



CHAPTER 10

Change Card Settings

This chapter explains how to change line and threshold settings on Cisco ONS 15454 SDH cards.

Before You Begin

Before performing any of the following procedures, investigate all alarms and clear any trouble conditions. Refer to the *Cisco ONS 15454 SDH 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-D88 Modify Line Settings and PM Parameter Thresholds for Electrical Cards, page 10-2](#)—As needed, complete this procedure to change line and threshold settings for all electrical cards (E1-N-14, E1-42, E3-12, DS3i-N-12, and STM1E-12).
2. [NTP-D89 Modify Line Settings and PM Parameter Thresholds for Optical Cards, page 10-3](#)—As needed, complete this procedure to change line and threshold settings for all optical (STM-N) cards.
3. [NTP-D118 Modify Alarm Interface Controller–International Settings, page 10-4](#)—As needed, complete this procedure to change external alarms and controls and/or orderwire settings.
4. [NTP-D91 DS3 i-N-12 Protect Cards from 1:1 Protection to 1:N Protection, page 10-4](#)—As needed, complete this procedure to change the protection type on E-1 or DS-3 cards.
5. [NTP-D311 Modify Port Settings and PM Parameter Thresholds for SAN Cards, page 10-6](#)—As needed, complete this procedure to change the FC_MR-4 card port and threshold settings.
6. [NTP-D330 Change Card or PPM Service State, page 10-6](#)—As needed, complete this procedure to change the service state on a card or pluggable port module (PPM).
7. [NTP-D331 Manage Pluggable Port Modules, page 10-7](#)—As needed, complete this procedure to provision a multirate PPM, assign the optical line rate, change the optical line rate, and delete PPMs.
8. [NTP-D354 Provision the Soak Timer for an ML-Series Card, page 10-8](#)—As needed, complete this procedure to provision the soak timer for ports on an ML-Series card.
9. [NTP-D361 View PPM Information on the LCD, page 10-9](#)—As needed, complete this procedure to view PPM (SFP) information for optical cards on the LCD.

NTP-D88 Modify Line Settings and PM Parameter Thresholds for Electrical Cards

Purpose	This procedure changes the line settings and performance monitoring (PM) parameter thresholds for electrical cards.
Tools/Equipment	None
Prerequisite Procedures	NTP-D17 Install the Electrical Cards, page 2-10
Required/As Needed	As needed
Onsite/Remote	Onsite or remote
Security Level	Provisioning or higher


Caution

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

- Step 1** Complete the “[DLP-D60 Log into CTC](#)” task on page 17-44 at the node where you want to change the electrical card settings. If you are already logged in, proceed to Step 2.
- Step 2** As needed, complete the “[NTP-D108 Back Up the Database](#)” procedure on page 15-5 to preserve the existing database.
- Step 3** Perform any of the following tasks as needed:
- [DLP-D365 Change Line and Threshold Settings for E1-42 Cards, page 20-69](#)
 - [DLP-D340 Change Line and Threshold Settings for the E3-12 Cards, page 20-37](#)
 - [DLP-D341 Change Line and Threshold Settings for the DS3i-N-12 Cards, page 20-42](#)
 - [DLP-D342 Change Line and Threshold Settings for the STM1E-12 Card, page 20-47](#)



Note To change settings on the Alarm Profiles tab, see [Chapter 9, “Manage Alarms.”](#)

- Step 4** As needed, complete the “[NTP-D108 Back Up the Database](#)” procedure on page 15-5.
- Stop. You have completed this procedure.**

NTP-D89 Modify Line Settings and PM Parameter Thresholds for Optical Cards

Purpose	This procedure changes the line settings and the PM parameter thresholds for optical (STM-N) cards.
Tools/Equipment	None
Prerequisite Procedures	NTP-D16 Install STM-N Cards and Connectors, page 2-7
Required/As Needed	As needed
Onsite/Remote	Onsite or remote
Security Level	Provisioning or higher



Caution

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

- Step 1** Complete the “[DLP-D60 Log into CTC](#)” task on page 17-44 at the node where you want to change the STM-N card settings. If you are already logged in, proceed to Step 2.
- Step 2** As needed, complete the “[NTP-D108 Back Up the Database](#)” procedure on page 15-5.
- Step 3** Perform any of the following tasks as needed:
- [DLP-D108 Change Line Settings for STM-N Cards, page 18-9](#)
 - [DLP-D343 Change SDH Threshold Settings for STM-N Cards, page 20-50](#)
 - [DLP-D109 Change Optics Thresholds Settings for STM-64, MRC-12, and MRC-2.5G-12 Cards, page 18-13](#)
 - [DLP-D216 Change the STM-N Card ALS Maintenance Settings, page 19-15](#)



Note

To change settings on the Provisioning > VC4 tab, go to the “[DLP-D122 Enable Intermediate Path Performance Monitoring](#)” task on page 18-21. To change settings on the Alarm Profiles tab, see Chapter 9, “Manage Alarms.”

- Step 4** Complete the “[NTP-D108 Back Up the Database](#)” procedure on page 15-5.
- Stop. You have completed this procedure.**

NTP-D118 Modify Alarm Interface Controller–International Settings

Purpose	This procedure changes the AIC-I card external alarms and controls (environmental alarms) and changes orderwire settings.
Tools/Equipment	None
Prerequisite Procedures	NTP-D247 Provision External Alarms and Controls on the Alarm Interface Controller–International , page 9-8 and the DLP-D83 Provision Orderwire , page 17-72
Required/As Needed	As needed
Onsite/Remote	Onsite or remote
Security Level	Provisioning or higher

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- Step 1** Complete the “[DLP-D60 Log into CTC](#)” task on page 17-44 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** As needed, complete the “[NTP-D108 Back Up the Database](#)” procedure on page 15-5.
- Step 3** Perform any of the following tasks as needed:
- [DLP-D208 Change External Alarms Using the AIC-I Card](#), page 19-6
 - [DLP-D209 Change External Controls Using the AIC-I Card](#), page 19-7
 - [DLP-D210 Change AIC-I Card Orderwire Settings](#), page 19-7
- Step 4** As needed, complete the “[NTP-D108 Back Up the Database](#)” procedure on page 15-5.
- Stop. You have completed this procedure.**
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NTP-D91 DS3 i-N-12 Protect Cards from 1:1 Protection to 1:N Protection

Purpose	This procedure converts DS3i-N-12 cards from 1:1 protection to 1:N protection. A 1:N protection group can protect a maximum of five working cards.
Tools/Equipment	None
Prerequisite Procedures	DLP-D71 Create a 1:1 Protection Group , page 17-57
Required/As Needed	As needed
Onsite/Remote	Onsite or remote
Security Level	Provisioning or higher



Note

This procedure assumes that DS3i-N-12 cards are installed in Slots 1 to 6 and/or Slots 12 to 17. The DS3i-N-12 cards in Slots 3 and 15 are the protect cards. Each protect card protects the other DS3i-N-12 cards in that half of the shelf. The ONS 15454 SDH must run CTC Software R4.0 or later.

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- Step 1** Complete the “[DLP-D60 Log into CTC](#)” task on page 17-44 at the node where you want to convert the DS3i-N-12 cards from 1:1 to 1:N protection. If you are already logged in, proceed to Step 2.
- Step 2** In node view, click the **Maintenance > Protection** tabs.
- Step 3** Click the protection group that contains Slot 3 or Slot 15 (where you will install the DS3i-N-12 card).
- Step 4** Make sure the slot you are upgrading is not carrying working traffic. In the Selected Group list, the protect slot must say Protect/Standby and not Working/Active. If the protect slot status is Working/Active, use the following steps to switch traffic to the working card:
- Under Selected Group, click the protect card.
 - Next to Switch Commands, click **Switch**.

The working slot should change to Working/Active and the protect slot should change to Protect/Standby. If they fail to change, do not continue. Troubleshoot the working card and slot to determine why the card cannot carry working traffic.
- Step 5** Repeat Steps 3 and 4 for each protection group that you need to convert.
- Step 6** Verify that no standing alarms exist for any of the DS3i-N-12 cards you are converting. If alarms exist and you have difficulty clearing them, contact your next level of support.
- Step 7** Click the **Provisioning > Protection** tabs.
- Step 8** Click the 1:1 protection group that contains the cards that you will move into the new protection group.
- Step 9** Click **Delete**.
- Step 10** When the confirmation dialog box appears, click **Yes**.



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

- Step 11** If you are deleting more than one protection group, repeat Steps 8 through 10 for each group.
- Step 12** Physically insert a DS3i-N-12 card into the same slot.
- Step 13** Verify that the card boots up properly.
- Step 14** Click the **Inventory** tab and verify that the new card appears as a DS3i-N-12 card.
- Step 15** Click the **Provisioning > Protection** tabs.
- Step 16** Click **Create**.
- Step 17** (Optional) Type a name for the protection group in the Name field.
- Step 18** Click Type and choose **1:N (card)** from the drop-down list.
- Step 19** Verify that the DS3i-N-12 card appears in the Protect Card field.
- Step 20** In the Available Cards list, highlight the cards that you want in the protection group. Click the arrow (>>) tab to move the cards to the Working Cards list.
- Step 21** Click **OK**.

The protection group should appear in the Protection Groups list on the Protection subtab.
- Step 22** As needed, complete the “[NTP-D108 Back Up the Database](#)” procedure on page 15-5.

Stop. You have completed this procedure.
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NTP-D311 Modify Port Settings and PM Parameter Thresholds for SAN Cards

Purpose	This procedure changes the line settings and PM parameter thresholds for FC_MR-4 cards.
Tools/Equipment	None
Prerequisite Procedures	NTP-D286 Install the FC_MR-4 Cards, page 2-12
Required/As Needed	As needed
Onsite/Remote	Onsite or remote
Security Level	Provisioning or higher

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- Step 1** Complete the “[DLP-D60 Log into CTC](#)” task on page 17-44 at the node where you want to change the STM-N card settings. If you are already logged in, proceed to Step 2.
- Step 2** As needed, complete the “[NTP-D108 Back Up the Database](#)” procedure on page 15-5.
- Step 3** Perform any of the following tasks as needed:
- [DLP-D354 Change General Port Settings for the FC_MR-4 Card, page 20-56](#)
 - [DLP-D355 Change Distance Extension Port Settings for the FC_MR-4 Card, page 20-58](#)
 - [DLP-D356 Change Enhanced FC/FICON Port Settings for the FC_MR-4 Card, page 20-59](#)
 - [DLP-D465 Create FC_MR-4 RMON Alarm Thresholds, page 21-40](#)
 - [DLP-D466 Delete FC_MR-4 RMON Alarm Thresholds, page 21-44](#)
- Step 4** As needed, complete the “[NTP-D108 Back Up the Database](#)” procedure on page 15-5.
- Stop. You have completed this procedure.**
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NTP-D330 Change Card or PPM Service State

Purpose	This procedure changes a card or port’s service state, which is an autonomously generated state that gives the overall condition of the port.
Tools/Equipment	None
Prerequisite Procedures	Chapter 2, “Install Cards and Fiber-Optic Cable”
Required/As Needed	As needed
Onsite/Remote	Onsite or remote
Security Level	Provisioning or higher



Note

On the STM64-XFP, MRC-12, and MRC-2.5G-12 cards, the PPM is equivalent to an optical port.

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- Step 1** Complete the “[DLP-D60 Log into CTC](#)” task on page 17-44 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 or PPM you want to change, and choose an administrative state from the drop-down list: **Unlocked** or **Locked,maintenance**.
- Step 4** Click **Apply**.
- Step 5** If an error message opens indicating that the card or PPM state cannot be changed from its current state, click **OK**.

Depending on the Admin State you choose, the card or port/PPM transitions to a different service state. For more information about the service states and card state transitions, refer to the “Administrative and Service States” appendix of the *Cisco ONS 15454 SDH Reference Manual*.

Stop. You have completed this procedure.

NTP-D331 Manage Pluggable Port Modules

Purpose	This procedure provisions, changes, and deletes PPMs for the MRC-12, MRC-2.5G-12, and STM64-XFP cards. (STM64-XFP cards are single-rate PPMs, and therefore can only be deleted.)
Tools/Equipment	None
Prerequisite Procedures	DLP-D107 Preprovision an SFP or XFP Device, page 18-8 or DLP-D335 Install GBIC or SFP/XFP Devices, page 20-28
Required/As Needed	As needed
Onsite/Remote	Onsite or remote
Security Level	Provisioning or higher

- Step 1** Complete the “[DLP-D60 Log into CTC](#)” task on page 17-44 at the node where you want to provision, change, or delete PPMs. If you are already logged in, continue with Step 2.
- Step 2** From the View menu, choose **Go to Network View**.
- Step 3** Click the **Alarms** tab:
- Verify that the alarm filter is not turned on. See the “[DLP-D227 Disable Alarm Filtering](#)” task on page 19-26 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 SDH Troubleshooting Guide*.
 - Complete the “[DLP-D147 Export CTC Data](#)” task on page 18-39 to export alarm and condition information.
- Step 4** As needed, complete the “[DLP-D132 Provision a Multirate PPM on the MRC-12 and MRC-2.5G-12 Cards](#)” task on page 18-27. Single-rate PPMs do not require provisioning.
- Step 5** As needed, complete the “[DLP-D133 Provision the Optical Line Rate on the MRC-12 and MRC-2.5G-12 Cards](#)” task on page 18-27 to assign an OC-3, OC-12, or OC-48 line rate.
- Step 6** As needed, complete the “[DLP-D134 Change the Optical Line Rate on the MRC-12 and MRC-2.5G-12 Cards](#)” task on page 18-28 to change the line rate on a multirate PPM. You cannot change the optical line rate on single-rate PPMs.
- Step 7** As needed, complete the “[DLP-D135 Delete a PPM from the MRC-12, MRC-2.5G-12, or STM64-XFP Card](#)” task on page 18-29.

Stop. You have completed this procedure.

NTP-D354 Provision the Soak Timer for an ML-Series Card

Purpose	This procedure provisions the soak timer for ports on an ML-Series card. The soak period is the amount of time that the ML-Series port remains in the Down state after an error-free signal is continuously received before it transitions to the Up state.
Tools/Equipment	None
Prerequisite Procedures	NTP-D18 Install Ethernet Cards and Connectors, page 2-11
Required/As Needed	As needed
Onsite/Remote	Onsite or remote
Security Level	Provisioning or higher

- Step 1** Complete the “[DLP-D60 Log into CTC](#)” task on page 17-44 at the node where you want to provision the soak timer for an ML-Series card. If you are already logged in, continue with Step 2.
- Step 2** In node view, double-click the ML-Series card that you want to provision.
- Step 3** Click the **Provisioning** tab.
- Step 4** Click the **Ether Ports** or **POS Ports** subtabs and complete the following:
- **PSAS**—Check to enable Pre-Service Alarm Suppression (PSAS), which suppresses all alarms on the port for the time designated in the Soak Time column.
 - **Soak Time**—Choose the desired soak time (in hours and minutes). Use this column when you have checked PSAS to suppress alarms. Once the port detects a signal, the countdown begins for the designated soak time. Soak time hours can be set from 0 to 48. Soak time minutes can be set from 0 to 45 in 15 minute increments.
- Step 5** Click **Apply**.

Stop. You have completed this procedure.

NTP-D361 View PPM Information on the LCD

Purpose	This procedure displays the line rate and the configured reach of PPMs installed on OC-N and MRC cards (MRC-12, MRC-2.5G-12) on the LCD, located on the front of the fan-tray assembly.
Tools/Equipment	None
Prerequisite Procedures	NTP-D16 Install STM-N Cards and Connectors, page 2-7 DLP-D335 Install GBIC or SFP/XFP Devices, page 20-28
Required/As Needed	As needed
Onsite/Remote	Onsite or remote
Security Level	Provisioning or higher

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- Step 1** On the ONS 15454 SDH front panel, repeatedly press the **Slot** button until the slot number of the card where the PPM resides appears on the LCD.
- Step 2** Repeatedly press the **Port** button. When you see “Status - Lambda” display on the LCD, press the **Status** button to select that option.
- Step 3** Press **Status** to toggle between “Lambda” and “Line Rate and Reach.”
- Step 4** Press **Status** to select one of those options.
- Step 5** Press the **Port** button as needed to display the information about the desired port.
- Stop. You have completed this procedure.s**
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