



INIT Commands

This chapter provides INIT (initialize) commands for the Cisco ONS 15454 SDH.

15.1 INIT-REG-<MOD2>

Initialize Register (10GFC, 10GIGE, 1GFC, 1GFICON, 2GFC, 2GFICON, CLNT, D1VIDEO, DS31, DV6000, E1, E3, E4, ESCON, ETRCLO, FSTE, G1000, GFPOS, GIGE, HDTV, ISC1, STM4, STM64, STM1, STM16, OCH, OMS, OTS, POS, STM1E, VC3, VC44C, VC38C, VC464C, VC48C, VC4, VC416C, VC42C, VC43C, VC12)

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

Usage Guidelines

This command initializes the performance monitoring (PM) registers.



Note

- The time period is always the current time period, and the previous time period counts are not cleared; therefore, both <MONDAT> and <MONTM> are not supported in this command.
 - All cards support only the (receive) RCV direction. BTH is not supported for this command.
 - INIT-REG-<MOD2> can also be used to initialize the (remote monitoring) RMON managed raw data.
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Category

Performance

Security

Provisioning

Input Format

```
INIT-REG-<MOD2>:[<TID>]:<AID>:<CTAG>::<MONTYPE>.,[<LOCN>],[<DIRN>],[<TMPER>]  
[.,];
```

Input Example

```
INIT-REG-STM1:CISCO:FAC-1-1:1234::CVL,,NEND,RCV,15-MIN;
```

Input Parameters

Table 15-1 INIT-REG-<MOD2> Input Parameters

Parameter and Values	Description
AID	Access identifier from the “25.1 ALL” section on page 25-1. All of the VC12 and Facility AIDs are supported
MONTYPE	Monitored type Parameter type is ALL_MONTYPE—monitoring type list
• AISSP	Alarm Indication Signal Seconds—Path
• ALL	All possible values
• BBEP	SDH Background Block Errors Path
• BBE-PM	OTN—Background Block Errors—Path Monitor Point
• BBER	SDH Background Block Error Ratio
• 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.
• BBE-SM	OTN—Background Block Errors—Section Monitor Point
• BIEC	FEC—Bit Errors Corrected
• CGV	8B10B—Code Group Violations
• 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
• ESCPP	Errored Seconds—CP—Bit Path
• ESL	Errored Seconds—Line
• ESP	Errored Seconds—Path
• ES-PM	OTN—Errored Seconds—Path 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
• ES-SM	OTN—Errored Seconds—Section Monitor Point
• ESV	Errored Seconds—VC Path
• etherStatsBroadcastPkts	The total number of good packets received that were directed to a multicast address
• etherStatsCollisions	Number of transmit packets that are collisions

Table 15-1 *INIT-REG-<MOD2> Input Parameters (continued)*

Parameter and Values	Description
• etherStatsCRCAAlignErrors	The total number of packets received that have a length (excluding framing bits, but including frame check sequence [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
• FCP	Failure Count—Line
• 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
• 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 Pointer Justification Count Seconds
• HP-OI	Outage Intensity
• HP-PJCDIFF	High Order Path Pointer Justification Count Difference
• HP-PJCS-PDET	High Order Path Pointer Justification Count
• 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

Table 15-1 *INIT-REG-<MOD2> Input Parameters (continued)*

Parameter and Values	Description
• 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 Interpacket 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 (cyclic redundancy check) CRC errors
• ifOutUcastPkts	Number of unicast packets transmitted
• IOS	8B10B - Idle Ordered Sets
• IPC	Invalid Packet Count
• LBCL-AVG	Average Laser Bias current in micro A
• LBCL-MAX	Maximum Laser Bias current in micro A
• LBCL-MIN	Minimum Laser Bias current in micro A
• LBCN	Normalized Laser Bias Current for STM1-8
• 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

Table 15-1 *INIT-REG-<MOD2> Input Parameters (continued)*

Parameter and Values	Description
• LP-SEP	A sequence of between 3 to 9 consecutive severely errored seconds (SES)
• LP-SEPI	Low-Order Path Severely Errored Period Intensity
• LP-SES	Low-Order Path Severely Errored Seconds
• LP-UAS	Low-Order Path Unavailable Seconds
• MS-PSC	Multiplex Section-Protection switch count
• MS-PSD	Multiplex Section-Protection switch duration
• NIOS	8B10B—Non Idle Ordered Sets
• NPJC-PDET	Negative Pointer Justification Count, Path Detected
• NPJC-PGEN	Negative Pointer Justification Count, Path Generated
• OPR-AVG	Average Receive Power in 1/10 micro W
• OPR-MAX	Maximum Receive Power in 1/10 micro W
• OPR-MIN	Minimum Receive Power in 1/10 micro W
• OPRN	Normalized Optical Receive Power for STM1-8
• OPRN-MAX	Maximum value for OPRN
• OPRN-MIN	Minimum value for OPRN
• OPT-AVG	Average Transmit Power in 1/10 micro W
• OPT-MAX	Maximum Transmit Power in 1/10 micro W
• OPT-MIN	Minimum Transmit Power in 1/10 micro W
• OPTN	Normalized value for Optical Power Transmitted for STM1-8 card
• 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	Positive Pointer Justification Count, Path Detected
• PPJC-PGEN	Positive Pointer Justification Count, Path Generated
• 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

Table 15-1 *INIT-REG-<MOD2> Input Parameters (continued)*

Parameter and Values	Description
• SASP	Severely Errored Framing/AIS Seconds Path
• SEFS	Severely Errored Framing Seconds
• SESCPP	Severely Errored Second—CP-Bit Path
• SESL	Severely Errored Second—Line
• SESP	Severely Errored Second—Path
• SES-PM	OTN—Severely Errored Second—Path
• SESR	Severely Errored Second—Ratio
• 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—VC Path
• UASCPP	Unavailable Second—CP-Bit Path
• UASL	Unavailable Second—Line
• UASP	Unavailable Second—Path
• UAS-PM	OTN—Unavailable Second—Path Monitor Point
• UAS-SM	OTN—Unavailable Second—Section Monitor Point
• UASV	Unavailable Second—VC Path
• UNC-WORDS	FEC—Uncorrectable Words
• VPC	Valid Packet Count
LOCN	Location associated with a particular command in reference to the entity identified by the AID 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
DIRN	Direction relative to the entity identified by the AID. Defaults to ALL, which means that the command initializes all of the registers irrespective of the PM direction Parameter type is DIRECTION—transmit and receive directions
• RCV	Receive direction only
TMPER	Accumulation time period for performance counters. A null value defaults to 15-MIN. Defaults to 15-MIN Parameter type is TMPER—accumulation time period for the performance management center

Table 15-1 *INIT-REG-<MOD2> Input Parameters (continued)*

Parameter and Values	Description
<ul style="list-style-type: none"> 1-DAY 	Performance parameter accumulation interval length; every 24-hours. For SDH PM data only one day of history data is available. For RMON managed PM data seven days of history data are available.
<ul style="list-style-type: none"> 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.
<ul style="list-style-type: none"> 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.
<ul style="list-style-type: none"> 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.
<ul style="list-style-type: none"> RAW-DATA 	Performance parameter accumulation interval length; starting from the last time the counters were cleared. This is only applicable to RMON managed PMs.

15.2 INIT-SYS

Initialize System

Usage Guidelines

This command initializes the specified card and its associated subsystem(s).



Note

- The SLOT-ALL AID and the list AID are not allowed in this command.
- Only one level of restart is supported in this command.
- It is important that the standby TCC2/TCC2P should be up and running fully standby before this command is sent on the active TCC2/TCC2P for a period of time. During this time, the system is vulnerable to traffic outages caused by timing disruptions or other causes.
- Before a card is hard reset, it must be in one of the following states: LOCKED-ENABLED, MAINTENANCE; LOCKED-ENABLED, DISABLED; LOCKED-DISABLED., MAINTENANCE; LOCKED-DISABLED, DISABLED.

Category

System

Security

Maintenance

Input Format

INIT-SYS:[<TID>]:<AID>:<CTAG>::[<CMDMDE=CMDMODE>];

Input Example

```
INIT-SYS:HOTWATER:SLOT-8:201::CMDMDE=FRCD;
```

Input Parameters**Table 15-2** *INIT-SYS Input Parameters*

Parameter and Values	Description
AID	Access identifier from the “25.1.11 EQPT” section on page 25-16
<PH>	The phase. 1=soft reset; 2=hard reset. PH is an integer. PH is a required parameter for the ONS 15600, ONS 15310-CL, and ONS 15310-MA. PH is supported on only the CE-100T-8 card on the ONS 15454.
CMDMDE	Command Mode. Allows the user to override safety checks. CMDMDE is not supported on the ONS15454 SDH. Defaults to NORM Parameter type is CMDMDE—forces the system to execute a given command regardless of any standing conditions. Normal mode is the default behavior for all commands but you can specify FRCD to force the system to override a state in which the command would normally be denied
<ul style="list-style-type: none"> FRCD 	Force the system to override a state in which the command would normally be denied
<ul style="list-style-type: none"> NORM 	Execute the command normally. Do not override any conditions that could make the command fail