



## Frame Relay

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This chapter describes provisioning the Cisco IAD1101 to use IP links over Frame Relay on a T1 line, acting as a data terminal equipment (DTE) Frame Relay access device. The chapter includes the following sections:

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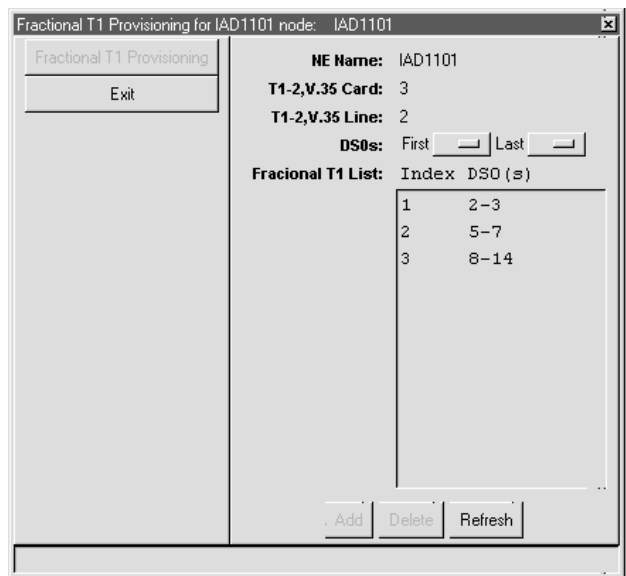
# Fractional T1 Provisioning

## Provisioning a Fractional T1

You must identify the group of DS0 channels to be used for the Frame Relay link. EMS manages user-defined groups of DS0 channels with fractional T1 provisioning.

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- Step 1 From Cisco 6700 NodeView, right-click the LED in the icon of the appropriate T1 line.
  - Step 2 Select **Start Fractional T1** from the popup menu to open the provisioning window. (See Figure 12-1.)

*Figure 12-1 Fractional T1 Provisioning Window*



- Step 3 EMS displays a list of previously-provisioned fractional T1s in the **Fractional T1 List**. If you are creating a new fractional T1, you cannot use DS0 channels that are already part of another fractional T1.
  - Step 4 In the **DS0s** field drop-down menu, select the **First** and **Last** DS0s to define the range of DS0 channels.
  - Step 5 Click **Add** to provision the fractional T1. EMS adds the fractional T1 to the list and assigns it an index.
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**Note** To provision additional fractional T1s, repeat Step 4 and Step 5.

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## Deleting a Fractional T1

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- Step 1 Highlight the fractional T1 in the list.
  - Step 2 Click **Delete**. EMS removes the fractional T1 from the list.
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# DLCMI

Use the data link connection management interface (DLCMI) to provision Frame Relay parameters such as address protocol and local management interface (LMI).



Note

The Cisco IAD1101 does not support the proprietary Cisco Frame Relay encapsulation. You must use IETF encapsulation when configuring a Frame Relay link on the Cisco IAD1101.

## Creating a DLMCI

- Step 1** From Cisco 6700 NodeView, right-click the LED on the icon of the T1 port that you intend to provision, and select **Start FRAD Provisioning**. EMS launches the Frame Relay provisioning window. (See Figure 12-2.)

*Figure 12-2 FRAD DLCMI Provisioning Window*

- Step 2** Set the following fields according to your Frame Relay network:
- **Fractional T1 Entry**—Select the fractional T1 for use with Frame Relay.
  - **LMI Type**—Select the LMI type for your Frame Relay link. The Cisco IAD1101 does not support the proprietary Cisco Frame Relay encapsulation. You must use IETF encapsulation when configuring a Frame Relay link on the Cisco IAD1101.
  - **Polling Interval**—Enter the number of seconds between polling messages (checking for link activity).
  - **Error Threshold**—Enter the number of times a link does not respond to a polling message before EMS considers the link to be down.
  - **Monitored Events**—Enter the number of error-free polling intervals that must occur before a down link is restored to active status.

- Step 3** Click **Add** to create the DLCMI. The DLCMI list shows the index and fractional T1 entry for the new DLCMI. (See Figure 12-3.)

**Figure 12-3** New DLCMI Index and Entries

FRAD DLCMI Provision for IAD1101 node: IAD1101

FRAD DLCMI Provisioning		NE Name: IAD1101	DLCMI List:
FRAD DLCMI Provisioning		T1-2,V.35 Card: 3	Index DSO (s)
FRAD Circuit Provisioning		T1-2,V.35 Line: 2	1 2-3
Exit		Fractional T1 Entry: <input type="text"/>	2 5-7
		LMI Type: <input type="text"/>	3 8-14
		Polling Interval(seconds): 10 <input type="text"/>	
		Error Threshold: 3 <input type="text"/>	
		Monitored Events: 4 <input type="text"/>	
		Max Supported VCs: 1	
		Status:	
		<input type="button" value="Add"/> <input type="button" value="Modify"/> <input type="button" value="Delete"/> <input type="button" value="Refresh"/>	

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## Deleting a DLCMI

- Step 1** From Cisco 6700 NodeView, right-click the LED on the icon of the appropriate T1 port, and select **Start FRAD Provisioning**. EMS launches the Frame Relay provisioning window. (See Figure 12-2.)
- Step 2** Remove any DLCIs associated with the DLCMI you intend to delete (see the “Deleting a DLCI” section on page 12-5).
- Step 3** In the DLCMI list, select a DLCMI and click **Delete**. EMS removes the DLCMI from the list.

# DLCI

## Provisioning a DLCI for the DLCMI

Frame Relay uses a data link connection identifier (DLCI) to identify a particular virtual circuit endpoint within a user access channel in a Frame Relay network.

To provision a DLCI for a DLCMI, complete the following steps starting in Cisco 6700 NodeView:

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- Step 1** From Cisco 6700 NodeView, right-click the LED in the icon of the appropriate T1 port, and select **Start FRAD Provisioning** from the popup menu. EMS launches the Frame Relay provisioning window. (See Figure 12-2.)
- Step 2** Click **FRAD Circuit Provisioning** in the function bar. EMS launches the Frame Relay circuit provisioning window. (See Figure 12-4.)

*Figure 12-4 FRAD Circuit Provisioning Window*

FRAD DLCMI Provisioning for IAD1101 node: IAD1101	
<b>NE Name:</b> IAD1101	<b>DLCMI List:</b>
<b>T1-2,V.35 Card:</b> 3	Index DSO (s)
<b>T1-2,V.35 Line:</b> 2	1 2-3
<b>DLCMI Index:</b>	2 5-7
<b>DLCI:</b> 0	3 8-14
<b>State:</b> [ ]	<b>DLCI List</b>
<b>Type:</b>	
[ Create ] [ Modify ] [ Delete ] [ Refresh ]	

- Step 3** Click the entry in the **DLCMI List** (upper right) to select a DLCMI.
- Step 4** Set the following fields for the DLCI to be created:
- **DLCI**—Enter the DLCI number.
  - **State**—Select **Active** or **Inactive**.
- Step 5** Click **Create** to create the DLCI, or click **Modify** to change an existing DLCI. The DLCI List shows the new DLCI entry.
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## Deleting a DLCI

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- Step 1** Highlight the DLCI in the DLCI list.
- Step 2** Click **Delete**. EMS removes the DLCI from the DLCMI.
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