



## Change Card Settings

This chapter explains how to change line, performance monitoring (PM), and threshold settings on Cisco ONS 15454 cards.



**Note**

Unless otherwise specified, “ONS 15454” refers to both ANSI and ETSI shelf assemblies.

## Before You Begin

Before performing any of the following procedures, investigate all alarms and clear any trouble conditions. Refer to the *Cisco ONS 15454 SONET and DWDM 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-G90 Modify Line Settings and PM Parameter Thresholds for Optical Service Channel Cards, page 10-2](#)—As needed, complete this procedure to change the optical service channel (OSC) card settings.
2. [NTP-G91 Modify Line Settings and PM Parameter Thresholds for Amplifier Cards, page 10-10](#)—As needed, complete this procedure to change the amplifier card settings.
3. [NTP-G92 Modify Line Settings and PM Parameter Thresholds for Multiplexer and Demultiplexer Cards, page 10-16](#)—As needed, complete this procedure to change the multiplexer and demultiplexer card settings.
4. [NTP-G93 Modify Line Settings and PM Parameter Thresholds for 32WSS Cards, page 10-22](#)—As needed, complete this procedure to change the 32WSS card settings.
5. [NTP-G94 Provision Pluggable Port Modules, page 10-29](#)—As needed, complete this procedure to provision pluggable port modules (PPMs) for transponder (TXP) and muxponder (MXP) cards.
6. [NTP-G95 Delete Pluggable Port Modules, page 10-31](#)—As needed, complete this procedure to delete PPMs for TXP and MXP cards.
7. [NTP-G96 Modify Line Settings and PM Parameter Thresholds for TXP\\_MR\\_10G and TXP\\_MR\\_10E Cards, page 10-32](#)—As needed, complete this procedure to change line and threshold settings for TXP\_MR\_10G and TXP\_MR\_10E transponder cards.

8. [NTP-G97 Modify Line Settings and PM Parameter Thresholds for MXP\\_2.5G\\_10G and MXP\\_2.5G\\_10E Cards, page 10-43](#)—As needed, complete this procedure to change line and threshold settings for MXP\_2.5G\_10G and MXP\_2.5G\_10E muxponder cards.
9. [NTP-G98 Modify Line Settings and PM Parameter Thresholds for TXP\\_MR\\_2.5G and TXPP\\_MR\\_2.5G Cards, page 10-55](#)—As needed, complete this procedure to change line and threshold settings for TXP\_MR\_2.5G and TXPP\_MR\_2.5G transponder cards.
10. [NTP-G99 Modify Line Settings and PM Parameter Thresholds for MXP\\_MR\\_2.5G and MXPP\\_MR\\_2.5G Cards, page 10-65](#)—As needed, complete this procedure to change line and threshold settings for MXP\_MR\_2.5G and MXPP\_MR\_2.5G muxponder cards.
11. [NTP-G100 Modify Alarm Interface Controller Settings \(ANSI Only\), page 10-77](#)—As needed, complete this procedure to change settings for external alarms, controls, and orderwire for the AIC card.
12. [NTP-G101 Modify Alarm Interface Controller—International Settings, page 10-80](#)—As needed, complete this procedure to change settings for external alarms, controls, and orderwire for the AIC-I card.
13. [NTP-G102 Change Card Service State, page 10-83](#)—As needed, complete this procedure to change card service state.

## NTP-G90 Modify Line Settings and PM Parameter Thresholds for Optical Service Channel Cards

|                                |                                                                                                              |
|--------------------------------|--------------------------------------------------------------------------------------------------------------|
| <b>Purpose</b>                 | This procedure changes the line and threshold settings for optical service channel cards (OSCM and OSC-CSM). |
| <b>Tools/Equipment</b>         | None                                                                                                         |
| <b>Prerequisite Procedures</b> | <a href="#">NTP-G30 Install the DWDM Cards, page 3-26</a>                                                    |
| <b>Required/As Needed</b>      | As needed                                                                                                    |
| <b>Onsite/Remote</b>           | Onsite or remote                                                                                             |
| <b>Security Level</b>          | Provisioning or higher                                                                                       |

- 
- Step 1** Complete the “[DLP-G46 Log into CTC](#)” task on [page 2-25](#) at the node where you want to change the OSCM or OSC-CSM card settings. If you are already logged in, proceed to [Step 2](#).
- Step 2** Complete the “[NTP-G103 Back Up the Database](#)” procedure on [page 11-2](#).
- Step 3** Perform any of the following tasks as needed:
- [DLP-G199 Change Optical Line Settings for OSCM and OSC-CSM Cards, page 10-3](#)
  - [DLP-G200 Change Line Threshold Settings for OSCM and OSC-CSM Cards, page 10-5](#)
  - [DLP-G201 Change Optical Line Parameters for OSCM and OSC-CSM Cards, page 10-6](#)
  - [DLP-G202 Change Optical Channel Threshold Settings for OSCM and OSC-CSM Cards, page 10-8](#)
  - [DLP-G203 Change Maintenance Settings for Automatic Laser Shutdown, page 10-9](#)
- Step 4** Complete the “[NTP-G103 Back Up the Database](#)” procedure on [page 11-2](#).
- Stop. You have completed this procedure.**
-

## DLP-G199 Change Optical Line Settings for OSCM and OSC-CSM Cards

|                                |                                                                              |
|--------------------------------|------------------------------------------------------------------------------|
| <b>Purpose</b>                 | This task changes the OC-3 optical line settings for OSCM and OSC-CSM cards. |
| <b>Tools/Equipment</b>         | None                                                                         |
| <b>Prerequisite Procedures</b> | <a href="#">DLP-G46 Log into CTC, page 2-25</a>                              |
| <b>Required/As Needed</b>      | As needed                                                                    |
| <b>Onsite/Remote</b>           | Onsite or remote                                                             |
| <b>Security Level</b>          | Provisioning or higher                                                       |

- Step 1** In node view, double-click the OSCM or OSC-CSM card where you want to change the OC-3 optical line settings.
- Step 2** Click the **Provisioning > OC3 Line > OC3 Line** tabs.
- Step 3** Modify any of the settings described in [Table 10-1](#).

**Table 10-1 OSCM and OSC-CSM Card OC-3 Optical Line Settings**

| Parameter             | Description                                                                                                                                                | Options                                                                                                                                                                                       |
|-----------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Port #                | Displays the port number.                                                                                                                                  | Display only                                                                                                                                                                                  |
| 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.<br><br>See the “ <a href="#">DLP-G104 Assign a Name to a Port</a> ” task on <a href="#">page 6-8</a> . |
| SF BER                | Sets the signal fail bit error rate.                                                                                                                       | <ul style="list-style-type: none"> <li>1E-3</li> <li>1E-4</li> <li>1E-5</li> </ul>                                                                                                            |
| SD BER                | Sets the signal degrade bit error rate.                                                                                                                    | <ul style="list-style-type: none"> <li>1E-5</li> <li>1E-6</li> <li>1E-7</li> <li>1E-8</li> <li>1E-9</li> </ul>                                                                                |
| Provides Synch        | Display only. If checked, the card is provisioned as a network element timing reference.                                                                   | <ul style="list-style-type: none"> <li>Checked</li> <li>Unchecked</li> </ul>                                                                                                                  |
| Enable Synch Messages | Enables synchronization status messages (S1 byte), which allow the node to choose the best timing source.                                                  | <ul style="list-style-type: none"> <li>Checked</li> <li>Unchecked</li> </ul>                                                                                                                  |
| Send Do Not Use       | When checked, sends a DUS (do not use) message on the S1 byte.                                                                                             | <ul style="list-style-type: none"> <li>Checked</li> <li>Unchecked</li> </ul>                                                                                                                  |
| PJSTSMon #            | Display only. 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. | <ul style="list-style-type: none"> <li>On</li> <li>Off</li> </ul>                                                                                                                             |

Table 10-1 OSCM and OSC-CSM Card OC-3 Optical Line Settings (continued)

| Parameter     | Description                                                                                                                                                                                                                                                                                    | Options                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
|---------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Admin State   | Sets the port service state unless network conditions prevent the change. For more information about administrative states, see <a href="#">Appendix C, “DWDM Enhanced State Model.”</a>                                                                                                       | <ul style="list-style-type: none"> <li>IS (ANSI) or Unlocked (ETSI)—Puts the port in-service. The port service state changes to IS-NR (ANSI) or Unlocked-enabled (ETSI).</li> <li>IS,AINS (ANSI) or Unlocked,automaticInService (ETSI)—Puts the port in automatic in-service. The port service state changes to OOS-AU,AINS (ANSI) or Unlocked-disabled,automaticInService (ETSI).</li> <li>OOS,DSBLD (ANSI) or Locked,disabled (ETSI)—Removes the port from service and disables it. The port service state changes to OOS-MA,DSBLD (ANSI) or Locked-enabled,disabled (ETSI).</li> <li>OOS,MT (ANSI) or Locked,maintenance (ETSI)—Removes the port from service for maintenance. The port service state changes to OOS-MA,MT (ANSI) or Locked-enabled,maintenance (ETSI).</li> </ul>                                                                                                                                                                                                                                                                                                                                      |
| Service State | Identifies the autonomously generated state that gives the overall condition of the port. Service states appear in the format: Primary State-Primary State Qualifier, Secondary State. For more information about service states, see <a href="#">Appendix C, “DWDM Enhanced State Model.”</a> | <ul style="list-style-type: none"> <li>IS-NR (In-Service and Normal [ANSI]) or Unlocked-enabled (ETSI)— The port is fully operational and performing as provisioned.</li> <li>OOS-AU,AINS (Out-Of-Service and Autonomous, Automatic In-Service [ANSI]) or Unlocked-disabled,automaticInService (ETSI)— The port is out-of-service, but traffic is carried. Alarm reporting is suppressed. The ONS node monitors the ports for an error-free signal. After an error-free signal is detected, the port stays in the OOS-AU,AINS/Unlocked-disabled,automaticInService state for the duration of the soak period. After the soak period ends, the port service state changes to IS-NR/Unlocked-enabled.</li> <li>OOS-MA,DSBLD (Out-of-Service and Management, Disabled [ANSI]) or Locked-enabled,disabled (ETSI)— The port is out-of-service and unable to carry traffic.</li> <li>OOS-MA,MT (Out-of-Service and Management, Maintenance [ANSI]) or Locked-enabled,maintenance (ETSI)— The port is out-of-service for maintenance. Alarm reporting is suppressed, but traffic is carried and loopbacks are allowed.</li> </ul> |

**Table 10-1 OSCM and OSC-CSM Card OC-3 Optical Line Settings (continued)**

| Parameter | Description                                                                                                                                   | Options                                                                                                                                                                                                    |
|-----------|-----------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| AINS Soak | Sets the automatic in-service soak period.                                                                                                    | <ul style="list-style-type: none"> <li>Duration of valid input signal, in hh.mm format, after which the card becomes in service (IS) automatically</li> <li>0 to 48 hours, 15-minute increments</li> </ul> |
| 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. | <ul style="list-style-type: none"> <li>Sonet</li> <li>SDH</li> </ul>                                                                                                                                       |

**Step 4** Click **Apply**.

**Step 5** Return to your originating procedure (NTP).

## DLP-G200 Change Line Threshold Settings for OSCM and OSC-CSM Cards

|                                |                                                                                   |
|--------------------------------|-----------------------------------------------------------------------------------|
| <b>Purpose</b>                 | This task changes the optical line threshold settings for OSCM and OSC-CSM cards. |
| <b>Tools/Equipment</b>         | None                                                                              |
| <b>Prerequisite Procedures</b> | <a href="#">DLP-G46 Log into CTC, page 2-25</a>                                   |
| <b>Required/As Needed</b>      | As needed                                                                         |
| <b>Onsite/Remote</b>           | Onsite or remote                                                                  |
| <b>Security Level</b>          | Provisioning or higher                                                            |

- Step 1** In node view, double-click the OSCM or OSC-CSM card where you want to change the optical line threshold settings.
- Step 2** Click the **Provisioning > OC3 Line > SONET Thresholds** tabs.
- Step 3** Modify any of the settings described in [Table 10-2](#).

**Table 10-2 OSCM and OSC-CSM Cards Optical Line Threshold Settings**

| Parameter | Description              | Options                                                                                                                                     |
|-----------|--------------------------|---------------------------------------------------------------------------------------------------------------------------------------------|
| Port      | Displays the port number | Display only                                                                                                                                |
| CV        | Coding violations        | Numeric. Can be set for 15-minute or one-day intervals for Line or Section (Near and Far End). Select the bullet and click <b>Refresh</b> . |
| ES        | Errored seconds          | Numeric. Can be set for 15-minute or one-day intervals for Line or Section (Near and Far End). Select the bullet and click <b>Refresh</b> . |
| SES       | Severely errored seconds | Numeric. Can be set for 15-minute or one-day intervals for Line or Section (Near and Far End). Select the bullet and click <b>Refresh</b> . |

**Table 10-2 OSCM and OSC-CSM Cards Optical Line Threshold Settings (continued)**

| Parameter | Description                                      | Options                                                                                                                                            |
|-----------|--------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------|
| SEFS      | (Section only.) Severely errored framing seconds | Numeric. Can be set for Far End, for 15-minute or one-day intervals for Section only. Select the bullet and click <b>Refresh</b> .                 |
| FC        | Failure count                                    | Numeric. Can be set for 15-minute or one-day intervals for Line or Section. Select the bullet and click <b>Refresh</b> or Path (Near and Far End). |
| UAS       | Unavailable seconds                              | Numeric. Can be set for 15-minute or one-day intervals for Line or Section (Near and Far End). Select the bullet and click <b>Refresh</b> .        |

**Step 4** Click **Apply**.

**Step 5** Return to your originating procedure (NTP).

## DLP-G201 Change Optical Line Parameters for OSCM and OSC-CSM Cards

|                                |                                                                           |
|--------------------------------|---------------------------------------------------------------------------|
| <b>Purpose</b>                 | This task changes the optical line parameters for OSCM and OSC-CSM cards. |
| <b>Tools/Equipment</b>         | None                                                                      |
| <b>Prerequisite Procedures</b> | <a href="#">DLP-G46 Log into CTC, page 2-25</a>                           |
| <b>Required/As Needed</b>      | As needed                                                                 |
| <b>Onsite/Remote</b>           | Onsite or remote                                                          |
| <b>Security Level</b>          | Provisioning or higher                                                    |

- Step 1** In node view, double-click the OSCM or OSC-CSM card where you want to change the optical line parameters.
- Step 2** Click the **Provisioning > Optical Line > Parameters** tabs.
- Step 3** Modify any of the settings described in [Table 10-3](#).

**Table 10-3 OSCM and OSC-CSM Card Optical Line Parameter Settings**

| Parameter   | Description                                                                                                                                                                              | Options                                                                                                                                                                          |
|-------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Port #      | Displays the port number and TX or RX.                                                                                                                                                   | Read-only                                                                                                                                                                        |
| 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.<br><br>See the “ <a href="#">DLP-G104 Assign a Name to a Port</a> ” task on page 6-8.      |
| Admin State | Sets the port service state unless network conditions prevent the change. For more information about administrative states, see <a href="#">Appendix C, “DWDM Enhanced State Model.”</a> | <ul style="list-style-type: none"> <li>IS/Unlocked</li> <li>IS,AINS/Unlocked,automaticInService</li> <li>OOS,DSBLD/Locked,disabled</li> <li>OOS,MT/Locked,maintenance</li> </ul> |

**Table 10-3 OSCM and OSC-CSM Card Optical Line Parameter Settings (continued)**

| Parameter              | Description                                                                                                                                                                                                                                                                                    | Options                                                                                                                                                                                                                         |
|------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Line Direction         | Provides the ability to associate a card with the line direction. Use this field if you have two cards and must designate which one will carry the traffic flow from east to west. The second card will carry traffic from west to east.                                                       | <ul style="list-style-type: none"> <li>East to West</li> <li>West to East</li> </ul>                                                                                                                                            |
| Service State          | Identifies the autonomously generated state that gives the overall condition of the port. Service states appear in the format: Primary State-Primary State Qualifier, Secondary State. For more information about service states, see <a href="#">Appendix C, “DWDM Enhanced State Model.”</a> | <ul style="list-style-type: none"> <li>IS-NR/Unlocked-enabled</li> <li>OOS-AU,AINS/Unlocked-disabled, automaticInService</li> <li>OOS-MA,DSBLD/Locked-enabled,disabled</li> <li>OOS-MA,MT/Locked-enabled,maintenance</li> </ul> |
| Type                   | Identifies the type of port. Display only.                                                                                                                                                                                                                                                     | <ul style="list-style-type: none"> <li>Input Com</li> <li>Output Com</li> <li>Input Line</li> <li>Output Line</li> <li>Input OSC</li> <li>Output OSC.</li> </ul>                                                                |
| Power                  | Shows the current power level per port. Display only.                                                                                                                                                                                                                                          | —                                                                                                                                                                                                                               |
| VOA Mode               | Shows the current functional mode of the variable optical attenuator (VOA). Display only.                                                                                                                                                                                                      | <ul style="list-style-type: none"> <li>Constant gain mode</li> <li>Constant power mode</li> <li>Not in use (N/A)</li> </ul>                                                                                                     |
| VOA Power Ref.         | Shows the value of the optical output power going to a VOA when constant power mode is active. Automatic node setup (ANS) is the only function that can modify this value. Display only.                                                                                                       | —                                                                                                                                                                                                                               |
| VOA Power Calib.       | The user can modify the optical output power to the VOA if necessary. This feature is normally used when the system is configured as “access” in Provisioning > WDM-ANS.                                                                                                                       | Numeric                                                                                                                                                                                                                         |
| VOA Attenuation Ref.   | Shows the attenuation value of the VOA when the VOA is set in constant attenuation mode. ANS and amplifier power control (APC) are the only functions that can modify this value. Display only.                                                                                                | —                                                                                                                                                                                                                               |
| VOA Attenuation Calib. | The user can modify the attenuation value of the VOA if necessary when the VOA mode is set for constant attenuation.                                                                                                                                                                           | Numeric                                                                                                                                                                                                                         |

**Step 4** Click **Apply**.

**Step 5** Return to your originating procedure (NTP).

## DLP-G202 Change Optical Channel Threshold Settings for OSCM and OSC-CSM Cards

|                                |                                                                                      |
|--------------------------------|--------------------------------------------------------------------------------------|
| <b>Purpose</b>                 | This task changes the optical channel threshold settings for OSCM and OSC-CSM cards. |
| <b>Tools/Equipment</b>         | None                                                                                 |
| <b>Prerequisite Procedures</b> | <a href="#">DLP-G46 Log into CTC, page 2-25</a>                                      |
| <b>Required/As Needed</b>      | As needed                                                                            |
| <b>Onsite/Remote</b>           | Onsite or remote                                                                     |
| <b>Security Level</b>          | Provisioning or higher                                                               |

- 
- Step 1** In node view, double-click the OSCM or OSC-CSM card where you want to change the optical channel threshold settings.
- Step 2** Click the **Provisioning > Optical Line > Optics Thresholds** tabs.
- Step 3** Modify any of the settings described in [Table 10-4](#).

**Table 10-4 OSCM and OSC-CSM Cards Optical Channel Thresholds Settings**

| Parameter        | Description                             | Options                                                                                                                   |
|------------------|-----------------------------------------|---------------------------------------------------------------------------------------------------------------------------|
| Port             | Display only. Displays the port number. | —                                                                                                                         |
| Power Low (dBm)  | Set the low power settings.             | Numeric. Can be set for 15-minute or one-day intervals for Warning or Alarm. Select the bullet and click <b>Refresh</b> . |
| Power High (dBm) | Set the high power settings.            | Numeric. Can be set for 15-minute or one-day intervals for Warning or Alarm. Select the bullet and click <b>Refresh</b> . |

- Step 4** Click **Apply**.
- Step 5** Return to your originating procedure (NTP).
-



## DLP-G203 Change Maintenance Settings for Automatic Laser Shutdown

|                                |                                                                                                                                              |
|--------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Purpose</b>                 | This task changes the maintenance settings for the automatic laser shutdown (ALS) feature on the OSC-CSM, OSCM, and OPT-BST amplifier cards. |
| <b>Tools/Equipment</b>         | None                                                                                                                                         |
| <b>Prerequisite Procedures</b> | <a href="#">DLP-G46 Log into CTC, page 2-25</a>                                                                                              |
| <b>Required/As Needed</b>      | As needed                                                                                                                                    |
| <b>Onsite/Remote</b>           | Onsite or remote                                                                                                                             |
| <b>Security Level</b>          | Provisioning or higher                                                                                                                       |

- Step 1** In node view, double-click the OSC-CSM, OSCM, or OPT-BST amplifier where you want to change the ALS maintenance settings.
- Step 2** Click the **Maintenance > ALS** tabs.
- Step 3** Modify any of the settings described in [Table 10-5](#).

**Table 10-5 OSC-CSM, OSCM, or OPT-BST Amplifier Maintenance Settings**

| Parameter               | Description                                                                                                                          | Options                                                                                                                                  |
|-------------------------|--------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------|
| OSRI                    | Optical safety remote interlock. Shuts down the optical output power. When set to On, the amplifier cannot be unknowingly turned on. | On and off                                                                                                                               |
| ALS Mode                | Automatic laser shutdown. Provides the ability to automatically shut a potentially hazardous laser off.                              | <ul style="list-style-type: none"> <li>Disable</li> <li>Auto Restart</li> <li>Manual Restart</li> <li>Manual Restart for Test</li> </ul> |
| Recovery Pulse Duration | Displays the duration of the optical power pulse that begins when an amplifier restarts. Display only.                               | —                                                                                                                                        |
| Recovery Pulse Interval | Displays the interval between optical power pulses. Display only.                                                                    | —                                                                                                                                        |
| Currently Shutdown      | Displays the current status of the laser. Display only.                                                                              | —                                                                                                                                        |
| Request Laser Restart   | If checked, allows you to restart the laser. Display only.                                                                           | Checked or unchecked                                                                                                                     |

- Step 4** Click **Apply**.
- Step 5** Return to your originating procedure (NTP).

# NTP-G91 Modify Line Settings and PM Parameter Thresholds for Amplifier Cards

|                                |                                                                                                     |
|--------------------------------|-----------------------------------------------------------------------------------------------------|
| <b>Purpose</b>                 | This procedure changes the line and threshold settings for the OPT-PRE and OPT-BST amplifier cards. |
| <b>Tools/Equipment</b>         | None                                                                                                |
| <b>Prerequisite Procedures</b> | <a href="#">NTP-G30 Install the DWDM Cards, page 3-26</a>                                           |
| <b>Required/As Needed</b>      | As needed                                                                                           |
| <b>Onsite/Remote</b>           | Onsite or remote                                                                                    |
| <b>Security Level</b>          | Provisioning or higher                                                                              |

- 
- Step 1** Complete the “[DLP-G46 Log into CTC](#)” task on [page 2-25](#) at the node where you want to change the OPT-PRE or OPT-BST amplifier card settings. If you are already logged in, proceed to [Step 2](#).
- Step 2** Complete the “[NTP-G103 Back Up the Database](#)” procedure on [page 11-2](#).
- Step 3** Perform any of the following tasks as needed:
- [DLP-G204 Change Optical Line Settings for OPT-PRE and OPT-BST Amplifiers, page 10-10](#)
  - [DLP-G205 Change Optical Line Threshold Settings for OPT-PRE and OPT-BST Amplifiers, page 10-12](#)
  - [DLP-G206 Change Optical Amplifier Line Settings for OPT-PRE and OPT-BST Amplifiers, page 10-13](#)
  - [DLP-G207 Change Optical Channel Threshold Settings for OPT-PRE and OPT-BST Amplifiers, page 10-15](#)
- Step 4** Complete the “[NTP-G103 Back Up the Database](#)” procedure on [page 11-2](#).
- Stop.** You have completed this procedure.
- 

## DLP-G204 Change Optical Line Settings for OPT-PRE and OPT-BST Amplifiers

|                                |                                                                                      |
|--------------------------------|--------------------------------------------------------------------------------------|
| <b>Purpose</b>                 | This task changes the optical line settings for OPT-PRE and OPT-BST amplifier cards. |
| <b>Tools/Equipment</b>         | None                                                                                 |
| <b>Prerequisite Procedures</b> | <a href="#">DLP-G46 Log into CTC, page 2-25</a>                                      |
| <b>Required/As Needed</b>      | As needed                                                                            |
| <b>Onsite/Remote</b>           | Onsite or remote                                                                     |
| <b>Security Level</b>          | Provisioning or higher                                                               |

- 
- Step 1** In node view, double-click the OPT-PRE or OPT-BST amplifier where you want to change the optical line settings.
- Step 2** Click the **Provisioning > Optical Line > Parameters** tabs.
- Step 3** Modify any of the settings described in [Table 10-6](#).

**Table 10-6 OPT-PRE and OPT-BST Amplifier Optical Line Settings**

| Parameter      | Description                                                                                                                                                                                                                                                                                    | Options                                                                                                                                                                                                                         |
|----------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Port #         | Displays the port number. Display only.                                                                                                                                                                                                                                                        | Displays port number and TX or RX.                                                                                                                                                                                              |
| 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.<br><br>See the “ <a href="#">DLP-G104 Assign a Name to a Port</a> ” task on page 6-8.                                                     |
| Admin State    | Sets the port service state unless network conditions prevent the change. For more information about administrative states, see <a href="#">Appendix C, “DWDM Enhanced State Model.”</a>                                                                                                       | <ul style="list-style-type: none"> <li>IS/Unlocked</li> <li>IS,AINS/Unlocked,automaticInService</li> <li>OOS,DSBLD/Locked,disabled</li> <li>OOS,MT/Locked,maintenance</li> </ul>                                                |
| Line Direction | Provides the ability to associate a card with the line direction. Use this field if you have two cards in the same shelf and must designate which one will carry the traffic flow from east to west. The second card will carry traffic from west to east.                                     | <ul style="list-style-type: none"> <li>East to West</li> <li>West to East</li> </ul>                                                                                                                                            |
| Service State  | Identifies the autonomously generated state that gives the overall condition of the port. Service states appear in the format: Primary State-Primary State Qualifier, Secondary State. For more information about service states, see <a href="#">Appendix C, “DWDM Enhanced State Model.”</a> | <ul style="list-style-type: none"> <li>IS-NR/Unlocked-enabled</li> <li>OOS-AU,AINS/Unlocked-disabled, automaticInService</li> <li>OOS-MA,DSBLD/Locked-enabled,disabled</li> <li>OOS-MA,MT/Locked-enabled,maintenance</li> </ul> |
| Type           | Identifies the type of port. Display only.                                                                                                                                                                                                                                                     | <ul style="list-style-type: none"> <li>Input Com</li> <li>Output Com</li> <li>Input Line</li> <li>Output Line</li> <li>Input OSC</li> <li>Output OSC.</li> </ul>                                                                |
| Power          | Shows the current power level per port. Display only.                                                                                                                                                                                                                                          | —                                                                                                                                                                                                                               |

**Step 4** Click **Apply**.

**Step 5** Return to your originating procedure (NTP).

## DLP-G205 Change Optical Line Threshold Settings for OPT-PRE and OPT-BST Amplifiers

|                                |                                                                                                |
|--------------------------------|------------------------------------------------------------------------------------------------|
| <b>Purpose</b>                 | This task changes the optical line threshold settings for OPT-PRE and OPT-BST amplifier cards. |
| <b>Tools/Equipment</b>         | None                                                                                           |
| <b>Prerequisite Procedures</b> | <a href="#">DLP-G46 Log into CTC, page 2-25</a>                                                |
| <b>Required/As Needed</b>      | As needed                                                                                      |
| <b>Onsite/Remote</b>           | Onsite or remote                                                                               |
| <b>Security Level</b>          | Provisioning or higher                                                                         |

- 
- Step 1** In node view, double-click the OPT-PRE or OPT-BST amplifier where you want to change the optical line threshold settings.
- Step 2** Click the **Provisioning > Optical Line > Optics Thresholds** tabs.
- Step 3** Modify any of the settings described in [Table 10-7](#).

**Table 10-7 OPT-PRE and OPT-BST Amplifiers Optical Line Thresholds Settings**

| Parameter        | Description                             | Options                                                                                                                   |
|------------------|-----------------------------------------|---------------------------------------------------------------------------------------------------------------------------|
| Port             | Display only. Displays the port number. | —                                                                                                                         |
| Power Low (dBm)  | Set the low power settings.             | Numeric. Can be set for 15-minute or one-day intervals for Warning or Alarm. Select the bullet and click <b>Refresh</b> . |
| Power High (dBm) | Set the high power settings.            | Numeric. Can be set for 15-minute or one-day intervals for Warning or Alarm. Select the bullet and click <b>Refresh</b> . |

- Step 4** Click **Apply**.
- Step 5** Return to your originating procedure (NTP).
-

## DLP-G206 Change Optical Amplifier Line Settings for OPT-PRE and OPT-BST Amplifiers

|                                |                                                                                                |
|--------------------------------|------------------------------------------------------------------------------------------------|
| <b>Purpose</b>                 | This task changes the optical amplifier line settings for OPT-PRE and OPT-BST amplifier cards. |
| <b>Tools/Equipment</b>         | None                                                                                           |
| <b>Prerequisite Procedures</b> | <a href="#">DLP-G46 Log into CTC, page 2-25</a>                                                |
| <b>Required/As Needed</b>      | As needed                                                                                      |
| <b>Onsite/Remote</b>           | Onsite or remote                                                                               |
| <b>Security Level</b>          | Provisioning or higher                                                                         |

- Step 1** In node view, double-click the OPT-PRE or OPT-BST amplifier where you want to change the optical amplifier line settings.
- Step 2** Click the **Provisioning > Opt. Ampli. Line > Parameters** tabs.
- Step 3** Modify any of the settings described in [Table 10-8](#).

**Table 10-8 OPT-PRE and OPT-BST Optical Amplifier Line Settings**

| Parameter      | Description                                                                                                                                                                                                                                                                                    | Options                                                                                                                                                                                                                        |
|----------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Port #         | Display only. Displays the port number.                                                                                                                                                                                                                                                        | Displays port number and TX or RX.                                                                                                                                                                                             |
| 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.<br><br>See the “ <a href="#">DLP-G104 Assign a Name to a Port</a> ” task on <a href="#">page 6-8</a> .                                   |
| Admin State    | Sets the port service state unless network conditions prevent the change. For more information about administrative states, see <a href="#">Appendix C, “DWDM Enhanced State Model.”</a>                                                                                                       | <ul style="list-style-type: none"> <li>IS/Unlocked</li> <li>IS,AINS/Unlocked,automaticInService</li> <li>OOS,DSBLD/Locked,disabled</li> <li>OOS,MT/Locked,maintenance</li> </ul>                                               |
| Line Direction | Provides the ability to associate a card with the line direction. Use this field if you have two cards in the same shelf and must designate which one will carry the traffic flow from east to west. The second card will carry traffic from west to east.                                     | <ul style="list-style-type: none"> <li>East to West</li> <li>West to East</li> </ul>                                                                                                                                           |
| Service State  | Identifies the autonomously generated state that gives the overall condition of the port. Service states appear in the format: Primary State-Primary State Qualifier, Secondary State. For more information about service states, see <a href="#">Appendix C, “DWDM Enhanced State Model.”</a> | <ul style="list-style-type: none"> <li>IS-NR/Unlocked-enabled</li> <li>OOS-AU,AINS/Unlocked-disabled,automaticInService</li> <li>OOS-MA,DSBLD/Locked-enabled,disabled</li> <li>OOS-MA,MT/Locked-enabled,maintenance</li> </ul> |

**Table 10-8** OPT-PRE and OPT-BST Optical Amplifier Line Settings (continued)

| Parameter        | Description                                                                                                                                                      | Options                                                                                                                                                                                                          |
|------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Type             | Identifies the type of port. Display only.                                                                                                                       | <ul style="list-style-type: none"> <li>• Input Com</li> <li>• Output Com</li> <li>• Input Line</li> <li>• Output Line</li> <li>• Input OSC</li> <li>• Output OSC.</li> </ul>                                     |
| Power            | Shows the current power level per port. Display only.                                                                                                            | —                                                                                                                                                                                                                |
| Power Ref.       | Shows the optical power per channel leaving to the amplifier. Display only.                                                                                      | —                                                                                                                                                                                                                |
| Power Calib.     | The user can manually set the total optical power going to the amplifiers.                                                                                       | Numeric                                                                                                                                                                                                          |
| Gain             | The current gain of the amplifiers. Display only.                                                                                                                | —                                                                                                                                                                                                                |
| Gain Set Point   | The value of the gain that the amplifier must achieve.                                                                                                           | Display only or numeric depending on mode setting. When the system is configured as metro core, this field is Display only. When the system is configured as metro access this field can be changed by the user. |
| Tilt Reference   | This field is set to zero. It represents the default value for the amplifier tilt. In a future software release this value will be managed by APC. Display only. | —                                                                                                                                                                                                                |
| Tilt Calibration | The user can manually set the amplifier tilt.                                                                                                                    | Numeric                                                                                                                                                                                                          |
| Mode             | Shows the working mode of the amplifier. Display only.                                                                                                           | Control gain<br>Control power                                                                                                                                                                                    |

**Step 4** Click **Apply**.

**Step 5** Return to your originating procedure (NTP).

## DLP-G207 Change Optical Channel Threshold Settings for OPT-PRE and OPT-BST Amplifiers

|                                |                                                                                                   |
|--------------------------------|---------------------------------------------------------------------------------------------------|
| <b>Purpose</b>                 | This task changes the optical channel threshold settings for OPT-PRE and OPT-BST amplifier cards. |
| <b>Tools/Equipment</b>         | None                                                                                              |
| <b>Prerequisite Procedures</b> | <a href="#">DLP-G46 Log into CTC, page 2-25</a>                                                   |
| <b>Required/As Needed</b>      | As needed                                                                                         |
| <b>Onsite/Remote</b>           | Onsite or remote                                                                                  |
| <b>Security Level</b>          | Provisioning or higher                                                                            |

- Step 1** In node view, double-click the OPT-PRE or OPT-BST amplifier where you want to change the optical channel threshold settings.
- Step 2** Click the **Provisioning > Opt. Ampli. Line > Optics Thresholds** tabs.
- Step 3** Modify any of the settings described in [Table 10-9](#).

**Table 10-9 OPT-PRE and OPT-BST Amplifier Optical Channel Threshold Settings**

| Parameter        | Description                             | Options                                                                                                                   |
|------------------|-----------------------------------------|---------------------------------------------------------------------------------------------------------------------------|
| Port             | Display only. Displays the port number. | —                                                                                                                         |
| Power Low (dBm)  | Set the low power settings.             | Numeric. Can be set for 15-minute or one-day intervals for Warning or Alarm. Select the bullet and click <b>Refresh</b> . |
| Power High (dBm) | Set the high power settings.            | Numeric. Can be set for 15-minute or one-day intervals for Warning or Alarm. Select the bullet and click <b>Refresh</b> . |

- Step 4** Click **Apply**.
- Step 5** Return to your originating procedure (NTP).

# NTP-G92 Modify Line Settings and PM Parameter Thresholds for Multiplexer and Demultiplexer Cards

|                                |                                                                                                                                                                                                           |
|--------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Purpose</b>                 | This procedure changes the line and PM parameter threshold settings for the multiplexer and demultiplexer cards. The cards included in this category are the 32MUX-O, 32DMX-O, 32DMX, and 4MD-xx.x cards. |
| <b>Tools/Equipment</b>         | None                                                                                                                                                                                                      |
| <b>Prerequisite Procedures</b> | <a href="#">NTP-G30 Install the DWDM Cards, page 3-26</a>                                                                                                                                                 |
| <b>Required/As Needed</b>      | As needed                                                                                                                                                                                                 |
| <b>Onsite/Remote</b>           | Onsite or remote                                                                                                                                                                                          |
| <b>Security Level</b>          | Provisioning or higher                                                                                                                                                                                    |


**Note**

Refer to the “Performance Monitoring” chapter in the *Cisco ONS 15454 SONET and DWDM Troubleshooting Guide* for more information on MUX and DMX parameters.

- 
- Step 1** Complete the “[DLP-G46 Log into CTC](#)” task on [page 2-25](#) at the node where you want to change the 32MUX-O, 32DMX, or 4MD-xx.x card settings. If you are already logged in, proceed to [Step 2](#).
- Step 2** Complete the “[NTP-G103 Back Up the Database](#)” procedure on [page 11-2](#).
- Step 3** Perform any of the following tasks as needed:
- [DLP-G208 Change Optical Line Settings for Multiplexer and Demultiplexer Cards, page 10-17](#)
  - [DLP-G209 Change Optical Line Threshold Settings for Multiplexer and Demultiplexer Cards, page 10-18](#)
  - [DLP-G210 Change Optical Channel Settings for Multiplexer and Demultiplexer Cards, page 10-19](#)
  - [DLP-G211 Change Optical Channel Threshold Settings for Multiplexer and Demultiplexer Cards, page 10-21](#)
- Step 4** Complete the “[NTP-G103 Back Up the Database](#)” procedure on [page 11-2](#).
- Stop. You have completed this procedure.**
-



## DLP-G208 Change Optical Line Settings for Multiplexer and Demultiplexer Cards

|                                |                                                                                                                            |
|--------------------------------|----------------------------------------------------------------------------------------------------------------------------|
| <b>Purpose</b>                 | This task changes the optical line settings for 32MUX-O, 32DMX-O, 32DMX, and 4MD xx.x multiplexer and demultiplexer cards. |
| <b>Tools/Equipment</b>         | None                                                                                                                       |
| <b>Prerequisite Procedures</b> | <a href="#">DLP-G46 Log into CTC, page 2-25</a>                                                                            |
| <b>Required/As Needed</b>      | As needed                                                                                                                  |
| <b>Onsite/Remote</b>           | Onsite or remote                                                                                                           |
| <b>Security Level</b>          | Provisioning or higher                                                                                                     |

- Step 1** In node view, double-click the multiplexer or demultiplexer cards where you want to change the optical line settings.
- Step 2** Click the **Provisioning > Optical Line > Parameters** tabs.
- Step 3** Modify any of the settings described in [Table 10-10](#).

**Table 10-10 Multiplexer and Demultiplexer Card Optical Line Settings**

| Parameter      | Description                                                                                                                                                                                                                                                                                    | Options                                                                                                                                                                                                                        |
|----------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Port #         | Displays the port number. Display only.                                                                                                                                                                                                                                                        | Displays port number and TX or RX.                                                                                                                                                                                             |
| 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.<br><br>See the “ <a href="#">DLP-G104 Assign a Name to a Port</a> ” task on <a href="#">page 6-8</a> .                                   |
| Admin State    | Sets the port service state unless network conditions prevent the change. For more information about administrative states, see <a href="#">Appendix C, “DWDM Enhanced State Model.”</a>                                                                                                       | <ul style="list-style-type: none"> <li>IS/Unlocked</li> <li>IS,AINS/Unlocked,automaticInService</li> <li>OOS,DSBLD/Locked,disabled</li> <li>OOS,MT/Locked,maintenance</li> </ul>                                               |
| Line Direction | Provides the ability to associate a card with the line direction. Use this field if you have two cards in the same shelf and must designate which one will carry the traffic flow from east to west. The second card will carry traffic from west to east.                                     | <ul style="list-style-type: none"> <li>East to West</li> <li>West to East</li> </ul>                                                                                                                                           |
| Service State  | Identifies the autonomously generated state that gives the overall condition of the port. Service states appear in the format: Primary State-Primary State Qualifier, Secondary State. For more information about service states, see <a href="#">Appendix C, “DWDM Enhanced State Model.”</a> | <ul style="list-style-type: none"> <li>IS-NR/Unlocked-enabled</li> <li>OOS-AU,AINS/Unlocked-disabled,automaticInService</li> <li>OOS-MA,DSBLD/Locked-enabled,disabled</li> <li>OOS-MA,MT/Locked-enabled,maintenance</li> </ul> |

**Table 10-10 Multiplexer and Demultiplexer Card Optical Line Settings (continued)**

| Parameter | Description                                           | Options                                                                                                                                                                     |
|-----------|-------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Type      | Identifies the type of port. Display only.            | <ul style="list-style-type: none"> <li>• Input Com</li> <li>• Output Com</li> <li>• Input Line</li> <li>• Output Line</li> <li>• Input OSC</li> <li>• Output OSC</li> </ul> |
| Power     | Display only. Shows the current power level per port. | —                                                                                                                                                                           |

**Step 4** Click **Apply**.

**Step 5** Return to your originating procedure (NTP).

## DLP-G209 Change Optical Line Threshold Settings for Multiplexer and Demultiplexer Cards

|                                |                                                                                                                                      |
|--------------------------------|--------------------------------------------------------------------------------------------------------------------------------------|
| <b>Purpose</b>                 | This task changes the optical line threshold settings for 32MUX-O, 32DMX-O, 32DMX, and 4MD-xx.x multiplexer and demultiplexer cards. |
| <b>Tools/Equipment</b>         | None                                                                                                                                 |
| <b>Prerequisite Procedures</b> | <a href="#">DLP-G46 Log into CTC, page 2-25</a>                                                                                      |
| <b>Required/As Needed</b>      | As needed                                                                                                                            |
| <b>Onsite/Remote</b>           | Onsite or remote                                                                                                                     |
| <b>Security Level</b>          | Provisioning or higher                                                                                                               |

- Step 1** In node view, double-click the multiplexer or demultiplexer cards where you want to change the optical line threshold settings.
- Step 2** Click the **Provisioning > Optical Line > Optics Thresholds** tabs.
- Step 3** Modify any of the settings described in [Table 10-11](#).

**Table 10-11 Multiplexer and Demultiplexer Card Optical Line Thresholds Settings**

| Parameter        | Description                             | Options                                                                                                                   |
|------------------|-----------------------------------------|---------------------------------------------------------------------------------------------------------------------------|
| Port             | Display only. Displays the port number. | —                                                                                                                         |
| Power Low (dBm)  | Set the low power settings.             | Numeric. Can be set for 15-minute or one-day intervals for Warning or Alarm. Select the bullet and click <b>Refresh</b> . |
| Power High (dBm) | Set the high power settings.            | Numeric. Can be set for 15-minute or one-day intervals for Warning or Alarm. Select the bullet and click <b>Refresh</b> . |

- Step 4** Click **Apply**.
- Step 5** Return to your originating procedure (NTP).

## DLP-G210 Change Optical Channel Settings for Multiplexer and Demultiplexer Cards

|                                |                                                                                                                               |
|--------------------------------|-------------------------------------------------------------------------------------------------------------------------------|
| <b>Purpose</b>                 | This task changes the optical channel settings for 32MUX-O, 32DMX-O, 32DMX, and 4MD-xx.x multiplexer and demultiplexer cards. |
| <b>Tools/Equipment</b>         | None                                                                                                                          |
| <b>Prerequisite Procedures</b> | <a href="#">DLP-G46 Log into CTC, page 2-25</a>                                                                               |
| <b>Required/As Needed</b>      | As needed                                                                                                                     |
| <b>Onsite/Remote</b>           | Onsite or remote                                                                                                              |
| <b>Security Level</b>          | Provisioning or higher                                                                                                        |

- Step 1** In node view, double-click the multiplexer or demultiplexer card where you want to change the optical channel settings.
- Step 2** Click the **Provisioning > Optical Chn > Parameters** tabs.
- Step 3** Modify any of the settings described in [Table 10-12](#).

**Table 10-12 Multiplexer and Demultiplexer Card Optical Channel Settings**

| Parameter      | Description                                                                                                                                                                                                                                                                                    | Options                                                                                                                                                                                                                        |
|----------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Port #         | Display only. Displays the port number.                                                                                                                                                                                                                                                        | Displays port number and TX or RX.                                                                                                                                                                                             |
| 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.<br><br>See the “ <a href="#">DLP-G104 Assign a Name to a Port</a> ” task on <a href="#">page 6-8</a> .                                   |
| Admin State    | Sets the port service state unless network conditions prevent the change. For more information about administrative states, see <a href="#">Appendix C, “DWDM Enhanced State Model.”</a>                                                                                                       | <ul style="list-style-type: none"> <li>IS/Unlocked</li> <li>IS,AINS/Unlocked,automaticInService</li> <li>OOS,DSBLD/Locked,disabled</li> <li>OOS,MT/Locked,maintenance</li> </ul>                                               |
| Line Direction | Provides the ability to associate a card with the line direction. Use this field if you have two cards in the same shelf and must designate which one will carry the traffic flow from east to west. The second card will carry traffic from west to east.                                     | <ul style="list-style-type: none"> <li>East to West</li> <li>West to East</li> </ul>                                                                                                                                           |
| Service State  | Identifies the autonomously generated state that gives the overall condition of the port. Service states appear in the format: Primary State-Primary State Qualifier, Secondary State. For more information about service states, see <a href="#">Appendix C, “DWDM Enhanced State Model.”</a> | <ul style="list-style-type: none"> <li>IS-NR/Unlocked-enabled</li> <li>OOS-AU,AINS/Unlocked-disabled,automaticInService</li> <li>OOS-MA,DSBLD/Locked-enabled,disabled</li> <li>OOS-MA,MT/Locked-enabled,maintenance</li> </ul> |

**Table 10-12 Multiplexer and Demultiplexer Card Optical Channel Settings (continued)**

| Parameter              | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | Options                                                                                                                                                                      |
|------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Type                   | Display only. Identifies the type of port.                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | <ul style="list-style-type: none"> <li>• Input Com</li> <li>• Output Com</li> <li>• Input Line</li> <li>• Output Line</li> <li>• Input OSC</li> <li>• Output OSC.</li> </ul> |
| Power                  | Display only. Shows the current power level per port.                                                                                                                                                                                                                                                                                                                                                                                                                                                                | —                                                                                                                                                                            |
| VOA Mode               | Display only. Shows the current functional mode of the VOA: constant power or constant attenuation.                                                                                                                                                                                                                                                                                                                                                                                                                  | —                                                                                                                                                                            |
| VOA Power Ref.         | <p>Display only. Shows the value of the optical output power going to a VOA when constant power mode is active.</p> <p>Dmux shows the reference value of the desired optical power going to the client. ANS is the only function that can modify this value (using the Pdrop parameter on the Provisioning tab).</p> <p>Mux show the reference value of the desired per-channel optical power. ANS is the only function that can modify this value (using the Port Mux Stage parameter on the Provisioning tab).</p> | —                                                                                                                                                                            |
| VOA Power Calib.       | <p>The user can modify the optical output power to the VOA if necessary. The VOA power calibration offsets the VOA power reference.</p> <p>Dmux allows you to modify the optical output power to the client if necessary. Mux allows you to modify the output power per channel.</p> <p>This feature is normally used when the system is configured as “access” in Provisioning &gt; WDM-ANS.</p>                                                                                                                    | Numeric                                                                                                                                                                      |
| VOA Attenuation Ref.   | Display only. Shows the attenuation value of the VOA when the VOA is set in attenuation mode. ANS and APC are the only functions that can modify this value.                                                                                                                                                                                                                                                                                                                                                         | —                                                                                                                                                                            |
| VOA Attenuation Calib. | Allows the user to modify the attenuation value of the VOA if necessary when the VOA mode is set for constant attenuation.                                                                                                                                                                                                                                                                                                                                                                                           | Numeric                                                                                                                                                                      |

**Table 10-12 Multiplexer and Demultiplexer Card Optical Channel Settings (continued)**

| Parameter           | Description                                                                                                                                                                                                                                                                                                                       | Options |
|---------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------|
| Actual Wavelength   | Display only. Shows the wavelength specified by the manufacturing data. This field cannot be set manually.                                                                                                                                                                                                                        | —       |
| Expected Wavelength | Shows the preprovisioned wavelength. This field is used to preprovision cards. For example, you can specify a generic AD-1C in Slot 15 and set the expected wavelength to 1552.52. The result is a AD-1C-52.5. If the actual equipment installed does not match the preprovisioned slot, a Mismatch Equipment Alarm (MEA) occurs. | Numeric |

**Step 4** Click **Apply**.

**Step 5** Return to your originating procedure (NTP).

## DLP-G211 Change Optical Channel Threshold Settings for Multiplexer and Demultiplexer Cards

|                                |                                                                                                                                         |
|--------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------|
| <b>Purpose</b>                 | This task changes the optical channel threshold settings for 32MUX-O, 32DMX-O, 32DMX, and 4MD-xx.x multiplexer and demultiplexer cards. |
| <b>Tools/Equipment</b>         | None                                                                                                                                    |
| <b>Prerequisite Procedures</b> | <a href="#">DLP-G46 Log into CTC, page 2-25</a>                                                                                         |
| <b>Required/As Needed</b>      | As needed                                                                                                                               |
| <b>Onsite/Remote</b>           | Onsite or remote                                                                                                                        |
| <b>Security Level</b>          | Provisioning or higher                                                                                                                  |

- Step 1** In node view, double-click the multiplexer or demultiplexer cards where you want to change the optical threshold settings.
- Step 2** Click the **Provisioning > Optical Chn > Optics Thresholds** tabs.
- Step 3** Modify any of the settings described in [Table 10-13](#).

**Table 10-13 Multiplexer and Demultiplexer Cards Optical Channel Threshold Settings**

| Parameter        | Description                             | Options                                                                                                                   |
|------------------|-----------------------------------------|---------------------------------------------------------------------------------------------------------------------------|
| Port             | Display only. Displays the port number. | —                                                                                                                         |
| Power Low (dBm)  | Set the low power settings.             | Numeric. Can be set for 15-minute or one-day intervals for Warning or Alarm. Select the bullet and click <b>Refresh</b> . |
| Power High (dBm) | Set the high power settings.            | Numeric. Can be set for 15-minute or one-day intervals for Warning or Alarm. Select the bullet and click <b>Refresh</b> . |

- Step 4** Click **Apply**.
- Step 5** Return to your originating procedure (NTP).
- 

## NTP-G93 Modify Line Settings and PM Parameter Thresholds for 32WSS Cards

|                                |                                                                            |
|--------------------------------|----------------------------------------------------------------------------|
| <b>Purpose</b>                 | This procedure changes the line and threshold settings for the 32WSS card. |
| <b>Tools/Equipment</b>         | None                                                                       |
| <b>Prerequisite Procedures</b> | <a href="#">NTP-G30 Install the DWDM Cards, page 3-26</a>                  |
| <b>Required/As Needed</b>      | As needed                                                                  |
| <b>Onsite/Remote</b>           | Onsite or remote                                                           |
| <b>Security Level</b>          | Provisioning or higher                                                     |

---

- Step 1** Complete the “[DLP-G46 Log into CTC](#)” task on [page 2-25](#) at the node where you want to change the 32WSS card settings. If you are already logged in, proceed to [Step 2](#).
- Step 2** Complete the “[NTP-G103 Back Up the Database](#)” procedure on [page 11-2](#).
- Step 3** Perform any of the following tasks as needed:
- [DLP-G212 Change Optical Channel Parameters for the 32WSS Card, page 10-23](#)
  - [DLP-G213 Change Optical Channel Optics Thresholds for the 32WSS Card, page 10-25](#)



**Note** To use the alarm profile tab, including creating alarm profiles and suppressing alarms, see [Chapter 7, “Manage Alarms.”](#)

---

- [DLP-G214 Change Optical Line Parameters for the 32WSS Card, page 10-26](#)
  - [DLP-G215 Change Optical Line Optics Thresholds for the 32WSS Card, page 10-28](#)
- Step 4** Complete the “[NTP-G103 Back Up the Database](#)” procedure on [page 11-2](#).

**Stop. You have completed this procedure.**

---

## DLP-G212 Change Optical Channel Parameters for the 32WSS Card

|                                |                                                                              |
|--------------------------------|------------------------------------------------------------------------------|
| <b>Purpose</b>                 | This task changes the optical channel parameter settings for the 32WSS card. |
| <b>Tools/Equipment</b>         | None                                                                         |
| <b>Prerequisite Procedures</b> | <a href="#">DLP-G46 Log into CTC, page 2-25</a>                              |
| <b>Required/As Needed</b>      | As needed                                                                    |
| <b>Onsite/Remote</b>           | Onsite or remote                                                             |
| <b>Security Level</b>          | Provisioning or higher                                                       |

- Step 1** In node view, double-click the 32WSS card where you want to change the optical channel parameter settings.
- Step 2** Click the **Provisioning > Optical Chn: Optical Connector** tab for one of the four optical channel: optical connector tabs (1 to 4) that are available.
- Step 3** Modify any of the settings described in [Table 10-14](#).

**Table 10-14 32WSS Optical Channel Parameter Settings**

| Parameter     | Description                                                                                                                                                                                                                                                                                                                                                        | Options                                                                                                                                                                                                                              |
|---------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Port          | Display only. Port designation information. Each Optical Channel has a unique receive (RX) and a pass-through (PT) port in this field. For example, with the first two ports of Optical Chn: Optical Connector 1 are designated as 1 CHAN-16-1-RX and 33 CHAN-16-1-PT. These ports are shown in the 32WSS display windows in top row of ADD RX ports as 01 and 33. | —                                                                                                                                                                                                                                    |
| Port Name     | The user can assign a logical name for each of the ports shown by filling in this field.                                                                                                                                                                                                                                                                           | User-defined. Name can be up to 32 alphanumeric/special characters. Blank by default. <ul style="list-style-type: none"> <li>See the “<a href="#">DLP-G104 Assign a Name to a Port</a>” task on <a href="#">page 6-8</a>.</li> </ul> |
| Admin State   | Sets the port service state unless network conditions prevent the change. For more information about administrative states, see <a href="#">Appendix C, “DWDM Enhanced State Model.”</a>                                                                                                                                                                           | <ul style="list-style-type: none"> <li>IS/Unlocked</li> <li>IS,AINS/Unlocked,automaticInService</li> <li>OOS,DSBLD/Locked,disabled</li> <li>OOS,MT/Locked,maintenance</li> </ul>                                                     |
| Service State | Identifies the autonomously generated state that gives the overall condition of the port. Service states appear in the format: Primary State-Primary State Qualifier, Secondary State. For more information about service states, see <a href="#">Appendix C, “DWDM Enhanced State Model.”</a>                                                                     | <ul style="list-style-type: none"> <li>IS-NR/Unlocked-enabled</li> <li>OOS-AU,AINS/Unlocked-disabled,automaticInService</li> <li>OOS-MA,DSBLD/Locked-enabled,disabled</li> <li>OOS-MA,MT/Locked-enabled,maintenance</li> </ul>       |

Table 10-14 32WSS Optical Channel Parameter Settings (continued)

| Parameter                   | Description                                                                                                                   | Options                                                                                                                                                                                                    |
|-----------------------------|-------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Line Direction              | Display only. Displays the direction that the optical signal flows.                                                           | <ul style="list-style-type: none"> <li>West to East (the direction in which channels are added)</li> <li>East to West (the direction in which channels are dropped)</li> </ul>                             |
| Type                        | Port type                                                                                                                     | <ul style="list-style-type: none"> <li>Add</li> <li>Passthrough</li> </ul>                                                                                                                                 |
| Power                       | Power value read by the photodiode after the VOA.                                                                             | <ul style="list-style-type: none"> <li>Numeric value (dB)</li> </ul>                                                                                                                                       |
| VOA Mode                    | Displays VOA power mode.                                                                                                      | <ul style="list-style-type: none"> <li>Constant Power</li> </ul>                                                                                                                                           |
| VOA Power Reference         | Display only. Displays VOA power reference.                                                                                   | <ul style="list-style-type: none"> <li>Numeric value (dB)</li> </ul>                                                                                                                                       |
| VOA Power Calibration       | Displays VOA power calibration.                                                                                               | <ul style="list-style-type: none"> <li>Numeric value (dB)</li> <li>-37 dB to -2 dB</li> </ul>                                                                                                              |
| VOA Attenuation Reference   | Display only. Displays VOA attenuation reference.                                                                             | <ul style="list-style-type: none"> <li>Numeric value (dB)</li> </ul>                                                                                                                                       |
| VOA Attenuation Calibration | Displays VOA attenuation calibration.                                                                                         | <ul style="list-style-type: none"> <li>Numeric value (dB)</li> <li>-30 dB to +30 dB</li> </ul>                                                                                                             |
| Actual Wavelength           | Display only. Displays the actual wavelength utilized by the channel.                                                         | <ul style="list-style-type: none"> <li>Actual measured value (nm)</li> <li>UNKNOWN</li> </ul>                                                                                                              |
| Expected Wavelength         | Display only. Displays the expected wavelength assigned for the channel.                                                      | <ul style="list-style-type: none"> <li>Value (nm) from the ITU-T grid specification</li> <li>UNKNOWN</li> </ul>                                                                                            |
| Power ADD                   | Display only. Displays Power Add, which is the value read by the photodiode before the VOA. Applicable only for ADD channels. | <ul style="list-style-type: none"> <li>Numeric value (dB)</li> </ul>                                                                                                                                       |
| Path Value                  | Display only. Displays Path value.                                                                                            | <ul style="list-style-type: none"> <li>Standby</li> </ul>                                                                                                                                                  |
| AINS Soak                   | Display only. Sets the automatic in-service soak period.                                                                      | <ul style="list-style-type: none"> <li>Duration of valid input signal, in hh.mm format, after which the card becomes in service (IS) automatically</li> <li>0 to 48 hours, 15-minute increments</li> </ul> |

**Step 4** Click **Apply**.

**Step 5** Return to your originating procedure (NTP).



## DLP-G213 Change Optical Channel Optics Thresholds for the 32WSS Card

|                                |                                                                                     |
|--------------------------------|-------------------------------------------------------------------------------------|
| <b>Purpose</b>                 | This task changes the optical channel optics threshold settings for the 32WSS card. |
| <b>Tools/Equipment</b>         | None                                                                                |
| <b>Prerequisite Procedures</b> | <a href="#">DLP-G46 Log into CTC, page 2-25</a>                                     |
| <b>Required/As Needed</b>      | As needed                                                                           |
| <b>Onsite/Remote</b>           | Onsite or remote                                                                    |
| <b>Security Level</b>          | Provisioning or higher                                                              |

- 
- Step 1** In node view, double-click the 32WSS card where you want to change the optical channel optics threshold settings.
- Step 2** Click the **Provisioning > Optical Chn: Optical Connector** tab for one of the four optical channel: optical connector tabs (1 to 4) that are available.
- Step 3** Click the **Optics Thresholds** tab to display the warnings thresholds settings for each port.
- Step 4** Modify any of the settings described in [Table 10-15](#).

**Table 10-15 32WSS Card Optical Channel Optics Threshold Settings**

| Parameter     | Description                                                                                                                                                                                                                                                                                                                                                   | Options                                                         |
|---------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------|
| Port          | Display only. Port designation information. Each Optical Channel has a unique RX and a PT port in this field. For example, the first two ports of Optical Ch: Optical Connector 1 are designated as 1 CHAN-16-1-RX and 33 CHAN-16-1-PT. These two corresponding ports are shown in the 32WSS display windows in the top row as ADD RX Port 01 and PT Port 33. | —                                                               |
| opwrMin (dBm) | Sets the warning thresholds minimum value (dBm).                                                                                                                                                                                                                                                                                                              | User-defined value. Typically a negative optical power setting. |
| opwrMax (dBm) | Sets the warning thresholds maximum value (dBm).                                                                                                                                                                                                                                                                                                              | User-defined value. Typically a positive optical power setting. |

- Step 5** Select the threshold alert type by clicking either the **Warning** or the **Alarm** radio button.
- Step 6** Select the warning threshold interval by selecting either the **15 Min** or **1 Day** radio button.
- Step 7** Click the **Refresh** button.
- Step 8** Return to your originating procedure (NTP).
-

## DLP-G214 Change Optical Line Parameters for the 32WSS Card

|                                |                                                                           |
|--------------------------------|---------------------------------------------------------------------------|
| <b>Purpose</b>                 | This task changes the optical line parameter settings for the 32WSS card. |
| <b>Tools/Equipment</b>         | None                                                                      |
| <b>Prerequisite Procedures</b> | <a href="#">DLP-G46 Log into CTC, page 2-25</a>                           |
| <b>Required/As Needed</b>      | As needed                                                                 |
| <b>Onsite/Remote</b>           | Onsite or remote                                                          |
| <b>Security Level</b>          | Provisioning or higher                                                    |

- Step 1** In node view, double-click the 32WSS card where you want to change the optical line parameter settings.
- Step 2** Click the **Provisioning > Optical Line > Parameters** tab.
- Step 3** Modify any of the settings described in [Table 10-16](#).

**Table 10-16 32WSS Optical Line Parameter Settings**

| Parameter | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | Options                                                                                                                                                                          |
|-----------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Port      | <p>Display only. Line designation information is read-only.</p> <p>The EXP-RX port receives an optical signal from another 32WSS module in the same network element. The EXP-TX port sends an optical signal to the other 32WSS module within the network element. For example, the two EXP ports are designated as 66 LINE-16-1-RX and 65 LINE-16-1-TX.</p> <p>The COM-TX port sends an aggregate optical signal to a booster card (for example, OSC-CSM or OSCM) for transmission outside of the network element. The COM-RX port receives the optical signal from a preamplifier and sends it to the optical splitter. For example, the two COM ports are designated as 67 LINE-16-2-TX and 68 LINE-16-2-RX.</p> <p>The DROP-TX port sends the split-off optical signal that contains drop channels to the 32DMX card, where the channels are further processed and dropped. For example, the DROP-TX port is designated as 69 LINE-16-3-TX.</p> | —                                                                                                                                                                                |
| Port Name | The user can assign a logical name for each of the ports shown by filling in this field.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | <p>User-defined. Name can be up to 32 alphanumeric/special characters. Blank by default.</p> <p>See the <a href="#">“DLP-G104 Assign a Name to a Port” task on page 6-8</a>.</p> |

**Table 10-16 32WSS Optical Line Parameter Settings (continued)**

| Parameter      | Description                                                                                                                                                                                                                                                                                    | Options                                                                                                                                                                                                                        |
|----------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Admin State    | Sets the port service state unless network conditions prevent the change. For more information about administrative states, see <a href="#">Appendix C, “DWDM Enhanced State Model.”</a>                                                                                                       | <ul style="list-style-type: none"> <li>IS/Unlocked</li> <li>IS,AINS/Unlocked,automaticInService</li> <li>OOS,DSBLD/Locked,disabled</li> <li>OOS,MT/Locked,maintenance</li> </ul>                                               |
| Service State  | Identifies the autonomously generated state that gives the overall condition of the port. Service states appear in the format: Primary State-Primary State Qualifier, Secondary State. For more information about service states, see <a href="#">Appendix C, “DWDM Enhanced State Model.”</a> | <ul style="list-style-type: none"> <li>IS-NR/Unlocked-enabled</li> <li>OOS-AU,AINS/Unlocked-disabled,automaticInService</li> <li>OOS-MA,DSBLD/Locked-enabled,disabled</li> <li>OOS-MA,MT/Locked-enabled,maintenance</li> </ul> |
| Line Direction | Display only. Displays the direction that the optical signal flows.                                                                                                                                                                                                                            | <ul style="list-style-type: none"> <li>West to East (the direction in which channels are added)</li> <li>East to West (the direction in which channels are dropped)</li> </ul>                                                 |
| Type           | Port type.                                                                                                                                                                                                                                                                                     | <ul style="list-style-type: none"> <li>Output Express</li> <li>Input Express</li> <li>Out Com</li> <li>Input Com</li> <li>Drop</li> </ul>                                                                                      |
| Power          | Power value read by the photodiode associated with the port.                                                                                                                                                                                                                                   | <ul style="list-style-type: none"> <li>Numeric value (dB)</li> </ul>                                                                                                                                                           |
| AINS Soak      | Sets the automatic in-service soak period.                                                                                                                                                                                                                                                     | <ul style="list-style-type: none"> <li>Duration of valid input signal, in hh.mm format, after which the card becomes in service (IS) automatically</li> <li>0 to 48 hours, 15-minute increments</li> </ul>                     |

**Step 4** Return to your originating procedure (NTP).

## DLP-G215 Change Optical Line Optics Thresholds for the 32WSS Card

|                                |                                                                                  |
|--------------------------------|----------------------------------------------------------------------------------|
| <b>Purpose</b>                 | This task changes the optical line optics threshold settings for the 32WSS card. |
| <b>Tools/Equipment</b>         | None                                                                             |
| <b>Prerequisite Procedures</b> | <a href="#">DLP-G46 Log into CTC, page 2-25</a>                                  |
| <b>Required/As Needed</b>      | As needed                                                                        |
| <b>Onsite/Remote</b>           | Onsite or remote                                                                 |
| <b>Security Level</b>          | Provisioning or higher                                                           |

- 
- Step 1** In node view, double-click the 32WSS card where you want to change the optical line optics warning threshold settings.
- Step 2** Click the **Provisioning > Optical Line** tab.
- Step 3** Click the **Optics Thresholds** tab to display the warnings thresholds settings for each line.
- Step 4** Modify any of the settings described in [Table 10-17](#).

**Table 10-17 32WSS Card Optical Line Optics Threshold Settings**

| Parameter     | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | Options                                                         |
|---------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------|
| Port          | <p>Display only. Line designation information is read-only.</p> <p>The EXP-RX port receives an optical signal from another 32WSS module in the same network element. The EXP-TX port sends an optical signal to the other 32WSS module within the network element. For example, the two EXP ports are designated as 66 LINE-16-1-RX and 65 LINE-16-1-TX.</p> <p>The COM-TX port sends an aggregate optical signal to a booster card (for example, OSC-CSM or OSCM) for transmission outside of the network element. The COM-RX port receives the optical signal from a preamplifier and sends it to the optical splitter. For example, the two COM ports are designated as 67 LINE-16-2-TX and 68 LINE-16-2-RX.</p> <p>The DROP-TX port sends the split-off optical signal that contains drop channels to the 32DMX card where the channels are further processed and dropped. For example, the DROP-TX port is designated as 69 LINE-16-3-TX.</p> | —                                                               |
| opwrMin (dBm) | Sets the warning thresholds minimum value (dBm).                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | User-defined value. Typically a negative optical power setting. |
| opwrMax (dBm) | Sets the warning thresholds maximum value (dBm).                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | User-defined value. Typically a positive optical power setting. |

- Step 5** Select the threshold alert type by clicking either the **Warning** or the **Alarm** radio button.
- Step 6** Select the warning threshold interval by selecting either the **15 Min** or **1 Day** radio button.

- Step 7** Click the **Refresh** button.
- Step 8** Return to your originating procedure (NTP).
- 

## NTP-G94 Provision Pluggable Port Modules

|                                |                                                                                                                                                                      |
|--------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Purpose</b>                 | This procedure provisions pluggable port modules (PPMs) such as Small Form-factor Pluggables (SFPs) for TXP and MXP cards. Only the TXP_MR_10G does not accept PPMs. |
| <b>Tools/Equipment</b>         | None                                                                                                                                                                 |
| <b>Prerequisite Procedures</b> | <a href="#">NTP-G32 Install the Transponder and Muxponder Cards, page 3-30</a><br><a href="#">DLP-G63 Install an SFP, page 3-32</a>                                  |
| <b>Required/As Needed</b>      | Required                                                                                                                                                             |
| <b>Onsite/Remote</b>           | Onsite or remote                                                                                                                                                     |
| <b>Security Level</b>          | Provisioning or higher                                                                                                                                               |

---

- Step 1** Complete the “[DLP-G46 Log into CTC](#)” task on [page 2-25](#) to log into an ONS 15454 on the network.
- Step 2** Click the **Alarms** tab:
- Verify that the alarm filter is not turned on. See the “[DLP-G128 Disable Alarm Filtering](#)” task on [page 7-32](#) as necessary.
  - Verify that no unexplained conditions appear on the network. If unexplained conditions appear, resolve them before continuing. Refer to the *Cisco ONS 15454 SONET and DWDM Troubleshooting Guide*.
  - Complete the “[DLP-G114 Export CTC Data](#)” task on [page 7-4](#) to export alarm and condition information.
- Step 3** In node view, double-click the card where you want to provision PPM settings.
- Step 4** Click the **Provisioning > Pluggable Port Modules** tabs.
- Step 5** In the Pluggable Port Modules pane, click **Create**. The Create PPM dialog box appears.
- Step 6** In the Create PPM dialog box, complete the following:
- PPM—Click the slot number where the SFP is installed from the drop-down list.
  - PPM Type—Click the number of ports supported by your SFP from the drop-down list. If only one port is supported, **PPM (1 port)** is the only menu option.
- Step 7** Click **OK**. The newly created port appears in the Pluggable Port Modules pane and the Pluggable Ports pane.
- Step 8** Repeat Steps [5](#) through [7](#) to create as many ports as needed.
- Step 9** Click the PPM port row that appears in the Pluggable Port Modules pane. The highlight changes to dark blue.
- Step 10** In the Selected PPM pane, click **Create**. The Create Port dialog box appears.
- Step 11** In the Create Port dialog box, complete the following:

- Port—Click the PPM number and port number from the drop-down list. The first number indicates the PPM and the second number indicates the number of ports. For example, the first PPM with one port displays as 1-1 and the second PPM with one port displays as 2-1.
- Port Type—Click the type of port from the drop-down list. The port type menu displays supported port rates per card. See [Table 10-18](#) for definitions of the supported rates per card.

**Step 12** Repeat Steps 9 through 11 to configure the port rates as needed.

**Table 10-18 PPM Port Types**

| Card                             | Port Type                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
|----------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| TXP_MR_2.5G and<br>TXPP_MR_2.5G  | <ul style="list-style-type: none"> <li>• OC-3/STM1—155 Mbps</li> <li>• OC-12/STM4—622 Mbps</li> <li>• OC-48/STM16—2.48 Gbps</li> <li>• ONE_GE—One Gigabit Ethernet 1,125 Gbps</li> <li>• ESCON—Enterprise System Connection (IBM signal)</li> <li>• DV6000—Proprietary signal from video vendor</li> <li>• SDI_D1_VIDEO—Serial Digital Interface and Digital Video signal type 1</li> <li>• HDTV—High Definition Television</li> <li>• PASS-THRU—Not specified</li> <li>• FC1G—Fiber Channel 1,06 Gbps</li> <li>• FC2G—Fiber Channel 2,125 Gbps</li> <li>• FICON1G—Fiber CON 1,06 Gbps (IBM signal)</li> <li>• FICON2G—Fiber CON 2,125 Gbps (IBM signal)</li> <li>• ETR_CLO—IBM Sysplex timer</li> <li>• ISC compat—InterSystem Coupling link (IBM signal)</li> <li>• ISC peer—InterSystem Coupling link (IBM signal)</li> </ul> |
| MXP_2.5G_10G and<br>MXP_2.5G_10E | <ul style="list-style-type: none"> <li>• OC-48/STM16—2.48 Gbps</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| TXP_MR_10E                       | <ul style="list-style-type: none"> <li>• OC-192/STM-64—10 Gbps</li> <li>• 10G Ethernet LAN Phy—10 Gbps Ethernet</li> <li>• 10G Fiber Channel—10 Gbps Fiber Channel</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| MXP_MR_2.5G and<br>MXPP_MR_2.5G  | <ul style="list-style-type: none"> <li>• FC1G—Fiber Channel 1,06 Gbps</li> <li>• FC2G—Fiber Channel 2,125 Gbps</li> <li>• FICON1G—Fiber CON 1,06 Gbps (IBM signal)</li> <li>• FICON2G—Fiber CON 2,125 Gbps (IBM signal)</li> <li>• ONE_GE—One Gigabit Ethernet 1,125 Gbps</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |

- Step 13** Click **OK**.
- Stop. You have completed this procedure.**
- 

## NTP-G95 Delete Pluggable Port Modules

|                                |                                                                                                           |
|--------------------------------|-----------------------------------------------------------------------------------------------------------|
| <b>Purpose</b>                 | This procedure deletes PPMs such as SFPs for TXP and MXP cards. Only the TXP_MR_10G does not accept PPMs. |
| <b>Tools/Equipment</b>         | None                                                                                                      |
| <b>Prerequisite Procedures</b> | <a href="#">NTP-G94 Provision Pluggable Port Modules, page 10-29</a>                                      |
| <b>Required/As Needed</b>      | As needed                                                                                                 |
| <b>Onsite/Remote</b>           | Onsite or remote                                                                                          |
| <b>Security Level</b>          | Provisioning or higher                                                                                    |

---

- Step 1** Complete the [“DLP-G46 Log into CTC” task on page 2-25](#) to log into an ONS 15454 on the network.
- Step 2** Click the **Alarms** tab:
- Verify that the alarm filter is not turned on. See the [“DLP-G128 Disable Alarm Filtering” task on page 7-32](#) as necessary.
  - Verify that no unexplained conditions appear on the network. If unexplained conditions appear, resolve them before continuing. Refer to the *Cisco ONS 15454 SONET and DWDM Troubleshooting Guide*.
  - Complete the [“DLP-G114 Export CTC Data” task on page 7-4](#) to export alarm and condition information.
- Step 3** In node view, double-click the card where you want to delete PPM settings.
- Step 4** Click the **Provisioning > Pluggable Port Modules** tabs.
- Step 5** To delete all PPM provisioning on a card:
- Click the PPM line that appears in the Pluggable Port Modules pane. The highlight changes to dark blue.
  - Click **Delete**. The Delete PPM dialog box appears.
  - Click **Yes**. The PPM provisioning is removed from the Pluggable Port Modules pane and the Selected PPM pane.
- Step 6** To delete PPM provisioning on a port:
- Click the PPM line that appears in the Selected PPM pane. The highlight changes to dark blue.
  - Click **Delete**. The Delete Port dialog box appears.
  - Click **Yes**. The PPM provisioning is removed from the Selected PPM pane.
- Stop. You have completed this procedure.**
-

# NTP-G96 Modify Line Settings and PM Parameter Thresholds for TXP\_MR\_10G and TXP\_MR\_10E Cards

|                                |                                                                                                                                                                                                              |
|--------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Purpose</b>                 | This procedure changes the line and threshold settings for TXP_MR_10G and TXP_MR_10E transponder cards.                                                                                                      |
| <b>Tools/Equipment</b>         | None                                                                                                                                                                                                         |
| <b>Prerequisite Procedures</b> | <a href="#">NTP-G32 Install the Transponder and Muxponder Cards, page 3-30</a><br><a href="#">DLP-G63 Install an SFP, page 3-32</a><br><a href="#">NTP-G94 Provision Pluggable Port Modules, page 10-29.</a> |
| <b>Required/As Needed</b>      | As needed                                                                                                                                                                                                    |
| <b>Onsite/Remote</b>           | Onsite or remote                                                                                                                                                                                             |
| <b>Security Level</b>          | Provisioning or higher                                                                                                                                                                                       |


**Note**

The TXP\_MR\_10G card does not support PPMs.

- 
- Step 1** Complete the “[DLP-G46 Log into CTC](#)” task on page 2-25 at the node where you want to change the transponder card settings. If you are already logged in, proceed to [Step 2](#).
- Step 2** Complete the “[NTP-G103 Back Up the Database](#)” procedure on page 11-2.
- Step 3** Perform any of the following tasks as needed:
- [DLP-G216 Change Card Settings for TXP\\_MR\\_10G and TXP\\_MR\\_10E Cards, page 10-33](#)
  - [DLP-G217 Change Line Settings for TXP\\_MR\\_10G and TXP\\_MR\\_10E Cards, page 10-34](#)
  - [DLP-G219 Change Line Threshold Settings for TXP\\_MR\\_10G and TXP\\_MR\\_10E Cards, page 10-38](#)
  - [DLP-G220 Change Optical Thresholds Settings for TXP\\_MR\\_10G and TXP\\_MR\\_10E Cards, page 10-39](#)
  - [DLP-G218 Change Section Trace Settings for the TXP\\_MR\\_10G Card, page 10-37](#)
  - [DLP-G221 Change OTN Settings for TXP\\_MR\\_10G and TXP\\_MR\\_10E Cards, page 10-40](#)
- Step 4** Complete the “[NTP-G103 Back Up the Database](#)” procedure on page 11-2.
- Stop. You have completed this procedure.**
-



## DLP-G216 Change Card Settings for TXP\_MR\_10G and TXP\_MR\_10E Cards

|                                |                                                                                                          |
|--------------------------------|----------------------------------------------------------------------------------------------------------|
| <b>Purpose</b>                 | This task changes the card settings for TXP_MR_10G and TXP_MR_10E multirate (10 Gbps) transponder cards. |
| <b>Tools/Equipment</b>         | None                                                                                                     |
| <b>Prerequisite Procedures</b> | <a href="#">DLP-G46 Log into CTC, page 2-25</a>                                                          |
| <b>Required/As Needed</b>      | As needed                                                                                                |
| <b>Onsite/Remote</b>           | Onsite or remote                                                                                         |
| <b>Security Level</b>          | Provisioning or higher                                                                                   |

- Step 1** In node view, double-click the TXP\_MR\_10G or TXP\_MR\_10E 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 10-19](#).

**Table 10-19 TXP\_MR\_10G and TXP\_MR\_10E Transponder Card Settings**

| Parameter                 | Description                                                                                                                                                          | Options                                                                                                                                                                                                                                   |
|---------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Termination Mode          | Sets the mode of operation. See the <a href="#">“14.12 Transponder and Muxponder Termination Modes”</a> section on <a href="#">page 14-122</a> for more information. | <ul style="list-style-type: none"> <li>Transparent</li> <li>Section (only for TXP_MR_10E)</li> <li>Line</li> </ul>                                                                                                                        |
| AIS/Squelch Configuration | (TXP_MR_10E only.) Sets the transparent termination mode configuration.                                                                                              | <ul style="list-style-type: none"> <li>Squelch</li> <li>AIS</li> </ul>                                                                                                                                                                    |
| Wavelength                | Sets the wavelength of the dense wavelength division multiplexing (DWDM) side optical transmitter.                                                                   | <ul style="list-style-type: none"> <li>First Tunable Wavelength</li> <li>Further wavelengths in 100-GHz ITU spacing</li> <li>Supported wavelengths are in white and marked by asterisks (**); unsupported wavelengths are gray</li> </ul> |

**Table 10-19 TXP\_MR\_10G and TXP\_MR\_10E Transponder Card Settings (continued)**

| Parameter               | Description                              | Options                                                                                                                                                                                                                    |
|-------------------------|------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Regeneration Peer Slot  | Sets the regeneration peer slot.         | <ul style="list-style-type: none"> <li>• None</li> <li>• 1</li> <li>• 2</li> <li>• 3</li> <li>• 4</li> <li>• 5</li> <li>• 6</li> <li>• 12</li> <li>• 13</li> <li>• 14</li> <li>• 15</li> <li>• 16</li> <li>• 17</li> </ul> |
| Regeneration Group Name | Sets the name of the regeneration group. | Type the name in the field.                                                                                                                                                                                                |
| Card Parameters         | Displays available tunable wavelengths.  | Information field                                                                                                                                                                                                          |

**Step 4** Click **Apply**.

**Step 5** Return to your originating procedure (NTP).

## DLP-G217 Change Line Settings for TXP\_MR\_10G and TXP\_MR\_10E Cards

|                                |                                                                                      |
|--------------------------------|--------------------------------------------------------------------------------------|
| <b>Purpose</b>                 | This task changes the line settings for TXP_MR_10G and TXP_MR_10E transponder cards. |
| <b>Tools/Equipment</b>         | None                                                                                 |
| <b>Prerequisite Procedures</b> | <a href="#">DLP-G46 Log into CTC, page 2-25</a>                                      |
| <b>Required/As Needed</b>      | As needed                                                                            |
| <b>Onsite/Remote</b>           | Onsite or remote                                                                     |
| <b>Security Level</b>          | Provisioning or higher                                                               |

- 
- Step 1** In node view, double-click the TXP\_MR\_10G or TXP\_MR\_10E card where you want to change the line settings.
- Step 2** Click the **Provisioning > Line > SONET (including 10G Ethernet WAN phy)** tab.
- Step 3** Modify any of the settings described in [Table 10-20](#).

**Note**

In [Table 10-20](#), some parameter tabs do not always apply to both the TXP\_MR\_10G and TXP\_MR\_10E cards. When the tabs do not apply, they will not appear to the user.

**Table 10-20 TXP\_MR\_10G and TXP\_MR\_10E Transponder Card Line Settings**

| Parameter     | Description                                                                                                                                                                                                                                                                                    | Options                                                                                                                                                                                                                         |
|---------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Port          | Display only. Displays the port number.                                                                                                                                                                                                                                                        | <ul style="list-style-type: none"> <li>1-1 (OC192)</li> <li>2 (Trunk)</li> </ul>                                                                                                                                                |
| 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.<br><br>See the <a href="#">“DLP-G104 Assign a Name to a Port” task on page 6-8</a> .                                                      |
| Admin State   | Sets the port service state unless network conditions prevent the change. For more information about administrative states, see <a href="#">Appendix C, “DWDM Enhanced State Model.”</a>                                                                                                       | <ul style="list-style-type: none"> <li>IS/Unlocked</li> <li>IS,AINS/Unlocked,automaticInService</li> <li>OOS,DSBLD/Locked,disabled</li> <li>OOS,MT/Locked,maintenance</li> </ul>                                                |
| Service State | Identifies the autonomously generated state that gives the overall condition of the port. Service states appear in the format: Primary State-Primary State Qualifier, Secondary State. For more information about service states, see <a href="#">Appendix C, “DWDM Enhanced State Model.”</a> | <ul style="list-style-type: none"> <li>IS-NR/Unlocked-enabled</li> <li>OOS-AU,AINS/Unlocked-disabled, automaticInService</li> <li>OOS-MA,DSBLD/Locked-enabled,disabled</li> <li>OOS-MA,MT/Locked-enabled,maintenance</li> </ul> |
| SF BER        | (Cards with no PPM only.) Sets the signal fail bit error rate.                                                                                                                                                                                                                                 | <ul style="list-style-type: none"> <li>1E-3</li> <li>1E-4</li> <li>1E-5</li> </ul>                                                                                                                                              |
| SD BER        | (Cards with no PPM only.) Sets the signal degrade bit error rate.                                                                                                                                                                                                                              | <ul style="list-style-type: none"> <li>1E-5</li> <li>1E-6</li> <li>1E-7</li> <li>1E-8</li> <li>1E-9</li> </ul>                                                                                                                  |
| AINS Soak     | (Cards with no PPM only.) Sets the automatic in-service soak period. Double click the time and use the up and down arrows to change settings.                                                                                                                                                  | <ul style="list-style-type: none"> <li>Duration of valid input signal, in hh.mm format, after which the card becomes in service (IS) automatically</li> <li>0 to 48 hours, 15-minute increments</li> </ul>                      |
| Type          | (Cards with no PPM only.) The optical transport type.                                                                                                                                                                                                                                          | <ul style="list-style-type: none"> <li>SONET</li> <li>SDH</li> </ul>                                                                                                                                                            |

**Table 10-20 TXP\_MR\_10G and TXP\_MR\_10E Transponder Card Line Settings (continued)**

| Parameter            | Description                                                                                                                                                                | Options                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
|----------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| ALS Mode             | Sets the automatic laser shutdown function mode. The DWDM transmitter supports ALS according to ITU-T G.644 (06/99). ALS can be disabled or be set for three mode options. | <ul style="list-style-type: none"> <li>Disable: ALS is off; the laser is not automatically shut down when traffic outages (LOS) occur.</li> <li>Auto Restart: ALS is on; the laser automatically shuts down when traffic outages (LOS) occur. It automatically restarts when the conditions that caused the outage are resolved.</li> <li>Manual Restart: ALS is on; the laser automatically shuts down when traffic outages (LOS) occur. However, the laser must be manually restarted when conditions that caused the outage are resolved.</li> <li>Manual Restart for Test: Manually restarts the laser for testing.</li> </ul> |
| ProvidesSync         | (TXP_MR_10E, OC192 only.) Sets the ProvidesSync card parameter. If checked, the card is provisioned as a network element timing reference.                                 | Checked or unchecked                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| SyncMsgIn            | (TXP_MR_10E, OC192 only.) Sets the EnableSync card parameter. Enables synchronization status messages (S1 byte), which allow the node to choose the best timing source.    | Checked or unchecked                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| Send DoNotUse        | (TXP_MR_10E, OC192 only.) Sets the Send DoNotUse card state. When checked, sends a DUS (do not use) message on the S1 byte.                                                | Checked or unchecked                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| Max Size             | (TXP_MR_10E, 10_GE only.) Sets the maximum Ethernet packet size.                                                                                                           | <ul style="list-style-type: none"> <li>1548 bytes</li> <li>Jumbo (64 to 9,216 bytes)</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| Incoming MAC Address | (TXP_MR_10E, 10_GE only.) Sets the incoming MAC address                                                                                                                    | Value of MAC address. 6 bytes in hexadecimal format.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |

**Step 4** Click **Apply**.

**Step 5** Return to your originating procedure (NTP).

## DLP-G218 Change Section Trace Settings for the TXP\_MR\_10G Card

|                                |                                                                                   |
|--------------------------------|-----------------------------------------------------------------------------------|
| <b>Purpose</b>                 | This task changes the section trace settings for the TXP_MR_10G transponder card. |
| <b>Tools/Equipment</b>         | None                                                                              |
| <b>Prerequisite Procedures</b> | <a href="#">DLP-G46 Log into CTC, page 2-25</a>                                   |
| <b>Required/As Needed</b>      | As needed                                                                         |
| <b>Onsite/Remote</b>           | Onsite or remote                                                                  |
| <b>Security Level</b>          | Provisioning or higher                                                            |

**Step 1** In node view, double-click the TXP\_MR\_10G card where you want to change the section trace settings.

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



**Note** The Section Trace tab is available for the TXP\_MR\_10G card only if no PPM has been created or if only an OC192 PPM has been created. The tab is not available if a TEN\_GE or FC10G PPM has been created.

**Step 3** Modify any of the settings described in [Table 10-21](#).

**Table 10-21 TXP\_MR\_10G Transponder Card Section Trace Settings**

| Parameter                 | Description                                                                                                                                                                                         | Options                                                                           |
|---------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|
| Port                      | Sets the port number.                                                                                                                                                                               | <ul style="list-style-type: none"> <li>1-1 (OC-192)</li> <li>2 (Trunk)</li> </ul> |
| Trace Mode                | Sets the trace mode.                                                                                                                                                                                | <ul style="list-style-type: none"> <li>Off/None</li> <li>Manual</li> </ul>        |
| Section Trace String Size | Sets the trace string size.                                                                                                                                                                         | <ul style="list-style-type: none"> <li>1 byte</li> <li>16 byte</li> </ul>         |
| Transmit                  | Displays the current transmit string; sets a new transmit string. You can select the Hex Mode or ASCII Mode button to change string input type.                                                     | String of trace string size                                                       |
| Expected                  | Displays the current expected string; sets a new expected string. You can select the Hex Mode or ASCII Mode button to change string input type.                                                     | String of trace string size                                                       |
| Received                  | Display only. Displays the current received string. You can press the Refresh button to manually refresh this display, or select the Auto-refresh every 5 sec check box to keep this panel updated. | String of trace string size                                                       |

**Step 4** Click **Apply**.

**Step 5** Return to your originating procedure (NTP).

## DLP-G219 Change Line Threshold Settings for TXP\_MR\_10G and TXP\_MR\_10E Cards

|                                |                                                                                                |
|--------------------------------|------------------------------------------------------------------------------------------------|
| <b>Purpose</b>                 | This task changes the line threshold settings for TXP_MR_10G and TXP_MR_10E transponder cards. |
| <b>Tools/Equipment</b>         | None                                                                                           |
| <b>Prerequisite Procedures</b> | <a href="#">DLP-G46 Log into CTC, page 2-25</a>                                                |
| <b>Required/As Needed</b>      | As needed                                                                                      |
| <b>Onsite/Remote</b>           | Onsite or remote                                                                               |
| <b>Security Level</b>          | Provisioning or higher                                                                         |

**Step 1** In node view, 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 10-22](#).



**Note**

The Line Thresholds setting are available for the TXP\_MR\_10E card only if no PPM has been created or if only an OC192 PPM has been created. The settings are not available if a TEN\_GE or FC10G PPM has been created.

**Table 10-22 TXP\_MR\_10G and TXP\_MR\_10E Transponder Card Line Threshold Settings**

| Parameter | Description                                      | Options                                                                                                                                                                   |
|-----------|--------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Port      | Display only. Port number                        | <ul style="list-style-type: none"> <li>1-1 (OC192)</li> <li>2 (Trunk)</li> </ul>                                                                                          |
| 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), Line, or Section. Select a bullet and click <b>Refresh</b> . |
| 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), Line, or Section. Select a bullet and click <b>Refresh</b> . |
| 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), Line, or Section. Select a bullet and click <b>Refresh</b> . |
| SEFS      | (Section only.) Severely errored framing seconds | Numeric. Can be set for Far End, for 15-minute or one-day intervals for Section only. Select the bullet and click <b>Refresh</b> .                                        |

**Table 10-22 TXP\_MR\_10G and TXP\_MR\_10E Transponder 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, or for Line (Far End only), Line, or Section. Select a bullet and click <b>Refresh</b> . |
| UAS       | Unavailable seconds | Numeric. Can be set for Near End or Far End, for 15-minute or one-day intervals, or for Line (Far End only), Line, or Section. Select a bullet and click <b>Refresh</b> . |

**Step 4** Click **Apply**.

**Step 5** Return to your originating procedure (NTP).

## DLP-G220 Change Optical Thresholds Settings for TXP\_MR\_10G and TXP\_MR\_10E Cards

|                                |                                                                                                   |
|--------------------------------|---------------------------------------------------------------------------------------------------|
| <b>Purpose</b>                 | This task changes the optical threshold settings for TXP_MR_10G and TXP_MR_10E transponder cards. |
| <b>Tools/Equipment</b>         | None                                                                                              |
| <b>Prerequisite Procedures</b> | <a href="#">DLP-G46 Log into CTC, page 2-25</a>                                                   |
| <b>Required/As Needed</b>      | As needed                                                                                         |
| <b>Onsite/Remote</b>           | Onsite or remote                                                                                  |
| <b>Security Level</b>          | Provisioning or higher                                                                            |

**Step 1** In node view, double-click the transponder 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 10-23](#).

**Table 10-23 TXP\_MR\_10G and TXP\_MR\_10E Transponder Card Optical Thresholds Settings**

| Parameter           | Description                                               | Options                                                        |
|---------------------|-----------------------------------------------------------|----------------------------------------------------------------|
| Port                | Display only. Displays the port number and name.          | <ul style="list-style-type: none"> <li>1</li> <li>2</li> </ul> |
| Laser Bias High (%) | Sets the warning threshold for low laser bias current.    | Numeric, in percent<br>Range 0 to 100                          |
| RX Power High (dBm) | Sets the warning threshold for high receiver input power. | Numeric, in dBm<br>Range -40.0 to +30.0                        |
| RX Power Low (dBm)  | Sets the warning threshold for low receiver input power.  | Numeric, in dBm<br>Range -40.0 to +30.0                        |

**Table 10-23 TXP\_MR\_10G and TXP\_MR\_10E Transponder Card Optical Thresholds Settings**

| Parameter           | Description                                                   | Options                                 |
|---------------------|---------------------------------------------------------------|-----------------------------------------|
| TX Power High (dBm) | Sets the warning threshold for high transmitter output power. | Numeric, in dBm<br>Range –40.0 to +30.0 |
| TX Power Low (dBm)  | Sets the warning threshold for low transmitter output power.  | Numeric, in dBm<br>Range –40.0 to +30.0 |

- Step 4** Click **Apply**.
- Step 5** Select the **TCA** or **Alarm** radio button.
- Step 6** Select a **15 Min** or **1 Day** performance monitoring interval radio button (available for threshold crossing alerts [TCA] only), and then click **Refresh**.
- Step 7** Return to your originating procedure (NTP).

## DLP-G221 Change OTN Settings for TXP\_MR\_10G and TXP\_MR\_10E Cards

|                                |                                                                                                                      |
|--------------------------------|----------------------------------------------------------------------------------------------------------------------|
| <b>Purpose</b>                 | This task changes the line optical transport network (OTN) settings for TXP_MR_10G and TXP_MR_10E transponder cards. |
| <b>Tools/Equipment</b>         | None                                                                                                                 |
| <b>Prerequisite Procedures</b> | <a href="#">DLP-G46 Log into CTC, page 2-25</a>                                                                      |
| <b>Required/As Needed</b>      | As needed                                                                                                            |
| <b>Onsite/Remote</b>           | Onsite or remote                                                                                                     |
| <b>Security Level</b>          | Provisioning or higher                                                                                               |

- Step 1** In node view, double-click the TXP\_MR\_10G or TXP\_MR\_10E card where you want to change the OTN settings.
- Step 2** Click one of the **Provisioning > OTN** tabs (OTN Lines, G.709 Thresholds, FEC Thresholds, or Trail Trace Identifier).
- Step 3** Modify any of the settings described in Tables [10-24](#) through [10-27](#).  
[Table 10-24](#) describes the values on the Provisioning > OTN > OTN Lines tab.

**Table 10-24 TXP\_MR\_10G and TXP\_MR\_10E Transponder Card OTN Settings**

| Parameter | Description                                                                                                                                             | Options                                                                                                                      |
|-----------|---------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------|
| Port #    | Display only. Displays the port number.                                                                                                                 | 2                                                                                                                            |
| G.709 OTN | Sets the OTN lines according to ITU-T G.709. Check box to enable.                                                                                       | <ul style="list-style-type: none"> <li>Enabled</li> <li>Disabled</li> </ul>                                                  |
| FEC       | Sets the OTN lines FEC mode. FEC mode can be Disabled, Enabled or Enhanced FEC mode can be enabled (to provide greater range and lower bit error rate). | <ul style="list-style-type: none"> <li>Disabled (FEC OFF)</li> <li>Standard (FEC ON)</li> <li>Enhanced (E-FEC ON)</li> </ul> |
| SF BER    | Sets the signal fail bit error rate.                                                                                                                    | <ul style="list-style-type: none"> <li>1E-5</li> </ul>                                                                       |



**Table 10-24 TXP\_MR\_10G and TXP\_MR\_10E Transponder Card OTN Settings (continued)**

| Parameter            | Description                                                                                                                                                                                                     | Options                                                                                                                  |
|----------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------|
| SD BER               | Sets the signal degrade bit error rate.                                                                                                                                                                         | <ul style="list-style-type: none"> <li>• 1E-5</li> <li>• 1E-6</li> <li>• 1E-7</li> <li>• 1E-8</li> <li>• 1E-9</li> </ul> |
| Asynch/Synch Mapping | (TXP_MR_10E only.) The card can perform multiplexing per ITU-T G.709. The ODUk (client SONET/SDH payload) can be mapped to the Optical Channel (OTUk) either asynchronously or synchronously with this setting. | <ul style="list-style-type: none"> <li>• Asynch mapping</li> <li>• Synch mapping</li> </ul>                              |

Table 10-25 describes the values on the Provisioning > OTN > G.709 Thresholds tab.

**Table 10-25 TXP\_MR\_10G and TXP\_MR\_10E Transponder Card ITU-T G.709 Threshold Settings**

| Parameter | Description                                                                                                                                                                                                                                                      | Options                                                                                                                                                      |
|-----------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Port      | Display only. Port number.                                                                                                                                                                                                                                       | 2                                                                                                                                                            |
| ES        | Severely errored seconds. Two types of thresholds can be asserted. Selecting the SM (OTUk) radio button selects FEC and overhead management and performance monitoring using OTUk. Selecting the PM radio button selects path performance monitoring using ODUk. | Numeric. Can be set for Near End or Far End, for 15-minute or one-day intervals, or for SM (OTUk) or PM (ODUk). Select a bullet and click <b>Refresh</b> .   |
| SES       | Severely errored seconds                                                                                                                                                                                                                                         | Numeric. Can be set for Near End or Far End, for 15-minute or one-day intervals, or for SM (OTUk) or PM (ODUk). Select the bullet and click <b>Refresh</b> . |
| UAS       | Unavailable seconds                                                                                                                                                                                                                                              | Numeric. Can be set for Near End or Far End, for 15-minute or one-day intervals, or for SM (OTUk) or PM (ODUk). Select the bullet and click <b>Refresh</b> . |
| BBE       | Background block errors                                                                                                                                                                                                                                          | Numeric. Can be set for Near End or Far End, for 15-minute or one-day intervals, or for SM (OTUk) or PM (ODUk). Select the bullet and click <b>Refresh</b> . |
| FC        | Failure counter                                                                                                                                                                                                                                                  | Numeric. Can be set for Near End or Far End, for 15-minute or one-day intervals, or for SM (OTUk) or PM (ODUk). Select the bullet and click <b>Refresh</b> . |

Table 10-26 describes the values on the Provisioning > OTN > FEC Thresholds tab.

**Table 10-26 TXP\_MR\_10G and TXP\_MR\_10E Transponder Card FEC Threshold Settings**

| Parameter            | Description                                                                  | Options                                                         |
|----------------------|------------------------------------------------------------------------------|-----------------------------------------------------------------|
| Port                 | Display only. Displays the port number and optional name.                    | 2                                                               |
| Bit Errors Corrected | Displays the number of bit errors corrected during the selected time period. | Numeric display. Can be set for 15-minute or one-day intervals. |
| Uncorrectable Words  | Displays the number of uncorrectable words in the selected time period.      | Numeric display. Can be set for 15-minute or one-day intervals. |

Table 10-27 describes the values on the Provisioning > OTN > Trail Trace Identifier tab.

**Table 10-27 TXP\_MR\_10G and TXP\_MR\_10E Transponder Card Trail Trace Identifier Settings**

| Parameter  | Description                                                                                                                                                                                         | Options                                                                                  |
|------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------|
| Port       | Sets the port number.                                                                                                                                                                               | <ul style="list-style-type: none"> <li>1</li> <li>2</li> </ul>                           |
| Level      | Sets the level.                                                                                                                                                                                     | <ul style="list-style-type: none"> <li>Section</li> <li>Path</li> </ul>                  |
| Trace Mode | Sets the trace mode.                                                                                                                                                                                | <ul style="list-style-type: none"> <li>Off/None</li> <li>Auto</li> <li>Manual</li> </ul> |
| Transmit   | Displays the current transmit string; sets a new transmit string.                                                                                                                                   | String of trace string size; trail trace identifier is 64 bytes in length.               |
| Expected   | Displays the current expected string; sets a new expected string.                                                                                                                                   | String of trace string size                                                              |
| Received   | Display only. Displays the current received string. You can press the Refresh button to manually refresh this display, or select the Auto-refresh every 5 sec check box to keep this panel updated. | String of trace string size                                                              |

**Step 4** Click **Apply**.

**Step 5** Return to your originating procedure (NTP).

# NTP-G97 Modify Line Settings and PM Parameter Thresholds for MXP\_2.5G\_10G and MXP\_2.5G\_10E Cards

|                                |                                                                                                                                                                                                               |
|--------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Purpose</b>                 | This procedure changes the line and threshold settings for MXP_2.5G_10G and MXP_2.5G_10E muxponder cards.                                                                                                     |
| <b>Tools/Equipment</b>         | None                                                                                                                                                                                                          |
| <b>Prerequisite Procedures</b> | <a href="#">NTP-G32 Install the Transponder and Muxponder Cards, page 3-30.</a><br><a href="#">DLP-G63 Install an SFP, page 3-32</a><br><a href="#">NTP-G94 Provision Pluggable Port Modules, page 10-29.</a> |
| <b>Required/As Needed</b>      | As needed                                                                                                                                                                                                     |
| <b>Onsite/Remote</b>           | Onsite or remote                                                                                                                                                                                              |
| <b>Security Level</b>          | Provisioning or higher                                                                                                                                                                                        |

- 
- Step 1** Complete the “[DLP-G46 Log into CTC](#)” task on [page 2-25](#) at the node where you want to change the muxponder card settings. If you are already logged in, proceed to [Step 2](#).
- Step 2** Complete the “[NTP-G103 Back Up the Database](#)” procedure on [page 11-2](#).
- Step 3** Perform any of the following tasks as needed:
- [DLP-G222 Change Card Settings for MXP\\_2.5G\\_10G and MXP 2.5G\\_10E Cards, page 10-44](#)
  - [DLP-G223 Change Line Settings for MXP\\_2.5G\\_10G and MXP 2.5G\\_10E Cards, page 10-45](#)
  - [DLP-G224 Change Section Trace Settings for MXP\\_2.5G\\_10G and MXP\\_2.5G\\_10E Cards, page 10-47](#)
  - [DLP-G225 Change Trunk Settings for MXP\\_2.5G\\_10G and MXP\\_2.5G\\_10E Cards, page 10-48](#)
  - [DLP-G226 Change Line Thresholds Settings for MXP\\_2.5G\\_10G and MXP 2.5G\\_10E Cards, page 10-49](#)
  - [DLP-G227 Change Optical Threshold Settings for MXP\\_2.5G\\_10G and MXP\\_2.5G\\_10E Cards, page 10-51](#)
  - [DLP-G228 Change Line OTN Settings for MXP\\_2.5G\\_10G and MXP\\_2.5G\\_10E Cards, page 10-52](#)
- Step 4** Complete the “[NTP-G103 Back Up the Database](#)” procedure on [page 11-2](#).
- Stop. You have completed this procedure.**
-

## DLP-G222 Change Card Settings for MXP\_2.5G\_10G and MXP 2.5G\_10E Cards

|                                |                                                                                                                                                 |
|--------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Purpose</b>                 | This task changes the card settings for MXP_2.5G_10G or MXP_2.5G_10E muxponder cards, including payload type, termination mode, and wavelength. |
| <b>Tools/Equipment</b>         | None                                                                                                                                            |
| <b>Prerequisite Procedures</b> | <a href="#">DLP-G46 Log into CTC, page 2-25</a>                                                                                                 |
| <b>Required/As Needed</b>      | As needed                                                                                                                                       |
| <b>Onsite/Remote</b>           | Onsite or remote                                                                                                                                |
| <b>Security Level</b>          | Provisioning or higher                                                                                                                          |

- 
- Step 1** In node view, double-click the MXP\_2.5G\_10G or and MXP\_2.5G\_10E 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 10-28](#).

**Table 10-28 MXP\_2.5G\_10G or MXP\_2.5G\_10E Muxponder Card Settings**

| Parameter        | Description                                                                                                                                                                                                          | Options                                                                                                                                                                                                                                              |
|------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Termination Mode | Sets the mode of operation. Options that do not apply to a card do not display. See <a href="#">“14.12 Transponder and Muxponder Termination Modes”</a> section on <a href="#">page 14-122</a> for more information. | <ul style="list-style-type: none"> <li>Transparent</li> <li>Section</li> <li>Line</li> </ul>                                                                                                                                                         |
| Wavelength       | Sets the wavelength of the DWDM trunk side of the optical transmitter.                                                                                                                                               | <ul style="list-style-type: none"> <li>First Tunable Wavelength</li> <li>Further wavelengths in 100-GHz ITU grid specification</li> <li>Supported wavelengths are in white and marked by asterisks (**); unsupported wavelengths are gray</li> </ul> |
| Card Parameters  | Displays the settings for the card.                                                                                                                                                                                  | Information only.                                                                                                                                                                                                                                    |

- Step 4** Click **Apply**.
- Step 5** Return to your originating procedure (NTP).
-

## DLP-G223 Change Line Settings for MXP\_2.5G\_10G and MXP 2.5G\_10E Cards

|                                |                                                                                       |
|--------------------------------|---------------------------------------------------------------------------------------|
| <b>Purpose</b>                 | This task changes the line settings for MXP_2.5G_10G or MXP_2.5G_10E muxponder cards. |
| <b>Tools/Equipment</b>         | None                                                                                  |
| <b>Prerequisite Procedures</b> | <a href="#">DLP-G46 Log into CTC, page 2-25</a>                                       |
| <b>Required/As Needed</b>      | As needed                                                                             |
| <b>Onsite/Remote</b>           | Onsite or remote                                                                      |
| <b>Security Level</b>          | Provisioning or higher                                                                |

**Step 1** Double-click the MXP\_2.5G\_10G or MXP\_2.5G\_10E card where you want to change the line settings.

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



**Note** The SONET tab appears only if you have created a PPM for the card.

**Step 3** Modify any of the settings described in [Table 10-29](#).

**Table 10-29 MXP\_2.5G\_10G or MXP 2.5G\_10E Muxponder Card Line Settings**

| Parameter     | Description                                                                                                                                                                                                                                                                                    | Options                                                                                                                                                                                                                                |
|---------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Port #        | Display only. Displays the port number. Ports 1 to 4 are client ports (OC-48/STS-16) and Port 5 is the DWDM trunk (OC-192/STS-64) that provides wavelength services.                                                                                                                           | <ul style="list-style-type: none"> <li>• 1</li> <li>• 2</li> <li>• 3</li> <li>• 4</li> <li>• 5</li> </ul>                                                                                                                              |
| Port Name     | Provides the ability to assign the specified port a logical name.                                                                                                                                                                                                                              | User-defined. Name can be up to 32 alphanumeric/special characters. Blank by default.<br><br>See the <a href="#">“DLP-G104 Assign a Name to a Port” task on page 6-8</a> .                                                             |
| Admin State   | Sets the port service state unless network conditions prevent the change. For more information about administrative states, see <a href="#">Appendix C, “DWDM Enhanced State Model.”</a>                                                                                                       | <ul style="list-style-type: none"> <li>• IS/Unlocked</li> <li>• IS,AINS/Unlocked,automaticInService</li> <li>• OOS,DSBLD/Locked,disabled</li> <li>• OOS,MT/Locked,maintenance</li> </ul>                                               |
| Service State | Identifies the autonomously generated state that gives the overall condition of the port. Service states appear in the format: Primary State-Primary State Qualifier, Secondary State. For more information about service states, see <a href="#">Appendix C, “DWDM Enhanced State Model.”</a> | <ul style="list-style-type: none"> <li>• IS-NR/Unlocked-enabled</li> <li>• OOS-AU,AINS/Unlocked-disabled,automaticInService</li> <li>• OOS-MA,DSBLD/Locked-enabled,disabled</li> <li>• OOS-MA,MT/Locked-enabled,maintenance</li> </ul> |

**Table 10-29 MXP\_2.5G\_10G or MXP\_2.5G\_10E Muxponder Card Line Settings (continued)**

| Parameter       | Description                                                                                                                                                                | Options                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
|-----------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| ALS Mode        | Sets the automatic laser shutdown function mode. The DWDM transmitter supports ALS according to ITU-T G.644 (06/99). ALS can be disabled or be set for three mode options. | <ul style="list-style-type: none"> <li>Disable: ALS is off; the laser is not automatically shut down when traffic outages (LOS) occur.</li> <li>Auto Restart: ALS is on; the laser automatically shuts down when traffic outages (LOS) occur. It automatically restarts when the conditions that caused the outage are resolved.</li> <li>Manual Restart: ALS is on; the laser automatically shuts down when traffic outages (LOS) occur. However, the laser must be manually restarted when conditions that caused the outage are resolved.</li> <li>Manual Restart for Test: Manually restarts the laser for testing.</li> </ul> |
| SF BER          | (Cards with no PPM only.) Sets the signal fail bit error rate.                                                                                                             | <ul style="list-style-type: none"> <li>1E-3</li> <li>1E-4</li> <li>1E-5</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| SD BER          | (Cards with no PPM only.) Sets the signal degrade bit error rate.                                                                                                          | <ul style="list-style-type: none"> <li>1E-5</li> <li>1E-6</li> <li>1E-7</li> <li>1E-8</li> <li>1E-9</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| AINS Soak       | (Cards with no PPM only.) Sets the automatic in-service soak period. Double click the time and use the up and down arrows to change settings.                              | <ul style="list-style-type: none"> <li>Duration of valid input signal, in hh.mm format, after which the card becomes in service (IS) automatically</li> <li>0 to 48 hours, 15-minute increments</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                         |
| Type            | (Cards with no PPM only.) The optical transport type                                                                                                                       | <ul style="list-style-type: none"> <li>SONET</li> <li>SDH</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| ProvidesSync    | (Cards with no PPM only.) Sets the ProvidesSync card parameter. If checked, the card is provisioned as a network element timing reference.                                 | Checked or unchecked                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| Enable Sync Msg | (Cards with no PPM only.) Enables synchronization status messages (S1 byte), which allow the node to choose the best timing source.                                        | <ul style="list-style-type: none"> <li>Yes</li> <li>No</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| Send DoNotUse   | (Cards with no PPM only.) When checked, sends a DUS (do not use) message on the S1 byte.                                                                                   | <ul style="list-style-type: none"> <li>Yes</li> <li>No</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |

**Step 4** Click **Apply**.

**Step 5** Return to your originating procedure (NTP).

## DLP-G224 Change Section Trace Settings for MXP\_2.5G\_10G and MXP\_2.5G\_10E Cards

|                                |                                                                                                 |
|--------------------------------|-------------------------------------------------------------------------------------------------|
| <b>Purpose</b>                 | This task changes the section trace settings for MXP_2.5G_10G and MXP_2.5G_10E muxponder cards. |
| <b>Tools/Equipment</b>         | None                                                                                            |
| <b>Prerequisite Procedures</b> | <a href="#">DLP-G46 Log into CTC, page 2-25</a>                                                 |
| <b>Required/As Needed</b>      | As needed                                                                                       |
| <b>Onsite/Remote</b>           | Onsite or remote                                                                                |
| <b>Security Level</b>          | Provisioning or higher                                                                          |

**Step 1** In node view, double-click the MXP\_2.5G\_10E or MXP\_2.5G\_10E card where you want to change the section trace settings.

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



**Note** The Section Trace tab appears only if you have created a PPM for the card.

**Step 3** Modify any of the settings described in [Table 10-30](#).

**Table 10-30 TXP\_MR\_10G and MXP\_MR\_10E Muxponder Card Section Trace Settings**

| Parameter                 | Description                                                                                                                                                                                         | Options                                                                              |
|---------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|
| Port                      | Sets the port number.                                                                                                                                                                               | <ul style="list-style-type: none"> <li>1</li> <li>2</li> <li>3</li> <li>4</li> </ul> |
| Trace Mode                | Sets the trace mode.                                                                                                                                                                                | <ul style="list-style-type: none"> <li>Off/None</li> <li>Manual</li> </ul>           |
| Section Trace String Size | Sets the trace string size. Select either radio button.                                                                                                                                             | <ul style="list-style-type: none"> <li>1 byte</li> <li>16 byte</li> </ul>            |
| Transmit                  | Displays the current transmit string; sets a new transmit string. You can select the Hex Mode or ASCII Mode button to change string input type.                                                     | String of trace string size                                                          |
| Expected                  | Displays the current expected string; sets a new expected string. You can select the Hex Mode or ASCII Mode button to change string input type.                                                     | String of trace string size                                                          |
| Received                  | Display only. Displays the current received string. You can press the Refresh button to manually refresh this display, or select the Auto-refresh every 5 sec check box to keep this panel updated. | String of trace string size                                                          |

- Step 4** Click **Apply**.
- Step 5** Return to your originating procedure (NTP).

## DLP-G225 Change Trunk Settings for MXP\_2.5G\_10G and MXP\_2.5G\_10E Cards

|                                |                                                                                         |
|--------------------------------|-----------------------------------------------------------------------------------------|
| <b>Purpose</b>                 | This task changes the trunk settings for MXP_2.5G_10G and MXP_2.5G_10E muxponder cards. |
| <b>Tools/Equipment</b>         | None                                                                                    |
| <b>Prerequisite Procedures</b> | <a href="#">DLP-G46 Log into CTC, page 2-25</a>                                         |
| <b>Required/As Needed</b>      | As needed                                                                               |
| <b>Onsite/Remote</b>           | Onsite or remote                                                                        |
| <b>Security Level</b>          | Provisioning or higher                                                                  |

- Step 1** In node view, double-click the MXP\_2.5G\_10E or MXP\_2.5G\_10E card where you want to change the section trace settings.
- Step 2** Click the **Provisioning > Line > Trunk** tab.
- Step 3** Modify any of the settings described in [Table 10-31](#).

**Table 10-31 TXP\_MR\_10G and MXP\_MR\_10E Muxponder Card Trunk Settings**

| Parameter   | Description                                                                                                                                                                              | Options                                                                                                                                                                          |
|-------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Port #      | Display only. Displays the port number. Ports 1 to 4 are client ports (OC-48/STS-16) and Port 5 is the DWDM trunk (OC-192/STS-64) that provides wavelength services                      | <ul style="list-style-type: none"> <li>5</li> </ul>                                                                                                                              |
| Port Name   | Provides the ability to assign the specified port a logical name.                                                                                                                        | User-defined. Name can be up to 32 alphanumeric/special characters. Blank by default.<br><br>See the “ <a href="#">DLP-G104 Assign a Name to a Port</a> ” task on page 6-8.      |
| Admin State | Sets the port service state unless network conditions prevent the change. For more information about administrative states, see <a href="#">Appendix C, “DWDM Enhanced State Model.”</a> | <ul style="list-style-type: none"> <li>IS/Unlocked</li> <li>IS,AINS/Unlocked,automaticInService</li> <li>OOS,DSBLD/Locked,disabled</li> <li>OOS,MT/Locked,maintenance</li> </ul> |



Table 10-31 TXP\_MR\_10G and MXP\_MR\_10E Muxponder Card Trunk Settings (continued)

| Parameter     | Description                                                                                                                                                                                                                                                                                    | Options                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
|---------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Service State | Identifies the autonomously generated state that gives the overall condition of the port. Service states appear in the format: Primary State-Primary State Qualifier, Secondary State. For more information about service states, see <a href="#">Appendix C, “DWDM Enhanced State Model.”</a> | <ul style="list-style-type: none"> <li>IS-NR/Unlocked-enabled</li> <li>OOS-AU,AINS/Unlocked-disabled, automaticInService</li> <li>OOS-MA,DSBLD/Locked-enabled,disabled</li> <li>OOS-MA,MT/Locked-enabled,maintenance</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                    |
| ALS Mode      | Sets the automatic laser shutdown function mode. The DWDM transmitter supports ALS according to ITU-T G.644 (06/99). ALS can be disabled or be set for three mode options.                                                                                                                     | <ul style="list-style-type: none"> <li>Disable: ALS is off; the laser is not automatically shut down when traffic outages (LOS) occur.</li> <li>Auto Restart: ALS is on; the laser automatically shuts down when traffic outages (LOS) occur. It automatically restarts when the conditions that caused the outage are resolved.</li> <li>Manual Restart: ALS is on; the laser automatically shuts down when traffic outages (LOS) occur. However, the laser must be manually restarted when conditions that caused the outage are resolved.</li> <li>Manual Restart for Test: Manually restarts the laser for testing.</li> </ul> |

**Step 4** Click **Apply**.

**Step 5** Return to your originating procedure (NTP).

## DLP-G226 Change Line Thresholds Settings for MXP\_2.5G\_10G and MXP 2.5G\_10E Cards

|                                |                                                                                                 |
|--------------------------------|-------------------------------------------------------------------------------------------------|
| <b>Purpose</b>                 | This task changes the line threshold settings for MXP_2.5G_10G or MXP_2.5G_10E muxponder cards. |
| <b>Tools/Equipment</b>         | None                                                                                            |
| <b>Prerequisite Procedures</b> | <a href="#">DLP-G46 Log into CTC, page 2-25</a>                                                 |
| <b>Required/As Needed</b>      | As needed                                                                                       |
| <b>Onsite/Remote</b>           | Onsite or remote                                                                                |
| <b>Security Level</b>          | Provisioning or higher                                                                          |

- Step 1** In node view, double-click the MXP\_2.5G\_10G or MXP\_2.5G\_10E 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 10-32](#).

**Note**

In [Table 10-32](#), some parameter tabs or selections do not always apply to both the MXP\_2.5G\_10G and MXP\_2.5G\_10E cards. When the tabs or selections do not apply they do not appear to the user.

**Table 10-32 MXP\_2.5G\_10G or MXP\_2.5G\_10E Muxponder Card Line Threshold Settings**

| Parameter | Description                                      | Options                                                                                                                                                                     |
|-----------|--------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Port      | Display only. Port number                        | <ul style="list-style-type: none"> <li>• 1</li> <li>• 2</li> <li>• 3</li> <li>• 4</li> <li>• 5</li> </ul>                                                                   |
| 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 Path. Select a bullet and click <b>Refresh</b> .   |
| 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 Path. Select the bullet and click <b>Refresh</b> . |
| 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 Path. Select the bullet and click <b>Refresh</b> . |
| SEFS      | (Section only.) Severely errored framing seconds | Numeric. Can be set for Far End, for 15-minute or one-day intervals for Section only. Select the bullet and click <b>Refresh</b> .                                          |
| FC        | (Line only.) Failure count                       | Numeric. Can be set for Near End or Far End, for 15-minute or one-day intervals, for Line only. Select the bullet and click <b>Refresh</b> .                                |
| UAS       | (Line only.) Unavailable seconds                 | Numeric. Can be set for Near End or Far End, for 15-minute or one-day intervals, for Line only. Select the bullet and click <b>Refresh</b> .                                |

**Step 4** Click **Apply**.

**Step 5** Return to your originating procedure (NTP).

## DLP-G227 Change Optical Threshold Settings for MXP\_2.5G\_10G and MXP\_2.5G\_10E Cards

|                                |                                                                                                    |
|--------------------------------|----------------------------------------------------------------------------------------------------|
| <b>Purpose</b>                 | This task changes the optical threshold settings for MXP_2.5G_10G or MXP_2.5G_10E muxponder cards. |
| <b>Tools/Equipment</b>         | None                                                                                               |
| <b>Prerequisite Procedures</b> | <a href="#">DLP-G46 Log into CTC, page 2-25</a>                                                    |
| <b>Required/As Needed</b>      | As needed                                                                                          |
| <b>Onsite/Remote</b>           | Onsite or remote                                                                                   |
| <b>Security Level</b>          | Provisioning or higher                                                                             |

- Step 1** In node view, double-click the MXP\_2.5G\_10G or MXP\_2.5G\_10E card where you want to change the optical threshold settings.
- Step 2** Click the **Provisioning > Optics Thresholds** tabs.
- Step 3** Modify any of the settings described in [Table 10-33](#).

**Table 10-33 MXP\_2.5G\_10G or MXP\_2.5G\_10E Muxponder Card Optical Threshold Settings**

| Parameter           | Description                                                   | Options                                                                                         |
|---------------------|---------------------------------------------------------------|-------------------------------------------------------------------------------------------------|
| Port                | Display only. Displays the port number.                       | <ul style="list-style-type: none"> <li>1</li> <li>2</li> <li>3</li> <li>4</li> <li>5</li> </ul> |
| Laser Bias Low (%)  | Sets the warning threshold for low laser bias current.        | Numeric, in percent<br>Range 0 to 100                                                           |
| RX Power High (dBm) | Sets the warning threshold for high receiver input power.     | Numeric, in dBm<br>Range -40.0 to +30.0                                                         |
| RX Power Low (dBm)  | Sets the warning threshold for low receiver input power.      | Numeric, in dBm<br>Range -40.0 to +30.0                                                         |
| TX Power High (dBm) | Sets the warning threshold for high transmitter output power. | Numeric, in dBm<br>Range -40.0 to +30.0                                                         |
| TX Power Low (dBm)  | Sets the warning threshold for low transmitter output power.  | Numeric, in dBm<br>Range -40.0 to +30.0                                                         |

- Step 4** Click **Apply**.
- Step 5** Select the **TCA** or **Alarm** radio button.
- Step 6** Select a **15 Min** or **1 Day** interval radio button (available for TCA only), and then click **Refresh**.
- Step 7** Return to your originating procedure (NTP).

## DLP-G228 Change Line OTN Settings for MXP\_2.5G\_10G and MXP\_2.5G\_10E Cards

|                                |                                                                                           |
|--------------------------------|-------------------------------------------------------------------------------------------|
| <b>Purpose</b>                 | This task changes the line OTN settings for MXP_2.5G_10G or MXP_2.5G_10E muxponder cards. |
| <b>Tools/Equipment</b>         | None                                                                                      |
| <b>Prerequisite Procedures</b> | <a href="#">DLP-G46 Log into CTC, page 2-25</a>                                           |
| <b>Required/As Needed</b>      | As needed                                                                                 |
| <b>Onsite/Remote</b>           | Onsite or remote                                                                          |
| <b>Security Level</b>          | Provisioning or higher                                                                    |

- Step 1** In node view, double-click the MXP\_2.5G\_10G or MXP\_2.5G\_10E card where you want to change the line OTN settings.
- Step 2** Click one of the **Provisioning > OTN** tabs (OTN Lines, OTN G.709 Thresholds, FEC Thresholds, or Trail Trace Identifier tab).
- Step 3** Modify any of the settings described in Tables [10-34](#) through [10-37](#).  
[Table 10-34](#) describes the values on the Provisioning > OTN > OTN Lines tab.



**Note** In [Table 10-34](#), some parameter tabs or values do not always apply to both the MXP\_2.5G\_10G and MXP\_2.5G\_10E cards. When the tabs or values do not apply, they do not appear to the user.

**Table 10-34 MXP\_2.5G\_10G or MXP\_2.5G\_10E Muxponder Card Line OTN Settings**

| Parameter | Description                                                                                                                                                                                         | Options                                                                                                                      |
|-----------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------|
| Port #    | Display only. Displays the port number.                                                                                                                                                             | 5                                                                                                                            |
| G.709 OTN | Sets the OTN lines according to ITU-T G.709.                                                                                                                                                        | <ul style="list-style-type: none"> <li>Enabled</li> <li>Disabled</li> </ul>                                                  |
| FEC       | Sets the OTN line FEC mode. FEC mode can be Disabled or Enabled. Enhanced FEC mode can be enabled (to provide greater range and lower bit error rate). E-FEC applies only to the MXP_2.5G_10E card. | <ul style="list-style-type: none"> <li>Disabled (FEC OFF)</li> <li>Standard (FEC ON)</li> <li>Enhanced (E-FEC ON)</li> </ul> |
| SF BER    | Sets the signal fail bit error rate.                                                                                                                                                                | <ul style="list-style-type: none"> <li>1E-5</li> </ul>                                                                       |

**Table 10-34 MXP\_2.5G\_10G or MXP\_2.5G\_10E Muxponder Card Line OTN Settings (continued)**

| Parameter            | Description                                                                                                                                     | Options                                                                                                        |
|----------------------|-------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------|
| SD BER               | Sets the signal degrade bit error rate.                                                                                                         | <ul style="list-style-type: none"> <li>1E-5</li> <li>1E-6</li> <li>1E-7</li> <li>1E-8</li> <li>1E-9</li> </ul> |
| Asynch/Synch Mapping | The MXP_2.5G_10E can perform standard ODU multiplexing according to ITU-T G.709. The card uses this to aggregate the four OC-48 client signals. | <ul style="list-style-type: none"> <li>ODU Multiplex</li> </ul>                                                |

Table 10-35 describes the values on the Provisioning > OTN > OTN G.709 Thresholds tab.

**Table 10-35 MXP\_2.5G\_10G or MXP\_2.5G\_10E Muxponder Card G.709 Threshold Settings**

| Parameter | Description                                                                                                                                                                                                                                                      | Options                                                                                                                                                    |
|-----------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Port      | Display only. Port number                                                                                                                                                                                                                                        | 5                                                                                                                                                          |
| ES        | Errored seconds                                                                                                                                                                                                                                                  | Numeric. Can be set for Near End or Far End, for 15-minute or one-day intervals, or for SM (OTUk) or PM (ODUk). Select a bullet and click <b>Refresh</b> . |
| SES       | Severely errored seconds. Two types of thresholds can be asserted. Selecting the SM (OTUk) radio button selects FEC and overhead management and performance monitoring using OTUk. Selecting the PM radio button selects path performance monitoring using ODUk. | Numeric. Can be set for Near End or Far End, for 15-minute or one-day intervals, or for SM (OTUk) or PM (ODUk). Select a bullet and click <b>Refresh</b> . |
| UAS       | Unavailable seconds                                                                                                                                                                                                                                              | Numeric. Can be set for Near End or Far End, for 15-minute or one-day intervals, or for SM (OTUk) or PM (ODUk). Select a bullet and click <b>Refresh</b> . |
| BBE       | Background block errors                                                                                                                                                                                                                                          | Numeric. Can be set for Near End or Far End, for 15-minute or one-day intervals, or for SM (OTUk) or PM (ODUk). Select a bullet and click <b>Refresh</b> . |
| FC        | Failure counter                                                                                                                                                                                                                                                  | Numeric. Can be set for Near End or Far End, for 15-minute or one-day intervals, or for SM (OTUk) or PM (ODUk). Select a bullet and click <b>Refresh</b> . |

Table 10-36 describes the values on the Provisioning > OTN > FEC Thresholds tab.

**Table 10-36 MXP\_2.5G\_10G or MXP\_2.5G\_10E Muxponder Card FEC Threshold Settings**

| Parameter            | Description                                                                                                                  | Options |
|----------------------|------------------------------------------------------------------------------------------------------------------------------|---------|
| Port                 | Display only. Displays the port number.                                                                                      | 5       |
| Bit Errors Corrected | Displays the number of bit errors corrected during the interval selected. The interval can be set for 15 minutes or one day. | Numeric |
| Uncorrectable Words  | Displays the number of uncorrectable words during the interval selected. The interval can be set for 15 minutes or one day.  | Numeric |

Table 10-37 describes the values on the Provisioning > OTN > Trail Trace Identifier tab.

**Table 10-37 MXP\_2.5G\_10G or MXP\_2.5G\_10E Muxponder Card Trail Trace Identifier Settings**

| Parameter  | Description                                                                                                                                                                                   | Options                                                                    |
|------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------|
| Port       | Sets the port number. The trail trace identifier is applicable only to the trunk interface, which handles G.709 frames.                                                                       | <ul style="list-style-type: none"> <li>5</li> </ul>                        |
| Level      | Sets the level.                                                                                                                                                                               | <ul style="list-style-type: none"> <li>Section</li> <li>Path</li> </ul>    |
| Trace Mode | Sets the trace mode.                                                                                                                                                                          | <ul style="list-style-type: none"> <li>Off/None</li> <li>Manual</li> </ul> |
| Transmit   | Displays the current transmit string; sets a new transmit string.                                                                                                                             | String of trace string size; trail trace identifier is 64 bytes in length. |
| Expected   | Displays the current expected string; sets a new expected string.                                                                                                                             | String of trace string size                                                |
| Received   | Display only. Displays the current received string. You can press the Refresh button to manually refresh this display, or select the Auto-refresh every 5 sec box to keep this panel updated. | String of trace string size                                                |

**Step 4** Click **Apply**.

**Step 5** Return to your originating procedure (NTP).

# NTP-G98 Modify Line Settings and PM Parameter Thresholds for TXP\_MR\_2.5G and TXPP\_MR\_2.5G Cards

|                                |                                                                                                                                                                                                             |
|--------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Purpose</b>                 | This procedure changes the line and threshold settings for TXP_MR_2.5G and TXPP_MR_2.5G transponder cards.                                                                                                  |
| <b>Tools/Equipment</b>         | None                                                                                                                                                                                                        |
| <b>Prerequisite Procedures</b> | <a href="#">NTP-G32 Install the Transponder and Muxponder Cards, page 3-30</a><br><a href="#">DLP-G63 Install an SFP, page 3-32</a><br><a href="#">NTP-G94 Provision Pluggable Port Modules, page 10-29</a> |
| <b>Required/As Needed</b>      | As needed                                                                                                                                                                                                   |
| <b>Onsite/Remote</b>           | Onsite or remote                                                                                                                                                                                            |
| <b>Security Level</b>          | Provisioning or higher                                                                                                                                                                                      |

- 
- Step 1** Complete the “[DLP-G46 Log into CTC](#)” task on page 2-25 at the node where you want to change the transponder card settings. If you are already logged in, proceed to [Step 2](#).
- Step 2** Complete the “[NTP-G103 Back Up the Database](#)” procedure on page 11-2.
- Step 3** Perform any of the following tasks as needed:
- [DLP-G229 Change Card Settings for TXP\\_MR\\_2.5G and TXPP\\_MR\\_2.5G Cards, page 10-55](#)
  - [DLP-G230 Change Line Settings for TXP\\_MR\\_2.5G and TXPP\\_MR\\_2.5G Cards, page 10-57](#)
  - [DLP-G231 Change Section Trace Settings for TXP\\_MR\\_2.5G and TXPP\\_MR\\_2.5G Cards, page 10-58](#)
  - [DLP-G232 Change Line Threshold Settings for TXP\\_MR\\_2.5G and TXPP\\_MR\\_2.5G Cards, page 10-59](#)
  - [DLP-G233 Change Optical Thresholds Settings for TXP\\_MR\\_2.5G and TXPP\\_MR\\_2.5G Cards, page 10-61](#)
  - [DLP-G234 Change OTN Settings for TXP\\_MR\\_2.5G and TXPP\\_MR\\_2.5G Cards, page 10-62](#)
- Step 4** Complete the “[NTP-G103 Back Up the Database](#)” procedure on page 11-2.
- Stop.** You have completed this procedure.
- 

## DLP-G229 Change Card Settings for TXP\_MR\_2.5G and TXPP\_MR\_2.5G Cards

|                                |                                                                                         |
|--------------------------------|-----------------------------------------------------------------------------------------|
| <b>Purpose</b>                 | This task changes the card settings for TXP_MR_2.5G and TXPP_MR_2.5G transponder cards. |
| <b>Tools/Equipment</b>         | None                                                                                    |
| <b>Prerequisite Procedures</b> | <a href="#">DLP-G46 Log into CTC, page 2-25</a>                                         |
| <b>Required/As Needed</b>      | As needed                                                                               |
| <b>Onsite/Remote</b>           | Onsite or remote                                                                        |
| <b>Security Level</b>          | Provisioning or higher                                                                  |

- Step 1** In node view, double-click the TXP\_MR\_2.5G or TXPP\_MR\_2.5G 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 10-38](#).

**Table 10-38 TXP\_MR\_2.5G and TXPP\_MR\_2.5G Transponder Card Settings**

| Parameter               | Description                                                                                                                                                                                                       | Options                                                                                                                                                                                                                                                                                                                                               |
|-------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Termination Mode        | Sets the mode of operation (option only supported for SONET/SDH payloads). See “ <a href="#">14.12 Transponder and Muxponder Termination Modes</a> ” section on <a href="#">page 14-122</a> for more information. | <ul style="list-style-type: none"> <li>Transparent</li> <li>Section</li> <li>Line</li> </ul>                                                                                                                                                                                                                                                          |
| Wavelength              | Sets the wavelength of the DWDM side optical transmitter.                                                                                                                                                         | <ul style="list-style-type: none"> <li>First Tunable Wavelength</li> <li>Further wavelengths in 100-GHz ITU spacing</li> <li>Supported wavelengths are in white and marked by asterisks (**); unsupported wavelengths are gray.</li> </ul> <p><b>Note</b> The four available wavelengths are listed in the Card Parameters section of the window.</p> |
| Regeneration Peer Slot  | Sets the regeneration peer slot.                                                                                                                                                                                  | <ul style="list-style-type: none"> <li>None</li> <li>1</li> <li>2</li> <li>3</li> <li>4</li> <li>5</li> <li>6</li> <li>12</li> <li>13</li> <li>14</li> <li>15</li> <li>16</li> <li>17</li> </ul>                                                                                                                                                      |
| Regeneration Group Name | Sets the regeneration peer group name.                                                                                                                                                                            | User defined.                                                                                                                                                                                                                                                                                                                                         |

- Step 4** Click **Apply**.
- Step 5** Return to your originating procedure (NTP).



## DLP-G230 Change Line Settings for TXP\_MR\_2.5G and TXPP\_MR\_2.5G Cards

|                                |                                                                                         |
|--------------------------------|-----------------------------------------------------------------------------------------|
| <b>Purpose</b>                 | This task changes the line settings for TXP_MR_2.5G and TXPP_MR_2.5G transponder cards. |
| <b>Tools/Equipment</b>         | None                                                                                    |
| <b>Prerequisite Procedures</b> | <a href="#">DLP-G46 Log into CTC, page 2-25</a>                                         |
| <b>Required/As Needed</b>      | As needed                                                                               |
| <b>Onsite/Remote</b>           | Onsite or remote                                                                        |
| <b>Security Level</b>          | Provisioning or higher                                                                  |

- Step 1** In node view, double-click the TXP\_MR\_2.5G or TXPP\_MR\_2.5G card where you want to change the line settings.
- Step 2** Click the **Provisioning > Line >** tab and any additional PPM tabs (OC12, OC48, and so on). Tabs and parameter selections vary according to PPM provisioning.
- Step 3** Modify any of the settings described in [Table 10-39](#).

**Table 10-39 TXP\_MR\_2.5G and TXPP\_MR\_2.5G Transponder Card Line Settings**

| Parameter     | Description                                                                                                                                                                                                                                                                                    | Options                                                                                                                                                                                                                        |
|---------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Port #        | Display only. Displays the port number.                                                                                                                                                                                                                                                        | <ul style="list-style-type: none"> <li>1</li> <li>2</li> <li>3 (TXPP_MR_2.5G card only)</li> </ul>                                                                                                                             |
| Port Name     | The user can assign a logical name for each of the ports shown by filling in this field.                                                                                                                                                                                                       | User-defined. Name can be up to 32 alphanumeric/special characters. Blank by default.<br><br>See the “ <a href="#">DLP-G104 Assign a Name to a Port</a> ” task on page 6-8.                                                    |
| Admin State   | Sets the port service state unless network conditions prevent the change. For more information about administrative states, see <a href="#">Appendix C, “DWDM Enhanced State Model.”</a>                                                                                                       | <ul style="list-style-type: none"> <li>IS/Unlocked</li> <li>IS,AINS/Unlocked,automaticInService</li> <li>OOS,DSBLD/Locked,disabled</li> <li>OOS,MT/Locked,maintenance</li> </ul>                                               |
| Service State | Identifies the autonomously generated state that gives the overall condition of the port. Service states appear in the format: Primary State-Primary State Qualifier, Secondary State. For more information about service states, see <a href="#">Appendix C, “DWDM Enhanced State Model.”</a> | <ul style="list-style-type: none"> <li>IS-NR/Unlocked-enabled</li> <li>OOS-AU,AINS/Unlocked-disabled,automaticInService</li> <li>OOS-MA,DSBLD/Locked-enabled,disabled</li> <li>OOS-MA,MT/Locked-enabled,maintenance</li> </ul> |
| ALS Mode      | Sets the automatic laser shutdown function.                                                                                                                                                                                                                                                    | <ul style="list-style-type: none"> <li>Disabled</li> <li>Auto Restart</li> <li>Manual Restart</li> <li>Manual Restart for Test</li> </ul>                                                                                      |

Table 10-39 TXP\_MR\_2.5G and TXPP\_MR\_2.5G Transponder Card Line Settings (continued)

| Parameter | Description                                                                | Options                                                                                                                                                                                                        |
|-----------|----------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| SF BER    | (OC-N and STM-N payloads only.) Sets the signal fail bit error rate.       | <ul style="list-style-type: none"> <li>• 1E-3</li> <li>• 1E-4</li> <li>• 1E-5</li> </ul>                                                                                                                       |
| SD BER    | (OC-N and STM-N payloads only.) Sets the signal degrade bit error rat.     | <ul style="list-style-type: none"> <li>• 1E-5</li> <li>• 1E-6</li> <li>• 1E-7</li> <li>• 1E-8</li> <li>• 1E-9</li> </ul>                                                                                       |
| AINS Soak | (OC-N and STM-N payloads only.) Sets the automatic in-service soak period. | <ul style="list-style-type: none"> <li>• Duration of valid input signal, in hh.mm format, after which the card becomes in service (IS) automatically</li> <li>• 0 to 48 hours, 15-minute increments</li> </ul> |
| Type      | The optical transport type.                                                | <ul style="list-style-type: none"> <li>• SONET</li> <li>• SDH</li> </ul>                                                                                                                                       |

**Step 4** Click **Apply**.

**Step 5** Return to your originating procedure (NTP).

## DLP-G231 Change Section Trace Settings for TXP\_MR\_2.5G and TXPP\_MR\_2.5G Cards

|                                |                                                                                                  |
|--------------------------------|--------------------------------------------------------------------------------------------------|
| <b>Purpose</b>                 | This task changes the section trace settings for TXP_MR_2.5G and TXPP_MR_2.5G transponder cards. |
| <b>Tools/Equipment</b>         | None                                                                                             |
| <b>Prerequisite Procedures</b> | <a href="#">DLP-G46 Log into CTC, page 2-25</a>                                                  |
| <b>Required/As Needed</b>      | As needed                                                                                        |
| <b>Onsite/Remote</b>           | Onsite or remote                                                                                 |
| <b>Security Level</b>          | Provisioning or higher                                                                           |

- 
- Step 1** In node view, double-click the TXP\_MR\_2.5G or TXPP\_MR\_2.5G card where you want to change the section trace settings.
- Step 2** Click the **Provisioning > Line > Section Trace** tab.
- Step 3** Modify any of the settings described in [Table 10-40](#).

**Table 10-40 TXP\_MR\_2.5G and TXPP\_MR\_2.5G Transponder Card Section Trace Settings**

| Parameter                 | Description                                                       | Options                                                                                       |
|---------------------------|-------------------------------------------------------------------|-----------------------------------------------------------------------------------------------|
| Port                      | Sets the port number.                                             | <ul style="list-style-type: none"> <li>1</li> <li>2</li> <li>3 (TXPP_MR_2.5G only)</li> </ul> |
| Trace Mode                | Sets the trace mode.                                              | <ul style="list-style-type: none"> <li>Off/None</li> <li>Manual</li> </ul>                    |
| Section Trace String Size | Sets the trace string size.                                       | <ul style="list-style-type: none"> <li>1 byte</li> <li>16 byte</li> </ul>                     |
| 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                  | Display only. Displays the current received string.               | String of trace string size                                                                   |

**Step 4** Click **Apply**.

**Step 5** Return to your originating procedure (NTP).

## DLP-G232 Change Line Threshold Settings for TXP\_MR\_2.5G and TXPP\_MR\_2.5G Cards

|                                |                                                                                                   |
|--------------------------------|---------------------------------------------------------------------------------------------------|
| <b>Purpose</b>                 | This task changes the line threshold settings for TXP_MR_2.5G and TXPP_MR_2.5G transponder cards. |
| <b>Tools/Equipment</b>         | None                                                                                              |
| <b>Prerequisite Procedures</b> | <a href="#">DLP-G46 Log into CTC, page 2-25</a>                                                   |
| <b>Required/As Needed</b>      | As needed                                                                                         |
| <b>Onsite/Remote</b>           | Onsite or remote                                                                                  |
| <b>Security Level</b>          | Provisioning or higher                                                                            |

**Step 1** In node view, double-click the TXP\_MR\_2.5G or TXPP\_MR\_2.5G 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 as follows:

- For OC-3/STM-1, OC-12/STM-4, and OC-48/STM-16 payloads, see [Table 10-41](#).
- For 1G Ethernet, 1G, and 2G Fiber Channel/FICON payloads, see [Table 10-42](#).

**Table 10-41 TXP\_MR\_2.5G and TXPP\_MR\_2.5G Transponder Card Line Thresholds Settings for OC-3/STM-1, OC-12/STM-4, and OC-48/STM-16 Payloads**

| Parameter | Description                                      | Options                                                                                                                                                                     |
|-----------|--------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Port      | Display only. Port number                        | <ul style="list-style-type: none"> <li>1</li> <li>2</li> <li>3 (TXPP_MR_2.5G card only)</li> </ul>                                                                          |
| 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 Path. Select the bullet and click <b>Refresh</b> . |
| 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 Path. Select the bullet and click <b>Refresh</b> . |
| 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 Path. Select the bullet and click <b>Refresh</b> . |
| SEFS      | (Section only.) Severely errored framing seconds | Numeric. Can be set for Far End, for 15-minute or one-day intervals for Section only. Select the bullet and click <b>Refresh</b> .                                          |
| FC        | (Line only.) Failure count                       | Numeric. Can be set for Near End or Far End, for 15-minute or one-day intervals for Line only. Select the bullet and click <b>Refresh</b> .                                 |
| UAS       | (Line only.) Unavailable seconds                 | Numeric. Can be set for Near End or Far End, for 15-minute or one-day intervals, for Line only. Select the bullet and click <b>Refresh</b> .                                |

**Table 10-42 TXP\_MR\_2.5G and TXPP\_MR\_2.5G Transponder Card Line Thresholds Settings for 1G Ethernet, 1G, and Fiber Channel/FICON Payloads**

| Parameter     | Description                          | Options                                                                                                                                      |
|---------------|--------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------|
| Port          | Display only. Port number            | <ul style="list-style-type: none"> <li>1</li> <li>2</li> <li>3 (TXPP_MR_2.5G card only)</li> </ul>                                           |
| Valid Packets | (Line only.) Number of valid packets | Numeric. Can be set for Near End or Far End, for 15-minute or one-day intervals, for Line only. Select the bullet and click <b>Refresh</b> . |

**Table 10-42 TXP\_MR\_2.5G and TXPP\_MR\_2.5G Transponder Card Line Thresholds Settings for 1G Ethernet, 1G, and Fiber Channel/FICON Payloads (continued)**

| Parameter             | Description                                                      | Options                                                                                                                                      |
|-----------------------|------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------|
| Invalid Packets       | (Line only.) Number of invalid packets                           | Numeric. Can be set for Near End or Far End, for 15-minute or one-day intervals, for Line only. Select the bullet and click <b>Refresh</b> . |
| Code Group Violations | (Line only.) Number of code group violations                     | Numeric. Can be set for Near End or Far End, for 15-minute or one-day intervals, for Line only. Select the bullet and click <b>Refresh</b> . |
| Idle Ordered Sets     | (Line only.) Number of idle ordered sets                         | Numeric. Can be set for Near End or Far End, for 15-minute or one-day intervals, for Line only. Select the bullet and click <b>Refresh</b> . |
| Non Idle Ordered Sets | (Line only.) Number of non-idle ordered sets                     | Numeric. Can be set for Near End or Far End, for 15-minute or one-day intervals, for Line only. Select the bullet and click <b>Refresh</b> . |
| Data Code Groups      | (Line only.) Number of data code groups (excluding ordered sets) | Numeric. Can be set for Near End or Far End, for 15-minute or one-day intervals, for Line only. Select the bullet and click <b>Refresh</b> . |

**Step 4** Click **Apply**.

**Step 5** Return to your originating procedure (NTP).

## DLP-G233 Change Optical Thresholds Settings for TXP\_MR\_2.5G and TXPP\_MR\_2.5G Cards

|                                |                                                                                                      |
|--------------------------------|------------------------------------------------------------------------------------------------------|
| <b>Purpose</b>                 | This task changes the optical threshold settings for TXP_MR_2.5G and TXPP_MR_2.5G transponder cards. |
| <b>Tools/Equipment</b>         | None                                                                                                 |
| <b>Prerequisite Procedures</b> | <a href="#">DLP-G46 Log into CTC, page 2-25</a>                                                      |
| <b>Required/As Needed</b>      | As needed                                                                                            |
| <b>Onsite/Remote</b>           | Onsite or remote                                                                                     |
| <b>Security Level</b>          | Provisioning or higher                                                                               |

- Step 1** In node view, double-click the TXP\_MR\_2.5G or TXPP\_MR\_2.5G card where you want to change the optical threshold settings.
- Step 2** Click the **Provisioning > Optics Thresholds** tabs.
- Step 3** Modify any of the settings described in [Table 10-43](#).

**Table 10-43 TXP\_MR\_2.5G and TXPP\_MR\_2.5G Transponder Card Optics Thresholds Settings**

| Parameter           | Description                                                   | Options                                                                                       |
|---------------------|---------------------------------------------------------------|-----------------------------------------------------------------------------------------------|
| Port                | Display only. Displays the port number.                       | <ul style="list-style-type: none"> <li>1</li> <li>2</li> <li>3 (TXPP_MR_2.5G only)</li> </ul> |
| Laser Bias Low (%)  | Sets the warning threshold for low laser bias current.        | Numeric, in percent<br>Range 0 to 100 (client side)<br>Range 0 to 100 (trunk side)            |
| RX Power High (dBm) | Sets the warning threshold for high receiver input power.     | Numeric, in dBm<br>Range -40.0 to +30.0 (client side)<br>Range -40.0 to +30.0 (trunk side)    |
| RX Power Low (dBm)  | Sets the warning threshold for low receiver input power.      | Numeric, in dBm<br>Range -40.0 to +30.0 (client side)<br>Range -40.0 to +30.0 (trunk side)    |
| TX Power High (dBm) | Sets the warning threshold for high transmitter output power. | Numeric, in dBm<br>Range -40.0 to +30.0 (client side)<br>Not applicable (trunk side)          |
| TX Power Low (dBm)  | Sets the warning threshold for low transmitter output power.  | Numeric, in dBm<br>Range -40.0 to +30.0 (client side)<br>Not applicable (trunk side)          |

- Step 4** Click **Apply**.
- Step 5** Click the **Alarm** radio button and click **Refresh**.
- Step 6** Click **Apply**.
- Step 7** Return to your originating procedure (NTP).

## DLP-G234 Change OTN Settings for TXP\_MR\_2.5G and TXPP\_MR\_2.5G Cards

|                                |                                                                                        |
|--------------------------------|----------------------------------------------------------------------------------------|
| <b>Purpose</b>                 | This task changes the OTN settings for TXP_MR_2.5G and TXPP_MR_2.5G transponder cards. |
| <b>Tools/Equipment</b>         | None                                                                                   |
| <b>Prerequisite Procedures</b> | <a href="#">DLP-G46 Log into CTC, page 2-25</a>                                        |
| <b>Required/As Needed</b>      | As needed                                                                              |
| <b>Onsite/Remote</b>           | Onsite or remote                                                                       |
| <b>Security Level</b>          | Provisioning or higher                                                                 |

- Step 1** In node view, double-click the TXP\_MR\_2.5G or TXPP\_MR\_2.5G card where you want to change the OTN settings.
- Step 2** Click one of the **Provisioning > OTN** tabs (OTN Lines, G.709 Thresholds, FEC Thresholds, or Trail Trace Identifier tab).

**Step 3** Modify any of the settings described in Tables 10-44 through 10-47.

Table 10-44 describes the values on the Provisioning > OTN > OTN Lines tab.

**Table 10-44 TXP\_MR\_2.5G and TXPP\_MR\_2.5G Transponder Card OTN Line Settings**

| Parameter | Description                                  | Options                                                                                                        |
|-----------|----------------------------------------------|----------------------------------------------------------------------------------------------------------------|
| Port #    | Display only. Displays the port number.      | 2                                                                                                              |
| G.709 OTN | Sets the OTN lines according to ITU-T G.709. | <ul style="list-style-type: none"> <li>Enabled</li> <li>Disabled</li> </ul>                                    |
| FEC       | Sets the OTN lines to FEC.                   | <ul style="list-style-type: none"> <li>Enabled</li> <li>Disabled</li> </ul>                                    |
| SF BER    | Sets the signal fail bit error rate.         | <ul style="list-style-type: none"> <li>1E-5</li> </ul>                                                         |
| SD BER    | Sets the signal degrade bit error rate.      | <ul style="list-style-type: none"> <li>1E-5</li> <li>1E-6</li> <li>1E-7</li> <li>1E-8</li> <li>1E-9</li> </ul> |

Table 10-45 describes the values on the Provisioning > OTN > G.709 Thresholds tab.

**Table 10-45 TXP\_MR\_2.5G and TXPP\_MR\_2.5G Transponder Card ITU-T G.709 Threshold Settings**

| Parameter         | Description               | Options                                                                                                                                                    |
|-------------------|---------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Port <sup>1</sup> | Display only. Port number | 2                                                                                                                                                          |
| ES                | Errored seconds           | Numeric. Can be set for Near End or Far End, for 15-minute or one-day intervals, or for SM (OTUk) or PM (ODUk). Select a bullet and click <b>Refresh</b> . |
| SES               | Severely errored seconds  | Numeric. Can be set for Near End or Far End, for 15-minute or one-day intervals, or for SM (OTUk) or PM (ODUk). Select a bullet and click <b>Refresh</b> . |
| UAS               | Unavailable seconds       | Numeric. Can be set for Near End or Far End, for 15-minute or one-day intervals, or for SM (OTUk) or PM (ODUk). Select a bullet and click <b>Refresh</b> . |
| BBE               | Background block errors   | Numeric. Can be set for Near End or Far End, for 15-minute or one-day intervals, or for SM (OTUk) or PM (ODUk). Select a bullet and click <b>Refresh</b> . |
| FC                | Failure counter           | Numeric. Can be set for Near End or Far End, for 15-minute or one-day intervals, or for SM (OTUk) or PM (ODUk). Select a bullet and click <b>Refresh</b> . |

1. Latency for 1G-FC payload without ITU-T G.709 is 4 microseconds, with ITU-T G.709 is 40 microseconds. Latency for 2G-FC payload without ITU-T G.709 is 2 microseconds, with ITU-T G.709 is 20 microseconds. Consider these values when planning a FC network that is sensitive to latency.

Table 10-46 describes the values on the Provisioning > OTN > FEC Threshold tab.

**Table 10-46 TXP\_MR\_2.5G and TXPP\_MR\_2.5G Transponder Card FEC Threshold Settings**

| Parameter            | Description                              | Options                                                 |
|----------------------|------------------------------------------|---------------------------------------------------------|
| Port                 | Display only. Displays the port number.  | 2                                                       |
| Bit Errors Corrected | Sets the value for bit errors corrected. | Numeric. Can be set for 15-minute or one-day intervals. |
| Uncorrectable Words  | Sets the value for uncorrectable words.  | Numeric. Can be set for 15-minute or one-day intervals. |

Table 10-47 describes the values on the Provisioning > OTN > Trail Trace Identifier tab.

**Table 10-47 TXP\_MR\_2.5G and TXPP\_MR\_2.5G Transponder Card Trail Trace Identifier Settings**

| Parameter  | Description                                                       | Options                                                                    |
|------------|-------------------------------------------------------------------|----------------------------------------------------------------------------|
| Level      | Sets the level.                                                   | <ul style="list-style-type: none"> <li>Section</li> <li>Path</li> </ul>    |
| Trace Mode | Sets the trace mode.                                              | <ul style="list-style-type: none"> <li>Off/None</li> <li>Manual</li> </ul> |
| Transmit   | Displays the current transmit string; sets a new transmit string. | String of trace string size; trail trace identifier is 64 bytes in length. |
| Expected   | Displays the current expected string; sets a new expected string. | String of trace string size                                                |
| Received   | Display only. Displays the current received string.               | String of trace string size                                                |

**Step 4** Click **Apply**.

**Step 5** Return to your originating procedure (NTP).



# NTP-G99 Modify Line Settings and PM Parameter Thresholds for MXP\_MR\_2.5G and MXPP\_MR\_2.5G Cards

|                                |                                                                                                                                                                                                             |
|--------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Purpose</b>                 | This procedure changes the line and threshold settings for MXP_MR_2.5G and MXPP_MR_2.5G muxponder cards.                                                                                                    |
| <b>Tools/Equipment</b>         | None                                                                                                                                                                                                        |
| <b>Prerequisite Procedures</b> | <a href="#">NTP-G32 Install the Transponder and Muxponder Cards, page 3-30</a><br><a href="#">DLP-G63 Install an SFP, page 3-32</a><br><a href="#">NTP-G94 Provision Pluggable Port Modules, page 10-29</a> |
| <b>Required/As Needed</b>      | As needed                                                                                                                                                                                                   |
| <b>Onsite/Remote</b>           | Onsite or remote                                                                                                                                                                                            |
| <b>Security Level</b>          | Provisioning or higher                                                                                                                                                                                      |

- 
- Step 1** Complete the “[DLP-G46 Log into CTC](#)” task on page 2-25 at the node where you want to change the muxponder card settings. If you are already logged in, proceed to [Step 2](#).
- Step 2** Complete the “[NTP-G103 Back Up the Database](#)” procedure on page 11-2.
- Step 3** Perform any of the following tasks as needed:
- [DLP-G235 Change Card Settings for MXP\\_MR\\_2.5G and MXPP\\_MR\\_2.5G Cards, page 10-66](#)
  - [DLP-G236 Change Line Settings for MXP\\_MR\\_2.5G and MXPP\\_MR\\_2.5G Cards, page 10-67](#)
  - [DLP-G237 Change Distance Extension Settings for MXP\\_MR\\_2.5G and MXPP\\_MR\\_2.5G Cards, page 10-69](#)
  - [DLP-G238 Change OC48 Settings for MXP\\_MR\\_2.5G and MXPP\\_MR\\_2.5G Cards, page 10-70](#)
  - [DLP-G239 Change Section Trace Settings for MXP\\_MR\\_2.5G and MXPP\\_MR\\_2.5G Cards, page 10-72](#)
  - [DLP-G240 Change Line Threshold Settings for MXP\\_MR\\_2.5G and MXPP\\_MR\\_2.5G Cards, page 10-73](#)
  - [DLP-G241 Change Optical Thresholds Settings for MXP\\_MR\\_2.5G and MXPP\\_MR\\_2.5G Cards, page 10-75](#)




---

**Note** To use the Alarm Profiles tab, including creating alarm profiles and suppressing alarms, see [Chapter 7, “Manage Alarms.”](#)

---

- Step 4** Complete the “[NTP-G103 Back Up the Database](#)” procedure on page 11-2.
- Stop. You have completed this procedure.**
-

## DLP-G235 Change Card Settings for MXP\_MR\_2.5G and MXPP\_MR\_2.5G Cards

|                                |                                                                                       |
|--------------------------------|---------------------------------------------------------------------------------------|
| <b>Purpose</b>                 | This task changes the card settings for MXP_MR_2.5G and MXPP_MR_2.5G muxponder cards. |
| <b>Tools/Equipment</b>         | None                                                                                  |
| <b>Prerequisite Procedures</b> | <a href="#">DLP-G46 Log into CTC, page 2-25</a>                                       |
| <b>Required/As Needed</b>      | As needed                                                                             |
| <b>Onsite/Remote</b>           | Onsite or remote                                                                      |
| <b>Security Level</b>          | Provisioning or higher                                                                |


**Note**

Card settings can be changed only if the facilities are out-of-service (OOS).

- Step 1** In node view, double-click the MXP\_MR\_2.5G or MXPP\_MR\_2.5G 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 10-48](#).

**Table 10-48 MXP\_MR\_2.5G and MXPP\_MR\_2.5G Muxponder Card Settings**

| Parameter  | Description                                                                                                                                                                    | Options                                                                                                                                                                                                                                                                                                                                               |
|------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Card Mode  | Sets the mode of operation (option only supported for SONET/SDH payloads).<br><br>Note: this setting is not currently supported. The only option available currently is FC-GE. | <ul style="list-style-type: none"> <li>FC-GE</li> </ul>                                                                                                                                                                                                                                                                                               |
| Wavelength | Sets the wavelength of the DWDM side optical transmitter.                                                                                                                      | <ul style="list-style-type: none"> <li>First Tunable Wavelength</li> <li>Further wavelengths in 100-GHz ITU spacing</li> <li>Supported wavelengths are in white and marked by asterisks (**); unsupported wavelengths are gray.</li> </ul> <p><b>Note</b> The four available wavelengths are listed in the Card Parameters section of the window.</p> |

- Step 4** Click **Apply**.
- Step 5** Return to your originating procedure (NTP).

## DLP-G236 Change Line Settings for MXP\_MR\_2.5G and MXPP\_MR\_2.5G Cards

|                                |                                                                                       |
|--------------------------------|---------------------------------------------------------------------------------------|
| <b>Purpose</b>                 | This task changes the line settings for MXP_MR_2.5G and MXPP_MR_2.5G muxponder cards. |
| <b>Tools/Equipment</b>         | None                                                                                  |
| <b>Prerequisite Procedures</b> | <a href="#">DLP-G46 Log into CTC, page 2-25</a>                                       |
| <b>Required/As Needed</b>      | As needed                                                                             |
| <b>Onsite/Remote</b>           | Onsite or remote                                                                      |
| <b>Security Level</b>          | Provisioning or higher                                                                |

- Step 1** In node view, double-click the MXP\_MR\_2.5G or MXPP\_MR\_2.5G card where you want to change the line settings.
- Step 2** Click the **Provisioning > Line >** tab and any additional tabs (Client, Distance Extension, OC48, Section Trace, and so on). Tabs and parameter selections vary according to PPM provisioning.
- Step 3** Modify any of the settings for the Client tab as described in [Table 10-49](#).

**Table 10-49 MXP\_MR\_2.5G and MXPP\_MR\_2.5G Muxponder Card Line Client Tab Settings**

| Parameter   | Description                                                                                                                                                                              | Options                                                                                                                                                                                              |
|-------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Port #      | Display only. Displays the port number.                                                                                                                                                  | <ul style="list-style-type: none"> <li>1</li> <li>2</li> <li>3</li> <li>4</li> <li>5</li> <li>6</li> <li>7</li> <li>8</li> <li>9 (trunk for MXP_MR_2.5G) or 9-10 (trunk for MXPP_MR_2.5G)</li> </ul> |
| Port Name   | The user can assign a logical name for each of the ports shown by filling in this field.                                                                                                 | User-defined. Name can be up to 32 alphanumeric/special characters. Blank by default.<br><br>See the “ <a href="#">DLP-G104 Assign a Name to a Port</a> ” task on <a href="#">page 6-8</a> .         |
| Admin State | Sets the port service state unless network conditions prevent the change. For more information about administrative states, see <a href="#">Appendix C, “DWDM Enhanced State Model.”</a> | <ul style="list-style-type: none"> <li>IS/Unlocked</li> <li>IS,AINS/Unlocked,automaticInService</li> <li>OOS,DSBLD/Locked,disabled</li> <li>OOS,MT/Locked,maintenance</li> </ul>                     |

**Table 10-49 MXP\_MR\_2.5G and MXPP\_MR\_2.5G Muxponder Card Line Client Tab Settings (continued)**

| Parameter           | Description                                                                                                                                                                                                                                                                                    | Options                                                                                                                                                                                                                         |
|---------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Service State       | Identifies the autonomously generated state that gives the overall condition of the port. Service states appear in the format: Primary State-Primary State Qualifier, Secondary State. For more information about service states, see <a href="#">Appendix C, “DWDM Enhanced State Model.”</a> | <ul style="list-style-type: none"> <li>IS-NR/Unlocked-enabled</li> <li>OOS-AU,AINS/Unlocked-disabled, automaticInService</li> <li>OOS-MA,DSBLD/Locked-enabled,disabled</li> <li>OOS-MA,MT/Locked-enabled,maintenance</li> </ul> |
| ALS Mode            | Sets the automatic laser shutdown function.                                                                                                                                                                                                                                                    | <ul style="list-style-type: none"> <li>Disabled</li> <li>Auto Restart</li> <li>Manual Restart</li> <li>Manual Restart for Test</li> </ul>                                                                                       |
| SF BER <sup>1</sup> | (OC-N and STM-N payloads only.) Sets the signal fail bit error rate threshold.                                                                                                                                                                                                                 | <ul style="list-style-type: none"> <li>1E-3</li> <li>1E-4</li> <li>1E-5</li> </ul>                                                                                                                                              |
| SD BER <sup>1</sup> | (OC-N and STM-N payloads only.) Sets the signal degrade bit error rate threshold.                                                                                                                                                                                                              | <ul style="list-style-type: none"> <li>1E-5</li> <li>1E-6</li> <li>1E-7</li> <li>1E-8</li> <li>1E-9</li> </ul>                                                                                                                  |
| AINS Soak           | (OC-N and STM-N payloads only.) Sets the automatic in-service soak period.                                                                                                                                                                                                                     | <ul style="list-style-type: none"> <li>Duration of valid input signal, in hh.mm format, after which the card becomes in service (IS) automatically</li> <li>0 to 48 hours, 15-minute increments</li> </ul>                      |
| Type                | The optical transport type                                                                                                                                                                                                                                                                     | <ul style="list-style-type: none"> <li>SONET</li> <li>SDH</li> </ul>                                                                                                                                                            |

1. BER and SD thresholds apply only to trunk ports (Port 9 for MXP\_MR\_2.5G and Ports 9-10 for MXPP\_MR\_2.5G).

**Step 4** Click **Apply**.

**Step 5** Return to your originating procedure (NTP).

## DLP-G237 Change Distance Extension Settings for MXP\_MR\_2.5G and MXPP\_MR\_2.5G Cards

|                                |                                                                                                     |
|--------------------------------|-----------------------------------------------------------------------------------------------------|
| <b>Purpose</b>                 | This task changes the distance extension settings for MXP_MR_2.5G and MXPP_MR_2.5G muxponder cards. |
| <b>Tools/Equipment</b>         | None                                                                                                |
| <b>Prerequisite Procedures</b> | <a href="#">DLP-G46 Log into CTC, page 2-25</a>                                                     |
| <b>Required/As Needed</b>      | As needed                                                                                           |
| <b>Onsite/Remote</b>           | Onsite or remote                                                                                    |
| <b>Security Level</b>          | Provisioning or higher                                                                              |



**Note** Distance extension settings can be changed only if the facilities are out-of-service (OOS).



**Note** The distance extension parameters only apply to client ports (1 to 8) and not to trunk ports (9 for MXP\_MR\_2.5G or 9 and 10 for MXPP\_MR\_2.5G).

- Step 1** In node view, double-click the MXP\_MR\_2.5G or MXPP\_MR\_2.5G card where you want to change the distance extension settings.
- Step 2** Click the **Provisioning > Line > Distance Extension** tab. Tabs and parameter selections vary according to PPM provisioning.
- Step 3** Modify any of the settings for the Distance Extension tab as described in [Table 10-50](#).

**Table 10-50 MXP\_MR\_2.5G and MXPP\_MR\_2.5G Muxponder Card Line Distance Extension Settings**

| Parameter                 | Description                                                                      | Options                                                                                                                                                                                              |
|---------------------------|----------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Port #                    | Display only. Displays the port number.                                          | <ul style="list-style-type: none"> <li>1</li> <li>2</li> <li>3</li> <li>4</li> <li>5</li> <li>6</li> <li>7</li> <li>8</li> <li>9 (trunk for MXP_MR_2.5G) or 9-10 (trunk for MXPP_MR_2.5G)</li> </ul> |
| Enable Distance Extension | Allows end-to-end distances of up to 1600 km for 1GFC and up to 800 km for 2GFC. | Checked or unchecked                                                                                                                                                                                 |
| Auto Detect Credits       | Allows automatic detection of buffer credits for FC flow control.                | Checked or unchecked                                                                                                                                                                                 |

**Table 10-50 MXP\_MR\_2.5G and MXPP\_MR\_2.5G Muxponder Card Line Distance Extension Settings**

| Parameter                 | Description                                                                                                                            | Options                                                                                                                |
|---------------------------|----------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------|
| Credits Available         | Display only. Displays the number of buffer credits available.                                                                         | <ul style="list-style-type: none"> <li>Numeric (range depends on the client equipment attached to the card)</li> </ul> |
| Autothreshold GFP Buffers | This parameter allows the threshold of the GFP buffer between two MXP_MR_2.5G or two MXPP_MR_2.5G cards to be automatically adjust ed. | Checked or unchecked                                                                                                   |
| GFP Buffers Available     | Displays the number of GFP buffers available between two MXP_MR_2.5G or two MXPP_MR_2.5G cards.                                        | <ul style="list-style-type: none"> <li>Numeric</li> </ul>                                                              |

**Step 4** Click **Apply**.

**Step 5** Return to your originating procedure (NTP).

## DLP-G238 Change OC48 Settings for MXP\_MR\_2.5G and MXPP\_MR\_2.5G Cards

**Purpose** This task changes the OC48 settings for MXP\_MR\_2.5G and MXPP\_MR\_2.5G muxponder cards.

**Tools/Equipment** None

**Prerequisite Procedures** [DLP-G46 Log into CTC, page 2-25](#)

**Required/As Needed** As needed

**Onsite/Remote** Onsite or remote

**Security Level** Provisioning or higher



**Note** OC48 settings apply only to the trunk ports (9 for MXP\_MR\_2.5G and 9 and 10 for MXPP\_MR\_2.5G)

**Step 1** In node view, double-click the MXP\_MR\_2.5G or MXPP\_MR\_2.5G card where you want to change the OC48 settings.

**Step 2** Click the **Provisioning > Line > OC48** tab. Tabs and parameter selections vary according to PPM provisioning.

**Step 3** Modify any of the settings for the OC48 Extension tab as described in [Table 10-51](#).

**Table 10-51 MXP\_MR\_2.5G and MXPP\_MR\_2.5G Muxponder Card Line OC48 Tab Settings**

| Parameter           | Description                                                                                                                                                                                                                                                                                    | Options                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
|---------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Port #              | Display only. Displays the port number.                                                                                                                                                                                                                                                        | <ul style="list-style-type: none"> <li>• 1</li> <li>• 2</li> <li>• 3</li> <li>• 4</li> <li>• 5</li> <li>• 6</li> <li>• 7</li> <li>• 8</li> <li>• 9 (trunk for MXP_MR_2.5G) or 9-10 (trunk for MXPP_MR_2.5G)</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                     |
| Port Name           | Provides the ability to assign the specified port a name.                                                                                                                                                                                                                                      | <p>User-defined. Name can be up to 32 alphanumeric/special characters. Blank by default.</p> <p>See the <a href="#">“DLP-G104 Assign a Name to a Port” task on page 6-8.</a></p>                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| Admin State         | Sets the port service state unless network conditions prevent the change. For more information about administrative states, see <a href="#">Appendix C, “DWDM Enhanced State Model.”</a>                                                                                                       | <ul style="list-style-type: none"> <li>• IS/Unlocked</li> <li>• IS,AINS/Unlocked,automaticInService</li> <li>• OOS,DSBLD/Locked,disabled</li> <li>• OOS,MT/Locked,maintenance</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| Service State       | Identifies the autonomously generated state that gives the overall condition of the port. Service states appear in the format: Primary State-Primary State Qualifier, Secondary State. For more information about service states, see <a href="#">Appendix C, “DWDM Enhanced State Model.”</a> | <ul style="list-style-type: none"> <li>• IS-NR/Unlocked-enabled</li> <li>• OOS-AU,AINS/Unlocked-disabled,automaticInService</li> <li>• OOS-MA,DSBLD/Locked-enabled,disabled</li> <li>• OOS-MA,MT/Locked-enabled,maintenance</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                     |
| ALS Mode            | Sets the automatic laser shutdown function mode. The DWDM transmitter supports ALS according to ITU-T G.644 (06/99). ALS can be disabled or be set for three mode options.                                                                                                                     | <ul style="list-style-type: none"> <li>• Disable: ALS is off; the laser is not automatically shut down when traffic outages (LOS) occur.</li> <li>• Auto Restart: ALS is on; the laser automatically shuts down when traffic outages (LOS) occur. It automatically restarts when the conditions that caused the outage are resolved.</li> <li>• Manual Restart: ALS is on; the laser automatically shuts down when traffic outages (LOS) occur. However, the laser must be manually restarted when conditions that caused the outage are resolved.</li> <li>• Manual Restart for Test: Manually restarts the laser for testing.</li> </ul> |
| SF BER <sup>1</sup> | Sets the signal fail bit error rate.                                                                                                                                                                                                                                                           | <ul style="list-style-type: none"> <li>• 1E-3</li> <li>• 1E-4</li> <li>• 1E-5</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |

**Table 10-51 MXP\_MR\_2.5G and MXPP\_MR\_2.5G Muxponder Card Line OC48 Tab Settings (continued)**

| Parameter           | Description                                                                                                                                   | Options                                                                                                                                                                                                        |
|---------------------|-----------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| SD BER <sup>1</sup> | Sets the signal degrade bit error rate.                                                                                                       | <ul style="list-style-type: none"> <li>• 1E-5</li> <li>• 1E-6</li> <li>• 1E-7</li> <li>• 1E-8</li> <li>• 1E-9</li> </ul>                                                                                       |
| AINS Soak           | Sets the automatic in-service soak period. Double click the time and use the up and down arrows to change settings.                           | <ul style="list-style-type: none"> <li>• Duration of valid input signal, in hh.mm format, after which the card becomes in service (IS) automatically</li> <li>• 0 to 48 hours, 15-minute increments</li> </ul> |
| Type                | The optical transport type.                                                                                                                   | <ul style="list-style-type: none"> <li>• SONET</li> <li>• SDH</li> </ul>                                                                                                                                       |
| ProvidesSync        | Sets the ProvidesSync card parameter. If checked, the card is provisioned as a network element timing reference.                              | Checked or unchecked                                                                                                                                                                                           |
| SyncMsgIn           | Sets the EnableSync card parameter. Enables synchronization status messages (S1 byte), which allow the node to choose the best timing source. | Checked or unchecked                                                                                                                                                                                           |
| Send DoNotUse       | Sets the Send DoNotUse card state. When checked, sends a DUS (do not use) message on the S1 byte.                                             | Checked or unchecked                                                                                                                                                                                           |

1. BER and SD thresholds apply only to trunk ports (Port 9 for MXP\_MR\_2.5G and Ports 9 and 10 for MXPP\_MR\_2.5G).

**Step 4** Click **Apply**.

**Step 5** Return to your originating procedure (NTP).

## DLP-G239 Change Section Trace Settings for MXP\_MR\_2.5G and MXPP\_MR\_2.5G Cards

|                                |                                                                                                |
|--------------------------------|------------------------------------------------------------------------------------------------|
| <b>Purpose</b>                 | This task changes the section trace settings for MXP_MR_2.5G and MXPP_MR_2.5G muxponder cards. |
| <b>Tools/Equipment</b>         | None                                                                                           |
| <b>Prerequisite Procedures</b> | <a href="#">DLP-G46 Log into CTC, page 2-25</a>                                                |
| <b>Required/As Needed</b>      | As needed                                                                                      |
| <b>Onsite/Remote</b>           | Onsite or remote                                                                               |
| <b>Security Level</b>          | Provisioning or higher                                                                         |

**Step 1** In node view, double-click the MXP\_MR\_2.5G or MXPP\_MR\_2.5G card where you want to change the section trace settings.



- Step 2** Click the **Provisioning > Line > Section Trace** tab. Tabs and parameter selections vary according to PPM provisioning.
- Step 3** Modify any of the settings in the Section Trace tab as described in [Table 10-52](#).

**Table 10-52 MXP\_MR\_2.5G and MXPP\_MR\_2.5G Muxponder Card Line Section Trace Tab Settings**

| Parameter                 | Description                                                       | Options                                                                                                          |
|---------------------------|-------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------|
| Port                      | Sets the port number.                                             | <ul style="list-style-type: none"> <li>9 (trunk for MXP_MR_2.5G) or 9 and 10 (trunk for MXPP_MR_2.5G)</li> </ul> |
| Trace Mode                | Sets the trace mode.                                              | <ul style="list-style-type: none"> <li>Off/None</li> <li>Auto</li> <li>Manual</li> </ul>                         |
| Section Trace String Size | Sets the trace string size.                                       | <ul style="list-style-type: none"> <li>1 byte</li> <li>16 byte</li> </ul>                                        |
| 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                  | Display only. Displays the current received string.               | String of trace string size                                                                                      |

- Step 4** Click **Apply**.
- Step 5** Return to your originating procedure (NTP).

## DLP-G240 Change Line Threshold Settings for MXP\_MR\_2.5G and MXPP\_MR\_2.5G Cards

|                                |                                                                                                 |
|--------------------------------|-------------------------------------------------------------------------------------------------|
| <b>Purpose</b>                 | This task changes the line threshold settings for MXP_MR_2.5G and MXPP_MR_2.5G muxponder cards. |
| <b>Tools/Equipment</b>         | None                                                                                            |
| <b>Prerequisite Procedures</b> | <a href="#">DLP-G46 Log into CTC, page 2-25</a>                                                 |
| <b>Required/As Needed</b>      | As needed                                                                                       |
| <b>Onsite/Remote</b>           | Onsite or remote                                                                                |
| <b>Security Level</b>          | Provisioning or higher                                                                          |

- Step 1** In node view, double-click the MXP\_MR\_2.5G or MXPP\_MR\_2.5G 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 as shown in [Table 10-53](#).

**Table 10-53 MXP\_MR\_2.5G and MXPP\_MR\_2.5G Muxponder Card Line Threshold Settings**

| <b>RMON Thresholds<sup>1</sup></b>  |                                                                                                 |                                                                                                                                                                             |
|-------------------------------------|-------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Index                               | Identifies the threshold.                                                                       | Numeric                                                                                                                                                                     |
| Slot/Port                           | Identifies the slot and port to which the threshold applies.                                    | Sx/Px, where <i>x</i> is a numeric value                                                                                                                                    |
| Variable                            | The particular remote monitoring (RMON) count under consideration for the threshold definition. | A text mnemonic, for example: “gfpStatsRxSBitErrors”                                                                                                                        |
| Alarm Type                          | The direction for which the alarm is to activate.                                               | <ul style="list-style-type: none"> <li>• Rising</li> <li>• Falling</li> </ul>                                                                                               |
| Sample Type                         | Whether the samples should be absolute or relative.                                             | <ul style="list-style-type: none"> <li>• Absolute</li> <li>• Relative</li> </ul>                                                                                            |
| Sample Period                       | The number of seconds for which the RMON count for the variable is accumulated.                 | Numeric (seconds)                                                                                                                                                           |
| Rising Threshold                    | The rising threshold value.                                                                     | Numeric                                                                                                                                                                     |
| Falling Threshold                   | The falling threshold value.                                                                    | Numeric                                                                                                                                                                     |
| <b>SONET Thresholds<sup>2</sup></b> |                                                                                                 |                                                                                                                                                                             |
| Port                                | Display only. Port number.                                                                      | <ul style="list-style-type: none"> <li>• 9 (trunk for MXP_MR_2.5G)</li> <li>• 9-10 (trunk for MXPP_MR_2.5G)</li> </ul>                                                      |
| 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 Path. Select the bullet and click <b>Refresh</b> . |
| 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 Path. Select the bullet and click <b>Refresh</b> . |
| 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 Path. Select the bullet and click <b>Refresh</b> . |
| SEFS                                | (Section only.) Severely errored framing seconds.                                               | Numeric. Can be set for Far End, for 15-minute or one-day intervals for Section only. Select the bullet and click <b>Refresh</b> .                                          |

**Table 10-53 MXP\_MR\_2.5G and MXPP\_MR\_2.5G Muxponder Card Line Threshold Settings (continued)**

| <b>RMON Thresholds<sup>1</sup></b> |                                   |                                                                                                                                              |
|------------------------------------|-----------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------|
| FC                                 | (Line only.) Failure count.       | Numeric. Can be set for Near End or Far End, for 15-minute or one-day intervals for Line only. Select the bullet and click <b>Refresh</b> .  |
| UAS                                | (Line only.) Unavailable seconds. | Numeric. Can be set for Near End or Far End, for 15-minute or one-day intervals, for Line only. Select the bullet and click <b>Refresh</b> . |

1. RMON thresholds apply to all data types. A PPM must be defined for the port to be able to define a line threshold. This only applies to client Ports 1 to 8 and GFP facilities (trunk Port 9 for MXP\_MR\_2.5G or trunk Ports 9 to 10 for MXPP\_MR\_2.5G).
2. SONET thresholds apply only to trunk ports (9 for MXP\_MR\_2.5G or 9 to 10 for MXPP\_MR\_2.5G).

- Step 4** Click **Apply**.
- Step 5** Return to your originating procedure (NTP).

## DLP-G241 Change Optical Thresholds Settings for MXP\_MR\_2.5G and MXPP\_MR\_2.5G Cards

|                                |                                                                                                    |
|--------------------------------|----------------------------------------------------------------------------------------------------|
| <b>Purpose</b>                 | This task changes the optical threshold settings for MXP_MR_2.5G and MXPP_MR_2.5G muxponder cards. |
| <b>Tools/Equipment</b>         | None                                                                                               |
| <b>Prerequisite Procedures</b> | <a href="#">DLP-G46 Log into CTC, page 2-25</a>                                                    |
| <b>Required/As Needed</b>      | As needed                                                                                          |
| <b>Onsite/Remote</b>           | Onsite or remote                                                                                   |
| <b>Security Level</b>          | Provisioning or higher                                                                             |

- Step 1** In node view, double-click the MXP\_MR\_2.5G or MXPP\_MR\_2.5G card where you want to change the optical threshold settings.
- Step 2** Click the **Provisioning > Optics Thresholds** tabs.
- Step 3** Modify any of the settings described in [Table 10-43](#).

**Table 10-54 MXP\_MR\_2.5G and MXPP\_MR\_2.5G Muxponder Card Optical Threshold Settings**

| Parameter           | Description                                                   | Options                                                                                                                                                                                                                        |
|---------------------|---------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Port                | Display only. Displays the port number.                       | <ul style="list-style-type: none"> <li>• 1</li> <li>• 2</li> <li>• 3</li> <li>• 4</li> <li>• 5</li> <li>• 6</li> <li>• 7</li> <li>• 8</li> <li>• 9 (trunk for MXP_MR_2.5G)</li> <li>• 9-10 (trunk for MXPP_MR_2.5G)</li> </ul> |
| Laser Bias Low (%)  | Sets the warning threshold for low laser bias current.        | Numeric, in percent<br>Range 0 to 100 (client side)<br>Range 0 to 100 (trunk side)                                                                                                                                             |
| RX Power High (dBm) | Sets the warning threshold for high receiver input power.     | Numeric, in dBm<br>Range -40.0 to +30.0 (client side)<br>Range -40.0 to +30.0 (trunk side)                                                                                                                                     |
| RX Power Low (dBm)  | Sets the warning threshold for low receiver input power.      | Numeric, in dBm<br>Range -40.0 to +30.0 (client side)<br>Range -40.0 to +30.0 (trunk side)                                                                                                                                     |
| TX Power High (dBm) | Sets the warning threshold for high transmitter output power. | Numeric, in dBm<br>Range -40.0 to +30.0 (client side)<br>Not applicable (trunk side)                                                                                                                                           |
| TX Power Low (dBm)  | Sets the warning threshold for low transmitter output power.  | Numeric, in dBm<br>Range -40.0 to +30.0 (client side)<br>Not applicable (trunk side)                                                                                                                                           |

- Step 4** Click **Apply**.
- Step 5** Select the **TCA** (Threshold Crossing Alert) or **Alarm** radio button.
- Step 6** Select a **15 Min** or **1 Day** performance monitoring interval radio button (available for TCA only), and then click **Refresh**.
- Step 7** Return to your originating procedure (NTP).

# NTP-G100 Modify Alarm Interface Controller Settings (ANSI Only)

|                                |                                                                                                                                                                                                                                                                                              |
|--------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Purpose</b>                 | 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) or to change orderwire settings.<br><br>Note that the AIC card is not compatible with the ETSI shelf. |
| <b>Tools/Equipment</b>         | None                                                                                                                                                                                                                                                                                         |
| <b>Prerequisite Procedures</b> | <a href="#">NTP-G71 Provision External Alarms and Controls on the Alarm Interface Controller Card, page 7-36</a><br><br><a href="#">DLP-G109 Provision Orderwire, page 6-15</a>                                                                                                              |
| <b>Required/As Needed</b>      | As needed                                                                                                                                                                                                                                                                                    |
| <b>Onsite/Remote</b>           | Onsite or remote                                                                                                                                                                                                                                                                             |
| <b>Security Level</b>          | Provisioning or higher                                                                                                                                                                                                                                                                       |

- 
- Step 1** Complete the “[DLP-G46 Log into CTC](#)” task on [page 2-25](#) at the node where you want to change the AIC card settings. If you are already logged in, proceed to [Step 2](#).
- Step 2** Complete the “[NTP-G103 Back Up the Database](#)” procedure on [page 11-2](#).
- Step 3** Perform any of the following tasks as needed:
- [DLP-G242 Change External Alarms Using the AIC Card, page 10-77](#)
  - [DLP-G243 Change External Controls Using the AIC Card, page 10-78](#)
  - [DLP-G244 Change Orderwire Settings Using the AIC Card, page 10-79](#)
- Step 4** Complete the “[NTP-G103 Back Up the Database](#)” procedure on [page 11-2](#).
- Stop. You have completed this procedure.**
- 

## DLP-G242 Change External Alarms Using the AIC Card

|                                |                                                                                                              |
|--------------------------------|--------------------------------------------------------------------------------------------------------------|
| <b>Purpose</b>                 | This task changes external alarm settings on the AIC card. This task applies to ONS 15454 ANSI shelves only. |
| <b>Tools/Equipment</b>         | None                                                                                                         |
| <b>Prerequisite Procedures</b> | <a href="#">DLP-G46 Log into CTC, page 2-25</a>                                                              |
| <b>Required/As Needed</b>      | As needed                                                                                                    |
| <b>Onsite/Remote</b>           | Onsite or remote                                                                                             |
| <b>Security Level</b>          | Provisioning or higher                                                                                       |

- 
- Step 1** Confirm that external-device relays are wired to the ENVIR ALARMS IN backplane pins. See the “[DLP-G23 Install Alarm Wires on the Backplane \(ANSI Only\)](#)” task on [page 1-53](#) for more information.
- Step 2** In node view, double-click the AIC card to display it in card view.
- Step 3** Click the **Provisioning > External Alarms** tabs.

- 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-G71 Provision External Alarms and Controls on the Alarm Interface Controller Card](#)” procedure on page 7-36.
- Enabled
  - Alarm Type
  - Severity
  - Virtual Wire
  - Raised When
  - Description
- 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-G243 Change External Controls Using the AIC Card

|                                |                                                                                                                |
|--------------------------------|----------------------------------------------------------------------------------------------------------------|
| <b>Purpose</b>                 | This task changes external control settings on the AIC card. This task applies to ONS 15454 ANSI shelves only. |
| <b>Tools/Equipment</b>         | None                                                                                                           |
| <b>Prerequisite Procedures</b> | <a href="#">DLP-G46 Log into CTC, page 2-25</a>                                                                |
| <b>Required/As Needed</b>      | As needed                                                                                                      |
| <b>Onsite/Remote</b>           | Onsite or remote                                                                                               |
| <b>Security Level</b>          | Provisioning or higher                                                                                         |

---

- Step 1** Verify the external control relays to the ENVIR ALARMS OUT backplane pins. See the “[DLP-G23 Install Alarm Wires on the Backplane \(ANSI Only\)](#)” task on page 1-53 for more information.
- Step 2** In node view, double-click the AIC card to display it in card view.
- Step 3** Click the **Provisioning > External Controls** tabs.
- Step 4** Modify any of the following fields for each external control wired to the ONS 15454 backplane. For definitions of these fields, see the “[NTP-G71 Provision External Alarms and Controls on the Alarm Interface Controller Card](#)” procedure on page 7-36.
- Enabled
  - Trigger Type
  - Control Type
  - Description
- Step 5** To provision additional controls, complete Step 4 for each additional device.
- Step 6** Click **Apply**.
- Step 7** Return to your originating procedure (NTP).
-

## DLP-G244 Change Orderwire Settings Using the AIC Card

|                                |                                                                                                         |
|--------------------------------|---------------------------------------------------------------------------------------------------------|
| <b>Purpose</b>                 | This task changes orderwire settings on the AIC card. This task applies to ONS 15454 ANSI shelves only. |
| <b>Tools/Equipment</b>         | None                                                                                                    |
| <b>Prerequisite Procedures</b> | <a href="#">DLP-G46 Log into CTC, page 2-25</a>                                                         |
| <b>Required/As Needed</b>      | As needed                                                                                               |
| <b>Onsite/Remote</b>           | Onsite or remote                                                                                        |
| <b>Security Level</b>          | 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** In node view, double-click the AIC card to display it in card view.
- Step 2** Click the **Provisioning > Local Orderwire** tabs or **Provisioning > Express Orderwire** tabs, depending on the orderwire path that you want to create.
- Step 3** If needed, adjust the transmit (Tx) and receive (Rx) decibel referred to one milliwatt (dBm) values 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 values.
- Step 4** Click **Apply**.
- Step 5** Return to your originating procedure (NTP).
-

# NTP-G101 Modify Alarm Interface Controller–International Settings

|                                |                                                                                                                                                                                                                          |
|--------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Purpose</b>                 | 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. |
| <b>Tools/Equipment</b>         | None                                                                                                                                                                                                                     |
| <b>Prerequisite Procedures</b> | <a href="#">NTP-G72 Provision External Alarms and Controls on the Alarm Interface Controller-International</a> , page 7-38<br><a href="#">DLP-G109 Provision Orderwire</a> , page 6-15                                   |
| <b>Required/As Needed</b>      | As needed                                                                                                                                                                                                                |
| <b>Onsite/Remote</b>           | Onsite or remote                                                                                                                                                                                                         |
| <b>Security Level</b>          | Provisioning or higher                                                                                                                                                                                                   |

- 
- Step 1** Complete the “[DLP-G46 Log into CTC](#)” task on page 2-25 at the node where you want to change the AIC-I card settings. If you are already logged in, proceed to [Step 2](#).
- Step 2** Complete the “[NTP-G103 Back Up the Database](#)” procedure on page 11-2.
- Step 3** Perform any of the following tasks as needed:
- [DLP-G245 Change External Alarms Using the AIC-I Card](#), page 10-80
  - [DLP-G246 Change External Controls Using the AIC-I Card](#), page 10-81
  - [DLP-G247 Change AIC-I Card Orderwire Settings](#), page 10-82
- Step 4** Complete the “[NTP-G103 Back Up the Database](#)” procedure on page 11-2.
- Stop.** You have completed this procedure.
- 

## DLP-G245 Change External Alarms Using the AIC-I Card

|                                |                                                              |
|--------------------------------|--------------------------------------------------------------|
| <b>Purpose</b>                 | This task changes external alarm settings on the AIC-I card. |
| <b>Tools/Equipment</b>         | None                                                         |
| <b>Prerequisite Procedures</b> | <a href="#">DLP-G46 Log into CTC</a> , page 2-25             |
| <b>Required/As Needed</b>      | As needed                                                    |
| <b>Onsite/Remote</b>           | Onsite or remote                                             |
| <b>Security Level</b>          | Provisioning or higher                                       |



### 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.

- 
- Step 1** Confirm that external-device relays are wired to the ENVIR ALARMS IN pins. See the “[DLP-G20 Install Alarm Wires on the MIC-A/P \(ETSI Only\)](#)” task on page 1-48 (ETSI) or “[DLP-G23 Install Alarm Wires on the Backplane \(ANSI Only\)](#)” task on page 1-53 (ANSI) 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.
- 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-G72 Provision External Alarms and Controls on the Alarm Interface Controller-International](#)” procedure on page 7-38.
- Enabled
  - Alarm Type
  - Severity
  - Virtual Wire
  - Raised When
  - Description
- 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-G246 Change External Controls Using the AIC-I Card

|                                |                                                                |
|--------------------------------|----------------------------------------------------------------|
| <b>Purpose</b>                 | This task changes external control settings on the AIC-I card. |
| <b>Tools/Equipment</b>         | None                                                           |
| <b>Prerequisite Procedures</b> | <a href="#">DLP-G46 Log into CTC, page 2-25</a>                |
| <b>Required/As Needed</b>      | As needed                                                      |
| <b>Onsite/Remote</b>           | Onsite or remote                                               |
| <b>Security Level</b>          | Provisioning or higher                                         |



### Note

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

---

- Step 1** Verify the external control relays to the ENVIR ALARMS OUT backplane pins. See the “[DLP-G20 Install Alarm Wires on the MIC-A/P \(ETSI Only\)](#)” task on page 1-48 (ETSI) or “[DLP-G23 Install Alarm Wires on the Backplane \(ANSI Only\)](#)” task on page 1-53 (ANSI) for more information.
- Step 2** In node view, 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-G72 Provision External Alarms and Controls on the Alarm Interface Controller-International](#)” procedure on page 7-38.
- 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-G247 Change AIC-I Card Orderwire Settings

|                                |                                                         |
|--------------------------------|---------------------------------------------------------|
| <b>Purpose</b>                 | This task changes orderwire settings on the AIC-I card. |
| <b>Tools/Equipment</b>         | None                                                    |
| <b>Prerequisite Procedures</b> | <a href="#">DLP-G46 Log into CTC, page 2-25</a>         |
| <b>Required/As Needed</b>      | As needed                                               |
| <b>Onsite/Remote</b>           | Onsite or remote                                        |
| <b>Security Level</b>          | 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** In node view, 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 change. Provisioning steps are the same for both types of orderwire.
- Step 3** If needed, adjust the Tx and Rx dBm values 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 values.
- Step 4** If you want to turn on the audible alert (buzzer) for the orderwire, check the **Buzzer On** check box.
- Step 5** Click **Apply**.
- Step 6** Return to your originating procedure (NTP).
-

# NTP-G102 Change Card Service State

|                                |                                                                                                                                                |
|--------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Purpose</b>                 | This procedure changes card service state.                                                                                                     |
| <b>Tools/Equipment</b>         | None                                                                                                                                           |
| <b>Prerequisite Procedures</b> | <a href="#">NTP-G30 Install the DWDM Cards, page 3-26</a> or<br><a href="#">NTP-G32 Install the Transponder and Muxponder Cards, page 3-30</a> |
| <b>Required/As Needed</b>      | As needed                                                                                                                                      |
| <b>Onsite/Remote</b>           | Onsite or remote                                                                                                                               |
| <b>Security Level</b>          | Provisioning or higher                                                                                                                         |

- 
- Step 1** Complete the [“DLP-G46 Log into CTC” task on page 2-25](#) at the node where you want to change the card service state.
- Step 2** Click the **Inventory** tab.
- Step 3** Click **Admin State** for the card you want to change, and choose an Admin state from the drop-down list:
- **IS** (In-Service [ANSI]) or **Unlocked** (ETSI)
  - **OOS,MT** (Out-of-Service,Maintenance [ANSI]) or **Locked-enabled** (ETSI)
- Step 4** Click **Apply**.
- Step 5** If an error message appears indicating that the card state cannot be changed from its current state, click **OK**.

For information about the enhanced state model and card state transitions, refer to the [“DWDM Enhanced State Model” section on page C-1](#).

**Stop. You have completed this procedure.**

---

