### CHAPTER 9

# **Provisioning ATM**

This chapter describes the procedures to provision the following line cards for ATM services:

- MSDSL-2W (shown in EMS as HDSL2/MS4)
- T1-2-V35
- OC3-AUPSR

### Line Provisioning

Starting from node view, double-click the facility to be provisioned. EMS launches the line provisioning window. (See Figure 9-1.)

T1-2,V.35 Line Provision for 6732	node: node1	×
T1-2,V.35 Basic Provisioning	6732 Hame:	node1
15-Min PM Threshold	T1-2,V.35 Card:	4
1.Dau PM Threshold	T1-2,V.35 Line:	
1-Day i Minieshold	Admin Status:	OutOfService —
15-Min PM Data	Operation Status:	Down
1-Day PM Data	Line Coding:	
Ear End 15-Min PM Data	BSA Mapping	
	Line Mode:	
Far End 1-Day PM Data	Line Buildout:	0-133 Feet -
Exit	Loopback:	
	Reset PM Count:	No -
	Line Test:	Off
	Line Power:	
	Bundle Size:	
	T1-2,V.35 Problem List:	Far End Loopback
	Apply	Refresh DS0 Signaling

#### Figure 9-1 Provisioning Line for ATM

The following fields must be set correctly before ATM can be provisioned on the facility:

- Line Frame Type: Set to HDLU-C or HDLU-R. Endpoints of an ATM virtual channel (VC) should be set to HDLU-R.
- **Bundle Size**: Set to the maximum number of DS0 channels provisioned to carry data traffic. This must be greater than 0 to enable ATM provisioning.

Close the line provisioning window by clicking the **Exit** tab. The line can now be provisioned for ATM.

### Assigning Virtual Paths and Virtual Channels

Each line must be provisioned with at least one virtual path (VP) and one virtual channel (VC) before ATM traffic can be accommodated.

Step 1 Starting from node view, right-click the facility to be provisioned, and select ATM Provisioning from the popup menu. EMS launches the ATM provisioning window. (See Figure 9-2.)

#### Figure 9-2 ATM Provisioning Window

ATM Provision for 6732 node:	node8	×
ATM Interface Provisioning	NE Name:	node8
VP/VC Modify and Delete	T1-2,V.35 Card:	4
·	T1-2,V.35 Line:	1
VP/VC Assignment	ATM Interface Type:	UNI 🗖
Exit	Configured VPs Count:	1
	Configured VCs Count:	1
	Max Active VPI Bits:	8
	Max Active VCI Bits:	14
	Cell Scrambling:	No 🖃
	Apply	Refresh

- **Step 2** The following ATM parameters should be set according to the ATM application being used:
  - ATM Interface Type
  - Max Active VPI Bits and Max Active VCI Bits
  - Cell Scrambling
- Step 3 Click the VP/VC Assignment tab. EMS launches the VP/VC assignment window. (See Figure 9-3.)

### Figure 9-3 VP/VC Assignment Window

ATMInistace Provisioning	BE Hanner	Pebon		VPI	VO	0.0	20
VP//C Nodily and Delete	71-2, V. 10 Card	10	AbiAC FINE				
WALLANGTOOR	VPI Frome						
Est	Tet		<u> </u>				
	VCI From:	12	_				
	Tec						
	Segment VP End Point:	No -					
	Segment VC End Paint:	No -					
	VC AAL Type:	Nos					
						- 1	٠ċ
		121/17	distant in the				-

**Step 4** Set the following ATM parameters:

- VPI From/To: Enter the range of VPIs to be assigned to this line.
- VCI From/To: Enter the range of VCIs to be assigned to this line.
- Segment VP Endpoint
- Segment VC Endpoint
- VC AAL Type: Select AAL5 to provision the new VCs for ATM Adaptation Layer 5 (AAL5), or select None to provision VCs without using an adaption layer.
- **Step 5** Click **Create VP** to provision the VPs, and click **Create VC** to provision the VCs. The newly created VPs and VCs appear in the **VP/VC List** at the right side of the window.

### Deleting VPs and VCs

To delete VPs and VCs provisioned on a particular line, right-click the line icon in node view, and select **ATM Provisioning** from the pop-up menu. Click the **VP/VC Modify and Delete** tab. EMS displays a list of VPs and VCs provisioned on the line. (See Figure 9-4.)

ATM Provision for 6732 node: 1	node9						×
ATM Interface Provisioning	NE Name:	node9		VPI	VCI	C.C.	
VP/VC Modify and Delete	T1-2,V.35 Card:	10	VP/VC List:	1			
	T1-2,V.35 Line:	1		1	32		
VP/VC Assignment	VPI :			1	33		
Exit	VCI:			1	34		
	Segment VP End Point:			1	35		
	Segment VC End Point:				36		
	VC AAL Type:				37		
					30 39		
				1	55		
							Ţ
				•			
		Apply	Delete Refresh				
							_

Figure 9-4 VP/VC Assignment Window

In the **VP/VC List** at the right side of the window, highlight the VPs and VCs to be deleted. Click **Delete** to remove the VPs and VCs. EMS removes the deleted VPs and VCs from the list.

# **ATM Cross Connect**

After a line had been provisioned with a VP/VC, you can create an ATM cross connect to another line in the NE chassis:

- **Step 1** To start ATM cross connect provisioning, enter the node view of the node to be provisioned. Move the cursor to the specific line that will be provisioned.
- **Step 2** Right-click the line and select **ATM Cross Connect**. EMS creates a list of all available VP/VCs on the line. (See Figure 9-5.)



### Figure 9-5 ATM Cross Connect VP/VC Display

**Step 3** Highlight the VP/VC to be cross connected. EMS displays the VP/VC number in the **Selected VPI** and **Selected VCI** windows at the top of the list. (See Figure 9-6.) Click the Selected VCI text box, and drag the cursor to the desired facility.



#### Figure 9-6 Draw ATM Cross Connect

Step 4 After the visual cross connect is drawn, EMS launches the ATM Cross Connect Provisioning window. (See Figure 9-7.) The VP/VC list on the left shows all VP/VCs for the source (originating) line, and the VP/VC list on the right shows VP/VCs for the destination line.

ATH Case Connect Provisioning ATH Creat Connect Conten Ealt	T1-2, V, IS Card T1-2, V, IS Card Selected VT1: Selected VC1:	10 1 1 32			11-2,0,35 Cards 11-2,0,35 Lines Connected VPS1 Cannected VCI:	90) 2		
	VP VC Link	1 1	V0 32	CC.	WP/VCLINE	VFI 1 1	93	<u></u> *
					Deare	•		

### Figure 9-7 ATM Cross Connect Provisioning Window

- **Step 5** Highlight the source VP/VC to be cross connected in the left **VP/VC List**, then highlight the destination VP/VC in the right **VP/VC List**. You must select one VP/VC on each line.
- Step 6 Click Create to provision the ATM cross connection. Once the cross connection is established, EMS displays the letter y next to the connected VP/VC on each line. (See Figure 9-8.)



#### Figure 9-8 ATM Cross Connections Confirmed

### **Delete ATM Cross Connections**

To delete ATM cross connections, right-click on a line in node view, and select **ATM Cross Connect** from the popup menu. EMS launches the ATM cross connect provisioning window. (See Figure 9-9.) The **VP/VC List** displays all VP/VCs configured on the line.

TH Dear Connect Dearer ing ATH Dear Connect Deale Ent	T1-2,V.35 Card: T1-2,V.35 Line: Selected VPI: Selected VCI:	10 1 1 32				Card Type: Card: Line: Connected VPI:	11-29-35 10 2 33
	WP/WC Lint:	1	32	7		Connected VCI:	
		•		Deb	.' *		

Figure 9-9 ATM Cross Connect Provisioning Window

Highlight the VP/VCs to be deleted, then click **Delete**. EMS removes the deleted cross connections from the VP/VC list display.

# Close ATM Cross Connect Display

To close the ATM cross connect display, right-click on the VPI/VCI list in node view, and select **End ATM Cross Connect Display** from the popup menu. EMS closes the cross connect display.