CHAPTER 22

SCHED Commands

This chapter provides SCHED (schedule) commands for the Cisco ONS 15454, ONS 15327, ONS 15600 and ONS 15310-CL.

22.1 SCHED-PMREPT-<MOD2>

Schedule Performance Monitoring Report (10GFC, 10GIGE, 1GFC, 1GFICON, 2GFC, 2GFICON, CLNT, D1VIDEO, DS1, DV6000, E1, E3, E4, EC1, ESCON, ETRCLO, FSTE, G1000, GFPOS, GIGE, HDTV, ISC1, OC12, OC192, OC3, OC48, OCH, OMS, OTS, POS, STS1, STS12C, STS18C, STS192C, STS24C, STS36C, STS3C, STS48C, STS6C, STS9C, T1, T3, VC12, VC3, VT1, VT2)

Usage Guidelines

Cisco ONS 15454, ONS 15327, ONS 15600, ONS 15310-CL

This command schedules/reschedules the NE to report the performance monitoring data for a line facility or for an STS/VT path periodically, using the automatic REPT PM message. This command can also remove the previously created schedule.

See Table 27-1 on page 27-1 for supported modifiers by platform.

The automatic performance monitoring reporting scheduled by this command is inhibited by default. ALW-PMREPT-ALL can be used to allow the NE to send the performance monitoring report. INH-PMREPT-ALL can be used to stop the NE from sending the performance monitoring report. The schedules created for the NE can be retrieved by RTRV-PMSCHED command.

The deletion of the schedule for the automatic performance monitoring reporting can be done by issuing SCHED-PMREPT-<MOD2> with the <NUMREPT> parameter equal to zero.

Note

- The current maximum number of schedules allowed to be created for a NE is 1000. If this number of schedules has been created for the NE, an error message “Reach Limits Of MAX Schedules Allowed. Can Not Add More” will be returned if another schedule creation is attempted on the NE. Frequent use of automatic performance monitoring reporting will significantly degrade the performance of the NE.
- A schedule cannot be created if the card associated with the schedule is not provisioned, or if the cross-connection associated with the schedule has not been created. However, a schedule is allowed to be deleted even if a card is not provisioned, or if the cross-connection has not been created.
- The number of outstanding performance monitoring reports counter <NUMREPT> will not be decremented, and the scheduled automatic performance monitoring reporting will not start if the card associated with the schedule is not physically plugged into the slot.

- An expired schedule would not be automatically removed. The SCHED-PMREPT command has to be issued with the <NUMREPT> parameter equal to zero in order to delete the expired schedule.
- Identical schedules for an NE is not allowed. Two schedules are considered identical if they have the same AID, MOD2 type, performance monitor type, performance monitor level, location, direction and time period.

  An error message “Duplicate Schedule” is returned when trying to create a schedule which is a duplicate of a existing schedule. However, if the existing schedule expires (with the parameter <NUMINVL> equal to zero when retrieved by the RTRV-PMSCHED command, for example, no more performance monitoring reporting sent) the new schedule with the identical parameter will replace the existing schedule.
- When a electrical or optical card is unprovisioned by the DLT-EQPT command, or a cross-connection is deleted by the DLT-CRS command, the schedules associated with that card or that cross-connection will be removed silently by the NE. This removal prevents another type of card or cross-connection with the same AID to be provisioned on the NE, and prevents the NE from trying to send automatic performance monitoring reports based on the existing schedules.

  The card or cross-connect can be unprovisioned or deleted through CTC. The schedules associated with that card or that cross-connection will also be removed silently by the NE.
- When creating schedules on an ONS 15327 XTC card, only schedules against the working XTC card (in Slot 6) are allowed. An error message “Can Not Create Schedule On Protect Card” will be returned if you try to create a schedule on protect XTC card in Slot 5.

Category Performance

Security Retrieve

Related Commands

ALW-PMREPT-ALL
DLT-<MOD1PAYLOAD>
DLT-FFP-<MOD2DWDMPAYLOAD>
DLT-FFP-<OCN_TYPE>
DLT-RMONTH-<MOD2_RMON>
ED-<GIGE_TYPE>
ED-<MOD1FCPAYLOAD>
ED-<MOD1FICONPAYLOAD>
ED-<MOD2DWDMPAYLOAD>
ED-<OCN_TYPE>
ED-ALS
ED-DS1
ED-EC1
ED-FFP-<MOD2DWDMPAYLOAD>
ED-FFP-<OCN_TYPE>
ED-FSTE
ED-G1000
ED-GFP
ED-HDLC
ED-POS
ED-T1
ED-T3
ED-TRC-<MOD2DWDMPAYLOAD>
ED-TRC-<OCN_TYPE>
ENT-<MOD1PAYLOAD>
ENT-FFP-<MOD2DWDMPAYLOAD>
ENT-FFP-<OCN_TYPE>
ENT-RMONTH-<MOD2_RMON>
INH-PMREPT-ALL
INIT-REG-<MOD2>
OPR-ALS
OPR-LPBK-<MOD2>
OPR-PROTNSW-<MOD2DWDMPAYLOAD>
OPR-PROTNSW-<OCN_TYPE>
REPT PM <MOD2>
RLS-LPBK-<MOD2>
RLS-PROTNSW-<MOD2DWDMPAYLOAD>
RLS-PROTNSW-<OCN_TYPE>
RMV-<MOD2>
RST-<MOD2>
RTRV-<MOD1FCPAYLOAD>
RTRV-<MOD1FICONPAYLOAD>
RTRV-<MOD2DWDMPAYLOAD>
RTRV-<OCN_TYPE>
RTRV-10GIGE
RTRV-ALMTH-<MOD2>
RTRV-ALS
RTRV-DS1
RTRV-EC1
RTRV-FAC
RTRV-FFP-<MOD2DWDMPAYLOAD>
RTRV-FFP-<OCN_TYPE>
RTRV-FSTE
RTRV-G1000
RTRV-GFP
RTRV-GIGE
RTRV-HDLC
RTRV-PM-<MOD2>
RTRV-PMMODE-<STS_PATH>
RTRV-PMSCHED-<MOD2>
RTRV-PMSCHED-ALL
RTRV-POS
RTRV-PROTNSW-<MOD2DWDMPAYLOAD>
RTRV-PROTNSW-<OCN_TYPE>
RTRV-RMONTH-<MOD2_RMON>
RTRV-T1
RTRV-T3
RTRV-TH-<MOD2>
RTRV-TH-ALL
RTRV-TRC-<MOD2DWDMPAYLOAD>
RTRV-TRC-<OCN_TYPE>
SET-ALMTH-<MOD2>
SET-PMMODE-<STS_PATH>

Input Format

SCHED-PMREPT-<MOD2>:[<TID>]:<SRC>:<CTAG>::[<REPTINVL>],[<REPTSTATM>],[<NUMREPT>],,[<MONLEV>],[<LOCN>],,[<TMPER>],[<TMOFST>];

Input Example

SCHED-PMREPT-OC3:NE-NAME:FAC-3-1:123::60-MIN,15-30,100,,1-UP,NEND,,15-MIN,0-0-15;

Input Parameters

Table 22-1 SCHED-PMREPT-<MOD2> Input Parameters

Parameter and Values	Description
AID	Access identifier from the "25.1.1 ALL" section on page 25-1. Must not be null
REPTINVL	Reporting interval. How often a report is generated and sent to the appropriate OS. Specifies how often a performance monitoring report is generated. The format is VAL-UN, where valid values for VAL (value) are: • 1 to 31 if UN (units of time) is DAY • 1 to 24 if UN is HR • 5 to 1440 if UN is MIN Examples are: 10-DAY, or 12-HR, or 100-MIN. A null value for the input defaults to 15-MIN.
REPTSTATM	The starting time for the performance monitoring report. The format is HOD-MOH, where HOD (hour of day) ranges from 0 to 23, and MOH (minute of hour) ranges from 0 to 59. If the input value of the starting time is smaller than the current time, for example, the input value is 5-30 (5:30 in the morning), and the current time is 10:30, the reporting will be scheduled to start at 5:30 the next day. A null value defaults to the current time of day. String
NUMREPT	The number of reports that the schedule is expected to produce. A value of 0 is used to delete a existing identical schedule. If NUMREPT is null, the schedule will be kept in effect until it is deleted. The value of NUMREPT will continue to be decremented even though the automatic performance monitoring reporting is inhibited. Integer
MONLEV	The discriminating level of the requested monitored parameter. It applies to all MONTYPE of the scheduled performance monitoring report. The format is LEV-DIRN, where valid values for LEV are decimal numbers, and valid values for DIRN are as follows: UP monitored parameter with values equal to or greater than the value of LEV will be reported. DN monitored parameter with values equal to or less than the value of LEV will be reported. The null input defaults to 1-UP. String

Table 22-1 SCHED-PMREPT-<MOD2> Input Parameters (continued)

Parameter and Values	Description
LOCN	Location associated with a particular command. Identifies the location from which the PM mode is to be retrieved. A null input defaults to NEND. FEND is not supported by all MOD2 types Parameter type is LOCATION—the location where the action is to take place
• FEND	Action occurs on the Far End of the facility
• NEND	Action occurs on the Near End of the facility
TMPER	Accumulation time period for performance counters. Defaults to 15-MIN. Optional Parameter type is TMPER—accumulation time period for the performance management center
• 1-DAY	Performance parameter accumulation interval length; every 24-hours. For SONET PM data only one day of history data is available. For RMON managed PM data seven days of history data are available.
• 1-HR	Performance parameter accumulation interval length; every 1 hour. This is only applicable to RMON managed PM data. There are 24 hours of history data available.
• 1-MIN	Performance parameter accumulation interval length; every 1 minute. This is only applicable to RMON managed PM data. There are 60 minutes of history available.
• 15-MIN	Performance parameter accumulation interval length; every 15 minutes. There are 32 15-MIN buckets of history data available for this accumulation interval length.
• RAW-DATA	Performance parameter accumulation interval length; starting from the last time the counters were cleared. This is only applicable to RMON managed PMs.
TMOFST	Time offset between reporting/diagnostics/exercises; from the end of the last complete accumulation time period to the beginning of the accumulation time period specified by TMPER. The format is DAY-HR-MIN where DAYS (days) ranges from 0 to 99, HR (hours) ranges from 0 to 23, and MIN (minutes) ranges from 1 to 59. A null value defaults to 0-0-0. Grouping of this parameter is not supported. If the value specified is larger than the maximum length of PM history the system is saving, there will be no PM report for the PM schedule generated. For example, if a PM schedule for OC48 is created with TMOFST of 2-1-0 (format: day-hour-minute), no report will be generated because the system can only hold two days worth of PM history. For setting 15-MIN schedules, the system can only hold 32 15-MIN buckets which totals eight hours therefore a schedule greater than 0-8-0 will not result in PM schedules being generated. String