



CHAPTER 7

Monitor Performance

Performance monitoring (PM) parameters are used by service providers to gather, store, and report performance data for early detection of problems. For more PM information, details, and definitions, refer to the *Cisco ONS 15310-MA SDH Reference Manual*. This chapter explains how to enable and view PM statistics for the Cisco ONS 15310-MA SDH.

Before You Begin

Before performing any of the following procedures, investigate all alarms and clear any trouble conditions. Refer to the *Cisco ONS 15310-MA SDH Troubleshooting Guide* as necessary.

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

1. [NTP-H64 Change the PM Display, page 7-2](#)—Complete as needed.
2. [NTP-H65 Monitor Electrical Performance, page 7-3](#)—Complete as needed.
3. [NTP-H66 Monitor Optical Performance, page 7-4](#)—Complete as needed
4. [NTP-H67 Monitor Ethernet Performance, page 7-4](#)—Complete as needed.
5. [NTP-H68 Create or Delete Ethernet RMON Thresholds, page 7-5](#)—Complete as needed.
6. [NTP-H175 Enable or Disable AutoPM, page 7-6](#)—Complete as needed.



Note

For additional information regarding PM parameters, refer to Telcordia's GR-1230-CORE, GR-499-CORE, and GR-253-CORE documents and GR-820-CORE document titled Generic Digital Transmission Surveillance, and in the ANSI T1.231 document entitled *Digital Hierarchy - Layer 1 In-Service Digital Transmission Performance Monitoring*.

NTP-H64 Change the PM Display

Purpose	This procedure enables you to change the display of PM counts by selecting drop-down list or radio button options in the Performance window.
Tools/Equipment	None
Prerequisite Procedures	Before you monitor performance, be sure you have created the appropriate circuits and provisioned the card according to your specifications. For more information, see Chapter 5, “Create Circuits and VC Low-order Path Tunnels.” and Chapter 9, “Change Port Settings.”
Required/As Needed	As needed
Onsite/Remote	Onsite or remote
Security Level	Retrieve or higher

Step 1 Complete the “[DLP-H29 Log into CTC](#)” task on page 16-43 at the node that you want to monitor. If you are already logged in, continue with Step 2.

Step 2 As needed, use the following tasks to change the display of PM counts:

- [DLP-H89 Refresh PM Counts for a Different Port](#), page 16-107
- [DLP-H90 Refresh Electrical or Optical PM Counts at Fifteen-Minute Intervals](#), page 16-108
- [DLP-H91 Refresh Electrical or Optical PM Counts at One-Day Intervals](#), page 16-109
- [DLP-H92 Monitor Near-End PM Counts](#), page 16-109
- [DLP-H93 Monitor Far-End PM Counts](#), page 16-110
- [DLP-H94 Reset Current PM Counts](#), page 16-111
- [DLP-H95 Clear Selected PM Counts](#), page 16-112
- [DLP-H264 Clear All PM Thresholds](#), page 18-65
- [DLP-H96 Set Auto Refresh Interval for Displayed PM Counts](#), page 16-113
- [DLP-H97 Monitor PM Counts for Selected Signal Types](#), page 16-114

Stop. You have completed this procedure.

NTP-H65 Monitor Electrical Performance

Purpose	This procedure allows you to view near-end or far-end performance on electrical ports at specified time intervals to detect possible performance problems.
Tools/Equipment	None
Prerequisite Procedures	Before you monitor performance, be sure you have created the appropriate circuits and provisioned the card according to your specifications. For more information, see Chapter 5, “Create Circuits and VC Low-order Path Tunnels.” and Chapter 9, “Change Port Settings.”
Required/As Needed	As needed
Onsite/Remote	Onsite or remote
Security Level	Retrieve or higher

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- Step 1** Complete the [“DLP-H29 Log into CTC” task on page 16-43](#) at the node you want to monitor. If you are already logged in, continue to [Step 2](#).
- Step 2** In node view, double-click the ONS 15310-MA SDH electrical card. The 15310-MA SDH electrical cards are the E1_21_E3_DS3_3 and the E1_63_E3_DS3_3. The card view appears.
- Step 3** Click the **Performance** tab.
- Step 4** Click the **E1**, **DS3**, or **E3** tabs to view the PM parameters.

The PM parameter names appear on the left side of the window in the Param column. The PM values appear on the right side of the window in the Curr (current) and Prev-*n* (previous) columns. For PM parameter definitions, refer to the *Cisco ONS 15310-MA SDH Reference Manual*.



Note To refresh, reset, or clear PM counts, see the [“NTP-H64 Change the PM Display” procedure on page 7-2](#).

Stop. You have completed this procedure.

NTP-H66 Monitor Optical Performance

Purpose	This procedure allows you to view near-end or far-end performance on an optical card and port at specified time intervals to detect possible performance problems.
Tools/Equipment	None
Prerequisite Procedures	Before you monitor performance, be sure you have created the appropriate circuits and provisioned the card according to your specifications. For more information, see Chapter 5, “Create Circuits and VC Low-order Path Tunnels.” and Chapter 9, “Change Port Settings.”
Required/As Needed	As needed
Onsite/Remote	Onsite or remote
Security Level	Retrieve or higher

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- Step 1** Complete the “[DLP-H29 Log into CTC](#)” task on page 16-43 at the node you want to monitor. If you are already logged in, continue with [Step 2](#).
- Step 2** Complete the “[DLP-H98 Enable Pointer Justification Count Performance Monitoring](#)” task on page 16-115 if you need to monitor clock synchronization.
- Step 3** Complete the “[DLP-H99 Enable Intermediate-Path Performance Monitoring](#)” task on page 16-116 if you need to monitor large amounts of VC (virtual container) traffic through intermediate nodes.
- Step 4** Complete the “[DLP-H100 View Optical STM-M PM Parameters](#)” task on page 17-1 as needed.



Note To refresh, reset, or clear PM counts, see the “[NTP-H64 Change the PM Display](#)” procedure on page 7-2.

Stop. You have completed this procedure.

NTP-H67 Monitor Ethernet Performance

Purpose	This procedure allows you to view node transmit and receive performance on an Ethernet card and port at specified time intervals to detect possible performance problems.
Tools/Equipment	None
Prerequisite Procedures	Before you monitor performance, be sure you have created the appropriate circuits and provisioned the card according to your specifications. For more information, see Chapter 5, “Create Circuits and VC Low-order Path Tunnels.” and Chapter 9, “Change Port Settings.”
Required/As Needed	As needed
Onsite/Remote	Onsite
Security Level	Retrieve or higher

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- Step 1** Complete the “[DLP-H29 Log into CTC](#)” task on page 16-43 at the node you want to monitor. If you are already logged in, continue with [Step 2](#).
- Step 2** Complete the “[DLP-H101 View Ether Ports and POS Ports Statistics PM Parameters](#)” task on page 17-1 as needed.
- Step 3** Complete the “[DLP-H102 View Ether Ports and POS Ports Utilization PM Parameters](#)” task on page 17-2 as needed.
- Step 4** As needed, use the “[DLP-H103 Refresh Ethernet PM Counts at a Different Time Interval](#)” task on page 17-3 to change the display of Ethernet utilization PM counts.
- Step 5** Complete the “[DLP-H104 View Ether Ports and POS Ports History PM Parameters](#)” task on page 17-3 as needed.

Stop. You have completed this procedure.

NTP-H68 Create or Delete Ethernet RMON Thresholds

Purpose	This procedure creates or deletes remote monitoring (RMON) Ethernet thresholds for the ONS 15310-MA SDH.
Tools/Equipment	None
Prerequisite Procedures	None
Required/As Needed	As needed
Onsite/Remote	Onsite or remote
Security Level	Provisioning or higher

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- Step 1** Complete the “[DLP-H29 Log into CTC](#)” task on page 16-43. If you are already logged in, continue with [Step 2](#).
- Step 2** Perform any of the following tasks as needed:
- [DLP-H105 Create Ethernet RMON Alarm Thresholds](#), page 17-4
 - [DLP-H106 Delete Ethernet RMON Alarm Thresholds](#), page 17-9

Stop. You have completed this procedure.

NTP-H175 Enable or Disable AutoPM

Purpose	This procedure allows you to enable or disable automatic autonomous performance monitoring (AutoPM) reports.
Tools/Equipment	None
Prerequisite Procedures	None
Required/As Needed	As needed
Onsite/Remote	Onsite or remote
Security Level	Provisioning or higher

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- Step 1** Complete the “[DLP-H29 Log into CTC](#)” task on page 16-43. If you are already logged in, continue with Step 2.
- Step 2** Click the **Provisioning > Defaults** tabs.
- Step 3** In the Defaults Selector area, click **NODE > General** and choose **NODE.general.AutoPM**.
- Step 4** In the Default Value field, select **True** to enable AutoPM.
- Step 5** Click **Apply**.
- Step 6** Follow Steps 1 through 5 to disable AutoPM. Select **False** in the Default Value field in Step 4 before proceeding to Step 5.
- Stop. You have completed this procedure.**
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