### **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



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 17-67 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



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 17-67 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 21-42
  - 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 17-86

**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 17-67 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 19-6
- 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 17-80

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 17-67 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 21-30
- **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



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 17-67 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 21-16
  - DLP-A439 Change Distance Extension Port Settings for the FC\_MR-4 Card, page 21-18
  - DLP-A440 Change Enhanced FC/FICON Port Settings for the FC\_MR-4 Card, page 21-20
  - 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



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 17-67 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 21-44 or

DLP-A469 Install a GBIC or SFP/XFP Device, page 21-59

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 17-67 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 19-17 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 21-26. 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 21-27 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 21-28 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-A447 Delete a PPM from the MRC-12 or OC192-XFP Card" task on page 21-29.

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/EquipmentNonePrerequisite ProceduresNoneRequired/As NeededAs needed

Onsite/Remote Onsite or remote
Security Level Provisioning or higher

- Step 1 Complete the "DLP-A60 Log into CTC" task on page 17-67 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.

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