INIT Commands

This chapter provides initialize (INIT) commands for the Cisco ONS 15454, Cisco ONS 15310-CL, Cisco ONS 15310-MA, and Cisco ONS 15600.

15.1 INIT-REG-<MOD2>

(Cisco ONS 15454, ONS 15327, ONS 15310-CL, ONS 15310-MA, ONS 15600) Initialize Register for 10GFC, 10GIGE, 1GFC, 1GFICON, 2GFC, 2GFICON, CLNT, D1VIDEO, DS1, DV6000, E1, E3, E4, EC1, ESCON, ETRCLO, ETH, FSTE, G1000, GFPOS, GIGE, HDTV, ISC1, ILK, ISCCOMPAT, ISC3PEER2R, ISC3PEER1G, ISC3PEER2G, OC12, OC192, OC3, OC48, OCH, OMS, OTS, POS, STS1, STS12C, STS18C, STS192C, STS24C, STS36C, STS3C, STS48C, STS6C, STS9C, T1, T3, VC12, VC3, VT1, or VT2 (INIT-REG-<MOD2>) command initializes the performance monitoring (PM) registers.

Usage Guidelines   See Table 28-1 on page 28-1 for supported modifiers by platform.

Note

- The time period is always the current time period, and the previous time period counts are not cleared; therefore, neither MONDAT nor MONTM are supported in this command.

- Unless otherwise stated, DS1 cards are the only cards that support the RCV and TRMT directions.

- INIT-REG-<MOD2> can also be used to initialize the remote monitoring (RMON)-managed raw data.

Category   Performance

Security   Provisioning

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

Input Examples	INIT-REG-OC3:CISCO:FAC-1-1:1234::CVL,,NEND,BTH,15-MIN;

Input Parameters	<AID>	Access identifier from the "26.1 ALL" section on page 26-1. All of the STS, VT1, Facility, and DS1 AIDs are supported.
	<MONTYPE>	Monitored type. The 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 one tenth of a percentage.
	• BBER-SM	OTN—Background Block Error Ratio—Section Monitor Point expressed as one tenth of a percentage.
	• BIEC	FEC—Bit Errors Corrected
	• BIT-EC	The number of bit errors corrected by the FEC algorithm
	• 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)
	• 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 one tenth of a percentage
	• ESR-SM	Errored Seconds Ratio—Section monitor Point expressed as one tenth 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
•	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, 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 Severely Errored Period Intensity 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 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	8B10—Idle Ordered Sets
•	IPC	Invalid Packet Count
•	LBCL-AVG	Average Laser Bias current in microA
•	LBCL-MAX	Maximum Laser Bias current in microA
•	LBCL-MIN	Minimum Laser Bias current in microA
•	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 tenths of a microW
•	OPR-MAX	Maximum Receive Power in tenths of a microW
•	OPR-MIN	Minimum Receive Power in tenths of a microW
•	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 tenths of a microW
•	OPT-MAX	Maximum Transmit Power in tenths of a microW
•	OPT-MIN	Minimum Transmit Power in tenths of a microW
•	OPTN	Normalized value for Optical Power Transmitted for the OC3-8 card
•	OPTN-MAX	Maximum value for OPTN
•	OPTN-MIN	Minimum value for OPTN
•	OPWR-AVG	Optical Power—Average Interval Value in tenths of a dBm
•	OPWR-MAX	Optical Power—Maximum Interval Value in tenths of a dBm
•	OPWR-MIN	Optical Power—Minimum Interval Value in tenths of a 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/Alarm Indication Signal (AIS) Seconds—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 one tenth of a percentage
•	SESR-SM	OTN—Severely Errored Second Ratio—Section Monitor Point expressed as one tenth 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	
• 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	
<LOCN>	Location associated with a particular command in reference to the entity identified by the AID. The parameter type is LOCATION, which is 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. The parameter type is DIRECTION (transmit and receive directions).	
• BTH	Both transmit and receive directions	
• RCV	Receive direction only	
• TRMT	Transmit direction only	
<TMPER>	Accumulation time period for performance counters. A null value defaults to 15-MIN. Defaults to 15-MIN. The parameter type is TMPER, which is the 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.	

15.2 INIT-SYS

(Cisco ONS 15454, ONS 15327, ONS 15310-CL, ONS 15310-MA, ONS 15600) The Initialize System (INIT-SYS) command initializes the specified card and its associated subsystems.

Note   In Cisco ONS 15600, the SLOT-ALL AID is allowed only for soft reset but not for hard reset.

Usage Guidelines

- This command cannot be executed if the network is in a Bidirectional Line Switched Ring (BLSR).

- The SLOT-ALL AID and the list AID are not allowed in this command.

- Only one level of reset is supported in this command for the ONS 15454.

- It is important that the standby TCC2/TCC2P should be up and running fully standby for a period of time before this command is sent on the active TCC2/TCC2P. During this time, the system is vulnerable to traffic outages caused by timing disruptions or other causes.

- The ONS 15310-CL supports the RESET parameters for the 15310-CL-CTX, CE-100T-8, and ML-100T-8 cards only.

- The ONS 15600 does not support soft resets on pluggable IO modules (PIMs).

- If a card is hard reset, it has to be in one of the following states: OOS-MA, MT; OOS-MA, DSBLD; OOS-AUMA, MT; OOS-AUMA, DSBLD.

Category   System

Security   Maintenance

Input Format   INIT-SYS:[<TID>]:<AID>:<CTAG>::<PH>[,<CMDMDE=CMDMDE>];

Input Examples   INIT-SYS:HOTWATER:SLOT-8:201::1,CMDMDE=FRCD;

Input Parameters

Parameter	Description	Cisco ONS 15454	Cisco ONS 15600	Cisco ONS 15310 MA
<AID>	Access identifier from the "26.14 EQPT" section on page 26-32.	Y	Y	Y
<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. The PH parameter is supported on the CE-100T-8 and CE-MR-10 cards on the ONS 15454.	Y	Y	Y
<CMDMDE>	(Optional) Command mode. Normal (NORM) mode is the default behavior for all commands but you can specify forced (FRCD) mode to force the system to override a state where the command would normally be denied. The FRCD mode of operation is applicable to delete a virtual concatenated (VCAT) member cross-connect in Unlocked-Enabled or Locked-Disabled, AutomaticInService service states. CMDMDE parameter is not supported on ONS 15310-CL.	N	Y	Y
• FRCD	Force the system to override a state in which the command would normally be denied.	Y	Y	Y
• NORM	Execute the command normally. Do not override any conditions that could make the command fail.	Y	Y	Y