



SET Commands

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

23.1 SET-ALMTH-<MOD2>

Set Alarm Threshold (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 15310-CL

This command sets the alarm thresholds on the following cards/ports/channels:

MXP_2.5G_10G/TXP_MR_10G, optical service channel, optical amplifier, dispersion compensation units, multiplex/demultiplex and OADM.

The only applicable MOD2 values are CLNT/OCH/OMS/OTS.

Category

DWDM

Security

Provisioning

Related Commands

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

Input Format

```
SET-ALMTH-<MOD2>:[<TID>]:<AID>:<CTAG>::<CONDTYPE>,<THLEV>[,,,];
```

Input Example

```
SET-ALMTH-{MOD2}::FAC-1-1:1::OPT-LOW,10;
```

Input Parameters

Table 23-1 SET-ALMTH-<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
CONDTYPE	Condition type for an alarm or a reported event Parameter type is ALM_THR—alarm threshold list for MXP_2.5G_10G, TXP_MR_10G, OSCM, OSC-CSM, OPT-PRE, OPT-BST, MD-4, MUX-32, DMX-32, AD-1C, AD-2C, AD-4C, AD-1B, and AD-4B cards
• BATV-EHIGH	Battery Voltage - Extremely High
• BATV-ELow	Battery Voltage - Extremely Low
• BATV-HIGH	Battery Voltage - High
• BATV-LOW	Battery Voltage - Low
• GAIN-HDEG	Gain not reached—High Degrade Threshold
• GAIN-HFAIL	Gain not reached—High Failure Threshold
• GAIN-LDEG	Gain not reached—Low Degrade Threshold
• GAIN-LFAIL	Gain not reached—Low Failure Threshold
• LBCL-HIGH	Laser Bias current in uA as 1/10% High Warning Threshold, Low Warning Threshold Measured value [0.0%, 100.0%]
• OPR-HIGH	Receive power in 1/10 uW Measured value [-40.0 dBm,+30.0 dBm]
• OPR-LOW	Receive power in 1/10 uW Measured value [-40.0 dBm,+30.0 dBm]
• OPT-HIGH	Transmit power in 1/10 uW. Measured value [-40.0 dBm,+30.0 dBm]
• OPT-LOW	Transmit power in 1/10 uW. Measured value [-40.0 dBm,+30.0 dBm]
• OPWR-HDEG	Optical Power—High Degrade Threshold
• OPWR-HFAIL	Optical Power—High Failure Threshold
• OPWR-LDEG	Optical Power—Low Degrade Threshold
• OPWR-LFAIL	Optical Power—Low Failure Threshold
• VOA-HDEG	VOA Attenuation—High Degrade Threshold
• VOA-HFAIL	VOA Attenuation—High Failure Threshold
• VOA-LDEG	VOA Attenuation—Low Degrade Threshold
• VOA-LFAIL	VOA Attenuation—Low Failure Threshold
THLEVEL	Threshold level. Float

23.2 SET-ALMTH-EQPT

Set Alarm Threshold Equipment

Usage Guidelines

Cisco ONS 15454, ONS 15310-CL

This command sets the alarm thresholds to manage the power level monitoring on an NE.

Category

Equipment

Security

Provisioning

Related Commands

ALW-SWDX-EQPT	INH-SWTOPROTN-EQPT	RTRV-ALMTH-EQPT
ALW-SWTOPROTN-EQPT	INH-SWTOWKG-EQPT	RTRV-COND-EQPT
ALW-SWTOWKG-EQPT	REPT ALM EQPT	RTRV-EQPT
DLT-EQPT	REPT EVT EQPT	SW-DX-EQPT
ED-EQPT	REPT RMV EQPT	SW-TOPROTN-EQPT
ENT-EQPT	REPT RST EQPT	SW-TOWKG-EQPT
INH-SWDX-EQPT	RTRV-ALM-EQPT	

Input Format

SET-ALMTH-EQPT:[<TID>]::<CTAG>::<ALMTHTYPE>,<THLEV>[,,,];

Input Example

SET-ALMTH-EQPT:::1::BATV-HIGH,-53.5;

Input Parameters

Table 23-2 SET-ALMTH-EQPT Input Parameters

Parameter and Values	Description
ALMTHTYPE	Alarm threshold type Parameter type is ALM_THR—alarm threshold list for MXP_2.5G_10G, TXP_MR_10G, OSCM, OSC-CSM, OPT-PRE, OPT-BST, MD-4, MUX-32, DMX-32, AD-1C, AD-2C, AD-4C, AD-1B, and AD-4B cards
• BATV-EHIGH	Battery Voltage - Extremely High
• BATV-ELow	Battery Voltage - Extremely Low
• BATV-HIGH	Battery Voltage - High
• BATV-LOW	Battery Voltage - Low
• GAIN-HDEG	Gain not reached—High Degrade Threshold
• GAIN-HFAIL	Gain not reached—High Failure Threshold
• GAIN-LDEG	Gain not reached—Low Degrade Threshold
• GAIN-LFAIL	Gain not reached—Low Failure Threshold
• LBCL-HIGH	Laser Bias current in uA as 1/10% High Warning Threshold, Low Warning Threshold Measured value [0.0%, 100.0%]

Table 23-2 SET-ALMTH-EQPT Input Parameters (continued)

Parameter and Values	Description
• OPR-HIGH	Receive power in 1/10 uW Measured value [-40.0 dBm,+30.0 dBm]
• OPR-LOW	Receive power in 1/10 uW Measured value [-40.0 dBm,+30.0 dBm]
• OPT-HIGH	Transmit power in 1/10 uW. Measured value [-40.0 dBm,+30.0 dBm]
• OPT-LOW	Transmit power in 1/10 uW. Measured value [-40.0 dBm,+30.0 dBm]
• OPWR-HDEG	Optical Power—High Degrade Threshold
• OPWR-HFAIL	Optical Power—High Failure Threshold
• OPWR-LDEG	Optical Power—Low Degrade Threshold
• OPWR-LFAIL	Optical Power—Low Failure Threshold
• VOA-HDEG	VOA Attenuation—High Degrade Threshold
• VOA-HFAIL	VOA Attenuation—High Failure Threshold
• VOA-LDEG	VOA Attenuation—Low Degrade Threshold
• VOA-LFAIL	VOA Attenuation—Low Failure Threshold
THLEVEL	Threshold level. Float

23.3 SET-ATTR-CONT

Set Attribute Control

Usage Guidelines

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

This command sets the attributes associated with an external control. The attributes are used when an external control is operated or released. To send the attributes, use the RTRV-ATTR-CONT command.



Note

If the <CONTTYPE> parameter is not specified, the control specified by <AID> is unprovisioned.



Note

A control should be unprovisioned before it is reprovisioned to another type of control.

Category

Environment

Security

Provisioning

Related Commands	OPR-ACO-ALL	RLS-EXT-CONT	RTRV-COND-ENV
	OPR-EXT-CONT	RTRV-ALM-ENV	RTRV-EXT-CONT
	REPT ALM ENV	RTRV-ATTR-CONT	SET-ATTR-ENV
	REPT EVT ENV	RTRV-ATTR-ENV	SET-ATTR-SECUDFLT

Input Format SET-ATTR-CONT:[<TID>]:<AID>:<CTAG>[::<CONTTYPER>];

Input Example SET-ATTR-CONT:CISCO:ENV-OUT-1:123::AIRCOND;

Input Parameters

Table 23-3 SET-ATTR-CONT Input Parameters

Parameter and Values	Description
AID	Access identifier from the “25.1.12 ENV” section on page 25-26. Identifies the external control for which attributes are being retrieved
CONTTYPER	Environmental control type. A null value is equivalent to ALL Parameter type is CONTTYPER—Environmental control types
• AIRCOND	Air conditioning
• ENGINE	Engine
• FAN	Fan
• GEN	Generator
• HEAT	Heat
• LIGHT	Light
• MISC	Miscellaneous
• SPKLR	Sprinkler

23.4 SET-ATTR-ENV

Set Attribute Environment

Usage Guidelines

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

This command sets the attributes associated with an external control.



Note

- If the <NTFCNCDE>, <ALMTYPE>, and <ALMMSG> parameters are omitted, the environmental alarm specified by <AID> is unprovisioned.
- An alarm should be unprovisioned and you should wait for any raised alarm to clear before reprovisioning the alarm to another alarm type.

- CL in NOTIF_CODE is not valid for provisioning commands. It is only valid for autonomous messages.

Category Environment

Security Provisioning

Related Commands	OPR-ACO-ALL	RLS-EXT-CONT	RTRV-COND-ENV
	OPR-EXT-CONT	RTRV-ALM-ENV	RTRV-EXT-CONT
	REPT ALM ENV	RTRV-ATTR-CONT	SET-ATTR-CONT
	REPT EVT ENV	RTRV-ATTR-ENV	SET-ATTR-SECUDFLT

Input Format SET-ATTR-ENV:[<TID>]:<AID>:<CTAG>:.[<NTFCNCDE>],[<ALMTYPE>],[<ALMMSG>];

Input Example SET-ATTR-ENV:CISCO:ENV-IN-1:123::MJ,OPENDR,“OPEN DOOR”;

Input Parameters

Table 23-4 SET-ATTR-ENV Input Parameters

Parameter and Values	Description
AID	Access identifier from the “25.1.12 ENV” section on page 25-26. Must not be null
NTFCNCDE	Two-letter notification code. Must not be null Parameter type is NOTIF_CODE—two-character notification code associated with an autonomous message
• CL	The condition causing the alarm has cleared
• CR	A critical alarm
• MJ	A major alarm
• MN	A minor alarm
• NA	The condition is not alarmed
• NR	The alarm is not reported
ALMTYPE	The alarm type for the environmental alarm. Must not be null Parameter type is ENV_ALM—environmental alarm types
• AIRCOMPR	Air compressor failure
• AIRCOND	Air conditioning failure
• AIRDRYR	Air dryer failure
• BATDSCHRG	Battery discharging
• BATTERY	Battery failure

Table 23-4 SET-ATTR-ENV Input Parameters (continued)

Parameter and Values	Description
• CLFAN	Cooling fan failure
• CPMAJOR	Centralized power major failure
• CPMINOR	Centralized power minor failure
• ENGINE	Engine failure
• ENGOPRG	Engine operating
• ENGTRANS	Standby engine transfer
• EXPLGS	Explosive gas
• FIRDETR	Fire detector failure
• FIRE	Fire
• FLOOD	Flood
• FUELLEAK	Fuel leak
• FUSE	Fuse failure
• GASALARM	Explosive gas, toxic gas, ventilation fail or gas monitor fail
• HATCH	CEV hatch fail
• GEN	Generator failure
• HIAIR	High airflow
• HIHUM	High humidity
• HITEMP	High temperature
• HIWTR	High water
• INTRUDER	Intrusion
• LEVELCON	Level converter
• LVDADSL	Secondary ADSL low voltage disconnect
• LVDBYPAS	Low voltage disconnected bypass
• LWBATVG	Low battery voltage
• LWFUEL	Low fuel
• LWHUM	Low humidity
• LWPRES	Low cable pressure
• LWTEMP	Low temperature
• LWWTR	Low water
• MISC	Miscellaneous
• OPENDR	Open door
• POWER	Commercial power failure
• PUMP	Pump failure
• PWR-48	48V power supply failure
• PWR-139	-139V power converter
• PWR-190	-190V power converter

Table 23-4 SET-ATTR-ENV Input Parameters (continued)

Parameter and Values	Description
• PWRMJ	Power supply major
• PWRMN	Power supply minor
• RECT	Rectifier failure
• RECTHI	Rectifier high voltage
• RECTLO	Rectifier low voltage
• RINGGENMJ	Ring generator major
• RINGGENMN	Ring generator minor
• RTACADSL	AC or AC/rectifier power fail ADSL equipment
• RTACCRIT	AC or AC/rectifier power fail DCL equipment critical site
• RTACPWR	AC or AC/rectifier power fail DCL equipment
• RTACPWRENG	Commercial AC fail, site equipped with standby engine
• RTBAYPWR	AC power loss distributed power RT bay
• RTRVENG	Retrieve standby engine, commercial AC restored
• SMOKE	Smoke
• TEMP	High-low temperature
• TOXICGAS	Toxic gas
• TREPEATER	T-repeater shelf
• VENTN	Ventilation system failure
ALMMSG	Alarm message. String. Must not be null

23.5 SET-ATTR-SECUDFLT

Set Attribute Security Default

Usage Guidelines

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

This command sets the system-wide default values associated with several security parameters.

The following parameters are set on a system-wide basis for all users and all privilege levels: MXINV, DURAL, UOUT, PFRCD, POLD, PINT, and LOGIN. The PRIVLVL keyword cannot be used to set these parameters for a specific privilege level.

The following parameters are set on a privilege-level basis: PAGE, PCND, and TMOUT. If any of these values are specified, the PRIVLVL keyword must also be present. If none of these parameters are specified, the PRIVLVL keyword cannot be used.



Note

Password aging can only be enabled/disabled for all privilege levels. The PRIVLVL keyword cannot be used with PAGE=0 to disable a specific user privilege level.

When system-level and privilege-level keywords are combined in the same command, system-level parameters are still set for all privilege levels, regardless of the value specified by PRIVLVL. Privilege-level parameters are only set for the privilege level specified by PRIVLVL.

**Note**

If PAGE and PINT both have values greater than 0, PINT must be less than PAGE.

The order of keywords is not restricted. Commas are only needed to separate keywords. If no keywords are specified, all parameters are left as is.

Category

Security

Security

Superuser

Related Commands

ACT-USER	ENT-USER-SECU	RTRV-ALM-ENV
ALW-MSG-SECU	INH-MSG-SECU	RTRV-ATTR-CONT
ALW-USER-SECU	INH-USER-SECU	RTRV-ATTR-ENV
CANC	OPR-ACO-ALL	RTRV-CMD-SECU
CANC-USER	OPR-EXT-CONT	RTRV-COND-ENV
CANC-USER-SECU	REPT ALM ENV	RTRV-DFLT-SECU
CLR-COND-SECU	REPT ALM SECU	RTRV-EXT-CONT
DLT-USER-SECU	REPT EVT ENV	RTRV-USER-SECU
ED-CMD-SECU	REPT EVT SECU	SET-ATTR-CONT
ED-PID	REPT EVT SESSION	SET-ATTR-ENV
ED-USER-SECU	RLS-EXT-CONT	

Input Format

```
SET-ATTR-SECUDFLT:[<TID>]::<CTAG>::[PAGE=<PAGE>],[PCND=<PCND>],
[MXINV=<MXINV>],[DURAL=<DURAL>],[TMOUT=<TMOUT>],[UOUT=<UOUT>],
[PFRCD=<PFRCD>],[POLD=<POLD>],[PINT=<PINT>],[LOGIN=<LOGIN>],
[PRIVLVL=<PRIVLVL>],[PDIF=<PDIF>];
```

Input Example

```
SET-ATTR-SECUDFLT:CISCO::123::PAGE=45,PCND=5,MXINV=5,DURAL=30,
TMOUT=0,UOUT=20,PFRCD=NO,POLD=5,PINT=20,LOGIN=MULTIPLE,
PRIVLVL=RTRV,PDIF=1;
```

Input Parameters

Table 23-5 SET-ATTR-SECUDFLT Input Parameters

Parameter and Values	Description
PAGE	Password aging interval. It is the number of days before a user is prompted to change his/her password. 0 indicates the policy is turned off and is the default. If PAGE is turned on for all privilege levels and is not specified for each privilege level, it defaults to 45 days. PAGE ranges from 20 to 90 days. Integer
PCND	Number of days a password can be used before a new one is mandatory (for example, the warning period). Default is 5 days. PCND ranges from 2 to 20 days. Integer
MXINV	Maximum number of consecutive and invalid session setup attempts allowed to occur before an intrusion attempt is suspected (for example, “Failed Logins Before Lockout” from CTC). 0 indicates the policy is turned off. Default is 5. MXINV ranges from 0 to 10. Integer
DURAL	Time interval (in seconds) during which a userid is locked out when an intrusion attempt is suspected (for example, the “Lockout Duration”). If the user is locked out until unlocked by a superuser, DURAL=INFINITE. Default is 30 seconds. DURAL ranges from 0 to 600 seconds. String
TMOU	Interval (in minutes) after which a session is terminated if no messages are exchanged between the user and the NE. 0 indicates that the session will not timeout. TMOU ranges from 0 minutes to 999 minutes. Defaults are 0 (no timeout) for RTRV users, 60 minutes for MAINT users, 30 minutes for PROV users, and 15 minutes for SUPER users. Integer
UOUT	UID aging interval, expressed in days. If a userid has not been used in UOUT days, the user will be forced to change his/her password (or logout) at the next login. No other command is allowed until the password has been changed. 0 indicates the policy is turned off and is the default. UOUT ranges from 0 to 99 days. Integer
PFRCD	Indicates a password change is required when a new user establishes a session to the NE for the first time (for example, “Require password change on 1st login”). Default is NO Parameter type is YES_NO—indicates whether the user’s password is about to expire, the user is logged into the NE or the user is locked out of the NE
• NO	No
• YES	Yes
POLD	Number of prior passwords that cannot be reused (for example, “Prevent reusing last X passwords”). Default is 1. POLD ranges from 1 to 10. Integer
PINT	Number of days that must pass before a password can be changed. If PINT is 0, the policy is turned off. Default is off. PINT ranges from 20 to 95 days. Integer

Table 23-5 SET-ATTR-SECUDFLT Input Parameters (continued)

Parameter and Values	Description
LOGIN	Number of times a user can log into an NE. LOGIN is either SINGLE or MULTIPLE. If LOGIN is SINGLE, a user can only log into an NE one time with any given userid, regardless of the method of login (for example, CTC, TL1, etc.). Default is MULTIPLE Parameter type is USER_LOGINS—the number of times a user can log into the same NE with the same userid
<ul style="list-style-type: none"> MULTIPLE 	A user can log into the same NE many times
<ul style="list-style-type: none"> SINGLE 	A user can log into the NE only once (includes both CTC and TL1 sessions)
PRIVLVL	User's access privilege Parameter type is PRIVILEGE—security level
<ul style="list-style-type: none"> MAINT 	Maintenance security level. 60 minutes of idle time
<ul style="list-style-type: none"> PROV 	Provision security level. 30 minutes of idle time
<ul style="list-style-type: none"> RTRV 	Retrieve security level. Unlimited idle time
<ul style="list-style-type: none"> SUPER 	Superuser security level. 15 minutes of idle time
PDIF	Indicates how many characters must differ between the old and new password. Default minimum character difference is 1. PDIF ranges from 1 to 5 characters. Integer. Rangeable

23.6 SET-PMMODE-<STS_PATH>

Set Performance Mode of PM Data Collection (STS1, STS12C, STS18C, STS192C, STS24C, STS36C, STS3C, STS48C, STS6C, STS9C)

Usage Guidelines

Cisco ONS 15454

This command sets the mode and turns the PM data collection mode on or off.

See [Table 27-1 on page 27-1](#) for supported modifiers by platform.



Note

- The PM mode and state of an entity are retrieved by using the RTRV-PMMODE command.
- The near end monitoring of the intermediate-path PM (IPPM) only supports OC3, OC12, OC48, OC192, and EC-1 on STS Path.
- The far end IPPM data collection is supported by the MRC-12 card only.
- This release of software will support only the Path (P) mode type PM parameters with this command, that is, this command is not applicable for Line (L) and Section (S) mode types. The PM monitoring for Line (L) and Section (S) are supported by the ONS 15454, and the storing PM data is always performed.

Category Performance

Security Provisioning

Related Commands		
ALW-PMREPT-ALL		RTRV-PMSCHED-<MOD2>
DLT-RMONTH-<MOD2_RMON>		RTRV-PMSCHED-ALL
ENT-RMONTH-<MOD2_RMON>		RTRV-RMONTH-<MOD2_RMON>
INH-PMREPT-ALL		RTRV-TH-<MOD2>
INIT-REG-<MOD2>		RTRV-TH-ALL
REPT PM <MOD2>		SCHED-PMREPT-<MOD2>
RTRV-PM-<MOD2>		SET-TH-<MOD2>
RTRV-PMMODE-<STS_PATH>		

Input Format SET-PMMODE-<STS_PATH>:[<TID>]:<SRC>:<CTAG>::<LOCN>,<MODETYPE>,<PMSTATE>;

Input Example SET-PMMODE-STS1:CISCO:STS-4-1-2:123::NEND,P,ON;

Input Parameters

Table 23-6 SET-PMMODE-<STS_PATH> Input Parameters

Parameter and Values	Description
SRC	Source access identifier from the “25.1.9 CrossConnectId” section on page 25-15
LOCN	Location associated with a particular command. Identifies the location from which the PM mode is to be retrieved. Only the near end PM data collection is supported Parameter type is LOCATION—the location where the action is to take place
<ul style="list-style-type: none"> NEND 	Action occurs on the Near End of the facility
MODETYPE	The type of PM parameters that the entity or the sub entity is to store as a result of an attribute change. Only the path (P) PM parameter is supported Parameter type is PM_MODE—the type of PM parameters
<ul style="list-style-type: none"> P 	Transport Path PM parameters

Table 23-6 SET-PMMODE-<STS_PATH> Input Parameters (continued)

Parameter and Values	Description
PMSTATE	Directs the named PM mode type to turn on or off. A null value defaults to on Parameter type is PM_STATE—directs the named PM mode type - path (P) state
<ul style="list-style-type: none"> • OFF 	Disable the mode
<ul style="list-style-type: none"> • ON 	Enable the mode

23.7 SET-TH-<MOD2>

Set Threshold (10GFC, 10GIGE, 1GFC, 1GFICON, 2GFC, 2GFICON, CLNT, D1VIDEO, DS1, DS3I, DV6000, E1, E3, E4, EC1, ESCON, ETRCLO, FSTE, G1000, GFPOS, GIGE, HDTV, ISC1, OC12, OC192, OC3, OC48, OCH, OMS, OTS, POS, STM1E, STS1, STS12C, STS18C, STS192C, STS24C, STS36C, STS3C, STS48C, STS6C, STS9C, T1, T3, VC11, VC12, VC3, VT1, VT2)

Usage Guidelines

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

This command sets the threshold for PM and sets the alarm thresholds for the MXP_2.5G_10G/TXP_MR_10G cards. If this command is used to set the alarm thresholds, the time-period is not applicable.

See [Table 27-1 on page 27-1](#) for supported modifiers by platform.

The rules are as follows: The PM Thresholds have a default of NEND for the location. The Alarm Thresholds do not require or interpret the location. The TMPER is not applicable to alarm thresholds. The TMPER default is 15-MIN. The client ports only accept SONET, Laser and alarm MONTYPES. The trunk ports accept SONET, Laser, alarm, FEC, OTN and 8B10B MONTYPES.

Refer to the [Cisco ONS SONET TL1 Reference Guide](#) for specific card provisioning rules.

Category

Performance

Security

Provisioning

Related Commands

ALW-PMREPT-ALL	RTRV-PMSCHED-<MOD2>
DLT-RMONTH-<MOD2_RMON>	RTRV-PMSCHED-ALL
ENT-RMONTH-<MOD2_RMON>	RTRV-RMONTH-<MOD2_RMON>
INH-PMREPT-ALL	RTRV-TH-<MOD2>
INIT-REG-<MOD2>	RTRV-TH-ALL
REPT PM <MOD2>	SCHED-PMREPT-<MOD2>
RTRV-PM-<MOD2>	SET-TH-<MOD2>
RTRV-PMMODE-<STS_PATH>	

Input Format

SET-TH-<MOD2>:[<TID>]:<AID>:<CTAG>::<MONTYPE>,<THLEV>,[<LOCN>],[<TMPER>];

Input Example

SET-TH-T3:CISCO:FAC-1-1:123::CVL,12,NEND,,15-MIN;

Input Parameters

Table 23-7 SET-TH-<MOD2> Input Parameters

Parameter and Values	Description
AID	Access identifier from the “ 25.1.1 ALL ” section on page 25-1. All the STS, VT1, Facility, and DS1 AIDs are supported
MONTYPE	Monitored type Parameter type is ALL_MONTYPE—monitoring type list
• AISSP	Alarm Indication Signal Seconds—Path
• ALL	All possible values
• BBE-PM	OTN—Background Block Errors—Path Monitor Point
• BBE-SM	OTN—Background Block Errors—Section Monitor Point
• BBER-PM	OTN—Background Block Error Ratio—Path Monitor Point expressed as 1/10th of a percentage.
• BBER-SM	OTN—Background Block Error Ratio—Section Monitor Point expressed as 1/10th of a percentage.
• BIEC	FEC—Bit Errors Corrected
• CGV	8B10B—Code Group Violations
• CSSP	Controlled Slip Seconds—Path (DSXM-12 FDL/T1.403 PM count)
• CVCPP	Coding Violations—CP-Bit Path
• CVL	Coding Violations—Line
• CVP	Coding Violations—Path
• CVS	Coding Violations—Section
• CVV	Coding Violations—Section
• DCG	8B10B—Data Code Groups
• ESAP	Errored Second Type A-Path (DS3XM-12 DS1 PM count)
• ESBP	Errored Second Type B-Path (DS3XM-12 DS1 PM count)

Table 23-7 SET-TH-<MOD2> Input Parameters (continued)

Parameter and Values	Description
• ESCPP	Errored Seconds—CP—Bit Path
• ESL	Errored Seconds—Line
• ESNPFE	Errored Second—Network Path (DS3XM-12 DS1 PM count)
• ESP	Errored Seconds—Path
• ES-PM	OTN—Errored Seconds—Path Monitor Point
• ES-SM	OTN—Errored Seconds—Section Monitor Point
• ESR	Errored Second—Ratio
• ESR-PM	Errored Seconds Ratio—Path monitor Point expressed as 1/10th of a percentage
• ESR-SM	Errored Seconds Ratio—Section monitor Point expressed as 1/10th of a percentage
• ESS	Errored Seconds—Section
• ESV	Errored Seconds—VT Path
• etherStatsBroadcastPkts	The total number of good packets received that were directed to a multicast address
• etherStatsCollisions	Number of transmit packets that are collisions
• etherStatsCRCAlignErrors	The total number of packets received that have a length (excluding framing bits, but including FCS octets) of between 64 and 1518 octets
• etherStatsDropEvents	Number of received frames dropped at the port level
• etherStatsFragments	The total number of packets received that were less than 64 octets
• etherStatsJabbers	The total number of packets received that are longer than 1518 octets
• etherStatsOctets	The total number of octets of data
• etherStatsOversizePkts	The total number of packets received that are longer than 1518 octets
• etherStatsPkts	The total number of packets (including bad packets, broadcast packets, and multicast packets) received
• etherStatsUndersizePkts	The total number of packets received that are less than 64 octets
• FC-L	Failure Count—Line
• FC-P	Failure Count—Path
• FC-PM	OTN—Failure Count—Path Monitor Point
• FC-SM	OTN—Failure Count—Section Monitor Point
• HP-AR	Availability Ratio
• HP-BBE	High-Order Path Background Block Error
• HP-BBER	High-Order Path Background Block Error Ratio
• HP-EB	High-Order Path Errored Block
• HP-ES	High-Order Path Errored Second

Table 23-7 SET-TH-<MOD2> Input Parameters (continued)

Parameter and Values	Description
• HP-ESA	High-Order Path Errored Seconds - A
• HP-ESB	High-Order Path Errored Seconds - B
• HP-ESR	High-Order Path Errored Second Ratio
• HP-FC	High-Order Path Failure Count
• HP-NPJC-PDET	High-Order Path Negative Pointer Justification Count
• HP-NPJC-PGEN	High-Order Path, Negative Pointer Justification Count
• HP-OI	Outage Intensity
• HP-PJCDIFF	High-Order Path Pointer Justification Count Difference
• HP-PJCS-PDET	High-Order Path Pointer Justification Count
• HP-PJCS-PGEN	High-Order Path Pointer Justification Count Seconds
• HP-PPJC-PDET	High-Order Path Positive Pointer Justification Count
• HP-PPJC-PGEN	High-Order Path, Positive Pointer Justification Count
• HP-SEPI	The number of SEP events in available time
• HP-SES	High-Order Path Severely Errored Seconds
• HP-SESR	High-Order Path Severely Errored Second Ratio
• HP-UAS	High-Order Path Unavailable Seconds
• ifInBroadcastPkts	Number of broadcast packets received since the last counter reset
• ifInDiscards	The number of inbound packets
• ifInErrorBytePktss	Receive Error Byte
• ifInErrors	The number of inbound packets (or transmission units) that contained errors
• ifInFramingErrorPkts	Receive Framing Error
• ifInJunkInterPkts	Receive Interpkt Junk
• ifInMulticastPkts	Number of multicast packets received since the last counter reset
• ifInOctets	Number of bytes transmitted since the last counter reset
• ifInUcastPkts	Number of unicast packets received since the last counter reset
• ifOutBroadcastPkts	Number of broadcast packets transmitted
• ifOutDiscards	The number of outbound packets
• ifOutErrors	The number of outbound packets (or transmission units) that could not be transmitted because of errors
• ifOutMulticastPkts	Number of multicast packets transmitted
• ifOutPayloadCrcErrors	Received payload CRC errors
• ifOutUcastPkts	Number of unicast packets transmitted
• IOS	8B10B- Idle Ordered Sets
• IPC	Invalid Packet Count
• LBCL-AVG	Average Laser Bias current in uA
• LBCL-MAX	Maximum Laser Bias current in uA

Table 23-7 SET-TH-<MOD2> Input Parameters (continued)

Parameter and Values	Description
• LBCL-MIN	Minimum Laser Bias current in uA
• LBCN	Normalized Laser Bias Current for OC3-8
• LBCN-HWT	Laser Bias Current
• LBCN-LWT	Laser Bias Current
• LOSSL	Loss of Signal Seconds—Line
• LP-BBE	Low-Order Path Background Block Error
• LP-BBER	Low-Order Path Background Block Error Ratio
• LP-EB	Low-Order Path Errored Block
• LP-ES	Low-Order Path Errored Second
• LP-ESA	Low-Order Path Errored Seconds-A
• LP-ESB	Low-Order Path Errored Seconds-B
• LP-ESR	Low-Order Path Errored Second Ratio
• LP-FC	Low-Order Path Failure Count
• LP-NPJC-DET	Low-Order Negative Pointer Justification Count, Detected
• LP-NPJC-GEN	Low Order Negative Pointer Justification Count, Generated
• LP-PPJC-DET	Low-Order Positive Pointer Justification Count, Detected
• LP-PPJC-GEN	Low-Order positive Pointer Justification Count, Generated
• LP-SEP	Low-Order Path Severely Errored Period
• LP-SEPI	Low-Order Path Severely Errored Period Intensity
• LP-SES	Low-Order Path Severely Errored
• LP-UAS	Low-Order Path Unavailable Seconds
• MS-PSC	Protection switch count
• MS-PSD	Protection switch duration
• NIOS	8B10B—Non Idle Ordered Sets
• NPJC-PDET	PPJC-PDET:Negative Pointer Justification
• NPJC-PGEN	PPJC-PGEN:Negative Pointer Justification
• OPR-AVG	Average Receive Power in 1/10 uW
• OPR-MAX	Maximum Receive Power in 1/10 uW
• OPR-MIN	Minimum Receive Power in 1/10 uW
• OPRN	Normalized Optical Receive Power for OC3-8
• OPRN-MAX	Maximum value for OPRN
• OPRN-MIN	Minimum value for OPRN
• OPT-AVG	Average Transmit Power in 1/10 uW
• OPT-MAX	Maximum Transmit Power in 1/10 uW
• OPT-MIN	Minimum Transmit Power in 1/10uW
• OPTN	Normalized value for Optical Power Transmitted for the OC3-8 card

Table 23-7 SET-TH-<MOD2> Input Parameters (continued)

Parameter and Values	Description
• OPTN-MAX	Maximum value for OPTN
• OPTN-MIN	Minimum value for OPTN
• OPWR-AVG	Optical Power—Average Interval Value in 1/10th of dBm
• OPWR-MAX	Optical Power—Maximum Interval Value in 1/10th of dBm
• OPWR-MIN	Optical Power—Minimum Interval Value in 1/10th of dBm
• PPJC-PDET	PPJC-PDET:Positive Pointer Justification
• PPJC-PGEN	PPJC-PGEN:Positive Pointer Justification
• PSC	Protection Switching Count
• PSC-R	Protection Switching Count—Ring
• PSC-S	Protection Switching Count—Span
• PSC-W	Protection Switching Count—Working
• PSD	Protection Switching Duration
• PSD-R	Protection Switching Duration—Ring
• PSD-S	Protection Switching Duration—Span
• PSD-W	Protection Switching Duration—Working
• SASCPP	Severely Errored Framing/AIS Second—CP-Bit Path
• SASP	Severely Errored Framing/AIS Seconds Path
• SEFS	Severely Errored Framing Seconds
• SEFSP	Severely Errored Framing Seconds—Path (DS3XM-12 DS1 PM count)
• SESCPP	Severely Errored Second—CP-Bit Path
• SESL	Severely Errored Second—Line
• SESNPFE	Severely Errored Second—Network Path (DS3XM-12 DS1 PM count)
• SESP	Severely Errored Second—Path
• SES-PM	OTN—Severely Errored Second—Path
• SESR-PM	OTN—Severely Errored Second Ratio—Path Monitor Point expressed as 1/10th of a percentage
• SESR-SM	OTN—Severely Errored Second Ratio—Section Monitor Point expressed as 1/10th of a percentage
• SESS	Severely Errored Second—Section
• SES-SM	OTN—Severely Errored Second—Section Monitor Point
• SESV	Severely Errored Second—VT Path
• UASCPP	Unavailable Second—CP-Bit Path
• UASL	Unavailable Second—Line
• UASNPFE	Unavailable Second—Network Path (DS3XM-12 DS1 PM count)
• UASP	Unavailable Second—Path

Table 23-7 SET-TH-<MOD2> Input Parameters (continued)

Parameter and Values	Description
• UAS-PM	OTN—Unavailable Second—Path Monitor Point
• UAS-SM	OTN—Unavailable Second—Section Monitor Point
• UASV	Unavailable Second—VT Path
• UNC-WORDS	FEC—Uncorrectable Words
• VPC	Valid Packet Count
THELV	Threshold level. Float
LOCN	Location associated with a particular command 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. 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.

23.8 SET-TOD

Set Time of Day

Usage Guidelines

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

This command sets the system date and time for the NE. The year should be entered using four digits while the hour should be entered using a 24-hour time period (for example, military time).

Category System

Security Provisioning

Related Commands			
ACT-USER	ED-TRAPTABLE	RTRV-MAP-NETWORK	
ALW-MSG-ALL	ENT-TRAPTABLE	RTRV-NE-APC	
ALW-MSG-DBCHG	INH-MSG-ALL	RTRV-NE-GEN	
ALW-MSG-SECU	INH-MSG-DBCHG	RTRV-NE-IPMAP	
COPY-RFILE	INH-MSG-SECU	RTRV-NE-PATH	
DLT-TRAPTABLE	INIT-SYS	RTRV-NE-SYNCN	
ED-DAT	REPT EVT FXFR	RTRV-NE-WDMANS	
ED-NE-GEN	RTRV-HDR	RTRV-TOD	
ED-NE-PATH	RTRV-INV	RTRV-TRAPTABLE	
ED-NE-SYNCN			

Input Format SET-TOD:[<TID>]::<CTAG>::<YEAR>,<MONTH>,<DAY>,<HOUR>,<MINUTE>,<SECOND>,<DIFFERENCE>[:DST=<DST>];

Input Example SET-TOD:CAZADERO::240::1998,05,08,13,18,55,480:DST=Y;

Input Parameters

Table 23-8 SET-TOD Input Parameters

Parameter and Values	Description
YEAR	The current calendar year. Integer
MONTH	The month of the year. Ranges from 01 to 12. Integer
DAY	The day of the month. Ranges from 01 to 31. Integer
HOUR	The hour of the day. Ranges from 00 to 23. Integer
MINUTE	The minute of the hour. Ranges from 00 to 59. Integer
SECOND	The second of the minute. Ranges from 00 to 59. Integer
DIFFERENCE	The number of minutes off UTC. Integer
DST	Daylight savings time Parameter type is ON_OFF—disable or enable an attribute
• N	Disable an attribute
• Y	Enable an attribute

