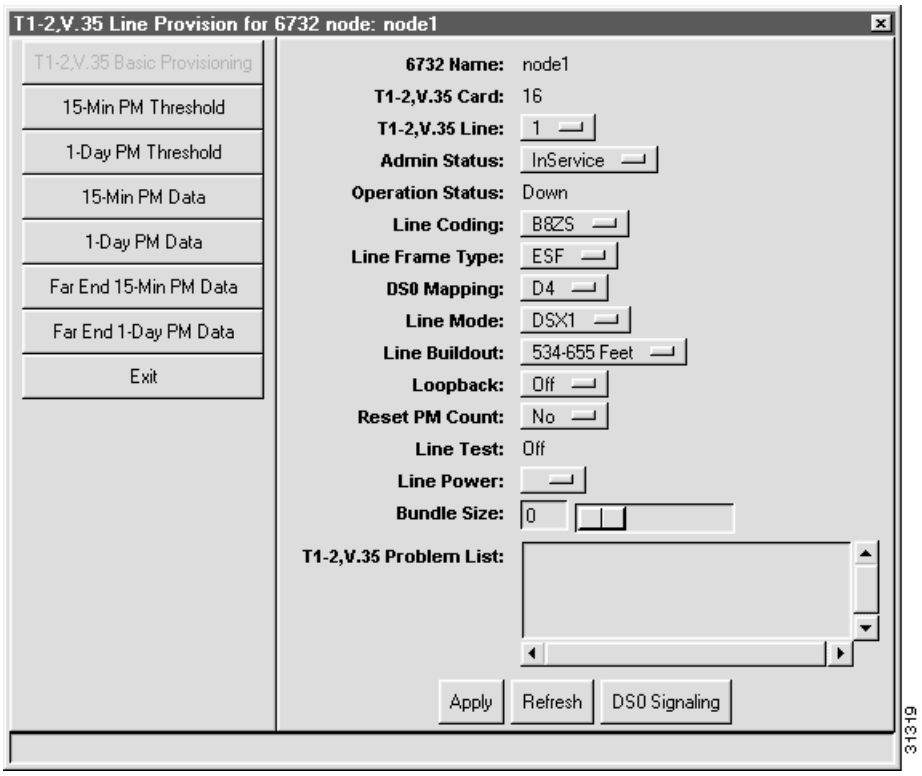
- **SONET Loop Back**—Select **Off** (disable loopback), **Line** (facing away from the NE), or **Equipment** (internal loopback).
- **Section Forced Corrupt BIP 8**—Select **Yes** to force a BIP 8 error at the section level.
- **Line Forced Corrupt BIP 8**—Select **Yes** to force a BIP 8 error at the line level.
- **Path Forced Corrupt BIP 8**—Select **Yes** to force a BIP 8 error at the path level.

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

Provisioning T1-2,V.35 Lines

Step 1 From Cisco 6700 NodeView (see Figure 7-1 on page 7-2), double-click the LED in the appropriate icon to open the line provisioning window. (See Figure 7-17.)

Figure 7-17 T1-2,V.35 Line Provisioning Window



Step 2 In the **T1 Line Number** field, select the T1 line to be provisioned.

Step 3 Set the following parameters according to your T1 application:

- **Line Coding**—Select **B8ZS** (binary 8 zero substitution) or **AMI** (alternate mark inversion).
- **Line Frame Type**—Select **ESF** (extended superframe), **SF** (superframe), **HDLU-C** (high-speed digital line unit, central node), or **HDLU-R** (high-speed digital line unit, remote node).
- **DS0 Mapping**—Leave as default value (**D4**).
- **Line Mode**—Select **DSX1** or **T1** line mode.
- **Line Buildout**—Select the transmit line length.
- **Loopback**—Select **Off** (disable loopback), **Line** (facing away from the NE), or **Equipment** (internal loopback).
- **Reset PM Count**—Select **Yes** to reset the performance monitoring data. (See Chapter 16, “System Maintenance and Monitoring,” for PM information and procedures.)

- **Line Power**—Leave blank (not supported).
- **Bundle Size**—Set the number of DS0 channels for use with dynamic bandwidth allocation (DBA). DBA allows data channels to be used for voice traffic when needed.

Note You must select the T1 line mode and the HDLU frame format to enable DBA.

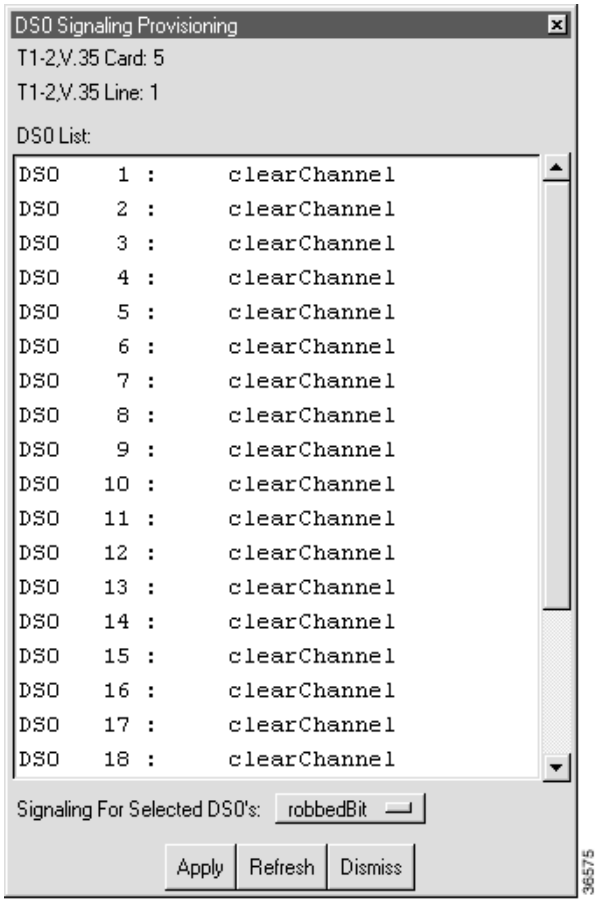
- **DS0 Signaling**—Click this button to open the DS0 signaling window. (See Figure 7-18.)

Step 4 After making changes in the basic provisioning window, click **Apply** to provision the line.

DS0 Channel Provisioning

Step 1 From the T1 line provisioning window (see Figure 7-17), click **DS0 Signaling** to open the DS0 signaling window. (See Figure 7-18.)

Figure 7-18 DS0 Signaling Window



Step 2 Highlight the DS0 channels to be modified.

Step 3 Set the signaling for selected DS0s:

- **robbedBit**—for all voice traffic.
- **clearChannel**—for all data traffic.

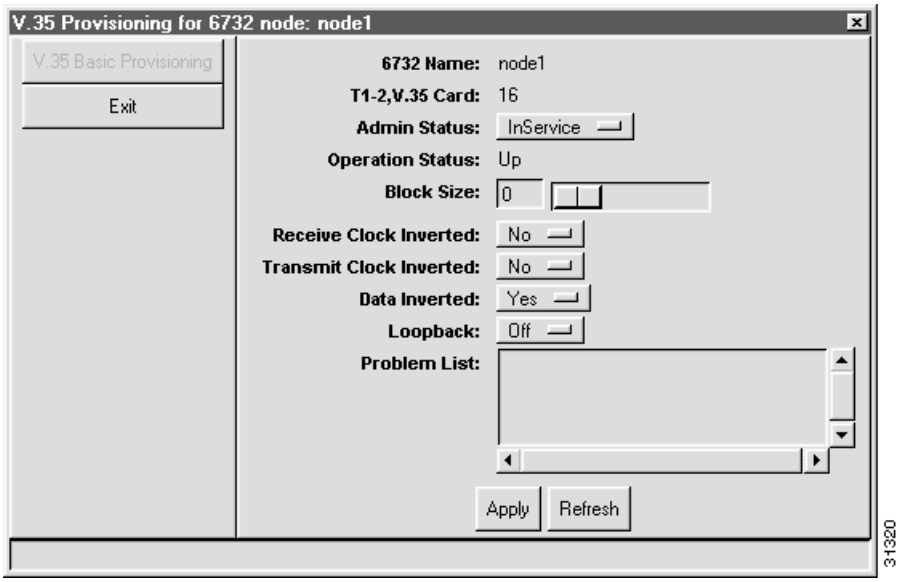
Step 4 Click **Apply** to provision the selected DS0 channels.

For batch provisioning, see Batch Provisioning T1 Lines, page 7-33.

Provisioning V.35 Ports

Step 1 From Cisco 6700 NodeView (see Figure 7-1 on page 7-2), double-click the LED in the appropriate icon to open the line provisioning window. (SeeFigure 7-19.)

Figure 7-19 V.35 Port Basic Provisioning Window



Step 2 Set the following parameters for your V.35 serial port connection:

- **Block Size**—Select the number of DS0 channels to be provisioned for the V.35 serial port.
- **Receive Clock Inverted**—Select **Yes** to invert the received clocking signal.
- **Transmit Clock Inverted**—Select **Yes** to invert the transmitted clocking signal.
- **Data Inverted**—Select **Yes** to invert the data over the V.35 port.
- **Loopback**—Select **Off** (disable loopback), **Line** (facing away from the NE), or **Equipment** (internal loopback).

For the T1-2,V.35 line card in a Cisco 6732 or Cisco 6705 chassis, typical settings are as follows:

- Receive Clock Inverted—No
- Transmit Clock Inverted—No
- Data Inverted—Yes

Step 3 For the V.35 serial port on a Cisco IAD1101, typical settings are as follows:

- Receive Clock Inverted—No
- Transmit Clock Inverted—Yes
- Data Inverted—No

Step 4 Click **Apply** to provision the line.

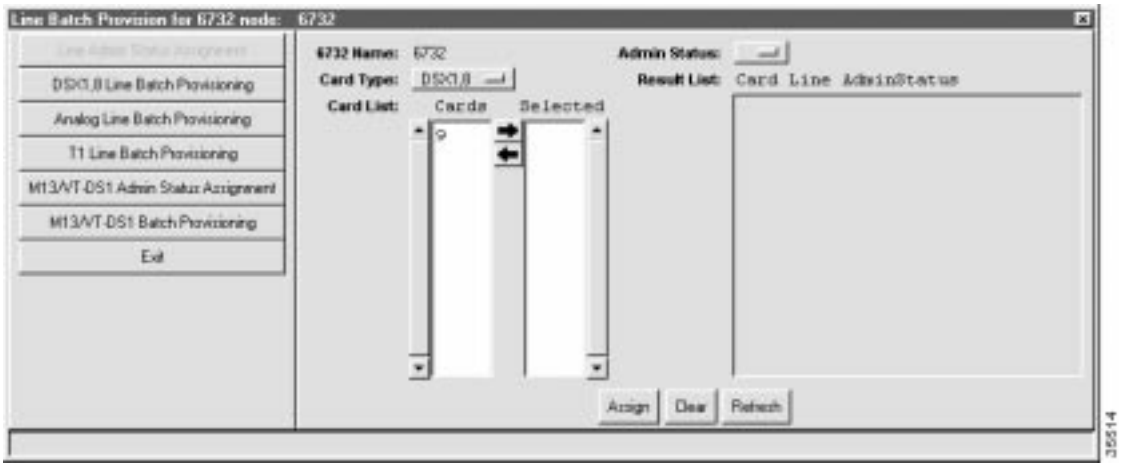
About Batch Provisioning

Batch provisioning is a way of placing multiple lines in service at the same time.

Batch Provisioning Overview

Step 1 From the Cisco 6700 NodeView menu bar (see Figure 7-1 on page 7-2), select **Objects > Line Batch Provisioning**. EMS displays the line status assignment window. (See Figure 7-20.)

Figure 7-20 Line Admin Status Assignment Window



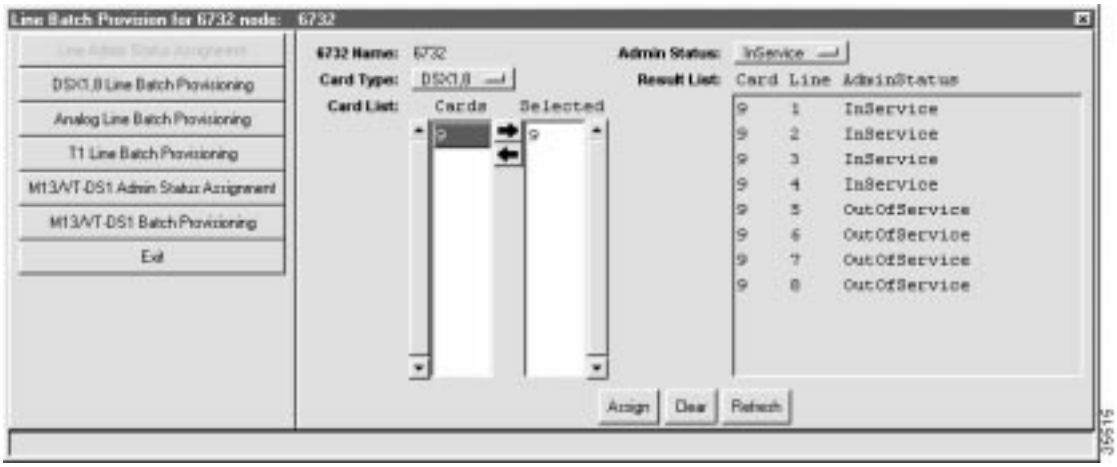
Step 2 In the **Admin Status** field, select **inService**.

Step 3 In the **Card Type** field, select one of the line card types that are currently installed in the NE. If the selected card type is present, EMS displays the slot numbers for each card in the **Card List** window. For example, if your NE has FXS/16 cards in slots 3 and 4, selecting the **FXS** card type displays 3 and 4 in the card list window.

Step 4 In the **Card List** window, click each card number while holding down the **Control** key to select (highlight) the card.

Step 5 When all card numbers are selected, click the right arrow next to the card list window. The **Result List** (on the right side of the window) displays all lines on the selected cards, along with the status (**inService** or **OutOfService**) of each line. (See Figure 7-21.)

Figure 7-21 Line Batch Provisioning Window with Selected Cards



Step 6 In the **Result List** window, select the lines to be placed in service.

Step 7 After the lines are selected, click the **Apply** button to put the lines in service. EMS works down the list, changing each **OutOfService** line to **InService**.

Step 8 Repeat Step 3 through Step 7 for each card type present in the NE.

Step 9 Click the **Exit** button on the left side of the window to return to Cisco 6700 NodeView.

Step 10 Select **View > Refresh Card Display** to update the NodeView display. Lines that have been placed in service displays a green LED.

The following sections detail batch line provisioning:

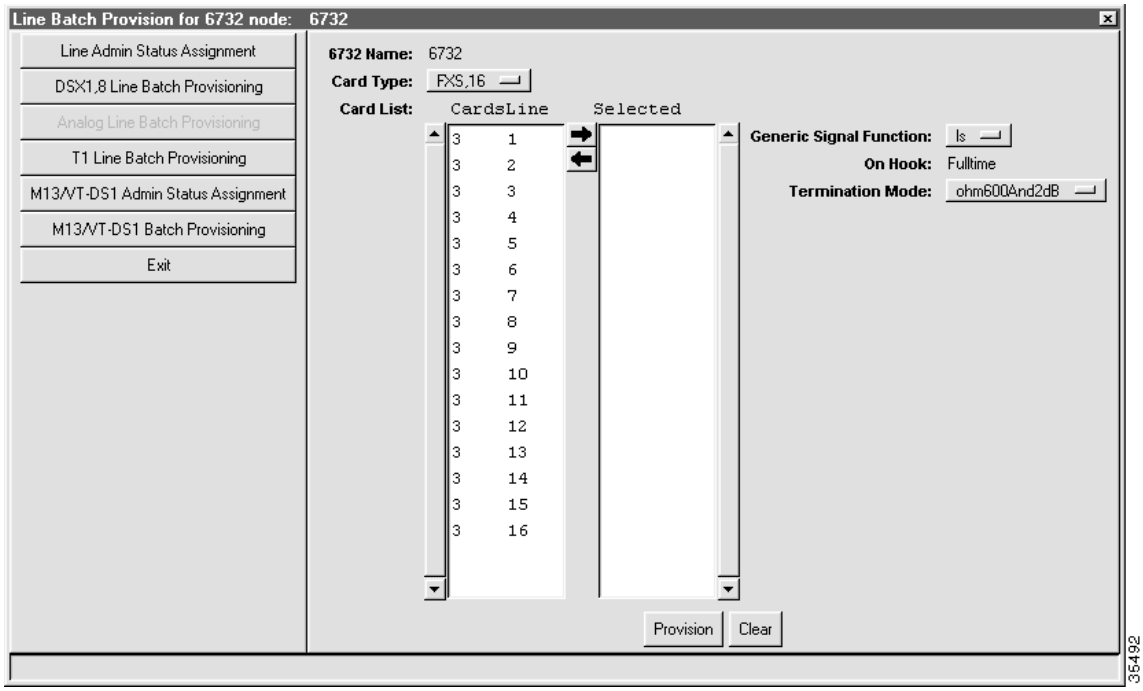
- Batch Provisioning Analog Lines, page 7-27
- Batch Provisioning DSX1 Lines, page 7-28
- Batch Provisioning DSX3 Lines, page 7-29
- Batch Provisioning STSX1 Lines, page 7-31
- Batch Provisioning T1 Lines, page 7-33

Batch Provisioning Analog Lines

Step 1 From the Cisco 6700 NodeView menu bar (see Figure 7-1 on page 7-2), select **Objects > Line Batch Provisioning**. EMS displays the line status assignment window. (See Figure 7-20 on page 7-25.)

Step 2 Select **Analog Line Batch Provisioning** in the function bar. EMS displays the analog line batch provisioning window. (See Figure 7-22.)

Figure 7-22 Analog Line Batch Provisioning Window



Step 3 Set the **Card Type** to the card or cards to be provisioned.

Step 4 In the **Card List**, select the lines to be provisioned.

Step 5 Click the right arrow between the **Card List** and the **Selected** list. EMS places the selected lines in the **Selected** list.

Step 6 Set the following parameters according to your application:

- **Generic Signal Function**—Select **ls** for loop start (default) or **gs** for ground start.
- **Termination Mode**—Select one of the following modes, expressed in ohms and digital-to-analog signal loss in dB:
  - **ohm600and0dB**
  - **ohm600and1dB** (default for RUVG/8)
  - **ohm600and2dB** (default for FXS/16)

- **ohm600and5dB**
- **ohm900andM2dB** (minus 2dB)
- **ohm900and2dB** (default for RPOTS/16)
- **ohm900and5dB**

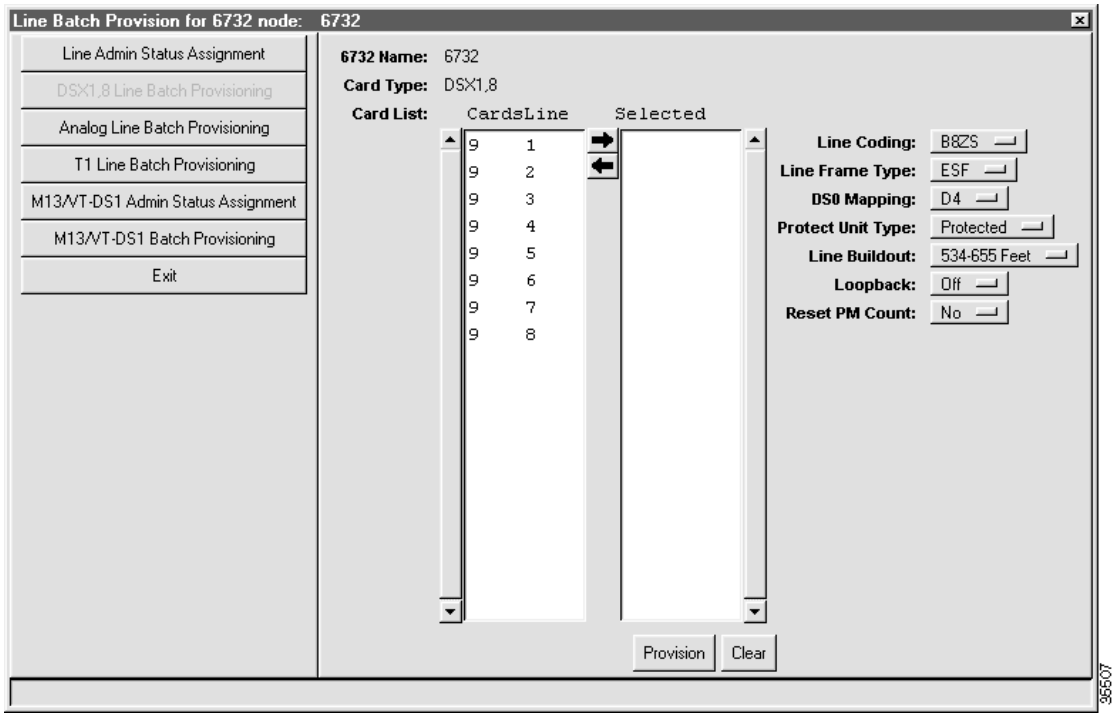
Step 7 Click **Apply** to provision the lines.

Batch Provisioning DSX1 Lines

Step 1 From the Cisco 6700 NodeView menu bar (see Figure 7-1 on page 7-2), select **Objects > Line Batch Provisioning**. EMS displays the line status assignment window. (See Figure 7-20 on page 7-25.)

Step 2 Select **DSX1,8 Line Batch Provisioning** in the function bar. EMS displays the DSX1 line batch provisioning window. (See Figure 7-23.)

Figure 7-23 DSX1 Line Batch Provisioning Window



Step 3 In the **Card List**, select the lines to be provisioned.

Step 4 Click the right arrow between the **Card List** and the **Selected** list. EMS places the selected lines in the **Selected** list.

Step 5 Set the following parameters according to your DSX1 application:

- **Line Coding**—Select **B8ZS** (binary 8 zero substitution) or **AMI** (alternate mark inversion).
- **Line Frame Type**—Select **ESF** (extended superframe), **SF** (superframe), or **SLC96** (subscriber loop carrier, 96 lines).
- **DS0 Mapping**—Select **D1**, **SLC-D4** (for use with TR-008), or **D4** (for use with GR-303).

- **Protect Unit Type**—Not supported.
- **Line Buildout**—Select the transmit line length.
- **Loopback**—Select **Off** (disable loopback), **Line** (facing away from the NE), or **Equipment** (internal loopback).
- **Reset PM Count**—Select **Yes** to reset the performance monitoring data. (See Chapter 16, "System Maintenance and Monitoring," for PM information and procedures.)

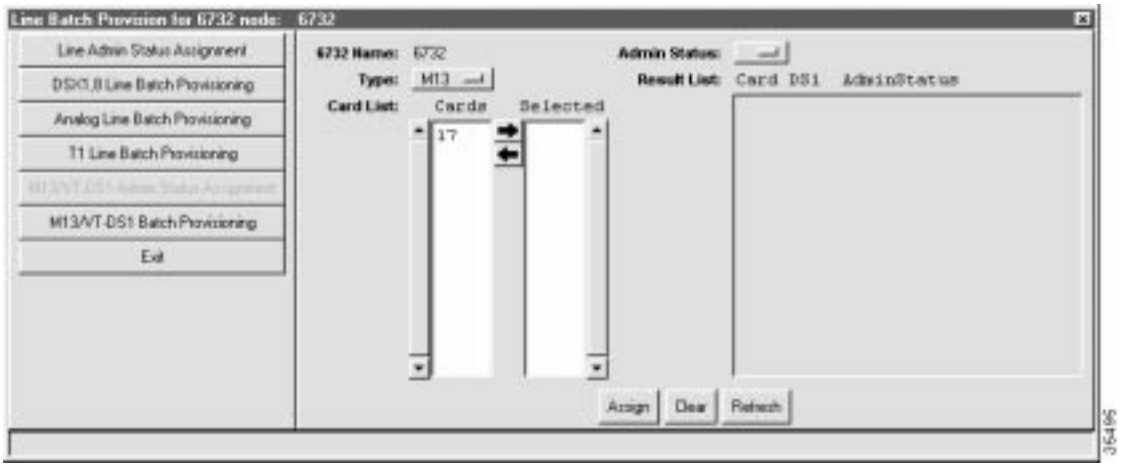
Step 6 Click **Apply** to provision the lines.

Batch Provisioning DSX3 Lines

Step 1 From the Cisco 6700 NodeView menu bar, select **Objects > Line Batch Provisioning**. EMS displays the line status assignment window. (See Figure 7-20 on page 7-25.)

Step 2 Select **M13/VT-DS1 Admin Status Assignment** in the function bar. EMS displays the M13/VT-DS1 batch provisioning window. (See Figure 7-24.)

Figure 7-24 M13/VT-DS1 Batch Provisioning Window



Step 3 Set the **Type** to **M13** (DSX3).

Step 4 In the **Card List**, select the cards with lines to be placed in service.

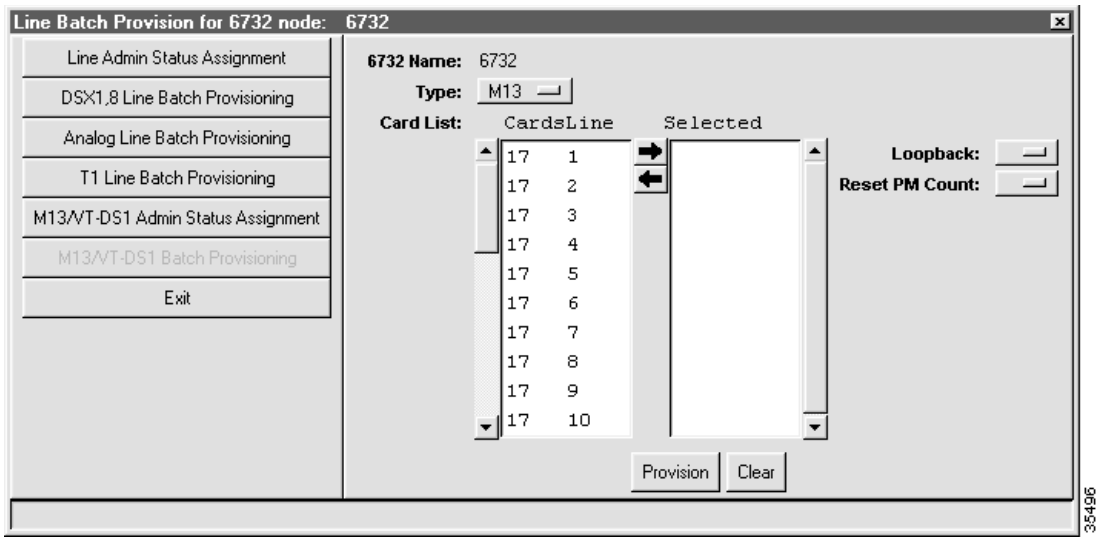
Step 5 Click the right arrow between the **Card List** and the **Selected** list. EMS places the selected lines in the **Selected** list.

Step 6 Set the **Admin Status** to **inService** or **OutOfService**.

Step 7 Click **Assign** to place the lines in service or out of service.

Step 8 Select **M13/VT-DS1 Batch Provisioning** in the function bar. EMS displays the M13/VT-DS1 batch provisioning window. (See Figure 7-23.)

Figure 7-25 M13/VT-DS1 Batch Provisioning Window



Step 9 Set the **Type** to **M13** (DSX3).

Step 10 In the **Card List**, select the lines to be provisioned.

Step 11 Click the right arrow between the **Card List** and the **Selected** list. EMS places the selected lines in the **Selected** list.

Step 12 Set the following parameters according to your application:

- **Loopback**—Select **Off** (disable loopback), **Line** (facing away from the NE), or **Equipment** (internal loopback).
- **Reset PM Count**—Select **Yes** to reset the performance monitoring data. (See Chapter 16, "System Maintenance and Monitoring," for PM information and procedures.)

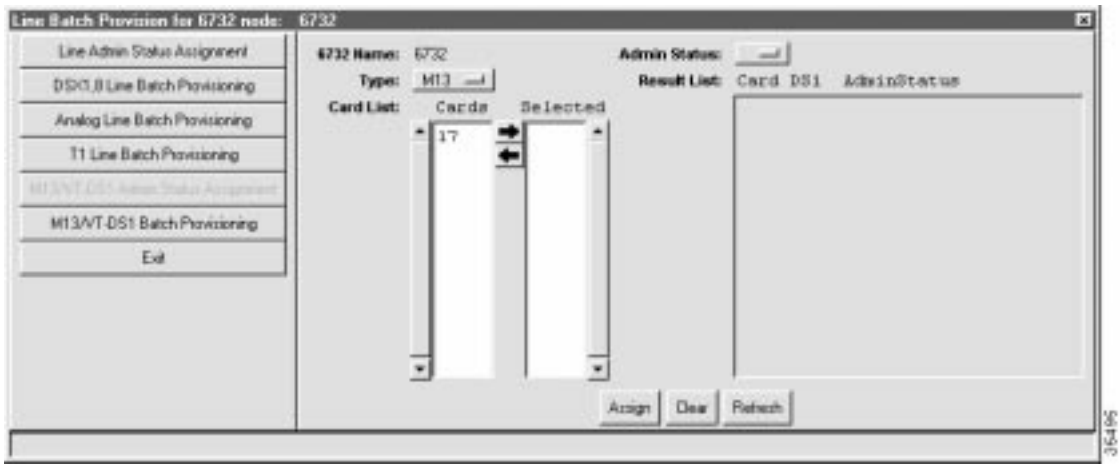
Step 13 Click **Apply** to provision the lines.

Batch Provisioning STSX1 Lines

Step 1 From Cisco 6700 NodeView menu bar (see Figure 7-1 on page 7-2), select **Objects > Line Batch Provisioning**. EMS displays the line status assignment window. (See Figure 7-20 on page 7-25.)

Step 2 Select **M13/VT-DS1 Admin Status Assignment** in the function bar. EMS displays the M13/VT-DS1 batch provisioning window. (See Figure 7-26.)

Figure 7-26 M13/VT-DS1 Batch Provisioning Window



Step 3 Set the **Type** to **VT-DS1** (STSX1).

Step 4 In the **Card List**, select the cards with lines to be placed in service.

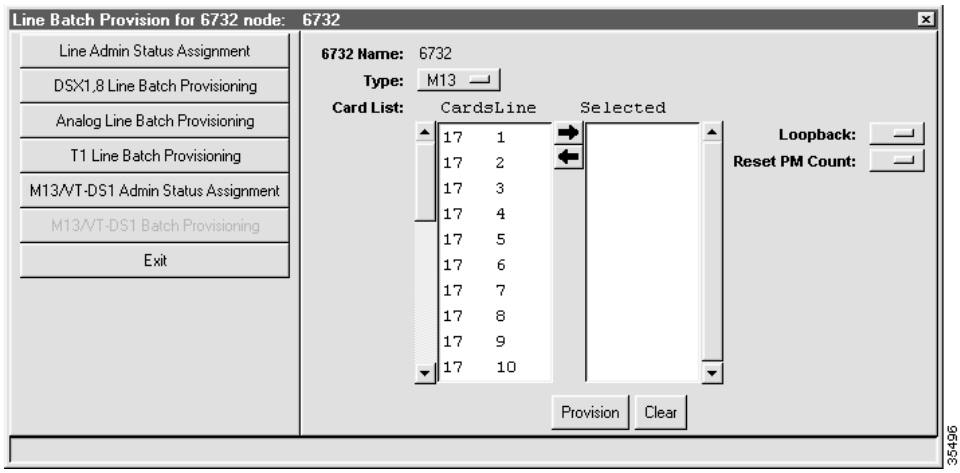
Step 5 Click the right arrow between the **Card List** and the **Selected** list. EMS places the selected lines in the **Selected** list.

Step 6 Set the **Admin Status** to **InService** or **OutOfService**.

Step 7 Click **Assign** to place the lines in service or out of service.

Step 8 Select **M13/VT-DS1 Batch Provisioning** in the function bar. EMS displays the M13/VT-DS1 batch provisioning window. (See Figure 7-27.)

Figure 7-27 M13/VT-DS1 Line Batch Provisioning Window



Step 9 Set the **Type** to **VT-DS1** (STSX1).

Step 10 In the **Card List**, select the lines to be provisioned.

Step 11 Click the right arrow between the **Card List** and the **Selected** list. EMS places the selected lines in the **Selected** list.

Step 12 Set the following parameters according to your application:

- **Loopback**—Select **Off** (disable loopback), **Line** (facing away from the NE), or **Equipment** (internal loopback).
- **Reset PM Count**—Select **Yes** to reset the performance monitoring data. (See Chapter 16, “System Maintenance and Monitoring,” for PM information and procedures.)

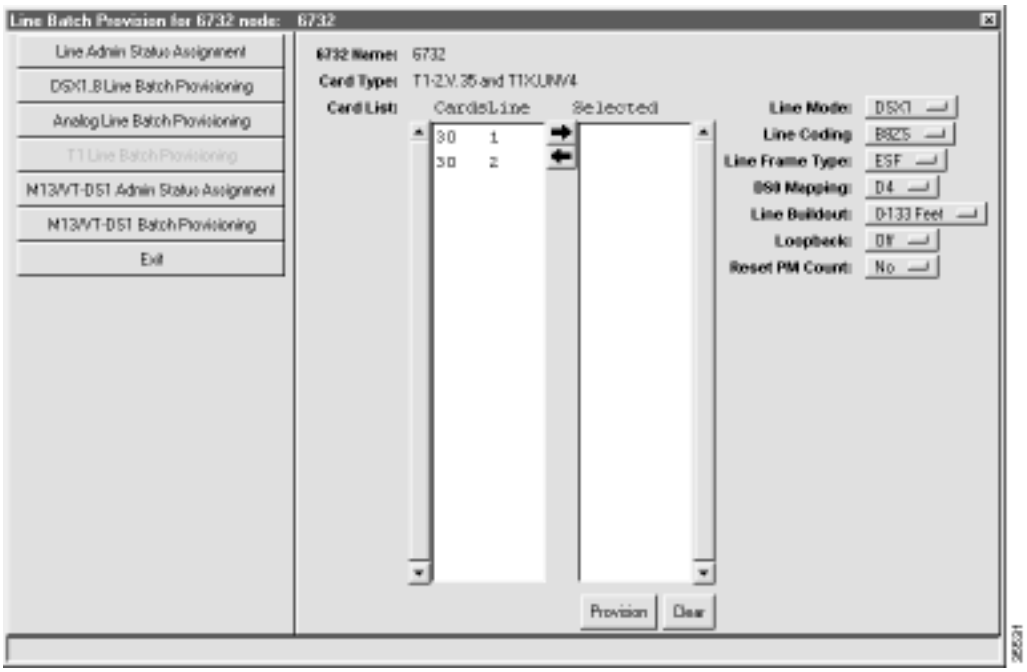
Step 13 Click **Apply** to provision the lines.

Batch Provisioning T1 Lines

Step 1 From the Cisco 6700 NodeView menu bar (see Figure 7-1 on page 7-2), select **Objects > Line Batch Provisioning**. EMS displays the line status assignment window. (See Figure 7-20 on page 7-25.)

Step 2 Select **T1 Line Batch Provisioning** in the function bar. EMS displays the T1 line batch provisioning window. (See Figure 7-28.)

Figure 7-28 T1 Line Batch Provisioning Window



Step 3 In the **Card List**, select the lines to be provisioned.

Step 4 Click the right arrow between the **CardsLine** List and the **Selected** list. EMS places the selected lines in the Selected list.

Step 5 Set the following parameters according to your application:

- **Line Coding**—Select **B8ZS** (binary 8 zero substitution) or **AMI** (alternate mark inversion).
- **Line Frame Type**—Select **ESF** (extended superframe), **SF** (superframe), **HDLU-C** (high-speed digital line unit, central), or **HDLU-R** (high-speed digital line unit, remote).
- **DS0 Mapping**—Leave as default (**D4**).
- **Line Buildout**—Select the transmit line length.
- **Loopback**—Select **Off** (disable loopback), **Line** (facing away from the NE), or **Equipment** (internal loopback).
- **Reset PM Count**—Select **Yes** to reset the performance monitoring data. (See Chapter 16, “System Maintenance and Monitoring,” for PM information and procedures.)

Step 6 Click **Apply** to provision the lines.