Change Card Settings

This chapter explains how to change line provisioning, thresholds, service states, and line rates on Cisco ONS 15454 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 Troubleshooting Guide* as necessary.

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

1. NTP-A88 Modify Line Settings and PM Parameter Thresholds for Electrical Cards, page 10-2—As needed, complete this procedure to change line and threshold settings for all electrical cards (EC-1, DS-1, DS-3, DS3i-N-12, and DS3XM).

2. NTP-A89 Modify Line Settings and PM Parameter Thresholds for Optical Cards, page 10-2—As needed, complete this procedure to change line and threshold settings for all optical cards.

3. NTP-A118 Modify Alarm Interface Controller–International Settings, page 10-3—As needed, complete this procedure to change external alarms and controls and/or orderwire settings.

4. NTP-A91 Upgrade DS-1 and DS-3 Protect Cards from 1:1 Protection to 1:N Protection, page 10-4—As needed, complete this procedure to change the protection type on DS-1 or DS-3 cards.

5. NTP-A315 Modify Port Settings and PM Parameter Thresholds for FC_MR-4 Cards, page 10-4—As needed, complete this procedure to change FC_MR-4 card port and threshold settings.

6. NTP-A321 Change Card or PPM Service State, page 10-5—As needed, complete this procedure to change the service state on a card or pluggable port module (PPM).

7. NTP-A322 Manage Pluggable Port Modules, page 10-6—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-A354 Set or Check Cross-Connect Mode for XC-VXC-10G Cards, page 10-7—As needed, complete this procedure to provision the node's cross-connect mode if mixed mode grooming is required.

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

Purpose	This procedure changes the line and threshold settings for electrical cards.
Tools/Equipment	None
Prerequisite Procedures	NTP-A17 Install the Electrical Cards, page 2-10
Required/As Needed	As needed
Onsite/Remote	Onsite or remote
Security Level	Provisioning or higher

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

Step 1   Complete the "DLP-A60 Log into CTC" task on page 17-66 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-A108 Back Up the Database" procedure on page 15-4.

Step 3   Perform any of the following tasks as needed:

- DLP-A165 Change Line and Threshold Settings for a DS1-14 or DS1N-14 Card, page 18-28
- DLP-A166 Change Line and Threshold Settings for a DS3-12 or DS3N-12 Card, page 18-32
- DLP-A167 Change Line and Threshold Settings for a DS3E-12 or DS3N-12E Card, page 18-36
- DLP-A168 Change Line and Threshold Settings for the DS3XM-6 Card, page 18-40
- DLP-A387 Change Line and Threshold Settings for the DS3XM-12 Card, page 20-87
- DLP-A526 Change Line and Threshold Settings for the DS3i-N-12 Cards, page 22-22
- DLP-A388 Change Line and Threshold Settings for the DS3/EC1-48 Cards, page 20-92
- DLP-A169 Change Line and Threshold Settings for the EC1-12 Card, page 18-44
- DLP-A376 Change Line and Threshold Settings for the DS1/E1-56 Cards, page 20-60

Step 4   As needed, complete the "NTP-A108 Back Up the Database" procedure on page 15-4.

Stop. You have completed this procedure.

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

Purpose	This procedure changes the line and threshold settings for optical (OC-N) cards.
Tools/Equipment	None
Prerequisite Procedures	NTP-A16 Install Optical Cards and Connectors, page 2-7

Required/As Needed	As needed
Onsite/Remote	Onsite or remote
Security Level	Provisioning or higher

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

Step 1   Complete the "DLP-A60 Log into CTC" task on page 17-66 at the node where you want to change the OC-N card settings. If you are already logged in, proceed to Step 2.

Step 2   As needed, complete the "NTP-A108 Back Up the Database" procedure on page 15-4.

Step 3   Perform any of the following tasks as needed:

- DLP-A379 Change Line Transmission Settings for OC-N Cards, page 20-71
- DLP-A171 Change Threshold Settings for OC-N Cards, page 18-48
- DLP-A459 Change Optics Thresholds Settings for OC-192 and MRC-12 Cards, page 21-41
- DLP-A527 Change the OC-N Card ALS Maintenance Settings, page 22-26
- DLP-A172 Change an Optical Port to SDH, page 18-50

Step 4   As needed, complete the "NTP-A108 Back Up the Database" procedure on page 15-4.

Stop. You have completed this procedure.

NTP-A118 Modify Alarm Interface Controller–International Settings

Purpose	This procedure provisions the AIC-I card to receive input from or send output to external devices wired to the backplane (called external alarms and controls or environmental alarms). It also changes orderwire settings.
Tools/Equipment	None
Prerequisite Procedures	NTP-A258 Provision External Alarms and Controls on the Alarm Interface Controller–International, page 8-8
	DLP-A83 Provision Orderwire, page 17-84
Required/As Needed	As needed
Onsite/Remote	Onsite or remote
Security Level	Provisioning or higher

Step 1   Complete the "DLP-A60 Log into CTC" task on page 17-66 at the node where you want to change the AIC-I card settings. If you are already logged in, continue with Step 2.

Step 2   As needed, complete the "NTP-A108 Back Up the Database" procedure on page 15-4.

Step 3   Perform any of the following tasks as needed:

- DLP-A208 Change External Alarms Using the AIC-I Card, page 19-6

- DLP-A209 Change External Controls Using the AIC-I Card, page 19-7
- DLP-A210 Change AIC-I Card Orderwire Settings, page 19-7

Step 4   As needed, complete the "NTP-A108 Back Up the Database" procedure on page 15-4.

Stop. You have completed this procedure.

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

Purpose	This procedure converts DS-1 and DS-3 protect cards from 1:1 to 1:N protection.
Tools/Equipment	None
Prerequisite Procedures	DLP-A71 Create a 1:1 Protection Group, page 17-78
Required/As Needed	As needed
Onsite/Remote	Onsite or remote
Security Level	Provisioning or higher

Step 1   Complete the "DLP-A60 Log into CTC" task on page 17-66 at the node where you want to convert the DS-1 or DS-3 cards from 1:1 to 1:N protection. If you are already logged in, continue with Step 2.

Step 2   As needed, complete the "NTP-A108 Back Up the Database" procedure on page 15-4.

Step 3   Perform any of the following tasks as needed:

- DLP-A176 Convert DS1-14 Cards From 1:1 to 1:N Protection, page 18-50
- DLP-A177 Convert DS3-12 Cards From 1:1 to 1:N Protection, page 18-52
- DLP-A178 Convert DS3-12E Cards From 1:1 to 1:N Protection, page 18-53
- DLP-A448 Convert DS3XM-6 or DS3XM-12 Cards From 1:1 to 1:N Protection, page 21-29

Step 4   As needed, complete the "NTP-A108 Back Up the Database" procedure on page 15-4.

Stop. You have completed this procedure.

NTP-A315 Modify Port Settings and PM Parameter Thresholds for FC_MR-4 Cards

Purpose	This procedure changes the line and threshold settings for storage area network (SAN) cards, including the FC_MR-4.
Tools/Equipment	None
Prerequisite Procedures	NTP-A274 Install the FC_MR-4 Card, page 2-13
Required/As Needed	As needed

| Onsite/Remote | Onsite or remote |
| Security Level | Provisioning or higher |

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

Step 1   Complete the "DLP-A60 Log into CTC" task on page 17-66 at the node where you want to change the OC-N card settings. If you are already logged in, continue with Step 2.

Step 2   As needed, complete the "NTP-A108 Back Up the Database" procedure on page 15-4.

Step 3   Perform any of the following tasks as needed:

- DLP-A438 Change General Port Settings for the FC_MR-4 Card, page 21-15
- DLP-A439 Change Distance Extension Port Settings for the FC_MR-4 Card, page 21-17
- DLP-A440 Change Enhanced FC/FICON Port Settings for the FC_MR-4 Card, page 21-19
- DLP-A357 Create FC_MR-4 RMON Alarm Thresholds, page 20-40
- DLP-A358 Delete FC_MR-4 RMON Alarm Thresholds, page 20-44

Step 4   As needed, complete the "NTP-A108 Back Up the Database" procedure on page 15-4.

Stop. You have completed this procedure.

NTP-A321 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

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Note   On the OC192-XFP and MRC-12 cards, the pluggable-port module (PPM) is equivalent to an optical port.

Step 1   Complete the "DLP-A60 Log into CTC" task on page 17-66 at the node where you want to change the card service state.

Step 2   From node view, click the **Inventory** tab.

Step 3   Choose an Admin state from the Admin State drop-down list for the card or PPM that you want to change: **IS** (In-Service) or **OOS,MT** (Out-of-Service,Maintenance).

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**.

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 Reference Manual*.

Stop. You have completed this procedure.

NTP-A322 Manage Pluggable Port Modules

Purpose	This procedure provisions, changes, and deletes pluggable port modules (PPMs) for the MRC-12 and OC192-XFP cards. (OC-192XFPs are single-rate PPMs, and therefore can only be deleted.)
Tools/Equipment	None
Prerequisite Procedures	DLP-A461 Preprovision an SFP or XFP Device, page 21-43 or
	DLP-A469 Install a GBIC or SFP/XFP Device, page 21-58
Required/As Needed	As needed
Onsite/Remote	Onsite or remote
Security Level	Provisioning or higher

Step 1 Complete the "DLP-A60 Log into CTC" task on page 17-66 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:

 a. Verify that the alarm filter is not turned on. See the "DLP-A227 Disable Alarm Filtering" task on page 19-18 as necessary.

 b. Verify that no unexplained conditions appear on the network. If unexplained conditions appear, resolve them before continuing. Refer to the *Cisco ONS 15454 Troubleshooting Guide*.

 c. Complete the "DLP-A532 Export CTC Data" task on page 22-32 to export alarm and condition information.

Step 4 As needed, complete the "DLP-A444 Provision a PPM on the MRC-12 Card" task on page 21-25. Single-rate PPMs do not require provisioning.

Step 5 As needed, complete the "DLP-A445 Provision the Optical Line Rate on the MRC-12 Card" task on page 21-26 to assign an OC-3, OC-12, or OC-48 line rate to a multirate PPM.

Step 6 As needed, complete the "DLP-A446 Change the Optical Line Rate on the MRC-12 Card" task on page 21-27 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-A447 Delete a PPM from the MRC-12 or OC192-XFP Card" task on page 21-28.

Stop. You have completed this procedure.

NTP-A354 Set or Check Cross-Connect Mode for XC-VXC-10G Cards

Purpose	This procedure is used to set or verify cross-connect mode provisioning required for mixed grooming mode.
Tools/Equipment	None
Prerequisite Procedures	None
Required/As Needed	As needed
Onsite/Remote	Onsite or remote
Security Level	Provisioning or higher

Step 1   Complete the "DLP-A60 Log into CTC" task on page 17-66 at the node where you want to change the XC-VXC-10G card settings. If you are already logged in, continue with Step 2.

Step 2   Navigate to the node view in CTC.

Step 3   Click **Provisioning > Cross-Connect**. The Cross-Connect dialog box is displayed.

Step 4   If necessary, click the **Mixed Mode** radio button in the Cross-Connect dialog box and click **Apply**.

Stop. You have completed this procedure.