Change Card Settings

This chapter explains how to change transmission settings on cards in a Cisco ONS 15454.

Before You Begin

Before performing any of the following procedures, complete the "NTP-A195 Document Existing Provisioning" procedure on page 7-2. Also, investigate all alarms and clear any trouble conditions. Refer to the *Cisco ONS 15454 Troubleshooting Guide* as necessary.

Caution Changing card settings can be service affecting. You should make all changes during a scheduled maintenance window.

This section lists the chapter procedures (NTPs). Turn to a procedure for applicable tasks (DLPs).

1. NTP-A88 Modify Line Settings and PM Parameter Thresholds for Electrical Cards, page 11-2—As needed, complete this procedure to change transmission settings, including line and threshold settings, for all electrical cards (EC-1, DS-1, DS-3, and DS3MX-6).
2. NTP-A89 Modify Line Settings and PM Parameter Thresholds for Optical Cards, page 11-19—As needed, complete this procedure to change transmission settings, including line and threshold settings, for all optical (OC-N) cards.
3. NTP-A206 Modify Line Settings and PM Parameter Thresholds for TXP_MR_10G Cards, page 11-25—As needed, complete this procedure to change transmission settings, including line and threshold settings, for TXP_MR_10G (transponder) cards.
4. NTP-A207 Modify Line Settings and PM Parameter Thresholds for MXP_2.5G_10G Cards, page 11-36—As needed, complete this procedure to change transmission settings, including line and threshold settings, for MXP_2.5G_10G (muxponder) cards.
5. NTP-A90 Modify Alarm Interface Controller Settings, page 11-46—As needed, complete this procedure to change external alarms and controls (environmental alarms) and/or orderwire settings.
6. NTP-A118 Modify Alarm Interface Controller-International Settings, page 11-49—As needed, complete this procedure to change external alarms and controls and/or orderwire settings.
7. NTP-A91 Upgrade DS-1 and DS-3 Protect Cards from 1:1 Protection to 1:N Protection, page 11-53—As needed, complete this procedure to change the protection type on DS-1 or DS-3 cards.

NTP-A88 Modify Line Settings and PM Parameter Thresholds for Electrical Cards

Purpose	This procedure changes the line and threshold settings for electrical cards; the default values are listed in the "Card Default Settings" section on page C-4.
Tools/Equipment	None
Prerequisite Procedures	"NTP-A17 Install the Electrical Cards" procedure on page 2-15
Required/As Needed	As needed
Onsite/Remote	Onsite or remote
Security Level	Provisioning or higher

Step 1 Log into the ONS 15454 node where you want to change the card settings. See the "DLP-A60 Log into CTC" task on page 3-23.

Step 2 Complete the "NTP-A108 Back Up the Database" procedure on page 15-8 to preserve the existing database.

Step 3 Perform any of the following tasks as needed:

- DLP-A165 Change Line and Threshold Settings for the DS1-14 or DS1N-14 Cards, page 11-2
- DLP-A166 Change Line and Threshold Settings for the DS3-12 or DS3N-12 Cards, page 11-6
- DLP-A167 Change Line and Threshold Settings for the DS3E-12 or DS3N-12E Cards, page 11-9
- DLP-A168 Change Line and Threshold Settings for the DS3XM-6 Card, page 11-12
- DLP-A169 Change Line and Threshold Settings for the EC1-12 Card, page 11-16

Step 4 When you are finished changing the card settings, complete the "NTP-A108 Back Up the Database" procedure on page 15-8.

Stop. You have completed this procedure.

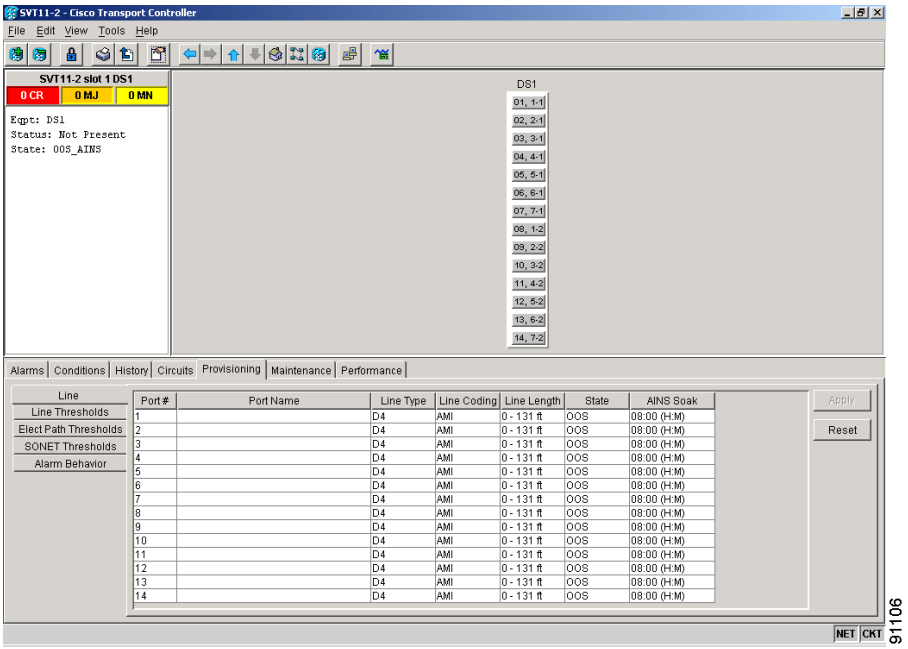
DLP-A165 Change Line and Threshold Settings for the DS1-14 or DS1N-14 Cards

Purpose	This task changes the line and threshold settings for the DS1-14 or DS1N-14 (DS-1) cards. Table C-1 on page C-5 lists the default DS-1 card settings.
Tools/Equipment	None
Prerequisite Procedures	DLP-A60 Log into CTC, page 3-23
Required/As Needed	As needed
Onsite/Remote	Onsite or remote
Security Level	Provisioning or higher

Step 1 In the node view, double-click the DS1-14 or DS1N-14 card where you want to change the line or threshold settings.

Step 2 Click the **Provisioning** tab (Figure 11-1).

Figure 11-1 Provisioning Line Parameters on the DS1-14 Card



Step 3 Depending on the setting you need to modify, click the **Line**, **Line Thrshld**, **Elect Path Thrshld**, or **Sonet Thrshld** tab.

Note See Chapter 7, "Manage Alarms" for information about the Alarm Behavior tab.

Step 4 Modify any of the settings found under these subtabs. For definitions of the Line settings, see Table 11-1. For definitions of the Line Threshold settings, see Table 11-2. For definitions of the Electrical Path settings, see Table 11-3.

For the factory default settings for the DS1-14 and DS1N-14 cards, see Table C-1 on page C-5.

Step 5 Click **Apply**.

Step 6 Repeat Steps 3 to 5 for each subtab that has parameters you want to provision.

Table 11-1 describes the values on the Provisioning > Line tabs for the DS-1 cards.

Table 11-1 Line Options for DS1-14 and DS1N-14 Cards

Parameter	Description	Options
Port #	Port number	1 - 14 (read-only)
Port	Port name	User-defined, up to 32 alphanumeric/special characters. Blank by default. See the "DLP-A314 Assign a Name to a Port" procedure on page 6-17.

Table 11-1 Line Options for DS1-14 and DS1N-14 Cards (continued)

Parameter	Description	Options
Line Type	Defines the line framing type	• D4 • ESF - Extended Super Frame • Unframed
Line Coding	Defines the DS-1 transmission coding type	• AMI - Alternate Mark Inversion (default) • B8ZS - Bipolar 8 Zero Substitution
Line Length	Defines the distance (in feet) from the backplane connection to the next termination point	• 0 - 131 • 132 - 262 • 263 - 393 • 394 - 524 • 525 - 655
State	Places port in or out of service	See the "DLP-A214 Change the Service State for a Port" task on page 5-6.
AINS Soak	Automatic in-service soak	• Duration of valid input signal in hh.mm after which the card becomes in service (IS) automatically. • 0 to 48 hours, 15 minutes increments.

Table 11-2 describes the values on the Provisioning > Line Thresholds tabs for the DS-1 cards.

Table 11-2 Line Thresholds Options for DS1-14 and DS1N-14 Cards

Parameter	Description	Options
Port	Port number	1 - 14 (read-only)
CV	Coding violations	Numeric. Can be set for 15-minute or one-day intervals. Select the bullet and click the Refresh button.
ES	Errored seconds	Numeric. Can be set for 15-minute or one-day intervals. Select the bullet and click the Refresh button.
SES	Severely errored seconds	Numeric. Can be set for 15-minute or one-day intervals. Select the bullet and click the Refresh button.
LOSS	Number of one-second intervals containing one or more loss of signal (LOS) defects	Numeric. Can be set for 15-minute or one-day intervals. Select the bullet and click the Refresh button.

Table 11-3 describes the values on the Provisioning > Elect Path Thresholds tabs for the DS-1 cards.

Table 11-3 Electrical Path Threshold Options for DS1-14 and DS1N-14 Cards

Parameter	Description	Options
Port	Port number	1 - 14 (read-only)
CV	Coding violations	Numeric. Can be set for 15-minute or one-day intervals. Select the bullet and click the Refresh button.
ES	Errored seconds	Numeric. Can be set for 15-minute or one-day intervals. Select the bullet and click the Refresh button.
SES	Severely errored seconds	Numeric. Can be set for 15-minute or one-day intervals. Select the bullet and click the Refresh button.
SAS	Severely errored frame/alarm indication signal	Numeric. Can be set for 15-minute or one-day intervals. Select the bullet and click the Refresh button.
AISS	Alarm indication signal seconds	Numeric. Can be set for 15-minute or one-day intervals. Select the bullet and click the Refresh button.
UAS	Unavailable seconds	Numeric. Can be set for 15-minute or one-day intervals. Select the bullet and click the Refresh button.

Table 11-4 describes the values on the Provisioning > SONET Thresholds tabs for the DS-1 cards.

Table 11-4 SONET Threshold Options for DS1-14 and DS1N-14 Cards

Parameter	Description	Options
Port #	DS-1 ports partitioned for STS	Read-only Line 1, STS 1, Line 2, STS 1 Line 3, STS 1, Line 4 STS 1
CV	Coding violations	Numeric. Can be set for 15-minute or one-day intervals. Select the bullet and click the Refresh button (Near End, STS termination).
ES	Errored seconds	Numeric. Can be set for 15-minute or one-day intervals. Select the bullet and click the Refresh button (Near End, STS termination).
FC	Failure count	Numeric. Can be set for 15-minute or one-day intervals. Select the bullet and click the Refresh button (Near End, STS termination).

Table 11-4 SONET Threshold Options for DS1-14 and DS1N-14 Cards (continued)

Parameter	Description	Options
SES	Severely errored seconds	Numeric. Can be set for 15-minute or one-day intervals. Select the bullet and click the Refresh button (Near End, STS termination).
UAS	Unavailable seconds	Numeric. Can be set for 15-minute or one-day intervals. Select the bullet and click the Refresh button (Near End, STS termination).

Note The threshold value displays after the circuit is created.

Step 7 Return to your originating procedure (NTP).

DLP-A166 Change Line and Threshold Settings for the DS3-12 or DS3N-12 Cards

Purpose	This task changes the line and threshold settings for the DS3-12 or DS3N-12 (DS-3) cards. Table C-2 on page C-7 lists the default values for the DS-3 cards.
Tools/Equipment	None
Prerequisite Procedures	DLP-A60 Log into CTC, page 3-23
Required/As Needed	As needed
Onsite/Remote	Onsite or remote
Security Level	Provisioning or higher

Step 1 Double-click the DS3-12 or DS3N-12 card where you want to change the line or threshold settings.

Step 2 Click the **Provisioning** tab.

Step 3 Depending on the setting you need to modify, click the **Line**, **Line Thrshld**, **Elec Path Thrshld**, or **Sonet Thrshld** subtab.

Note See Chapter 7, "Manage Alarms" for information about the Alarm Behavior tab.

Step 4 Modify any of the settings found under these subtabs. For definitions of the Line settings, see Table 11-5. For definitions of the Line Threshold settings, see Table 11-6. For definitions of the SONET Threshold settings, see Table 11-7.

For the factory default settings for the DS3-12 and DS3N-12 Cards, see Table C-2 on page C-7.

Step 5 Click **Apply**.

Step 6 Repeat Steps 4 and 5 for each subtab that has parameters you want to provision.

Table 11-5 describes the values on the Provisioning > Line tabs for the DS-3 cards.

Table 11-5 Line Options for DS3-12 or DS3N-12 Cards

Parameter	Description	Options
Port #	Port number	1 - 12
Port	Port name	User-defined, up to 32 alphanumeric/ special characters. Blank by default. See the "DLP-A314 Assign a Name to a Port" procedure on page 6-17.
Line Length	Defines the distance (in feet) from backplane connection to the next termination point	• 0 - 225 (default) • 226 - 450
State	Places port in or out of service	See the "DLP-A214 Change the Service State for a Port" task on page 5-6.
AINS Soak	Automatic in-service soak	Duration of valid input signal in hh.mm after which the card becomes in service (IS) automatically. 0 to 48 hours, 15 minutes increments.

Table 11-6 describes the values on the Provisioning > Line Thresholds tabs for the DS-3 cards.

Table 11-6 Line Threshold Options for DS3-12 or DS3N-12 Cards

Parameter	Description	Options
Port #	Port number	1 - 12
CV	Coding violations	Numeric. Can be set for 15-minute or one-day intervals. Select the bullet and click the Refresh button.
ES	Errored seconds	Numeric. Can be set for 15-minute or one-day intervals. Select the bullet and click the Refresh button.
SES	Severely errored seconds	Numeric. Can be set for 15-minute or one-day intervals. Select the bullet and click the Refresh button.
LOSS	Loss of signal; number of one-second intervals containing one or more LOS defects	Numeric. Can be set for 15-minute or one-day intervals. Select the bullet and click the Refresh button.

Table 11-7 describes the values on the Provisioning > SONET Thresholds tabs for the DS-3 cards.

Table 11-7 SONET Threshold Options for DS3-12 or DS3N-12 Cards

Parameter	Description	Options
Port #	DS-3 ports partitioned for STS	Read-only Line 1, STS 1, Line 2, STS 1 Line 3, STS 1, Line 4 STS 1
CV	Coding violations	Numeric. Can be set for 15-minute or one-day intervals. Select the bullet and click the Refresh button (Near and Far End, STS termination only).
ES	Errored seconds	Numeric. Can be set for 15-minute or one-day intervals. Select the bullet and click the Refresh button (Near and Far End, STS termination only).
FC	Failure count	Numeric. Can be set for 15-minute or one-day intervals. Select the bullet and click the Refresh button (Near and Far End, STS termination only).
SES	Severely errored seconds	Numeric. Can be set for 15-minute or one-day intervals. Select the bullet and click the Refresh button (Near and Far End, STS termination only).
UAS	Unavailable seconds	Numeric. Can be set for 15-minute or one-day intervals. Select the bullet and click the Refresh button (Near and Far End, STS termination only).

Note The threshold value displays after the circuit is created.

Step 7 Return to your originating procedure (NTP).

DLP-A167 Change Line and Threshold Settings for the DS3E-12 or DS3N-12E Cards

Purpose	This task changes the line and threshold settings for the DS3E-12 or DS3N-12E (DS3E) cards. Table C-3 on page C-8 lists the default values for the DS3E cards.
Tools/Equipment	None
Prerequisite Procedures	DLP-A60 Log into CTC, page 3-23
Required/As Needed	As needed
Onsite/Remote	Onsite or remote
Security Level	Provisioning or higher

Note If the DS3E is installed in an ONS 15454 slot that is provisioned for a DS-3 card, the DS3E enhanced performance monitoring parameters are unavailable. If this occurs, remove the DS3E from the ONS 15454, delete the DS-3 card in CTC using the "DLP-A191 Delete a Card" task on page 2-22, and provision the slot for the DS3E using the "NTP-A115 Preprovision a Slot" task on page 2-23.

Step 1 Double-click the DS3E-12 or DS3N-12E card where you want to change the line or threshold settings.

Step 2 Click the **Provisioning** tab.

Step 3 Depending on the setting you need to modify, click the **Line**, **Line Thrshld**, **Elect Path Thrshld**, or **Sonet Thrshld** subtab.

Note See Chapter 7, "Manage Alarms" for information about the Alarm Behavior tab.

Step 4 Modify any of the settings found under these subtabs. For definitions of the Line settings, see Table 11-8. For definitions of the Line Threshold settings, see Table 11-9. For definitions of the Electrical Path Thresholds, see Table 11-10. For definitions of the SONET Threshold settings, see Table 11-11.

For the factory default settings for the DS3-12E and DS3N-12E cards, see Table C-3 on page C-8.

Step 5 Click **Apply**.

Step 6 Repeat Steps 4 and 5 for each subtab that has parameters you want to provision.

Table 11-8 describes the values on the Provisioning > Line tabs for the DS3E cards.

Table 11-8 Line Options for the DS3-12E and DS3N-12E Cards

Parameter	Description	Options
Port #	Port number	1 - 12 (Read-only)
Port	Port name	User-defined, up to 32 alphanumeric/ special characters. Blank by default. See the "DLP-A314 Assign a Name to a Port" procedure on page 6-17.

Table 11-8 Line Options for the DS3-12E and DS3N-12E Cards (continued)

Parameter	Description	Options
Line Type	Defines the line framing type	• M13 • C Bit • Auto Provisioned
Detected Line Type	Displays the detected line type	Read-only
Line Coding	Defines the DS3E transmission coding type	B3ZS
Line Length	Defines the distance (in feet) from backplane connection to the next termination point	• 0 - 225 (default) • 226 - 450
State	Places port in or out of service	See the "DLP-A214 Change the Service State for a Port" task on page 5-6.
AINS Soak	Automatic in-service soak	• Duration of valid input signal in hh.mm after which the card becomes in service (IS) automatically. • 0 to 48 hours, 15-minute increments.

Table 11-9 describes the values on the Provisioning > Line Thresholds tabs for the DS3E cards.

Table 11-9 Line Threshold Options for the DS3-12E and DS3N-12E Cards

Subtab	Parameter	Description	Options
Port #	Port number	1 - 12 (Read-only)	Port #
Line Thrshold	CV	Coding violations	Numeric. Can be set for 15-minute or one-day intervals. Select the bullet and click the Refresh button.
	ES	Errored seconds	Numeric. Can be set for 15-minute or one-day intervals. Select the bullet and click the Refresh button.
	SES	Severely errored seconds	Numeric. Can be set for 15-minute or one-day intervals. Select the bullet and click the Refresh button.
	LOSS	Loss of signal; number of one-second intervals containing one or more LOS defects	Numeric. Can be set for 15-minute or one-day intervals. Select the bullet and click the Refresh button.

Table 11-10 describes the values on the Provisioning > Elect Path Thresholds tabs for the DS3E cards.

Table 11-10 Electrical Path Options for the DS3-12E and DS3N-12E Cards

Subtab	Parameter	Description	Options
Port #	Port number	1 - 12 (Read-only)	Port #
Elect Path Thrshld	CV	Coding violations	Numeric. Can be set for 15-minute or one-day intervals. Select the bullet and click the Refresh button (DS3 Pbit: Near End only; DS3 CPbit: Near and Far End).
	ES	Errored seconds	Numeric. Can be set for 15-minute or one-day intervals. Select the bullet and click the Refresh button (DS3 Pbit: Near End only; DS3 CPbit: Near and Far End).
	SES	Severely errored seconds	Numeric. Can be set for 15-minute or one-day intervals. Select the bullet and click the Refresh button (DS3 Pbit: Near End only; DS3 CPbit: Near and Far End).
	SAS	Severely errored frame/alarm indication signal	Numeric. Can be set for 15-minute or one-day intervals. Select the bullet and click the Refresh button (DS3 Pbit: Near End only; DS3 CPbit: Near and Far End).
	AIS	Alarm indication signal	Numeric. Can be set for 15-minute or one-day intervals. Select the bullet and click the Refresh button (DS3 Pbit: Near End only; DS3 CPbit: Near and Far End).
	UAS	Unavailable seconds	Numeric. Can be set for 15-minute or one-day intervals. Select the bullet and click the Refresh button (DS3 Pbit: Near End only; DS3 CPbit: Near and Far End).

Table 11-11 describes the values on the Provisioning > SONET Thresholds tabs for the DS3E cards.

Table 11-11 SONET Threshold Options for DS3-12E and DS3N-12E Cards

Parameter	Description	Options
Port #	DS-3 ports partitioned for STS	Read-only Line 1, STS 1, Line 2, STS 1 Line 3, STS 1, Line 4 STS 1
CV	Coding violations	Numeric. Can be set for 15-minute or one-day intervals. Select the bullet and click the Refresh button (Near and Far End, STS termination only).

Table 11-11 SONET Threshold Options for DS3-12E and DS3N-12E Cards (continued)

Parameter	Description	Options
ES	Errored seconds	Numeric. Can be set for 15-minute or one-day intervals. Select the bullet and click the Refresh button (Near and Far End, STS termination only).
FC	Failure count	Numeric. Can be set for 15-minute or one-day intervals. Select the bullet and click the Refresh button (Near and Far End, STS termination only).
SES	Severely errored seconds	Numeric. Can be set for 15-minute or one-day intervals. Select the bullet and click the Refresh button (Near and Far End, STS termination only).
UAS	Unavailable seconds	Numeric. Can be set for 15-minute or one-day intervals. Select the bullet and click the Refresh button (Near and Far End, STS termination only).

Note The threshold value displays after the circuit is created.

Step 7 Return to your originating procedure (NTP).

DLP-A168 Change Line and Threshold Settings for the DS3XM-6 Card

Purpose	This task changes the line and threshold settings for the DS3XM-6 card. Table C-4 on page C-10 lists the default settings for the DS3XM-6 card.
Tools/Equipment	None
Prerequisite Procedures	DLP-A60 Log into CTC, page 3-23
Required/As Needed	As needed
Onsite/Remote	Onsite or remote
Security Level	Provisioning or higher

Note The DS3XM-6 (transmux) card can accept up to six channelized DS-3 signals and convert each signal to 28 VT1.5 signals. Conversely, the card can take 28 T-1s and multiplex them into a channeled C-bit or M13 framed DS-3.

Step 1 Double-click the DS3XM-6 card where you want to change the line or threshold settings.

Step 2 Click the **Provisioning** tab.

Step 3 Depending on the setting you need to modify, click the **Line**, **Line Thrshld**, **Elect Path Thrshld**, or **Sonet Thrshld** subtab.

Note See Chapter 7, "Manage Alarms" for information about the Alarm Behavior tab.

Step 4 Modify any of the settings found under these subtabs. For definitions of the Line settings, see Table 11-12. For definitions of the Line Threshold settings, see Table 11-13. For definitions of the Electrical Path Thresholds, see Table 11-14. For definitions of the SONET Threshold settings, see Table 11-15.

For the factory default settings for the DS3XM-6 card, see Table C-4 on page C-10.

Step 5 Click **Apply**.

Step 6 Repeat Steps 3 to 5 for each subtab that has parameters you want to provision.

Table 11-12 describes the values on the Provisioning > Line tabs for the DS3XM-6 cards.

Table 11-12 Line Options for the DS3XM-6 Parameters

Parameter	Description	Options
Port #	Port number	1 - 6 (read-only)
Port	Port name	User-defined, up to 32 alphanumeric/ special characters. Blank by default See the "DLP-A314 Assign a Name to a Port" procedure on page 6-17.
Line Type	Defines the line framing type	• M13 - default • C BIT
Line Coding	Defines the DS-1 transmission coding type that is used	B3ZS
Line Length	Defines the distance (in feet) from backplane connection to the next termination point	• 0 - 225 (default) • 226 - 450
State	Places port in or out of service	See the "DLP-A214 Change the Service State for a Port" task on page 5-6
AINS Soak	Automatic in-service soak	• Duration of valid input signal in hh.mm after which the card becomes in service (IS) automatically. • 0 to 48 hours, 15 minutes increments.

Table 11-13 lists the line threshold options for DS3XM-6 cards.

Table 11-13 Line Threshold Options for the DS3XM-6 Card

Parameter	Description	Options
Port #	Port number	1 - 6 (read-only)
CV	Coding violations	Numeric. Can be set for 15-minute or one-day intervals. Select the bullet and click the Refresh button.

Table 11-13 Line Threshold Options for the DS3XM-6 Card (continued)

Parameter	Description	Options
ES	Errored seconds	Numeric. Can be set for 15-minute or one-day intervals. Select the bullet and click the Refresh button.
SES	Severely errored seconds	Numeric. Can be set for 15-minute or one-day intervals. Select the bullet and click the Refresh button.
LOSS	Loss of signal	Numeric. Can be set for 15-minute or one-day intervals. Select the bullet and click the Refresh button.

Table 11-14 describes the values on the Provisioning > Elect Path Thresholds tabs for the DS3XM-6 cards.

Table 11-14 Electrical Path Threshold Options for the DS3XM-6 Card

Parameter	Description	Options
Port #	Port number	1 - 6 (read-only)
CV	Coding violations	Numeric. Can be set for 15-minute or one-day intervals. Select the bullet and click the Refresh button (DS3, Pbit Near End only; DS3 CPbit, Near and Far End; DS1, only if there is a VT circuit dropped on the port).
ES	Errored seconds	Numeric. Can be set for 15-minute or one-day intervals. Select the bullet and click the Refresh button (DS3, Pbit Near End only; DS3 CPbit, Near and Far End; DS1, only if there is a VT circuit dropped on the port).
SES	Severely errored seconds	Numeric. Can be set for 15-minute or one-day intervals. Select the bullet and click the Refresh button (DS3, Pbit Near End only; DS3 CPbit, Near and Far End; DS1, only if there is a VT circuit dropped on the port).
SAS	Severely errored frame/alarm indication signal	Numeric. Can be set for 15-minute or one-day intervals. Select the bullet and click the Refresh button (DS3, Pbit Near End only; DS3 CPbit, Near and Far End; DS1, only if there is a VT circuit dropped on the port).

Table 11-14 Electrical Path Threshold Options for the DS3XM-6 Card (continued)

Parameter	Description	Options
AISS	Alarm indication signal seconds	Numeric. Can be set for 15-minute or one-day intervals. Select the bullet and click the Refresh button (DS3, Pbit Near End only; DS3 CPbit, Near and Far End; DS1, only if there is a VT circuit dropped on the port).
UAS	Unavailable seconds	Numeric. Can be set for 15-minute or one-day intervals. Select the bullet and click the Refresh button (DS3, Pbit Near End only; DS3 CPbit, Near and Far End; DS1, only if there is a VT circuit dropped on the port).

Table 11-15 describes the values on the Provisioning > SONET Thresholds tabs for the DS3XM-6 cards.

Table 11-15 SONET Threshold Options for the DS3XM-6 Card

Parameter	Description	Options
CV	Coding violations	Numeric. Can be set for 15-minute or one-day intervals. Select the bullet and click the Refresh button (STS and VT Term).
ES	Errored seconds	Numeric. Can be set for 15-minute or one-day intervals. Select the bullet and click the Refresh button (STS and VT Term).
FC	Failure count	Numeric. Can be set for 15-minute or one-day intervals. Select the bullet and click the Refresh button (STS and VT Term).
SES	Severely errored seconds	Numeric. Can be set for 15-minute or one-day intervals. Select the bullet and click the Refresh button (STS and VT Term).
UAS	Unavailable seconds	Numeric. Can be set for 15-minute or one-day intervals. Select the bullet and click the Refresh button (STS and VT Term).

Note The threshold value displays after the circuit is created.

Step 7 Return to your originating procedure (NTP).

DLP-A169 Change Line and Threshold Settings for the EC1-12 Card

Purpose	This task changes the line and threshold settings for the EC1-12 (EC-1) card. The default EC-1 settings are listed in Table C-5 on page C-13.
Tools/Equipment	None
Prerequisite Procedures	DLP-A60 Log into CTC, page 3-23
Required/As Needed	As needed
Onsite/Remote	Onsite or remote
Security Level	Provisioning or higher

Step 1 Double-click the EC-1 card where you want to change the line or threshold settings.

Step 2 Click the **Provisioning** tab.

Step 3 Depending on the setting you need to modify, click the **Line**, **Thresholds,** or **STS** subtab.

Note See Chapter 7, "Manage Alarms" for information about the Alarm Behavior tab.

Step 4 Modify any of the settings found under these subtabs. For definitions of the Line settings, see Table 11-16. For definitions of the threshold settings, see Table 11-17.

For the factory default settings for the EC-1 card, see Table C-5 on page C-13.

Step 5 Click **Apply**.

Step 6 Repeat Steps 4 and 5 for each subtab that has parameters you want to provision.

Note The STS subtab is used to provision intermediate path performance monitoring (IPPM). To provision IPPM, circuits must be provisioned on the EC1-12 card. For circuit creation procedures, go to Chapter 6, "Create Circuits and VT Tunnels." To provision IPPM, go to the "DLP-A121 Enable Pointer Justification Count Performance Monitoring" task on page 8-2.

Table 11-16 Line Options for the EC1-12 card

Parameter	Description	Options
Port #	EC-1 card port #	1 - 12 (read-only)
Port Name	Name assigned to the port (optional)	User-defined, up to 32 alphanumeric/ special characters. Blank by default. See the "DLP-A314 Assign a Name to a Port" procedure on page 6-17.
PJStsMon#	Sets the STS that will be used for pointer justification. If set to zero, no STS is used.	• 0 (default) • 1
Line Length (feet)	Defines the distance (in feet) from backplane to next termination point	• 0 - 225 (default) • 226 - 450

Table 11-16 Line Options for the EC1-12 card (continued)

Parameter	Description	Options
Rx Equalization	For early EC1-12 card versions, equalization can be turned off if the line length is short or the environment is extremely cold; Rx Equalization should normally be set to On	• On (checked, default) • Off (unchecked)
State	Places the port in or out of service	See the "DLP-A214 Change the Service State for a Port" task on page 5-6.

Table 11-17 lists the threshold options for EC-12 cards.

Table 11-17 Threshold Options for the EC1-12 Card

SONET Layer	Parameter	Description	Options
	Port #	EC-1 card port #	1 - 12 (read-only)
Line	CV	Coding violations	Numeric. Can be set for 15-minute or one-day intervals. Select the bullet and click the Refresh button.
	ES	Errored seconds	Numeric. Can be set for 15-minute or one-day intervals. Select the bullet and click the Refresh button.
	SES	Severely errored seconds	Numeric. Can be set for 15-minute or one-day intervals. Select the bullet and click the Refresh button.
	FC	Failure count	Numeric. Can be set for 15-minute or one-day intervals. Select the bullet and click the Refresh button.
	UAS	Unavailable seconds	Numeric. Can be set for 15-minute or one-day intervals. Select the bullet and click the Refresh button.
	PPJC-PDET	Positive Pointer Justification Count, STS Path Detected	Numeric. Can be set for 15-minute or one-day intervals. Select the bullet and click the Refresh button.
	NPJC-PDET	Negative Pointer Justification Count, STS Path Detected	Numeric. Can be set for 15-minute or one-day intervals. Select the bullet and click the Refresh button.
	PPJC-PGEN	Positive Pointer Justification Count, STS Path Generated	Numeric. Can be set for 15-minute or one-day intervals. Select the bullet and click the Refresh button.
	NPJC-PGEN	Negative Pointer Justification Count, STS Path Generated	Numeric. Can be set for 15-minute or one-day intervals. Select the bullet and click the Refresh button.
	PSC	Protection Switching Count	Numeric. Can be set for 15-minute or one-day intervals. Select the bullet and click the Refresh button.

Table 11-17 Threshold Options for the EC1-12 Card (continued)

SONET Layer	Parameter	Description	Options
	PSD	Protection Switching Duration	Numeric. Can be set for 15-minute or one-day intervals. Select the bullet and click the Refresh button.
Section	CV	Coding violations	Numeric. Can be set for 15-minute or one-day intervals. Select the bullet and click the Refresh button (Near End only).
	ES	Errored seconds	Numeric. Can be set for 15-minute or one-day intervals. Select the bullet and click the Refresh button.
	SES	Severely errored seconds	Numeric. Can be set for 15-minute or one-day intervals. Select the bullet and click the Refresh button.
	SEFS	Severely errored framing seconds	Numeric. Can be set for 15-minute or one-day intervals. Select the bullet and click the Refresh button.
Path	CV	Coding violations	Numeric. Can be set for 15-minute or one-day intervals. Select the bullet and click the Refresh button (Near and Far End).
	ES	Errored seconds	Numeric. Can be set for 15-minute or one-day intervals. Select the bullet and click the Refresh button.
	FC	Failure count	Numeric. Can be set for 15-minute or one-day intervals. Select the bullet and click the Refresh button.
	SES	Severely errored seconds	Numeric. Can be set for 15-minute or one-day intervals. Select the bullet and click the Refresh button.
	UAS	Unavailable seconds	Numeric. Can be set for 15-minute or one-day intervals. Select the bullet and click the Refresh button.

Step 7 Return to your originating procedure (NTP).

NTP-A89 Modify Line Settings and PM Parameter Thresholds for Optical Cards

Purpose	This procedure changes the line and threshold settings for optical cards. The default OC-N card settings are provided in the "Card Default Settings" section on page C-4.
Tools/Equipment	None
Prerequisite Procedures	None
Required/As Needed	As needed
Onsite/Remote	Onsite or remote
Security Level	Provisioning or higher

Note To change optical settings for transponder cards, see "DLP-A277 Change Optical Thresholds Settings for TXP_MR_10G Cards" task on page 11-31. To change optical settings for muxponder cards, see "DLP-A283 Change Optical Thresholds Settings for MXP_2.5G_10G Cards" task on page 11-41.

Step 1 Log into the ONS 15454 node where you want to change the card settings. See the "DLP-A60 Log into CTC" task on page 3-23.

Step 2 Complete the "NTP-A108 Back Up the Database" procedure on page 15-8.

Step 3 Perform any of the following tasks as needed:

- DLP-A170 Change Line Transmission Settings for OC-N Cards, page 11-19
- DLP-A171 Change Threshold Settings for OC-N Cards, page 11-21
- DLP-A172 Change an Optical Port to SDH, page 11-24

Step 4 Complete the "NTP-A108 Back Up the Database" procedure on page 15-8.

Stop. You have completed this procedure.

DLP-A170 Change Line Transmission Settings for OC-N Cards

Purpose	This task changes the line transmission settings for OC-N cards. The default OC-N card settings are provided in the "Card Default Settings" section on page C-4.
Tools/Equipment	None
Prerequisite Procedures	DLP-A60 Log into CTC, page 3-23
Required/As Needed	As needed
Onsite/Remote	Onsite or remote
Security Level	Provisioning or higher

Step 1 Double-click the OC-N card where you want to change the line settings.

Step 2 Click the **Provisioning > Line** tabs.

Step 3 Modify any of the settings described in Table 11-18.

To view the factory default settings for the OC-N Cards, see Table C-7 on page C-20 for the OC-3 card, Table C-8 on page C-22 for the OC-12 card, Table C-9 on page C-24 for the OC-48 card, or Table C-10 on page C-26 for the OC-192 card.

Note The STS subtab is used to provision intermediate path performance monitoring (IPPM). To provision IPPM, circuits must be provisioned on the EC1-12 card.

Step 4 Click **Apply**.

Table 11-18 OC-N Card Line Settings

Parameter	Description	Options
Port #	Port number (read-only)	• 1 (OC-12, OC-48, OC-192) • 1-4 (OC-3, OC12-4)
Port Name	Provides the ability to assign the specified port a name	User-defined. Name can be up to 32 alphanumeric/special characters. Blank by default. See the "DLP-A314 Assign a Name to a Port" procedure on page 6-17.
SF BER Level	Sets the signal fail bit error rate	• 1E-3 • 1E-4 • 1E-5
SD BER Level	Sets the signal degrade bit error rate	• 1E-5 • 1E-6 • 1E-7 • 1E-8 • 1E-9
Provides Synch	If checked, the card is provisioned as a network element timing reference	• Yes • No (Read-only)
Enable Synch Messages	Enables synchronization status messages (S1 byte), which allow the node to choose the best timing source	• Yes • No
Send Do Not Use	When checked, sends a DUS (do not use) message on the S1 byte	• Yes • No
PJSTSMon #	Sets the STS that will be used for pointer justification. If set to 0, no STS is monitored. Only one STS can be monitored on each OC-N port.	• 0 - 3 (OC-3, per port) • 0 - 12 (OC-12) • 0 - 48 (OC-48) • 0 - 192 (OC-192)

Table 11-18 OC-N Card Line Settings (continued)

Parameter	Description	Options
State	Places port in or out of service	• In Service • Out of Service • Out of Service MT • Out of Service AINS
AINS Soak	Automatic in-service soak	• Duration of valid input signal in hh.mm after which the card becomes in service (IS) automatically. • 0 to 48 hours, 15 minutes increments.
Type	Defines the port as SONET or SDH. The *Enable Sync Msg* field and the *Send Do Not Use* field must be disabled before the port can be set to SDH.	• Sonet • SDH

Step 5 Return to your originating procedure (NTP).

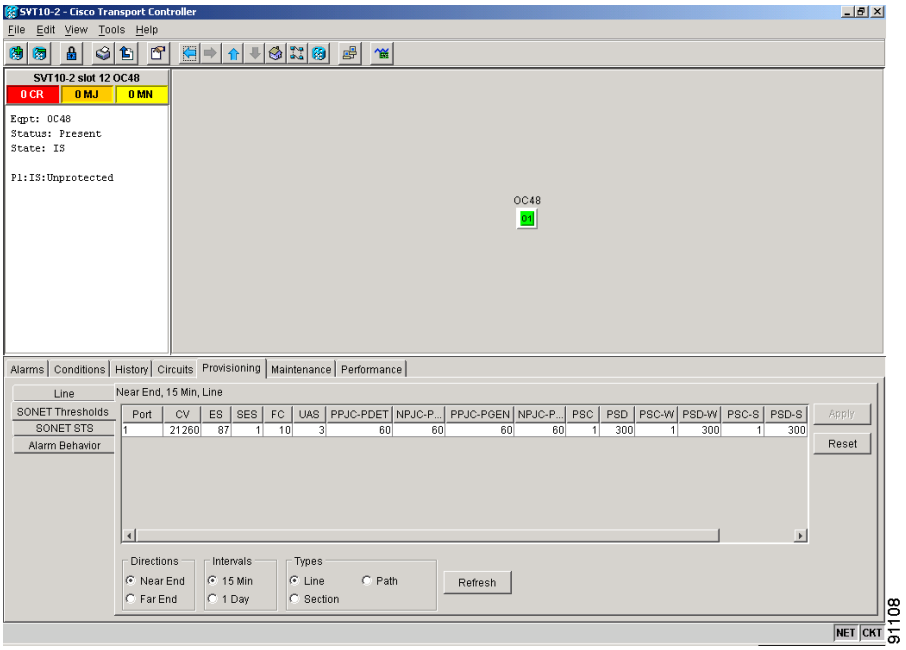
DLP-A171 Change Threshold Settings for OC-N Cards

Purpose	This task changes threshold settings for OC-N cards. The default OC-N card settings are provided in the "Card Default Settings" section on page C-4.
Tools/Equipment	None
Prerequisite Procedures	DLP-A60 Log into CTC, page 3-23
Required/As Needed	As needed
Onsite/Remote	Onsite or remote
Security Level	Provisioning or higher

Step 1 In node view, double-click the OC-N card where you want to change the threshold settings (Figure 11-2).

Step 2 Click the **Provisioning > Thresholds** tabs.

Figure 11-2 Provisioning Thresholds on the OC48 IR 1310 Card



Step 3 Modify any of the settings found in Table 11-19.

To view the factory default settings for the OC-N cards, see Table C-7 on page C-20 for the OC-3 card, Table C-8 on page C-22 for the OC-12 card, Table C-9 on page C-24 for the OC-48 card, or Table C-10 on page C-26 for the OC-192 card.

Step 4 Click **Apply**.

Table 11-19 OC-N Threshold Options

Parameter	Description	Options
Port	Port number	• 1 (OC-12, OC-48, OC-192) • 1-4 (OC-3, OC12-4)
CV	Coding violations	Numeric. Can be set for 15-minute or one-day intervals for Line, Section, or Path (Near and Far End). Select the bullet and click the Refresh button.
ES	Errored seconds	Numeric. Can be set for 15-minute or one-day intervals for Line, Section, or Path (Near and Far End). Select the bullet and click the Refresh button.
SES	Severely errored seconds	Numeric. Can be set for 15-minute or one-day intervals for Line, Section, or Path (Near and Far End). Select the bullet and click the Refresh button.
SEFS	Severely errored framing seconds	Numeric. Can be set for 15-minute or one-day intervals for Line, Section, or Path (Near and Far End). Select the bullet and click the Refresh button.

Table 11-19 OC-N Threshold Options (continued)

Parameter	Description	Options
FC	Failure count	Numeric. Can be set for 15-minute or one-day intervals for Line . Select the bullet and click the Refresh button. or Path (Near and Far End)
UAS	Unavailable seconds	Numeric. Can be set for 15-minute or one-day intervals for Line or Path (Near and Far End). Select the bullet and click the Refresh button.
PPJC-PDET	Positive Pointer Justification Count, STS Path detected.	Numeric. Can be set for 15-minute or one-day intervals for Line (Near and Far End). Select the bullet and click the Refresh button.
NPJC-PDET	Negative Pointer Justification Count, STS Path detected.	Numeric. Can be set for 15-minute or one-day intervals for Line (Near and Far End). Select the bullet and click the Refresh button.
PPJC-PGEN	Positive Pointer Justification Count, STS Path generated.	Numeric. Can be set for 15-minute or one-day intervals for Line (Near and Far End). Select the bullet and click the Refresh button.
NPJC-PGEN	Negative Pointer Justification Count, STS Path generated.	Numeric. Can be set for 15-minute or one-day intervals for Line (Near and Far End). Select the bullet and click the Refresh button.
PSC	Protection Switching Count (Line)	Numeric. Can be set for 15-minute or one-day intervals for Line (Near and Far End). Select the bullet and click the Refresh button.
PSD	Protection Switch Duration (Line)	Numeric. Can be set for 15-minute or one-day intervals for Line (Near and Far End). Select the bullet and click the Refresh button.
PSC-W	Protection Switching Count - Working line BLSR is not supported on the OC-3 card; therefore, the PSC-W, PSC-S, and PSC-R PMs do not increment.	Numeric. Can be set for 15-minute or one-day intervals for Line (Near and Far End). Select the bullet and click the Refresh button.
PSD-W	Protection Switching Duration - Working line BLSR is not supported on the OC-3 card; therefore, the PSD-W, PSD-S, and PSD-R PMs do not increment.	Numeric. Can be set for 15-minute or one-day intervals for Line (Near and Far End). Select the bullet and click the Refresh button.

Table 11-19 OC-N Threshold Options (continued)

Parameter	Description	Options
PSC-S	Protection Switching Duration - Span BLSR is not supported on the OC-3 card; therefore, the PSC-W, PSC-S, and PSC-R PMs do not increment.	Numeric. Can be set for 15-minute or one-day intervals for Line (Near and Far End). Select the bullet and click the Refresh button.
PSD-S	Protection Switching Duration - Span BLSR is not supported on the OC-3 card; therefore, the PSD-W, PSD-S, and PSD-R PMs do not increment.	Numeric. Can be set for 15-minute or one-day intervals for Line (Near and Far End). Select the bullet and click the Refresh button.
PSC-R	Protection Switching Duration - Ring BLSR is not supported on the OC-3 card; therefore, the PSC-W, PSC-S, and PSC-R PMs do not increment.	Numeric. Can be set for 15-minute or one-day intervals for Line (Near and Far End). Select the bullet and click the Refresh button.
PSD-R	Protection Switching Duration - Ring BLSR is not supported on the OC-3 card; therefore, the PSD-W, PSD-S, and PSD-R PMs do not increment.	Numeric. Can be set for 15-minute or one-day intervals for Line (Near and Far End). Select the bullet and click the Refresh button.

Step 5 Return to your originating procedure (NTP).

DLP-A172 Change an Optical Port to SDH

Purpose	This task provisions a port on an OC-N card for SDH.
Tools/Equipment	None
Prerequisite Procedures	DLP-A60 Log into CTC, page 3-23
Required/As Needed	As needed
Onsite/Remote	Onsite or remote
Security Level	Provisioning or higher

Step 1 Double-click the OC-N card where you want to provision a port for SDH.

Step 2 Click the **Provisioning > Line** tabs.

Step 3 In the Type field, specify the port and choose SDH.

Note Before you can change the port type to SDH, ensure the following: the EnableSyncMsg and SendDoNotUse fields are unchecked, the card is not part of a BLSR or 1+1 protection group, the card is not part of an orderwire channel, and the card is not a SONET DCC/GCC termination point.

Step 4 Click **Apply**.

Step 5 If the card is a multiport OC-N card, such as an OC12-4, you can repeat Steps 3 and 4 for any other ports on that card.

Step 6 Return to your originating procedure (NTP).

NTP-A206 Modify Line Settings and PM Parameter Thresholds for TXP_MR_10G Cards

Purpose	This procedure changes the line and threshold settings for TXP_MR_10G (transponder) cards. The default card settings are provided in the "Card Default Settings" section on page C-4.
Tools/Equipment	None
Prerequisite Procedures	None
Required/As Needed	As needed
Onsite/Remote	Onsite or remote
Security Level	Provisioning or higher

Step 1 Log into the ONS 15454 node where you want to change the settings. See the "DLP-A60 Log into CTC" task on page 3-23.

Step 2 Complete the "NTP-A108 Back Up the Database" procedure on page 15-8.

Step 3 Perform any of the following tasks as needed:

- DLP-A274 Change Card Settings for TXP_MR_10G Cards, page 11-26
- DLP-A275 Change Line Settings for TXP_MR_10G Cards, page 11-28
- DLP-A276 Change Line Threshold Settings for TXP_MR_10G Cards, page 11-30
- DLP-A277 Change Optical Thresholds Settings for TXP_MR_10G Cards, page 11-31

Step 4 Complete the "NTP-A108 Back Up the Database" procedure on page 15-8.

Stop. You have completed this procedure.

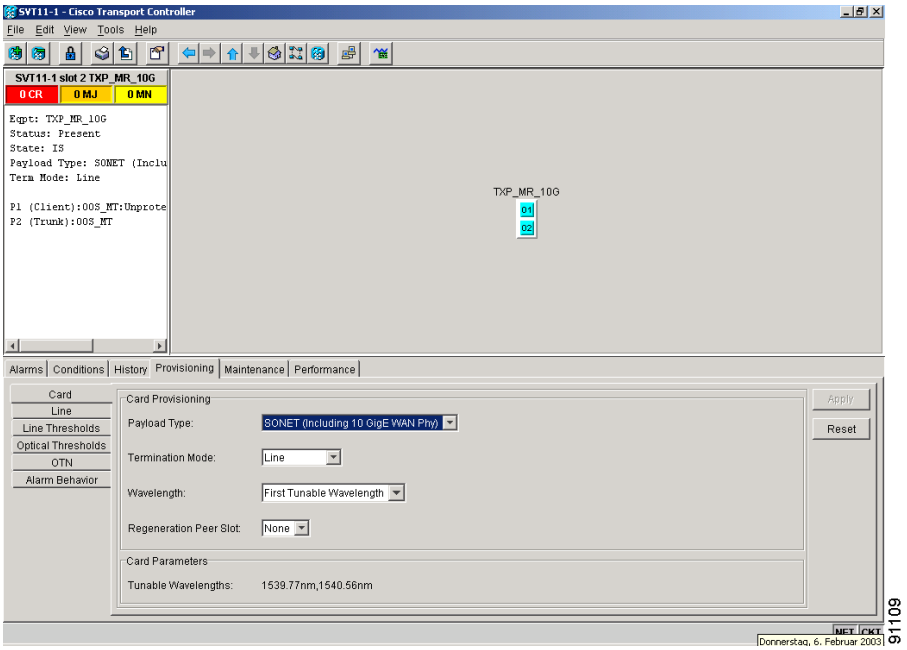
DLP-A274 Change Card Settings for TXP_MR_10G Cards

Purpose	This task changes the card settings for TXP_MR_10G (transponder) cards. The default card settings are provided in the "Card Default Settings" section on page C-4.
Tools/Equipment	None
Prerequisite Procedures	DLP-A60 Log into CTC, page 3-23
Required/As Needed	As needed
Onsite/Remote	Onsite or remote
Security Level	Provisioning or higher

Step 1 Double-click the TXP_MR_10G card where you want to change the line settings.

Step 2 Click the **Provisioning > Card** tabs (Figure 11-1).

Figure 11-3 Provisioning Card Parameters on the TXP_MR_10G Card



Step 3 Modify any of the settings described in Table 11-20.

Step 4 Click **Apply**.

Table 11-20 TXP_MR_10G (Transponder) Card Settings

Parameter	Description	Options
Payload Type	Sets the type of payload	• SONET/10 GigE WAN Phy • SDH • 10 GigE LAN Phy
Termination Mode	Sets the mode of operation	• Transparent • Line

Table 11-20 TXP_MR_10G (Transponder) Card Settings (continued)

Parameter	Description	Options
Wavelength	Sets the wavelength of the DWDM side optical transmitter	• First Tunable Wavelength • (Further wavelengths in 100 GHz ITU spacing)
Regeneration Peer Slot	Sets the regeneration peer slot	• None • 1 • 2 • 3 • 4 • 5 • 6 • 12 • 13 • 14 • 15 • 16 • 17

Step 5 Return to your originating procedure (NTP).

DLP-A275 Change Line Settings for TXP_MR_10G Cards

Purpose	This task changes the line settings for TXP_MR_10G (transponder) cards. The default card settings are provided in the "Card Default Settings" section on page C-4.
Tools/Equipment	None
Prerequisite Procedures	DLP-A60 Log into CTC, page 3-23
Required/As Needed	As needed
Onsite/Remote	Onsite or remote
Security Level	Provisioning or higher

Step 1 Double-click the TXP_MR_10G card where you want to change the line settings.

Step 2 Click the **Provisioning > Line** tab.

Step 3 Modify any of the settings described in Table 11-21.

For the factory default settings for the TXP_MR_10G cards, see Table C-11 on page C-28.

Step 4 Click **Apply**.

Table 11-21 TXP_MR_10G (Transponder) Card Line Settings

Parameter	Description	Options
Port #	Port number (read-only)	• 1 • 2
Port Name	Provides the ability to assign the specified port a name	User-defined. Name can be up to 32 alphanumeric/special characters. Blank by default. See the "DLP-A314 Assign a Name to a Port" procedure on page 6-17.
SF BER Level	Sets the signal fail bit error rate	• 1E-3 • 1E-4 • 1E-5
SD BER Level	Sets the signal degrade bit error rate	• 1E-5 • 1E-6 • 1E-7 • 1E-8 • 1E-9
State	Places port in service, out of service, out of service-maintenance, or out of service-auto in service.	• IS • OOS • OOS_MT • OOS_AINS
AINS Soak	Automatic in-service soak	• Duration of valid input signal in hh.mm after which the card becomes in service (IS) automatically. • 0 to 48 hours, 15 minutes increments.
ALS Mode	Sets the automatic laser shutdown function	• Disabled • Auto Restart • Manual Restart • Manual Restart for Test

Step 5 Return to your originating procedure (NTP).

DLP-A276 Change Line Threshold Settings for TXP_MR_10G Cards

Purpose	This task changes the line threshold settings for TXP_MR_10G (transponder) cards. The default card settings are provided in the "Card Default Settings" section on page C-4.
Tools/Equipment	None
Prerequisite Procedures	DLP-A60 Log into CTC, page 3-23
Required/As Needed	As needed
Onsite/Remote	Onsite or remote
Security Level	Provisioning or higher

Step 1 Double-click the TXP_MR_10G card where you want to change the line threshold settings.

Step 2 Click the **Provisioning > Line Thresholds** tabs.

Step 3 Modify any of the settings described in Table 11-22.

For the factory default settings for the TXP_MR_10G cards, see Table C-11 on page C-28.

Step 4 Click **Apply**.

Table 11-22 TXP_MR_10G (Transponder) Card Line Thresholds Settings

Parameter	Description	Options
Port #	Port number (read-only)	• 1 • 2
CV	Coding violations	Numeric. Can be set for Near End or Far End, for 15-minute or one-day intervals, or for Line (Far End only), Section or Line. Select bullet and click Refresh button.
ES	Errored seconds	Numeric. Can be set for Near End or Far End, for 15-minute or one-day intervals, or for Line (Far End only), Section or Line. Select bullet and click Refresh button.
SES	Severely errored seconds	Numeric. Can be set for Near End or Far End, for 15-minute or one-day intervals, or for Line (Far End only), Section or Line. Select bullet and click Refresh button.
SEFS	Severely errored framing seconds	Numeric. Can be set for Far End, for 15-minute or one-day intervals, for Section only. Select bullet and click Refresh button.

Table 11-22 TXP_MR_10G (Transponder) Card Line Thresholds Settings (continued)

Parameter	Description	Options
FC	Failure count	Numeric. Can be set for Near End or Far End, for 15-minute or one-day intervals, for Line only. Select bullet and click Refresh button.
UAS	Unavailable seconds	Numeric. Can be set for Near End or Far End, for 15-minute or one-day intervals, for Line only. Select bullet and click Refresh button.

Step 5 Return to your originating procedure (NTP).

DLP-A277 Change Optical Thresholds Settings for TXP_MR_10G Cards

Purpose	This task changes the optical threshold settings for TXP_MR_10G(Transponder) cards. The default card settings are provided in the "Card Default Settings" section on page C-4.
Tools/Equipment	None
Prerequisite Procedures	DLP-A60 Log into CTC, page 3-23
Required/As Needed	As needed
Onsite/Remote	Onsite or remote
Security Level	Provisioning or higher

Step 1 Double-click the OC-N card where you want to change the optical threshold settings.

Step 2 Click the **Provisioning > Optical Thresholds** tabs.

Step 3 Modify any of the settings described in Table 11-23.

For the factory default settings for the TXP_MR_10G cards, see Table C-11 on page C-28.

Step 4 Click **Apply**.

Table 11-23 TXP_MR_10G (Transponder) Card Optical Thresholds Settings

Parameter	Description	Options
Port #	Port number (read-only)	• 1 • 2
RX Power High (dBm)	Sets the warning threshold for high receiver input power	Numeric, in dBm range -16.5 to +30.0 (client side) range -21.0 to 30.0 (trunk side)
RX Power Low (dBm)	Sets the warning threshold for low receiver input power	Numeric, in dBm range -40.0 to +1.5 (client side) range -40.0 to -2.3 (trunk side)

Table 11-23 TXP_MR_10G (Transponder) Card Optical Thresholds Settings (continued)

Parameter	Description	Options
RX Temp High (C)	Sets the warning threshold for high receiver temperature	Numeric, in degrees Celsius 125 (client side, read only) range -3.75 to 125.0 (trunk side)
RX Temp Low (C)	Sets the warning threshold for low receiver temperature	Numeric, in degrees Celsius -40 (client side, read only) range -40.0 to 67.5 (trunk side)
Laser Bias High (%)	Sets the warning threshold for high laser bias current	Numeric, in percent range 37.5 to 100.0 (client side) range 37.5 to 100.0 (trunk side)
Laser Bias Low (%)	Sets the warning threshold for low laser bias current	Numeric, in percent range 0 to 37.5 (client side) range 0 to 37.5 (trunk side)
Laser Temp High (C)	Sets the warning threshold for high laser temperature	Numeric, in degrees Celsius range -7.5 to 125.0 (client side) range 3.75 to 125.0 (trunk side)
Laser Temp Low (C)	Sets the warning threshold for low laser temperature	Numeric, in degrees Celsius range -40.0 to 56.25 (client side) range -40.0 to 33.75 (trunk side)
TX Power High (dBm)	Sets the warning threshold for high transmitter output power	Numeric, in dBm range -17.0 to 30.0 (client side) range -18.8 to 30.0 (trunk side)
TX Power Low (dBm)	Sets the warning threshold for low transmitter output power	Numeric, in dBm range -40.0 to 1.5 (client side) range -40.0 to 2.6 (trunk side)

Step 5 Return to your originating procedure (NTP).

DLP-A278 Change Section Trace Settings for TXP_MR_10G Cards

Purpose	This task changes the section trace settings for TXP_MR_10G (transponder) cards. The default card settings are provided in the "Card Default Settings" section on page C-4.
Tools/Equipment	None
Prerequisite Procedures	DLP-A60 Log into CTC, page 3-23
Required/As Needed	As needed
Onsite/Remote	Onsite or remote
Security Level	Provisioning or higher

Step 1 Double-click the TXP_MR_10G card where you want to change the section trace settings.

Step 2 Click the **Provisioning > Section Trace** tab.

Step 3 Modify any of the settings described in Table 11-24.

For the factory default settings for the TXP_MR_10G cards, see Table C-11 on page C-28.

Step 4 Click **Apply**.

Table 11-24 TXP_MR_10G (Transponder) Card Section Trace Settings

Parameter	Description	Options
Port #	Port number	• 1 • 2
Trace Mode	Sets the trace mode	• Off/None • Manual
Section Trace String Size	Sets the trace string size	• 1 byte • 16 byte
Transmit	Displays the current transmit string; sets a new transmit string	String of trace string size
Expected	Displays the current expected string; sets a new expected string	String of trace string size
Received	Displays the current received string (read only)	String of trace string size

Step 5 Return to your originating procedure (NTP).

DLP-A279 Change Optical Transport Network Settings for TXP_MR_10G Cards

Purpose	This task changes the line optical transport network (OTN) settings for TXP_MR_10G (transponder) cards. The default card settings are provided in the "Card Default Settings" section on page C-4.
Tools/Equipment	None
Prerequisite Procedures	DLP-A60 Log into CTC, page 3-23
Required/As Needed	As needed
Onsite/Remote	Onsite or remote
Security Level	Provisioning or higher

Step 1 Double-click the TXP_MR_10G card where you want to change the OTN settings.

Step 2 Click the **Provisioning > OTN** tabs.

Step 3 Modify any of the settings described in Table 11-25.

For the factory default settings for the TXP_MR_10G cards, see Table C-11 on page C-28.

Step 4 Click **Apply**.

Table 11-25 TXP_MR_10G (Transponder) Card OTN Settings

Parameter	Description	Options
OTN Lines Port #	Port number (read-only)	2
OTN Lines G.709 OTN	Sets the OTN lines according to ITU-T G.709	• enabled • disabled
OTN Lines FEC	Sets the OTN lines to forward error correction (FEC)	• enabled • disabled
OTN Lines SF BER	Sets the signal fail bit error rate	• 1E-3 • 1E-4 • 1E-5
OTN Lines SD BER	Sets the signal degrade bit error rate	• 1E-5 • 1E-6 • 1E-7 • 1E-8 • 1E-9
OTN Lines TxPower (dBm)	Sets the laser transmit power on the trunk side using variable optical attenuator (VOA)	—24.0 to +2 dBm in 0.1 dB steps
G.709 Thresholds Port	Port number (read-only)	2
G.709 Thresholds ES	Errored seconds	Numeric. Can be set for Near End or Far End, for 15-minute or one-day intervals, for SM (OTUk) or PM (ODUk). Select bullet and click Refresh button.
G.709 Thresholds SES	Severely errored seconds	Numeric. Can be set for Near End or Far End, for 15-minute or one-day intervals, for SM (OTUk) or PM (ODUk). Select bullet and click Refresh button.
G.709 Thresholds UAS	Unavailable seconds	Numeric. Can be set for Near End or Far End, for 15-minute or one-day intervals, for SM (OTUk) or PM (ODUk). Select bullet and click Refresh button.
G.709 Thresholds BBE	Background block errors	Numeric. Can be set for Near End or Far End, for 15-minute or one-day intervals, for SM (OTUk) or PM (ODUk). Select bullet and click Refresh button.
G.709 Thresholds FC	Failure counter	Numeric. Can be set for Near End or Far End, for 15-minute or one-day intervals, for SM (OTUk) or PM (ODUk). Select bullet and click Refresh button.

Table 11-25 TXP_MR_10G (Transponder) Card OTN Settings (continued)

Parameter	Description	Options
FEC Thresholds Port	Port number (read-only)	2
FEC Thresholds	Bit Errors Corrected	Numeric. Can be set for 15-minute or one-day intervals.
FEC Thresholds	Byte Errors Corrected	Numeric. Can be set for 15-minute or one-day intervals.
FEC Thresholds	Zero Bit Errors Detected	Numeric. Can be set for 15-minute or one-day intervals.
FEC Thresholds	One Bit Errors Detected	Numeric. Can be set for 15-minute or one-day intervals.
FEC Thresholds	Uncorrectable Words	Numeric. Can be set for 15-minute or one-day intervals.
Trail Trace Identifier	Level	• Section • Path
Trail Trace Identifier Trace Mode	Sets the trace mode	• Off/None • Manual
Trail Trace Identifier Transmit	Displays the current transmit string; sets a new transmit string	String of trace string size; trail trace identifier is 64 bytes in length.
Trail Trace Identifier Expected	Displays the current expected string; sets a new expected string	String of trace string size
Trail Trace Identifier Received	Displays the current received string (read only)	String of trace string size

Step 5 Return to your originating procedure (NTP).

NTP-A207 Modify Line Settings and PM Parameter Thresholds for MXP_2.5G_10G Cards

Purpose	This procedure changes the line and threshold settings for MXP_2.5G_10G (muxponder) cards. The default card settings are provided in the "Card Default Settings" section on page C-4.
Tools/Equipment	None
Prerequisite Procedures	None
Required/As Needed	As needed
Onsite/Remote	Onsite or remote
Security Level	Provisioning or higher

Step 1 Log into the ONS 15454 node where you want to change the settings. See the "DLP-A60 Log into CTC" task on page 3-23.

Step 2 Complete the "NTP-A108 Back Up the Database" procedure on page 15-8.

Step 3 Perform any of the following tasks as needed:

- DLP-A280 Change Card Settings for MXP_2.5G_10G Cards, page 11-36
- DLP-A281 Change Line Settings for MXP_2.5G_10G Cards, page 11-37
- DLP-A282 Change Line Thresholds Settings for MXP_2.5G_10G Cards, page 11-40
- DLP-A283 Change Optical Thresholds Settings for MXP_2.5G_10G Cards, page 11-41

Step 4 Complete the "NTP-A108 Back Up the Database" procedure on page 15-8.

Stop. You have completed this procedure.

DLP-A280 Change Card Settings for MXP_2.5G_10G Cards

Purpose	This task changes the card settings for MXP_2.5G_10G (muxponder) cards, including payload type, termination mode, and wavelength. The default card settings are provided in the "Card Default Settings" section on page C-4.
Tools/Equipment	None
Prerequisite Procedures	DLP-A60 Log into CTC, page 3-23
Required/As Needed	As needed
Onsite/Remote	Onsite or remote
Security Level	Provisioning or higher

Step 1 Double-click the MXP_2.5G_10G card where you want to change the card settings.

Step 2 Click the **Provisioning > Card** tabs.

Step 3 Modify any of the settings described in Table 11-26.

For the factory default settings for the MXP_2.5G_10G cards, see Table C-6 on page C-15.

Step 4 Click **Apply**.

Table 11-26 MXP_2.5G_10G (Muxponder) Card Settings

Parameter	Description	Options
Payload Type	Sets the type of payload	• SONET • SDH
Termination Mode	Sets the mode of operation	• Transparent • Line
Wavelength	Sets the wavelength of the DWDM side optical transmitter	• First Tunable Wavelength • (Further wavelengths in 100 GHz ITU spacing)

Step 5 Return to your originating procedure (NTP).

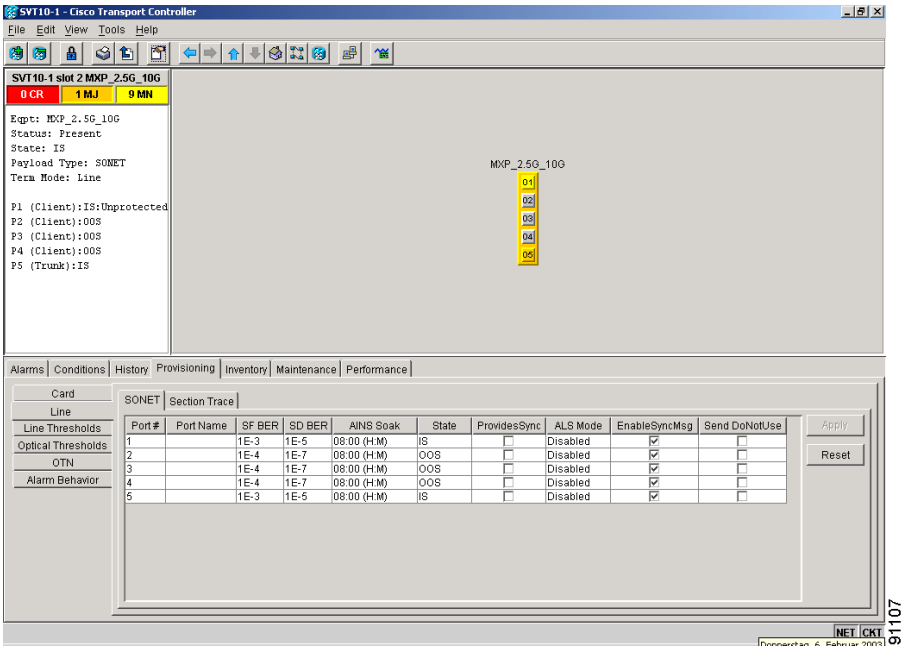
DLP-A281 Change Line Settings for MXP_2.5G_10G Cards

Purpose	This task changes the line settings for MXP_2.5G_10G (muxponder) cards. The default card settings are provided in the "Card Default Settings" section on page C-4.
Tools/Equipment	None
Prerequisite Procedures	DLP-A60 Log into CTC, page 3-23
Required/As Needed	As needed
Onsite/Remote	Onsite or remote
Security Level	Provisioning or higher

Step 1 Double-click the MXP_2.5G_10G card where you want to change the line settings.

Step 2 Click the **Provisioning > Line** tab (Figure 11-1).

Figure 11-4 Provisioning Line Parameters on the MXP_2.5G_10G Card



Step 3 Modify any of the settings described in Table 11-27.

For the factory default settings for the MXP_2.5G_10G cards, see Table C-6 on page C-15.

Step 4 Click **Apply**.

Table 11-27 MXP_2.5G_10G (Muxponder) Card Line Settings

Parameter	Description	Options
Port #	Port number (read-only)	• 1 • 2 • 3 • 4 • 5
Port Name	Provides the ability to assign the specified port a name	User-defined. Name can be up to 32 alphanumeric/special characters. Blank by default. See the "DLP-A314 Assign a Name to a Port" task on page 6-17.
SF BER Level	Sets the signal fail bit error rate	• 1E-3 • 1E-4 • 1E-5

Table 11-27 MXP_2.5G_10G (Muxponder) Card Line Settings (continued)

Parameter	Description	Options
SD BER Level	Sets the signal degrade bit error rate	• 1E-5 • 1E-6 • 1E-7 • 1E-8 • 1E-9
State	Places port in service, out of service, out of service-maintenace, or out of service-auto in service	• IS • OOS • OOS_MT • OOS_AINS
AINS Soak	Automatic in-service soak	• Duration of valid input signal in hh.mm after which the card becomes in service (IS) automatically. • 0 to 48 hours, 15 minutes increments
ALS Mode	Sets the automatic laser shutdown function	• Disabled • Auto Restart • Manual Restart • Manual Restart for Test
Provides Sync	If checked, the card is provisioned as a network element timing reference	• Yes • No (Read-only)
Enable Sync Msg	Enables synchronization status messages (S1 byte), which allow the node to choose the best timing source	• Yes • No
Send DoNotUse	When checked, sends a DUS (do not use) message on the S1 byte	• Yes • No

Step 5 Return to your originating procedure (NTP).

DLP-A282 Change Line Thresholds Settings for MXP_2.5G_10G Cards

Purpose	This task changes the line threshold settings for MXP_2.5G_10G (Muxponder) cards. The default card settings are provided in the "Card Default Settings" section on page C-4.
Tools/Equipment	None
Prerequisite Procedures	DLP-A60 Log into CTC, page 3-23
Required/As Needed	As needed
Onsite/Remote	Onsite or remote
Security Level	Provisioning or higher

Step 1 Double-click the MXP_2.5G_10G card where you want to change the line threshold settings.

Step 2 Click the **Provisioning > Line Thresholds** tabs.

Step 3 Modify any of the settings described in Table 11-28.

For the factory default settings for the MXP_2.5G_10G cards, see Table C-6 on page C-15.

Step 4 Click **Apply**.

Table 11-28 MXP_2.5G_10G (Muxponder) Card Line Threshold Settings

Parameter	Description	Options
Port #	Port number (read-only)	• 1 • 2 • 3 • 4 • 5
CV	Coding violations	Numeric. Can be set for Near End or Far End, for 15-minute or one-day intervals, or for Line (Far End only), Section or Line. Select bullet and click Refresh button.
ES	Errored seconds	Numeric. Can be set for Near End or Far End, for 15-minute or one-day intervals, or for Line (Far End only), Section or Line. Select bullet and click Refresh button.
SES	Severely errored seconds	Numeric. Can be set for Near End or Far End, for 15-minute or one-day intervals, or for Line (Far End only), Section or Line. Select bullet and click Refresh button.
SEFS	Severely errored framing seconds	Numeric. Can be set for Far End, for 15-minute or one-day intervals, for Section only. Select bullet and click Refresh button.

Table 11-28 MXP_2.5G_10G (Muxponder) Card Line Threshold Settings (continued)

Parameter	Description	Options
FC	Failure count	Numeric. Can be set for Near End or Far End, for 15-minute or one-day intervals, for Line only. Select bullet and click Refresh button.
UAS	Unavailable seconds	Numeric. Can be set for Near End or Far End, for 15-minute or one-day intervals, for Line only. Select bullet and click Refresh button.

Step 5 Return to your originating procedure (NTP).

DLP-A283 Change Optical Thresholds Settings for MXP_2.5G_10G Cards

Purpose	This task changes the optical threshold settings for MXP_2.5G_10G (muxponder) cards. The default card settings are provided in the "Card Default Settings" section on page C-4.
Tools/Equipment	None
Prerequisite Procedures	DLP-A60 Log into CTC, page 3-23
Required/As Needed	As needed
Onsite/Remote	Onsite or remote
Security Level	Provisioning or higher

Step 1 Double-click the MXP_2.5G_10G card where you want to change the optical threshold settings.

Step 2 Click the **Provisioning > Optical Thresholds** tabs.

Step 3 Modify any of the settings described in Table 11-29.

For the factory default settings for the MXP_2.5G_10G cards, see Table C-6 on page C-15.

Step 4 Click **Apply**.

Table 11-29 MXP_2.5G_10G (Muxponder) Card Optical Threshold Settings

Parameter	Description	Options
Port #	Port number (read-only)	• 1 • 2 • 3 • 4 • 5
RX Power High (dBm)	Sets the warning threshold for high receiver input power	Numeric, in dBm range -16.5 to +30.0 (client side) range -21.0 to 30.0 (trunk side)

Table 11-29 MXP_2.5G_10G (Muxponder) Card Optical Threshold Settings (continued)

Parameter	Description	Options
RX Power Low (dBm)	Sets the warning threshold for low receiver input power	Numeric, in dBm range -40.0 to +1.5 (client side) range -40.0 to -2.3 (trunk side)
RX Temp High (C)	Sets the warning threshold for high receiver temperature	Numeric, in degrees Celsius 125 (client side, read only) range -3.75 to 125.0 (trunk side)
RX Temp Low (C)	Sets the warning threshold for low receiver temperature	Numeric, in degrees Celsius -40 (client side, read only) range -40.0 to 67.5 (trunk side)
Laser Bias High (%)	Sets the warning threshold for high laser bias current	Numeric, in percent range 37.5 to 100.0 (client side) range 37.5 to 100.0 (trunk side)
Laser Bias Low (%)	Sets the warning threshold for low laser bias current	Numeric, in percent range 0 to 37.5 (client side) range 0 to 37.5 (trunk side)
Laser Temp High (C)	Sets the warning threshold for high laser temperature	Numeric, in degrees Celsius range -7.5 to 125.0 (client side) range 3.75 to 125.0 (trunk side)
Laser Temp Low (C)	Sets the warning threshold for low laser temperature	Numeric, in degrees Celsius range -40.0 to 56.25 (client side) range -40.0 to 33.75 (trunk side)
TX Power High (dBm)	Sets the warning threshold for high transmitter output power	Numeric, in dBm range -17.0 to 30.0 (client side) range -18.8 to 30.0 (trunk side)
TX Power Low (dBm)	Sets the warning threshold for low transmitter output power	Numeric, in dBm range -40.0 to 1.5 (client side) range -40.0 to 2.6 (trunk side)

Step 5 Return to your originating procedure (NTP).

DLP-A284 Change Section Trace Settings for MXP_2.5G_10G Cards

Purpose	This task changes the section trace settings for MXP_2.5G_10G (muxponder) cards. The default card settings are provided in the "Card Default Settings" section on page C-4.
Tools/Equipment	None
Prerequisite Procedures	DLP-A60 Log into CTC, page 3-23
Required/As Needed	As needed
Onsite/Remote	Onsite or remote
Security Level	Provisioning or higher

Step 1 Double-click the MXP_2.5G_10G card where you want to change the section trace settings.

Step 2 Click the **Provisioning > Section Trace** tabs.

Step 3 Modify any of the settings described in Table 11-30.

For the factory default settings for the MXP_2.5G_10G cards, see Table C-6 on page C-15.

Step 4 Click **Apply**.

Table 11-30 MXP_2.5G_10G (Muxponder) Card Section Trace Settings

Parameter	Description	Options
Port #	Port number	• 1 • 2 • 3 • 4 • 5
Trace Mode	Sets the trace mode	• Off/None • Manual
Section Trace String Size	Sets the trace string size	• 1 byte • 16 byte
Transmit	Displays the current transmit string; sets a new transmit string	String of trace string size
Expected	Displays the current expected string; sets a new expected string	String of trace string size
Received	Displays the current received string (read only)	String of trace string size

Step 5 Return to your originating procedure (NTP).

DLP-A285 Change Optical Transport Network Settings for MXP_2.5G_10G Cards

Purpose	This task changes the line OTN settings for MXP_2.5G_10G (muxponder) cards. The default card settings are provided in the "Card Default Settings" section on page C-4.
Tools/Equipment	None
Prerequisite Procedures	DLP-A60 Log into CTC, page 3-23
Required/As Needed	As needed
Onsite/Remote	Onsite or remote
Security Level	Provisioning or higher

Step 1 Double-click the MXP_2.5G_10G card where you want to change the OTN settings.

Step 2 Click the **Provisioning > OTN** tabs.

Step 3 Modify any of the settings described in Table 11-31.

For the factory default settings for the MXP_2.5G_10G cards, see Table C-6 on page C-15.

Step 4 Click **Apply**.

Table 11-31 MXP_2.5G_10G (Muxponder) Card OTN Settings

Parameter	Description	Options
OTN Lines Port #	Port number (read-only)	5
OTN Lines G.709 OTN	Sets the OTN lines according to ITU-T G.709	• Enabled • Disabled
OTN Lines FEC	Sets the OTN lines to forward error correction (FEC)	• Enabled • Disabled
OTN Lines SF BER	Sets the signal fail bit error rate	• 1E-3 • 1E-4 • 1E-5
OTN Lines SD BER	Sets the signal degrade bit error rate	• 1E-5 • 1E-6 • 1E-7 • 1E-8 • 1E-9
OTN Lines TxPower (dBm)	Sets the laser transmit power on the trunk side using variable optical attenuator (VOA)	—24.0 to +2 dBm in 0.1 dB steps
G.709 Thresholds Port	Port number (read-only)	5
G.709 Thresholds ES	Errored seconds	Numeric. Can be set for Near End or Far End, for 15-minute or one-day intervals, for SM (OTUk) or PM (ODUk). Select bullet and click Refresh button.
G.709 Thresholds SES	Severely errored seconds	Numeric. Can be set for Near End or Far End, for 15-minute or one-day intervals, for SM (OTUk) or PM (ODUk). Select bullet and click Refresh button.
G.709 Thresholds UAS	Unavailable seconds	Numeric. Can be set for Near End or Far End, for 15-minute or one-day intervals, for SM (OTUk) or PM (ODUk). Select bullet and click Refresh button.

Table 11-31 MXP_2.5G_10G (Muxponder) Card OTN Settings (continued)

Parameter	Description	Options
G.709 Thresholds BBE	Background block errors	Numeric. Can be set for Near End or Far End, for 15-minute or one-day intervals, for SM (OTUk) or PM (ODUk). Select bullet and click Refresh button.
G.709 Thresholds FC	Failure counter	Numeric. Can be set for Near End or Far End, for 15-minute or one-day intervals, for SM (OTUk) or PM (ODUk). Select bullet and click Refresh button.
FEC Thresholds Port	Port number (read-only)	5
FEC Thresholds	Bit Errors Corrected	Numeric. Can be set for 15-minute or one-day intervals.
FEC Thresholds	Byte Errors Corrected	Numeric. Can be set for 15-minute or one-day intervals.
FEC Thresholds	Zero Bit Errors Detected	Numeric. Can be set for 15-minute or one-day intervals.
FEC Thresholds	One Bit Errors Detected	Numeric. Can be set for 15-minute or one-day intervals.
FEC Thresholds	Uncorrectable Words	Numeric. Can be set for 15-minute or one-day intervals.
Trail Trace Identifier Level	Level	• Section • Path
Trail Trace Identifier Trace Mode	Sets the trace mode	• Off/None • Manual
Trail Trace Identifier Transmit	Displays the current transmit string; sets a new transmit string	String of trace string size; trail trace identifier is 64 bytes in length.
Trail Trace Identifier Expected	Displays the current expected string; sets a new expected string	String of trace string size
Trail Trace Identifier Received	Displays the current received string (read only)	String of trace string size

Step 5 Return to your originating procedure (NTP).

NTP-A90 Modify Alarm Interface Controller Settings

Purpose	This procedure provisions the AIC card to receive input from, or send output to, external devices wired to the backplane (called external alarms and controls or environmental alarms).
Tools/Equipment	None
Prerequisite Procedures	None
Required/As Needed	As needed
Onsite/Remote	Onsite or remote
Security Level	Provisioning or higher

Note If you are provisioning the AIC card for the first time, see the "NTP-A32 Provision External Alarms and Controls on the Alarm Interface Controller" task on page 7-33.

Step 1 Log into the ONS 15454 node where you want to change the AIC card settings. See the "DLP-A60 Log into CTC" task on page 3-23.

Step 2 Complete the "NTP-A108 Back Up the Database" procedure on page 15-8.

Step 3 Perform any of the following tasks as needed:

- DLP-A173 Change External Alarms Using the AIC Card, page 11-46
- DLP-A174 Change External Controls Using the AIC Card, page 11-48
- DLP-A175 Change Orderwire Settings Using the AIC Card, page 11-48

Step 4 Complete the "NTP-A108 Back Up the Database" procedure on page 15-8.

Stop. You have completed this procedure.

DLP-A173 Change External Alarms Using the AIC Card

Purpose	This task changes external alarm settings on the AIC card.
Tools/Equipment	None
Prerequisite Procedures	DLP-A60 Log into CTC, page 3-23
Required/As Needed	As needed
Onsite/Remote	Onsite or remote
Security Level	Provisioning or higher

Step 1 Confirm that external-device relays are wired to the ENVIR ALARMS IN backplane pins. See the "DLP-A19 Install Alarm Wires on the Backplane" task on page 1-35 for more information.

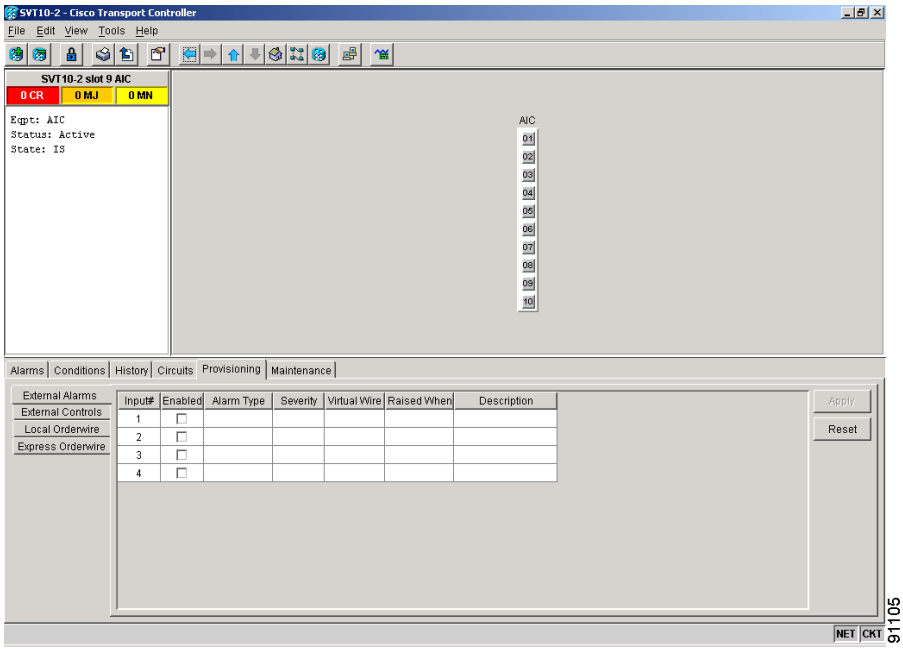
Step 2 Double-click the AIC card to display it in card view.

Step 3 Click the **Provisioning > External Alarms** tabs (Figure 11-5 on page 11-47).

Step 4 Modify any of the following fields for each external device wired to the ONS 15454 backplane. For definitions of these fields, see the "NTP-A32 Provision External Alarms and Controls on the Alarm Interface Controller" procedure on page 7-33.

- Enabled
- Alarm Type
- Severity
- Virtual Wire
- Raised When
- Description

Figure 11-5 Provisioning External Alarms on the AIC Card



Step 5 To provision additional devices, complete Step 4 for each additional device.

Step 6 Click **Apply**.

Step 7 Return to your originating procedure (NTP).

DLP-A174 Change External Controls Using the AIC Card

Purpose	This task changes external control settings on the AIC card.
Tools/Equipment	None
Prerequisite Procedures	DLP-A60 Log into CTC, page 3-23
Required/As Needed	As needed
Onsite/Remote	Onsite or remote
Security Level	Provisioning or higher

Step 1 Verify the external control relays to the ENVIR ALARMS OUT backplane pins. See the "DLP-A19 Install Alarm Wires on the Backplane" task on page 1-35 for more information.

Step 2 Double-click the AIC card to display it in card view.

Step 3 On the **External Controls** subtab, modify any of the following fields for each external control wired to the ONS 15454 backplane. For definitions of these fields, see the "NTP-A32 Provision External Alarms and Controls on the Alarm Interface Controller" task on page 7-33.

- Enabled
- Trigger Type
- Control Type
- Description

Step 4 To provision additional controls, complete Step 3 for each additional device.

Step 5 Click **Apply**.

Step 6 Return to your originating procedure (NTP).

DLP-A175 Change Orderwire Settings Using the AIC Card

Purpose	This task changes orderwire settings on the AIC card.
Tools/Equipment	None
Prerequisite Procedures	DLP-A60 Log into CTC, page 3-23
Required/As Needed	As needed
Onsite/Remote	Onsite or remote
Security Level	Provisioning or higher

Caution When provisioning orderwire for ONS 15454s residing in a ring, do not provision a complete orderwire loop. For example, a four-node ring typically has east and west ports provisioned at all four nodes. However, to prevent orderwire loops, provision two orderwire ports (east and west) at all but one of the ring nodes.

Tip Before you begin, make a list of the ONS 15454 slots and ports that require orderwire communication.

Step 1 Double-click the AIC to display it in card view.

Step 2 Select the **Provisioning > Local Orderwire** tabs or **Provisioning > Express Orderwire** tabs, depending on the orderwire path that you want to create.

The Local Orderwire subtab is shown in Figure 11-7 on page 11-53. The example shows the subtab for the AIC-I card. The screen for the AIC card is similar. Provisioning steps are the same for both types of orderwire.

Step 3 If needed, adjust the Tx and Rx dBm by moving the slider to the right or left for the headset type (four-wire or two-wire) that you will use. In general, you should not need to adjust the dBm.

Step 4 Click **Apply**.

Step 5 Return to your originating procedure (NTP).

NTP-A118 Modify Alarm Interface Controller-International Settings

Purpose	This procedure provisions the AIC-I card to receive input from, or send output to, external devices wired to the backplane (called external alarms and controls or environmental alarms), or to change orderwire settings.
Tools/Equipment	None
Prerequisite Procedures	None
Required/As Needed	As needed
Onsite/Remote	Onsite or remote
Security Level	Provisioning or higher

Note If you are provisioning the AIC-I card for the first time, see the "NTP-A123 Provision External Alarms and Controls on the Alarm Interface Controller-International" procedure on page 7-35.

Step 1 Log into the ONS 15454 node where you want to change the AIC-I card settings. See the "DLP-A60 Log into CTC" task on page 3-23.

Step 2 Complete the "NTP-A108 Back Up the Database" procedure on page 15-8.

Step 3 Perform any of the following tasks as needed:

- DLP-A208 Change External Alarms Using the AIC-I Card, page 11-50
- DLP-A209 Change External Controls Using the AIC-I Card, page 11-51
- DLP-A210 Change AIC-I Card Orderwire Settings, page 11-52

Step 4 Complete the "NTP-A108 Back Up the Database" procedure on page 15-8.

Stop. You have completed this procedure.

DLP-A208 Change External Alarms Using the AIC-I Card

Purpose	This task changes external alarm settings on the AIC-I card.
Tools/Equipment	None
Prerequisite Procedures	DLP-A60 Log into CTC, page 3-23
Required/As Needed	As needed
Onsite/Remote	Onsite or remote
Security Level	Provisioning or higher

Step 1 Confirm that external-device relays are wired to the ENVIR ALARMS IN backplane pins. See the "DLP-A19 Install Alarm Wires on the Backplane" task on page 1-35 for more information.

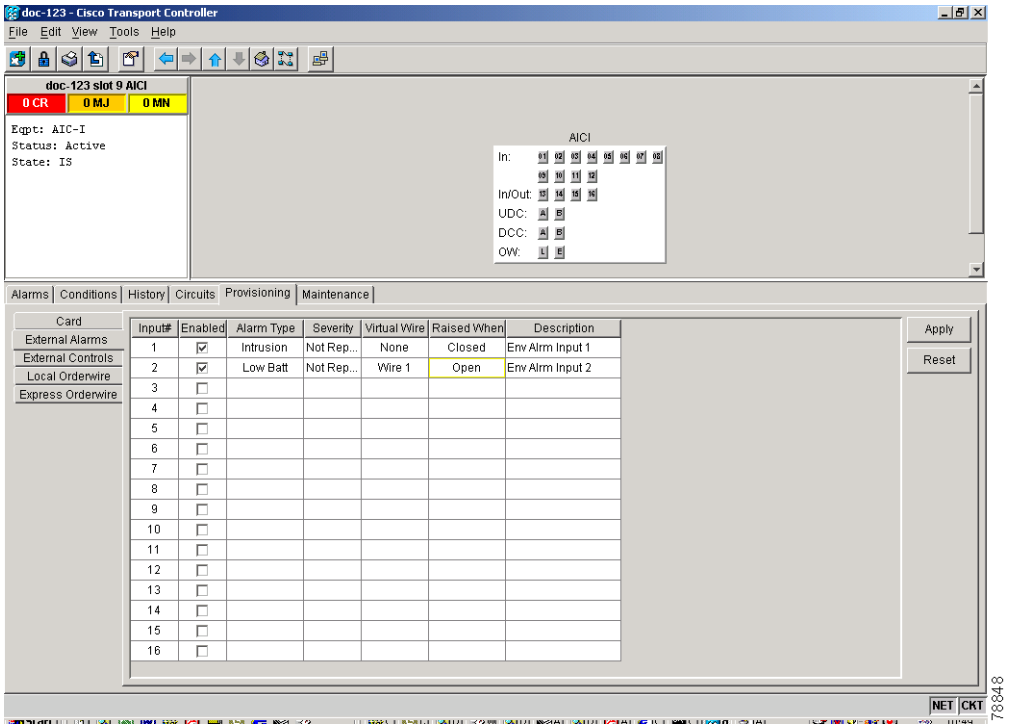
Step 2 Double-click the AIC-I card to display it in card view.

Step 3 Click the **Provisioning > External Alarms** tabs (Figure 11-6 on page 11-51).

Step 4 Modify any of the following fields for each external device wired to the ONS 15454 backplane. For definitions of these fields, see the "NTP-A32 Provision External Alarms and Controls on the Alarm Interface Controller" task on page 7-33.

- Enabled
- Alarm Type
- Severity
- Virtual Wire
- Raised When
- Description

Figure 11-6 Provisioning External Alarms on the AIC-I Card



Step 5 To provision additional devices, complete Step 4 for each additional device.

Step 6 Click **Apply**.

Step 7 Return to your originating procedure (NTP).

Note The procedure is the same if you are using the Alarm Expansion panel (AEP). In this case, the number of contacts that are shown on the screen is changed accordingly.

DLP-A209 Change External Controls Using the AIC-I Card

Purpose	This task changes external control settings on the AIC-I card.
Tools/Equipment	None
Prerequisite Procedures	DLP-A60 Log into CTC, page 3-23
Required/As Needed	As needed
Onsite/Remote	Onsite or remote
Security Level	Provisioning or higher

Step 1 Verify the external control relays to the ENVIR ALARMS OUT backplane pins. See the "DLP-A19 Install Alarm Wires on the Backplane" task on page 1-35 for more information.

Step 2 Double-click the AIC-I card to display it in card view.

Step 3 On the **External Controls** subtab, modify any of the following fields for each external control wired to the ONS 15454 backplane. For definitions of these fields, see the "NTP-A32 Provision External Alarms and Controls on the Alarm Interface Controller" procedure on page 7-33.

- Enabled
- Trigger Type
- Control Type
- Description

Step 4 To provision additional controls, complete Step 3 for each additional device.

Step 5 Click **Apply**.

Step 6 Return to your originating procedure (NTP).

Note The procedure is the same if you are using the Alarm Expansion panel (AEP). In this case, the number of contacts that are shown on the screen is changed accordingly.

DLP-A210 Change AIC-I Card Orderwire Settings

Purpose	This task changes orderwire settings on the AIC-I card.
Tools/Equipment	None
Prerequisite Procedures	DLP-A60 Log into CTC, page 3-23
Required/As Needed	As needed
Onsite/Remote	Onsite or remote
Security Level	Provisioning or higher

Caution When provisioning orderwire for ONS 15454s residing in a ring, do not provision a complete orderwire loop. For example, a four-node ring typically has east and west ports provisioned at all four nodes. However, to prevent orderwire loops, provision two orderwire ports (east and west) at all but one of the ring nodes.

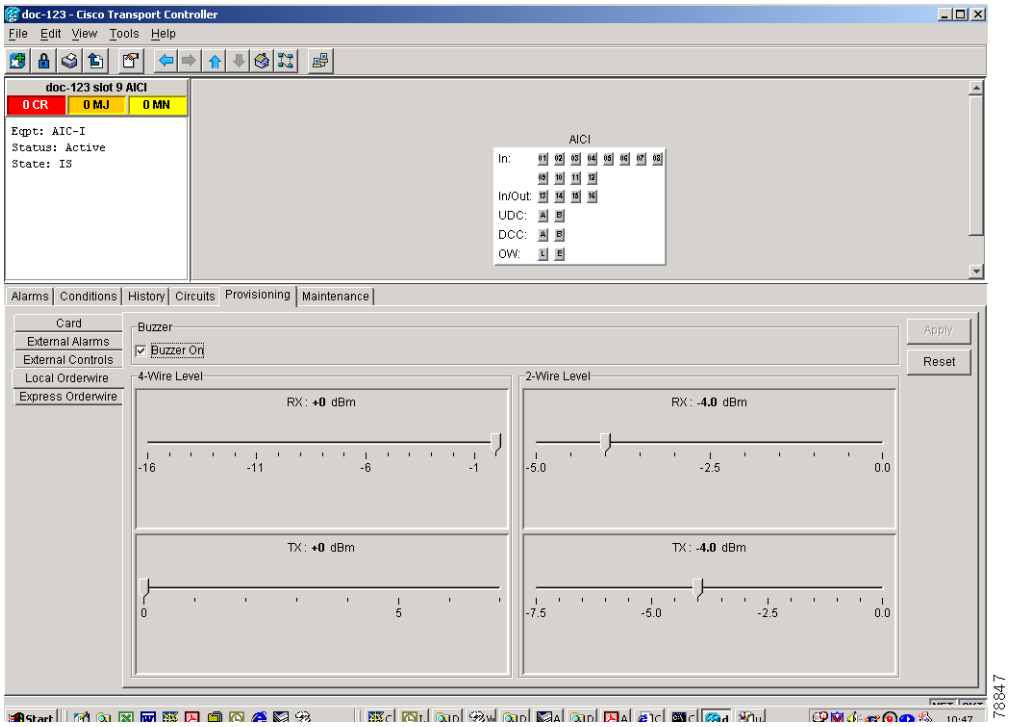
Tip Before you begin, make a list of the ONS 15454 slots and ports that require orderwire communication.

Step 1 Double-click the AIC-I card to display it in card view.

Step 2 Click the **Provisioning > Local Orderwire** tabs or the **Provisioning > Express Orderwire** tabs, depending on the orderwire path that you want to create.

Figure 11-7 shows the Local Orderwire subtab. Provisioning steps are the same for both types of orderwire.

Figure 11-7 Provisioning Local Orderwire



Step 3 If needed, adjust the Tx and Rx dBm by moving the slider to the right or left for the headset type (four-wire or two-wire) that you will use. In general, you should not need to adjust the dBm.

Step 4 If you want to turn on the audible alert (buzzer) for the orderwire, select (check) the **Buzzer On** check box.

Step 5 Click **Apply**.

Step 6 Return to your originating procedure (NTP).

NTP-A91 Upgrade DS-1 and DS-3 Protect Cards from 1:1 Protection to 1:N Protection

Purpose	This task converts DS-1 and DS-3 protect cards from 1:1 to 1:N protection.
Tools/Equipment	None
Prerequisite Procedures	None
Required/As Needed	As needed
Onsite/Remote	Onsite or remote
Security Level	Provisioning or higher

Step 1 Log into the ONS 15454 node where you want to change the settings. See the "DLP-A60 Log into CTC" task on page 3-23.

Step 2 Complete the "NTP-A108 Back Up the Database" procedure on page 15-8.

Step 3 Perform any of the following tasks as needed:

- DLP-A176 Convert DS1-14 Cards From 1:1 to 1:N Protection, page 11-54
- DLP-A177 Convert DS3-12 Cards From 1:1 to 1:N Protection, page 11-55
- DLP-A178 Convert DS3-12E Cards From 1:1 to 1:N Protection, page 11-57

Step 4 Complete the "NTP-A108 Back Up the Database" procedure on page 15-8.

Stop. You have completed this procedure.

DLP-A176 Convert DS1-14 Cards From 1:1 to 1:N Protection

Purpose	This task convers DS1-14 cards in a 1:1 protection scheme to 1:N protection.
Tools/Equipment	None
Prerequisite Procedures	DLP-A60 Log into CTC, page 3-23
Required/As Needed	As needed
Onsite/Remote	Onsite
Security Level	Provisioning or higher

Note This procedure assumes DS1-14 cards are installed in Slots 1 through 6 and/or Slots 12 through 17. The DS1-14 cards in Slots 3 and 15, which are the protection slots, will be replaced with DS1N-14 cards. The ONS 15454 must run CTC Release 2.0 or later. The procedure also requires at least one DS1N-14 card.

Step 1 In node view, click the **Maintenance > Protection** tabs.

Step 2 Click the protection group that contains Slot 3 or Slot 15 (where you will install the DS1N-14 card).

Step 3 Make sure the slot you are upgrading is not carrying working traffic. In the Selected Group list, the protect slot must say Protect/Standby (shown in Figure 11-7 on page 11-54) and not Protect/Active. If the protect slot status is Protect/Active, use the following steps to switch traffic to the working card:

a. Under Selected Group, click the protect card.

b. Next to Switch Commands, click **Switch**.

The working slot should change to Working/Active and the protect slot should change to Protect/Standby. If they do not change, do not continue. Troubleshoot the working card and slot to determine why the card cannot carry working traffic.

Step 4 Repeat Steps 1 – 3 for each protection group that you need to convert.

Step 5 Verify that no standing alarms exist for any of the DS1-14 cards that you are converting. If alarms exist and you have difficulty clearing them, contact your next level of support.

Step 6 Click the **Provisioning > Protection** tabs.

Step 7 Click the 1:1 protection group that contains the cards that you will move into the new protection group.

Step 8 Click **Delete**.

Step 9 When the confirmation dialog displays, click **Yes**.

Note Deleting the 1:1 protection group does not disrupt service. However, no protection bandwidth exists for the working circuits until you complete the 1:N protection procedure. Therefore, complete this procedure as quickly as possible.

Step 10 If needed, repeat Steps 7 – 9 for other protection groups.

Step 11 Physically remove the DS1-14 card from Slot 3 or Slot 15. This raises an improper removal alarm.

Step 12 In node view, right-click the slot that held the removed card and select **Delete** from the pull-down menu. Wait for the card to disappear from node view.

Step 13 Physically insert a DS1N-14 card into the same slot.

Step 14 Verify that the card boots up properly.

Step 15 Click the **Inventory** tab and verify that the new card appears as a DS1N-14.

Step 16 Click the **Provisioning** > **Protection** tabs.

Step 17 Click **Create**.

Step 18 Type a name for the protection group in the Name field (optional).

Step 19 From the Type pull-down menu, choose **1:N (card)**.

Step 20 From the Protect Card pull-down menu, choose the DS1N-14 card. Verify that the correct DS1N-14 card appears in the Protect Card field.

Step 21 Under Available Cards, highlight the cards that you want in the protection group. Click the arrow (>>) tab to move the cards to the Working Cards list.

Step 22 If necessary, set a new reversion time in the Reversion time pull-down menu.

Note 1:N protection groups are always revertive.

Step 23 Click **OK**. The protection group appears in the Protection Groups list on the Protection subtab.

Step 24 Return to your originating procedure (NTP).

DLP-A177 Convert DS3-12 Cards From 1:1 to 1:N Protection

Purpose	This task converts DS3-12 cards in a 1:1 protection scheme to 1:N protection.
Tools/Equipment	None
Prerequisite Procedures	DLP-A60 Log into CTC, page 3-23
Required/As Needed	As needed
Onsite/Remote	Onsite
Security Level	Provisioning or higher

Note This procedure assumes that DS3-12 cards are installed in Slots 1 - 6 and/or Slots 12 - 17. The DS3-12 cards in Slots 3 and 15, which are the protection slots, will be replaced with DS3N-12 cards. The ONS 15454 must run CTC Release 2.0 or later. The procedure also requires at least one DS3N-12 card and a protection group with DS3-12 cards.

Step 1 In node view, click the **Maintenance** > **Protection** tabs.

Step 2 Click the protection group containing Slot 15 (where you will install the DS3N-12 card).

Step 3 Make sure the slot you are upgrading is not carrying working traffic. In the Selected Group list, the protect slot must say Protect/Standby as shown in Figure 11-7 on page 11-54, and not Protect/Active. If the protect slot status is Protect/Active, use the following steps to switch traffic to the working card:

a. Under Selected Group, click the protect card.

b. Next to Switch Commands, click **Switch**.

The working slot should change to Working/Active and the protect slot should change to Protect/Standby. If they fail to change, do not continue. Troubleshoot the working card and slot to determine why the card cannot carry working traffic.

Step 4 Repeat Steps 2 and 3 for each protection group that you need to convert.

Step 5 Verify that no standing alarms exist for any of the DS3-12 cards you are converting. If alarms exist and you have difficulty clearing them, contact your next level of support.

Step 6 Click the **Provisioning** > **Protection** tabs.

Step 7 Click the 1:1 protection group that contains the cards that you will move into the new protection group.

Step 8 Click **Delete**.

Step 9 When the confirmation dialog displays, click **Yes**.

Note Deleting the 1:1 protection groups will not disrupt service. However, no protection bandwidth exists for the working circuits until the 1:N protection procedure is completed. Therefore, complete this procedure as soon as possible.

Step 10 If you are deleting more than one protection group, repeat Steps 7 – 9 for each group.

Step 11 Physically remove the DS3-12 card from Slot 3 or Slot 15. This raises an improper removal alarm.

Step 12 In node view, right-click the slot that held the removed card and choose **Delete** from the pull-down menu. Wait for the card to disappear from the node view.

Step 13 Physically insert a DS3N-12 card into the same slot.

Step 14 Verify that the card boots up properly.

Step 15 Click the **Inventory** tab and verify that the new card appears as a DS3N-12 card.

Step 16 Click the **Provisioning** > **Protection** tabs.

Step 17 Click **Create**.

Step 18 Type a name for the protection group in the Name field (optional).

Step 19 Click **Type** and choose **1:N (card)** from the pull-down menu.

Step 20 Verify that the DS3N-12 card appears in the Protect Card field.

Step 21 In the Available Cards list, highlight the cards that you want in the protection group. Click the arrow (>>) tab to move the cards to the Working Cards list.

Step 22 Click **OK**.

The protection group should appear in the Protection Groups list on the Protection subtab.

Step 23 Return to your originating procedure (NTP).

DLP-A178 Convert DS3-12E Cards From 1:1 to 1:N Protection

Purpose	This task converts DS3-12E cards in a 1:1 protection scheme to 1:N protection.
Tools/Equipment	None
Prerequisite Procedures	DLP-A60 Log into CTC, page 3-23
Required/As Needed	As needed
Onsite/Remote	Onsite
Security Level	Provisioning or higher

Note This task assumes that DS3-12E cards are installed in Slots 1 - 6 and/or Slots 12 - 17. The DS3-12E cards in Slots 3 and 15, which are the protection slots, will be replaced with DS3N-12E cards. The procedure requires at least one DS3N-12E card and a protection group with DS3-12E cards.

Step 1 In node view, click the **Maintenance > Protection** tab.

Step 2 Click the protection group containing Slot 15 (where you will install the DS3N-12E card).

Step 3 Make sure the slot you are upgrading is not carrying working traffic. In the Selected Group list, the protect slot must say Protect/Standby as shown in Figure 11-7 on page 11-54, and not Protect/Active. If the protect slot status is Protect/Active, use the following steps to switch traffic to the working card:

a. Under Selected Group, click the protect card.

b. Next to Switch Commands, click **Switch**.

The working slot should change to Working/Active and the protect slot should change to Protect/Standby. If they fail to change, do not continue. Troubleshoot the working card and slot to determine why the card cannot carry working traffic.

Step 4 Repeat Steps 2 and 3 for each protection group that you need to convert.

Step 5 Verify that no standing alarms exist for any of the DS3-12E cards you are converting. If alarms exist and you have difficulty clearing them, contact your next level of support.

Step 6 Click the **Provisioning > Protection** tab.

Step 7 Click the 1:1 protection group that contains the cards that you will move into the new protection group.

Step 8 Click **Delete**.

Step 9 When the confirmation dialog displays, click **Yes**.

Note Deleting the 1:1 protection groups will not disrupt service. However, no protection bandwidth exists for the working circuits until the 1:N protection procedure is completed. Do not delay when completing this procedure.

Step 10 If you are deleting more than one protection group, repeat Steps 7 – 9 for each group.

Step 11 Physically remove the DS3-12E card from Slot 3 or Slot 15. This raises an improper removal alarm.

Step 12 In node view, right-click the slot that held the removed card and choose **Delete** from the pull-down menu. Wait for the card to disappear from the node view.

Step 13 Physically insert a DS3N-12E card into the same slot.

Step 14 Verify that the card boots up properly.

Step 15 Click the **Inventory** tab and verify that the new card appears as a DS3N-12E.

Step 16 Click the **Provisioning > Protection** tabs.

Step 17 Click **Create**.

Step 18 Type a name for the protection group in the Name field (optional).

Step 19 Click **Type** and choose **1:N (card)** from the pull-down menu.

Step 20 Verify that the DS3N-12E card appears in the Protect Card field.

Step 21 In the Available Cards list, highlight the cards that you want in the protection group. Click the arrow (**>>**) tab to move the cards to the Working Cards list.

Step 22 Click **OK**.

The protection group should appear in the Protection Groups list on the Protection subtab.

Step 23 Return to your originating procedure (NTP).