



# CHAPTER 27

## Conditions



### Note

The terms "Unidirectional Path Switched Ring" and "UPSR" may appear in Cisco literature. These terms do not refer to using Cisco ONS 15xxx products in a unidirectional path switched ring configuration. Rather, these terms, as well as "Path Protected Mesh Network" and "PPMN," refer generally to Cisco's path protection feature, which may be used in any topological network configuration. Cisco does not recommend using its path protection feature in any particular topological network configuration.

This chapter describes the conditions for TL1 commands and autonomous messages for the Cisco ONS 15454, Cisco ONS 15310-CL, Cisco ONS 15310-MA, and Cisco ONS 15600.

Conditions include any problem detected on an ONS 15454, ONS 15310-CL, ONS 15310-MA, or ONS 15600 shelf. They can include standing or transient notifications. A snapshot of all currently raised standing conditions on the network, node, or card can be retrieved in the Cisco Transport Controller (CTC) Conditions window or using the RTRV-COND commands. (In addition, some but not all cleared conditions are found in the CTC History tab.)

**Table 27-1**      **Conditions**

Condition	Description
AIS	Alarm Indication Signal
AIS-L	Alarm Indication Signal-Line
AIS-P	Alarm Indication Signal-Path
AIS-V	Alarm Indication Signal-VT
ALS	Automatic Laser Shutdown
APC-DISABLED	Automatic Power Control Disabled
APC-FAIL	Automatic Power Control Failure
APSB	Byte Failure
APSC-IMP	Improper Automatic Protection Switch (APS) Code
APSCDFLTK	Default K Byte
APSCINCON	Inconsistent APS Code
APSCM	Protection Switching Channel Match Failure
APSCNMIS	Node ID Mismatch
APSIMP	APS Invalid Mode

Table 27-1 Conditions (continued)

Condition	Description
APSM	Automatic Protection Switch Mode Mismatch
AS-CMD	Alarms Suppressed By User Command
AS-MT	Alarms Suppressed For Maintenance
AU-LOF	Loss of Frame (LOF)–Administration Unit–Loss of Multiframe
AUD-LOG-LOSS	Audit Log 100 Percent Full–Oldest records will be lost
AUD-LOG-LOW	Audit Log 80 Percent Full
AUTOLSROFF	Automatic Laser Shutoff Due To High Temperature
AUTORESET	Automatic System Reset
AUTOSW-AIS	Automatic Path Protection Switch Caused By AIS
AUTOSW-LOP	Automatic Path Protection Switch Caused By LOP
AUTOSW-PDI	Automatic Path Protection Switch Caused By PDI
AUTOSW-SDBER	Automatic Path Protection Switch Caused By SDBER
AUTOSW-SFBER	Automatic Path Protection Switch Caused By SFBER
AUTOSW-UNEQ	Automatic Path Protection Switch Caused By UNEQ
BAT-FAIL	Battery Failure
BAT-HGH-VLT	High Volt
BAT-LOW-VLT	Low Volt
BKUPMEM	Primary Nonvolatile Backup Memory Failure
BLSROSYNC	BLSR Out Of Sync
CARLOSS	Carrier Loss On The LAN
CKTDOWN	Signaling Unable to Set Up Circuit
CLDRESTART	Cold Restart
COMIOXC	Input/Output (IO) Slot To Cross-connect (XCON) Communication Failure
COMM-FAIL	Plug-in Module Communication Failure
CONTBUS-A-18	TCC A To DCC A Processor Communication Failure
CONTBUS-B-18	TCC B To DCC B Processor Communication Failure
CONTBUS_A	Controller A To Shelf Slot Communication Failure
CONTBUS_B	Controller B To Shelf Slot Communication Failure
CTNEQPT-MISMATCH	Connection Equipment Mismatch
CTNEQPT-PBPROT	Interconnection Equipment Failure–Protect XC Payload Bus
CTNEQPT-PBWORK	Interconnection Equipment Failure–Working XC Payload Bus
DATAFLT	Software Fault–Data Integrity Fault
DBOSYNC	Standby Database Out of Synchronization
DS3-MISM	DS3 Frame Format Mismatch
DSP-COMM-FAIL	DSP Communication Failure

**Table 27-1** Conditions (continued)

Condition	Description
DSP-FAIL	DSP Failure
DUP-IPADDR	IP address already in use within the same data communications channel (DCC) area
DUP-NODENAME	Node name already in use within the same DCC area
E-W-MISMATCH	Both Ends Of Fiber Provisioned As East Or Both As West
EHIBATVG	Extreme High Voltage
ELWBATVG	Extreme Low Voltage
EOC	Section DCC (SDCC) Termination Failure
EOC-L	Line DCC (LDCC) Termination Failure
EQPT	Equipment Failure
EQPT-MISS	Replaceable Equipment/Unit is Missing
ERFI-P-CONN	Enhanced Remote Failure Indication–Path–Connectivity
ERFI-P-PAYLD	Enhanced Remote Failure Indication–Path–Payload
ERFI-P-SRVR	Enhanced Remote Failure Indication–Path–Server
ERROR-CONFIG	Error in Startup Configuration
ETH-LINKLOSS	Rear Panel Ethernet Link Removed
EXCCOL	Excess Collisions on the LAN
EXERCISE-RING-FAIL	Exercise Request on Ring Failed
EXERCISE-RING-REQ	Exercise Request on Ring
EXERCISE-SPAN-FAIL	Exercise Request on Span Failed
EXERCISE-SPAN-REQ	Exercise Request on Span
EXT	Failure Detected External To The NE
EXTRA-TRAF-PREEMPT	Extra Traffic Preempted
FAILTOSW	Failure To Switch To Protection
FAILTOSW-PATH	Failure To Switch To Protection–Path
FAILTOSWR	Failure To Switch To Protection–Ring
FAILTOSWS	Failure To Switch To Protection–Span
FAN	Fan Failure
FANDEGRADE	Partial Fan Failure
FE-AIS	Far End AIS
FE-DS1-MULTLOS	Far End Multiple DS1 LOS Detected On DS3
FE-DS1-NSA	Far End DS1 Equipment Failure–Non-Service-Affecting
FE-DS1-SA	Far End DS1 Equipment Failure–Service-Affecting
FE-DS1-SNGLLOS	Far End Single DS1 Loss of Signal (LOS)
FE-DS3-NSA	Far End DS3 Equipment Failure–Non-Service-Affecting
FE-DS3-SA	Far End DS3 Equipment Failure–Service-Affecting

Table 27-1 Conditions (continued)

Condition	Description
FE-EQPT-NSA	Far End Common Equipment Failure–Non-Service-Affecting
FE-EXERCISING-RING	Far End Exercising Ring
FE-EXERCISING-SPAN	Far End Exercising Span
FE-FRCDWKSWPR-RING	Far End Working Facility Forced To Switch To Protection–Ring
FE-FRCDWKSWPR-SPAN	Far End Working Facility Forced To Switch To Protection–Span
FE-IDLE	Far End Idle
FE-LOCKOUTOFPR-SPAN	Far End Lockout Of Protection–Span
FE-LOF	Far End LOF
FE-LOS	Far End LOS
FE-MANWKSWPR-RING	Far End Manual Switch Of Working Facility To Protection–Ring
FE-MANWKSWPR-SPAN	Far End Manual Switch Of Working Facility To Protection–Span
FEC-MISM	FEC Mismatch
FEPRLF	Far End Protection Line Failure
FORCED-REQ	Forced Switch Request
FORCED-REQ-RING	Forced Switch Request On Ring
FORCED-REQ-SPAN	Forced Switch Request On Span
FRCDSWTOINT	Forced Switch To Internal Clock
FRCDSWTOPRI	Forced Switch To Primary Reference
FRCDSWTOSEC	Forced Switch To Second Reference
FRCDSWTOHTRD	Forced Switch To Third Reference
FRNGSYNC	Free Running Synchronization Mode
FSTSYNC	Fast Start Synchronization Mode
FULLPASSTHR-BI	Bidirectional Full Pass Through Is Active
GCC-EOC	GCC Termination Failure
GE-OOSYNC	Gigabit Ethernet Out of Synchronization
HI-LASERBIAS	Equipment High Laser Bias
HI-RXPOWER	Equipment High Receive (Rx) Power
HI-TXPOWER	Equipment High Transmit (Tx) Power
HITEMP	High Temperature
HLDOVRSYNC	Holdover Synchronization Mode
I-HITEMP	Industrial High Temperature
IMPROPRMVL	Improper Removal

Table 27-1 Conditions (continued)

Condition	Description
INC-GFP-OUTOFFRAME	Out Of Frame Detected by Generic Framing Procedure (GFP) Receiver
INC-GFP-SIGLOSS	Client Signal Loss Frames Detected by GFP Receiver
INC-ISD	DS3 Idle Condition
INC-SIGLOSS	Incoming Signal Loss on Fibre Channel Interface
INC-SYNCLOSS	Incoming Synchronization Loss on Fibre Channel Interface
INC_GFP_SYNCLOSS	Client Synchronization Loss Frames Detected by GFP Receiver
INHSWPR	Inhibit Switch To Protect Request On Equipment
INHSWWKG	Inhibit Switch To Working Request On Equipment
INTRUSION-PSWD	Security Intrusion Attempt Detected—See Audit Log
INVMACADR	Invalid MAC Address
IOSCFGCOPY	IOS Configuration Copy In Progress
KB-PASSTHR	K Byte Pass Through Is Active
KBYTE-APS-CHANNEL-FAILURE	K Byte Channel Failure
LAN-POL-REV	LAN Connection Polarity Reversed
LASEREOL	Laser Approaching End of Life
LKOUTPR-S	Lockout Of Protection—Span
LMP-HELLODOWN	LMP Hello FSM to Control Channel Down
LMP-NDFAIL	LMP Neighbor Discovery has failed
LO-RXPOWER	Equipment Low Rx Power
LO-TXPOWER	Equipment Low Tx Power
LOA	Loss of Alignment
LOC	Loss of Channel
LOCKOUT-REQ	Lockout Switch Request On Facility or Equipment
LOCKOUT-REQ-RING	Lockout Switch Request On Ring
LOF	Loss Of Frame
LOM	Loss of Multiframe
LOP-P	Loss Of Pointer—Path
LOP-V	Loss Of Pointer—VT
LOS	Loss Of Signal
LPBKCRS	Cross-connect Loopback
LPBKDS1FEAC	DS1 Loopback Due To Far End Alarm and Control (FEAC) Command
LPBKDS1FEAC-CMD	DS1 Loopback Command Sent To Far End
LPBKDS3FEAC	DS3 Loopback Due To FEAC Command
LPBKDS3FEAC-CMD	DS3 Loopback Command Sent To Far End

**Table 27-1** Conditions (continued)

<b>Condition</b>	<b>Description</b>
LPBKFACILITY	Facility Loopback
LPBKTERMINAL	Terminal Loopback
LWBATVG	Low Volt
MAN-REQ	Manual Switch Request
MANRESET	Manual System Reset
MANSWTOINT	Manual Switch To Internal Clock
MANSWTOPRI	Manual Switch To Primary Reference
MANSWTOSEC	Manual Switch To Second Reference
MANSWTOHIRD	Manual Switch To Third Reference
MANUAL-REQ-RING	Manual Switch Request On Ring
MANUAL-REQ-SPAN	Manual Switch Request On Span
MEA	Mismatch Of Equipment And Attributes
MEM-GONE	Free Memory On Card Near Zero
MEM-LOW	Free Memory On Card Very Low
MFGMEM	Manufacturing Data Memory (EEPROM Failure)
NO-CONFIG	No Startup Config
NTWTPINC	Network Topology Incomplete
OCHNC-ACTIV-FAIL	Optical Channel Activation Failure
OCHNC-DEACTIV-FAIL	Optical Channel Deactivation Failure
OCHNC-FAIL	Optical Channel Connection Failure
OCHNC-INC	Optical Channel Incomplete
ODUK-AIS-PM	ODUk: Alarm Indication Signal
ODUK-BDI-PM	ODUk: PM Backward Defect Indication
ODUK-LCK-PM	ODUk: Locked Defect-PM
ODUK-OCI-PM	ODUk: Open Connection Indication
ODUK-SD-PM	ODUk: Signal Degrade
ODUK-SF-PM	ODUk: Signal Failure
ODUK-TIM-PM	ODUk: Trail Trace Identifier Mismatch
OOU-TPT	Out of Use-Transport Failure
OPTNTWMIS	Optical Network Type Mismatch
OTUK-AIS	OTUk: Alarm Indication Signal
OTUK-BDI	OTUk: Backward Defect Indication
OTUK-LOF	OTUk: Loss Of Frame
OTUK-SD	OTUk: Signal Degrade
OTUK-SF	OTUk: Signal Failure
OTUK-TIM	OTUk: Trail Trace Identifier Mismatch

**Table 27-1** Conditions (continued)

Condition	Description
OUT-OF-SYNC	8B10B Out of Sync
PDI-P	Payload Defect Indication–Path
PEER-NORESPONSE	Peer Card Not Responding
PLM-P	Payload Label Mismatch–Path
PLM-V	Signal Label Mismatch Failure–Payload Label Mismatch–VT
PORT-CODE-MISM	Pluggable Port security code mismatch
PORT-COMM-FAIL	Module Communication Failure
PORT-MISMATCH	Pluggable Port rate mismatch
PORT-MISSING	Pluggable Port missing
PRC-DUPID	Duplicate Node ID
PROTNA	Protection Unit Not Available
PTIM	Payload Type Identifier Mismatch
PWR-REDUN	Redundant Power Capability Lost
RAI	Remote Alarm Indication
RCVR-MISS	Facility Termination Equipment–Receiver Missing
RFI	Remote Failure Indication
RFI-L	Remote Failure Indication–Line
RFI-P	One-Bit Remote Failure Indication–Path
RFI-V	Remote Failure Indication–VT
RING-ID-MIS	Ring ID Mismatch
RING-MISMATCH	Far End of Fiber Is Provisioned With Different Ring ID
RING-SW-EAST	Ring Switch Is Active on the East Side
RING-SW-WEST	Ring Switch Is Active on the West Side
RSVP-HELLODOWN	RSVP Hello FSM to Neighbor Down
RUNCFG-SAVENEED	Need to Save Running Configuration
SD	Signal Degrade
SD-L	Bit Error Rate (BER) Threshold Exceeded For Signal Degrade–Line
SD-P	BER Threshold Exceeded For Signal Degrade–Path
SF	Signal Failure
SF-L	BER Threshold Exceeded For Signal Failure–Line
SF-P	BER Threshold Exceeded For Signal Failure–Path
SFTWDOWN	Software Download In Progress
SNTP-HOST	Simple Network Time Protocol (SNTP) Host Failure
SPAN-SW-EAST	Span Switch Is Active On The East Side
SPAN-SW-WEST	Span Switch Is Active On The West Side

**Table 27-1** Conditions (continued)

Condition	Description
SQM	Sequence Mismatch
SQUELCH	Ring Is Squelching Traffic
SQUELCHED	Equipment Squelched
SSM-DUS	Do Not Use For Synchronization
SSM-FAIL	Failed To Receive Synchronization Status Message
SSM-LNC	G812–Local Node Clock Traceable
SSM-OFF	Synchronization Status Messages Are Disabled On This Interface
SSM-PRC	G811–Primary Reference Clock Traceable
SSM-PRS	Stratum 1 Primary Reference Source Traceable
SSM-RES	Reserved For Network Synchronization Use
SSM-SDH-TN	G812–Transit Node Clock Traceable
SSM-SETS	G813–Synchronous Equipment Timing Source Traceable
SSM-SMC	SONET Minimum Clock Traceable
SSM-ST2	Stratum 2 Traceable
SSM-ST3	Stratum 3 Traceable
SSM-ST3E	Stratum 3E Traceable
SSM-ST4	Stratum 4 Traceable
SSM-STU	Synchronized–Traceability Unknown
SSM-TNC	Transit Node Clock Traceable
SWMTXMOD	Switching Matrix Module Failure
SWTOPRI	Switch To Primary Reference
SWTOSEC	Switch To Second Reference
SWTOTHIRD	Switch To Third Reference
SYNC-FREQ	Synchronization Reference Frequency Out Of Bounds
SYNCPRI	Primary Synchronization Reference Failure
SYNCSEC	Secondary Synchronization Reference Failure
SYNCTHIRD	Third Synchronization Reference Failure
SYSBOOT	System Reboot
TIM	TIM Section–Trace Identifier Mismatch Failure
TIM-MON	TIM Section Monitor–Trace Identifier Mismatch Failure
TIM-P	STS Path Trace Identifier Mismatch
TPTFAIL	Transport layer failure
TRMT	Transmit Failure
TRMT-MISS	Facility Termination Equipment–Transmitter Missing
TUNDERRUN	Ethernet Transmit First In First Out Underrun

**Table 27-1**     *Conditions (continued)*

<b>Condition</b>	<b>Description</b>
TX-AIS	Alarm Indication Signal in Tx
TX-RAI	Remote Alarm Indication in Tx
UNC-WORD	Forward Error Correction (FEC) Uncorrected Word
UNEQ-P	Unequipped–Path
UNEQ-V	Signal Label Mismatch Failure–Unequipped VT
VCG-DEG	Virtual Concatenation (VCAT) Group Degraded
VCG-DOWN	VCAT Group Down
WKSWPR	Switched To Protection
WTR	Wait To Restore
WVL-MISMATCH	Equipment Wavelength Mismatch

