



TL1 Alarms and Errors



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 provides TL1 alarm and error information supported by the Cisco ONS 15454 and Cisco ONS 15327, including:

- Alarms
- Errors
- Echo

Each alarm includes a description and severity. Errors are listed by error type and include error message. Conditions are not alarmed (NA) or not reported (NR) and are listed in the "Condition" [Table 4-76 on page 4-51](#).

7.1 Alarms

Refer to "Alarm Troubleshooting" in the *Cisco ONS 15454 Troubleshooting Guide* or the *Cisco ONS 15327 Troubleshooting Guide* for complete alarm definitions, trouble notifications, and fault recovery procedures. The alarms are listed alphabetically by alarmable object:

- [AEP, page 7-2](#)
- [AIP, page 7-3](#)
- [BITS, page 7-3](#)
- [BP, page 7-3](#)
- [CC, page 7-3](#)
- [CKT, page 7-4](#)
- [DS1, page 7-4](#)
- [DS3, page 7-5](#)
- [DWDM Client, page 7-5](#)
- [DWDM Trunk, page 7-7](#)
- [ECN, page 7-9](#)
- [ENV, page 7-9](#)
- [EQPT, page 7-9](#)
- [ETHER, page 7-11](#)
- [EXTSYNCH, page 7-11](#)
- [FAN, page 7-12](#)
- [FUDC, page 7-12](#)
- [HDGE \(G1000\), page 7-13](#)
- [MSUDC, page 7-13](#)
- [NE, page 7-13](#)
- [NERING, page 7-14](#)
- [NESYNCH, page 7-15](#)
- [OCN, page 7-15](#)
- [OSCRING, page 7-16](#)
- [OTS, page 7-16](#)
- [STSMON, page 7-16](#)
- [STSTERM, page 7-17](#)
- [UPC-CKT, page 7-17](#)
- [VT-MON, page 7-17](#)
- [VT-TERM, page 7-18](#)

For a sample of each TL1 alarm that can be generated by the Cisco ONS 15454, refer to the file 15454_r41_tl1_alarms.txt or 15454_r45_tl1_alarms.txt on the Cisco ONS 15454 Software CD in the subdirectory \T11. For a sample of each TL1 alarm that can be generated by the Cisco ONS 15327, refer to the file 15327_r40_tl1_alarms.txt or 15327_r45_tl1_alarms.txt on the Cisco ONS 15327 Software CD in the subdirectory \T11. These files can be used to test an operations support system's ability to receive alarms which the ONS 15454/ONS 15327 can raise.

7.1.1 AEP

Alarm expansion panel

Table 7-1 **AEP**

AEP Alarm	Severity	Description
EQPT	CR/SA	An Equipment Failure alarm indicates that a hardware failure has occurred on the reporting card.
MFGMEM	CR/SA	The manufacturing data memory failure alarm means that the ONS 15454/15327 cannot access the data on the erasable programmable read-only memory (EPROM).

7.1.2 AIP

Auxiliary interface protection module

Table 7-2 AIP

AIP Alarm	Severity	Description
INVMACADR	MJ/NSA	The Equipment Failure Invalid MAC Address alarm occurs when the ONS 15454/15327 Media Access Control layer address (MAC Address) is invalid.
MEA	CR/SA	If the Mismatch of Equipment Attributes alarm is reported against the AIP, the fuse in the AIP board blew or is missing. The MEA alarm also occurs when an old AIP board with a 2-Amp fuse is installed in a newer 10 Gbps-compatible or ANSI shelf assembly (15454-SA-ANSI).
MFGMEM	CR/SA	The manufacturing data memory failure alarm means that the ONS 15454/15327 cannot access the data on the erasable programmable read-only memory (EPROM).

7.1.3 BITS

Building integration timing supply (BITS) incoming references (BITS-1, BITS-2)

Table 7-3 BITS

BITS Alarm	Severity	Description
LOF	MJ/SA	A port on the TCC/MIC BITS input detects a loss of frame (LOF) on the incoming BITS timing reference signal.
LOS	MJ/SA	The TCC/MIC card has a loss of signal (LOS) condition from the BITS timing source.
SSM-FAIL	MN/NSA	Synchronization status messaging failed.

7.1.4 BP

The backplane

Table 7-4 BP

BP Alarm	Severity	Description
MEA	CR/SA	The MEA alarm for the backplane occurs when the revision of the backplane is incompatible with cross-connect equipment.
MFGMEM	CR/SA	The Manufacturing Data Memory Failure (MFGMEM) alarm means that the ONS 15454/15327 cannot access the data on the erasable programmable read-only memory (EPROM).

7.1.5 CC

Control channel

Table 7-5 CC

CC Alarm	Severity	Description
LMP-HELLODOWN	MN/NSA	The Link Management Protocol (LMP) Hello Down alarm means that Hello protocol, which monitors unified control plane (UCP) control channel status, is not available for link management.
LMP-NDFAIL	MN/NSA	The LMP Neighbor Detection Fail alarm means that neighbor detection within the UCP has failed.

7.1.6 CKT

UCP circuit

Table 7-6 CKT

CKT Alarm	Severity	Description
CKTDOWN	CR/SA	The Unified Control Plane (UCP) Circuit Down alarm applies to logical circuits created within the UCP between devices and It occurs when the there is signaling failure across a UCP interface.

7.1.7 DS1

A DS1 line on a DS1 or DS3XM card

Table 7-7 DS1

DS1 Alarm	Severity	Description
LOF (DS-1)	MJ/SA	The DS-1 LOF alarm indicates that the receiving ONS 15454 has lost frame delineation in an incoming DS-1 data stream.
LOS (DS-1)	MJ/SA	A LOS (DS-1) alarm for a DS-3 port or a DS-1 port occurs when the port on the card is in service but no signal is being received.
LOS (DS-3)	CR/SA	The LOS (DS-3) for either a DS-3 port or a DS-1 port occurs when the port on the card is in service but no signal is being received.
RCVR-MISS	MJ/SA	A Facility Termination Equipment Receiver Missing alarm occurs when the facility termination equipment detects an incorrect amount of impedance on its backplane connector.
TRMT	MJ/SA	A Missing Transmitter alarm occurs when there is a transmit failure on the DS-1 card because of an internal hardware failure. The card must be replaced.
TRMT-MISS	MJ/SA	A Facility Termination Equipment Transmitter Missing alarm occurs when the facility termination equipment detects an incorrect amount of impedance on its backplane connector.

7.1.8 DS3

A DS3 line on a DS3 or DS3XM card

Table 7-8 DS3

DS3 Alarm	Severity	Description
LOF	CR/SA	The DS-3 LOF alarm indicates that the receiving ONS 15454/15327 has lost frame delineation in the incoming DS-3 data stream.
LOS	CR/SA	The LOS (DS-3) for either a DS-3 port or a DS-1 port occurs when the port on the card is in service but no signal is being received.

7.1.9 DWDM Client

The port (such as OC-12 or OC-48) where the client signal is plugged in

Table 7-9 DWDM Client

DWDM Client Alarm	Severity	Description
AUTOLSROFF	CR/SA	The Auto Laser Shutdown alarm occurs when the OC-192 card temperature exceeds 194° F (90 ° C).
CARLOSS (ML-Series)	MJ/SA	A Carrier Loss alarm on the ML-series Ethernet (traffic) card is the data equivalent of an LOS (OC-N).
EOC	MJ/NSA	The SONET Data Communications Channel (DCC) Termination Failure alarm occurs when the ONS 15454 loses its data communications channel.
HI-LASERBIAS	MN/NSA	The Equipment High Transmit Laser Bias Current alarm is raised against the TXP and MXP card laser performance. The alarm indicates that the card laser has reached the maximum laser bias tolerance.
HI-LASERTEMP	MN/NSA	The Equipment High Laser Optical Transceiver Temperature alarm applies to the TXP and MXP cards. This alarm occurs when the internally measured transceiver temperature exceeds the card default level by 2° C.
HI-RXPOWER	MN/NSA	The Equipment High Receive Power alarm is an indicator for TXP card and MXP card received optical signal power. This alarm occurs when the measured optical power of the received signal exceeds the threshold.
HI-TXPOWER	MN/NSA	The Equipment High Transmit Power alarm is an indicator for TXP card and MXP card transmitted optical signal power. This alarm occurs when the measured optical power of the transmitted signal exceeds the threshold.
LOF (OC-N)	CR/SA	The LOF alarm occurs when a port on the reporting OC-N card has an LOF condition. LOF indicates that the receiving ONS 15454 has lost frame delineation in the incoming data.

Table 7-9 DWDM Client (continued)

DWDM Client Alarm	Severity	Description
LO-LASERBIAS	MN/NSA	The Equipment Low Transmit Laser Bias Current alarm is raised against the TXP and MXP card laser performance. The alarm indicates that the card laser has reached the minimum laser bias tolerance.
LO-LASERTEMP	MN/NSA	The Equipment Low Laser Optical Transceiver Temperature alarm applies to the TXP and MXP cards. This alarm occurs when the internally measured transceiver temperature falls 2° C under the card default level.
LO-RXPOWER	MN/NSA	The Equipment Low Receive Power alarm is an indicator for TXP card and MXP card received optical signal power. This alarm occurs when the measured optical power of the received signal falls under the threshold.
LOS (OC-N)	CR/SA	A LOS alarm on an OC-N port occurs when a SONET receiver detects an all-zero pattern for 10 microseconds or longer.
LO-TXPOWER	MN/NSA	The Equipment Low Transmit Power alarm is an indicator for TXP card and MXP card transmitted optical signal power. This alarm occurs when the measured optical power of the transmitted signal falls under the threshold.
PORT-CODE-MISM	MJ/NSA (R4.1) CR/SA (R4.5)	The Pluggable Port Security Code Mismatch alarm refers to ML-series Ethernet (traffic) cards (MXP and TXP) and occurs when the SFP connector that is plugged into the card is not supported by Cisco.
PORT-COMM-FAIL	MJ/SA (R4.5) CR/SA (R4.1)	The Port Communication Failure alarm applies to TXP and MXP card SFPs and occurs when the card cannot communicate with the SFP.
PORT-MISMATCH	MJ/NSA (R4.1) CR/SA (R4.5)	The Pluggable Port Mismatch alarm applies to ML-series Ethernet (traffic) card small form pluggable (SFP) connectors. The alarm indicates that the provisioned payload for the connector does not match the SFP configuration.
PORT-MISSING	MJ/NSA (R4.1) CR/SA (R4.5)	The Pluggable Port Missing alarm applies to ML-series Ethernet (traffic) card small form pluggable (SFP) connectors. The alarm indicates that the connector is not plugged into the card port.
SQUELCHED	MJ/SA	The DWDM Client Signal Squelched alarm is raised by an MXP or TXP card when G.709 monitoring is enabled and the card is operating in transparent mode.
SSM-FAIL	MN/NSA	The SSM Failed alarm occurs when the synchronization status messaging received by the ONS 15454 fails.

Table 7-9 DWDM Client (continued)

DWDM Client Alarm	Severity	Description
TIM	CR/SA (R4.5) NA/NSA (R4.1 and OCn)	The Section Trace Identifier Mismatch (TIM) occurs when the expected J1 path trace string does not match the received string.
TIM-MON	MN/NSA	The TIM Section Monitor Trace Identifier Mismatch alarm is similar to the TIM-P alarm, but it applies to TXP and MXP cards when they are configured in transparent mode.

7.1.10 DWDM Trunk

The main span of the link; from the card point of view, it is the port operating in the 100-GHz spacing frequency grid

Table 7-10 DWDM Trunk

DWDM Trunk Alarm	Severity	Description
AUTOLSROFF	CR/SA	The Auto Laser Shutdown alarm occurs when the OC-192 card temperature exceeds 194° F (90° C).
CARLOSS (ML-Series)	MJ/SA	A Carrier Loss alarm on the ML-series Ethernet (traffic) card occurs when the Ethernet port has lost its link and is not receiving a valid signal.
DSP-COMM-FAIL	MJ/SA	The DSP Communication Failure alarm indicates that there is a communications failure between an MXP or TXP card microprocessor and the on-board DSP chip that controls the trunk (DWDM) port.
DSP-FAIL	MJ/SA	The DSP Failure alarm indicates that a DSP-COMM-FAIL has persisted for an extended period on an MXP or TXP card and that the card is faulty.
EOC	MJ/NSA	The SONET Data Communications Channel (DCC) Termination Failure alarm occurs when the ONS 15454 loses its data communications channel.
GCC-EOC	MJ/NSA	The GCC Embedded Operation Channel Failure alarm applies to the OTN communication channel for TXP and MXP cards. It is raised when the channel cannot operate.
HI-LASERBIAS	MN/NSA	The Equipment High Transmit Laser Bias Current alarm is raised against the TXP and MXP card laser performance. The alarm indicates that the card laser has reached the maximum laser bias tolerance.
HI-LASERTEMP	MN/NSA	The Equipment High Laser Optical Transceiver Temperature alarm applies to the TXP and MXP cards. This alarm occurs when the internally measured transceiver temperature exceeds the card default level by 2° C.
HI-RXPOWER	MN/NSA	The Equipment High Receive Power alarm is an indicator of the optical signal power that is transmitted to the TXP or MXP card.

Table 7-10 DWDM Trunk (continued)

DWDM Trunk Alarm	Severity	Description
HI-RXTEMP	MN/NSA	The Equipment High Receive temperature alarm refers to the temperature of the trunk card port on the TXP and MXP cards.
HI-TXPOWER	MN/NSA	The Equipment High Transmit Power alarm is an indicator for TXP card and MXP card transmitted optical signal power. This alarm occurs when the measured optical power of the transmitted signal exceeds the threshold.
LOC	CR/SA	Loss of Fiber Continuity - Mux 32 occurs when G709 is turned on for trunk ports.
LOF (OC-N)	CR/SA	The LOF alarm occurs when a port on the reporting OC-N card has an LOF condition.
LO-LASERBIAS	MN/NSA	The Equipment Low Transmit Laser Bias Current alarm is raised against the TXP and MXP card laser performance. The alarm indicates that the card laser has reached the minimum laser bias tolerance.
LO-LASERTEMP	MN/NSA	The Equipment Low Laser Optical Transceiver Temperature alarm applies to the TXP and MXP cards. This alarm occurs when the internally measured transceiver temperature falls 2° C under the card default level.
LOM	CR/SA	The optical transport unit (OTU) Loss of Multiframe alarm applies to MXP and TXP cards when the Multi Frame Alignment Signal (MFAS) overhead field is errored for more than five frames and persists for more than three milliseconds.
LO-RXPOWER	MN/NSA	The Equipment Low Receive Power alarm is an indicator for TXP card and MXP card received optical signal power. This alarm occurs when the measured optical power of the received signal falls under the threshold.
LO-RXTEMP	MN/NSA	The Equipment Low Receive temperature alarm refers to the temperature of the trunk card port for the TXP and MXP cards.
LOS (OC-N)	CR/SA	An OC-N LOS alarm occurs when a SONET receiver detects an all-zero pattern for 10 microseconds or longer.
LO-TXPOWER	MN/NSA	The Equipment Low Transmit Power alarm is an indicator for TXP card and MXP card transmitted optical signal power. This alarm occurs when the measured optical power of the transmitted signal falls under the threshold.
OTUK-LOF	CR/SA	The OTUK LOF alarm applies to TXP cards and MXP cards when G.709 monitoring is enabled for the cards. The alarm indicates that the card has lost frame delineation on the input data. Loss of frame occurs when the optical transport unit overhead frame alignment (FAS) area is errored for more than five frames and that the error persists more than three milliseconds.
PTIM	MN/NSA	The Payload Type Identifier Mismatch alarm occurs when there is a mismatch between the way the G.709 option is configured on MXP cards and TXP card at each end of the optical span.
SSM-FAIL	MN/NSA	The SSM Failed alarm occurs when the synchronization status messaging received by the ONS 15454 fails.

Table 7-10 DWDM Trunk (continued)

DWDM Trunk Alarm	Severity	Description
TIM-MON	MN/NSA	The TIM Section Monitor Trace Identifier Mismatch alarm is similar to the TIM-P alarm, but it applies to TXP and MXP cards when they are configured in transparent mode.
WVL-MISMATCH	MJ/SA	The Equipment Wavelength Mismatch alarm applies to the TXP and MXP cards. It occurs when you provision the card in CTC with a wavelength that the card does not support.

7.1.11 ECN

An EC1 line on an EC1 card

Table 7-11 ECN

ECN Alarm	Severity	Description
LOF	CR/SA	The EC-N LOF alarm occurs when a port on the reporting OC-N card has an LOF condition.
LOS	CR/SA	LOS on an EC-N port occurs when a SONET receiver detects an all-zero pattern for 10 microseconds or longer.

7.1.12 ENV

An environmental alarm port on an AIC card (ONS 15454) or MIC card (ONS 15327)

Table 7-12 ENV

ENV Alarm	Severity	Description
EXT	MN/NSA	A Failure Detected External to the NE alarm occurs because an environmental alarm is present, for example, a door is open or flooding has occurred.

7.1.13 EQPT

A card in any of the card slots. This object is used for alarms that refer to the card itself and all other objects on the card including ports, lines, STS and VT.

Table 7-13 EQPT

EQPT Alarm	Severity	Description
AUTORESET	MN/NSA	The Automatic System Reset alarm occurs when you change an IP address or perform any other operation that causes an automatic card-level reboot.
BKUPMEMP	CR/NSA	A problem with the TCC/XTC card's flash memory.

Table 7-13 EQPT (continued)

EQPT Alarm	Severity	Description
CARLOSS	MJ/SA	A Carrier Loss on the LAN Equipment alarm occurs when the ONS 15454/15327 and the workstation hosting CTC do not have a TCP/IP connection.
COMIOXC	CR/SA	The I/O Slot To Cross-Connect (XCON) Communication Failure alarm is caused by the cross-connect card. It occurs when there is a communication failure for a particular I/O slot.
CONTBUS-A	MJ/NSA	The TCC/XTC card in Slot 7/Slot 5 has lost communication with a traffic card.
CONTBUS-A-18	MJ/NSA	The main processor on the TCC/XTC card in Slot 7/Slot 5 has lost communication with the coprocessor on the second TCC/XTC card in Slot 11/Slot 6.
CONTBUS-B	MJ/NSA	The TCC/XTC card in Slot 11/Slot 6 has lost communication with a traffic card.
CONTBUS-B-18	MJ/NSA	The main processor on the TCC/XTC card in Slot 11/Slot 6 has lost communication with the coprocessor on the TCC/XTC card in Slot 7/Slot 5.
CTNEQPT-PBPROT	CR/SA	A failure of the main payload between the protect cross-connect (XC/XCVT/XC10G) card in Slot 10, or the protect XTC card, and the reporting traffic card.
CTNEQPT-PBWORK	CR/SA	A failure of the main payload bus between the active cross-connect (XC/XCVT/XC10G) card in Slot 8, or the active XTC card, and the reporting traffic card.
ERROR-CONFIG	MN/NSA	The Error in Startup Configuration alarm applies to the ML-series Ethernet cards. These cards process startup configuration files line by line. If one or more lines cannot be executed, the error causes the ERROR-CONFIG alarm.
EQPT	CR/SA	A hardware failure occurred on the reporting card.
EXCCOL	MN/NSA	There are too many collisions occurring between data packets on the network management LAN, and communications between the ONS 15454/15327 and CTC may be affected.
HITEMP	CR/SA MN/NSA	CR/SA for NE. MN/NSA for EQPT. The High Temperature alarm occurs when the temperature of the ONS 15454 is above 122° F (50° C).
IMPROPRMVL	CR/SA	A card was physically removed from its slot before the card was deleted from CTC.
MEA	CR/SA	The MEA alarm for equipment is reported against a card slot when the physical card inserted into a slot does not match the card type that is provisioned for that slot in CTC.
MEM-GONE	MJ/NSA	Data generated by software operations exceeds the memory capacity of the TCC/XTC card.
MEM-LOW	MN/NSA	Data generated by software operations is close to exceeding the memory capacity of the TCC/XTC card.

Table 7-13 EQPT (continued)

EQPT Alarm	Severity	Description
NO-CONFIG	MN/NSA	The No Startup Configuration alarm applies to ML-series Ethernet cards and occurs when you pre-provision a high-speed slot for the card without inserting the card first, or when you insert a card without pre-provisioning.
PEER-NORESPONSE	MJ/NSA	The switch agent raises a Peer Card Not Responding alarm if either traffic card in a protection group does not receive a response to the peer status request message
PROTNA	MN/NSA	The Protection Unit Not Available is raised by an out-of-service protection when a TCC/XTC or cross-connect card or port that is provisioned as part of a protection group is not available.
PWR-REDUN	MN/NSA	The Redundant Power Capability Lost alarm applies to cards (such as the TCC2 and newer optical cards) that have two built-in fuses. The alarm indicates that one of the fuses has blown, and must be serviced.
SFTWDOWN	MN/NSA	A Software Download in progress alarm occurs when the TCC/XTC is downloading or transferring software.
SWMTXMOD	CR/SA	The Switching Matrix Module Failure alarm occurs on the cross-connect card or a traffic card. If the alarm reports against a traffic card, it means that the logic component on the cross-connect card is out of frame (OOF) with the logic component on the reporting traffic card.

7.1.14 ETHER

Ethernet, such as for straight-through (CAT 5) LAN cables.

Table 7-14 ETHER

ETHER Alarm	Severity	Description
CARLOSS (E-Series)	MJ/SA	A Carrier Loss on the LAN E-Series Ethernet Card alarm is the data equivalent of an LOS (OC-N). The Ethernet card has lost its link and is not receiving a valid signal.
CARLOSS (G-Series)	MJ/SA	A Carrier Loss on the LAN G-Series Ethernet Card alarm is the data equivalent of an LOS (OC-N). The Ethernet card has lost its link and is not receiving a valid signal.

7.1.15 EXTSYNCH

BITS outgoing references (SYNC-BITS1, SYNC-BITS2)

Table 7-15 EXTSYNCH

EXTSYNCH Alarm	Severity	Description
SYNCPRI	MN/NSA	A loss of the primary timing source (reference 1).

Table 7-15 *EXTSYNCH (continued)*

SYNCSEC	MN/NSA	A loss of the secondary timing source (reference 2).
SYNCTHIRD	MN/NSA	A loss of the third timing source (reference 3).

7.1.16 FAN

Fan-tray assembly

Table 7-16 *FAN*

FAN Alarm	Severity	Description
EQPT-MISS	CR/SA	Indicates the replaceable fan-tray assembly unit is missing or not fully inserted.
FAN	CR/SA	A problem with the fan-tray assembly.
FANDEGRADE	MJ/NSA	The Partial Fan Failure alarm is raised if fan speed for one of the fans in the fan-tray assembly falls below 500 RPM when read by a tachometry counter.
MEA	CR/SA	The MEA alarm is reported against the fan tray when a newer fan-tray assembly (15454-FTA3) with a 5 Amp fuse is used with an older shelf assembly or when an older fan tray with a 2 Amp fuse is used with a newer 10 Gbps compatible or ANSI shelf assembly (15454-SA-ANSI) that contains cards introduced in Release 3.1 or later.
MFGMEM	CR/SA	The manufacturing data memory failure alarm occurs if the ONS 15454 cannot access the data in the erasable programmable read-only memory (EEPROM).

7.1.17 FUDC

SONET F1 byte user data channel

Table 7-17 *FUDC*

FUDC Alarm	Severity	Description
LOS	CR/SA	An OC-N LOS alarm occurs when a SONET receiver detects an all-zero pattern for 10 microseconds or longer. An LOS means the upstream transmitter has failed.

7.1.18 HDGE (G1000)

High Density Gigabit Ethernet. Applies to G1000-4 cards.

Table 7-18 HDGE (G1000)

NE Alarm	Severity	Description
CARLOSS	MJ/SA	A carrier loss on the LAN G-series card is the data equivalent of an LOS (OC-N) alarm. The Ethernet card has lost its link and is not receiving a valid signal.
TPTFAIL	MJ/SA	Indicates a break in the end-to-end Ethernet link integrity feature of the G1000-4 cards. This alarm indicates a far-end condition and not a problem with the port reporting TPTFAIL.
TUNDERRUN	CR/SA	The Ethernet Transmit Underrun alarm is raised by a G1000-4 card when there is a major hardware fault on a port

7.1.19 MSUDC

SONET multiplex section user data channel

Table 7-19 MSUDC

MSUDC Alarm	Severity	Description
LOS	CR/SA	An OC-N LOS alarm occurs when a SONET receiver detects an all-zero pattern for 10 microseconds or longer. An LOS means the upstream transmitter has failed.

7.1.20 NBR

Neighbor

Table 7-20 NBR

NBR Alarm	Severity	Description
RSVP-HELLODOWN	MN/NSA	The Resource Reservation Protocol (RSVP) Hello Down alarm occurs when the Hello protocol, which monitors UCP control channel status, is not available for reserving resources.

7.1.21 NE

The entire network element

Table 7-21 NE

NE Alarm	Severity	Description
DATAFLT	MN/NSA	The TCC/XTC exceeds its flash memory.
DBOSYNC	MJ/NSA	The standby TCC/XTC “To be Active” database does not synchronize with the “Active” database on the active TCC/XTC.
EHIBATVG-A	MN/NSA	The voltage level on battery lead A exceeds -56.7 Vdc. (ONS 15454)

Table 7-21 NE (continued)

EHIBATVG-B	MN/NSA	The voltage level on battery lead B exceeds -56.7 Vdc. (ONS 15454)
ELWBATVG-A	MN/NSA	The voltage on battery feed A is extremely low or has been lost, and power redundancy is no longer guaranteed. (ONS 15454)
ELWBATVG-B	MN/NSA	The voltage on battery feed B is extremely low or has been lost, and power redundancy is no longer guaranteed. (ONS 15454)
HITEMP	CR/SA MN/NSA	CR/SA for NE MN/NSA for EQPT The temperature of the ONS 15454/ONS 15327 is above 122° F (50° C).
OPTNTWMIS	MJ/NSA	The Optical Network Type Mismatch alarm is raised when DWDM nodes are not configured for the same type of network, either MetroCore and MetroAccess.
PRC-DUPID	MJ/SA	Two identical node IDs exist in the same ring.
PWR-A	MJ/SA	This alarm applies to the NE shelf. It occurs when there is no power supplied to the main power connector. (ONS 15454)
PWR-B	MJ/SA	This alarm applies to the NE rack. It occurs when there is no power supplied to the backup power connector. (ONS 15454)
SNTP-HOST	MN/NSA	The SNTP (Simple Network Timing Protocol) Host Failure alarm indicates that an ONS node serving as an IP proxy for the other ONS nodes in the ring is not forwarding SNTP information to the other ONS nodes in the network.
SYSBOOT	MJ/SA	New software is booting on the TCC/XTC card.

7.1.22 NERING

Represents the ring status of the NE

Table 7-22 NERING

NERING Alarm	Severity	Description
BLSROSYNC	MJ/SA	The BLSR Out Of Sync alarm occurs when a node on a working ring loses its DCC connection because all transmit and receive fiber is removed, and you attempt to add or delete a circuit.
PRC-DUPID	MJ/SA	The Procedural Error Duplicate Node ID alarm indicates that two identical node IDs exist in the same ring.
RING-MISMATCH	MJ/SA	A Procedural Error Mismatch Ring alarm occurs when the ring ID of the ONS node that is reporting the alarm does not match the ring ID of another ONS node in the BLSR.

7.1.23 NESYNCH

Represents the timing status of the NE

Table 7-23 NESYNCH

NESYNCH Alarm	Severity	Description
FRNGSYNC	MJ/SA	The reporting ONS node is in free run synchronization mode.
FSTSYNC	MN/NSA	A Fast Start Synchronization alarm occurs when the ONS node is choosing a new timing reference.
HLDOVRSYNC	MJ/SA	A loss of primary/secondary timing reference.
SYNCPRI	MN/NSA	A loss of the primary timing source (reference 1).
SYNCSEC	MN/NSA	A loss of the secondary timing source (reference 2).
SYNCTHIRD	MN/NSA	A loss of the third timing source (reference 3).

7.1.24 OCN

An OCN line on an OCN card

Table 7-24 OCN

OCN Alarm	Severity	Description
APSB	MN/NSA	The line terminating equipment detects protection switching byte failure in the incoming automatic protection switching (APS) signal.
APSCDFLTK	MN/NSA	A BLSR is not properly configured.
APSC-IMP	MN/NSA	Invalid K bytes.
APSCINCON	MN/SA	The SONET overhead contains K1/K2 APS bytes that notify receiving equipment, such as the ONS 15454/ONS 15327, to switch the SONET signal from a working to a protect path.
APSCM	MJ/SA	The ONS 15454/ONS 15327 expects a working channel but receives a protection channel.
APSCNMIS	MJ/SA	The source node ID contained in the K2 byte of the APS channel being received is not present in the ring map.
APSM	MN/NSA	There is a mismatch of the protection switching schemes at the two ends of the span.
AUTOLSROFF	CR/SA	The OC-192 card temperature exceeds 194° F (90 ° C). (ONS 15454)
EOC	MJ/NSA	The ONS 15454/ONS 15327 has lost its data communications channel (DCC).
E-W-MISMATCH	MJ/SA	Nodes in a ring have an east slot/port misconnected to another east slot/port or a west slot/port misconnected to another west slot/port.
EXTRA-TRAF-PREEMPT	MN/NSA	An Extra Traffic Preempted alarm occurs on OC-N cards in two-fiber and four-fiber BLSRs because low-priority traffic directed to the protect system has been preempted by a working system protection switch.
FEPRLF	MN/NSA	an APS switching channel SF occurs on the protect card coming into the node.

Table 7-24 OCN (continued)

OCN Alarm	Severity	Description
LASEREOL	MN/NSA	The Laser Approaching End of Life alarm applies to TXP and MXP cards and occurs when the laser in the card will need to be replaced.
LOF	CR/SA	A port on the reporting OC-N card has an LOF condition.
LOS	CR/SA	A SONET receiver detects an all-zero pattern for 10 microseconds or longer.
SSM-FAIL	MN/NSA	Synchronization status messaging received by the ONS 15454/ONS 15327 fails.

7.1.25 OSCRING

Optical service channel ring

Table 7-25 OSCRING

OSCRING Alarm	Severity	Description
RING-ID-MIS	MJ/NSA	(Applicable to DWDM nodes only) The Ring ID Mismatch refers to the ring OSC in APC and occurs when a ring ID does not match other detectable node ring IDs.

7.1.26 OTS

Optical transport system

Table 7-26 OTS

OTS Alarm	Severity	Description
LOC	CR/SA	Loss of Fiber Continuity - Mux 32 occurs when G709 is turned on for trunk ports.

7.1.27 STSMON

STS alarm detection at the monitor point (upstream from the cross-connect)

Table 7-27 STSMON

STSMON Alarm	Severity	Description
LOP-P	CR/SA	A loss of pointer (LOP) condition at the path level.
PLM-P	CR/SA	A signal label mismatch failure (SLMF).
TIM-P	MN/NSA	The TIM Path alarm occurs when the expected path trace string does not match the received path trace string.
UNEQ-P	CR/SA	An SLMF UNEQ Path alarm occurs when the path does not have a valid sender.

7.1.28 STSTERM

STS alarm detection at termination (downstream from the cross-connect)

Table 7-28 STSTERM

STSTERM Alarm	Severity	Description
LOP-P	CR/SA	A loss of pointer (LOP) condition at the path level.
PLM-P	CR/SA	A signal label mismatch failure (SLMF).
TIM-P	CR/SA	The TIM Path alarm occurs when the expected path trace string does not match the received path trace string.
UNEQ-P	CR/SA	An SLMF UNEQ Path alarm occurs when the path does not have a valid sender.

7.1.29 UPC-CKT

Unified control plane circuit

Table 7-29 UPC-CKT

UPC-CKT Alarm	Severity	Description
CKTDOWN	CR/SA	The UCP Circuit Down alarm applies to logical circuits created within the UCP between devices.

7.1.30 VT-MON

VT1 alarm detection at the monitor point (upstream from the cross-connect)

Table 7-30 VT-MON

VT-MON Alarm	Severity	Description
AUTOSW-LOP	MN/SA	The AUTOSW-LOP alarm indicates that automatic path protection switching occurred because of an LOP-V alarm.
AUTOSW-UNEQ	MN/SA	AUTOSW-UNEQ (VTMON) indicates that an UNEQ-V caused automatic path protection switching to occur.
LOP-V	MJ/SA	The LOP VT alarm indicates a loss of pointer at the VT level.
UNEQ-V	MJ/SA	An SLMF UNEQ VT alarm indicates that the node is receiving SONET path overhead with bits 5, 6, and 7 of the V5 overhead byte all set to zeroes.

7.1.31 VT-TERM

VT1 alarm detection at termination (downstream from cross-connect)

Table 7-31 VT-TERM

VT-TERM Alarm	Severity	Description
LOP-V	MJ/SA	The LOP VT alarm indicates a loss of pointer at the VT level.
PLM-V	MJ/SA (R4.1) MN/SA (R.4.5)	A Payload Label Mismatch VT Layer alarm indicates that the content of the V5 byte in the SONET overhead is inconsistent or invalid.
UNEQ-V	MJ/SA	An SLMF UNEQ VT alarm indicates that the node is receiving SONET path overhead with bits 5, 6, and 7 of the V5 overhead byte all set to zeroes.

7.2 Errors

Errors may be generated by any command or command response message. You can find errors listed by error code in [Table 7-32 on page 7-18](#). The format of an error message is as follows:

```
SID DATE TIME
M CTAG DENY
<ERRCDE>
/* <ERRMSG> */
;
```

7.2.1 Errors Listed by Error Code

Table 7-32 Errors listed by Error Code

Error Code	Error Messages
ENEQ	At Least One Equipment Is Not Plugged (R4.5) Control Not Provisioned (R4.1) Environmental Control Interface Not Found Equipment Not Found Equipment Not Present Equipment Not Provisioned Internal Communication Error Sensor Interface Not Found
IBEX	Invalid AID Block. Extra Datablock. Invalid Payload Block. Extra Datablock.
ICNV	Cannot Set DCC When G709 Is Enabled Equipment Does Not Match Request Equipment In Use Invalid Command Operation Not Supported By This Card

Table 7-32 *Errors listed by Error Code (continued)*

Error Code	Error Messages
	Performance Monitoring Type Not Supported Trace Not Supported On Protect Trunk Port
IDMS	Missing Internal Data
IDNC	Invalid Data Invalid PST Value Invalid SST Value Primary Source Cannot Be INTERNAL When Secondary Source Is Not INTERNAL Primary Source Cannot Be INTERNAL When Third Source Is Not INTERNAL
IDNC (continued)	Secondary Source Cannot Be INTERNAL When Third Source Is Not INTERNAL
IDNV	2F-BLSR Architecture Does Not Permit Manual/Forced Span Switching AUTO ALS Mode Not Allowed With Digital Wrapper Disabled AUTO Trace Mode Not Allowed At least an XC10G XC card is needed for this equipment type Cannot Change Protection Type Command Not Valid On Protect Card DCC Not Supported In Transparent Term Mode Equipment Does Not Support CALOPWR Equipment Does Not Support EXPWLEN Equipment Does Not Support Payload Type Equipment Does Not Support RDIRN Equipment Does Not Support Regeneration Group Equipment Does Not Support VOAPWR Equipment Incompatible For Regeneration Group Frame Format Contains Invalid Data Frame Format Not Supported On Equipment GCC Not Supported On CLNT Port Incompatible Equipment Type Incompatible Equipment Type For Protection Incompatible Protect Slot For Protection Interval Out Of Range Invalid AID For PCA Cross-Connection Invalid Data For 2F-BLSR Invalid Drop Path Invalid Equipment Type

Table 7-32 *Errors listed by Error Code (continued)*

Error Code	Error Messages
	Invalid Ethernet Frame Size Invalid Holdoff Timer Value Invalid Log Name Invalid MONLEV Value Invalid MONTYPE Value Invalid Mac Address Invalid PM Interval Invalid Peer Id Invalid Protid
IDNV (continued)	Invalid Reference Invalid Regeneration Group Configuration Invalid Report Interval Invalid Start Time Invalid Switch Type For BLSR Invalid TAP Number Invalid Time Offset Invalid Trace Level J0 Section Trace Not Supported In Transparent Term Mode Keyword All Not Allowed Line Code Not Supported Multiple AIDs Not Allowed Multiple Protection Group Card Slot Identifiers Not Allowed Multiple References Not Allowed Null Userid Or Range In Userid List Not Allowed Number Of Reports Is Negative Parameter Not Supported By Payload Type Parameter Not Supported By This Optical Node Type Parameter Not Supported On Protect Trunk Port Payload Type Does Not Support AUTO ALS Mode Payload Type Does Not Support DCC Payload Type Does Not Support OOS-AINS State Payload Type Does Not Support OTN/FEC Payload Type Not Supported Protect Card Does Not Support Protection Type Protect Slot Not Provisioned Protection Group Card Slot Identifier Field Required

Table 7-32 *Errors listed by Error Code (continued)*

Error Code	Error Messages
	Protection Group Does Not Exist Protection Group Name Exceeds Maximum Length Read Only Threshold Regeneration Group Name Exceeds Maximum Length Ring Lockout BLSR Switching Is Not Supported Switch Type Is Not Allowed On 1+1 Term Mode Does Not Support Synchronization/Timing Parameters Threshold Value Out Of Range Trace Level Not Supported By Client Port
IDNV (continued)	Trace Level Required Trace Not Supported In Transparent Term Mode Transponder Does Not Support Synchronization/Timing Parameters Unsupported Or Incompatible Termination Mode VOA Out Of Range
IDRG	Difference Value Range Error Invalid PJMON Value Invalid Threshold Value Invalid Watermark Value
IIAC	AID Does Not Match with Requested BLSR Path Type ALL, Ranging and Grouping Are Not Supported CCT=1WAY Not Allowed When G1000 Or ML Series Ports Are Used Cannot Make Changes To Protect Card Cross-Connection Cannot Overlap PCA Boundary Cross-Connection Cannot Use GIGE Ports When In Transponder Mode Equipment Can Not Be Provisioned On Low Speed Slot Equipment Does Not Match Request Expected Trace Not Supported On This Card Type Expected Trace String Exceeds Maximum Length Incoming Trace Not Supported On This Card Type Incorrect Card Type Input, Invalid Access Invalid AID Invalid DS1 AID Invalid G1000 Facility Port Invalid Month Or Day Invalid Node Side

Table 7-32 Errors listed by Error Code (continued)

Error Code	Error Messages
	Invalid NodeId Invalid Operation On Drop AID Invalid PJMON Value Invalid Protect AID Invalid Protect AID Or Working AID Invalid Reference Invalid RingId Invalid Source/Destination AID Count For Cross-Connection Type Invalid TAP
IIAC (continued)	Invalid TPORT AID Invalid Time Invalid Year J1 Trace Not Supported On This Card List AID Not Allowed For ALL AID List Or All AID Not Supported Multiple AIDs Not Supported Multiple Destination AID Exceeds Limit Multiple Destinations Not Supported By Cross-Connection Multiple Source AID Exceeds Limit Multiple TAP AIDs Not Supported No TPORT With ONE-PORT-BI TRANS Mode No TPORT With Removing TRANS Mode Not Allowed On 1+1 Protect Line Not Allowed On BLSR Protect Line Optional AIDs Are Not Supported RingId Does Not Match with AID Number TPORT Must Use The Same Slot As The Aid TPORT Supports Only A Single AID Trace Mode Not Supported On This Card Type Trace Not Supported For Current Configuration Trace Not Supported On This Card Type Trace String Exceeds Maximum Length Path Protection Cross-Connections Not Allowed When G1000 Or ML Series Ports Are Used Use Of TPORT Argument Requires Use Of TRANS
IICM	Input, Invalid MOD1

Table 7-32 Errors listed by Error Code (continued)

Error Code	Error Messages
	Input, Invalid MOD2 Input, Invalid VERB
IICT	Invalid Correlation Tag
IIDT	2F-BLSR Does Not Support SRVRTV/SRVTM/EASTPROT/WESTPROT Parameters Cannot Activate To Older Software Cannot Add And Remove Drops Together Cannot Revert From R2 To R1 Cannot Revert To Newer Software Command Already In Progress
IIDT (continued)	DEST Incompatible With RFR Type DEST Incompatible With SWDL Type DEST Required For RFBU Type Duplicate BLSR Working/Protect Facilities Duplicate Performance Monitoring Schedule Facility Already in OSC Group File Name Missing in FTP URL Flash Manager Not Active Hostname Missing In FTP URL IOS Config File Too Big Invalid BLSR Mode Invalid BLSR Protect Facility Invalid BLSR Working Facility Invalid Data Parameter Invalid OSC Group Facility Invalid Port In FTP URL Invalid Revertive Time Invalid Software Switch Type Invalid State Value Mandatory FTP URL Not Provided Maximum Performance Monitoring Schedule Limit Reached Memory Out Of Range Missing/Invalid Destination Missing/Invalid Source Non-IP Hostname In FTP URL Null Outputs In FTP URL Parsing

Table 7-32 Errors listed by Error Code (continued)

Error Code	Error Messages
	Only NORM CMD_MODE Is Supported Only OOS PST Is Supported Only Port 21 Is Supported Only SWDL Is Supported For The xfertype Argument Password Missing In FTP URL Performance Monitoring Schedule Does Not Exist Port Missing In FTP URL SRC Incompatible With RFBU Type SRC Required For RFR Type SRC Required For SWDL Type
IIDT (continued)	SWDL Incompatible With RFILE-PKG Aid Software Activate/Revert Failed Software Not Available For Switch Unknown Error Processing FTP URL. Username Missing In FTP URL ftp:// Missing In FTP URL
IIFM	Invalid AID Block. Invalid Data Format. Invalid Payload Block. Invalid Data Format.
IIPG	Configuration Requires Transparent Termination Mode (R4.5) Equipment Payload Type Incompatible For Regeneration Group Payload Type Requires Transparent Termination Mode Transparent Termination Mode Required For Regeneration Group
IISP	Input, Garbage
IITA	Input, Invalid Target Identifier
INUP	General Block Unsupported
IPEX	Invalid Payload Block. Extra Parameters. Invalid Payload Block. Extra Parameters.
IPMS	Invalid AID Block. Missing Mandatory Field. Invalid Payload Block. Missing Mandatory Field.
IPNC	Cannot Change Existing Protection Type Description Cannot Have More Than 64 Characters Invalid Flow Control Value Invalid Maximum Frame Size Invalid Parameter Invalid Trans Value Parameters Are Not Consistent

Table 7-32 *Errors listed by Error Code (continued)*

Error Code	Error Messages
	Parameters Not Compatible
IPNV	Cannot Set Expected Path Trace For Source Path Cannot Set Expected Path Trace In Auto Mode Cannot Set Outgoing Path Trace For Drop Path Cross-Connection Does Not Have Path Protection Path Selector Exercise Is Not Allowed On Protected Facility Facility Does Not Support Montype Far End Performance Monitoring Values Not Supported Holdoff Timer Not Supported For Non-DRI Cross-Connections INT Not Valid For BITS-OUT
IPNV (continued)	Internal-Ip Lookup Failed Internal-Network Nodes Lookup Failed Invalid Clock Source Invalid Condition Type Invalid Default Router Address Invalid IIOP Port number Invalid IP Address Invalid IP Configuration Parameter Invalid IP Mask Invalid Parameter Invalid Payload Block. Empty Parameter. Invalid SNTP Host Address Invalid Switch Command For Synchronization Invalid Switch Type New Source Must Be Specified Node Name Exceeds Maximum Length PM Not Supported Payload Does Not Support Optics Montypes Primary Reference Incompatible With Timing Mode Protection Type Does Not Support Reversion Mode Reference Type Not Supported SPNWTR Parameter Not Supported Secondary Reference Incompatible With Timing Mode Synchronization Source Already Defined For The Slot TMGREF Parameter Not Supported Third Reference Incompatible With Timing Mode

Table 7-32 Errors listed by Error Code (continued)

Error Code	Error Messages
	Time Period Not Applicable Timing Mode Not Compatible
PICC	AID Required Bad Password Toggling - New Password Same As A Prior Password Command Not Available To This User Level Invalid User Access Privilege Value Invalid User Identifier - Must Conform To TL1 Rules Invalid User Password - Must Conform To TL1 Rules Unexpected Default Case Unknown CORBA Exception (Internal Error)
PICC (continued)	Unknown User User Access Privilege Required User Already Exists User Identifier Exceeds Maximum Length Allowed User Not Authorized User Password Required
PIMA	Memory Out Of Range
PIUC	Cannot Delete The Logged In User User Currently Logged Into Another Session User Is Not Superuser User Not Allowed To Change User Access Privilege User Not Allowed To Change User Password User Not Allowed To Lock/Unlock Self
RALB	Requested DCC In Use
RRNG	Invalid Slot Number Invalid Slot Number For Sdh Electrical Cards
RTBY	Connection In Service TAP Already In Use TAP Number In Use
RTEN	Cannot Access VT Cannot Change Access Mode Cannot Set Access Mode Invalid Access Mode Invalid STS TAP Number Invalid TAP AID Invalid TAP Mode

Table 7-32 Errors listed by Error Code (continued)

Error Code	Error Messages
	Invalid TAP Number Invalid VT TAP Number Requested TAP Does Not Exist TAP Not Found
SAAL	Already Allowed
SAAS	Equipment Already Provisioned
SADC	TAP Not Connected
SADS	Loopback Applied On Cross-connection
SAIN	Already Inhibited
SAIS	Port Already In Service
SAMS	Already In Clear Maintenance State
	Already In Force Maintenance State Already In Lockout Maintenance State Already In Manual Maintenance State
SAOP	Control Already Operated Control Already Released Control Operated In Mntry
SAOS	Port Already In OOS-AINS Port Already In OOS-MT Port Already Out Of Service
SAPR	Cannot Provision Regeneration Group When A Protection Group Is Present (R4.5)
SCAT	End Point Is Already Connected (R4.5) STS Is Already Connected (R4.1) Test Access Busy VT Is Already Connected
SDBE	AID Parser Failed Cannot Access Conditions Cannot Access Controls Cannot Access Date/Time Cannot Access Defaults Description Cannot Access Environmental Settings Cannot Access Equipment Cannot Access Facility Cannot Access IP Configuration Cannot Access Interface

Table 7-32 *Errors listed by Error Code (continued)*

Error Code	Error Messages
	Cannot Access Node ID Cannot Access Object Cannot Access Orderwire Cannot Access Protection Group Cannot Access Protection State Cannot Access SNTP Host Cannot Access STS Cannot Access Software Version Cannot Access Synchronization Configuration Cannot Access Timezone
SDBE (continued)	Cannot Access Trace Information Cannot Access VT Cannot Access VT Performance Monitoring Parameters Cannot Create 1+1 Protection Group Cannot Edit STS Cannot Get Line Information Cannot Get Synchronization Configuration Cannot Set Date Cannot Set Date When Using SNTP Cannot Set IP Configuration Cannot Set Node Name Cannot Set Pointer Justification Monitoring Parameter (PJMON) Cannot Set SNTP Host Configuration Cannot Set Timezone Cannot Switch To E2 Byte With Express Orderwire IS Card Type Not Supported Delete Protection Group Failed Equipment Not Found Facility Does Not Exist Facility Does Not Match Request Facility Does Not Support Mac Address Facility Is Not Provisioned File Transfer In Progress IOS Config Update In Progress Incompatible Parameter Values Incorrect Facility Type

Table 7-32 *Errors listed by Error Code (continued)*

Error Code	Error Messages
	Interface Does Not Support Loopback Type Internal Access Failed Internal Database Error Invalid DCC Invalid Mondat Format Invalid Montm Format Invalid Performance Monitoring Mode Invalid Protection Group Invalid Time Period Location Value Invalid
SDBE (continued)	Loopback Is Invalid Loopback Port In Service Mac Address Not Supported By Payload Object Not Provisioned Operation Not Supported On EC1 Interface STS Not Provisioned Synchronization Configuration Not Available Synchronization Status Messaging(SSM) Not Supported On EC1 Interface Synchronization Status Messaging(SSM) Not Supported On SDH Used Frame Format Does Not Support Synchronization Status Messaging(SSM) VT Not Provisioned
SDLD	Duplex Unit Locked
SDNA	Active TCC Not Ready Standby TCC Not Ready
SNCC	Replace This Message When A SNCC message is needed
SNCN	Cannot Switch To Inferior Reference Source Clock Source Failed Command Not Implemented Cross-Connection Type Not Supported In TL1 Invalid Clock Source Requested Direction Not Supported STS Rate Changing Not Supported
SNNS	Reference Not From Optical Card
SNOS	Cannot Change Card Wavelength With Port(s) Not In OOS State (R4.5) Cannot Change Payload With Port(s) Not In OOS State

Table 7-32 *Errors listed by Error Code (continued)*

Error Code	Error Messages
	Cannot Change Termination Mode With Port(s) Not In OOS State
SNPR	Cannot Get Role Of Port
SNVS	Already Switched To Internal Reference Source BLSR East Operation Already Set BLSR West Operation Already Set Cannot Change Configuration When Port(s) Are Not In OOS State Cannot Change Payload For Protection Group Cannot Change Payload When Port(s) Are DCC Enabled Cannot Change Payload When Port(s) Are Used As A Clock Source Cannot Change Termination Mode When Port(s) Are DCC Enabled
SNVS (continued)	Cannot Change Termination Mode When Port(s) Are Used As a Clock Source Cannot Change Termination Mode With Trace Enabled Cannot Operate Loopback In Current Cross-connection State Cannot Operate Loopback In Current State Cannot Provision Regeneration Group When A Protection Switch Operation Is Present Cannot Provision Regeneration Group When Equipment Has Different FEC Settings Cannot Provision Regeneration Group When Equipment Has Different G.709 Settings Facility Not Part Of BLSR Invalid AINS Soak Time Invalid Admin State Invalid BLSR Element Invalid Clock Source Invalid Equipment State Invalid Transponder Provisioning Loopback Already In Progress Loopback Not In Progress No Switch In Progress Protection Group Does Not Exist Protection Unit Active Working Unit Already Active Working Unit Already Standby
SOSE	Unrecognized Message Type
SPFA	Cannot Get Current Card Status

Table 7-32 *Errors listed by Error Code (continued)*

Error Code	Error Messages
	Protection Unit Failed Or Missing
SPLD	Cannot Create 1+1 Protection Group Cannot Delete Equipment Equipment In Use FTP Task Is Busy Facility Is Busy Protection Unit Locked
SRAC	Invalid Connection Type
SRCN	Already In Requested Mode Requested Condition Already Exists
SROF	1+1 Protection Group Not Found ALS Mode Does Not Allow Laser Restart APC System Is Busy Active Flash Not Ready All DCCs In Use BLSR In Use BLSR Protect STS Path List Is Empty Can Not Get IOS Config Source Origin Cannot Access 1+1 Line Cannot Access 1+1 Protected Line Cannot Access 2 Fiber BLSR Cannot Access 4 Fiber BLSR East Protection Cannot Access 4 Fiber BLSR West Protection Cannot Access 4F BLSR Cannot Access Alarm Log Cannot Access BLSR Cannot Access BLSR 2 Wire Line Cannot Access Cross-Connection Cannot Access DCC Cannot Access Facility Cannot Access Performance Monitoring Statistics Cannot Access Protected Equipment Cannot Access Protection Group Information Cannot Access Protection Group Name Cannot Access Protection Group Reversion Information Cannot Access STS

Table 7-32 Errors listed by Error Code (continued)

Error Code	Error Messages
	Cannot Access TAP Cannot Access Unprotected Line Cannot Access Unprotected Line Cannot Access VT Cannot Change Ethernet IP With DHCP Provisioned Cannot Change Ethernet IP With OSPF Provisioned Cannot Change XTC Protection Group Cannot Create Cross-Connection Between Incompatible Interfaces Cannot Create Protection Group Cannot Create TAP
SROF (continued)	Cannot Create TAP On Last VT Cannot Create Y cable Protection Cannot Delete Cross-Connection Cannot Delete Last Drop Cannot Delete Protection Group Cannot Disable DWRAP With FEC Enabled Cannot Disable DWRAP With GCC Enabled Cannot Edit Ethernet IP Cannot Edit STS Cannot Enable FEC When G.709 Is Disabled Cannot Enable FEC With DWRAP Disabled Cannot Perform ACO Cannot Provision Equipment Cannot Provision Protection Equipment Cannot Set Bidirectional Protection Group Cannot Set DCC When Digital Wrapper Is Enabled Cannot Set GCC When DWRAP Is Disabled Cannot Set NodeId Cannot Set Payload Type Cannot Set Protection Group Name Cannot Set Protection Group Revertive Behavior Cannot Set RingId Cannot Set Span Revertive Mode Unless 4-Fiber Ring Cannot Set Span Revertive Time In Non-revertive Mode Cannot Set Span Revertive Time Unless 4-Fiber Ring Cannot Set Termination Mode

Table 7-32 Errors listed by Error Code (continued)

Error Code	Error Messages
	Cannot Set Wave Length Cannot Switch For Specified Connection Type Cannot Switch For Specified Path Cannot Update Synchronization Reference List Command Not Supported Cross-Connection Creation Failed Cross-Connection Does Not Exist DCC Does Not Exist DCC Not In Use DWRAP Not Enabled
SROF (continued)	Database Is Busy Element Not Found Equipment Does Not Match Request Equipment Does Not Support 8B10B Montypes Equipment Does Not Support Cross-connection Loopback Ethernet IP And Default Router IP Subnets Are Different Expected Trace Size Exceeds Trace Format Limit Facility Does Not Support Laser Restart Facility Not Protected Facility Not Provisioned Flash Is Busy Generation1 Does Not Support Given Quality Of RES Get IOR Failed Host Not In IP Address Format Insufficient Path Width For Cross-Connection Insufficient Path Width For Test Access Internal Exercise Failure Internal Facility Type Failure Invalid ALS Recovery Interval Invalid ALS Recovery Pulse Width Invalid Control Type (CONTTYPE) For AID Invalid Cross-Connection Path Invalid Cross-Connection Type For Drops Invalid Drop Path Invalid FTP Username/Password Invalid Loopback Provision

Table 7-32 *Errors listed by Error Code (continued)*

Error Code	Error Messages
	Invalid Operation For Connection Type Invalid Operation For Specified Path Invalid Path Invalid Protection Group Invalid Protection Switch Operation Invalid State When Loopback Present Invalid Subnet Mask Invalid Synchronization Source Invalid Path Protection Path J0 Section Trace Level Not Supported By 10GE Payload Type
SROF (continued)	Laser Was Not Shutdown.Cannot Restart Laser Loopback Not Allowed On Drop Path Loopback Type Does Not Match MIC Cards Cannot Be Reset Maximum Drop Limit Reached Maximum User Limit Reached No Path To Regulate No Start-Up IOS Config Operate Alarm Cutoff Failed Operation Not Supported Parameter Not Supported When DWRAP Is Enabled Path Already In Use Path Specified Is Not Valid Path Used For Test Access Payload Type Does Not Support Trace Peer Equipment Attributes Do Not Match Peer Equipment Type Does Not Match Peer Facility Has Loopback Peer Facility In Use Peer Payload Type Does Not Match Peer Termination Mode Does Not Match Pool Does Not Exist Protect Port Active Protection Group Does Not Exist Protection Switching Failed Protection Type Mismatch

Table 7-32 Errors listed by Error Code (continued)

Error Code	Error Messages
	Protection Type Not Compatible With Facility Provisioning Rules Failed Regeneration Group Already Exist Regeneration Group Does Not Exist Requested Operation Failed Ring Reversion Failed SDBER Out Of Range SFBER Out Of Range STS Does Not Exist STS Does Not Have TAP
SROF (continued)	STS Path Width Does Not Match STS Path Width Does Not Match Section Termination Mode Not Supported Software Activation Failed Software Download Failed Software Error Software Error Software Reversion Failed Span Reversion Failed Specified Operation Is Not Valid Standby Flash Not Ready Synchronization/Timing Parameters Not Supported With DWRAP Enabled TTI Trace Not Allowed With G709 Disabled Test Access Active Trace Format Not Supported By J0 Section Trace Trace Format Not Supported By TTI Section Trace Trace Message Size Exceeds Trace Format Limit Trace Mode Incompatible With Termination Mode Trace Mode Not Supported Unprovisioning Rules Failed Unsupported BLSR STS Path Operation Unsupported Command Type Unsupported Element Type VT Does Not Exist VT Does Not Have TAP

Table 7-32 *Errors listed by Error Code (continued)*

Error Code	Error Messages
	Wavelength Value Not Supported Working/Peer Card In Use XC Card Does Not Support VT Cross-Connection XC Card Not Present Y Cable Protection Does Not Exist
SRQN	BLSR Creation Failed BLSR Deletion Failed BLSR Does Not Exist BLSR Editing Failed Cannot Create Automatic Links
SRQN (continued)	Cannot Edit SENDDUS On Protect Port Cannot Edit SYNCMSG On Protect Port DCC Not Allowed In SDH Mode DCC Not Allowed On Protect Port Data Access Request Failed Invalid Mode For Current Configuration Invalid Request OSC Group Already Exists OSC Group Does Not Exist Protect Card Does Not Support Electrical Protection Protect Card Does Not Support Protection Type SDH Not Allowed SDH Not Allowed On Protect Port SDH Not Allowed With DCC SDH Not Allowed With SENDDUS SDH Not Allowed With SYNCMSG SENDDUS Not Allowed With SDH Mode SYNCMSG Not Allowed With SDH Mode Sync Status Messaging(SSM) Not Allowed With SDH Mode
SSRD	Manual Switch Cannot Override Forced Switch Switch Request Denied
SSRE	Memory Resources Exceeded
SWFA	Working Unit Failed Or Missing
SWLD	Working Unit Locked

7.3 Echo

In order to improve telnet functionality for automated systems, the echo function has been turned off since ONS 15454 Release 3.0. This change is transparent to users running standard UNIX-compliant telnet clients; however, PC users may need to change their client setup to enable “local echo.” This is normally accomplished by a pull-down menu or a preference attribute.

To test the local echo on your PC client, use the RTRV-HDR command. If you receive a response but no data, set local echo ON. Cisco recommends that you close any windows containing sensitive information after exiting a TL1 session.

