

## **DLPs A100 to A199**



The terms "Unidirectional Path Switched Ring" and "UPSR" may appear in Cisco literature. These terms do not refer to using Cisco ONS 15xxx products in a unidirectional path switched ring configuration. Rather, these terms, as well as "Path Protected Mesh Network" and "PPMN," refer generally to Cisco's path protection feature, which may be used in any topological network configuration. Cisco does not recommend using its path protection feature in any particular topological network configuration.

# **DLP-A111 Changing the Maximum Number of Session Entries for Alarm History**

**Purpose** This task changes the maximum number of session entries included in the

alarm history. Use this task to extend the history list in order to save

information for future reference or troubleshooting.

**Tools/Equipment** None

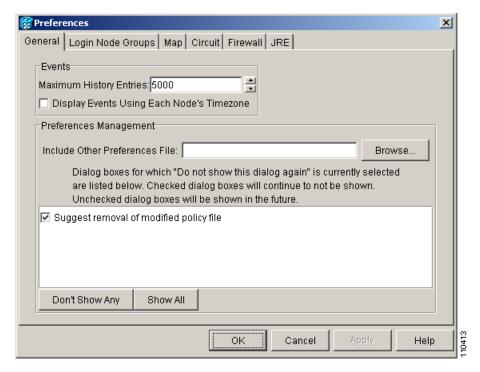
Prerequisite Procedures DLP-A60 Log into CTC, page 17-66

Required/As NeededAs neededOnsite/RemoteOnsite or remoteSecurity LevelProvisioning or higher

**Step 1** From the Edit menu, choose **Preferences**.

The CTC Preferences dialog box appears (Figure 18-1).

Figure 18-1 CTC Preferences Dialog Box



- Click the up or down arrow buttons next to the Maximum History Entries field to change the entry. Step 2
- Step 3 Click Apply and OK.



Note

Setting the Maximum History Entries value to the high end of the range uses more Cisco Transport Controller (CTC) memory and could impair CTC performance.



Note

This task changes the maximum history entries recorded for CTC sessions. It does not affect the maximum number of history entries viewable for a network, node, or card.

Return to your originating procedure (NTP). Step 4

## **DLP-A112 Display Alarms and Conditions Using Time Zone**

**Purpose** This task changes the time stamp for events to the time zone of the ONS

node reporting the alarm. By default, the events time stamp is set to the

time zone for the CTC workstation.

**Tools/Equipment** None

Prerequisite Procedures DLP-A60 Log into CTC, page 17-66

Required/As Needed As needed
Onsite/Remote Onsite or remote

Security Level Provisioning or higher

**Step 1** From the Edit menu, choose **Preferences**.

The CTC Preferences dialog box appears (Figure 18-1 on page 18-2).

Step 2 Check the Display Events Using Each Node's Timezone check box. The Apply button is enabled.

Step 3 Click Apply and OK.

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

## **DLP-A113 Synchronize Alarms**

**Purpose** This task is used to view ONS 15454 events at the card, node, or network

level and to refresh the alarm listing so that you can check for new and

cleared alarms and conditions.

**Tools/Equipment** None

Prerequisite Procedures DLP-A60 Log into CTC, page 17-66

Required/As Needed As needed

Onsite/Remote Onsite or remote
Security Level Retrieve or higher

Step 1 At the card, node, or network view, click the Alarms tab.

#### Step 2 Click Synchronize.

This button causes CTC to retrieve a current alarm summary for the card, node, or network. This step is optional because CTC updates the Alarms window automatically as raise/clear messages arrive from the node.



Note

Alarms that have been raised during the session will have a check mark in the Alarms window New column. When you click Synchronize, the check mark disappears.

**Step 3** Return to your originating procedure (NTP).

#### **DLP-A114 View Conditions**

**Purpose** This task is used to view conditions (events with a Not Reported [NR]

severity) at the card, node, or network level. Conditions give you a clear

record of changes or events that do not result in alarms.

**Tools/Equipment** None

Prerequisite Procedures DLP-A60 Log into CTC, page 17-66

Required/As Needed As needed

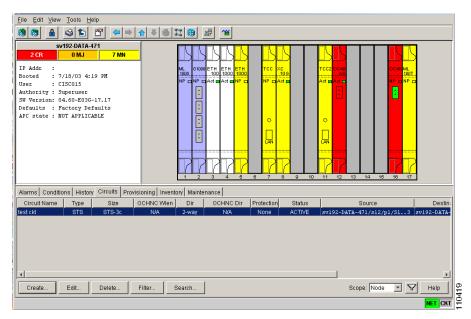
Onsite/Remote Onsite or remote
Security Level Retrieve or higher

**Step 1** From the card, node, or network view, click the **Conditions** tab.

#### Step 2 Click Retrieve (Figure 18-2).

The Retrieve button requests the current set of fault conditions from the node, card, or network. The window is not updated when events change on the node. You must click Retrieve to see any changes.

Figure 18-2 Node View Conditions Window



Conditions include all fault conditions raised on the node, whether or not they are reported.



Alarms can be unreported when they are filtered out of the display. See the "DLP-A225 Enable Alarm Filtering" task on page 19-17 for information.

Events that are reported as Major (MJ), Minor (MN), or Critical (CR) severities are alarms. Events that are reported as Not Alarmed (NA) are conditions. Conditions that are not reported at all are marked NR in the Conditions window severity column. Conditions that have a default severity of CR, MJ, MN, or NA but are not reported due to exclusion or suppression are shown as NR in the Conditions window.



Note

For more information about alarm suppression, see the "DLP-A522 Suppress Alarm Reporting" task on page 22-17.

Current conditions are shown with the severity chosen in the alarm profile, if used. For more information about alarm profiles, see the "NTP-A71 Create, Download, and Assign Alarm Severity Profiles" procedure on page 7-7.



When a port is placed in the Out-of-Service and Management, Maintenance (OOS-MA,MT) service state, it raises an Alarms Suppressed for Maintenance (AS-MT) condition. For information about alarm and condition troubleshooting, refer to the *Cisco ONS 15454 Troubleshooting Guide*.

Step 3 If you want to apply exclusion rules, check the Exclude Same Root Cause check box at the node or network view, but do not check the Exclude Same Root Cause check box in card view.

An exclusion rule eliminates all lower-level alarms or conditions that originate from the same cause. For example, a fiber break might cause a loss of signal (LOS) alarm, an alarm indication signal (AIS) condition, and a signal failure (SF) condition. If you check the Exclude Same Root Cause check box, only the LOS alarm will appear. According to Telcordia GR-253, exclusion rules apply to a query of all conditions from a node.

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

## **DLP-A117 Apply Alarm Profiles to Cards and Nodes**

**Purpose** This task applies a custom or default alarm profile to cards or nodes.

**Tools/Equipment** None

Prerequisite Procedures DLP-A518 Create a New or Cloned Alarm Severity Profile, page 22-9

DLP-A60 Log into CTC, page 17-66

Required/As NeededAs neededOnsite/RemoteOnsite or remoteSecurity LevelProvisioning or higher

Step 1 In node view, click the **Provisioning > Alarm Profiles > Alarm Behavior** tab (Figure 18-3).

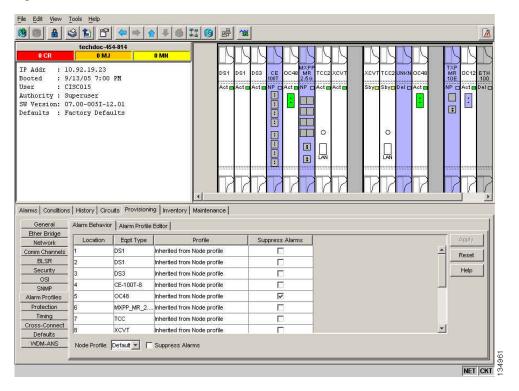


Figure 18-3 Node View Alarm Behavior Window

- **Step 2** To apply profiles to a card:
  - a. Click a selection from the Profile column for the card.
  - **b.** Choose the new profile from the drop-down list.
  - c. Click Apply.
- **Step 3** To apply the profile to an entire node:
  - a. Click the **Node Profile** drop-down arrow at the bottom of the window (Figure 18-3).
  - **b.** Choose the new alarm profile from the drop-down list.
  - c. Click Apply.
- Step 4 To reapply a previous alarm profile after you have applied a new one, select the previous profile and click **Apply** again.
- **Step 5** Return to your originating procedure (NTP).

# **DLP-A121 Enable/Disable Pointer Justification Count Performance Monitoring**

**Purpose** This task enables or disables pointer justification counts, which provide

a way to align the phase variations in synchronous transport signal (STS) payloads and to monitor the clock synchronization between nodes. A consistently large pointer justification count indicates clock

synchronization problems between nodes.

**Tools/Equipment** None

Prerequisite Procedures DLP-A60 Log into CTC, page 17-66

Required/As Needed As needed

Onsite/Remote Onsite or remote
Security Level Provisioning or higher

Step 1 In node view, double-click the card you want to monitor. The card view appears.

See Table 18-1 for a list of line terminating equipment (LTE) cards.

Table 18-1 OC-N Cards that Terminate the Line, Called LTEs

<b>Line Terminating Equipment</b>
EC1-12
OC3 IR 4/STM1 SH 1310
OC3 IR4/STM1 SH 1310-8
OC12 LR/STM4 LH 1310
OC12 IR/STM4 SH 1310
OC12 IR/STM4 SH 1310-4
OC12 LR/STM4 LH 1550
OC48 LR 1550
OC48 IR 1310
OC48 LR/STM16 LH AS 1550
OC48 IR/STM16 SH AS 1310
OC48 ELR 200 GHz
OC48 ELR/STM16 EH 100 GHz
OC192 SR/STM64 IO 1310
OC192 IR/STM64 SH 1550
OC192 LR/STM64 LH 1550
OC192 ELR/STM64 LH ITU 15xx.xx

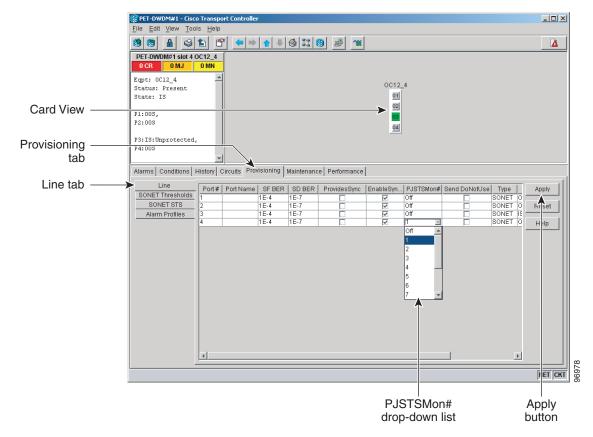
**Step 2** Click the **Provisioning > Line** tabs.

Step 3 From the PJSTSMon# drop-down list, make a selection based on the following rules (Figure 18-4):

• Off means pointer justification monitoring is disabled (default).

• 1 to *n* are the number of STSs on the port. One STS per port can be enabled from the PJSTSMon# card drop-down list.

Figure 18-4 Enabling or Disabling Pointer Justification Count Parameters



- Step 4 In the Service State field, confirm that the port is in the In-Service and Normal (IS-NR) service state.
- Step 5 If the port is IS-NR, click **Apply**. If the port in the Out-of-Service and Management, Disabled (OOS-MA,DSBLD), OOS-MA,MT, or the Out-of-Service and Autonomous, Automatic In-Service (OOS-AU,AINS) service state, choose **IS** from the Admin State drop-down list and click **Apply**.
- Step 6 Click the **Performance** tab to view performance monitoring (PM) parameters. For PM parameter definitions, refer to the "Performance Monitoring" chapter in the *Cisco ONS 15454 Troubleshooting Guide*.



The count fields for PPJC and NPJC PM parameters appear white and blank unless pointer justification count performance monitoring is enabled.

**Step 7** Return to your originating procedure (NTP).

## **DLP-A122** Enable/Disable Intermediate Path Performance Monitoring

**Purpose** This task enables or disables intermediate path performance monitoring

(IPPM), which allows you to monitor large amounts of STS traffic

through intermediate nodes.

**Tools/Equipment** None

Prerequisite Procedures DLP-A60 Log into CTC, page 17-66

Required/As Needed As needed

Onsite/Remote Onsite or remote
Security Level Provisioning or higher



The monitored IPPM parameters are STS CV-P, STS ES-P, STS SES-P, STS UAS-P, and STS FC-P. Far-end path monitoring can be performed on the OC3-4 and EC1 cards. For PM parameter definitions, refer to the "Performance Monitoring" chapter of the *Cisco ONS 15454 Troubleshooting Guide*.



An OC-48 IR card used in a bidirectional line switched ring (BLSR) does not support IPPM during a protection switch.

Step 1 In node view, double-click the OC-N card you want to monitor. The card view appears.

See Table 18-1 on page 18-7 for a list of OC-N LTE cards.

Step 2 Click the **Provisioning > SONET STS** tabs (Figure 18-5).

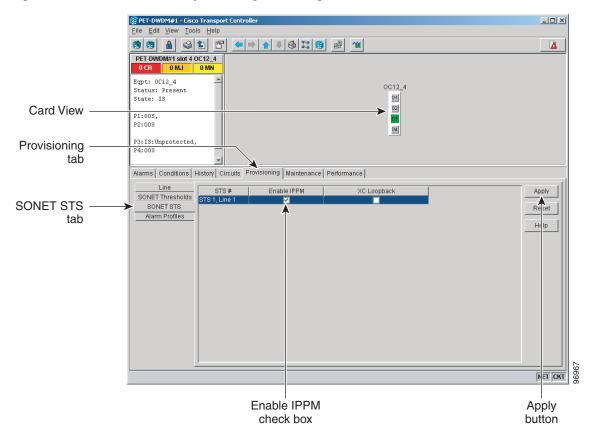


Figure 18-5 SONET STS Tab for Enabling or Disabling IPPM

- Step 3 Click the check box in the Enable IPPM column and make a selection based on the following rules:
  - Unchecked means IPPM is disabled for that STS (default)
  - · Checked means IPPM is enabled for that STS
- Step 4 Click Apply.
- Step 5 Click the **Performance** tab to view PM parameters. For IPPM parameter definitions, refer to the "Performance Monitoring" chapter of the *Cisco ONS 15454 Troubleshooting Guide*.
- **Step 6** Return to your originating procedure (NTP).

#### **DLP-A124 Refresh PM Counts at 15-Minute Intervals**

**Purpose** This task changes the window view to display PM counts in 15-minute

intervals.

**Tools/Equipment** None

Prerequisite Procedures DLP-A60 Log into CTC, page 17-66

Required/As Needed As needed

Onsite/Remote Onsite or remote
Security Level Retrieve or higher

Step 1 In node view, double-click the card where you want to view PM counts. The card view appears.

Step 2 Click the **Performance** tab.

Step 3 Click the 15 min radio button.

**Step 4** Click **Refresh**. Performance monitoring parameters appear in 15-minute intervals synchronized with the time of day.

Step 5 View the Curr column to find PM counts for the current 15-minute interval.

Each monitored performance parameter has corresponding threshold values for the current time period. If the value of the counter exceeds the threshold value for a particular 15-minute interval, a threshold crossing alert (TCA) is raised. The number represents the counter value for each specific performance monitoring parameter.

**Step 6** View the Prev-*n* columns to find PM counts for the previous 15-minute intervals.



Note

If a complete 15-minute interval count is not possible, the value appears with a yellow background. An incomplete or incorrect count can be caused by monitoring for less than 15 minutes after the counter started, changing node timing settings, changing the time zone settings, replacing a card, resetting a card, or changing port service states. When the problem is corrected, the subsequent 15-minute interval appears with a white background.

**Step 7** Return to your originating procedure (NTP).

### **DLP-A125 Refresh PM Counts at One-Day Intervals**

**Purpose** This task changes the window view to display PM parameters in 1-day

intervals.

**Tools/Equipment** None

Prerequisite Procedures DLP-A60 Log into CTC, page 17-66

Required/As Needed As needed

Onsite/Remote Onsite or remote
Security Level Retrieve or higher

- **Step 1** In node view, double-click the card where you want to view PM counts. The card view appears.
- Step 2 Click the Performance tab.
- Step 3 Click the 1 day radio button.
- Step 4 Click Refresh. Performance monitoring appears in 1-day intervals synchronized with the time of day.
- Step 5 View the Curr column to find PM counts for the current 1-day interval.

Each monitored performance parameter has corresponding threshold values for the current time period. If the value of the counter exceeds the threshold value for a particular 1-day interval, a TCA is raised. The number represents the counter value for each specific performance monitoring parameter.

**Step 6** View the Prev-*n* columns to find PM counts for the previous 1-day intervals.



If a complete count over a 1-day interval is not possible, the value appears with a yellow background. An incomplete or incorrect count can be caused by monitoring for less than 24 hours after the counter started, changing node timing settings, changing the time zone settings, replacing a card, resetting a card, or changing port service states. When the problem is corrected, the subsequent 1-day interval appears with a white background.

**Step 7** Return to your originating procedure (NTP).

#### **DLP-A126 View Near-End PM Counts**

Purpose This task enables you to view near-end PM counts for the selected card

and port.

Tools/Equipment None

Prerequisite Procedures DLP-A60 Log into CTC, page 17-66

**Required/As Needed** As needed

Onsite/Remote Onsite or remote
Security Level Retrieve or higher

- **Step 1** In node view, double-click the card where you want to view PM counts. The card view appears.
- Step 2 Click the Performance tab.
- Step 3 Click the Near End radio button.
- Step 4 Click **Refresh**. All PM parameters occurring for the selected card on the incoming signal appear. For PM parameter definitions refer to the "Performance Monitoring" chapter of the *Cisco ONS 15454 Troubleshooting Guide*.
- Step 5 View the Curr column to find PM counts for the current time interval.
- **Step 6** View the Prev-*n* columns to find PM counts for the previous time intervals.
- **Step 7** Return to your originating procedure (NTP).

#### **DLP-A127 View Far-End PM Counts**

**Purpose** This task enables you to view far-end PM parameters for the selected

card and port.

**Tools/Equipment** None

**Prerequisite Procedures** DLP-A60 Log into CTC, page 17-66

Required/As Needed As needed

Onsite/Remote Onsite or remote **Security Level** Retrieve or higher

Step 1 In node view, double-click the card where you want to view PM counts. The card view appears.

Click the **Performance** tab. Step 2

Click the Far End radio button. Step 3

Click **Refresh**. All PM parameters recorded by the far-end node for the selected card on the outgoing Step 4 signal appear. For PM parameter definitions, refer to the "Performance Monitoring" chapter of the Cisco ONS 15454 Troubleshooting Guide.

Step 5 View the Curr column to find PM counts for the current time interval.

Step 6 View the Prev-*n* columns to find PM counts for the previous time intervals.

Return to your originating procedure (NTP). Step 7

#### **DLP-A129 Reset Current PM Counts**

**Purpose** This task clears the current PM count, but it does not clear the

cumulative PM count. This task allows you to see how quickly PM

counts rise.

**Tools/Equipment** None

**Prerequisite Procedures** DLP-A60 Log into CTC, page 17-66

Required/As Needed As needed

Onsite/Remote Onsite or remote **Security Level** Retrieve or higher

In node view, double-click the card where you want to view PM counts. The card view appears. Step 1

Step 2 Click the **Performance** tab.

Step 3 Click Baseline.



Note

The Baseline button clears the PM counts displayed in the current time interval but does not clear the PM counts on the card. When the current time interval expires or the window view changes, the total number of PM counts on the card and on the window appear in the appropriate column. The baseline values are discarded if you change views to a different window and then return to the Performance window.

- **Step 4** View the current statistics columns to observe changes to PM counts for the current time interval.
- **Step 5** Return to your originating procedure (NTP).

#### **DLP-A131 Search for Circuits**

**Purpose** This task searches for ONS 15454 circuits at the network, node, or card

level.

**Tools/Equipment** None

Prerequisite Procedures DLP-A60 Log into CTC, page 17-66

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

**Step 1** Navigate to the appropriate CTC view:

- To search the entire network, click View > Go to Network View.
- To search for circuits that originate, terminate, or pass through a specific node, click **View** > **Go to Other Node**, then choose the node you want to search and click **OK**.
- To search for circuits that originate, terminate, or pass through a specific card, double-click the card on the shelf graphic in node view to open the card in card view.
- Step 2 Click the Circuits tab.
- Step 3 If you are in node or card view, choose the scope for the search, **Node** or **Network** (**All**), in the Scope drop-down list located at the bottom right-hand side of the screen.
- Step 4 Click Search.
- **Step 5** In the Circuit Name Search dialog box, complete the following:
  - Find What—Enter the text of the circuit name you want to find.
  - Match whole word only—Check this check box to instruct CTC to select circuits only if the entire word matches the text in the Find What field.
  - Match case—Check this check box to instruct CTC to select circuits only when the capitalization matches the capitalization entered in the Find What field.
  - Direction—Choose the direction for the search. Searches are conducted up or down from the currently selected circuit.
- Step 6 Click Find Next. If a match is found, click Find Next again to find the next circuit.
- Step 7 Repeat Steps 5 and 6 until you are finished, then click Cancel.
- **Step 8** Return to your originating procedure (NTP).

#### **DLP-A137 Provision Path Trace on OC-N Ports**

**Purpose** This task monitors a path trace on OC-N ports within the circuit path.

**Tools/Equipment** The OC-N ports you want to monitor must be on OC-N cards capable of

receiving path trace. See Table 19-3 on page 19-47.

Prerequisite Procedures DLP-A264 Provision a J1 Path Trace on Circuit Source and Destination

Ports, page 19-46

DLP-A60 Log into CTC, page 17-66

Required/As Needed As needed
Onsite/Remote Onsite or remote

Security Level Provisioning or higher

- Step 1 From the View menu, choose **Go to Other Node**. In the Select Node dialog box, choose the node where path trace was provisioned on the circuit source and destination ports.
- Step 2 Click Circuits.
- Step 3 Choose the STS circuit that has path trace provisioned on the source and destination ports, then click Edit.
- Step 4 In the Edit Circuit window, click the **Show Detailed Map** check box at the bottom of the window. A detailed circuit graphic showing source and destination ports appears.
- Step 5 In the detailed circuit map, right-click the circuit OC-N port (the square on the left or right of the source node icon) and choose **Edit Path Trace** from the shortcut menu.



Note

The OC-N port must be on a receive-only card listed in Table 19-3 on page 19-47. If not, the Edit Path Trace menu item will not appear.

- Step 6 In the Circuit Path Trace window, enable the path trace expected string by choosing **Auto** or **Manual** from the Path Trace Mode drop-down list:
  - Auto—Uses the first string received from the port at the other path trace end as the current expected string. An alarm is raised when a string that differs from the baseline is received. For OC-N ports, Auto is recommended because Manual mode requires you to trace the circuit on the Edit Circuit window to determine whether the port is the source or destination path.
  - Manual—Uses the Current Expected String field as the baseline string. An alarm is raised when a string that differs from the Current Expected String is received.
- Step 7 If you set the Path Trace Mode field to Manual, enter the string that the OC-N port should receive in the New Expected String field. To do this, trace the circuit path on the detailed circuit window to determine whether the port is in the circuit source or destination path, then set the New Expected String to the string transmitted by the circuit source or destination. If you set the Path Trace Mode field to Auto, skip this step.
- Step 8 Click Apply, then click Close.
- **Step 9** Return to your originating procedure (NTP).

## DLP-A140 Change the Node Name, Date, Time, and Contact Information

**Purpose** This procedure changes basic information such as node name, date, time,

and contact information.

**Tools/Equipment** None

Prerequisite Procedures DLP-A60 Log into CTC, page 17-66

Required/As Needed As needed

Onsite/Remote Onsite or remote
Security Level Provisioning or higher



Changing the date, time, or time zone might invalidate the node's performance monitoring counters.

**Step 1** In node view, click the **Provisioning > General** tabs.

**Step 2** Change any of the following:

• General: Node Name

• General: Contact

· Location: Latitude

Location: Longitude

• Location: Description



To see changes to longitude or latitude on the network map, you must go to network view and right-click the specified node, then click Reset Node Position.

- Time: Use NTP/SNTP Server
- Time: Date (M/D/Y)
- Time: Time (H:M:S)
- Time: Time Zone
- Time: Use Daylight Saving Time
- AIS-V Insertion On STS-1 Signal Degrade Path: Insert AIS-V on STS-1 SD-P
- AIS-V Insertion On STS-1 Signal Degrade Path: SD-P BER

See the "NTP-A25 Set Up Name, Date, Time, and Contact Information" procedure on page 4-4 for detailed field descriptions.

- Step 3 Click Apply. Confirm that the changes appear; if not, repeat the task.
- **Step 4** Return to your originating procedure (NTP).

## **DLP-A142 Modify a Static Route**

**Purpose** This task modifies a static route on an ONS 15454.

**Tools/Equipment** None

Prerequisite Procedures DLP-A60 Log into CTC, page 17-66

DLP-A65 Create a Static Route, page 17-73

**Required/As Needed** As needed

Onsite/Remote Onsite or remote

Security Level Provisioning or higher

**Step 1** In node view, click the **Provisioning > Network** tabs.

Step 2 Click the Static Routing tab.

**Step 3** Click the static route you want to edit.

Step 4 Click Edit.

**Step 5** In the Edit Selected Static Route dialog box, enter the following:

Mask

· Next Hop

Cost

See the "DLP-A65 Create a Static Route" task on page 17-73 for detailed field descriptions.

Step 6 Click OK.

**Step 7** Return to your originating procedure (NTP).

### **DLP-A143 Delete a Static Route**

**Purpose** This task deletes an existing static route on an ONS 15454.

**Tools/Equipment** None

Prerequisite Procedures DLP-A60 Log into CTC, page 17-66

DLP-A65 Create a Static Route, page 17-73

Required/As NeededAs neededOnsite/RemoteOnsite or remoteSecurity LevelProvisioning or higher

Step 1 In node view, click the **Provisioning > Network > Static Routing** tabs.

**Step 2** Click the static route you want to delete.

Step 3 Click **Delete**. A confirmation dialog box appears.

Step 4 Click Yes.

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

#### **DLP-A144 Disable OSPF**

**Purpose** This task disables the Open Shortest Path First (OSPF) routing protocol

process for an ONS 15454 LAN.

**Tools/Equipment** None

Prerequisite Procedures DLP-A60 Log into CTC, page 17-66

DLP-A250 Set Up or Change Open Shortest Path First Protocol, page

19-34

Required/As Needed As needed

Onsite/Remote Onsite or remote
Security Level Provisioning or higher

Step 1 In node view, click the **Provisioning > Network > OSPF** tabs. The OSPF subtab has several options.

Step 2 In the OSPF on LAN area, uncheck the OSPF active on LAN check box.

Step 3 Click Apply. Confirm that the changes appear; if not, repeat the task.

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

## **DLP-A145 Change the Network View Background Color**

**Purpose** This task changes the network view background color or the domain view

background color (the area displayed when you open a domain).

Tools/Equipment None

Prerequisite procedures DLP-A60 Log into CTC, page 17-66

**Required/As needed** As needed

Onsite/Remote Onsite or remote
Security Level Retrieve or higher



If you modify background colors, the change is stored in your CTC user profile on the computer. The change does not affect other CTC users.

- Step 1 From the View menu, choose Go to Network View.
- Step 2 If you want to change a domain background, double-click the domain. If not, continue with Step 3.
- Step 3 Right-click the network view or domain map area and choose **Set Background Color** from the shortcut menu.
- **Step 4** In the Choose Color dialog box, select a background color.
- Step 5 Click OK.

**Step 6** Return to your originating procedure (NTP).

#### **DLP-A148 Create Domain Icons**

**Purpose** This task creates a domain, which is an icon that groups ONS 15454 icons

in CTC network view.

**Tools/Equipment** None

Prerequisite procedures DLP-A60 Log into CTC, page 17-66

**Required/As needed** As needed

Onsite/Remote Onsite or remote
Security Level Provisioning or higher



Domains created by one user are visible to all users who log into the network.

Step 1 From the View menu, choose Go to Network View.

Step 2 Right-click the network map and choose Create New Domain from the shortcut menu.

Step 3 When the domain icon appears on the map, click the map name and type the domain name.

Step 4 Press Enter.

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

## **DLP-A149 Manage Domain Icons**

**Purpose** This task manages CTC network view domain icons.

**Tools/Equipment** None

Prerequisite procedures DLP-A60 Log into CTC, page 17-66

DLP-A148 Create Domain Icons, page 18-19

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



All domain changes, such as added or removed nodes, are visible to all users who log into the network.

Step 1 From the View menu, choose Go to Network View.

Step 2 Locate the domain action you want in Table 18-2 and complete the appropriate steps.

Table 18-2 Managing Domains

Domain action	Steps	
Move a domain	Press Ctrl and drag and drop the domain icon to the new location.	
Rename a domain	Right-click the domain icon and choose <b>Rename Domain</b> from the shortcut menu. Type the new name in the domain name field.	
Add a node to a domain	Drag and drop the node icon to the domain icon.	
Move a node from a domain to the network map	Open the domain and right-click a node. Choose Move Node Back to Parent View.	
Open a domain	Double-click the domain icon. Alternatively, right-click the domain and choose <b>Open Domain</b> .	
Return to network view	Right-click the domain view area and choose <b>Go to Parent View</b> from the shortcut menu.	
Preview domain contents	Right-click the domain icon and choose <b>Show Domain Overview</b> . The domain icon shows a small preview of the nodes in the domain. To turn off the domain overview, right-click the overview and select <b>Show Domain Overview</b> .	
Remove domain	Right-click the domain icon and choose <b>Remove Domain</b> . Any nodes in the domain are returned to the network map.	

Step 3 Return to your originating procedure (NTP).

## **DLP-A150 Modify a 1:1 Protection Group**

**Purpose** This task modifies a 1:1 protection group for electrical (DS-1, DS-3, EC-1,

and DS3XM) cards.

**Tools/Equipment** None

**Prerequisite Procedures** DLP-A71 Create a 1:1 Protection Group, page 17-78

DLP-A60 Log into CTC, page 17-66

Required/As NeededAs neededOnsite/RemoteOnsite or remoteSecurity LevelProvisioning or higher

- **Step 1** In node view, click the **Provisioning > Protection** tabs.
- **Step 2** In the Protection Groups area, click the 1:1 protection group you want to modify.
- **Step 3** In the Selected Group area, you can modify the following, as needed:
  - Name—As needed, type the changes to the protection group name. The name can have up to 32 alphanumeric characters.

- Revertive—Check this box if you want traffic to revert to the working card after failure conditions stay corrected for the amount of time chosen from the Reversion time drop-down list. Uncheck if you do not want traffic to revert.
- Reversion time—If the Revertive check box is selected, choose the reversion time from the Reversion time drop-down list. The range is 0.5 to 12.0 minutes. The default is 5.0 minutes. This is the amount of time that will elapse before the traffic reverts to the working card. Traffic can revert when conditions causing the switch are cleared.
- **Step 4** Click **Apply**. Confirm that the changes appear; if not, repeat the task.



To convert electrical protection groups, see the "NTP-A91 Upgrade DS-1 and DS-3 Protect Cards from 1:1 Protection to 1:N Protection" procedure on page 11-4.

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

## **DLP-A152 Modify a 1:N Protection Group**

**Purpose** This task modifies a 1:N protection group for DS-1 and DS-3 cards.

**Tools/Equipment** None

**Prerequisite Procedures** DLP-A72 Create a 1:N Protection Group, page 17-80

DLP-A60 Log into CTC, page 17-66

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

- Step 1 Verify that the DS-1 and DS-3 cards are installed according to the 1:N specifications in the "DLP-A72 Create a 1:N Protection Group" task on page 17-80.
- **Step 2** In node view, click the **Provisioning > Protection** tabs.
- **Step 3** In the Protection Groups area, click the 1:N protection group you want to modify.
- **Step 4** In the Selected Group area, change any of the following, as needed:
  - Name—Type the changes to the protection group name. The name can have up to 32 alphanumeric characters.
  - Available Cards—If cards are available, they will appear here. Use the arrow buttons to move them into the Working Cards column.
  - Working Cards—Use the arrow buttons to move cards out of the Working Cards column.
  - Reversion Time—Choose a reversion time from the drop-down list. The range is 0.5 to 12.0 minutes. The default is 5.0 minutes. This is the amount of time that will elapse before the traffic reverts to the working card. Traffic can revert when conditions causing the switch are cleared.

See the "DLP-A72 Create a 1:N Protection Group" task on page 17-80 for field descriptions.

Step 5 Click Apply. The changes are applied. Confirm that the changes appear; if not repeat the task.



To convert electrical protection groups, see the "NTP-A91 Upgrade DS-1 and DS-3 Protect Cards from 1:1 Protection to 1:N Protection" procedure on page 11-4.

**Step 6** Return to your originating procedure (NTP).

## **DLP-A154 Modify a 1+1 Protection Group**

**Purpose** This task modifies a 1+1 protection group for any optical port (OC-3,

OC-12, OC-12 IR, OC-48, OC-48 AS, and OC-192).

**Tools/Equipment** None

**Prerequisite Procedures** DLP-A73 Create a 1+1 Protection Group, page 17-81

DLP-A60 Log into CTC, page 17-66

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

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

Step 2 In the Protection Groups area, click the 1+1 protection group you want to modify.

**Step 3** In the Selected Group area, you can modify the following, as needed:

- Name—Type the changes to the protection group name. The name can have up to 32 alphanumeric characters.
- Bidirectional switching—Check or uncheck.
- Revertive—Check this box if you want traffic to revert to the working card after failure conditions stay corrected for the amount of time chosen from the Reversion Time drop-down list. Uncheck if you do not want traffic to revert.
- Reversion time—If the Revertive check box is selected, choose the reversion time from the Reversion time drop-down list. The range is 0.5 to 12.0 minutes. The default is 5.0 minutes. This is the amount of time that will elapse before the traffic reverts to the working card. Traffic can revert when conditions causing the switch are cleared.

See the "DLP-A73 Create a 1+1 Protection Group" task on page 17-81 for field descriptions.

- **Step 4** Click **Apply**. Confirm that the changes appear; if not repeat the task.
- **Step 5** Return to your originating procedure (NTP).

## **DLP-A155 Delete a Protection Group**

**Purpose** This task deletes a 1:1, 1:N, 1+1, or Y-cable protection group.

**Tools/Equipment** None

Prerequisite Procedures DLP-A60 Log into CTC, page 17-66

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

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

**Step 2** In the Protection Groups area, click the protection group you want to delete.

Step 3 Click Delete.

Step 4 Click Yes in the Delete Protection Group dialog box. Confirm that the changes appear; if they do not, repeat Steps 1 through 3.

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

#### **DLP-A156 Delete a Section DCC Termination**

Purpose This task deletes a SONET Section data communications channel (SDCC)

termination on the ONS 15454.

**Tools/Equipment** None

Prerequisite Procedures DLP-A60 Log into CTC, page 17-66

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

**Step 1** Click the **Provisioning > Comm Channel > SDCC** tabs.

Step 2 Click the SDCC termination to be deleted and click **Delete**. The Delete SDCC Termination dialog box appears.

Step 3 Click Yes in the confirmation dialog box. Confirm that the changes appear; if not, repeat the task.

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

## **DLP-A157 Change the Node Timing Source**

**Purpose** This task changes the SONET timing source for the ONS 15454.

**Tools/Equipment** None

Prerequisite Procedures DLP-A60 Log into CTC, page 17-66

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



The following procedure might be service affecting and should be performed during a scheduled maintenance window.

**Step 1** In node view, click the **Provisioning > Timing** tabs.

**Step 2** In the General Timing section, change any of the following information:

· Timing Mode



Note

Because mixed timing can cause timing loops, Cisco does not recommend using the Mixed Timing option. Use this mode with care.

- SSM Message Set
- · Quality of RES
- Revertive
- · Revertive Time

See the "DLP-A69 Set Up External or Line Timing" task on page 17-75 for field descriptions.

Step 3 In the BITS Facilities section, you can change the following information:



Toto

The BITS Facilities section sets the parameters for your building integrated timing supply (BITS1 and BITS2) timing references. Many of these settings are determined by the timing source manufacturer. If equipment is timed through BITS Out, you can set timing parameters to meet the requirements of the equipment.

- · BITS In State
- · BITS Out State
- State
- Coding
- Framing
- · Sync Messaging
- · AIS Threshold
- LBO

**Step 4** In the Reference Lists area, you can change the following information:



Note

Reference lists define up to three timing references for the node and up to six BITS Out references. BITS Out references define the timing references used by equipment that can be attached to the node's BITS Out pins on the backplane. If you attach equipment to BITS Out pins, you normally attach it to a node with Line mode because equipment near the external timing reference can be directly wired to the reference.

- NE Reference
- BITS 1 Out
- · BITS 2 Out
- **Step 5** Click **Apply**. Confirm that the changes appear; of not, repeat the task.
- **Step 6** Return to your originating procedure (NTP).

## DLP-A158 Change User Password and Security Level on a Single Node

**Purpose** This task changes settings for an existing user at one node.

**Tools/Equipment** None

Prerequisite Procedures DLP-A60 Log into CTC, page 17-66

**Required/As Needed** As needed

Onsite/Remote Onsite or remote

Security Level Superuser

- Step 1 In node view, click the **Provisioning > Security > Users** tabs.
- **Step 2** Click the user whose settings you want to modify, then click **Change**.
- **Step 3** In the Change User dialog box, you can:
  - Change a user password
  - · Modify the user security level
  - Lock out the user

See the "NTP-A30 Create Users and Assign Security" procedure on page 4-4 for field descriptions.

Step 4 Click OK.



Note

User settings that you changed during this task will not appear until that user logs off and logs back in.

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

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## **DLP-A159 Delete a User from a Single Node**

**Purpose** This task deletes an existing user from a single node.

**Tools/Equipment** None

Prerequisite Procedures DLP-A60 Log into CTC, page 17-66

Required/As Needed As needed
Onsite/Remote Onsite or remote
Security Level Superuser



You cannot delete a user who is currently logged in. To log out a user, you can complete the "DLP-A315 Log Out a User on a Single Node" task on page 20-9, or you can choose the "Logout before delete" option in the Delete User dialog box.



CTC will allow you to delete other Superusers if one Superuser remains. For example, you can delete the CISCO15 user if you have created another Superuser. Use this option with caution.

- Step 1 In node view, click the **Provisioning > Security > Users** tabs.
- **Step 2** Choose the user you want to delete.
- Step 3 Click Delete.
- Step 4 In the Delete User dialog box, verify that the user name displayed is the one you want to delete.
- Step 5 Click **OK**. Confirm that the changes appear; if not, repeat the task.
- **Step 6** Return to your originating procedure (NTP).

## **DLP-A160 Change User Password and Security Level on Multiple Nodes**

**Purpose** This task changes settings for an existing user at multiple nodes.

**Tools/Equipment** None

Prerequisite Procedures DLP-A60 Log into CTC, page 17-66

Required/As Needed As needed
Onsite/Remote Onsite or remote
Security Level Superuser



You must add the same user name and password to each node the user will access.

- Step 1 From the View menu, choose Go to Network View. Verify that you can access all the nodes where you want to add users.
- Step 2 Click the **Provisioning > Security > Users** tabs. Highlight the user's name whose settings you want to change.

- Step 3 Click Change. The Change User dialog box appears.
- **Step 4** In the Change User dialog box, you can:
  - Change a user's password
  - Modify the user's security level
  - Lock out the user

See the "DLP-A75 Create a New User on Multiple Nodes" task on page 17-83 for field descriptions.

- Step 5 In the Select Applicable Nodes area, uncheck any nodes where you do not want to change the user's settings (all network nodes are selected by default).
- **Step 6** Click **OK**. A Change Results confirmation dialog box appears.
- Step 7 Click OK to acknowledge the changes. Confirm that the changes appear; if not, repeat the task.
- **Step 8** Return to your originating procedure (NTP).

## **DLP-A161 Delete a User from Multiple Nodes**

**Purpose** This task deletes an existing user from multiple nodes.

**Tools/Equipment** None

Prerequisite Procedures DLP-A60 Log into CTC, page 17-66

Required/As Needed As needed
Onsite/Remote Onsite or remote

Security Level Superuser



You cannot delete a user who is currently logged in. To log out a user, you can complete the "DLP-A316 Log Out a User on Multiple Nodes" task on page 20-9, or you can choose the "Logout before delete" option in the Delete User dialog box.



CTC will allow you to delete other Superusers if one Superuser remains. For example, you can delete the CISCO15 user if you have created another Superuser. Use this option with caution.

- Step 1 From the View menu, choose Go to Network View.
- Step 2 Click the **Provisioning > Security** tabs. Highlight the name of the user you want to delete.
- **Step 3** Click **Delete**. The Delete User dialog box appears.
- **Step 4** In the Select Applicable Nodes area, uncheck any nodes where you do not want to delete this user.
- **Step 5** Click **OK**. A User Deletion Results confirmation dialog box appears.
- Step 6 Click OK to acknowledge the changes. Confirm that the changes appear; if not, repeat the task.
- **Step 7** Return to your originating procedure (NTP).

## **DLP-A163 Delete SNMP Trap Destinations**

Purpose This task deletes Simple Network Management Protocol (SNMP) trap

destinations on an ONS 15454.

**Tools/Equipment** None

Prerequisite Procedures DLP-A60 Log into CTC, page 17-66

Required/As NeededAs neededOnsite/RemoteOnsite or remoteSecurity LevelProvisioning or higher

**Step 1** In node view, click the **Provisioning > SNMP** tabs.

Step 2 In the Trap Destinations area, click the trap you want to delete.

Step 3 Click Delete. A confirmation dialog box appears.

Step 4 Click Yes. Confirm that the changes appear; if not, repeat the task.

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

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

**Purpose** This task changes the line and threshold settings for the DS1-14 or

DS1N-14 (DS-1) cards.

**Tools/Equipment** None

Prerequisite Procedures DLP-A60 Log into CTC, page 17-66

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

- **Step 1** In the node view, double-click the DS1-14 or DS1N-14 card where you want to change the line or threshold settings.
- **Step 2** Click the **Provisioning** tab.
- Step 3 Depending on the setting you need to modify, click the Line, Line Thresholds, Elect Path Thresholds, or SONET Thresholds tab.



Note

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

- Step 4 Modify any of the settings found under these subtabs. For definitions of the Line settings, see Table 18-3. For definitions of the Line Threshold settings, see Table 18-4. For definitions of the Electrical Path Threshold settings, see Table 18-5. For definitions of the SONET Threshold settings, see Table 18-6.
- Step 5 Click Apply.

Repeat Steps 3 through 5 for each subtab that has parameters you want to provision.Table 18-3 describes the values on the Provisioning > Line tabs for the DS-1 cards.

Table 18-3 Line Options for DS1-14 and DS1N-14 Cards

Parameter	Description	Options	
Port #	(Display only.) Sets the port number.	1 to 14	
Port Name	Sets the port name.	User-defined, up to 32 alphanumeric/special characters. Blank by default.	
		See the "DLP-A314 Assign a Name to a Port" task on page 20-8.	
SF BER	Sets the signal fail bit error rate.	<ul><li>1E-3</li><li>1E-4</li><li>1E-5</li></ul>	
SD BER	Sets the signal degrade bit error rate.	• 1E-5 • 1E-6 • 1E-7 • 1E-8 • 1E-9	
Line Type	Defines the line framing type.	<ul><li>D4</li><li>ESF - Extended Super Frame</li><li>Unframed</li></ul>	
Line Coding	Defines the DS-1 transmission coding type.	<ul> <li>AMI - Alternate Mark Inversion (default)</li> <li>B8ZS - Bipolar 8 Zero Substitution</li> </ul>	
Line Length	Defines the distance (in feet) from the backplane connection to the next termination point.	<ul> <li>0 - 131</li> <li>132 - 262</li> <li>263 - 393</li> <li>394 - 524</li> <li>525 - 655</li> </ul>	
Admin State	Sets the port service state unless network conditions prevent the change.	<ul> <li>IS—Puts the port in-service. The port service state changes to IS-NR.</li> <li>IS,AINS—Puts the port in automatic in-service. The port service state changes to OOS-AU,AINS.</li> <li>OOS,DSBLD—Removes the port from service and disables it. The port service state changes to OOS-MA,DSBLD.</li> <li>OOS,MT—Removes the port from service for</li> </ul>	
		maintenance. The port service state changes to OOS-MA,MT.	

Table 18-3 Line Options for DS1-14 and DS1N-14 Cards (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.	<ul> <li>IS-NR—(In-Service and Normal) The port is fully operational and performing as provisioned.</li> <li>OOS-AU,AINS—(Out-Of-Service and Autonomous, Automatic In-Service) 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 OOS-AU,AINS state for the duration of the soak period. After the soak period ends, the port service state changes to IS-NR.</li> <li>OOS-MA,DSBLD—(Out-of-Service and Management, Disabled) The port is out-of-service and unable to carry traffic.</li> <li>OOS-MA,MT—(Out-of-Service and Management, Maintenance) The port is out-of-service for maintenance. Alarm reporting is suppressed, but traffic is carried and loopbacks are allowed.</li> </ul>
AINS Soak	Sets the automatic in-service soak period.	Duration of valid input signal, in hh.mm format, after which the card becomes in service (IS) automatically
		• 0 to 48 hours, in 15-minute increments

Table 18-4 describes the values on the Provisioning > Line Thresholds tabs for the DS-1 cards.

Table 18-4 Line Thresholds Options for DS1-14 and DS1N-14 Cards

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

Table 18-5 describes the values on the Provisioning > Elect Path Thresholds tabs for the DS-1 cards.

Table 18-5 Electrical Path Threshold Options for DS1-14 and DS1N-14 Cards

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

Table 18-6 describes the values on the Provisioning > SONET Thresholds tabs for the DS-1 cards.

Table 18-6 SONET Threshold Options for DS1-14 and DS1N-14 Cards

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

Table 18-6 SONET Threshold Options for DS1-14 and DS1N-14 Cards (continued)

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



Note The threshold value appears after the circuit is created.

**Step 7** Return to your originating procedure (NTP).

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

**Purpose** This task changes the line and threshold settings for the DS3-12 or

DS3N-12 (DS-3) cards.

Tools/Equipment None

Prerequisite Procedures DLP-A60 Log into CTC, page 17-66

Required/As Needed As needed
Onsite/Remote Onsite or remote

Security Level Provisioning or higher

- Step 1 Double-click the DS3-12 or DS3N-12 card where you want to change the line or threshold settings.
- Step 2 Click the **Provisioning** tab.

Step 3 Depending on the setting you need to modify, click the Line, Line Thresholds, Elect Path Thresholds, or SONET Thresholds tab.



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

- Step 4 Modify any of the settings found under these subtabs. For definitions of the Line settings, see Table 18-7. For definitions of the Line Threshold settings, see Table 18-8. For definitions of the Elect Path Threshold settings, see Table 18-9 on page 18-35. For definitions of the SONET Threshold settings, see Table 18-10 on page 18-35.
- Step 5 Click Apply.
- Step 6 Repeat Steps 3 through 5 for each subtab that has parameters you want to provision.

  Table 18-7 describes the values on the Provisioning > Line tabs for the DS-3 cards.

Table 18-7 Line Options for DS3-12 or DS3N-12 Cards

Parameter	Description	Options
Port #	Sets the port number.	1 to 12
Port Name	Sets the port name.	User-defined, up to 32 alphanumeric/special characters. Blank by default.
		See the "DLP-A314 Assign a Name to a Port" task on page 20-8.
SF BER	Sets the signal fail bit error rate.	• 1E-3
		• 1E-4
		• 1E-5
SD BER	Sets the signal degrade bit error rate.	• 1E-5
		• 1E-6
		• 1E-7
		• 1E-8
		• 1E-9
Line Length	Defines the distance (in feet) from	• 0 - 225 (default)
	backplane connection to the next termination point.	• 226 - 450
Admin State	Sets the port service state unless network conditions prevent the change.	• IS—Puts the port in-service. The port service state changes to IS-NR.
		• IS,AINS—Puts the port in automatic in-service. The port service state changes to OOS-AU,AINS.
		OOS,DSBLD—Removes the port from service and disables it. The port service state changes to OOS-MA,DSBLD.
		• OOS,MT—Removes the port from service for maintenance. The port service state changes to OOS-MA,MT.

Table 18-7 Line Options for DS3-12 or DS3N-12 Cards (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.	<ul> <li>IS-NR—(In-Service and Normal) The port is fully operational and performing as provisioned.</li> <li>OOS-AU,AINS—(Out-Of-Service and Autonomous, Automatic In-Service) 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</li> </ul>
		signal is detected, the port stays in OOS-AU,AINS state for the duration of the soak period. After the soak period ends, the port service state changes to IS-NR.
	OOS-MA,DSBLD—(Out-of-Service and Management, Disabled) The port is out-of-service and unable to carry traffic.	
		OOS-MA,MT—(Out-of-Service and Management, Maintenance) The port is out-of-service for maintenance. Alarm reporting is suppressed, but traffic is carried and loopbacks are allowed.
AINS Soak	Sets the automatic in-service soak period.	Duration of valid input signal, in hh.mm format, after which the card becomes in service (IS) automatically 0 to 48 hours, 15-minute increments.

Table 18-8 describes the values on the Provisioning > Line Thresholds tabs for the DS-3 cards.

Table 18-8 Line Threshold Options for DS3-12 or DS3N-12 Cards

Parameter	Description	Options
Port	Port number	1 to 12
CV	Coding violations	Numeric. Can be set for 15-minute or one-day intervals. Select the bullet and click <b>Show Thresholds</b> .
ES	Errored seconds	Numeric. Can be set for 15-minute or one-day intervals. Select the bullet and click <b>Show Thresholds</b> .

Table 18-8 Line Threshold Options for DS3-12 or DS3N-12 Cards (continued)

Parameter	Description	Options
SES	Severely errored seconds	Numeric. Can be set for 15-minute or one-day intervals. Select the bullet and click <b>Show Thresholds</b> .
LOSS	Loss of signal seconds; number of one-second intervals containing one or more LOS defects	Numeric. Can be set for 15-minute or one-day intervals. Select the bullet and click <b>Show Thresholds</b> .

Table 18-9 describes the values on the Provisioning > Elect Path Thresholds tabs for the DS-3 cards.

Table 18-9 Electrical Path Threshold Options for DS3-12 or DS3N-12 Cards

Parameter	Description	Options
Port	(Display only.) Port number	1 to 12
EB	Errored blocks	Numeric. Can be set for 15-minute or one-day intervals, near end or far end. Select the bullet and click <b>Show Thresholds</b> .
BBE	Background block errors	Numeric. Can be set for 15-minute or one-day intervals, near end or far end. Select the bullet and click <b>Show Thresholds</b> .
ES	Errored seconds	Numeric. Can be set for 15-minute or one-day intervals, near end or far end. Select the bullet and click <b>Show Thresholds</b> .
SES	Severely errored seconds	Numeric. Can be set for 15-minute or one-day intervals, near end or far end. Select the bullet and click <b>Show Thresholds</b> .
UAS	Unavailable seconds	Numeric. Can be set for 15-minute or one-day intervals, near end or far end. Select the bullet and click <b>Show Thresholds</b> .
AISS	Alarm indication signal	Numeric. Can be set for 15-minute or one-day intervals. Select the bullet and click <b>Show Thresholds</b> (DS3 Pbit: Near End only; DS3 CPbit: Near and Far End).

Table 18-10 describes the values on the Provisioning > SONET Thresholds tabs for the DS-3 cards.

Table 18-10 SONET Threshold Options for DS3-12 or DS3N-12 Cards

Parameter	Description	Options
Port	(Display only.) DS-3 ports partitioned for	Line 1, STS 1, Line 2, STS 1
	STS	Line 3, STS 1, Line 4 STS 1
CV	Coding violations	Numeric. Can be set for 15-minute or one-day intervals. Select the bullet and click <b>Show Thresholds</b> (Near and Far End, STS termination only).

Table 18-10 SONET Threshold Options for DS3-12 or DS3N-12 Cards (continued)

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



Note

The threshold value appears after the circuit is created.

**Step 7** Return to your originating procedure (NTP).

# DLP-A167 Change Line and Threshold Settings for the DS3-12E or DS3N-12E Cards

**Purpose** This task changes the line and threshold settings for the DS3E-12 or

DS3N-12E (DS3E) cards.

Tools/Equipment None

Prerequisite Procedures DLP-A60 Log into CTC, page 17-66

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



If the DS3E is installed in an ONS 15454 slot that is provisioned for a DS-3 card, the DS3E enhanced performance monitoring parameters are unavailable. If this occurs, remove the DS3E from the ONS 15454, delete the DS-3 card in CTC using the "DLP-A191 Delete a Card" task on page 18-65, and provision the slot for the DS3E using the "DLP-A330 Preprovision a Slot" task on page 20-20.

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

Step 2 Click the **Provisioning** tab.

Step 3 Depending on the setting you need to modify, click the Line, Line Thresholds, Elect Path Thresholds, or SONET Thresholds tab.



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

- Step 4 Modify any of the settings found under these subtabs. For definitions of the Line settings, see Table 18-11. For definitions of the Line Threshold settings, see Table 18-12. For definitions of the Electrical Path Threshold settings, see Table 18-13. For definitions of the SONET Threshold settings, see Table 18-14.
- Step 5 Click Apply.
- Step 6 Repeat Steps 3 through 5 for each subtab that has parameters you want to provision.

Table 18-11 describes the values on the Provisioning > Line tabs for the DS3E cards.

Table 18-11 Line Options for the DS3-12E and DS3N-12E Cards

Parameter	Description	Options
Port #	(Display only.) Sets the port number.	1 to 12
Port Name	Sets the port name.	User-defined, up to 32 alphanumeric/ special characters. Blank by default.
		See the "DLP-A314 Assign a Name to a Port" task on page 20-8.
SF BER	Sets the signal fail bit error rate.	• 1E-3
		• 1E-4
		• 1E-5
SD BER	Sets the signal degrade bit error rate.	• 1E-5
		• 1E-6
		• 1E-7
		• 1E-8
		• 1E-9
Line Type	Defines the line framing type.	• M13
		• C Bit
		Auto Provisioned
Detected	Displays the detected line type	• M13
Line Type	(read-only).	• C Bit
		• Unframed
		• Unknown
Line Coding	Defines the DS3E transmission coding type.	B3ZS
Line	Defines the distance (in feet) from	• 0 - 225 (default)
Length	backplane connection to the next termination point.	• 226 - 450

Table 18-11 Line Options for the DS3-12E and DS3N-12E Cards (continued)

Parameter	Description	Options
Admin State	Sets the port service state unless network conditions prevent the change.	• IS—Puts the port in-service. The port service state changes to IS-NR.
		• IS,AINS—Puts the port in automatic in-service. The port service state changes to OOS-AU,AINS.
		OOS,DSBLD—Removes the port from service and disables it. The port service state changes to OOS-MA,DSBLD.
		OOS,MT—Removes the port from service for maintenance. The port service state changes to OOS-MA,MT.
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.	IS-NR—(In-Service and Normal) The port is fully operational and performing as provisioned.
		OOS-AU,AINS—(Out-Of-Service and Autonomous, Automatic In-Service)     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 OOS-AU,AINS state for the duration of the soak period. After the soak period ends, the port service state changes to IS-NR.
		OOS-MA,DSBLD—(Out-of-Service and Management, Disabled) The port is out-of-service and unable to carry traffic.
		OOS-MA,MT—(Out-of-Service and Management, Maintenance) The port is out-of-service for maintenance. Alarm reporting is suppressed, but traffic is carried and loopbacks are allowed.
AINS Soak	Sets the automatic in-service soak period.	Duration of valid input signal, in hh.mm format, after which the card becomes in service (IS) automatically
		• 0 to 48 hours, 15-minute increments

Table 18-12 describes the values on the Provisioning > Line Thresholds tabs for the DS3E cards.

Table 18-12 Line Threshold Options for the DS3-12E and DS3N-12E Cards

Parameter	Description	Options
Port	(Display only.) Port number	1 to 12
CV	Coding violations	Numeric. Can be set for 15-minute or one-day intervals. Select the bullet and click <b>Show Thresholds</b> .
ES	Errored seconds	Numeric. Can be set for 15-minute or one-day intervals. Select the bullet and click <b>Show Thresholds</b> .
SES	Severely errored seconds	Numeric. Can be set for 15-minute or one-day intervals. Select the bullet and click <b>Show Thresholds</b> .
LOSS	Loss of signal seconds; number of one-second intervals containing one or more LOS defects	Numeric. Can be set for 15-minute or one-day intervals. Select the bullet and click <b>Show Thresholds</b> .

Table 18-13 describes the values on the Provisioning > Elect Path Thresholds tabs for the DS3E cards.

Table 18-13 Electrical Path Options for the DS3-12E and DS3N-12E Cards

Parameter	Description	Options
Port	(Display only.) Port number	1 to 12
CV	Coding violations	Numeric. Can be set for 15-minute or one-day intervals. Select the bullet and click <b>Show Thresholds</b> (DS3 Pbit: Near End only; DS3 CPbit: Near and Far End).
ES	Errored seconds	Numeric. Can be set for 15-minute or one-day intervals. Select the bullet and click <b>Show Thresholds</b> (DS3 Pbit: Near End only; DS3 CPbit: Near and Far End).
SES	Severely errored seconds	Numeric. Can be set for 15-minute or one-day intervals. Select the bullet and click <b>Show Thresholds</b> (DS3 Pbit: Near End only; DS3 CPbit: Near and Far End).
SAS	Severely errored frame/alarm indication signal	Numeric. Can be set for 15-minute or one-day intervals. Select the bullet and click <b>Show Thresholds</b> (DS3 Pbit: Near End only; DS3 CPbit: Near and Far End).

Table 18-13 Electrical Path Options for the DS3-12E and DS3N-12E Cards (continued)

Parameter	Description	Options
AIS	Alarm indication signal	Numeric. Can be set for 15-minute or one-day intervals. Select the bullet and click <b>Show Thresholds</b> (DS3 Pbit: Near End only; DS3 CPbit: Near and Far End).
UAS	Unavailable seconds	Numeric. Can be set for 15-minute or one-day intervals. Select the bullet and click  Show Thresholds (DS3 Pbit: Near End only; DS3 CPbit: Near and Far End).

Table 18-14 describes the values on the Provisioning > SONET Thresholds tabs for the DS3E cards.

Table 18-14 SONET Threshold Options for DS3-12E and DS3N-12E Cards

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



The threshold value appears after the circuit is created.

**Step 7** Return to your originating procedure (NTP).

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

**Purpose** This task changes the line and threshold settings for the DS3XM-6 card.

**Tools/Equipment** None

Prerequisite Procedures DLP-A60 Log into CTC, page 17-66

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



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

- Step 1 In node view, double-click the DS3XM-6 card where you want to change the line or threshold settings.
- Step 2 Click the **Provisioning** tab.
- Step 3 Depending on the setting you need to modify, click the Line, Line Thresholds, Elect Path Thresholds, or SONET Thresholds tab.



—— Note

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

- Step 4 Modify any of the settings found under these subtabs. For definitions of the Line settings, see Table 18-15. For definitions of the Line Threshold settings, see Table 18-16. For definitions of the Electrical Path Threshold settings, see Table 18-17. For definitions of the SONET Threshold settings, see Table 18-18.
- Step 5 Click Apply.
- **Step 6** Repeat Steps 3 through 5 for each subtab that has parameters you want to provision.

Table 18-15 describes the values on the Provisioning > Line tabs for the DS3XM-6 cards.

Table 18-15 Line Options for the DS3XM-6 Parameters

Parameter	Description	Options
Port #	(Display only.) Sets the port number.	1 to 6
Port Name	Sets the port name.	User-defined, up to 32 alphanumeric/ special characters. Blank by default.
		See the "DLP-A314 Assign a Name to a Port" task on page 20-8.
SF BER	Sets the signal fail bit error rate.	• 1E-3
		• 1E-4
		• 1E-5

Table 18-15 Line Options for the DS3XM-6 Parameters (continued)

Parameter	Description	Options
SD BER	Sets the signal degrade bit error	• 1E-5
	rate.	• 1E-6
		• 1E-7
		• 1E-8
		• 1E-9
Line Type	Defines the line framing type.	M13 - default
		• C BIT
Line Coding	Defines the DS-1 transmission coding type that is used.	B3ZS
Line Length	Defines the distance (in feet)	• 0 - 225 (default)
	from backplane connection to the next termination point.	• 226 - 450
Admin State	Sets the port service state unless network conditions prevent the	• IS—Puts the port in-service. The port service state changes to IS-NR.
	change.	• IS,AINS—Puts the port in automatic in-service. The port service state changes to OOS-AU,AINS.
		OOS,DSBLD—Removes the port from service and disables it. The port service state changes to OOS-MA,DSBLD.
		OOS,MT—Removes the port from service for maintenance. The port service state changes to OOS-MA,MT.

Table 18-15 Line Options for the DS3XM-6 Parameters (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.	<ul> <li>IS-NR—(In-Service and Normal) The port is fully operational and performing as provisioned.</li> <li>OOS-AU,AINS—(Out-Of-Service and Autonomous, Automatic In-Service) 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 OOS-AU,AINS state for the duration of the soak period. After the soak period ends, the port service state changes to IS-NR.</li> <li>OOS-MA,DSBLD—(Out-of-Service and Management, Disabled) The port is out-of-service and unable to carry traffic.</li> <li>OOS-MA,MT—(Out-of-Service and Management, Maintenance) The port is out-of-service for maintenance. Alarm reporting is suppressed, but traffic is carried and loopbacks are allowed.</li> </ul>
AINS Soak	Sets the automatic in-service soak period.	<ul> <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>

Table 18-16 lists the line threshold options for DS3XM-6 cards.

Table 18-16 Line Threshold Options for the DS3XM-6 Card

Parameter	Description	Options
Port	(Display only.) Port number	1 to 6
CV	Coding violations	Numeric. Can be set for 15-minute or one-day intervals. Select the bullet and click <b>Show Thresholds</b> .
ES	Errored seconds	Numeric. Can be set for 15-minute or one-day intervals. Select the bullet and click <b>Show Thresholds</b> .
SES	Severely errored seconds	Numeric. Can be set for 15-minute or one-day intervals. Select the bullet and click <b>Show Thresholds</b> .
LOSS	Loss of signal seconds	Numeric. Can be set for 15-minute or one-day intervals. Select the bullet and click <b>Show Thresholds</b> .

Table 18-17 describes the values on the Provisioning > Elect Path Thresholds tabs for the DS3XM-6 cards.

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Table 18-17 Electrical Path Threshold Options for the DS3XM-6 Card

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

Table 18-18 describes the values on the Provisioning > SONET Thresholds tabs for the DS3XM-6 cards.

Table 18-18 SONET Threshold Options for the DS3XM-6 Card

Parameter	Description	Options
CV	Coding violations	Numeric. Can be set for 15-minute or one-day intervals. Select the bullet and click <b>Show Thresholds</b> (STS and VT Term).
ES	Errored seconds	Numeric. Can be set for 15-minute or one-day intervals. Select the bullet and click <b>Show Thresholds</b> (STS and VT Term).

Table 18-18 SONET Threshold Options for the DS3XM-6 Card (continued)

Parameter	Description	Options
FC	Failure count	Numeric. Can be set for 15-minute or one-day intervals. Select the bullet and click <b>Show Thresholds</b> (STS and VT Term).
SES	Severely errored seconds	Numeric. Can be set for 15-minute or one-day intervals. Select the bullet and click <b>Show Thresholds</b> (STS and VT Term).
UAS	Unavailable seconds	Numeric. Can be set for 15-minute or one-day intervals. Select the bullet and click <b>Show Thresholds</b> (STS and VT Term).



Note

The threshold value appears after the circuit is created.

**Step 7** Return to your originating procedure (NTP).

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

**Purpose** This task changes the line and threshold settings for the EC1-12 (EC-1)

card.

**Tools/Equipment** None

Prerequisite Procedures DLP-A60 Log into CTC, page 17-66

Required/As Needed As needed

Onsite/Remote Onsite or remote
Security Level Provisioning or higher

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

Step 2 Click the **Provisioning** tab.

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



Note

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



Note

The STS subtab is used to provision IPPM. To provision IPPM, circuits must be provisioned on the EC1-12 card. For circuit creation procedures, go to Chapter 6, "Create Circuits and VT Tunnels."

Step 4 Modify any of the settings found under these subtabs. For definitions of the Line settings, see Table 18-19. For definitions of the SONET Threshold settings, see Table 18-20. For information on modifying SONET STS settings, see the "DLP-A121 Enable/Disable Pointer Justification Count Performance Monitoring" task on page 18-7.

#### Step 5 Click Apply.

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

Table 18-19 describes the values on the Line tab for the EC1-12 card.

Table 18-19 Line Options for the EC1-12 Card

Parameter	Description	Options
Port #	(Display only.) Displays the EC-1 card port number.	1 to 12
Port Name	Sets a name for the port (optional).	User-defined, up to 32 alphanumeric/ special characters. Blank by default.
		See the "DLP-A314 Assign a Name to a Port" task on page 20-8.
SF BER	Sets the signal fail bit error rate.	• 1E-3
		• 1E-4
		• 1E-5
SD BER	Sets the signal degrade bit error	• 1E-5
	rate.	• 1E-6
		• 1E-7
		• 1E-8
		• 1E-9
PJStsMon#	Sets the STS that will be used for	• 0 (default)
	pointer justification; if set to zero, no STS is used.	• 1
Line Buildout	Defines the distance (in feet) from	• 0 - 225 (default)
	backplane to next termination point.	• 226 - 450
Rx	For early EC1-12 card versions,	• On (checked, default)
Equalization	equalization can be turned off if the line length is short or the environment is extremely cold; Rx Equalization should normally be	Off (unchecked)
	set to On.	
Admin State	Sets the port service state unless network conditions prevent the	• IS—Puts the port in-service. The port service state changes to IS-NR.
	change.	• IS,AINS—Puts the port in automatic in-service. The port service state changes to OOS-AU,AINS.
		OOS,DSBLD—Removes the port from service and disables it. The port service state changes to OOS-MA,DSBLD.
		OOS,MT—Removes the port from service for maintenance. The port service state changes to OOS-MA,MT.

Table 18-19 Line Options for the EC1-12 Card (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.	<ul> <li>IS-NR—(In-Service and Normal) The port is fully operational and performing as provisioned.</li> <li>OOS-AU,AINS—(Out-Of-Service and Autonomous, Automatic In-Service) 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 OOS-AU,AINS state for the duration of the soak period. After the soak period ends, the port service state changes to IS-NR.</li> <li>OOS-MA,DSBLD—(Out-of-Service and Management, Disabled) The port is out-of-service and unable to carry traffic.</li> <li>OOS-MA,MT—(Out-of-Service and Management, Maintenance) The port is out-of-service for maintenance. Alarm reporting is suppressed, but traffic is carried and loopbacks are allowed.</li> </ul>
AINS Soak	Sets the automatic in-service soak period.	Duration of valid input signal, in hh.mm format, after which the card becomes in service (IS) automatically
		• 0 to 48 hours, 15-minute increments

Table 18-20 lists the SONET Threshold options for EC1-12 cards.

Table 18-20 SONET Threshold Options for the EC1-12 Card

SONET Layer	Parameter	Description	Options
All	Port #	(Display only.) EC-1 card port #	1 to 12
Line (L)	CV	Coding violations	Numeric. Can be set for 15-minute or one-day intervals. Select the bullet and click <b>Refresh</b> .
	ES	Errored seconds	Numeric. Can be set for 15-minute or one-day intervals. Select the bullet and click <b>Refresh</b> .
	SES	Severely errored seconds	Numeric. Can be set for 15-minute or one-day intervals. Select the bullet and click <b>Refresh</b> .

Table 18-20 SONET Threshold Options for the EC1-12 Card (continued)

SONET Layer	Parameter	Description	Options
Line (L)	FC	Failure count	Numeric. Can be set for 15-minute or one-day intervals. Select the bullet and click <b>Refresh</b> .
	UAS	Unavailable seconds	Numeric. Can be set for 15-minute or one-day intervals. Select the bullet and click <b>Refresh</b> .
Section (S)	CV	Coding violations	Numeric. Can be set for 15-minute or one-day intervals. Select the bullet and click <b>Refresh</b> (Near End only).
	ES	Errored seconds	Numeric. Can be set for 15-minute or one-day intervals. Select the bullet and click <b>Refresh</b> .
	SES	Severely errored seconds	Numeric. Can be set for 15-minute or one-day intervals. Select the bullet and click <b>Refresh</b> .
	SEFS	Severely errored framing seconds	Numeric. Can be set for 15-minute or one-day intervals. Select the bullet and click <b>Refresh</b> .
Path (P)	CV	Coding violations	Numeric. Can be set for 15-minute or one-day intervals. Select the bullet and click <b>Refresh</b> (Near and Far End).
	ES	Errored seconds	Numeric. Can be set for 15-minute or one-day intervals. Select the bullet and click <b>Refresh</b> .
	FC	Failure count	Numeric. Can be set for 15-minute or one-day intervals. Select the bullet and click <b>Refresh</b> .
	SES	Severely errored seconds	Numeric. Can be set for 15-minute or one-day intervals. Select the bullet and click <b>Refresh</b> .
	UAS	Unavailable seconds	Numeric. Can be set for 15-minute or one-day intervals. Select the bullet and click <b>Refresh</b> .

**Step 7** Return to your originating procedure (NTP).

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

**Purpose** This task changes the line transmission settings for OC-N cards.

**Tools/Equipment** None

Prerequisite Procedures DLP-A60 Log into CTC, page 17-66

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

Step 1 In node view, double-click the OC-N card where you want to change the line settings.

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

Step 3 Modify any of the settings described in Table 18-21.

Table 18-21 OC-N Card Line Settings

Parameter	Description	Options	
Port #	(Display only.) Displays the port	• 1 (OC-12, OC-48, OC-192)	
	number.	• 1-4 (OC-3, OC12-4)	
Port Name	Provides the ability to assign the specified port a name.	User-defined. Name can be up to 32 alphanumeric/special characters. Blank by default.	
		See the "DLP-A314 Assign a Name to a Port" task on page 20-8.	
SF BER	Sets the signal fail bit error rate.	• 1E-3	
		• 1E-4	
		• 1E-5	
SD BER	Sets the signal degrade bit error	• 1E-5	
	rate	• 1E-6	
		• 1E-7	
		• 1E-8	
		• 1E-9	
Provides	(Display only.) If checked, the	• Yes	
Synch	card is provisioned as a network element timing reference.	• No	
Enable	Enables synchronization status	• Yes	
Synch Messages	messages (S1 byte), which allow the node to choose the best timing source.	• No	
Send Do	When checked, sends a DUS (do	• Yes	
Not Use	not use) message on the S1 byte.	• No	
Send <ff></ff>	When checked, sends a special	• Yes	
DoNotUse	DUS (0xff) message on the S1 byte.	• No	

Table 18-21 OC-N Card Line Settings (continued)

Parameter	Description	Options
Admin SSM	Allows you to override the synchronization traceability unknown (STU) value (default	PRS: Primary Reference Source (Stratum 1)
		• ST2: Stratum 2
	setting).	TNC: Transit node clock
		• ST3E: Stratum 3E
		• ST3: Stratum 3
		SMC: SONET minimum clock
		ST4: Stratum 4
PJSTSMon#		• 0 - 3 (OC-3, per port)
	pointer justification. If set to 0, no STS is monitored. Only one	• 0 - 12 (OC-12)
	STS can be monitored on each	• 0 - 48 (OC-48)
	OC-N port.	• 0 - 192 (OC-192)
Admin State	Sets the port service state unless network conditions prevent the	• IS—Puts the port in-service. The port service state changes to IS-NR.
	change.	• IS,AINS—Puts the port in automatic in-service. The port service state changes to OOS-AU,AINS.
		OOS,DSBLD—Removes the port from service and disables it. The port service state changes to OOS-MA,DSBLD.
		OOS,MT—Removes the port from service for maintenance. The port service state changes to OOS-MA,MT.
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.	IS-NR—(In-Service and Normal) The port is fully operational and performing as provisioned.
		OOS-AU,AINS—(Out-Of-Service and Autonomous, Automatic In-Service) 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 OOS-AU,AINS state for the duration of the soak period. After the soak period ends, the port service state changes to IS-NR.
		OOS-MA,DSBLD—(Out-of-Service and Management, Disabled) The port is out-of-service and unable to carry traffic.
		OOS-MA,MT—(Out-of-Service and Management, Maintenance) The port is out-of-service for maintenance. Alarm reporting is suppressed, but traffic is carried and loopbacks are allowed.

Table 18-21 OC-N Card Line Settings (continued)

Parameter	Description	Options
AINS Soak	Sets the automatic in-service soak period.	<ul> <li>Duration of valid input signal, in hh.mm format, after which the card becomes IS automatically</li> <li>0 to 48 hours, 15-minute increments</li> </ul>
Туре	Defines the port as SONET or SDH. The Enable Sync Msg field and the Send Do Not Use field must be disabled before the port can be set to SDH.	• Sonet • SDH
ALS Mode	Sets the automatic laser shutdown function.	<ul> <li>Disabled</li> <li>Auto Restart</li> <li>Manual Restart</li> <li>Manual Restart for Test</li> </ul>

Step 4 Click Apply.

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

# **DLP-A171 Change Threshold Settings for OC-N Cards**

**Purpose** This task changes threshold settings for OC-N cards.

Tools/Equipment None

Prerequisite Procedures DLP-A60 Log into CTC, page 17-66

Required/As NeededAs neededOnsite/RemoteOnsite or remoteSecurity LevelProvisioning or higher

- **Step 1** In node view, double-click the OC-N card where you want to change the threshold settings.
- Step 2 Click the **Provisioning > SONET Thresholds** tabs.
- Step 3 Modify any of the settings found in Table 18-22.

Table 18-22 OC-N Threshold Options

Parameter	Description	Options
Port	Port number	• 1 (OC-12, OC-48, OC-192)
		• 1-4 (OC-3, OC12-4)
CV	Coding violations	Numeric. Can be set for 15-minute or one-day intervals for Line, Section, or Path (Near and Far End). Select the bullet and click <b>Refresh</b> .

Table 18-22 OC-N Threshold Options (continued)

Parameter	Description	Options
ES	Errored seconds	Numeric. Can be set for 15-minute or one-day intervals for Line, Section, or Path (Near and Far End). Select the bullet and click <b>Refresh</b> .
SES	Severely errored seconds	Numeric. Can be set for 15-minute or one-day intervals for Line, Section, or Path (Near and Far End). Select the bullet and click <b>Refresh</b> .
SEFS	Severely errored framing seconds	Numeric. Can be set for 15-minute or one-day intervals for Line, Section, or Path (Near and Far End). Select the bullet and click <b>Refresh</b> .
FC	Failure count	Numeric. Can be set for 15-minute or one-day intervals for Line or Path (Near and Far End). Select the bullet and click <b>Refresh</b> .
UAS	Unavailable seconds	Numeric. Can be set for 15-minute or one-day intervals for Line or Path (Near and Far End). Select the bullet and click <b>Refresh</b> .
PSC	Protection Switching Count (Line)	Numeric. Can be set for 15-minute or one-day intervals for Line (Near and Far End). Select the bullet and click <b>Refresh</b> .
PSD	Protection Switch Duration (Line)	Numeric. Can be set for 15-minute or one-day intervals for Line (Near and Far End). Select the bullet and click <b>Refresh</b> .
PSC-W	Protection Switching Count - Working line BLSR is not supported on the OC-3 card; therefore, the PSC-W, PSC-S, and PSC-R PM parameters do not increment.	Numeric. Can be set for 15-minute or one-day intervals for Line (Near and Far End). Select the bullet and click <b>Refresh</b> .
PSD-W	Protection Switching Duration - Working line  BLSR is not supported on the OC-3 card; therefore, the PSD-W, PSD-S, and PSD-R PM parameters do not increment.	Numeric. Can be set for 15-minute or one-day intervals for Line (Near and Far End). Select the bullet and click <b>Refresh</b> .
PSC-S	Protection Switching Duration - Span BLSR is not supported on the OC-3 card; therefore, the PSC-W, PSC-S, and PSC-R PM parameters do not increment.	Numeric. Can be set for 15-minute or one-day intervals for Line (Near and Far End). Select the bullet and click <b>Refresh</b> .
PSD-S	Protection Switching Duration - Span BLSR is not supported on the OC-3 card; therefore, the PSD-W, PSD-S, and PSD-R PM parameters do not increment.	Numeric. Can be set for 15-minute or one-day intervals for Line (Near and Far End). Select the bullet and click <b>Refresh</b> .

Table 18-22 OC-N Threshold Options (continued)

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

#### Step 4 Click Apply.

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

## **DLP-A172 Change an Optical Port to SDH**

**Purpose** This task provisions a port on an OC-N card for SDH.

Tools/Equipment None

Prerequisite Procedures DLP-A60 Log into CTC, page 17-66

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

- **Step 1** In node view, double-click the OC-N card where you want to provision a port for SDH.
- **Step 2** Click the **Provisioning > Line** tabs.
- **Step 3** In the Type field for the desired port, choose **SDH**.



Note

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

- Step 4 Click Apply.
- Step 5 If the card is a multiport OC-N card, for example a four-port OC-3, eight-port OC-3, or four-port OC-12, you can repeat Steps 3 and 4 for any other ports on that card.
- **Step 6** Return to your originating procedure (NTP).

### **DLP-A173 Change External Alarms Using the AIC Card**

**Purpose** This task changes external alarm settings on the Alarm Interface Controller

(AIC) card.

**Tools/Equipment** None

Prerequisite Procedures DLP-A60 Log into CTC, page 17-66

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

- Step 1 Confirm that external-device relays are wired to the ENVIR ALARMS IN backplane pins. See the "DLP-A19 Install Alarm Wires on the Backplane" task on page 17-22 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-A32 Provision External Alarms and Controls on the Alarm Interface Controller" procedure on page 7-9.
  - 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-A174 Change External Controls Using the AIC Card**

**Purpose** This task changes external control settings on the AIC card.

Tools/Equipment None

Prerequisite Procedures DLP-A60 Log into CTC, page 17-66

Required/As Needed As needed

Onsite/Remote Onsite or remote
Security Level Provisioning or higher

- Step 1 Verify the external control relays to the ENVIR ALARMS OUT backplane pins. See the "DLP-A19 Install Alarm Wires on the Backplane" task on page 17-22 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-A32 Provision External Alarms and Controls on the Alarm Interface Controller" procedure on page 7-9.
  - · 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-A175 Change Orderwire Settings Using the AIC Card**

**Purpose** This task changes orderwire settings on the AIC card.

**Tools/Equipment** None

Prerequisite Procedures DLP-A60 Log into CTC, page 17-66

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



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.



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 Tx and Rx dBm by moving the slider to the right or left for the headset type (four-wire or two-wire) that you will use. In general, you should not need to adjust the dBm.
- Step 4 Click Apply.
- **Step 5** Return to your originating procedure (NTP).

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

**Purpose** This task converts DS1-14 cards in a 1:1 protection scheme to 1:N

protection. A 1:N protection group can protect a maximum of five working

cards.

**Tools/Equipment** CTC Software Release 2.0 or later

At least one DS1M-14 card

Prerequisite Procedures DLP-A60 Log into CTC, page 17-66

Required/As Needed As needed
Onsite/Remote Onsite

**Security Level** Provisioning or higher



This procedure assumes DS1-14 cards are installed in Slots 1 through 6 and/or Slots 12 through 17. The DS1-14 cards in Slots 3 and 15, which are the protection slots, will be replaced with DS1N-14 cards.

- **Step 1** In node view, click the **Maintenance > Protection** tabs.
- Step 2 Click the protection group that contains Slot 3 or Slot 15 (where you will install the DS1N-14 card).
- Step 3 Make sure the slot you are upgrading is not carrying working traffic. In the Selected Group list, the protect slot must say Protect/Standby (shown Figure 18-5 on page 18-56) and not Protect/Active. If the protect slot status is Protect/Active, switch traffic to the working card:
  - a. Under Selected Group, click the protect card.
  - **b.** Next to Switch Commands, click **Switch**.

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

- **Step 4** Repeat Steps 2 through 3 for each protection group that you need to convert.
- Step 5 Click the **Alarms** tab to verify that no standing alarms exist for any of the DS1-14 cards that you are converting. If alarms exist and you have difficulty clearing them, contact your next level of support.
- **Step 6** Click the **Provisioning > Protection** tabs.
- Step 7 Click the 1:1 protection group that contains the cards that you will move into the new protection group.
- Step 8 Click Delete.
- Step 9 When the confirmation dialog box appears, click Yes.



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

- **Step 10** If needed, repeat Steps 7 to 9 for other DS-1 1:1 protection groups that you want to include in a 1:N group.
- **Step 11** Physically remove the DS1-14 card from Slot 3 or Slot 15. This raises an improper removal alarm.
- Step 12 In node view, right-click the slot that held the removed card and select **Delete** from the shortcut menu. Wait for the card to disappear from node view.

- **Step 13** Physically insert a DS1N-14 card into the same slot.
- **Step 14** Verify that the card boots up properly.
- **Step 15** Click the **Inventory** tab and verify that the new card appears as a DS1N-14.
- **Step 16** Click the **Provisioning > Protection** tabs.
- Step 17 Click Create.
- **Step 18** Type a name for the protection group in the Name field (optional).
- Step 19 From the Type drop-down list, choose 1:N (card).
- **Step 20** From the Protect Card drop-down list, choose the DS1N-14 card. Verify that the correct DS1N-14 card appears in the Protect Card field.
- Step 21 In the Available Cards list, highlight the cards that you want in the protection group. Click the arrow (>>) button to move the cards to the Working Cards list.
- Step 22 If necessary, select a new reversion time in the Reversion time drop-down list.



Note

1:N protection groups are always revertive.

- Step 23 Click OK. The protection group appears in the Protection Groups list on the Protection subtab.
- **Step 24** Return to your originating procedure (NTP).

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

**Purpose** This task converts DS3-12 cards in 1:1 protection to 1:N protection. A 1:N

protection group can protect a maximum of five working cards.

**Tools/Equipment** CTC Software R2.0 or later

At least on DS3N-12 card and a protection group with DS3-12 cards.

Prerequisite Procedures DLP-A60 Log into CTC, page 17-66

**Required/As Needed** As needed **Onsite/Remote** Onsite

**Security Level** Provisioning or higher



This procedure assumes that DS3-12 cards are installed in Slots 1 to 6 and/or Slots 12 to 17. The DS3-12 cards in Slots 3 or 15, which are the protection slots, will be replaced with DS3N-12 cards.

- **Step 1** In node view, click the **Maintenance > Protection** tabs.
- Step 2 Click the protection group containing Slot 3 or Slot 15 (where you will install the DS3N-12 card).
- Step 3 Make sure the slot you are upgrading is not carrying working traffic. In the Selected Group list, the protect slot must say Protect/Standby as shown Figure 18-5 on page 18-56, and not Protect/Active. If the protect slot status is Protect/Active, switch traffic to the working card:
  - **a.** Under Selected Group, click the protect card.

b. Next to Switch Commands, click Switch.

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

- **Step 4** Repeat Steps 2 and 3 for each protection group that you need to convert.
- Step 5 Click the Alarms tab to verify that no standing alarms exist for any of the DS3-12 cards you are converting. If alarms exist and you have difficulty clearing them, contact your next level of support.
- **Step 6** Click the **Provisioning > Protection** tabs.
- Step 7 Click the 1:1 protection group that contains the cards that you will move into the new protection group.
- Step 8 Click Delete.
- **Step 9** When the confirmation dialog box appears, click **Yes**.



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

- **Step 10** If you are deleting more than one DS-3 1:1 protection group, repeat Steps 7 through 9 for each group that you want to include in a 1:N group.
- **Step 11** Physically remove the protect DS3-12 card from Slot 3 or Slot 15. This raises an improper removal alarm.
- Step 12 In node view, right-click the slot that held the removed card and choose **Delete** from the shortcut menu. Wait for the card to disappear from the node view.
- **Step 13** Physically insert a DS3N-12 card into the same slot.
- **Step 14** Verify that the card boots up properly.
- Step 15 Click the **Inventory** tab and verify that the new card appears as a DS3N-12 card.
- **Step 16** Click the **Provisioning > Protection** tabs.
- Step 17 Click Create.
- **Step 18** Type a name for the protection group in the Name field (optional).
- Step 19 Click Type and choose 1:N (card) from the drop-down list.
- **Step 20** Verify that the DS3N-12 card appears in the Protect Card field.
- Step 21 In the Available Cards list, highlight the cards that you want in the protection group. Click the arrow (>>) button to move the cards to the Working Cards list.
- Step 22 Click OK.

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

**Step 23** Return to your originating procedure (NTP).

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

Purpose This task converts DS3-12E cards in 1:1 protection to 1:N protection. A

1:N protection group can protect a maximum of five working cards.

**Tools/Equipment** At least one DS3N-12E card and a protection group with DS3N-12E cards.

Prerequisite Procedures DLP-A60 Log into CTC, page 17-66

**Required/As Needed** As needed **Onsite/Remote** Onsite

**Security Level** Provisioning or higher



This task assumes that DS3-12E cards are installed in Slots 1 to 6 and/or Slots 12 to 17. The DS3-12E cards in Slots 3 or 15, which are the protection slots, will be replaced with DS3N-12E cards.

- Step 1 In node view, click the Maintenance > Protection tab.
- Step 2 Click the protection group containing Slot 3 or Slot 15 (where you will install the DS3N-12E card).
- Step 3 Make sure the slot you are upgrading is not carrying working traffic. In the Selected Group list, the protect slot must say Protect/Standby as shown Figure 18-5 on page 18-56, and not Protect/Active. If the protect slot status is Protect/Active, switch traffic to the working card:
  - a. Under Selected Group, click the protect card.
  - b. Next to Switch Commands, click Switch.

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

- **Step 4** Repeat Steps 2 and 3 for each protection group that you need to convert.
- Step 5 Click the Alarms tab to verify that no standing alarms exist for any of the DS3-12E cards you are converting. If alarms exist and you have difficulty clearing them, contact your next level of support.
- **Step 6** Click the **Provisioning > Protection** tab.
- Step 7 Click the 1:1 protection group that contains the cards that you will move into the new protection group.
- Step 8 Click Delete.
- **Step 9** When the confirmation dialog 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. Do not delay when completing this procedure.

- **Step 10** If you are deleting more than one DS-3 1:1 protection group, repeat Steps 7 through 9 for each group that you want to include in a 1:N group.
- **Step 11** Physically remove the protect DS3-12E card from Slot 3 or Slot 15. This raises an improper removal alarm.
- Step 12 In node view, right-click the slot that held the removed card and choose **Delete** from the shortcut menu. Wait for the card to disappear from the node view.
- **Step 13** Physically insert a DS3N-12E card into the same slot.

- **Step 14** Verify that the card boots up properly.
- **Step 15** Click the **Inventory** tab and verify that the new card appears as a DS3N-12E.
- **Step 16** Click the **Provisioning > Protection** tabs.
- Step 17 Click Create.
- **Step 18** Type a name for the protection group in the Name field (optional).
- Step 19 Click Type and choose 1:N (card) from the drop-down list.
- Step 20 Verify that the DS3N-12E card appears in the Protect Card field.
- Step 21 In the Available Cards list, highlight the cards that you want in the protection group. Click the arrow (>>) button to move the cards to the Working Cards list.
- Step 22 Click OK.

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

**Step 23** Return to your originating procedure (NTP).

### DLP-A189 Verify that a 1+1 Working Slot is Active

**Purpose** This task verifies that a working slot in a 1+1 protection scheme is active

(and that the protect slot is in standby).

**Tools/Equipment** None

Prerequisite Procedures DLP-A60 Log into CTC, page 17-66

Required/As Needed As needed

Onsite/Remote Onsite or remote
Security Level Maintenance or higher

- **Step 1** In node view, click the **Maintenance > Protection** tabs.
- Step 2 In the Selected Group area, verify that the working slot/port is shown as Working/Active. If so, this task is complete.
- Step 3 If the working slot says Working/Standby, perform a Manual switch on the working slot:
  - **a.** In the Selected Group area, choose the Protect/Active slot.
  - a. In the Switch Commands field, choose Manual.
  - **b.** Click **Yes** in the confirmation dialog box.
- **Step 4** Verify that the working slot is carrying traffic (Working/Active).



Note

If the slot is not active, look for conditions or alarms that might be preventing the card from carrying working traffic. Refer to the *Cisco ONS 15454 Troubleshooting Guide*.

- **Step 5** When the working slot is carrying traffic, clear the Manual switch:
  - a. In the Switch Commands field, choose Clear.
  - **b.** Click **Yes** in the confirmation dialog box.

- Step 6 Verify that the working slot does not revert to Standby, which might indicate a problem on the working span.
- **Step 7** Return to your originating procedure (NTP).

### **DLP-A190 Install a UBIC-V EIA**

Purpose This task installs a Universal Backplane Interface Connector—Vertical

(UBIC-V) EIA.

**Tools/Equipment** #2 Phillips screwdriver

Small slot-head screwdriver

6 perimeter screws, 6-32 x 0.375-inch Phillips head (P/N 48-0422-01) UBIC-V, A side (15454-EIA-UBICV-A) EIA panel and/or UBIC-V, B side

(15454-EIA-UBICV-B) EIA panel

Prerequisite Procedures None

Required/As Needed As needed
Onsite/Remote Onsite
Security Level None



Always use an electrostatic discharge (ESD) wristband when working with a powered ONS 15454. Plug the wristband cable into the ESD jack located on the lower-right outside edge of the shelf assembly.



UBIC-V EIAs can only be installed on shelf assembly 15454-SA-HD. 15454-SA-HD shelf assemblies are differentiated from other shelf assemblies by the blue hexagon symbol, which indicates the available high-density slots, found under Slots 1 through 3 and 15 through 17.



UBIC-V or UBIC-H EIAs are required when using high-density (48-port DS-3 and 12-port DS3XM) electrical cards.

- Step 1 Locate the correct UBIC-V EIA for the side you want to install and remove the UBIC EIA-V from the packaging.
- Step 2 Verify that none of the pins on the UBIC EIA are bent.
- **Step 3** If present, remove the yellow connector protectors.
- **Step 4** If screws are present in the alignment standoff holes, use a Phillips screwdriver to remove them.
- Step 5 Use a flathead screwdriver or 5/16-inch deep socket wrench to tighten the standoffs at 8 to 10 inch pound-force (lb-in) (9.2 to 11.5 centimeter kilogram-force[kgf-cm]). Figure 18-6 shows the alignment standoffs installed on the shelf.

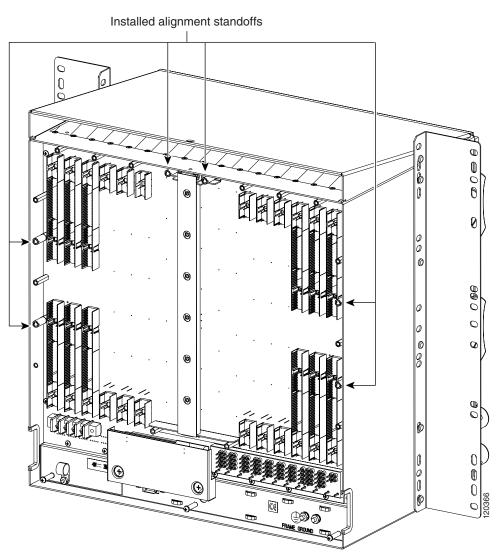
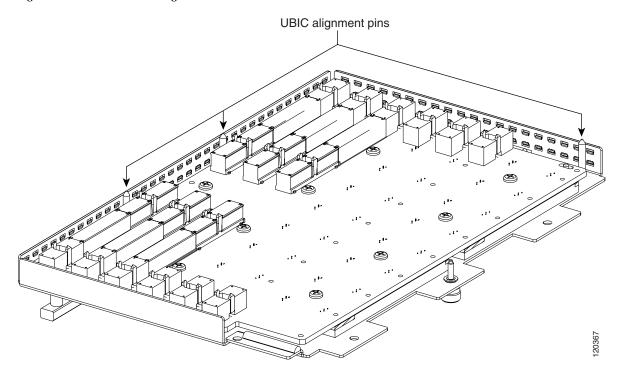


Figure 18-6 Installed Alignment Standoffs

Step 6 Line up the alignment pins on the UBIC EIA with the alignment standoffs on the shelf and push the UBIC EIA with consistent pressure until the pins and standoffs fit together firmly (Figure 18-7).

Figure 18-7 UBIC-V Alignment Pins



 $\triangle$ 

**Caution** Do not force the UBIC-V EIA onto the shelf if you feel strong resistance.

Step 7 Locate the three jack screws on the UBIC-V (Figure 18-8). Starting with any jack screw, tighten the thumb screw a few turns and move to the next one, turning each thumb screw a few turns at a time until all three screws are hand tight (Figure 18-9).

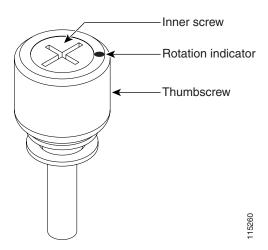
Caution Tightening the jack screws unevenly could cause damage to the UBIC-V connectors.

**@**(2) (2)**2** 1 Jack screws (3)

Figure 18-8 **UBIC-V EIA Screw Locations** 

- Perimeter screws, 6-32 x 0.375-inch Phillips head (6)

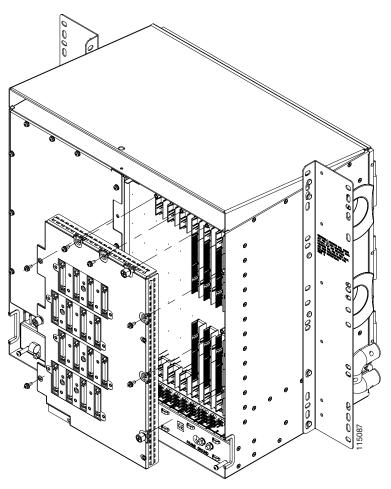
Figure 18-9 UBIC-V EIA Jack Screw



Step 8 Use a Phillips screwdriver to install the six perimeter screws and bracket screws (P/N 48-0422-01) at 8 to 10 lb-in. (9.2 to 11.5kgf-cm) to secure the cover panel to the backplane (Figure 18-8 on page 18-64). Install the alarm and timing panel cover and insert and tighten the last perimeter screw.

Figure 18-10 shows a UBIC-V EIA installation.

Figure 18-10 Installing the UBIC-V EIA



**Step 9** Return to your originating procedure (NTP).

## **DLP-A191 Delete a Card**

**Purpose** This task deletes a card from CTC.

**Tools/Equipment** None

Prerequisite Procedures DLP-A60 Log into CTC, page 17-66

Required/As NeededAs neededOnsite/RemoteOnsite or remoteSecurity LevelProvisioning or higher

Step 1 On the shelf graphic in CTC, right-click the card that you want to remove and choose **Delete Card**.

You cannot delete a card if any of the following conditions apply:

- The card is a TCC2/TCC2P card. To replace a TCC2/TCC2P card, refer to the *Cisco ONS 15454 Troubleshooting Guide*.
- The card is part of a protection group; see the "DLP-A155 Delete a Protection Group" task on page 18-23.
- The card has circuits; see the "NTP-A278 Modify and Delete Overhead Circuits" procedure on page 9-4 and the "DLP-A333 Delete Circuits" task on page 20-21.
- The card is part of a BLSR; see the "NTP-A240 Remove a BLSR Node" procedure on page 14-6.
- The card is being used for timing; see the "DLP-A157 Change the Node Timing Source" task on page 18-24.
- The card has a DCC/GCC termination; see the "NTP-A292 Modify or Delete Communications Channel Terminations and Provisionable Patchcords" procedure on page 10-4.



If you delete a card in CTC but do not remove it from the shelf, it will reboot and reappear in CTC.

**Step 2** Return to your originating procedure (NTP).

### **DLP-A194 Clear a BLSR Force Ring Switch**

**Purpose** This task removes a Force switch from a BLSR port.

**Tools/Equipment** None

Prerequisite Procedures DLP-A60 Log into CTC, page 17-66

Required/As Needed As needed Onsite/Remote Onsite

Security Level Maintenance or higher

- Step 1 From the View menu, choose Go to Network View.
- **Step 2** Click the **Provisioning > BLSR** tabs.
- Step 3 Click Edit.
- **Step 4** To clear a Force switch on the west line:
  - **a.** Right-click the BLSR west port where you want to clear the protection switch and choose **Set West Protection Operation**. Ports with a Force switch applied are marked with an F.
  - In the Set West Protection Operation dialog box, choose CLEAR from the drop-down list. Click OK.
  - c. In the Confirm BLSR Operation dialog box, click Yes.

- **Step 5** To clear a Force switch on the east line:
  - **a.** Right-click the BLSR east port where you want to clear the protection switch and choose **Set East Protection Operation**. Ports with a Force switch applied are marked with an F.
  - b. In the Set East Protection Operation dialog box, choose CLEAR from the drop-down list. Click OK.
  - c. In the Confirm BLSR Operation dialog box, click Yes.

On the BLSR network graphic, a green and a purple span line connects each node. This is the normal display for BLSRs when protection operations are not invoked.

- **Step 6** From the File menu, choose **Close**.
- **Step 7** Return to your originating procedure (NTP).

## **DLP-A195 Verify Timing in a Reduced Ring**

**Purpose** This task verifies timing in the ring where you removed a node.

**Tools/Equipment** None

Prerequisite Procedures DLP-A60 Log into CTC, page 17-66

Required/As Needed As needed
Onsite/Remote Onsite/remote

**Security Level** Provisioning or higher

- **Step 1** In node view, click the **Provisioning > Timing** tabs.
- Step 2 Observe the Timing Mode field to see the type of timing (Line, External, Mixed) that has been set for that node.
- Step 3 Scroll down to the Reference Lists and observe the NE Reference fields to see the timing references provisioned for that node.
- **Step 4** If the removed node was the only BITS timing source, perform the following:
  - **a.** Contact your synchronization coordinator or appropriate personnel before continuing with this procedure.
  - b. Look for another node on the ring that can be used as a BITS source and set that node's Timing Mode to **External**. Choose that node as the primary timing source for all other nodes in the ring. See the "DLP-A157 Change the Node Timing Source" task on page 18-24.
  - c. If no node in the reduced ring can be used as a BITS source, choose one node to be your internal timing source. Set that node's Timing Mode to External, set BITS-1 and BITS-2 BITS In State to OOS, and set the NE Reference to Internal. Then, choose line timing for all other nodes in the ring. This forces the first node to be their primary timing source. (See the "DLP-A157 Change the Node Timing Source" task on page 18-24.)



Note

This type of timing conforms to Stratum 3 requirements and is not considered optimal.

Step 5 If the removed node was not the only BITS timing source, provision the adjacent nodes to line timing using SONET links (east and west) as timing sources, traceable to the node with external BITS timing. See the "NTP-A28 Set Up Timing" procedure on page 4-9.

**Step 6** Return to your originating procedure (NTP).

# DLP-A196 Delete a BLSR from a Single Node

**Purpose** This task deletes a BLSR from a node after you remove the node from the

BLSR.

**Tools/Equipment** None

Prerequisite Procedures DLP-A60 Log into CTC, page 17-66

Required/As Needed As needed

Onsite/Remote Onsite or remote
Security Level Provisioning or higher

**Step 1** In node view, display the node that was removed from the BLSR:

- If the node that was removed is connected to the same LAN as your computer, from the File menu, choose **Add Node**, then enter the node name or IP address.
- If the node that was removed is not connected to the same LAN as your computer, you must connect to the node using a direct connection. See Chapter 3, "Connect the PC and Log into the GUI" for procedures.
- **Step 2** Click the **Provisioning > BLSR** tabs.
- Step 3 Highlight the ring and click **Delete**.
- **Step 4** In the Suggestion dialog box, click **OK**.
- Step 5 In the confirmation message, confirm that this is the ring you want to delete. If so, click Yes.
- **Step 6** Return to your originating procedure (NTP).

### **DLP-A197 Initiate a Path Protection Force Switch**

**Purpose** This task switches all circuits on a path protection span to another span.

**Tools/Equipment** None

Prerequisite Procedures DLP-A60 Log into CTC, page 17-66

Required/As Needed As needed

Onsite/Remote Onsite or remote
Security Level Maintenance or higher



The Force Switch Away command overrides normal protective switching mechanisms. Applying this command incorrectly can cause traffic outages.

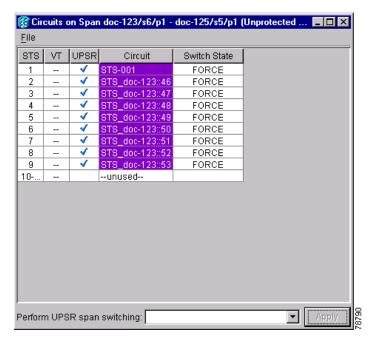


Traffic is not protected during a Force protection switch.

- Step 1 From the View menu, choose Go to Network View.
- Step 2 Right-click the span where you want to switch path protection traffic away. Choose Circuits from the shortcut menu.
- Step 3 In the Circuits on Span dialog box, choose FORCE SWITCH AWAY. Click Apply.
- Step 4 In the Confirm UPSR Switch dialog box, click Yes.
- Step 5 In the Protection Switch Result dialog box, click **OK**.

In the Circuits on Span window, the Switch State for all circuits is FORCE. Figure 18-11 shows an example.

Figure 18-11 Circuits on Span Dialog Box with a Force Switch





A Force switch request on a span or card causes CTC to raise a FORCED-REQ condition. The condition clears when you clear the Force switch.

**Step 6** Return to your originating procedure (NTP).

### **DLP-A198 Clear a Path Protection Force Switch**

**Purpose** This task clears a path protection Force switch.

**Tools/Equipment** None

Prerequisite Procedures DLP-A60 Log into CTC, page 17-66

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

- Step 1 From the View menu at the node view, choose Go to Network View.
- Step 2 Right-click the span where you want to clear the switch. Choose Circuits from the shortcut menu.
- Step 3 In the Circuits on Span dialog box, choose CLEAR to remove the Force switch. Click Apply.
- Step 4 In the Confirm UPSR Switch dialog box, click Yes.
- Step 5 In the Protection Switch Result dialog box, click OK.

In the Circuits on Span window, the Switch State for all path protection circuits is CLEAR.

**Step 6** Return to your originating procedure (NTP).