Note: 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.

Contents

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

    1. From the Edit menu, choose **Preferences**.
        The Cisco Transport Controller (CTC) Preferences dialog box appears (Figure 18-1).

Figure 18-1: CTC Preferences Dialog Box
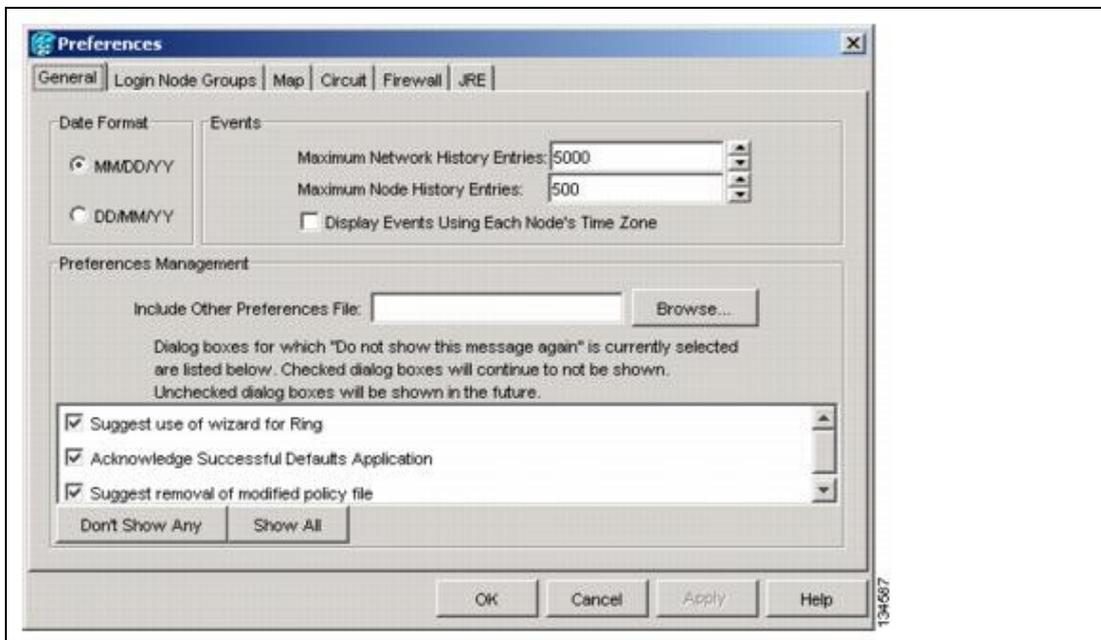
    2. Click the up or down arrow buttons next to the Maximum History Entries field to change the entry.
    3. Click **Apply** and **OK**.

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

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

    1. From the Edit menu, choose **Preferences**.
        The CTC Preferences dialog box appears (Figure 18-1).
    2. Check the **Display Events Using Each Node's Time Zone** check box. The Apply button is enabled.
    3. Click **Apply** and **OK**.
    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
Required/As Needed	As needed
Onsite/Remote	Onsite or remote
Security Level	Retrieve or higher

    1. At the card, node, or network view, click the **Alarms** tab.
    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.
    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
Required/As Needed	As needed
Onsite/Remote	Onsite or remote
Security Level	Retrieve or higher

    1. From the card, node, or network view, click the **Conditions** tab.
    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
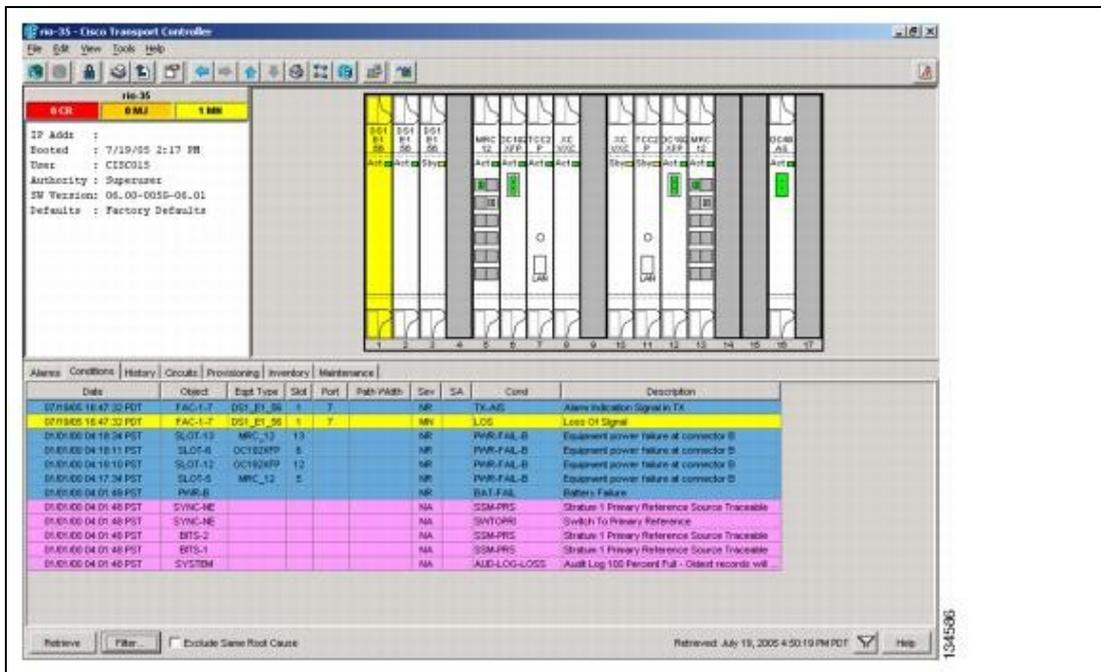
Conditions include all fault conditions raised on the node, whether or not they are reported. **Note:** Alarms can be unreported when they are filtered out of the display. See the "DLP-A225 Enable Alarm Filtering" task for information.

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 Not-Reported (NR) in the Conditions window severity column. Conditions that have a default severity of Critical (CR), Major (MJ), Minor (MN), or Not-Alarmed (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.

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.

Note: 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*.

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 may cause an LOS alarm, an AIS condition, and an SF condition. If you check the Exclude Same Root Cause check box, only the LOS alarm will appear. According to Telcordia, exclusion rules apply to a query of "all conditions from a node."

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 DLP-A60 Log into CTC
Required/As Needed	As needed
Onsite/Remote	Onsite or remote
Security Level	Provisioning or higher

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

Figure 18-3: Node View Alarm Behavior Window

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

Figure 18-2: Node View Conditions Window   6

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

1. Enable Intermediate Path Performance Monitoring as specified in DLP-A122 Enable/Disable Intermediate Path Performance Monitoring
2. 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

Line Terminating Equipment
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

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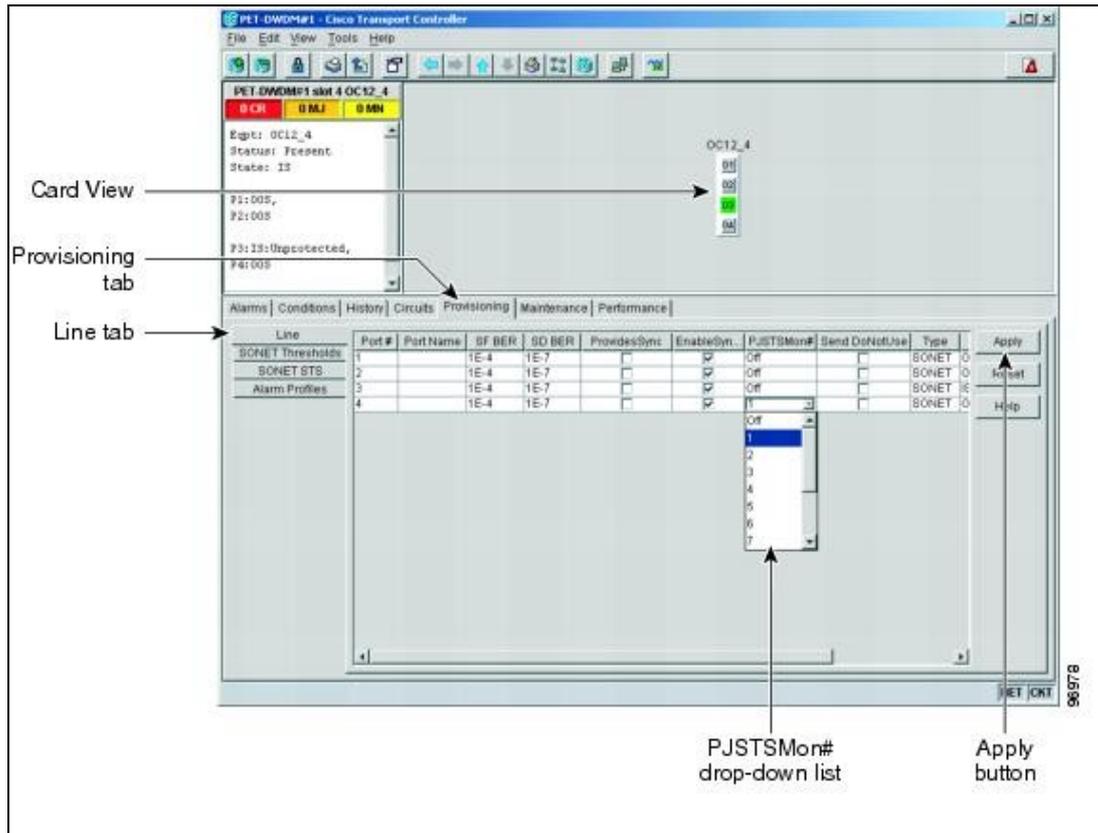
5. In the Service State field, confirm that the port is in the In-Service and Normal (IS-NR) service state.
6. If the port is IS-NR, click **Apply**. If the port is in the Out-of-Service and Management, Disabled (OOS-MA,DSBLD), Out-of-Service and Management, Maintenance (OOS-MA,MT), or the Out-of-Service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

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

8. Return to your originating procedure (NTP).

DLP-A122 Enable/Disable Intermediate Path Performance Monitoring

Purpose	This task enables or disables intermediate path performance monitoring, which allows you to monitor large amounts of STS traffic through intermediate nodes.
Tools/Equipment	None
Prerequisite Procedures	DLP-A60 Log into CTC
Required/As Needed	As needed
Onsite/Remote	Onsite or remote
Security Level	Provisioning or higher

Note: 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 EC-1 cards. For PM parameter definitions, refer to the "Performance Monitoring" chapter of the *Cisco ONS 15454 Reference Manual*.

Note: An OC-48 IR card used in a BLSR does not support IPPM during a protection switch.

1. In node view, double-click the OC-N card you want to monitor. The card view appears.
   See Table 18-1 for a list of OC-N LTE cards.
2. Click the **Provisioning > SONET STS** tabs (Figure 18-5).

Figure 18-5: SONET STS Tab for Enabling or Disabling IPPM
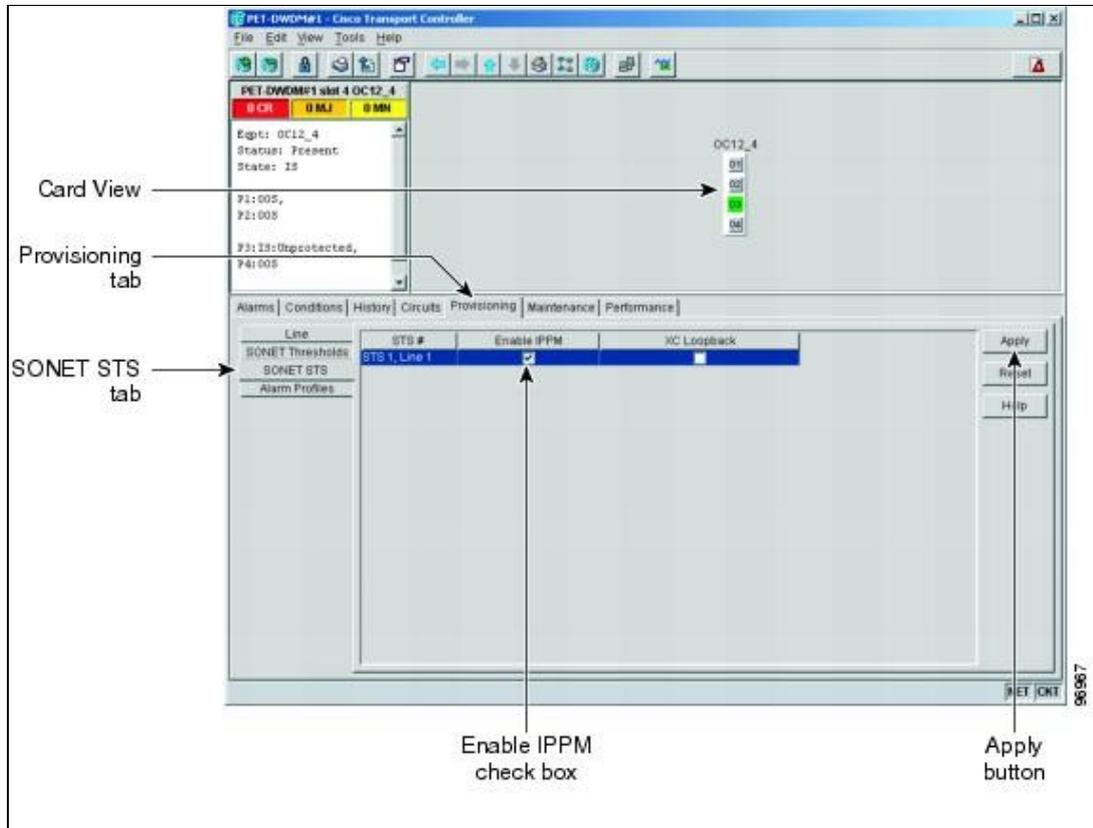
Click the check box in the Enable IPPM column and make a selection based on the following rules:

· Unchecked means IPPM is disabled for that STS (default)
· Checked means IPPM is enabled for that STS

3. Click **Apply**.
4. Click the **Performance** tab to view PM parameters. For IPPM parameter definitions, refer to the "Performance Monitoring" chapter of the *Cisco ONS 15454 Reference Manual*.
5. 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
Required/As Needed	As needed
Onsite/Remote	Onsite or remote
Security Level	Retrieve or higher

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

2. Click the **Performance** tab.

3. Click the **15 min** radio button.

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

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.

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.

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

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

2. Click the **Performance** tab.

3. Click the **1 day** radio button.

4. Click **Refresh**. Performance monitoring appears in 1-day intervals synchronized with the time of day.

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 threshold crossing alert (TCA) is raised. The number represents the counter value for each specific performance monitoring parameter.

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

   Note: 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.

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

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

1. In node view, double-click the card where you want to view PM counts. The card view appears.
2. Click the **Performance** tab.
3. Click the **Near End** radio button.
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 Reference Manual*.
5. View the Curr column to find PM counts for the current time interval.
6. View the Prev-*n* columns to find PM counts for the previous time intervals.
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
Required/As Needed	As needed
Onsite/Remote	Onsite or remote
Security Level	Retrieve or higher

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

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

1. In node view, double-click the card where you want to view PM counts. The card view appears.
2. Click the **Performance** tab.
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.

4. View the current statistics columns to observe changes to PM counts for the current time interval.

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

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.
2. Click the **Circuits** tab.
3. If you are in node or card view, choose the scope for the search, **Node** or **Network (All)**, from the Scope drop-down list located at the bottom right-hand side of the screen.
4. Click Search.
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.
6. Click **Find Next**. If a match is found, click **Find Next** again to find the next circuit.
7. Repeat Steps 5 and 6 until you are finished, then click **Cancel**.
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.
Prerequisite Procedures	DLP-A264 Provision a J1 Path Trace on Circuit Source and Destination Ports DLP-A60 Log into CTC
Required/As Needed	As needed
Onsite/Remote	Onsite or remote
Security Level	Provisioning or higher

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.
2. Click **Circuits**.
3. Choose the STS circuit that has path trace provisioned on the source and destination ports, then click **Edit**.
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.
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. If not, the Edit Path Trace menu item will not appear.
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 in 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.
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 map 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.
8. Click **Apply**, then click **Close**.
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
Required/As Needed	As needed
Onsite/Remote	Onsite or remote
Security Level	Provisioning or higher

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

1. In node view, click the **Provisioning > General** tabs.
2. Change any of the following:
      ♦ General: Node Name
      ♦ General: Contact
      ♦ Location: Latitude
      ♦ Location: Longitude
      ♦ Location: Description
      Note: 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 Savings 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 for detailed field descriptions.

2. Click **Apply**. Confirm that the changes appear; if not, repeat the task.
3. 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 DLP-A65 Create a Static Route
Required/As Needed	As needed
Onsite/Remote	Onsite or remote
Security Level	Provisioning or higher

1. In node view, click the **Provisioning > Network** tabs.
2. Click the **Static Routing** tab.
3. Click the static route you want to edit.
4. Click **Edit**.
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 for detailed field descriptions.
6. Click **OK**.
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 DLP-A65 Create a Static Route
Required/As Needed	As needed
Onsite/Remote	Onsite or remote
Security Level	Provisioning or higher

1. In node view, click the **Provisioning > Network > Static Routing** tabs.
2. Click the static route you want to delete.
3. Click **Delete**. A confirmation dialog box appears.
4. Click Yes.
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 DLP-A250 Set Up or Change Open Shortest Path First Protocol
Required/As Needed	As needed
Onsite/Remote	Onsite or remote
Security Level	Provisioning or higher

1. In node view, click the **Provisioning** > **Network** > **OSPF** tabs. The OSPF subtab has several options.
2. In the OSPF on LAN area, uncheck the **OSPF active on LAN?** check box.
3. Click **Apply**.
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
Required/As needed	As needed
Onsite/Remote	Onsite or remote
Security Level	Retrieve or higher

Note: 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.

1. From the View menu, choose **Go to Network View**.
2. If you want to change a domain background, double-click the domain. If not, continue with Step 3.
3. Right-click the network view or domain map area and choose **Set Background Color** from the shortcut menu.
4. In the Choose Color dialog box, select a background color.
5. Click **OK**.
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. By default, domains are visible to all CTC sessions that log into the network.
Tools/Equipment	None
Prerequisite procedures	DLP-A60 Log into CTC
Required/As needed	As needed
Onsite/Remote	Onsite or remote

Security Level	Superuser only

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

Note: To allow users of any security level to create local domains, that is, domains that are visible on the home CTC session only, superusers can change the CTC.network.LocalDomainCreationAndViewing NE default value to TRUE. A TRUE value means any user can maintain the domain information in his or her Preferences file, meaning domain changes will not affect other CTC sessions. (The default value is FALSE, meaning domain information affects all CTC sessions and only superusers can create a domain or put a node into a domain.) See the NTP-A336 Edit Network Element Defaults to change NE default values.

1. From the View menu, choose **Go to Network View**.
2. Right-click the network map and choose **Create New Domain** from the shortcut menu.
3. When the domain icon appears on the map, click the map name and type the domain name.
4. Press **Enter**.
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 DLP-A148 Create Domain Icons
Required/As needed	As needed
Onsite/Remote	Onsite or remote
Security Level	Provisioning or higher

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

Note: To allow users of any security level to create local domains, that is, domains that are visible on the home CTC session only, superusers can change the CTC.network.LocalDomainCreationAndViewing NE default value to TRUE. A TRUE value means any user can maintain the domain information in his or her Preferences file, meaning domain changes will not affect other CTC sessions. (The default value is FALSE, meaning domain information affects all CTC sessions and only superusers can create a domain or put a node into a domain.) See the NTP-A336 Edit Network Element Defaults to change NE default values.

1. From the View menu, choose **Go to Network View**.
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 **Rename Domain** 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. • Right-click the domain and choose **Open Domain**.
Return to network view	Right-click the domain view area and choose **Go to Parent View** from the shortcut menu.
Preview domain contents	Right-click the domain icon and choose **Show Domain Overview**. 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 **Show Domain Overview**.
Remove domain	Right-click the domain icon and choose **Remove Domain**. Any nodes in the domain are returned to the network map.

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 cards (DS-1, DS-3, EC-1, and DS3XM).
Tools/Equipment	None
Prerequisite Procedures	DLP-A71 Create a 1:1 Protection Group DLP-A60 Log into CTC
Required/As Needed	As needed
Onsite/Remote	Onsite or remote
Security Level	Provisioning or higher

1. In node view, click the **Provisioning > Protection** tabs.
2. In the Protection Groups area, click the 1:1 protection group you want to modify.
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.
4. Click **Apply**.
   Note: 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.
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 DLP-A60 Log into CTC
Required/As Needed	As needed

Table 18-2: Managing Domains   17

Onsite/Remote	Onsite or remote
Security Level	Provisioning or higher

1. Verify that the DS-1 or DS-3 cards are installed according to the 1:N specifications in the "DLP-A72 Create a 1:N Protection Group" task.
2. In node view, click the **Provisioning > Protection** tabs.
3. In the Protection Groups area, click the 1:N protection group you want to modify.
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 Entities-If cards are available, they will appear here. Use the arrow buttons to move them into the Working Cards column.
   - Working Entities-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 for field descriptions.
5. Click **Apply**.
     Note: 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.
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-48AS, and OC-192).
Tools/Equipment	None
Prerequisite Procedures	DLP-A73 Create a 1+1 Protection Group DLP-A60 Log into CTC
Required/As Needed	As needed
Onsite/Remote	Onsite or remote
Security Level	Provisioning or higher

1. In node view, click the **Provisioning > Protection** tabs.
2. In the Protection Groups area, click the 1+1 protection group you want to modify.
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 for field descriptions.
4. Click **Apply**.
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
Required/As Needed	As needed
Onsite/Remote	Onsite or remote
Security Level	Provisioning or higher

1. In node view, click the **Provisioning > Protection** tabs.
2. In the Protection Groups area, click the protection group you want to delete.
3. Click **Delete**.
4. Click **Yes** in the Delete Protection Group dialog box.
5. Return to your originating procedure (NTP).

DLP-A156 Delete a Section DCC Termination

Purpose	This task deletes a SONET Section DCC termination on the ONS 15454.
Tools/Equipment	None
Prerequisite Procedures	DLP-A60 Log into CTC
Required/As Needed	As needed
Onsite/Remote	Onsite or remote
Security Level	Provisioning or higher

1. Click the **Provisioning > Comm Channel > S**DCC tabs.
2. Click the SDCC termination to be deleted and click **Delete**. The Delete SDCC Termination dialog box appears.
3. Click **Yes** in the confirmation dialog box.
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
Required/As Needed	As needed
Onsite/Remote	Onsite or remote
Security Level	Provisioning or higher

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

1. In node view, click the **Provisioning > Timing** tabs.
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 SONET External or Line Timing" task for field descriptions.

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

Note: The BITS Facilities section sets the parameters for your 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

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

5. Click **Apply**.

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

1. In node view, click the **Provisioning > Security > Users** tabs.

2. Click the user whose settings you want to modify, then click **Change**.

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 for field descriptions.

4. Click **OK**.

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

5. Return to your originating procedure (NTP).

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

Note: 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, or you can choose the "Logout before delete" option in the Delete User dialog box.

Note: 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.

1. In node view, click the **Provisioning > Security > Users** tabs.
2. Choose the user you want to delete.
3. Click **Delete**.
4. In the Delete User dialog box, verify that the user name displayed is the one you want to delete.
5. Click **OK**.
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
Required/As Needed	As needed
Onsite/Remote	Onsite or remote
Security Level	Superuser only

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

1. From the View menu, choose Go to Network View. Verify that you can access all the nodes where you want to add users.
2. Click the **Provisioning > Security > Users** tabs. Highlight the user's name whose settings you want to change.
3. Click **Change**. The Change User dialog box appears.
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 for field descriptions.
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).
6. Click **OK**. A Change Results confirmation dialog box appears.
7. Click **OK** to acknowledge the changes.
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
Required/As Needed	As needed
Onsite/Remote	Onsite or remote
Security Level	Superuser only

Note: 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, or you can choose the "Logout before delete" option in the Delete User dialog box.

Note: 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.

1. From the View menu, choose Go to Network View.
2. Click the **Provisioning > Security** tabs. Highlight the name of the user you want to delete.
3. Click **Delete**. The Delete User dialog box appears.
4. In the Select Applicable Nodes area, uncheck any nodes where you do not want to delete this user.
5. Click **OK**. A User Deletion Results confirmation dialog box appears.
6. Click **OK** to acknowledge the changes.
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
Required/As Needed	As needed
Onsite/Remote	Onsite or remote
Security Level	Provisioning or higher

1. In node view, click the **Provisioning > SNMP** tabs.
2. In the Trap Destinations area, click the trap you want to delete.
3. Click **Delete**. A confirmation dialog box appears.
4. Click **Yes**.
5. Return to your originating procedure (NTP).

DLP-A165 Change Line and Threshold Settings for a DS1-14 or DS1N-14 Card

Purpose	This task changes the line and threshold settings for a DS1-14 or DS1N-14 card.
Tools/Equipment	None
Prerequisite Procedures	DLP-A60 Log into CTC
Required/As Needed	As needed
Onsite/Remote	Onsite or remote
Security Level	Provisioning or higher

Note: For the default values and domains of user-provisionable card settings, refer to the "Network Element Defaults" appendix in the *Cisco ONS 15454 Reference Manual*.

1. In node view, double-click the DS1-14 or DS1N-14 card where you want to change the line or threshold settings.
2. Click the **Provisioning** tab.
3. Depending on the setting you need to modify, click the **Line, Line Thresholds, Elect Path Thresholds, or SONET Thresholds** tab.
   Note: See Manage Alarms for information about the Alarm Profiles tab.
   Note: If you want to modify a threshold setting, it might be necessary to click on the available directional, type, and interval (15 Min, 1 Day) radio buttons and then click **Refresh**. This will display the desired threshold setting.
4. Modify the settings found under these subtabs by clicking in the field you want to modify. In some fields you can choose an option from a drop-down list; in others you can type a value.
5. Click **Apply**.
6. Repeat Steps 3 through 5 for each subtab that has parameters you want to provision.
   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.
   Table 18-3 describes the values on the **Provisioning > Line** tabs.

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

Parameter	Description	Options
Port #	(Display only) 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.
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.	• D4 • ESF - Extended Super Frame • Unframed
Line Coding	Defines the DS-1 transmission coding type.	• AMI - Alternate Mark Inversion (default) • B8ZS - Bipolar 8 Zero Substitution
Line Length	Defines the distance (in feet) from the backplane connection to the next termination point.	• 0 - 131 • 132 - 262 • 263 - 393 • 394 - 524

		• 525 - 655
Admin State	Sets the port administrative 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. **Note:** CTC will not allow you to change a port service state from IS-NR to OOS-MA,DSBLD. You must first change a port to the OOS-MA,MT service state before putting it in the OOS-MA,DSBLD service state.
Service State	(Display only) 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, in 15-minute increments

Table 18-4 describes the values on the **Provisioning > Line Thresholds** tabs.

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

Parameter	Description
Port	(Display only) Port number; 1 to 14
CV	Coding violations
ES	Errored seconds
SES	Severely errored seconds
LOSS	Number of one-second intervals containing one or more loss of signal (LOS) defects

Table 18-3: Line Options for DS1-14 and DS1N-14 Cards   24

| 15 Min radio button | Clicking this radio button and then clicking Refresh will cause the threshold values on this tab to display for 15-minute intervals. |
| 1 Day radio button | Clicking this radio button and then clicking Refresh will cause the threshold values on this tab to display for 1-day intervals. |

Table 18-5 describes the values on the **Provisioning > Elect Path Thresholds** tabs.

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

Parameter	Description
Port	(Display only) Port number; 1 to 14
CV	Coding violations
ES	Errored seconds
SES	Severely errored seconds
SAS	Severely errored frame/alarm indication signal
AISS	Alarm indication signal seconds
UAS	Unavailable seconds
15 Min radio button	Clicking this radio button and then clicking Refresh will cause the threshold values on this tab to display for 15-minute intervals.
1 Day radio button	Clicking this radio button and then clicking Refresh will cause the threshold values on this tab to display for 1-day intervals.

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
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
ES	Errored seconds
FC	Failure count
SES	Severely errored seconds
UAS	Unavailable seconds
15 Min radio button	Clicking this radio button and then clicking Refresh will cause the threshold values on this tab to display for 15-minute intervals.
1 Day radio button	Clicking this radio button and then clicking Refresh will cause the threshold values on this tab to display for 1-day intervals.

Note: The threshold value appears after the circuit is created.

7. Return to your originating procedure (NTP).

DLP-A166 Change Line and Threshold Settings for a DS3-12 or DS3N-12 Card

| Purpose | This task changes the line and threshold settings for a DS3-12 or DS3N-12 card. |

Table 18-4: Line Thresholds Options for DS1-14 and DS1N-14 Cards   25

Tools/Equipment	None
Prerequisite Procedures	DLP-A60 Log into CTC
Required/As Needed	As needed
Onsite/Remote	Onsite or remote
Security Level	Provisioning or higher

Note: For the default values and domains of user-provisionable card settings, refer to the "Network Element Defaults" appendix in the *Cisco ONS 15454 Reference Manual.*

1. Double-click the DS3-12 or DS3N-12 card where you want to change the line or threshold settings.
2. Click the **Provisioning** tab.
3. Depending on the setting you need to modify, click the **Line, Line Thresholds, Elect Path Thresholds,** or **SONET Thresholds** tab.
      Note: See Manage Alarms for information about the Alarm Profiles tab.
      Note: If you want to modify a threshold setting, it might be necessary to click on the available directional, type, and interval (15 Min, 1 Day) radio buttons and then click **Refresh**. This will display the desired threshold setting.
4. Modify the settings found under these subtabs by clicking in the field you want to modify. In some fields you can choose an option from a drop-down list; in others you can type a value.
5. Click **Apply**.
6. Repeat Steps 3 through 5 for each subtab that has parameters you want to provision.
      For definitions of the line settings, see Table 18-7. For definitions of the line threshold settings, see Table 18-8: Line Threshold Options for DS3-12 or DS3N-12 Cards. For definitions of the Elect Path Threshold settings, see Table 18-9. For definitions of the SONET threshold settings, see Table 18-10: SONET Threshold Options for DS3-12 or DS3N-12 Cards.
      Table 18-7 describes the values on the **Provisioning > Line** tabs.

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

Parameter	Description	Options
Port	(Display only) 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.
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 backplane connection to the next termination point.	• 0 - 225 (default) • 226 - 450
Admin State	Sets the port administrative 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. **Note:** CTC will not allow you to change a port service state from IS-NR to OOS-MA,DSBLD. You must first change a port to the OOS-MA,MT service state before putting it in the OOS-MA,DSBLD service state.
Service State	(Display only) 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 the 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.

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

Parameter	Description
Port	(Display only) Port number; 1 to 12
CV	Coding violations
ES	Errored seconds
SES	Severely errored seconds
LOSS	Loss of signal seconds; number of one-second intervals containing one or more LOS defects
15 Min radio button	Clicking this radio button and then clicking Refresh will cause the threshold values on this tab to display for 15-minute intervals.
1 Day radio button	Clicking this radio button and then clicking Refresh will cause the threshold values on this tab to display for 1-day intervals.

Table 18-9 describes the values on the **Provisioning > Elect Path Thresholds** tabs.

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

Parameter	Description
Port	(Display only) Port number; 1 to 12
EB	Errored blocks
BBE	Background block errors
ES	Errored seconds
SES	Severely errored seconds
UAS	Unavailable seconds
AISS	Alarm indication signal seconds
15 Min radio button	Clicking this radio button and then clicking Refresh will cause the threshold values on this tab to display for 15-minute intervals.
1 Day radio button	Clicking this radio button and then clicking Refresh will cause the threshold values on this tab to display for 1-day intervals.

Table 18-10 describes the values on the **Provisioning > SONET Thresholds** tabs.

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

Parameter	Description
Port	(Display only) DS-3 ports partitioned for STS. Line 1, STS 1, Line 2, STS 1 Line 3, STS 1, Line 4 STS 1
CV	(Near and Far End, STS termination only) Coding violations
ES	(Near and Far End, STS termination only) Errored seconds
FC	(Near and Far End, STS termination only) Failure count
SES	(Near and Far End, STS termination only) Severely errored seconds
UAS	(Near and Far End, STS termination only) Unavailable seconds
15 Min radio button	Clicking this radio button and then clicking Refresh will cause the threshold values on this tab to display for 15-minute intervals.
1 Day radio button	Clicking this radio button and then clicking Refresh will cause the threshold values on this tab to display for 1-day intervals.

Note: The threshold value appears after the circuit is created.

7. Return to your originating procedure (NTP).

DLP-A167 Change Line and Threshold Settings for a DS3E-12 or DS3N-12E Card

Purpose	This task changes the line and threshold settings for a DS3E-12 or DS3N-12E (DS3E) card.
Tools/Equipment	None
Prerequisite Procedures	DLP-A60 Log into CTC

Table 18-8: Line Threshold Options for DS3-12 or DS3N-12 Cards   28

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

Note: For the default values and domains of user-provisionable card settings, refer to the "Network Element Defaults" appendix in the *Cisco ONS 15454 Reference Manual*.

Note: 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, and provision the slot for the DS3E using the "DLP-A330 Preprovision a Card Slot" task.

1. Double-click the DS3E-12 or DS3N-12E card where you want to change the line or threshold settings.
2. Click the **Provisioning** tab.
3. Depending on the setting you need to modify, click the **Line, Line Thresholds, Elect Path Thresholds**, or **SONET Thresholds** tab.
   > **Note:** See Manage Alarms for information about the Alarm Profiles tab.
   > **Note:** If you want to modify a threshold setting, it might be necessary to click on the available directional, type, and interval (15 Min, 1 Day) radio buttons and then click **Refresh**. This will display the desired threshold setting.
4. Modify the settings found under these subtabs by clicking in the field you want to modify. In some fields you can choose an option from a drop-down list; in others you can type a value.
5. Click **Apply**.
6. Repeat Steps 3 through 5 for each subtab that has a parameter you want to provision.
   > 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.
   > Table 18-11 describes the values on the **Provisioning > Line** tabs.

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

Parameter	Description	Options
Port #	(Display only) 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.
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 Line Type	(Display only) Displays the detected line type.	• M13 • C Bit • Unframed • Unknown
Line Coding	Defines the DS3E transmission coding type.	B3ZS
Line Length	Defines the distance (in feet) from backplane connection to the next termination point.	• 0 - 225 (default) • 226 - 450
Admin State	Sets the port administrative 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. **Note:** CTC will not allow you to change a port service state from IS-NR to OOS-MA,DSBLD. You must first change a port to the OOS-MA,MT service state before putting it in the OOS-MA,DSBLD service state.
Service State	(Display only) 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. **Note:** CTC will not allow you to change a port service state from IS-NR to OOS-MA,DSBLD. You must first change a port to the OOS-MA,MT service state before putting it in the OOS-MA,DSBLD service state.
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 18-11: Line Options for the DS3-12E and DS3N-12E Cards   30

Table 18-12 describes the values on the **Provisioning > Line Thresholds** tabs.

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

Parameter	Description
Port	(Display only) Port number; 1 to 12
CV	Coding violations
ES	Errored seconds
SES	Severely errored seconds
LOSS	Loss of signal seconds; number of one-second intervals containing one or more LOS defects
15 Min radio button	Clicking this radio button and then clicking Refresh will cause the threshold values on this tab to display for 15-minute intervals.
1 Day radio button	Clicking this radio button and then clicking Refresh will cause the threshold values on this tab to display for 1-day intervals.

Table 18-13 describes the values on the **Provisioning > Elect Path Thresholds** tabs.

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

Parameter	Description
Port	(Display only) Port number; 1 to 12
CV	Coding violations. Available for DS3 Pbit, Near End only; and DS3 CPbit, Near End and Far End.
ES	Errored seconds. Available for DS3 Pbit, Near End only; and DS3 CPbit: Near end and Far End.
SES	Severely errored seconds. Available for DS3 Pbit, Near End only; and DS3 CPbit, Near End and Far End.
SAS	Severely errored frame/alarm indication signal. Available for DS3 Pbit, Near End only; and DS3 CPbit, Near End and Far End.
AIS	Alarm indication signal. Available for DS3 Pbit, Near End only; and DS3 CPbit, Near End and Far End.
UAS	Unavailable seconds. Available for DS3 Pbit, Near End only; and DS3 CPbit, Near End and Far End.
15 Min radio button	Clicking this radio button and then clicking Refresh will cause the threshold values on this tab to display for 15-minute intervals.
1 Day radio button	Clicking this radio button and then clicking Refresh will cause the threshold values on this tab to display for 1-day intervals.

Table 18-14 describes the values on the **Provisioning > SONET Thresholds** tabs.

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

Parameter	Description
Port	(Display only) DS-3 ports partitioned for STS. Line 1, STS 1, Line 2, STS 1 Line 3, STS 1, Line 4 STS 1

Table 18-12: Line Threshold Options for the DS3-12E and DS3N-12E Cards   31

CV	Coding violations. Available for Near and Far End, STS termination only.
ES	Errored seconds. Available for Near and Far End, STS termination only.
FC	Failure count. Available for Near and Far End, STS termination only.
SES	Severely errored seconds. Available for Near and Far End, STS termination only.
UAS	Unavailable seconds. Available for Near and Far End, STS termination only.
15 Min radio button	Clicking this radio button and then clicking Refresh will cause the threshold values on this tab to display for 15-minute intervals.
1 Day radio button	Clicking this radio button and then clicking Refresh will cause the threshold values on this tab to display for 1-day intervals.

Note: The threshold value appears after the circuit is created.

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

Note: 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.

Note: For the default values and domains of user-provisionable card settings, refer to the "Network Element Defaults" appendix in the *Cisco ONS 15454 Reference Manual*.

1. In node view, double-click the DS3XM-6 card where you want to change the line or threshold settings.
2. Click the **Provisioning** tab.
3. Depending on the setting you need to modify, click the **Line, Line Thresholds, Elect Path Thresholds,** or **SONET Thresholds** tab.
    Note: See Manage Alarms for information about the Alarm Profiles tab.
    Note: If you want to modify a threshold setting, it might be necessary to click on the available directional, type, and interval (15 Min, 1 Day) radio buttons and then click **Refresh**. This will display the desired threshold setting.
4. Modify the settings found under these subtabs by clicking in the field you want to modify. In some fields you can choose an option from a drop-down list; in others you can type a value.
5. Click **Apply**.
6. Repeat Steps 3 through 5 for each subtab that has parameters you want to provision.
    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.
    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.
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 - default • C BIT
Line Coding	Defines the DS-1 transmission coding type that is used.	B3ZS
Line Length	Defines the distance (in feet) from backplane connection to the next termination point.	• 0 - 225 (default) • 226 - 450
Admin State	Sets the port administrative 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. **Note:** CTC will not allow you to change a port service state from IS-NR to OOS-MA,DSBLD. You must first change a port to the OOS-MA,MT service state before putting it in the OOS-MA,DSBLD service state.
Service State	(Display only) 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.

Table 18-15: Line Options for the DS3XM-6 Parameters   33

		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 18-16 describes the values on the **Provisioning > Line Thresholds** tabs for DS3XM-6 cards.

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

Parameter	Description
Port	(Display only) Port number; 1 to 6
CV	Coding violations
ES	Errored seconds
SES	Severely errored seconds
LOSS	Loss of signal seconds
15 Min radio button	Clicking this radio button and then clicking Refresh will cause the threshold values on this tab to display for 15-minute intervals.
1 Day radio button	Clicking this radio button and then clicking Refresh will cause the threshold values on this tab to display for 1-day intervals.

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

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

Parameter	Description
Port	(Display only) Port number. 1 to 6.
CV	Coding violations. Available for DS3, Pbit Near End only; DS3 CPbit, Near End and Far End; and DS1, only if a VT circuit is dropped on the port.
ES	Errored seconds. Available for DS3, Pbit Near End only; DS3 CPbit, Near End and Far End; and DS1, only if a VT circuit is dropped on the port.
SES	Severely errored seconds. Available for DS3, Pbit Near End only; DS3 CPbit, Near End and Far End; and DS1, only if a VT circuit is dropped on the port.
SAS	Severely errored frame/alarm indication signal. Available for DS3, Pbit Near End only; DS3 CPbit, Near End and Far End; and DS1, only if a VT circuit is dropped on the port.
AISS	Alarm indication signal seconds. Available for DS3, Pbit Near End only; DS3 CPbit, Near End and Far End; and DS1, only if a VT circuit is dropped on the port.

Table 18-16: Line Threshold Options for the DS3XM-6 Card   34

UAS	Unavailable seconds. Available for DS3, Pbit Near End only; DS3 CPbit, Near End and Far End; and DS1, only if a VT circuit is dropped on the port.
15 Min radio button	Clicking this radio button and then clicking Refresh will cause the threshold values on this tab to display for 15-minute intervals.
1 Day radio button	Clicking this radio button and then clicking Refresh will cause the threshold values on this tab to display for 1-day intervals.

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
CV	Coding violations
ES	Errored seconds
FC	Failure count
SES	Severely errored seconds
UAS	Unavailable seconds
15 Min radio button	Clicking this radio button and then clicking Refresh will cause the threshold values on this tab to display for 15-minute intervals.
1 Day radio button	Clicking this radio button and then clicking Refresh will cause the threshold values on this tab to display for 1-day intervals.

> **Note:** The threshold value appears after the circuit is created.

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

Note: For the default values and domains of user-provisionable card settings, refer to the "Network Element Defaults" appendix in the *Cisco ONS 15454 Reference Manual*.

1. In node view, double-click the EC-1 card where you want to change the line or threshold settings.
2. Click the **Provisioning** tab.
3. Depending on the setting you need to modify, click the **Line** or **SONET Thresholds** tabs.
   > **Note:** See Manage Alarms for information about the Alarm Profiles tab.
   > **Note:** The STS subtab is used to provision intermediate path performance monitoring (IPPM). To provision IPPM, circuits must be provisioned on the EC1-12 card. For circuit creation procedures, go to Create Circuits and VT Tunnels. To provision IPPM, go to the "DLP-A121 Enable/Disable Pointer Justification Count Performance Monitoring" task.
   > **Note:** If you want to modify a threshold setting, it might be necessary to click on the available directional, type, and interval (15 Min, 1 Day) radio buttons and then click **Refresh**. This will display the desired threshold setting.
4. Modify the settings found under these subtabs by clicking in the field you want to modify. In some fields you can choose an option from a drop-down list; in others you can type a value.

Table 18-17: Electrical Path Threshold Options for the DS3XM-6 Card   35

5. Click **Apply**.
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. For definitions of the SONET threshold settings, see Table 18-20.

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

Parameter	Description	Options
Port	(Display only) Port number.	1 to 12
Port Name	(Optional) Sets a name for the port.	User-defined, up to 32 alphanumeric/ special characters. Blank by default. See the "DLP-A314 Assign a Name to a Port" task.
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
PJStsMon#	Sets the STS that will be used for pointer justification; if set to zero, no STS is used.	• 0 (default) • 1
Line Buildout	Defines the distance (in feet) from backplane to next termination point.	• 0 - 225 (default) • 226 - 450
Rx Equalization	For early EC1-12 card versions, equalization can be turned off if the line length is short or the environment is extremely cold; Rx Equalization should normally be set to On.	• On (checked, default) • Off (unchecked)
Admin State	Sets the port administrative 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.

		Note: CTC will not allow you to change a port service state from IS-NR to OOS-MA,DSBLD. You must first change a port to the OOS-MA,MT service state before putting it in the OOS-MA,DSBLD service state.
Service State	(Display only) 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 18-20 lists the values on the SONET Thresholds tab for EC1-12 cards.

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

SONET Layer	Parameter	Description
All	Port #	(Display only) EC-1 card port number; 1 to 12
Line (L)	CV	Coding violations
	ES	Errored seconds
Line (L)	SES	Severely errored seconds
	FC	Failure count
	UAS	Unavailable seconds
Section (S)	CV	Coding violations (Near End only)
	ES	Errored seconds

Table 18-19: Line Options for the EC1-12 Card   37

	SES	Severely errored seconds
	SEFS	Severely errored framing seconds
	CV	Coding violations (Near End and Far End)
	ES	Errored seconds
Path (P)	FC	Failure count
	SES	Severely errored seconds
	UAS	Unavailable seconds

7. 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
Required/As Needed	As needed
Onsite/Remote	Onsite or remote
Security Level	Provisioning or higher

Note: For the default values and domains of user-provisionable card settings, refer to the "Network Element Defaults" appendix in the *Cisco ONS 15454 Reference Manual*.

1. In node view, double-click the OC-N card where you want to change the threshold settings.
2. Click the **Provisioning > SONET Thresholds** tabs.
   > **Note:** If you want to modify a threshold setting, it might be necessary to click on the available directional, type, and interval (15 Min, 1 Day) radio buttons and then click **Refresh**. This will display the desired threshold setting.
3. Modify the settings described in Table 18-21 by clicking in the field you want to modify and typing in the desired value.
4. Click **Apply**.

Table 18-21: OC-N Threshold Options

Parameter	Description
Port	Port number • 1 (OC-3, OC-12, OC-48, OC-192) • 1-4 (OC12-4) • 1-12: PPM 1 (MRC_12)
CV	Coding violations
ES	Errored seconds
SES	Severely errored seconds
SEFS	Severely errored framing seconds
FC	Failure count
UAS	Unavailable seconds
PSC	Protection Switching Count (Line)
PSD	Protection Switch Duration (Line)
PSC-W	Protection Switching Count - Working line

Table 18-20: SONET Threshold Options for the EC1-12 Card   38

	Note: Bidirectional line switch rings (BLSRs) are not supported on the OC-3 card; therefore, the PSC-W, PSC-S, and PSC-R performance monitoring parameters (PMs) do not increment.
PSD-W	Protection Switching Duration - Working line **Note:** BLSR is not supported on the OC-3 card; therefore, the PSD-W, PSD-S, and PSD-R PMs do not increment.
PSC-S	Protection Switching Duration - Span **Note:** BLSR is not supported on the OC-3 card; therefore, the PSC-W, PSC-S, and PSC-R PMs do not increment.
PSD-S	Protection Switching Duration - Span **Note:** BLSR is not supported on the OC-3 card; therefore, the PSD-W, PSD-S, and PSD-R PMs do not increment.
PSC-R	Protection Switching Count - Ring **Note:** BLSR is not supported on the OC-3 card; therefore, the PSC-W, PSC-S, and PSC-R PMs do not increment.
PSD-R	Protection Switching Duration - Ring **Note:** BLSR is not supported on the OC-3 card; therefore, the PSD-W, PSD-S, and PSD-R PMs do not increment.

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. You must put the port in the OOS,MT administrative service state before changing the port to SDH.
Tools/Equipment	None
Prerequisite Procedures	DLP-A60 Log into CTC DLP-A214 Change the Service State for a Port
Required/As Needed	As needed
Onsite/Remote	Onsite or remote
Security Level	Provisioning or higher

1. In node view, double-click the OC-N card where you want to provision a port for SDH.
2. Click the **Provisioning > Line** tabs.
3. In the Type field for the desired port, choose **SDH**.
    Note: Before you 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.
4. Click **Apply**.
5. If the card is a multiport OC-N card, for example a four-port OC-3, eight-port OC-3, four-port OC-12, or MRC-12, you can repeat Steps 3 and 4 for any other ports on that card.
6. Return to your originating procedure (NTP).

Table 18-21: OC-N Threshold Options   39

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	None
Prerequisite Procedures	DLP-A60 Log into CTC
Required/As Needed	As needed
Onsite/Remote	Onsite
Security Level	Provisioning or higher

Note: 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.

1. In node view, click the **Maintenance > Protection** tabs.
2. Click the protection group that contains Slot 3 or Slot 15 (where you will install the DS1N-14 card).
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, not Protect/Active. If the protect slot status is Protect/Active, switch traffic to the working card:
    1. Under Selected Group, click the protect card.
    2. 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.
4. Repeat Steps 1 through 3 for each protection group that you need to convert.
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.
6. Click the **Provisioning > Protection** tabs.
7. Click the 1:1 protection group that contains the cards that you will move into the new protection group.
8. Click **Delete**.
9. When the confirmation dialog box appears, click **Yes**.
    Note: 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.
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.
11. Physically remove the DS1-14 card from Slot 3 or Slot 15. This raises an improper removal alarm (IMPROPRMVL).
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.
13. Physically insert a DS1N-14 card into the same slot.
14. Verify that the card boots up properly.
15. Click the **Inventory** tab and verify that the new card appears as a DS1N-14.
16. Click the **Provisioning > Protection** tabs.
17. Click **Create**.
18. Type a name for the protection group in the Name field (optional).
19. From the Type drop-down list, choose **1:N (card)**.
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.
21. In the Available Cards list, highlight the cards that you want in the protection group. Click the arrow (>>) tab to move the cards to the Working Cards list.

22. If necessary, set a new reversion time in the Reversion time drop-down list.
    Note: 1:N protection groups are always revertive.
23. Click **OK**. The protection group appears in the Protection Groups list on the Protection subtab.
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	None
Prerequisite Procedures	DLP-A60 Log into CTC
Required/As Needed	As needed
Onsite/Remote	Onsite
Security Level	Provisioning or higher

Note: 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. The ONS 15454 must run CTC Release 2.0 or later. The procedure also requires at least one DS3N-12 card and a protection group with DS3-12 cards.

1. In node view, click the **Maintenance > Protection** tabs.
2. Click the protection group containing Slot 3 or Slot 15 (where you will install the DS3N-12 card).
3. Make sure the slot that you are upgrading is not carrying working traffic. In the Selected Group list, the protect slot must say Protect/Standby, and not Protect/Active. If the protect slot status is Protect/Active, switch traffic to the working card:
    1. Under Selected Group, click the protect card.
    2. 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.
4. Repeat Steps 2 and 3 for each protection group that you need to convert.
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.
6. Click the **Provisioning > Protection** tabs.
7. Click the 1:1 protection group that contains the cards that you will move into the new protection group.
8. Click **Delete**.
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. Therefore, complete this procedure as soon as possible.
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.
11. Physically remove the protect DS3-12 card from Slot 3 or Slot 15. This raises an improper removal alarm (IMPROPRMVL).
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.
13. Physically insert a DS3N-12 card into the same slot.
14. Verify that the card boots up properly.
15. Click the **Inventory** tab and verify that the new card appears as a DS3N-12 card.
16. Click the **Provisioning > Protection** tabs.

17. Click **Create**.
18. Type a name for the protection group in the Name field (optional).
19. Click **Type** and choose **1:N (card)** from the drop-down list.
20. Verify that the DS3N-12 card appears in the Protect Card field.
21. In the Available Cards list, highlight the cards that you want in the protection group. Click the arrow (>>) tab to move the cards to the Working Cards list.
22. Click **OK**.
      The protection group should appear in the Protection Groups list on the Protection subtab.
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	None
Prerequisite Procedures	DLP-A60 Log into CTC
Required/As Needed	As needed
Onsite/Remote	Onsite
Security Level	Provisioning or higher

Note: 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. The procedure requires at least one DS3N-12E card and a protection group with DS3-12E cards.

1. In node view, click the **Maintenance > Protection** tabs.
2. Click the protection group containing Slot 3 or Slot 15 (where you will install the DS3N-12E card).
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, and not Protect/Active. If the protect slot status is Protect/Active, switch traffic to the working card:
    1. Under Selected Group, click the protect card.
    2. 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.
4. Repeat Steps 2 and 3 for each protection group that you need to convert.
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.
6. Click the **Provisioning > Protection** tab.
7. Click the 1:1 protection group that contains the cards that you will move into the new protection group.
8. Click **Delete**.
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.
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.
11. Physically remove the protect DS3-12E card from Slot 3 or Slot 15. This raises an improper removal alarm (IMPROPRMVL).
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.

13. Physically insert a DS3N-12E card into the same slot.
14. Verify that the card boots up properly.
15. Click the **Inventory** tab and verify that the new card appears as a DS3N-12E.
16. Click the **Provisioning > Protection** tabs.
17. Click **Create**.
18. Type a name for the protection group in the Name field (optional).
19. Click **Type** and choose **1:N (card)** from the drop-down list.
20. Verify that the DS3N-12E card appears in the Protect Card field.
21. In the Available Cards list, highlight the cards that you want in the protection group. Click the arrow (>>) tab to move the cards to the Working Cards list.
22. Click **OK**.
        The protection group should appear in the Protection Groups list on the Protection subtab.
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
Required/As Needed	As needed
Onsite/Remote	Onsite or remote
Security Level	Maintenance or higher

1. In node view, click the **Maintenance > Protection** tabs.
2. In the Selected Group area, verify that the working slot/port is shown as Working/Active. If so, this task is complete.
3. If the working slot says Working/Standby, perform a Manual switch on the working slot:
    1. In the Selected Group area, choose the Protect/Active slot.
    2. In the Switch Commands field, choose **Manual**.
    3. Click **Yes** in the confirmation dialog box.
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 for alarm descriptions and instructions.
5. When the working slot is carrying traffic, clear the Manual switch:
    1. In the Switch Commands field, choose **Clear**.
    2. Click **Yes** in the confirmation dialog box.
6. Verify that the working slot does not revert to Standby, which might indicate a problem on the working span.
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

Caution! 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.

Note: 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.

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

1. Locate the correct UBIC-V EIA for the side you want to install and remove the UBIC EIA-V from the packaging.
2. Verify that none of the pins on the UBIC EIA are bent.
3. If present, remove the yellow connector protectors.
4. If screws are present in the alignment standoff holes, use a Phillips screwdriver to remove them.
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

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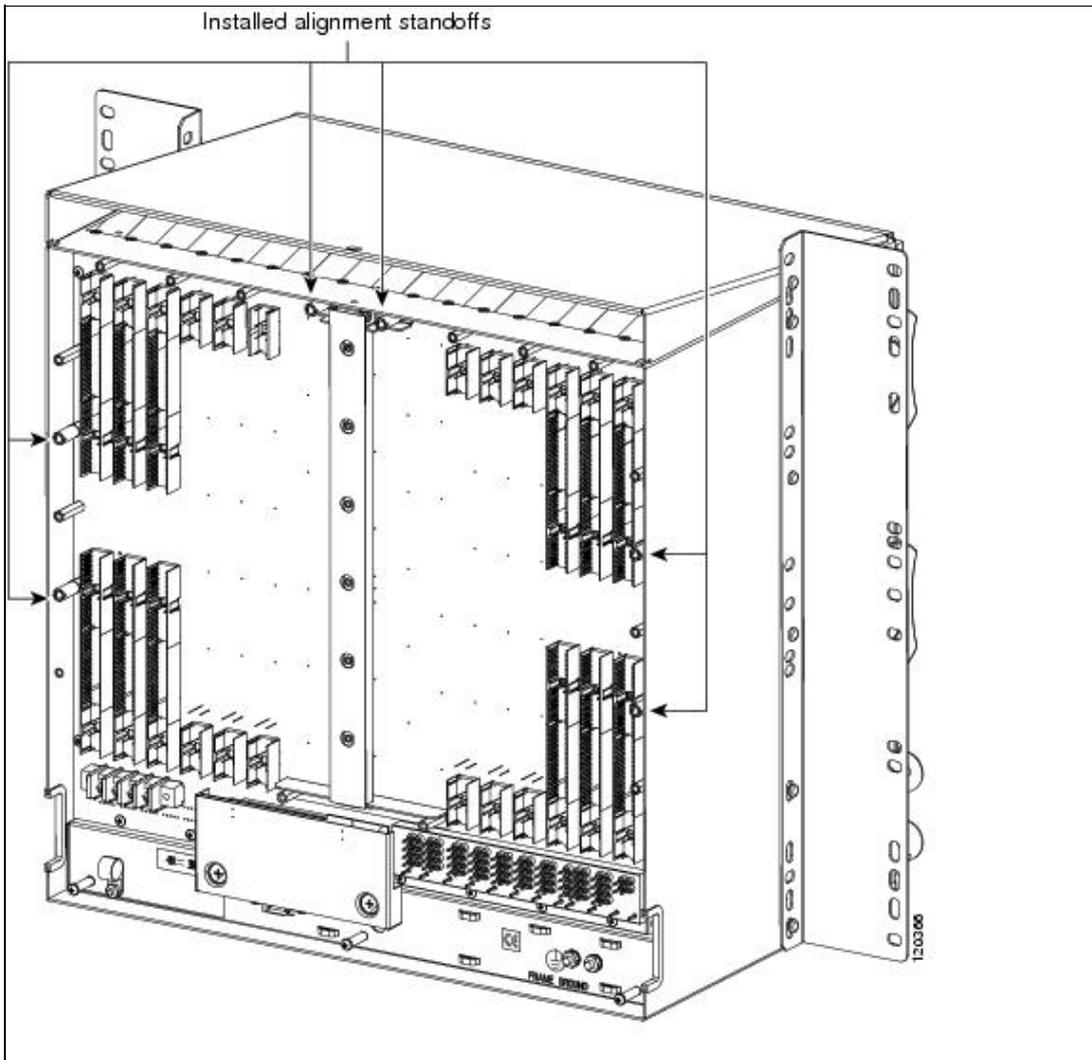
6. Line up the alignment pins on the UBIC EIA with the alignment standoffs on the shelf and push the UBIC EIA with consistent pressure until the pins and standoffs fit together firmly (Figure 18-7).

Figure 18-7: UBIC-V Alignment Pins

Figure 18-6: Installed Alignment Standoffs   45

Figure 18-7: UBIC-V Alignment Pins
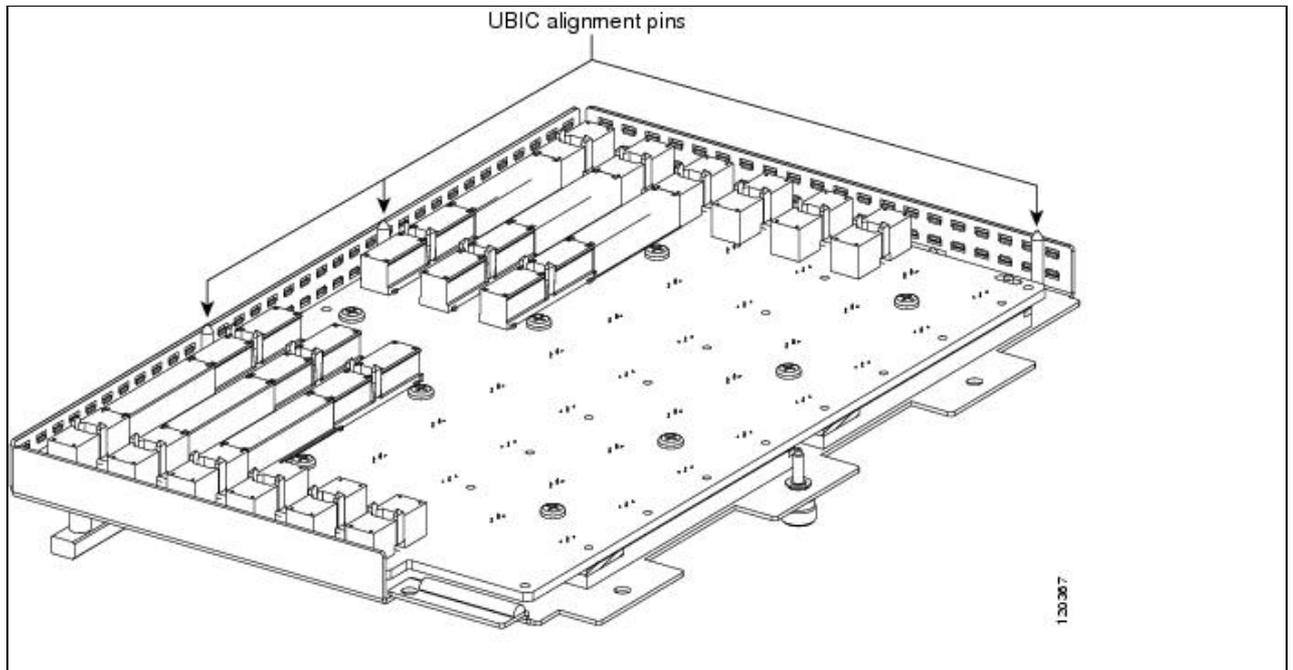
Caution! Do not force the UBIC-V EIA onto the shelf if you feel strong resistance.

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.

Figure 18-8: UBIC-V EIA Screw Locations

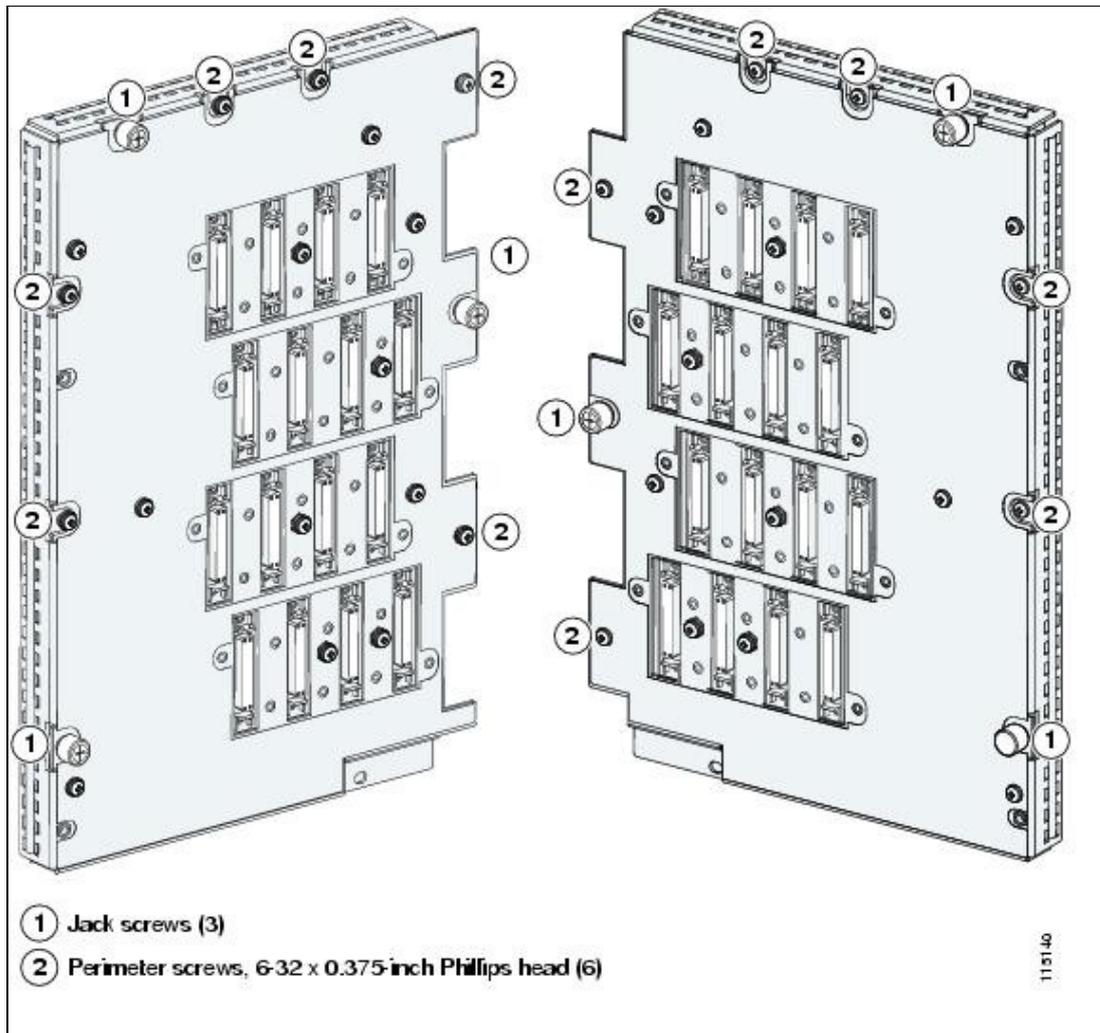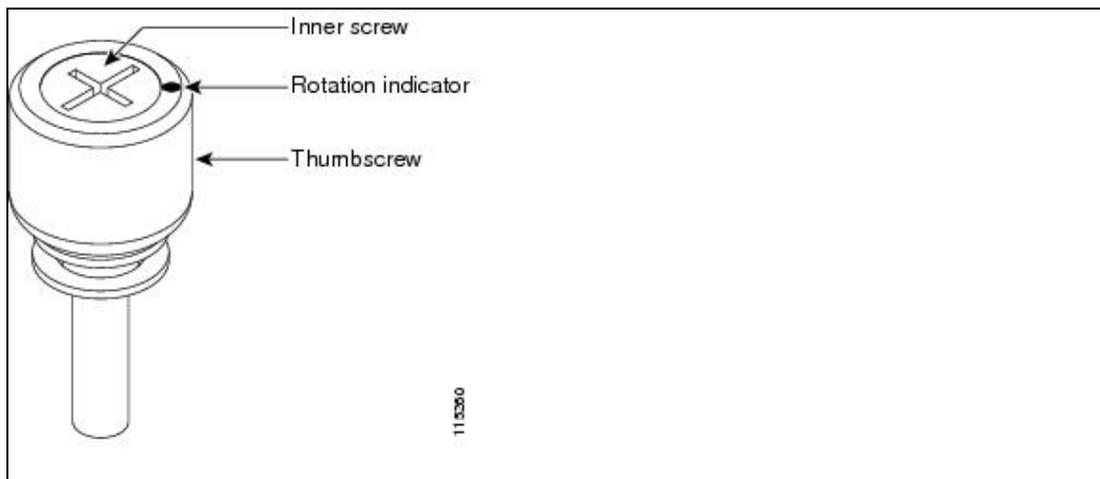Figure 18-7: UBIC-V Alignment Pins   46

① Jack screws (3)

② Perimeter screws, 6-32 x 0.375-inch Phillips head (6)

115140

Figure 18-9: UBIC-V EIA Jack Screw

Inner screw

Rotation indicator

Thumbscrew

115350

8. Use a Phillips screwdriver to install the six perimeter screws and bracket screws (P/N 48-0422-01) at 8 to 10 lb-inch (9.2 to 11.5kgf-cm) to secure the cover panel to the backplane (Figure 18-8). 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 18-8: UBIC-V EIA Screw Locations   47

Figure 18-10: Installing the UBIC-V EIA
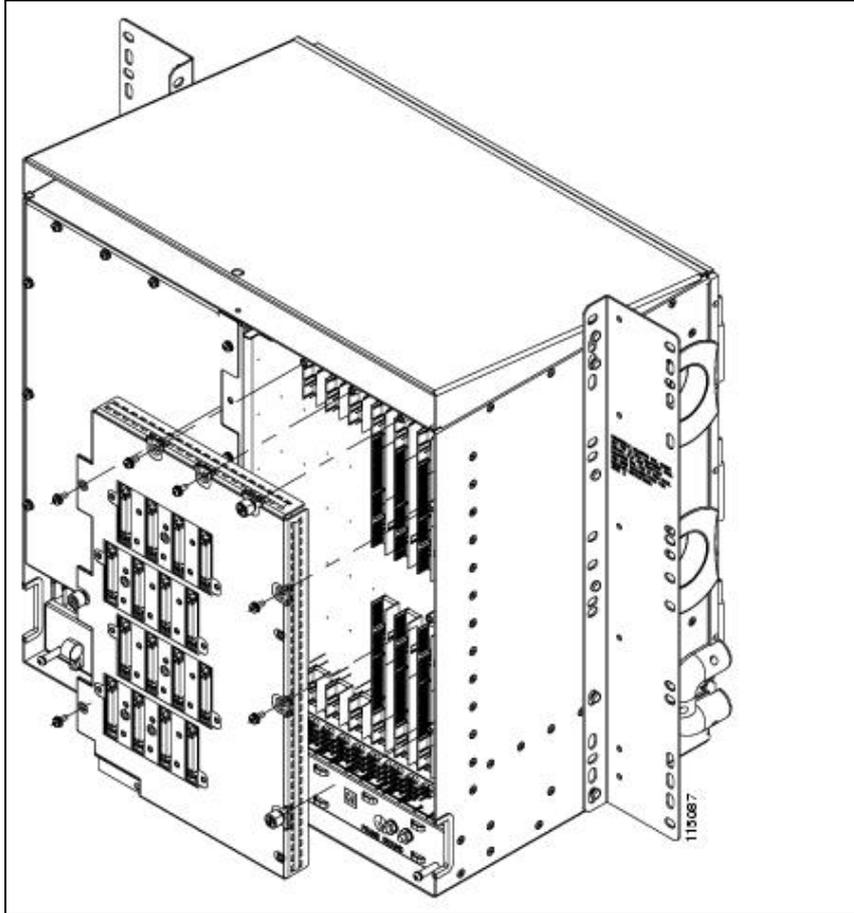
9. Return to your originating procedure (NTP).

DLP-A191 Delete a Card

Purpose	This task deletes a card from CTC.
Tools/Equipment	None
Prerequisite Procedures	DLP-A60 Log into CTC
Required/As Needed	As needed
Onsite/Remote	Onsite or remote
Security Level	Provisioning or higher

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.
   - ♦ The card has circuits; see the NTP-A278 Modify and Delete Overhead Circuits and Server Trails and the "DLP-A333 Delete Circuits" task.
   - ♦ The card is part of a BLSR; see the NTP-A240 Remove a BLSR Node.
   - ♦ The card is being used for timing; see the "DLP-A157 Change the Node Timing Source" task.
   - ♦ The card has a DCC/GCC termination; see the NTP-A292 Modify or Delete Communications Channel Terminations and Provisionable Patchcords.

Figure 18-10: Installing the UBIC-V EIA   48

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

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

1. From the View menu, choose Go to Network View.
2. Click the **Provisioning > BLSR** tabs.
3. Click **Edit**.
4. To clear a Force switch on the west line:
    1. 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.
    2. In the Set West Protection Operation dialog box, choose **CLEAR** from the pull-down menu. Click **OK**.
    3. In the Confirm BLSR Operation dialog box, click **Yes**.
5. To clear a Force switch on the east line:
    1. 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.
    2. In the Set East Protection Operation dialog box, choose **CLEAR** from the pull-down menu. Click **OK**.
    3. 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.
6. From the File menu, choose **Close**.
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
Required/As Needed	As needed
Onsite/Remote	Onsite/remote
Security Level	Provisioning or higher

1. In node view, click the **Provisioning > Timing** tabs.
2. Observe the Timing Mode field to see the type of timing (Line, External, Mixed) that has been set for that node.
3. Scroll down to the Reference Lists and observe the NE Reference fields to see the timing references provisioned for that node.
4. If the removed node was the only BITS timing source, perform the following:
    1. Contact your synchronization coordinator or appropriate personnel before continuing with this procedure.

2. 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.

3. 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.)

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

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.

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

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 Connect the PC and Log into the GUI for procedures.
2. Click the **Provisioning > BLSR** tabs.
3. Highlight the ring and click **Delete**.
4. In the Suggestion dialog box, click **OK**.
5. In the confirmation message, confirm that this is the ring you want to delete. If so, click **Yes**.
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
Required/As Needed	As needed
Onsite/Remote	Onsite or remote
Security Level	Maintenance or higher

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

Caution! Traffic is not protected during a Force protection switch.

1. From the View menu, choose **Go to Network View**.
2. Right-click the span where you want to switch path protection traffic away. Choose **Circuits** from the shortcut menu.
3. In the Circuits on Span dialog box, choose **FORCE SWITCH AWAY**. Click **Apply**.
4. In the Confirm Path Protection Switch dialog box, click **Yes**.
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
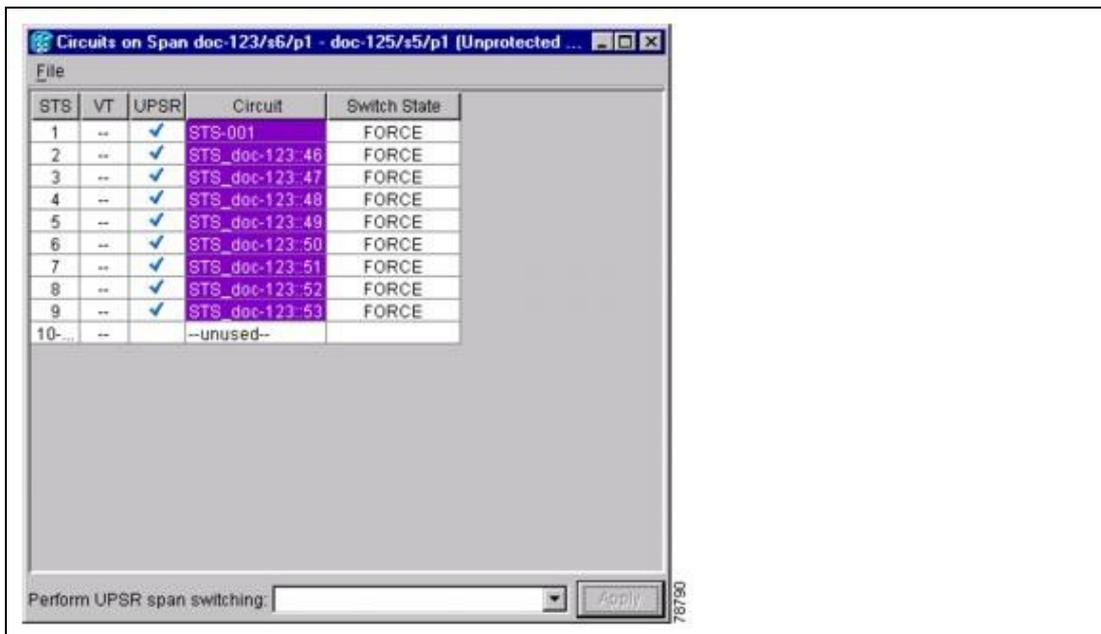
> **Note:** A Force switch request on a span or card causes CTC to raise a FORCED-REQ condition. The condition clears when you clear the Force switch.

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

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

6. Return to your originating procedure (NTP).