



Manage Alarms

This chapter explains how to view and manage the alarms and conditions on a Cisco ONS 15454.

Cisco Transport Controller (CTC) detects and reports alarms generated by the Cisco ONS 15454 and the ONS network. You can use CTC to monitor and manage alarms at a card, node, or network level. You can also view alarm counts on the LCD front panel.



Note

Except where noted, the procedures and tasks in this chapter apply to both DWDM (Software Release 4.5) and non-DWDM (Software R4.1 and earlier) nodes.

Before You Begin

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

1. [NTP-A195 Document Existing Provisioning, page 9-2](#)—Complete this procedure as needed to print or export node data.
2. [NTP-A196 View Alarms, History, Events, and Conditions, page 9-5](#)—Complete this procedure as needed to see alarms and conditions occurring on the node and a complete history of alarm and condition messages.
3. [NTP-A68 Delete Cleared Alarms from Display, page 9-13](#)—Complete this procedure as needed to delete cleared alarm information.
4. [NTP-A69 View Alarm-Affected Circuits, page 9-14](#)—Complete this procedure as needed to find circuits that are affected by a particular alarm or condition.
5. [NTP-A70 View Alarm Counts on the LCD for a Node, Slot, or Port, page 9-16](#)—Complete this procedure as needed to see a statistical count of alarms that have occurred for a slot or port.
6. [NTP-A71 Create, Download, and Assign Alarm Severity Profiles, page 9-17](#)—Complete this procedure as needed to change the default severity for certain alarms, assign the new severities to a port, card, or node, and delete alarm profiles.
7. [NTP-A168 Enable, Modify, or Disable Alarm Severity Filtering, page 9-26](#)—Complete this procedure as needed to enable, disable, or modify alarm severity filtering in the Conditions, Alarms, or History screens; you can enable, modify, and disable alarm severity filtering at the node or network level.
8. [NTP-A72 Suppress Alarms and Discontinue Alarm Suppression, page 9-30](#)—As needed, use these tasks to suppress reported alarms at the port, card, or node level and disable the suppress command to resume normal alarm reporting.

NTP-A195 Document Existing Provisioning

Purpose	This procedure prints card, node, or network CTC information in graphical or tabular form on a Windows-provisioned printer, or to export card, node, or network information as editable delineated text files to other applications. This procedure is useful for network record keeping and troubleshooting.
Tools/Equipment	Printer connected to the CTC computer by a direct or network connection
Prerequisite Procedures	Chapter 4, “Turn Up Node”
Required/As needed	As needed
Onsite/Remote	Onsite or remote
Security Level	Retrieve

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- Step 1** Complete the “[DLP-A60 Log into CTC](#)” task on page 3-26 at the node where you want to record or save data. If you are already logged in, continue with [Step 2](#).
- Step 2** As needed, complete the “[DLP-A138 Print CTC Data](#)” task on page 9-2.
- Step 3** As needed, complete the “[DLP-A139 Export CTC Data](#)” task on page 9-4.
- Stop. You have completed this procedure.**
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DLP-A138 Print CTC Data

Purpose	This task prints CTC card, node, or network data in graphical or tabular form on a Windows-provisioned printer.
Tools/Equipment	Printer connected to the CTC computer by a direct or network connection
Prerequisite procedures	DLP-A60 Log into CTC , page 3-26
Required/As needed	As needed
Onsite/Remote	Onsite or remote
Security Level	Retrieve

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- Step 1** Click the tab (and subtab, if present) containing the information you want to print. For example, click the **Alarms** tab to print Alarms window data.
- The print operation is available for all network, node, and card view windows.
- Step 2** Click **File > Print**.
- Step 3** In the Print dialog box, click a a printing option ([Figure 9-1](#)).
- Entire Frame—Prints the entire CTC window including the graphical view of the card, node, or network. This option is available for all windows.
 - Tabbed View—Prints the lower half of the CTC window containing tabs and data. The printout includes the selected tab (on top) and the data shown in the tab window. For example, if you print the History window Tabbed View, you print only history items appearing in the window. This option is available for all windows.

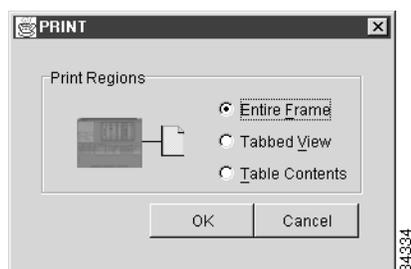
- Table Contents—Prints CTC data in table format without graphical representations of shelves, cards, or tabs. This option is available only for CTC table data, so it does not apply to:
 - Provisioning > General, Protection, SNMP, or Timing windows
 - Provisioning > Network > General window
 - Provisioning > UCP > Node window
 - Provisioning > WDM-ANS > Provisioning window (Release 4.5)
 - Maintenance > Database, Protection, Diagnostic, or Timing windows
 - Maintenance > Cross-Connect > Cards window

The Table Contents option prints all the data contained in a table and the table column headings. For example, if you print the History window Table Contents view, you print all data included in the table whether or not items appear in the window.

**Tip**

When you print using the Tabbed View option, it can be difficult to distinguish whether the printout applies to the network, node, or card view. To determine the view, compare the tabs on the printout. The network, node, and card views are identical except that network view does not contain an Inventory tab or Performance tab.

Figure 9-1 Selecting CTC Data For Print



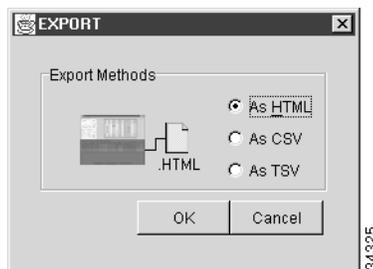
- Step 4** Click **OK**.
- Step 5** In the Windows Print dialog box, click a printer and click **OK**.
- Step 6** Repeat this task for each window that you want to print.
- Step 7** Return to your originating procedure (NTP).

DLP-A139 Export CTC Data

Purpose	This task exports CTC table data as delineated text to view or edit the data in text editor, word processing, spreadsheet, database management, or web browser applications.
Tools/Equipment	None
Prerequisite procedures	DLP-A60 Log into CTC, page 3-26
Required/As needed	As needed
Onsite/Remote	Onsite or remote
Security Level	Retrieve

-
- Step 1** Click the tab containing the information you want to export (for example, the Alarms tab or the Circuits tab).
- Step 2** Choose **Export** from the File menu.
- Step 3** In the Export dialog box ([Figure 9-2](#)), click a data format:
- As HTML—Saves data as a simple HTML table file without graphics. The file must be viewed or edited with applications such as Netscape Navigator, Microsoft Internet Explorer, or other applications capable of opening HTML files.
 - As CSV—Saves the CTC table as comma-separated values (CSV).
 - As TSV—Saves the CTC table as tab-separated values (TSV).

Figure 9-2 Selecting CTC Data For Export



- Step 4** If you want to open a file in a text editor or word processor application, procedures may vary; but typically you can use the File > Open command to display the CTC data, or you can double-click the file name and choose an application such as Notepad.
- Text editor and word processor applications display the data exactly as it is exported, including comma or tab separators. All applications that open the data files allow you to format the data.
- Step 5** If you want to open the file in spreadsheet and database management applications, procedures may vary; but typically you need to open the application and choose File > Import, then choose a delimited file to display the data in cells.

Spreadsheet and database management programs also allow you to manage the exported data.



Note An exported file cannot be opened in CTC.

The export operation only applies to tabular data, so it is not available for the following CTC tabs and subtabs:

- Provisioning > General, Protection, SNMP, or Timing windows
- Provisioning > Network > General window
- Provisioning > UCP > Node window
- Provisioning > WDM-ANS > Provisioning window (Release 4.5)
- Maintenance > Database, Protection, Diagnostic, or Timing windows
- Maintenance > Cross-Connect > Cards window

Step 6 Click **OK**.

Step 7 In the Save dialog box, enter a name in the File name field using one of the following formats:

- [filename].html—for HTML files
- [filename].csv—for CSV files
- [filename].tsv—for TSV files

Step 8 Navigate to a directory where you want to store the file.

Step 9 Click **OK**.

Step 10 Repeat the task for each window that you want to export.

Step 11 Return to your originating procedure (NTP).

NTP-A196 View Alarms, History, Events, and Conditions

Purpose	Use this procedure to view current or historical alarms and conditions for a card, a node, or network. This information is useful for monitoring and troubleshooting hardware and software events.
Tools/Equipment	None
Prerequisite Procedures	None
Required/As Needed	As needed
Onsite/Remote	Onsite or remote
Security Level	Provisioning

Step 1 Complete the “[DLP-A60 Log into CTC](#)” task on page 3-26 at the node that contains the alarms you want to view. If you are already logged in, continue with [Step 2](#).

Step 2 In the card, node, or network view, click the **Alarms** tab to display the alarms for that card, node, or network ([Figure 9-3](#)).

Figure 9-3 CTC Node View

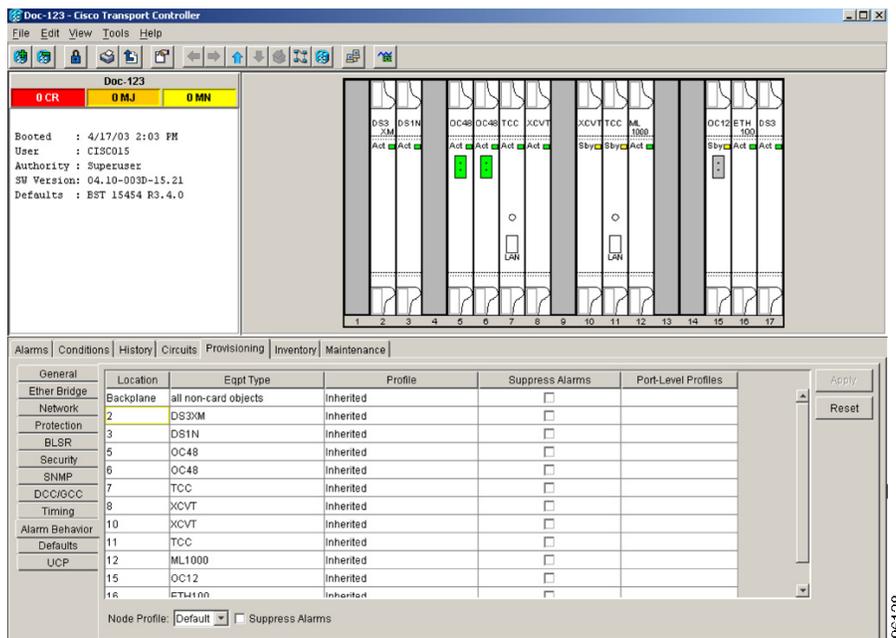


Table 9-1 lists the columns in the Alarms window and their descriptions.

Table 9-1 Alarm Column Descriptions

Column	Information Recorded
New	Indicates a new alarm; to change this status, click either the Synchronize button or the Delete Cleared Alarms button
Date	Date and time of the alarm
Node	Node where the alarm occurred (appears only in network view)
Object	TL1 access identifier (AID) for the alarmed object; for an STSmon or VTmon, this is the monitored STS or VT
Eqpt Type	Card type in this slot
Slot	Slot where the alarm occurred (appears only in network and node view)
Port	Port where the alarm is raised; for STSTerm and VTTerm, the port refers to the upstream card it is partnered with
Sev	Severity level: CR (critical), MJ (major), MN (minor), NA (not-alarmed), NR (not-reported)
ST	Status: R (raised), C (clear)
SA	When checked, indicates a service-affecting alarm
Cond	The error message/alarm name; these names are alphabetically defined in the “Alarm Troubleshooting” chapter of the <i>Cisco ONS 15454 Troubleshooting Guide</i>
Description	Description of the alarm
Num	An incrementing count of alarm messages
Ref	The reference number assigned to the alarm

Table 9-2 lists the color codes for alarm and condition severities.

Table 9-2 Color Codes for Alarms and Conditions

Color	Description
Red	Raised Critical (CR) alarm
Orange	Raised Major (MJ) alarm
Yellow	Raised Minor (MN) alarm
Magenta (pink)	Raised Not-Alarmed (NA) condition
Blue	Raised Not-Reported (NR) condition
White	Cleared (C) alarm or condition

Releases 4.0 and later have specifically numbered STS and VT alarm object identifiers based upon the object TL1 access identifiers (AIDs).

Table 9-3 Release 4.0 and Later Port-Based Alarm Numbering Scheme

Release 4.0 STS and VT Alarm Numbering		
MON object	STS-<Slot>-<Port>-<STS> For example, STS-6-1-6 VT1-<Slot>-<Port>-<STS>-<VT Group>-<VT> For example, VT1-6-1-6-1-1	Port=1
TERM object	<Upstream Slot>-<Port>-<STS> For example, STS-6-3-6 <Upstream Slot>-<Port>-<STS>-<VT Group>-<VT> For example, VT1-6-3-6-1-1	Port=1

- Step 3** If alarms are present, refer to the *Cisco ONS 15454 Troubleshooting Guide* for information and troubleshooting procedures.
- Step 4** Complete the “[DLP-A110 View Alarm History](#)” task on page 9-8, the “[DLP-A113 Synchronize Alarms](#)” task on page 9-11, or the “[DLP-A114 View Conditions](#)” task on page 9-11 as needed.

Stop. You have completed this procedure.

DLP-A110 View Alarm History

Purpose	Use this task to view past cleared and uncleared ONS 15454 alarm messages at the card, node, or network level. This task is useful for troubleshooting configuration, traffic, or connectivity issues that are indicated by alarms.
Tools/Equipment	None
Prerequisite Procedures	DLP-A60 Log into CTC, page 3-26
Required/As Needed	As needed
Onsite/Remote	Onsite or remote
Security Level	Retrieve

Step 1 Decide whether you want to view the alarm message history at the node, network, or card level.

Step 2 To view node alarm history:

- a. Click the **History > Session** tabs to view the alarms and conditions (events) raised during the current session.
- b. Click the **History > Node** tabs to retrieve all available alarm messages for the node.



Tip Double-click an alarm in the alarm table or an event (condition) message in the history table to display the view that corresponds to the alarm message. For example, double-clicking a card alarm takes you to card view. In network view, double-clicking a node alarm takes you to node view.

Step 3 To view network alarm history, from node view:

- a. Click **View > Go to Network View**.
- b. Click the **History** tab.

Alarms and conditions (events) raised during the current session appear.

Step 4 To view card alarm history, from network view click **View > Go to Previous View** to return to the node view.

Step 5 From node view, double-click a card on the shelf graphic to display the card-level view for the card.



Note TCC+/TCC2 and cross-connect cards do not have a card view.

- a. Click the **History > Session** tabs to view the alarm messages raised during the current session.
- b. Click the **History > Card** tabs to retrieve all available alarm messages for the card.



Note The ONS 15454 can store up to 640 critical alarm messages, 640 major alarm messages, 640 minor alarm messages, and 640 condition messages. When any of these limits is reached, the ONS 15454 discards the oldest events in that category.

Step 6 To display Not-Alarmed (NA) and transient event (condition) history from the node or card view:

- a. Check the **Events** check box in the History > Node window or History > Card window.

- b. Click **Retrieve**.

The window displays raised and cleared alarm messages (and events, if selected).



Tip Double-click an alarm in the alarm table or a condition in the history table to display the view that corresponds to the alarm message. For example, double-clicking a card alarm takes you to card view. In network view, double-clicking a node alarm takes you to node view.

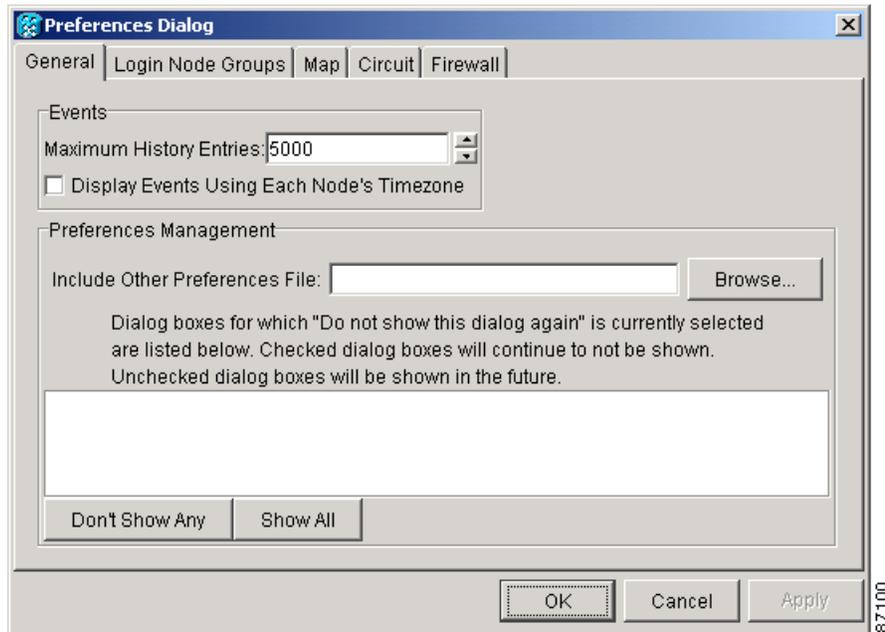
- Step 7** Return to your originating procedure (NTP).

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

Purpose	This task changes the maximum number of session entries included in the alarm history. Use this task to extend the history list in order to save information for future reference or troubleshooting.
Tools/Equipment	None
Prerequisite Procedures	DLP-A60 Log into CTC, page 3-26
Required/As Needed	As needed
Onsite/Remote	Onsite or remote
Security Level	Provisioning

- Step 1** From the Edit menu, choose **Preferences**.
The CTC Preferences Dialog box appears ([Figure 9-4](#)).

Figure 9-4 CTC Preferences Dialog Box



Step 2 Click the up or down arrow buttons next to the Maximum History Entries field to change the entry.

Step 3 Click **Apply** and **OK**.



Note Setting the Maximum History Entries value to the high end of the range uses more 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.

Step 4 Return to your originating procedure (NTP).

DLP-A112 Display Alarms and Conditions Using Time Zone

Purpose	Use this task to change the timestamp for events to the timezone of the ONS node reporting the alarm. By default, the events timestamp is set to the timezone for the CTC workstation.
Tools/Equipment	None
Prerequisite Procedures	DLP-A60 Log into CTC, page 3-26
Required/As Needed	As needed
Onsite/Remote	Onsite or remote
Security Level	Provisioning

-
- Step 1** From the Edit menu, choose **Preferences**.
The CTC Preferences Dialog box appears ([Figure 9-4 on page 9-10](#)).
- Step 2** Check the **Display Events Using Each Node's Timezone** check box. The Apply button is enabled.
- Step 3** Click **Apply** and **OK**.
- Step 4** Return to your originating procedure (NTP).
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DLP-A113 Synchronize Alarms

Purpose	Use this task to view ONS 15454 events at the card, node, or network level and to refresh the alarm listing while troubleshooting so that you can check for new and cleared alarms and conditions.
Tools/Equipment	None
Prerequisite Procedures	DLP-A60 Log into CTC, page 3-26
Required/As Needed	As needed
Onsite/Remote	Onsite or remote
Security Level	Retrieve

-
- Step 1** At the card, node, or network view, click the **Alarms** tab.
- Step 2** Click **Synchronize**.

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



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

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

DLP-A114 View Conditions

Purpose	Use this task to view conditions [events with a Not-Reported (NR) severity] at the card, node, or network level. Conditions give you a clear record of changes or events that do not result in alarms.
Tools/Equipment	None
Prerequisite Procedures	DLP-A60 Log into CTC, page 3-26
Required/As Needed	As needed
Onsite/Remote	Onsite or remote
Security Level	Retrieve

- Step 1** From the card, node, or network view, click the **Conditions** tab.
- Step 2** Click **Retrieve** (Figure 9-5).

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 9-5 Node View Conditions Window

Date	Object	EqptType	Slot	Port	Sev	SA	Cond	Description
01/01/70 18:02:02 CST	SYNC-NE				NA	SWTOPRI	Switch To Primary Reference	
01/01/70 18:02:02 CST	SYNC-NE				NA	SSM-ST3	Stratum 3 Traceable	
01/01/70 18:02:02 CST	BITS-2				NA	SSM-PRS	Stratum 1 Primary Reference Source Trac...	
01/01/70 18:02:02 CST	BITS-1				NA	SSM-PRS	Stratum 1 Primary Reference Source Trac...	
01/01/70 18:02:02 CST	SYNC-NE				NA	FRNGSYNC	Free Running Synchronization Mode	
01/01/70 18:02:08 CST	FAC-6-1	OC48	6	1	NA	AS-CMD	Alarms Suppressed By User Command	
01/01/70 21:27:48 CST	VT1-6-1	OC48	6	1	NR	AIS-V	Alarm Indication Signal - VT	
01/01/70 18:02:08 CST	FAC-5-1	OC48	5	1	NA	AS-CMD	Alarms Suppressed By User Command	
01/01/70 21:27:48 CST	VT1-5-1	OC48	5	1	NR	AIS-V	Alarm Indication Signal - VT	
01/01/70 18:05:09 CST	SLOT-12	ML1000	12		NA	NO-CONFIG	No Startup Config	

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 on page 9-27](#), for information.

Events that are reported as Major (MJ), Minor (MN), or Critical (CR) severities are alarms. Events that are reported as Not-Alerted (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-Alerted (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-A119 Suppress Alarm Reporting” task on page 9-31](#).

Current conditions are shown with the severity chosen in the alarm profile, if used. For more information about alarm profiles, see the [“NTP-A71 Create, Download, and Assign Alarm Severity Profiles” procedure on page 9-17](#).



Note When ports are placed out of service for maintenance (OOS-MT), they raise an Alarms Suppressed for Maintenance (AS-MT) condition. For information about alarm and condition troubleshooting, refer to the *Cisco ONS 15454 Troubleshooting Guide*.

- Step 3** If you want to apply exclusion rules, check the **Exclude Same Root Cause** check box at the node or network view, but do not check the Exclude Same Root Cause check box in card view.
- An exclusion rule eliminates all lower-level alarms or conditions that originate from the same cause. For example, a fiber break may cause an LOS alarm, an AIS condition, and an SF condition. If you check the Exclude Same Root Cause checkbox, only the LOS alarm will appear. According to Telcordia, exclusion rules apply to a query of “all conditions from a node.”
- Step 4** Return to your originating procedure (NTP).

NTP-A68 Delete Cleared Alarms from Display

Purpose	Use this procedure to delete Cleared (C) status alarms from the alarms window. The procedure can be used to delete transient messages from the CTC History window.
Tools/Equipment	None
Prerequisite Procedures	None
Required/As Needed	As needed
Onsite/Remote	Onsite or remote
Security Level	Retrieve

- Step 1** Log into a node where you want to delete alarms. See the “DLP-A60 Log into CTC” task on page 3-26 for instructions. If you are already logged in, go to [Step 2](#).
- Step 2** To delete cleared node-level alarms:
- In the node view, click the **Alarms** tab.
 - Click the **Delete Cleared Alarms** button, referring to the rules in [Step 5](#).
- This action removes any cleared ONS 15454 alarms from the Alarms display. The rows of cleared alarms turn white and have a C in their status (ST) column ([Figure 9-5 on page 9-12](#)).
- Step 3** To delete cleared card-level alarms:
- In the node view, double-click the card graphic for the card you want to open.
 - Click the **Alarms** tab and then click the **Delete Cleared Alarms** button, referring to the rules in [Step 5](#).
- Step 4** To delete cleared network-level alarms:
- In the node view click **View > Go to Network View**.
 - Click the **Alarms** tab and then click the **Delete Cleared Alarms** button, referring to the rules in [Step 5](#).

- Step 5** Consult the following rules when deleting cleared alarms from the display:
- If the Autodelete Cleared Alarms check box is checked, an alarm disappears from the window when it is cleared.
 - If the Autodelete Cleared Alarms check box is not checked, an alarm remains in the window when it is cleared. The alarm appears white in the window and has a Clear (CL) severity. The alarm can be removed by clicking the Delete Cleared Alarms button.
- Step 6** Transient messages are single messages and not raise-and-clear pairs (that is, they do not have companion messages stating they are cleared). Click the **Delete Cleared Alarms** button to remove the transients from the History window.
- Stop. You have completed this procedure.**
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NTP-A69 View Alarm-Affected Circuits

Purpose	Use this procedure to view all circuits, if any, affected by an alarm or condition.
Tools/Equipment	None
Prerequisite Procedures	NTP-A196 View Alarms, History, Events, and Conditions, page 9-5
Required/As Needed	As needed
Onsite/Remote	Onsite or remote
Security Level	Retrieve

- Step 1** Complete the “[DLP-A60 Log into CTC](#)” task on page 3-26. If you are already logged in, continue with [Step 2](#).
- Step 2** In the network, node, or card view, click the **Alarms** tab or **Conditions** tab and then right-click anywhere in the row of an active alarm or condition.



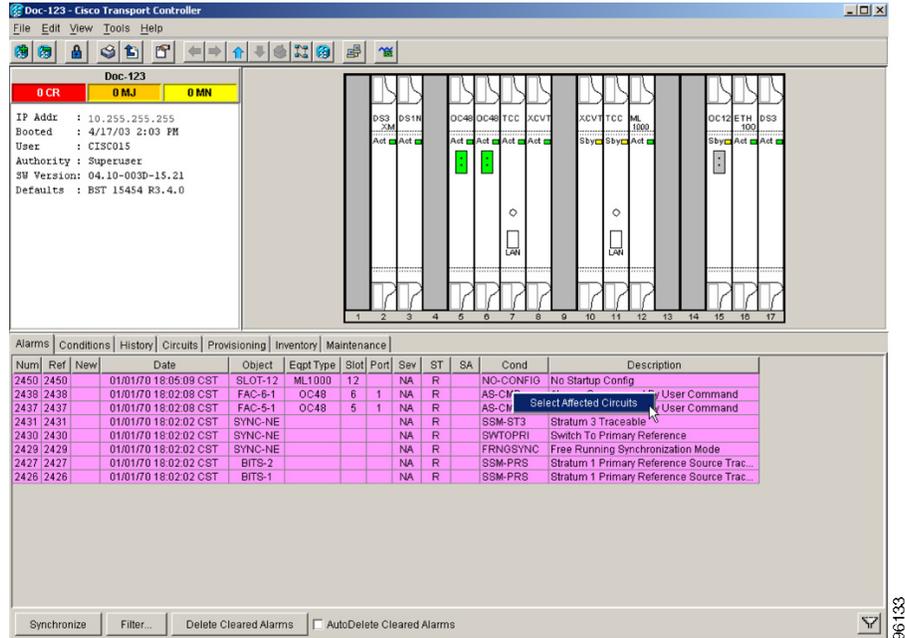
Note The node view is the default, but you can also navigate to the Alarms tab in the network view or card view to perform Step 2.



Note The card view is not available for the TCC+/TCC2 or cross-connect cards.

The Select Affected Circuit option appears on the shortcut menu ([Figure 9-6](#)).

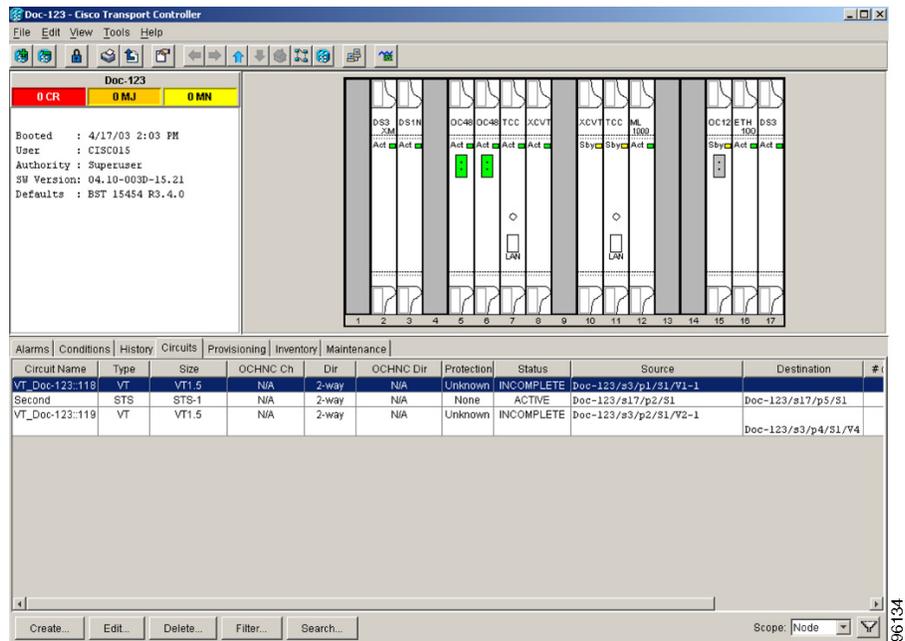
Figure 9-6 Select Affected Circuits Option



Step 3 Left-click or right-click **Select Affected Circuits**.

The Circuits window appears with the affected circuits highlighted (Figure 9-7).

Figure 9-7 Viewing Alarm-Affected Circuits



Step 4 If you want to search for particular circuits, see the “DLP-A131 Search for Circuits” task on page 11-7.

Stop. You have completed this procedure.

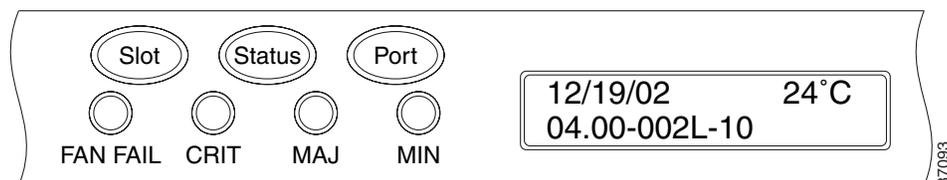
NTP-A70 View Alarm Counts on the LCD for a Node, Slot, or Port

Purpose	Use this procedure to find out how many alarms have occurred on a node, slot, or port without using CTC.
Tools/Equipment	None
Prerequisite Procedures	None
Required/As Needed	As needed
Onsite/Remote	Onsite
Security Level	Retrieve

- Step 1** If you want to view the alarm count for the node, press the **Slot** button on the LCD panel until Node appears on the LCD.
- Step 2** To view the node alarm summary, press the **Status** button.
- Step 3** To view the node-level alarm summary:
- Press the **Port** button to toggle to Port 0.
 - Press the **Status** button.
- Step 4** To view the card-level alarm count, press the **Slot** button.
- Step 5** To view the slot alarm summary, wait 8 seconds after pressing Slot and the LCD is automatically updated with the summary of all alarms for the slot. To toggle to summaries for different slots, press the **Slot** button again.
- Step 6** To view port-level alarm counts:
- Press the **Port** button to toggle to Port 0.
 - Press **Status** to get slot card-level alarm counts.
 - To toggle to a the alarm count for a different port, press the **Port** button again.
 - Press **Slot** to toggle back to the node summary.

Figure 9-8 shows the LCD panel.

Figure 9-8 The LCD Panel





Note A blank LCD results when the fuse on the AIP board is blown. If this occurs, log into <http://www.cisco.com/tac> for more information or log into <http://www.cisco.com/warp/public/687/Directory/DirTAC.shtml> to obtain a directory of Cisco TAC toll-free numbers for your country.

Stop. You have completed this procedure.

NTP-A71 Create, Download, and Assign Alarm Severity Profiles

Purpose	Use this procedure to create a customized copy of the default alarm profile applied to a node, to download a saved custom profile from a network location to another node, to assign custom severities individually to a port, card, or node, and to delete alarm profiles.
Tools/Equipment	None
Prerequisite Procedures	None
Required/As Needed	As needed
Onsite/Remote	Onsite or remote
Security Level	Provisioning or higher

-
- Step 1** Complete the “[DLP-A60 Log into CTC](#)” task on page 3-26 at the node where you want to create an alarm profile. If you are already logged in, continue with [Step 2](#) to clone or modify an alarm profile, or go to [Step 3](#) to download an alarm profile.
- Step 2** Complete the “[DLP-A115 Create Alarm Severity Profiles](#)” task on page 9-18. This task clones a current alarm profile, renames the profile, and customizes the new profile. Go to [Step 4](#).
- Step 3** Complete the “[DLP-A223 Download an Alarm Severity Profile](#)” task on page 9-20. This task downloads an alarm severity profile from a CD or a node.
- Step 4** As necessary, complete the “[DLP-A429 Apply Alarm Profiles to Ports](#)” task on page 9-21 or the “[DLP-A117 Apply Alarm Profiles to Cards and Nodes](#)” task on page 9-23.

Stop. You have completed this procedure.

DLP-A115 Create Alarm Severity Profiles

Purpose	Use this task to create a custom severity profile by modifying the default severity profile.
Tools/Equipment	None
Prerequisite Procedures	DLP-A60 Log into CTC, page 3-26
Required/As Needed	As needed
Onsite/Remote	Onsite or remote
Security Level	Provisioning or higher

- Step 1** From the View menu choose **Go to Network View**.
- Step 2** Click the **Provisioning > Alarm Profiles** tabs ([Figure 9-3 on page 9-6](#)).
- Step 3** Click **Load**.
- Step 4** In the Select Profile(s) from Node or Filename to Load dialog box, click the **From Node** radio button.
- Step 5** Click the node name you are logged into in the Node Names list.
- Step 6** Click **Default** in the Profile Names list.
- Step 7** Click **OK**.

The default alarm severity profile appears in the Alarm Profiles window ([Figure 9-9](#)).



Note The alarm profile list contains a master list of alarms that is used for a mixed node network. Some of these alarms may not be used in all ONS nodes.

Figure 9-9 Network View Alarm Profiles Window

AlarmType:Condition	Default
AIC-AEP:EQPT	CR
AIC-AEP:MFGMEM	CR
AIC-AIE:EQPT	CR
AIC-AIE:MFGMEM	CR
AIP:INVMACADR	MJ
AIP:MEA	CR
AIP:MFGMEM	CR
BITS:AIS	NR
BITS:LOF	MJ
BITS:LOS	MJ
BITS:SSM-DUS	NA
BITS:SSM-FAIL	NA
BITS:SSM-OFF	NA

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Step 8 Right-click anywhere in the Default profile column to display the profile editing shortcut menu.

Step 9 Click **Clone** in the shortcut menu.



Tip To find out which profiles are available for loading or cloning, click the Available button. You cannot clone Inherited profiles.

Step 10 In the Clone Profile dialog box, enter a name for the copied profile in the New Profile Name field.

Profile names must be unique. If you try to import or name a profile that has the same name as another profile, CTC adds a suffix to create a new name. Long file names are supported.

Step 11 Click **OK**.

A new alarm profile (named in [Step 10](#)) is created. This profile duplicates the default profile severities and appears to the right of the default profile in the Alarm Profiles window. You can highlight it and drag it to a different position.

Step 12 Modify (customize) the new alarm profile:

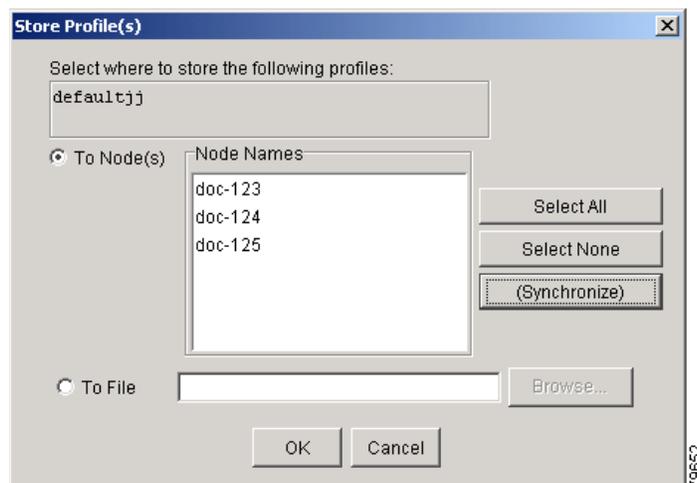
- a. In the new alarm profile column, double-click the alarm severity you want to change.
- b. Click the desired severity in the drop-down menu.
- c. Repeat Steps [a](#) and [b](#) for each severity you want to customize.

Step 13 After you have customized the new alarm profile, right-click the profile column to highlight it.

Step 14 Click **Store** in the profile editing shortcut menu.

Step 15 Click the **To Node(s)** radio button and go to [Step a](#) or click the **To File** radio button and go to [Step b](#) ([Figure 9-10](#)).

Figure 9-10 Store Profiles Dialog Box



a. Choose the node(s) where you want to save the profile:

- If you want to save the profile to only one node, click the node in the Node Names list.
- If you want to save the profile to all nodes, click **Select All**.
- If you do not want to save the profile to any nodes, click **Select None**.
- If you want to update alarm profile information, click **(Synchronize)**.

- b. Navigate to the profile save location by clicking **Browse**.
 - Enter a name in the File name field.
 - Click **Select** to choose this name and location.



Note Long file names are supported. CTC supplies a suffix of *.pfl to stored files.

- c. Click the **OK** button to store the profile.



Note Click the Hide Identical Rows check box to configure the Alarm Profiles window to display rows with dissimilar severities.



Note Click the Hide Reference Values check box to configure the Alarm Profiles window to display severities that do not match the Default profile.

Step 16 Return to your originating procedure (NTP).

DLP-A223 Download an Alarm Severity Profile

Purpose	Use this task to download a custom alarm severity profile from a network-drive accessible CD-ROM, floppy disk, or hard disk location.
Tools/Equipment	None
Prerequisite Procedures	DLP-A60 Log into CTC, page 3-26
Required/As Needed	As needed
Onsite/Remote	Onsite or remote
Security Level	Provisioning or higher

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

Step 2 Click the **Provisioning > Alarm Profiles** tabs.

Step 3 Click **Load**.

Step 4 If you want to download a file from the local PC hard drive, floppy disk, CD-ROM, or a network drive (if connected), click the **From File** radio button in the Select Profile(s) from Node or Filename to Load dialog box.

- a. Click **Browse**.
The Open dialog box appears.
- b. In the Look in pull-down menu, click to navigate to the folder where the profile file is located.
- c. Click the name in the window to highlight it.



Note The file must have the *.pfl extension.

- d. Click **Open**.
- Go to [Step 6](#).
- Step 5** If you want to download a file from the login node or another connected node, click the **From Node** radio button in the Select Profile(s) from Node or Filename to Load dialog box.
- Click the node where the profile is located under the Node Names list.
 - Click the profile under the Profile Names list.
- Step 6** Click **OK** in the Select Profile(s) from Node or Filename to Load dialog box.
- The downloaded profile appears at the right side of the Alarm Profiles window.
- Step 7** Right-click anywhere in the downloaded profile column to display the profile editing shortcut menu.
- Step 8** Click **Store** in the shortcut menu.
- Step 9** In the Store Profile(s) dialog box, click **To Node(s)**.
- Choose the node(s) where you want to save the profile:
 - If you want to save the profile to only one node, click the node in the Node Names list.
 - If you want to save the profile to all nodes, click **Select All**.
 - If you do not want to save the profile to any nodes, click **Select None**.
 - If you want to update alarm profile information, click **Synchronize**.
 - Click **OK**.
- Step 10** Return to your originating procedure (NTP).

DLP-A429 Apply Alarm Profiles to Ports

Purpose	Use this task to apply a custom or default alarm severity profile to a port or ports.
Tools/Equipment	None
Prerequisite Procedures	DLP-A115 Create Alarm Severity Profiles, page 9-18 DLP-A60 Log into CTC, page 3-26
Required/As Needed	As needed
Onsite/Remote	Onsite or remote
Security Level	Provisioning or higher

- Step 1** In the node view, double-click a card to display the card view.



Note You can also apply alarm profiles to cards using the “[DLP-A117 Apply Alarm Profiles to Cards and Nodes](#)” task on page 9-23.



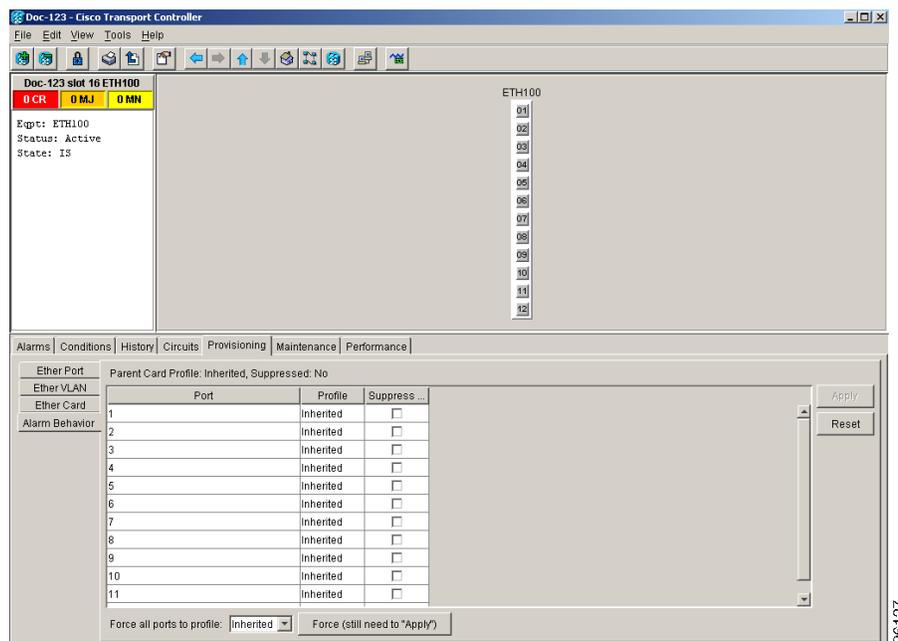
Note The card view is not available for the TCC+/TCC2 or cross-connect cards.

- Step 2** Depending on which card you want to apply the profile to, click the following tabs:

- If the card is an E-Series Ethernet, G-Series Ethernet, MXP, TXP, OC-N, or electrical traffic (DS-1 or DS-3) card, click the **Provisioning > Alarm Behavior** tabs.
- If the card is an ML-Series Ethernet (traffic) card, click the **Provisioning > Ether Alarming** tabs or the **Provisioning > POS Alarming** tabs, depending on whether you want to apply the profile to the front physical ports (“Ether alarming”) or packet over SONET (“POS alarming”). For more information about ML-Series card ports and service, see the *Cisco ONS 15454 SONET/SDH ML-Series Multilayer Ethernet Card Software Feature and Configuration Guide*.
- If the card is an OSCM or OSC-CSM DWDM card, click the **Provisioning > OC3 Line** tab or **Provisioning > Optical Line** tab and the Alarm Behavior subtab.
- If the card is a 32MUX-O or 32DMX-O DWDM card, click the **Provisioning > Optical Chn** or **Provisioning > Line** tab and the Alarm Behavior subtab.
- If the card is an OPT-PRE or OPT-BST DWDM card, click the **Provisioning > Optical Line** or **Provisioning > Optical Ampli. Line** and the Alarm Behavior subtab.
- If the card is a channel add/drop DWDM card (AD-1C-xx.x, AD-2C-xx.x, AD-4C-xx.x) click the **Provisioning > Optical Line** or **Provisioning > Optical Chn** tab and the Alarm Behavior subtab.
- If the card is a band add/drop (AD-1B-xx.x, AD-2B-xx.x, AD-4B-xx.x) DWDM card, click the **Provisioning > Optical Line** or **Provisioning > Optical Band** tab and the Alarm Behavior subtab.

Figure 9-11 shows the alarm profile of Ethernet card ports. CTC shows Parent Card Profile: Inherited.

Figure 9-11 Card View Port Alarm Profile



Go to [Step 3](#) to apply profiles to a port. Go to [Step 4](#) to apply profiles to all ports on a card.

Step 3 To apply profiles on a port basis:

- Click the port row under the Profile column.
- Choose the new profile from the drop-down menu.
- Click **Apply**.

- Step 4** To apply profiles to all ports on a card:
- Click the **Force all ports to profile** menu arrow at the bottom of the window.
 - Choose the new profile from the drop-down menu.
 - Click **Force (still need to “Apply”)**.
 - Click **Apply**.



Tip Click Reset to return to the previous profile setting unless you have already clicked Apply. To return to the previous profile if you have already applied it, select the previous profile and click Apply again.

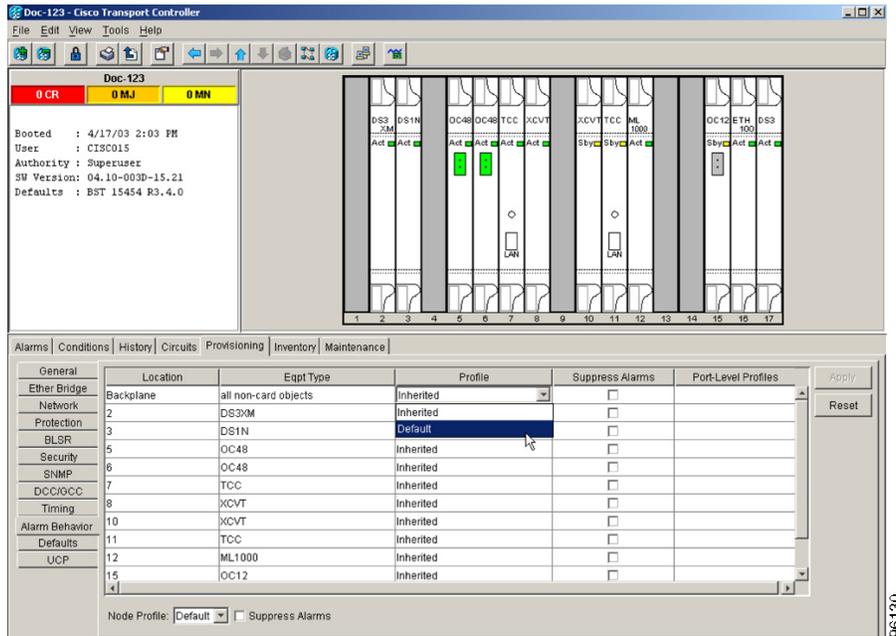
- Step 5** Return to your originating procedure (NTP).

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-A115 Create Alarm Severity Profiles, page 9-18 DLP-A60 Log into CTC, page 3-26
Required/As Needed	As needed
Onsite/Remote	Onsite or remote
Security Level	Provision

- Step 1** In node view, click the **Provisioning > Alarm Behavior** tabs ([Figure 9-12](#)).

Figure 9-12 Node View Alarm Profile



- Step 2** To apply profiles to a card:
- Click the Profile row for the card.
 - Choose the new profile from the drop-down menu.
 - Click **Apply**.
- Step 3** To apply the profile to an entire node:
- Click the **Node Profile** menu arrow at the bottom of the window (Figure 9-12).
 - Click the new alarm profile in the drop-down menu.
 - Click **Apply**.



Tip Click Reset to return to the previous profile setting unless you have already clicked Apply. To return to the previous profile if you have already applied it, select the previous profile and click Apply again.

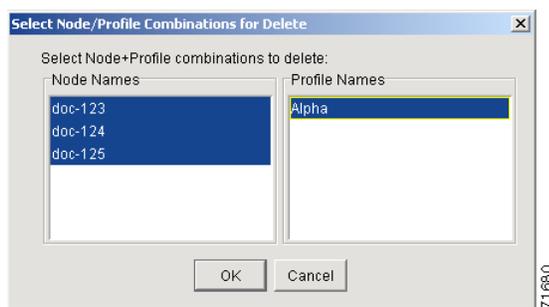
- Step 4** Return to your originating procedure (NTP).

DLP-A118 Delete Alarm Severity Profiles

Purpose	This task deletes a custom or default alarm severity profile.
Tools/Equipment	None
Prerequisite Procedures	DLP-A60 Log into CTC, page 3-26
Required/As Needed	As needed
Onsite/Remote	Onsite or remote
Security Level	Provision

- Step 1** From the View menu choose **Go to Network View**.
- Step 2** Click the **Provisioning > Alarm Profiles** tabs.
- Step 3** Click the column heading for the profile column you want to delete.
The selected alarm profile name is displayed in the Description field.
- Step 4** Click **Delete**.
The Select Node/Profile Combination for Delete dialog box appears ([Figure 9-13](#)).

Figure 9-13 Select Node/Profile Combination For Delete Dialog Box



- Step 5** Click the node name(s) in the Node Names list to highlight the profile location.



Tip If you hold the Shift key down, you can select consecutive node names. If you hold the Ctrl key down, you can select any combination of nodes.

- Step 6** Click the profile name(s) you want to delete in the Profile Names list.

- Step 7** Click **OK**.

The Delete Alarm Profile confirmation dialog box appears.

- Step 8** Click **Yes** for each Delete Alarm Profile confirmation dialog box.



Note If you delete a profile from a node, it is still displayed in the network view Provisioning > Alarm Profiles window unless you remove it by choosing Remove.

- Step 9** To remove the alarm profile from the Provisioning > Alarm Profiles window, right-click the column of the profile you deleted and choose **Remove** from the shortcut menu.



Note If a node and profile combination is selected but does not exist, a warning appears: “One or more of the profile(s) selected do not exist on one or more of the node(s) selected.” For example, if node A has only profile 1 and the user tries to delete both profile 1 and profile 2 from node A, this warning appears. However, the operation still removes profile 1 from node A.



Note The Default and Inherited special profiles cannot be deleted and do not appear in the Select Node/Profile Combination for Delete Window.

Return to your originating procedure (NTP).

NTP-A168 Enable, Modify, or Disable Alarm Severity Filtering

Purpose	Use this procedure to start, change, or stop alarm filtering for one or more severities in the Alarms, Conditions, and History windows in all network nodes.
Tools/Equipment	None
Prerequisite Procedures	None
Required/As Needed	As needed
Onsite/Remote	Onsite or remote
Security Level	Retrieve

- Step 1** Complete the “[DLP-A60 Log into CTC](#)” task on page 3-26 at the node where you want to enable alarm severity filtering. If you are already logged in, continue with [Step 2](#).
- Step 2** As necessary, complete the “[DLP-A225 Enable Alarm Filtering](#)” task on page 9-27. This task enables alarm filtering at the card, node, and network views for all nodes in the network. Alarm filtering can be enabled for alarms, conditions, or events.
- Step 3** As necessary, complete the “[DLP-A226 Modify Alarm and Condition Filtering Parameters](#)” task on page 9-27 to modify the alarm filtering for network nodes to show or hide particular alarms or conditions.
- Step 4** As necessary, complete the “[DLP-A227 Disable Alarm Filtering](#)” task on page 9-30 to disable alarm profile filtering for all network nodes.

Stop. You have completed this procedure.

DLP-A225 Enable Alarm Filtering

Purpose	Use this task to enable alarm filtering for alarms, conditions, or event history in all network nodes.
Tools/Equipment	None
Prerequisite Procedures	DLP-A60 Log into CTC, page 3-26
Required/As Needed	As needed
Onsite/Remote	Onsite or remote
Security Level	Retrieve

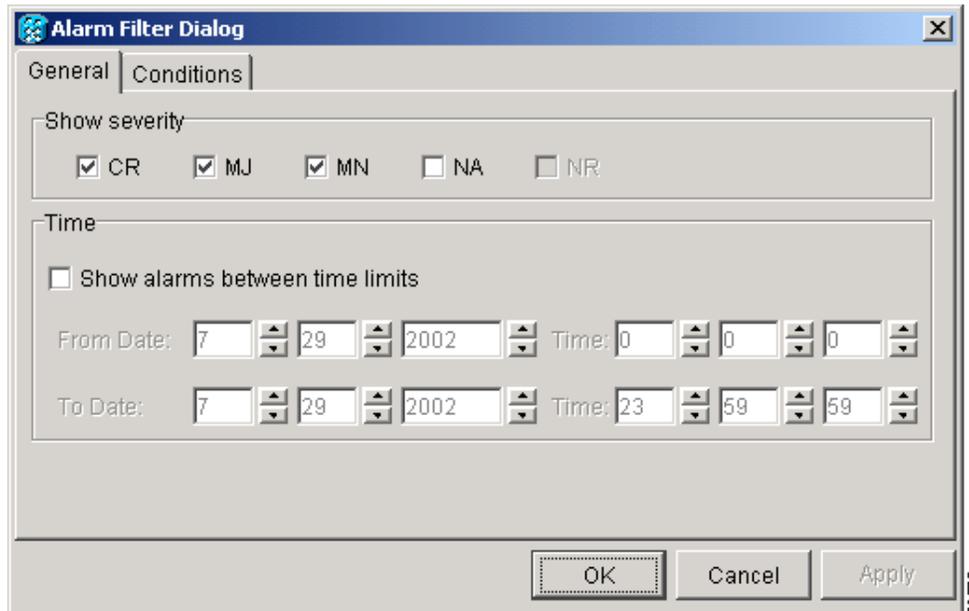
-
- Step 1** At the node, network, or card view, click the **Alarms** tab.
- Step 2** Click the **Filter** tool at the lower-right side of the bottom toolbar.
- Alarm filtering is enabled if the tool is selected and disabled if the tool is raised (not selected).
- Alarm filtering will be enabled in the card, node, and network views of the Alarms tab at the node and for all other nodes in the network. If, for example, the Alarm Filter tool is enabled in the Alarms tab of the node view at one node, the Alarms tab in the network view and card view of that node will also show the tool enabled. All other nodes in the network will also have the tool enabled.
- If you filter an alarm in card view, the alarm will still be displayed in node view. In this view, the card will display the color of the highest-level alarm. The alarm is also shown for the node in the network view.
- Step 3** If you want alarm filtering enabled when you view conditions, repeat Steps 1 and 2 using the Conditions window.
- Step 4** If you want alarm filtering enabled when you view alarm history, repeat Steps 1 and 2 using the History window.
- Step 5** Return to your originating procedure (NTP).
-

DLP-A226 Modify Alarm and Condition Filtering Parameters

Purpose	Use this task to change alarm and condition reporting in all network nodes.
Tools/Equipment	None
Prerequisite Procedures	DLP-A225 Enable Alarm Filtering, page 9-27 DLP-A60 Log into CTC, page 3-26
Required/As Needed	As needed
Onsite/Remote	Onsite or remote
Security Level	Retrieve

-
- Step 1** At the node, network, or card view, click the **Alarms** tab.
- Step 2** Click the **Filter** button at the lower-left of the bottom toolbar.
- The Alarm Filter Dialog box appears, showing the General tab ([Figure 9-14](#)).

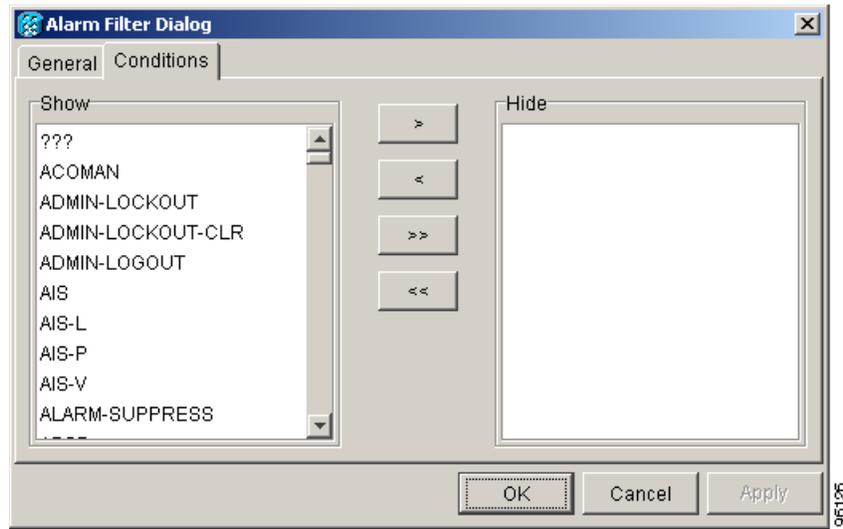
Figure 9-14 Alarm Filter Dialog Box General Tab



In the General tab Show Severity box, you can choose which alarm severities will show through the alarm filter and provision a time period during which filtered alarms show through the filter. To change the alarm severities shown in the filter, go to [Step 3](#) To change the time period filter for the alarms go to [Step 4](#)

- Step 3** In the Show Severity area, click the check boxes for the severities [Critical (CR), Major (MJ), Minor (MN), or Not-Alerted (NA)] you want to be reported at the network level. Leave severity check boxes deselected (unchecked) to keep them from appearing.
- When alarm filtering is disabled, all alarms show.
- Step 4** In the Time area, click the **Show alarms between time limits** check box to enable it. Then click the up and down arrows in the From Date, To Date, and Time fields to modify what period of alarms are shown.
- To modify filter parameters for conditions, continue with [Step 5](#). If you do not need to modify them, continue with [Step 6](#).
- Step 5** Click the **Conditions** tab ([Figure 9-15](#)).

Figure 9-15 Alarm Filter Dialog Box Conditions Tab



When alarm filtering is enabled, conditions in the Show list are visible and conditions in the Hide list are invisible.

- To move conditions individually from the Show list to the Hide list, click the > button.
- To move conditions individually from the Hide list to the Show list, click the < button.
- To move conditions collectively from the Show list to the Hide list, click the >> button.
- To move conditions collectively from the Hide list to the Show list, click the << button.



Note Conditions include alarms.

Step 6 Click **Apply** and **OK**.

Alarm and condition filtering parameters are enforced when alarm filtering is enabled (see the [“DLP-A225 Enable Alarm Filtering” task on page 9-27](#)), and are not enforced when alarm filtering is disabled (see the [“DLP-A227 Disable Alarm Filtering” task on page 9-30](#)).

Step 7 Return to your originating procedure (NTP).

DLP-A227 Disable Alarm Filtering

Purpose	Use this task to turn off specialized alarm filtering in all network nodes so that all severities are reported in CTC.
Tools/Equipment	None
Prerequisite Procedures	DLP-A225 Enable Alarm Filtering, page 9-27 DLP-A60 Log into CTC, page 3-26
Required/As Needed	As needed
Onsite/Remote	Onsite or remote
Security Level	Retrieve

-
- Step 1** At the node, network, or card view, click the **Alarms** tab.
- Step 2** Click the **Filter** tool at the lower-right side of the bottom toolbar.
Alarm filtering is enabled if the tool is indented and disabled if the tool is raised (not selected).
- Step 3** If you want alarm filtering disabled when you view conditions, click the **Conditions** tab and repeat [Step 2](#).
- Step 4** If you want alarm filtering disabled when you view alarm history, click the **History** tab and repeat [Step 2](#).
- Step 5** Return to your originating procedure (NTP).
-

NTP-A72 Suppress Alarms and Discontinue Alarm Suppression

Purpose	Use this procedure to prevent alarms from being reported for a port, card, or node in circumstances when an alarm or condition is known to exist but you do not want to include it in the display. Also use this procedure to resume normal alarm reporting by discontinuing the suppression.
Tools/Equipment	None
Prerequisite Procedures	None
Required/As Needed	As needed
Onsite/Remote	Onsite or remote
Security Level	Provisioning

-
- Step 1** Complete the [“DLP-A60 Log into CTC” task on page 3-26](#) for instructions. If you are already logged in, continue with [Step 2](#).
- Step 2** Complete the [“DLP-A119 Suppress Alarm Reporting” task on page 9-31](#) to make the node send out autonomous messages that clear particular raised alarms and cause the suppressed alarms to appear in the Conditions window.



Note Suppressing one or more alarms prevents them from appearing in Alarm or History windows or in any other clients. The suppress command causes CTC to display them in the Conditions window, where Not-Reported (NR) events are shown. The suppressed alarms appear there with their severity, their severity color code, and service-affecting status.

Step 3 Complete the “[DLP-A120 Discontinue Alarm Suppression](#)” task on page 9-32 to remove the suppress command and resume normal alarm reporting.

Stop. You have completed this procedure.

DLP-A119 Suppress Alarm Reporting

Purpose	This task suppresses the reporting of ONS 15454 alarms at the port, card, or node level.
Tools/Equipment	None
Prerequisite Procedures	DLP-A60 Log into CTC , page 3-26
Required/As Needed	As needed
Onsite/Remote	Onsite or remote
Security Level	Provisioning



Caution If multiple CTC/TL1 sessions are open, suppressing alarms in one session suppresses the alarms in all other open sessions.

Step 1 At either the node or card view, click the **Provisioning > Alarm Behavior** tabs.

Step 2 At the node level, you can suppress alarms on a card basis or for the entire node. At the card level, you can suppress alarms on a port basis.

- a. To suppress alarms at the node level for the entire node, check the **Suppress Alarms** column check box located at the bottom-left of the window.
- b. To suppress alarms at the node level for individual cards, check the **Suppress Alarms** column check box for the slot row where you want to suppress alarms ([Figure 9-12 on page 9-24](#)).



Note In node view, row numbers correspond to slot numbers.

- c. Click **Apply** (whether or not you complete the next step).
The node sends out autonomous messages to clear any raised alarms.

Step 3 To suppress alarms at the card level for ports:

- a. Double-click the card.
- b. Click the **Provisioning > Alarm Behavior** tabs.
- c. Check the **Suppress Alarms** column check box for the port row where you want to suppress alarms ([Figure 9-11 on page 9-22](#)).
- d. Click **Apply**.

**Caution**

If multiple CTC sessions are open, suppressing alarms in one session suppresses the alarms in all other open sessions.

Step 4 Return to your originating procedure (NTP).

DLP-A120 Discontinue Alarm Suppression

Purpose	This task discontinues alarm suppression and reenables alarm reporting on a port, card, or node.
Tools/Equipment	None
Prerequisite Procedures	DLP-A119 Suppress Alarm Reporting, page 9-31 DLP-A60 Log into CTC, page 3-26
Required/As Needed	As needed
Onsite/Remote	Onsite or remote
Security Level	Provisioning

-
- Step 1** To discontinue alarm suppression for the entire node, uncheck the **Suppress Alarms** check box at the lower-left of the Alarm Behavior window.
- Step 2** To discontinue alarm suppression for individual cards that you suppressed at the node level:
- Uncheck the check box in the Suppress Alarms column for that card.
 - Click **Apply**.
- Step 3** To discontinue alarm suppression for ports that you suppressed at the card level:
- Double-click the card to display the card view.
 - Uncheck the **Suppress Alarms** check box for the port(s) you no longer want to suppress.
 - Click **Apply**.
- Step 4** Return to your originating procedure (NTP).
-

NTP-A32 Provision External Alarms and Controls on the Alarm Interface Controller

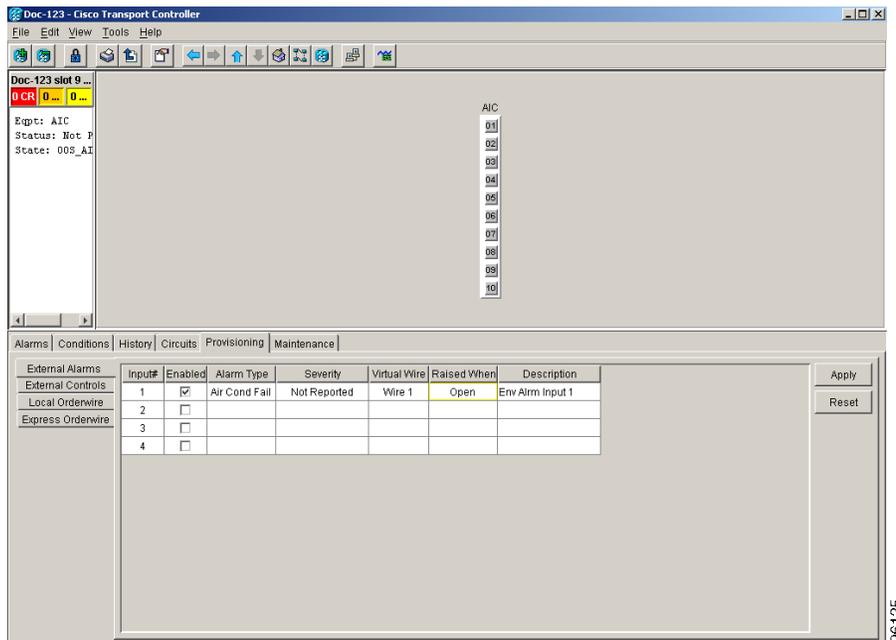
Purpose	Use this procedure to create external (environmental) alarms and external controls for the Alarm Interface Controller (AIC) card.
Tools/Equipment	An AIC card must be installed in Slot 9.
Prerequisite Procedures	NTP-A24 Verify Card Installation, page 4-2
Required/As Needed	As needed
Onsite/Remote	Onsite or remote
Security Level	Provisioning or higher


Note

For information about the AIC-I external alarms and controls, virtual wire, and orderwire, refer to the *Cisco ONS 15454 Reference Manual*.

-
- Step 1** Verify the backplane wiring. See the “[NTP-A8 Attach Wires to Alarm, Timing, LAN, and Craft Pin Connections](#)” procedure on page 1-36 for information about the ONS 15454 backplane pins.
- For external alarms, verify that the external-device relays are wired to the ENVIR ALARMS IN backplane pins.
 - For external controls, verify the external relays are wired to the ENVIR ALARMS OUT backplane pins.
- Step 2** In the node view, double-click the AIC card on the shelf graphic. The card view appears.
- Step 3** If you are provisioning external alarms, click the **Provisioning > External Alarms** tabs ([Figure 9-16](#)). If you are not provisioning external alarms, skip Steps 4 through 6 and go to [Step 7](#).

Figure 9-16 AIC Card External Alarms



Step 4 Complete the following fields for each external device wired to the ONS 15454 backplane:

- **Enabled**—Check the check box to activate the fields for the alarm input number.
- **Alarm Type**—Choose an alarm type from the drop-down menu.
- **Severity**—Click a severity in the drop-down menu.

The severity determines the severity the alarm has in the Alarms and History tabs and determines whether the LEDs are activated. Critical (CR), Major (MJ), and Minor (MN) alarms activate the LEDs. Not-Alerted (NA) and Not-Reported (NR) do not activate LEDs, but do report the information in CTC.

- **Virtual Wire**—Choose the virtual wire number in the drop-down menu to assign the external device to a virtual wire. Otherwise, do not change the None default. For information about the AIC virtual wire, see the *Cisco ONS 15454 Reference Manual*.
- **Raised When**—From the drop-down menu, choose the contact condition (open or closed) that triggers the alarm.
- **Description**—A default description is provided; enter a different description if needed.

Step 5 To provision up to four virtual wire inputs for external devices, complete [Step 4](#) for each additional device.

Step 6 Click **Apply**.

Step 7 If you are provisioning external control outputs for external devices, click the **External Controls** subtab.

Step 8 Complete the following options for each external control wired to the ONS 15454 backplane:

- **Enabled**—Check this check box to activate the fields for the alarm input number.
- **Control Type**—Choose the control type from the drop-down menu: air conditioner, engine, fan, generator, heat, light, sprinkler, or miscellaneous.
- **Trigger Type**—Choose a trigger type: a local minor, major, or critical alarm; a remote minor, major, or critical alarm; or a virtual wire activation.

- Description—Enter a description.

Step 9 To provision additional external controls, complete Steps 7 and 8 for each additional device.

Step 10 Click **Apply**.



Note When you provision an external alarm, the alarm object is ENV-IN-nn. The variable nn refers to the external alarm's number, regardless of the name you assign.



Note Environmental alarms that you create (and name) should be recorded locally for the NE. Both the Alarm name and resolution are node-specific.

Stop. You have completed this procedure.

NTP-A248 Provision External Alarms and Controls on the Alarm Interface Controller-International

Purpose	Use this procedure to create external (environmental) alarms and external controls for the AIC-I card.
Tools/Equipment	An AIC-I card must be installed in Slot 9.
Prerequisite Procedures	NTP-A24 Verify Card Installation, page 4-2
Required/As Needed	As needed
Onsite/Remote	Onsite or remote
Security Level	Provisioning or higher



Note AIC-I alarm provides direct alarm contacts (external alarm inputs and external control outputs) for ONS 15454 and ONS 15454 SDH systems. In the ONS-145454 ANSI shelf, these AIC-I alarm contacts are routed through the backplane to wire-wrap pins accessible from the back of the shelf. If you install an Alarm Expansion Panel (AEP), the AIC-I alarm contacts cannot be used. Only the alarm expansion panel (AEP) alarm contacts can be used. For further information about the AEP, see [“NTP-A119 Install the Alarm Expansion Panel” procedure on page 1-32](#) and the [“NTP-A120 Install an External Wire-Wrap Panel to the AEP” procedure on page 1-43](#).



Note For information about the AIC-I alarms, controls, and virtual wire, refer to the *Cisco ONS 15454 Reference Manual*.

Step 1 Verify the backplane wiring. If you are using the AEP, see the [“NTP-A119 Install the Alarm Expansion Panel” procedure on page 1-32](#). Otherwise, see the [“NTP-A8 Attach Wires to Alarm, Timing, LAN, and Craft Pin Connections” procedure on page 1-36](#) for information about the ONS 15454 backplane pins.

- For external alarms, verify that the external device relays are wired to the ENVIR ALARMS IN backplane pins.

- b. For external controls, verify that the external device relays are wired to the ENVIR ALARMS OUT backplane pins.

Step 2 In the node view, double-click the AIC-I card on the shelf graphic. The card view appears.

Step 3 Click the **Provisioning > Card** tabs.

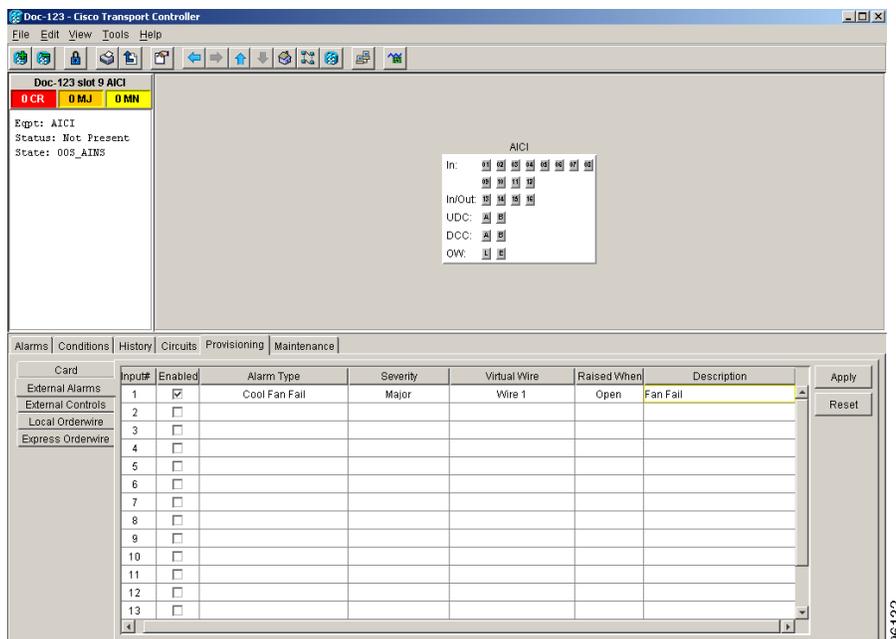
Step 4 In the Input/Output area, click one of the following options:

- Add Extension—Check this check box if you are using the AEP.
- Extension Type—The AEP radio button is automatically selected if you checked the Add Extension check box.
- Input/Output—Select **External Alarm** if you use external alarms only; select **External Control** if you use both external alarms and external controls. Selecting only External Alarm gives you 16 external alarm ports and no external control ports. If you select External control, four of the ports are converted to external control ports, leaving you with 12 external alarm ports.

Step 5 Click **Apply**.

Step 6 If you are provisioning external alarms, click the **External Alarms** tab. If you are not provisioning external alarms, skip Steps 7 through 9 and go to [Step 10](#).

Figure 9-17 Provisioning External Alarms On The AIC-I Card



Step 7 Complete the following fields for each external device wired to the ONS 15454 backplane:

- Enabled—Check the check box to activate the fields for the alarm input number.
- Alarm Type—Choose an alarm type from the drop-down menu.
- Severity—Click a severity from the drop-down menu.

The severity determines the severity the alarm has in the Alarms and History tabs and determines whether the LEDs are activated. Critical (CR), Major (MJ), and Minor (MN) alarms activate the LEDs. Not-Alerted (NA) and Not-Reported (NR) do not activate LEDs, but do report the information in CTC.

- **Virtual Wire**—Choose the virtual wire number from the drop-down menu to assign the external device to a virtual wire. Otherwise, do not change the None default. For information about the AIC virtual wire, see the *Cisco ONS 15454 Reference Manual*.
- **Raised When**—From the drop-down, choose the contact condition (open or closed) that triggers the alarm.
- **Description**—A default description is provided; enter a different description if needed.

Step 8 To provision additional devices, complete [Step 7](#) for each additional device.

Step 9 Click **Apply**.

Step 10 If you are provisioning external controls, click the **External Controls** tab and complete the following fields for each external control wired to the ONS 15454 backplane:

- **Enabled**—Check this check box to activate the fields for the alarm input number.
- **Control Type**—Choose the control type from the drop-down menu: air conditioner, engine, fan, generator, heat, light, sprinkler, or miscellaneous.
- **Trigger Type**—Choose a trigger type: a local minor, major, or critical alarm; a remote minor, major, or critical alarm; or a virtual wire activation.
- **Description**—Enter a description.

Step 11 To provision the other external controls, complete [Step 10](#) for each additional device.

Step 12 Click **Apply**.



Note When you provision an external alarm, the alarm object is ENV-IN-*nn*. The variable *nn* refers to the external alarm's number, regardless of the name you assign.



Note Environmental alarms that you create (and name) should be recorded locally for the NE. Both the Alarm name and resolution are node-specific.

Stop. You have completed this procedure.
