REPT Messages

This chapter provides report (REPT) messages for the Cisco ONS 15454.

> ✎ **Note** The REPT commands do not apply to the Cisco ONS 15454 M2 and Cisco ONS 15454 M6 platforms.

19.1 REPT ALM <MOD2ALM>

(Cisco ONS 15454, ONS 15454 M2, and ONS 15454 M6) The Report Alarm for 1GFC, 1GFICON, 2GFC, 2GFICON, CLNT, DS1, E100, E1000, E3, E4, EC1, ETH, FSTE, G1000, GFPOS, GIGE, ILK, ISCCOMPAT, ISC3PEER2R, ISC3PEER1G, ISC3PEER2G, OC12, OC192, OC3, OC48, OCH, OMS, OTS, 10GFC, 8GFC, 10GIGE, 100GIGE, 40GIGE, OC192, OTU1, OTU2, OTU3, OTU4, POS, STM1, STM4, STM16, STM64, STS1, STS12C, STS18C, STS192C, STS24C, STS36C, STS3C, STS48C, STS6C, STS9C, T1, T3, UDCDCC, UDCF, VC3, VC4, VC4-2c, VC4-3c, VC4-4c, VC4-8c,VC4-16c,VC4-64c, VC12, VCG, VT1, VT2, or WLEN (REPT ALM <MOD2ALM>) message reports an alarm condition against a facility, an RPR interface, or a path.

Usage Guidelines See for supported modifiers by platform.

Category Fault

Security Retrieve

Output Format
```
   SID DATE TIME
** ATAG REPT ALM <MOD2ALM>
   "<AID>:<NTFCNCDE>,<CONDTYPE>,<SRVEFF>,[<OCRDAT>],
   [<OCRTM>],[<LOCN>],[<DIRN>]:[<DESC>],[<AIDDET>]"
;
```

```
SID DATE TIME
** ATAG REPT ALM <MOD2ALM>
  "<AID>:<NTFCNCDE>,<CONDTYPE>,<SRVEFF>,[<OCRDAT>],[<OCRTM>],[<LOCN>],
  [<DIRN>]:[<DESC>],[<AIDDET>]"
;
```

Output Example

```
TID-000 1998-06-20 14:30:00
** 100.100 REPT ALM 1GFC
  "FAC-2-1:MJ,LOS,SA,08-01,14-25-59,,:\"LOSS OF SIGNAL\",OC12"
;
```

Output Parameters

Parameter	Description
<AID>	Access identifier from the "28.20 LINE" section on page 28-46 and "28.17 FACILITY" section on page 28-42.
<NTFCNCDE>	Two-letter notification code. The parameter type is NOTIF_CODE, which is a two-character notification code associated with an autonomous message.
• CL	The condition causing the alarm has cleared
• CR	A critical alarm
• MJ	A major alarm
• MN	A minor alarm
• NA	The condition is not alarmed
• NR	The alarm is not reported
<CONDTYPE>	Condition type for an alarm or a reported event. The parameter type is CONDITION, which is any problem detected on an ONS 15454 shelf, whether or not the problem is reported (that is, whether or not it generates a trouble notification). Reported conditions include alarms, Not Alarmed conditions (NA), and Not Reported (NR) conditions. See the Chapter 29, "Conditions" for a list of conditions.
<SRVEFF>	The effect on service caused by the standing alarm or condition. The parameter type is SERV_EFF, which is the effect of the alarm on service.
• NSA	The condition is non-service affecting
• SA	The condition is service affecting
<OCRDAT>	(Optional) Date
<OCRTM>	(Optional) Time
<DESC>	(Optional) Condition description.
<AIDDET>	(Optional) AIDDET uses the same addressing rules as the AID, but specifies AID type and additional details about the entity being managed. The parameter type is EQPT_TYPE, which is the type of equipment being provisioned into a slot.
• 100G-LC-C	100G-LC-C card
• 100G-CK-C	100G-CK-C card

Parameter	Description
• 10X10G-LC	10X10G-LC card
• CFP-LC	CFP-LC card
• AR-MXP	Any rate muxponder
• AR-XP	Any rate xponder
• AR-XPE	Any rate enhanced xponder.
• 16-WXC-FS	16-WXC-FS card.
• 15216-MD-40-EVEN	Thermal Multiplex/Demultiplex Passive Unit, spaced at 50 GHz on even grid
• 15216-MD-40-ODD	Thermal Multiplex/Demultiplex Passive Unit, spaced at 50 GHz on odd grid
• 15216-MD-ID-50	Thermal Interleaver Passive Unit, spaced at 50 GHz grid
• 15216-FLD4-30-3	Edge 4-Ch Bi-Directional OADM Module 1530.33 to 1532.68.
• 15216-FLD4-33-4	Edge 4-Ch Bi-Directional OADM Module 1533.47 to 1535.82.
• 15216-FLD4-36-6	Edge 4-Ch Bi-Directional OADM Module 1536.61 to 1538.98.
• 15216-FLD4-39-7	Edge 4-Ch Bi-Directional OADM Module 1539.77 to 1542.14.
• 15216-FLD4-42-9	Edge 4-Ch Bi-Directional OADM Module 1542.94 to 1545.32.
• 15216-FLD4-46-1	Edge 4-Ch Bi-Directional OADM Module 1546.12 to 1548.51.
• 15216-FLD4-49-3	Edge 4-Ch Bi-Directional OADM Module 1549.32 to 1551.72.
• 15216-FLD4-52-5	Edge 4-Ch Bi-Directional OADM Module 1552.52 to 1554.94.
• 15216-FLD4-55-7	Edge 4-Ch Bi-Directional OADM Module 1555.75 to 1558.17.
• 15216-FLD4-58-9	Edge 4-Ch Bi-Directional OADM Module 1558.98 to 1561.42.
• 32DMX-L	3- channel demultiplexer for L-band
• 32WSS-L	32-channel wavelength switch selector for L-band
• 40-MXP-C	40 Gbit/Sec Multirate Muxponder
• 40-SMR1-C	The single module 40-channel ROADM on C-band
• 40-SMR2-C	The single module 40-channel ROADM with EDFA on C-band
• 40-TXP-C	40 Gigabits per second Multirate Transponder
• 80-WXC-C	80-channel wavelength cross-connect spaced at 100 GHz grid
• AD-1B	OADM 1-Band Filter
• AD-1C	OADM 1-Channel Filter
• AD-2C	OADM 2-Channel Filter

Parameter	Description
• AD-4B	OADM 4-Band Filter
• AD-4C	OADM 4-Channel Filter
• AICI	AIC-I card
• AIP	Alarm Indication Panel
• ALM-PWR	Alarm Power
• ASAP-4	ASAP carrier card with four PIM slots
• BP	The backplane of the NE
• CE-100T-8	8-port 100T card
• CE-1000-4	4-port GIGE mapper card
• CRFT-TMG	Craft Timing
• DCC	Data Communications Channel
• DCU	Dispersion Compensation Unit
• DMX-32	Optical DMX 32 Channels
• DS3i-N-12	DS3i-N-12 card
• E1	E1 card
• E1-42	42-port E1 card
• E1000T-2	2-port interface card supporting 1000BaseT Ethernet facilities
• E100T-12	12-port interface card supporting 100BaseT Ethernet facilities
• E100T-4	Four-port interface card supporting 100BaseT Ethernet facilities
• E1N	E1N card
• E3	E3 card
• EDRA-1-26	EDRA-1-26 amplifier
• EDRA-1-35	EDRA-1-35 amplifier
• EDRA-2-26	EDRA-2-26 amplifier
• EDRA-2-35	EDRA-2-35 amplifier
• FBGDCU-1157	
• FBGDCU-1322	
• FBGDCU-165	
• FBGDCU-1653	
• FBGDCU-1983	
• FBGDCU-331	
• FBGDCU-496	
• FBGDCU-661	
• FBGDCU-826	
• FBGDCU-992	
• FILLER_CARD	Filler card
• FMEC-155E-1TO1	The equipment type for FMEC STM1E12 card

Parameter	Description
• FMEC-155E-1TO3	The equipment type for FMEC STM1E12 card with 1:3 protection
• FMEC-155E-UNPROT	The equipment type for FMEC STM1E12 card without protection
• FMEC-SMZ-E1	FMEC card corresponding to E1 card
• FMEC-SMZ-E3	FMEC card corresponding to E3 card
• FTA	Fan Tray of the NE
• FTA1	Fan Tray 1 of the NE
• FTA2	Fan Tray 2 of the NE
• G1K-4	G1K-4 card
• MD-4	Optical Multiplexer/Demultiplexer with 4 Channels
• MD-48-CM	
• MD-48-EVEN	
• MD-48-ODD	
• MESH-PP-SMR	The passive unit Patch Panel device used to connect upto four 40-SMR2-C cards
• MF-16AD-CFS	16-channels - 1 direction, colorless, omnidirectional add/drop unit.
• MF-4x4-COFS	4-channels, 4-directions, colorless, omnidirectional add/drop unit.
• MF-AST-EDFA	MF-AST-EDFA unit
• MF-DEG-5	5-degrees mesh patch panel
• MF-MPO-8LC	MPO to 8-LC adapter
• MF-UPG-4	4-degrees upgrade module
• ML100X-8	8-port 100X card with optical interface
• ML-100T-8	8-port 100T card with optical interface
• MMU	Multiring mesh upgrade unit
• MS-ISC-100T	Fast Ethernet switch card used for internal shelf connection
• MUX-32	Optical MUX 32 Channels
• MXP-2.5G-10G	10G (4 * 2.5G) Muxponder card
• MXP-MR-10DME	10 Gbps datamux with enhanced FEC
• OPT-AMP-L	Optical preamplifier for L-band
• OPT-BST	Optical booster amplifier
• OPT-BST-L	Optical booster for L-band
• OPT-EDFA-17	MAL-less EDFA Optical Amplifier - C-band - 17dB Gain
• OPT-EDFA-24	MAL-less EDFA Optical Amplifier - C-band - 24dB Gain
• OPT-PRE	Optical Preamplifier
• OPT-RAMP-C	Raman pump amplifier C-band
• OPT-RAMP-CE	An extended version of Raman pump amplifier
• OPT-RAMP-COP	Raman COP card.
• OPT-RAMP-CTP	Raman CTP card.

Parameter	Description
• OPT-RAMP-E	Raman pump amplifier E-band
• OSC-CSM	Optical Service Channel with Combiner/Separator Module
• OSCM	Optical Service Channel Module
• OTU2-XP	A 4x10G transponder that is capable to operate with multiple bit rates - 10G FC, 10GE, and OC192/STM64
• PIM-4	Pluggable interface module with 4 PPM slots
• PP-4-SMR	Patch-Panel, 4 degrees, for SMR cards
• PP-MESH-4	Patch-Panel, 4 degrees
• PP-MESH-8	Patch-Panel, 8 degrees
• PPM-1	Pluggable port module with 1-port SFP module
• PSM	Protection Service Module card
• PTF-4	Fabric card.
• PTM-4	Line card.
• PTSA	CPT 50 panel.
• PTSYS- Fan-Out-Group	PTSYS Fan-Out-Group.
• SHELF	Shelf entity
• STM4	An interface card that supports one or more STM4 (622 Mbps) optical facilities
• STM4-4	A four port STM4 card
• STM4-IR-1	An interface card that supports one intermediate range STM4 (622 Mbps) optical facilities
• STM4-LR-1	An interface card that supports one long range STM4 (622 Mbps) optical facilities
• STM4-SR-1	An interface card that supports one short range STM4 (622 Mbps) optical facilities
• STM64-4	A four port STM64 card
• STM64-LR-1	An interface card that supports one or more STM64 optical facilities
• STM1	An interface card that supports multiple STM1 (155 Mbps) optical facilities
• STM1-IR-4	An interface card that supports four intermediate range STM1 (155 Mbps) optical facilities
• STM1-SR-4	An interface card that supports four short range STM1 (155 Mbps) optical facilities
• STM1ATM-IR-6	An interface card that supports six intermediate range STM1 (155 Mbps) ATM optical fibers
• STM1IR-STM1SH-1310-8	An STM1 card which has 8 ports over the lower speed slot with XC-VXL-10G/XC-VXL-2.5G
• STM1POS-SR-4	An interface card that supports four short range STM1 (155 Mbps) POS optical facilities
• STM16	An interface card that supports one or more STM16 (10 Gbps) optical facilities

Parameter	Description
• STM16-AS-1	An interface card that supports one short range OC-48 (10 Gbps) optical facilities that can be provisioned in any I/O slot
• STM16-ELR-1	An interface card that supports one short range STM16 (2.5 Gbps) optical facility
• STM16-IR-1	An interface card that supports one intermediate range STM16 (10 Gbps) optical facility
• STM16-LR-1	An interface card that supports one long range STM16 (10 Gbps) optical facility
• STM16-SR-1	An interface card that supports one short range STM16 (10 Gbps) optical facilities
• TCC	Timing, Communications, and Control card
• TDC-CC	Coarse tunable dispersion compensation unit
• TDC-FC	Fine tunable dispersion compensation unit
• TXP-MR-10G	10G Multirate Transponder card
• TXP-MR-2.5G	Multirate 2.5G Unprotected
• TXPP-MR-2.5G	Multirate 2.5G Protected
• UNKNOWN	Unknown equipment type
• UNPROVISIONED	Unprovisioned equipment type
• WSE	Wire Speed Encryption (WSE) card
• XC-VXC-10G	XC-VXC-10G cross-connect card
• XCVXL-10G	XC-VXL-10G cross-connect card
• XCVXL-2.5G	XC-VXL-2.5G cross-connect card

19.2 REPT ALM BITS

(Cisco ONS 15454, ONS 15454 M2, and ONS 15454 M6) The Report Alarm Building Integrated Timing Supply (REPT ALM BITS) message reports an alarm condition on a BITS facility.

Usage Guidelines   None

Category   Synchronization

Security   Retrieve

Output Format

SID DATE TIME
** ATAG REPT ALM BITS
   "<AID>:<NTFCNCDE>,<CONDTYPE>,<SRVEFF>,[<OCRDAT>],[<OCRTM>],[<LOCN>],
   [<DIRN>]:[<DESC>]"
;

Output Example

TID-000 1998-06-20 14:30:00
** 100.100 REPT ALM BITS
   "BITS-1:MJ,SYNC,SA,08-01,14-25-59,,:\"LOSS OF TIMING\""
;

Output Parameters

<AID>		Access identifier from the "28.6 BITS" section on page 28-22.
<NTFCNCDE>		Two-letter notification code. The parameter type is NOTIF_CODE, the two-character notification code associated with an autonomous message.
	CL	The condition causing the alarm has cleared.
	CR	A critical alarm.
	MJ	A major alarm.
	MN	A minor alarm.
	NA	The condition is not alarmed.
	NR	The alarm is not reported.
<CONDTYPE>		The condition type for an alarm or a reported event. The parameter type is CONDITION, which is any problem detected on an ONS 15454 shelf, whether or not the problem is reported (that is, whether or not it generates a trouble notification). Reported conditions include alarms, Not-Alarmed conditions (NA), and Not-Reported (NR) conditions. See Chapter 29, "Conditions" for a list of conditions.
<OCRDAT>		(Optional) Date
<OCRTM>		(Optional) Time
<SRVEFF>		The effect on service caused by the standing alarm or condition. The parameter type is SERV_EFF, which is the effect of the alarm on service.
	NSA	The condition is non-service affecting.
	SA	The condition is service affecting.
<LOCN>		Location associated with a particular command. Identifies the location from which the PM mode is to be retrieved. 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>		The PM count retrieval direction. The parameter type is DIRECTION, which is the transmit and receive directions.
	BTH	Both transmit and receive directions

• RCV	Receive direction only
<DESC>	(Optional) Condition description.

19.3 REPT ALM COM

(Cisco ONS 15454, ONS 15454 M2, and ONS 15454 M6) The Report Alarm Common (REPT ALM COM) message reports an alarm condition when an AID cannot be given. For example, a fan failure is reported using this message.

Usage Guidelines   None

Category   Fault

Security   Retrieve

Output Format

```
   SID DATE TIME
** ATAG REPT ALM COM
   "[<AID>]:<NTFCNCDE>,<CONDTYPE>,<SRVEFF>,[<OCRDAT>],[<OCRTM>],[<LOCN>],
   [<DIRN>]:[<DESC>]"
;
```

Output Example

```
   TID-000 1998-06-20 14:30:00
** 100.100 REPT ALM COM
   "COM:MJ,FAN,NSA,08-01,14-25-59,,:\"FAN FAILURE\""
;
```

Output Parameters

<AID>	(Optional) Access identifier. Identifies the entity to which the command pertains. Indicates an alarm without AID. AID is a string.
<NTFCNCDE>	Two-letter notification code. The parameter type is NOTIF_CODE, which is the two-character notification code associated with an autonomous message.
• CL	The condition causing the alarm has cleared.
• CR	A critical alarm.
• MJ	A major alarm.
• MN	A minor alarm.
• NA	The condition is not alarmed.
• NR	The alarm is not reported.

<CONDTYPE>	The condition type for an alarm or a reported event. The parameter type is CONDITION, which is any problem detected on an ONS 15454 shelf, whether or not the problem is reported (that is, whether it generates a trouble notification). Reported conditions include alarms, Not-Alarmed conditions (NA), and Not-Reported (NR) conditions. See Chapter 29, "Conditions" for a list of conditions.
<OCRDAT>	(Optional) Date
<OCRTM>	(Optional) Time
<SRVEFF>	The effect on service caused by the standing alarm or condition. The parameter type is SERV_EFF, which is the effect of the alarm on service.
• NSA	The condition is non-service affecting.
• SA	The condition is service affecting.
<LOCN>	Location associated with a particular command. Identifies the location from which the PM mode is to be retrieved. 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>	The PM count retrieval direction. The parameter type is DIRECTION, which is the transmit and receive directions.
• BTH	Both transmit and receive directions
• RCV	Receive direction only
<DESC>	(Optional) Condition description.

19.4 REPT ALM ENV

(Cisco ONS 15454, ONS 15454 M2, and ONS 15454 M6) The Report Alarm Environment (REPT ALM ENV) message reports a customer-defined condition on an environmental alarm input.

Usage Guidelines   None

Category   Environment

Security   Retrieve

Output Format

```
   SID DATE TIME
** ATAG REPT ALM ENV
   "<AID>:<NTFCNCDE>,<ALMTYPE>,[<OCRDAT>],[<OCRTM>],[<DESC>]"
;
```

Output Example

TID-000 1998-06-20 14:30:00
** 100.100 REPT ALM ENV
  "ENV-IN-1:MJ,OPENDR,08-01,14-25-59,\"OPEN DOOR\""
;

Output Parameters

<AID>		Access identifier from the "28.14 ENV" section on page 28-39. Identifies an environmental input.
<NTFCNCDE>		Two-letter notification code. The parameter type is NOTIF_CODE, which is a two-character notification code associated with an autonomous message.
•	CL	The condition causing the alarm has cleared.
•	CR	A critical alarm.
•	MJ	A major alarm.
•	MN	A minor alarm.
•	NA	The condition is not alarmed.
•	NR	The alarm is not reported.
<ALMTYPE>		Abbreviated code identifying the alarm. The parameter type is ENV_ALM, which is the environmental alarm types.
•	AIRCOMPR	Air compressor failure
•	AIRCOND	Air conditioning failure
•	AIRDRYR	Air dryer failure
•	BATDSCHRG	Battery discharging
•	BATTERY	Battery failure
•	CLFAN	Cooling fan failure
•	CPMAJOR	Centralized power major failure
•	CPMINOR	Centralized power minor failure
•	ENGINE	Engine failure
•	ENGOPRG	Engine operating
•	ENGTRANS	Standby engine transfer
•	EXPLGS	Explosive gas
•	FIRDETR	Fire detector failure
•	FIRE	Fire
•	FLOOD	Flood
•	FUELLEAK	Fuel leak
•	FUSE	Fuse failure
•	GASALARM	Explosive gas, toxic gas, ventilation fail, or gas monitor fail
•	HATCH	Controlled Environment Vault (CEV) hatch fail
•	GEN	Generator failure
•	HIAIR	High airflow
•	HIHUM	High humidity
•	HITEMP	High temperature
•	HIWTR	High water

•	INTRUDER	Intrusion
•	LEVELCON	Level converter
•	LVDADSL	Secondary ADSL low voltage disconnect
•	LVDBYPAS	Low voltage disconnect bypass
•	LWBATVG	Low battery voltage
•	LWFUEL	Low fuel
•	LWHUM	Low humidity
•	LWPRES	Low cable pressure
•	LWTEMP	Low temperature
•	LWWTR	Low water
•	MISC	Miscellaneous
•	OPENDR	Open door
•	POWER	Commercial power failure
•	PUMP	Pump failure
•	PWR-48	48 V power supply failure
•	PWR-139	–139 V power converter
•	PWR-190	–190 V power converter
•	PWRMJ	Power supply major
•	PWRMN	Power supply minor
•	RECT	Rectifier failure
•	RECTHI	Rectifier high voltage
•	RECTLO	Rectifier low voltage
•	RINGGENMJ	Ringing generator major
•	RINGGENMN	Ringing generator minor
•	RTACADSL	AC or AC/rectifier power fail ADSL equipment
•	RTACCRIT	AC or AC/rectifier power fail DCL equipment critical site
•	RTACPWR	AC or AC/rectifier power fail DCL equipment
•	RTACPWRENG	Commercial AC fail, site equipped with standby engine
•	RTBAYPWR	AC power loss distributed power RT bay
•	RTRVENG	Retrieve standby engine, commercial AC restored
•	SMOKE	Smoke
•	TEMP	High-low temperature
•	TOXICGAS	Toxic gas
•	TREPEATER	T-repeater shelf
•	VENTN	Ventilation system failure
<OCRDAT>		(Optional) Date.
<OCRTM>		(Optional) Time.

<LOCN>	Location associated with a particular command. Identifies the location from which the PM mode is to be retrieved. 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>	The PM count retrieval direction. The parameter type is DIRECTION, which is the transmit and receive directions.
• BTH	Both transmit and receive directions
• RCV	Receive direction only
<DESC>	(Optional) Condition description.

19.5 REPT ALM LMP

(Cisco ONS 15454) The Report Alarm Link Management Protocol (REPT ALM LMP) is the autonomous message which is used to report the LMP-FAIL alarms for the control channels and traffic engineering (TE) links.

Usage Guidelines   None

Category   Fault

Security   Retrieve

Output Format
```
   SID DATE TIME** ATAG REPT ALM LMP
"[<AID>]:<NTFCNCDE>,<CONDTYPE>,<SRVEFF>,[<OCRDAT>],[<OCRTM>],[<LOCN>],
 [<DIRN>]:[<DESC>]"
;
```

Output Example
```
   va454-5 1998-06-20 14:30:00
A  814.812 REPT ALM LMP
     "CTRL-1:MJ,LMP-FAIL,NSA,08-01,14-25-59,,\"LMP Failure\","
;
```

Output Parameters

<AID>	The LMP control channel AID values.
• CTRL-ALL	Specifies all the control channels.
• CTRL-{1-4}	Specifies an individual control channel.
<NTFCNCDE>	The two-character notification code associated with an autonomous message.

• CL	The condition causing the alarm has cleared.	
• CR	A critical alarm.	
• MJ	A major alarm.	
• MN	A minor alarm.	
• NA	The condition is not alarmed.	
• NR	The condition is not reported.	
<CONDTYPE>	The condition type for an alarm or a reported event. The parameter type is CONDITION, which is any problem detected on an ONS 15454 shelf, whether or not the problem is reported (that is, whether it generates a trouble notification). Reported conditions include alarms, Not-Alarmed conditions (NA), and Not-Reported (NR) conditions. See Chapter 29, "Conditions" for a list of conditions.	
<SRVEFF>	Indicates the effect of the alarm on service.	
• NSA	The condition is non-service affecting.	
• SA	The condition is service affecting.	
<OCRDAT>	(Optional) Date (YYYY-MM-DD)	
<OCRTM>	(Optional) Time (HH:MM:SS)	
<LOCN>	Location associated with a particular command. Identifies the location from which the PM mode is to be retrieved. 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>	The PM count retrieval direction. The parameter type is DIRECTION, which is the transmit and receive directions.	
• BTH	Both transmit and receive directions	
• RCV	Receive direction only	
<DESC>	The condition description.	

19.6 REPT ALM EQPT

(Cisco ONS 15454, ONS 15454 M2, and ONS 15454 M6) The Report Alarm Equipment (REPT ALM EQPT) message reports an alarm condition against an equipment unit or slot.

Usage Guidelines   None

Category   Equipment

Security   Retrieve

Output Format

SID DATE TIME
** ATAG REPT ALM EQPT
"<AID>:<NTFCNCDE>,<CONDITION>,<SRVEFF>,[<OCRDAT>],[<OCRTM>],[<LOCN>],
[<DIRN>],:[<DESC>],[<AIDDET>]"
;

Output Example

TID-000 1998-06-20 14:30:00
** 100.100 REPT ALM EQPT
"SLOT-7:MJ,CONTR,NSA,08-01,14-25-59,NEND,RCV:\"CONTROLLER FAILURE\",TSC"
;

Output Parameters

Parameter	Description
<AID>	Access identifier from the "28.15 EQPT" section on page 28-39. Equipment AID SLOT-{1-17}.
<NTFCNCDE>	Two-letter notification code. The parameter type is NOTIF_CODE, which is a two-character notification code associated with an autonomous message.
• CL	The condition causing the alarm has cleared.
• CR	A critical alarm.
• MJ	A major alarm.
• MN	A minor alarm.
• NA	The condition is not alarmed.
• NR	The alarm is not reported.
<CONDITION>	Condition type for an alarm or a reported event. The parameter type is CONDITION, which is any problem detected on an ONS 15454 shelf, whether or not the problem is reported (that is, whether or not it generates a trouble notification). Reported conditions include alarms, Not Alarmed conditions (NA), and Not Reported (NR) conditions. See the Chapter 29, "Conditions" for a list of conditions.
<SRVEFF>	The effect on service caused by the standing alarm or condition. The parameter type is SERV_EFF, which is the effect of the alarm on service.
• NSA	The condition is non-service affecting.
• SA	The condition is service affecting.
<OCRDAT>	(Optional) Date
<OCRTM>	(Optional) Time
<DESC>	(Optional) Condition description.
<AIDDET>	(Optional) AIDDET uses the same addressing rules as the AID, but specifies AID type and additional details about the entity being managed. The parameter type is EQPT_TYPE, which is the type of equipment being provisioned into a slot.
• 100G-LC-C	100G-LC-C card
• 100G-CK-C	100G-CK-C card

Parameter	Description
• 10X10G-LC	10X10G-LC card
• CFP-LC	CFP-LC card
• AR-MXP	Any rate muxponder
• AR-XP	Any rate xponder
• AR-XPE	Any rate enhanced xponder.
• 16-WXC-FS	16-WXC-FS card.
• 15216-MD-40-EVEN	Thermal Multiplex/Demultiplex Passive Unit, spaced at 50 GHz on even grid
• 15216-MD-40-ODD	Thermal Multiplex/Demultiplex Passive Unit, spaced at 50 GHz on odd grid
• 15216-MD-ID-50	Thermal Interleaver Passive Unit, spaced at 50 GHz grid
• 15216-FLD4-30-3	Edge 4-Ch Bi-Directional OADM Module 1530.33 to 1532.68.
• 15216-FLD4-33-4	Edge 4-Ch Bi-Directional OADM Module 1533.47 to 1535.82.
• 15216-FLD4-36-6	Edge 4-Ch Bi-Directional OADM Module 1536.61 to 1538.98.
• 15216-FLD4-39-7	Edge 4-Ch Bi-Directional OADM Module 1539.77 to 1542.14.
• 15216-FLD4-42-9	Edge 4-Ch Bi-Directional OADM Module 1542.94 to 1545.32.
• 15216-FLD4-46-1	Edge 4-Ch Bi-Directional OADM Module 1546.12 to 1548.51.
• 15216-FLD4-49-3	Edge 4-Ch Bi-Directional OADM Module 1549.32 to 1551.72.
• 15216-FLD4-52-5	Edge 4-Ch Bi-Directional OADM Module 1552.52 to 1554.94.
• 15216-FLD4-55-7	Edge 4-Ch Bi-Directional OADM Module 1555.75 to 1558.17.
• 15216-FLD4-58-9	Edge 4-Ch Bi-Directional OADM Module 1558.98 to 1561.42.
• 32DMX-L	3- channel demultiplexer for L-band
• 32WSS-L	32-channel wavelength switch selector for L-band
• 40-MXP-C	40 Gbit/Sec Multirate Muxponder
• 40-SMR1-C	The single module 40-channel ROADM on C-band
• 40-SMR2-C	The single module 40-channel ROADM with EDFA on C-band
• 40-TXP-C	40 Gigabits per second Multirate Transponder
• 80-WXC-C	80-channel wavelength cross-connect spaced at 100 GHz grid
• AD-1B	OADM 1-Band Filter
• AD-1C	OADM 1-Channel Filter
• AD-2C	OADM 2-Channel Filter

Parameter	Description
• AD-4B	OADM 4-Band Filter
• AD-4C	OADM 4-Channel Filter
• AICI	AIC-I card
• AIP	Alarm Indication Panel
• ALM-PWR	Alarm Power
• ASAP-4	ASAP carrier card with four PIM slots
• BP	The backplane of the NE
• CE-100T-8	8-port 100T card
• CE-1000-4	4-port GIGE mapper card
• CRFT-TMG	Craft Timing
• DCC	Data Communications Channel
• DCU	Dispersion Compensation Unit
• DMX-32	Optical DMX 32 Channels
• DS3i-N-12	DS3i-N-12 card
• E1	E1 card
• E1-42	42-port E1 card
• E1000T-2	2-port interface card supporting 1000BaseT Ethernet facilities
• E100T-12	12-port interface card supporting 100BaseT Ethernet facilities
• E100T-4	Four-port interface card supporting 100BaseT Ethernet facilities
• E1N	E1N card
• E3	E3 card
• EDRA-1-26	EDRA-1-26 amplifier
• EDRA-1-35	EDRA-1-35 amplifier
• EDRA-2-26	EDRA-2-26 amplifier
• EDRA-2-35	EDRA-2-35 amplifier
• FBGDCU-1157	
• FBGDCU-1322	
• FBGDCU-165	
• FBGDCU-1653	
• FBGDCU-1983	
• FBGDCU-331	
• FBGDCU-496	
• FBGDCU-661	
• FBGDCU-826	
• FBGDCU-992	
• FILLER_CARD	Filler card
• FMEC-155E-1TO1	The equipment type for FMEC STM1E12 card

Parameter	Description
• FMEC-155E-1TO3	The equipment type for FMEC STM1E12 card with 1:3 protection
• FMEC-155E-UNPROT	The equipment type for FMEC STM1E12 card without protection
• FMEC-SMZ-E1	FMEC card corresponding to E1 card
• FMEC-SMZ-E3	FMEC card corresponding to E3 card
• FTA	Fan Tray of the NE
• FTA1	Fan Tray 1 of the NE
• FTA2	Fan Tray 2 of the NE
• G1K-4	G1K-4 card
• MD-4	Optical Multiplexer/Demultiplexer with 4 Channels
• MD-48-CM	
• MD-48-EVEN	
• MD-48-ODD	
• MESH-PP-SMR	The passive unit Patch Panel device used to connect upto four 40-SMR2-C cards
• MF-16AD-CFS	16-channels - 1 direction, colorless, omnidirectional add/drop unit.
• MF-4x4-COFS	4-channels, 4-directions, colorless, omnidirectional add/drop unit.
• MF-AST-EDFA	MF-AST-EDFA unit
• MF-DEG-5	5-degrees mesh patch panel
• MF-MPO-8LC	MPO to 8-LC adapter
• MF-UPG-4	4-degrees upgrade module
• ML100X-8	8-port 100X card with optical interface
• ML-100T-8	8-port 100T card with optical interface
• MMU	Multiring mesh upgrade unit
• MS-ISC-100T	Fast Ethernet switch card used for internal shelf connection
• MUX-32	Optical MUX 32 Channels
• MXP-2.5G-10G	10G (4 * 2.5G) Muxponder card
• MXP-MR-10DME	10 Gbps datamux with enhanced FEC
• OPT-AMP-L	Optical preamplifier for L-band
• OPT-BST	Optical booster amplifier
• OPT-BST-L	Optical booster for L-band
• OPT-EDFA-17	MAL-less EDFA Optical Amplifier - C-band - 17dB Gain
• OPT-EDFA-24	MAL-less EDFA Optical Amplifier - C-band - 24dB Gain
• OPT-PRE	Optical Preamplifier
• OPT-RAMP-C	Raman pump amplifier C-band
• OPT-RAMP-CE	An extended version of Raman pump amplifier
• OPT-RAMP-COP	Raman COP card.
• OPT-RAMP-CTP	Raman CTP card.

Parameter	Description
• OPT-RAMP-E	Raman pump amplifier E-band
• OSC-CSM	Optical Service Channel with Combiner/Separator Module
• OSCM	Optical Service Channel Module
• OTU2-XP	A 4x10G transponder that is capable to operate with multiple bit rates - 10G FC, 10GE, and OC192/STM64
• PIM-4	Pluggable interface module with 4 PPM slots
• PP-4-SMR	Patch-Panel, 4 degrees, for SMR cards
• PP-MESH-4	Patch-Panel, 4 degrees
• PP-MESH-8	Patch-Panel, 8 degrees
• PPM-1	Pluggable port module with 1-port SFP module
• PSM	Protection Service Module card
• PTF-4	Fabric card.
• PTM-4	Line card.
• PTSA	CPT 50 panel.
• PTSYS- Fan-Out-Group	PTSYS Fan-Out-Group.
• SHELF	Shelf entity
• STM4	An interface card that supports one or more STM4 (622 Mbps) optical facilities
• STM4-4	A four port STM4 card
• STM4-IR-1	An interface card that supports one intermediate range STM4 (622 Mbps) optical facilities
• STM4-LR-1	An interface card that supports one long range STM4 (622 Mbps) optical facilities
• STM4-SR-1	An interface card that supports one short range STM4 (622 Mbps) optical facilities
• STM64-4	A four port STM64 card
• STM64-LR-1	An interface card that supports one or more STM64 optical facilities
• STM1	An interface card that supports multiple STM1 (155 Mbps) optical facilities
• STM1-IR-4	An interface card that supports four intermediate range STM1 (155 Mbps) optical facilities
• STM1-SR-4	An interface card that supports four short range STM1 (155 Mbps) optical facilities
• STM1ATM-IR-6	An interface card that supports six intermediate range STM1 (155 Mbps) ATM optical fibers
• STM1IR-STM1SH-1310-8	An STM1 card which has 8 ports over the lower speed slot with XC-VXL-10G/XC-VXL-2.5G
• STM1POS-SR-4	An interface card that supports four short range STM1 (155 Mbps) POS optical facilities
• STM16	An interface card that supports one or more STM16 (10 Gbps) optical facilities

Parameter	Description
• STM16-AS-1	An interface card that supports one short range OC-48 (10 Gbps) optical facilities that can be provisioned in any I/O slot
• STM16-ELR-1	An interface card that supports one short range STM16 (2.5 Gbps) optical facility
• STM16-IR-1	An interface card that supports one intermediate range STM16 (10 Gbps) optical facility
• STM16-LR-1	An interface card that supports one long range STM16 (10 Gbps) optical facility
• STM16-SR-1	An interface card that supports one short range STM16 (10 Gbps) optical facilities
• TCC	Timing, Communications, and Control card
• TDC-CC	Coarse tunable dispersion compensation unit
• TDC-FC	Fine tunable dispersion compensation unit
• TXP-MR-10G	10G Multirate Transponder card
• TXP-MR-2.5G	Multirate 2.5G Unprotected
• TXPP-MR-2.5G	Multirate 2.5G Protected
• UNKNOWN	Unknown equipment type
• UNPROVISIONED	Unprovisioned equipment type
• WSE	Wire Speed Encryption (WSE) card
• XC-VXC-10G	XC-VXC-10G cross-connect card
• XCVXL-10G	XC-VXL-10G cross-connect card
• XCVXL-2.5G	XC-VXL-2.5G cross-connect card

19.7 REPT ALM SECU

(Cisco ONS 15454, ONS 15454 M2, and ONS 15454 M6) The Report Alarm Security (REPT ALM SECU) reports the occurrence of an alarmed security event against the NE.

Usage Guidelines

Based on TR-NWT-000835, the AID of the security alarm should be the connection identifier (CID) that is not currently supported.

The COM or user identifier (UID) is an acceptable substitute for the AID.

✎

Note The INTRUSION-PSWD condition is the only condition that is reported as a standing condition instead of a transient condition. It defaults to NA and is reported by the REPT EVT SECU message. However, it can be reprovisioned to be reported at a higher severity. If the severity of this alarm is higher than NA, it is reported by the REPT ALM SECU message.

Category

Security

Security   Superuser

Output Format   SID DATE TIME
** ATAG REPT ALM SECU
 "<AID>:<NOTIFCODE>,<SECUALMTYPE>"
;

Output Example   TID-000 1998-06-20 14:30:00
** 100.100 REPT ALM SECU
 "COM:CR,INTRUSION-PSWD"
;

Output Parameters

<AID>		Access identifier. Identifies an entity with the condition. Defaults to COM. AID is a string.
<NOTIFCODE>		Two-letter notification code. The parameter type is NOTIF_CODE, which is a two-character notification code associated with an autonomous message.
•	CL	The condition causing the alarm has cleared.
•	CR	A critical alarm.
•	MJ	A major alarm.
•	MN	A minor alarm.
•	NA	The condition is not alarmed.
•	NR	The alarm is not reported.
<SECUALMTYPE>		Security alarm type. It is a subset of the CONDITION type. In this release, the only allowable type is INTRUSION-PSWD. The parameter type is SECUALMTYPE (security alarm type).
•	INTRUSION-PSWD	Condition raised after an invalid password is used during login. This condition is raised only if the password is used a specific number of times.

19.8 REPT ALM SYNCN

(Cisco ONS 15454, ONS 15454 M2, and ONS 15454 M6) The Report Alarm Synchronization (REPT ALM SYNCN) message reports an alarm condition against a synchronization reference.

Usage Guidelines   None

Category   Synchronization

| **Security** | Retrieve |

| **Output Format** | SID DATE TIME
** ATAG REPT ALM SYNCN
   "<AID>:<NTFCNCDE>,<CONDTYPE>,<SRVEFF>,[<OCRDAT>],[<OCRTM>],[<LOCN>],
   [<DIRN>]:[<DESC>],[<EQPTTYPE>]"
; |

| **Output Example** | TID-000 1998-06-20 14:30:00
** 100.100 REPT ALM SYNCN
   "SYNC-NE:MJ,MAN,SA,08-01,14-25-59,,:\"MANUAL SWITCH\",TCC"
; |

Output Parameters	<AID>	Access identifier from the "28.31 SYNC_REF" section on page 28-60. Identifies a synchronization reference with alarm condition.
	<NTFCNCDE>	Notification code. The parameter type is NOTIF_CODE, which is a two-character notification code associated with an autonomous message.
	• CL	The condition causing the alarm has cleared.
	• CR	A critical alarm.
	• MJ	A major alarm.
	• MN	A minor alarm.
	• NA	The condition is not alarmed.
	• NR	The alarm is not reported.
	<CONDTYPE>	Condition type for an alarm or a reported event. The parameter type is CONDITION, which is any problem detected on an ONS 15454 shelf, whether or not the problem is reported (that is, whether or not it generates a trouble notification). Reported conditions include alarms, Not Alarmed (NA) conditions, and Not Reported (NR) conditions. See the Chapter 29, "Conditions" for a list of conditions.
	<SRVEFF>	The effect on service caused by the standing alarm or condition. The parameter type is SERV_EFF, which is the effect of the alarm on service.
	• NSA	The condition is non-service affecting.
	• SA	The condition is service affecting.
	<OCRDAT>	(Optional) Date
	<OCRTM>	(Optional) Time
	<DESC>	(Optional) Condition description.
	<EQPTTYPE>	(Optional) The parameter type is EQPT_TYPE, which is the type of equipment being provisioned into a slot.
	• 100G-LC-C	100G-LC-C card

•	100G-CK-C	100G-CK-C card
•	10X10G-LC	10X10G-LC card
•	CFP-LC	CFP-LC card
•	AR-MXP	Any rate muxponder
•	AR-XP	Any rate xponder
•	AR-XPE	Any rate enhanced xponder.
•	16-WXC-FS	16-WXC-FS card.
•	15216-MD-40-EVEN	Thermal Multiplex/Demultiplex Passive Unit, spaced at 50 GHz on even grid
•	15216-MD-40-ODD	Thermal Multiplex/Demultiplex Passive Unit, spaced at 50 GHz on odd grid
•	15216-MD-ID-50	Thermal Interleaver Passive Unit, spaced at 50 GHz grid
•	15216-FLD4-30-3	Edge 4-Ch Bi-Directional OADM Module 1530.33 to 1532.68.
•	15216-FLD4-33-4	Edge 4-Ch Bi-Directional OADM Module 1533.47 to 1535.82.
•	15216-FLD4-36-6	Edge 4-Ch Bi-Directional OADM Module 1536.61 to 1538.98.
•	15216-FLD4-39-7	Edge 4-Ch Bi-Directional OADM Module 1539.77 to 1542.14.
•	15216-FLD4-42-9	Edge 4-Ch Bi-Directional OADM Module 1542.94 to 1545.32.
•	15216-FLD4-46-1	Edge 4-Ch Bi-Directional OADM Module 1546.12 to 1548.51.
•	15216-FLD4-49-3	Edge 4-Ch Bi-Directional OADM Module 1549.32 to 1551.72.
•	15216-FLD4-52-5	Edge 4-Ch Bi-Directional OADM Module 1552.52 to 1554.94.
•	15216-FLD4-55-7	Edge 4-Ch Bi-Directional OADM Module 1555.75 to 1558.17.
•	15216-FLD4-58-9	Edge 4-Ch Bi-Directional OADM Module 1558.98 to 1561.42.
•	32DMX-L	3- channel demultiplexer for L-band
•	32WSS-L	32-channel wavelength switch selector for L-band
•	40-MXP-C	40 Gbit/Sec Multirate Muxponder
•	40-SMR1-C	The single module 40-channel ROADM on C-band
•	40-SMR2-C	The single module 40-channel ROADM with EDFA on C-band
•	40-TXP-C	40 Gigabits per second Multirate Transponder
•	80-WXC-C	80-channel wavelength cross-connect spaced at 100 GHz grid
•	AD-1B	OADM 1-Band Filter
•	AD-1C	OADM 1-Channel Filter
•	AD-2C	OADM 2-Channel Filter

• AD-4B	OADM 4-Band Filter
• AD-4C	OADM 4-Channel Filter
• AICI	AIC-I card
• AIP	Alarm Indication Panel
• ALM-PWR	Alarm Power
• ASAP-4	ASAP carrier card with four PIM slots
• BP	The backplane of the NE
• CE-100T-8	8-port 100T card
• CE-1000-4	4-port GIGE mapper card
• CRFT-TMG	Craft Timing
• DCC	Data Communications Channel
• DCU	Dispersion Compensation Unit
• DMX-32	Optical DMX 32 Channels
• DS3i-N-12	DS3i-N-12 card
• E1	E1 card
• E1-42	42-port E1 card
• E1000T-2	2-port interface card supporting 1000BaseT Ethernet facilities
• E100T-12	12-port interface card supporting 100BaseT Ethernet facilities
• E100T-4	Four-port interface card supporting 100BaseT Ethernet facilities
• E1N	E1N card
• E3	E3 card
• EDRA-1-26	EDRA-1-26 amplifier
• EDRA-1-35	EDRA-1-35 amplifier
• EDRA-2-26	EDRA-2-26 amplifier
• EDRA-2-35	EDRA-2-35 amplifier
• FBGDCU-1157	
• FBGDCU-1322	
• FBGDCU-165	
• FBGDCU-1653	
• FBGDCU-1983	
• FBGDCU-331	
• FBGDCU-496	
• FBGDCU-661	
• FBGDCU-826	
• FBGDCU-992	
• FILLER_CARD	Filler card
• FMEC-155E-1TO1	The equipment type for FMEC STM1E12 card
• FMEC-155E-1TO3	The equipment type for FMEC STM1E12 card with 1:3 protection

•	FMEC-155E-UNPROT	The equipment type for FMEC STM1E12 card without protection
•	FMEC-SMZ-E1	FMEC card corresponding to E1 card
•	FMEC-SMZ-E3	FMEC card corresponding to E3 card
•	FTA	Fan Tray of the NE
•	FTA1	Fan Tray 1 of the NE
•	FTA2	Fan Tray 2 of the NE
•	G1K-4	G1K-4 card
•	MD-4	Optical Multiplexer/Demultiplexer with 4 Channels
•	MD-48-CM	
•	MD-48-EVEN	
•	MD-48-ODD	
•	MESH-PP-SMR	The passive unit Patch Panel device used to connect upto four 40-SMR2-C cards
•	MF-16AD-CFS	16-channels - 1 direction, colorless, omnidirectional add/drop unit.
•	MF-4x4-COFS	4-channels, 4-directions, colorless, omnidirectional add/drop unit.
•	MF-AST-EDFA	MF-AST-EDFA unit
•	MF-DEG-5	5-degrees mesh patch panel
•	MF-MPO-8LC	MPO to 8-LC adapter
•	MF-UPG-4	4-degrees upgrade module
•	ML100X-8	8-port 100X card with optical interface
•	ML-100T-8	8-port 100T card with optical interface
•	MMU	Multiring mesh upgrade unit
•	MS-ISC-100T	Fast Ethernet switch card used for internal shelf connection
•	MUX-32	Optical MUX 32 Channels
•	MXP-2.5G-10G	10G (4 * 2.5G) Muxponder card
•	MXP-MR-10DME	10 Gbps datamux with enhanced FEC
•	OPT-AMP-L	Optical preamplifier for L-band
•	OPT-BST	Optical booster amplifier
•	OPT-BST-L	Optical booster for L-band
•	OPT-EDFA-17	MAL-less EDFA Optical Amplifier - C-band - 17dB Gain
•	OPT-EDFA-24	MAL-less EDFA Optical Amplifier - C-band - 24dB Gain
•	OPT-PRE	Optical Preamplifier
•	OPT-RAMP-C	Raman pump amplifier C-band
•	OPT-RAMP-CE	An extended version of Raman pump amplifier
•	OPT-RAMP-COP	Raman COP card.
•	OPT-RAMP-CTP	Raman CTP card.
•	OPT-RAMP-E	Raman pump amplifier E-band
•	OSC-CSM	Optical Service Channel with Combiner/Separator Module
•	OSCM	Optical Service Channel Module

•	OTU2-XP	A 4x10G transponder that is capable to operate with multiple bit rates - 10G FC, 10GE, and OC192/STM64
•	PIM-4	Pluggable interface module with 4 PPM slots
•	PP-4-SMR	Patch-Panel, 4 degrees, for SMR cards
•	PP-MESH-4	Patch-Panel, 4 degrees
•	PP-MESH-8	Patch-Panel, 8 degrees
•	PPM-1	Pluggable port module with 1-port SFP module
•	PSM	Protection Service Module card
•	PTF-4	Fabric card.
•	PTM-4	Line card.
•	PTSA	CPT 50 panel.
•	PTSYS- Fan-Out-Group	PTSYS Fan-Out-Group.
•	SHELF	Shelf entity
•	STM4	An interface card that supports one or more STM4 (622 Mbps) optical facilities
•	STM4-4	A four port STM4 card
•	STM4-IR-1	An interface card that supports one intermediate range STM4 (622 Mbps) optical facilities
•	STM4-LR-1	An interface card that supports one long range STM4 (622 Mbps) optical facilities
•	STM4-SR-1	An interface card that supports one short range STM4 (622 Mbps) optical facilities
•	STM64-4	A four port STM64 card
•	STM64-LR-1	An interface card that supports one or more STM64 optical facilities
•	STM1	An interface card that supports multiple STM1 (155 Mbps) optical facilities
•	STM1-IR-4	An interface card that supports four intermediate range STM1 (155 Mbps) optical facilities
•	STM1-SR-4	An interface card that supports four short range STM1 (155 Mbps) optical facilities
•	STM1ATM-IR-6	An interface card that supports six intermediate range STM1 (155 Mbps) ATM optical fibers
•	STM1IR-STM1SH-1310-8	An STM1 card which has 8 ports over the lower speed slot with XC-VXL-10G/XC-VXL-2.5G
•	STM1POS-SR-4	An interface card that supports four short range STM1 (155 Mbps) POS optical facilities
•	STM16	An interface card that supports one or more STM16 (10 Gbps) optical facilities
•	STM16-AS-1	An interface card that supports one short range OC-48 (10 Gbps) optical facilities that can be provisioned in any I/O slot
•	STM16-ELR-1	An interface card that supports one short range STM16 (2.5 Gbps) optical facility

• STM16-IR-1	An interface card that supports one intermediate range STM16 (10 Gbps) optical facility
• STM16-LR-1	An interface card that supports one long range STM16 (10 Gbps) optical facility
• STM16-SR-1	An interface card that supports one short range STM16 (10 Gbps) optical facilities
• TCC	Timing, Communications, and Control card
• TDC-CC	Coarse tunable dispersion compensation unit
• TDC-FC	Fine tunable dispersion compensation unit
• TXP-MR-10G	10G Multirate Transponder card
• TXP-MR-2.5G	Multirate 2.5G Unprotected
• TXPP-MR-2.5G	Multirate 2.5G Protected
• UNKNOWN	Unknown equipment type
• UNPROVISIONED	Unprovisioned equipment type
• WSE	Wire Speed Encryption (WSE) card
• XC-VXC-10G	XC-VXC-10G cross-connect card
• XCVXL-10G	XC-VXL-10G cross-connect card
• XCVXL-2.5G	XC-VXL-2.5G cross-connect card

19.9 REPT DBCHG

(Cisco ONS 15454, ONS 15454 M2, and ONS 15454 M6) The Report Database Change (REPT DBCHG) message reports any changes on the NE that result from:

- TL1 provisioning commands or their graphical user interface (GUI) equivalents containing the verbs ALW, DLT, ED, ENT, INH, INIT, OPR, RLS, SET, and SW (for example, DLT-EQPT, ENT-CRS-STS1)

- External event such as a board insertion

Usage Guidelines
- When the secondary state is changed from AINS state to any other state, no REPT DBCHG messages are generated.

- REPT DBCHG is turned off by default. To turn REPT DBCHG on, you must issue the ALW-MSG-DBCHG command.

- REPT DBCHG messages are generated every time a roll is performed. A cross-connect delete and add REPT DBCHG message will not be sent every time a roll is performed; instead a REPT DBCHG message on the roll will be sent.

Category   Log

Security   Retrieve

Output Format

SID DATE TIME
A ATAG REPT DBCHG
   "TIME=<TIME>,DATE=<DATE>,[SOURCE=<SOURCE>],[USERID=<USERID>],
   DBCHGSEQ=<DBCHGSEQ>:<COMMAND>:[<AID>]:::[<PSTPSTQ>,],<SST>"
;

Output Example

TID-000 1998-06-20 14:30:00
A 100 REPT DBCHG
   "TIME=14-35-46,DATE=99-07-28,SOURCE=123,USERID=CISCO15,DBCHGSEQ=456:
   ENT-CRS-VT1:VT1-4-1-2-6-4:::PST-PSTQ,SST"
;

Output Parameters

<TIME>	The time of the message triggered by the NE.
<DATE>	The date of the message triggered by the NE.
<SOURCE>	(Optional) An input-command CTAG if present. SOURCE is a string. Maximum length of 20 characters.
<USERID>	(Optional) The user name or user identifier. USERID is a string. Maximum length of 20 characters.
<DBCHGSEQ>	Identifier or range of identifiers to be retrieved. It is a sequential number of the DBCHGSEQ message. DBCHGSEQ is an integer.
<COMMAND>	The input command or substitute. Maximum length of 20 characters. COMMAND is a string.
<AID>	Access identifier. Maximum length of 64 characters. Excess characters will be truncated. AID is a string.
<PSTPSTQ>	Admin state in the PST-PSTQ format. The parameter type is PST_PSTQ, which is the service state of the entity described by the primary state (SST) and a primary state qualifier (PSTQ).
• IS-NR	In Service and Normal
• OOS-AU	Out of Service and Autonomous
• OOS-AUMA	Out of Service and Autonomous Management
• OOS-MA	Out of Service and Management
<SST>	Secondary state. The parameter type is SST, which provides additional information pertaining to PST and PSTQ.
• AINS	Automatic In-Service
• DSBLD	Disabled
• LPBK	Loopback
• MEA	Mismatched Equipment
• MT	Maintenance
• OOG	Out of Group
• SWDL	Software Download
• UAS	Unassigned
• UEQ	Unequipped

19.10 REPT EVT <MOD2ALM>

(Cisco ONS 15454, ONS 15454 M2, and ONS 15454 M6) The Report Event for 1GFC, 1GFICON, 2GFC, 2GFICON, CLNT, DS1, E100, E1000, E3, E4, EC1, ETH, FSTE, G1000, GFPOS, GIGE, ILK, ISCCOMPAT, ISC3PEER2R, ISC3PEER1G, ISC3PEER2G, OC12, OC192, OC3, OC48, OCH, OMS, OTS, POS, STM1,STM4,STM16,STM64, STS1, STS12C, STS18C, STS192C, STS24C, STS36C, STS3C, STS48C, STS6C, STS9C, T1, T3, UDCDCC, UDCF, VC3, VC4, VC4-2c, VC4-3c, VC4-4c, VC4-8c, VC4-16c,VC4-64c, VC12, VCG, VT1, VT2, WLEN, or RPRIF (REPT EVT <MOD2ALM>) message reports the occurrence of a nonalarmed event. In Software Release 5.0 and later, REPT EVT <MOD2ALM> can report the remote monitoring (RMON)-managed threshold crossing alarm.

Usage Guidelines   See Table 30-1 on page 30-1 for supported modifiers by platform.

Category   Fault

Security   Retrieve

Output Format
```
  SID DATE TIME
A ATAG REPT EVT <MOD2ALM>
  "<AID>:<CONDTYPE>,[<CONDEFF>],,,[<LOCN>],[<DIRN>],[<MONVAL>],[<THLEV>],
[<TMPER>]:[<DESC>],[<AIDDET>]"
;
```

Output Example
```
  TID-000 1998-06-20 14:30:00
A 100.100 REPT EVT 1GFC
  "FAC-5-1:WKSWPR,TC,,,FEND,,12,13,15-MIN:\"WORKING SWITCH TO PROTECTION\",
  OC48"
;
```

Output Parameters

<AID>	Access identifier from the "28.1 ALL" section on page 28-1.
<CONDTYPE>	Condition type for an alarm or a reported event. The parameter type is CONDITION, which is any problem detected on an ONS 15454 shelf, whether or not the problem is reported (that is, whether or not it generates a trouble notification). Reported conditions include alarms, Not Alarmed (NA) conditions, and Not Reported (NR) conditions. See the Chapter 29, "Conditions"for a list of conditions.
<CONDEFF>	(Optional) The effect of the event on the condition of the NE. The parameter type is COND_EFF, which is the state of the condition upon the affected unit.

• CL	Standing condition cleared
• SC	Standing condition raised
• TC	Transient condition
<LOCN>	(Optional) 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. Direction of PM relative to the entity identified by the AID. The parameter type is DIRECTION (transmit and receive directions).
• BTH	Both transmit and receive directions
• RCV	Receive direction only
• TRMT	Transmit direction only
<MONVAL>	(Optional) Monitored value. Value to which the register identified by MONTYPE is to be initialized to or the measured value of a monitored parameter. The value is in the form of numeric counts or rates. MONVAL is a float.
<THLEV>	(Optional) Threshold level. THLEV is a float.
<TMPER>	(Optional) Accumulation time period for performance counters. 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.
<DESC>	(Optional) Condition description.
<AIDDET>	(Optional) AIDDET uses the same addressing rules as the AID, but specifies AID type and additional details about the entity being managed. The parameter type is EQPT_TYPE, which is the type of equipment being provisioned into a slot.
• 100G-LC-C	100G-LC-C card

•	100G-CK-C	100G-CK-C card
•	10X10G-LC	10X10G-LC card
•	CFP-LC	CFP-LC card
•	AR-MXP	Any rate muxponder
•	AR-XP	Any rate xponder
•	AR-XPE	Any rate enhanced xponder.
•	16-WXC-FS	16-WXC-FS card.
•	15216-MD-40-EVEN	Thermal Multiplex/Demultiplex Passive Unit, spaced at 50 GHz on even grid
•	15216-MD-40-ODD	Thermal Multiplex/Demultiplex Passive Unit, spaced at 50 GHz on odd grid
•	15216-MD-ID-50	Thermal Interleaver Passive Unit, spaced at 50 GHz grid
•	15216-FLD4-30-3	Edge 4-Ch Bi-Directional OADM Module 1530.33 to 1532.68.
•	15216-FLD4-33-4	Edge 4-Ch Bi-Directional OADM Module 1533.47 to 1535.82.
•	15216-FLD4-36-6	Edge 4-Ch Bi-Directional OADM Module 1536.61 to 1538.98.
•	15216-FLD4-39-7	Edge 4-Ch Bi-Directional OADM Module 1539.77 to 1542.14.
•	15216-FLD4-42-9	Edge 4-Ch Bi-Directional OADM Module 1542.94 to 1545.32.
•	15216-FLD4-46-1	Edge 4-Ch Bi-Directional OADM Module 1546.12 to 1548.51.
•	15216-FLD4-49-3	Edge 4-Ch Bi-Directional OADM Module 1549.32 to 1551.72.
•	15216-FLD4-52-5	Edge 4-Ch Bi-Directional OADM Module 1552.52 to 1554.94.
•	15216-FLD4-55-7	Edge 4-Ch Bi-Directional OADM Module 1555.75 to 1558.17.
•	15216-FLD4-58-9	Edge 4-Ch Bi-Directional OADM Module 1558.98 to 1561.42.
•	32DMX-L	3- channel demultiplexer for L-band
•	32WSS-L	32-channel wavelength switch selector for L-band
•	40-MXP-C	40 Gbit/Sec Multirate Muxponder
•	40-SMR1-C	The single module 40-channel ROADM on C-band
•	40-SMR2-C	The single module 40-channel ROADM with EDFA on C-band
•	40-TXP-C	40 Gigabits per second Multirate Transponder
•	80-WXC-C	80-channel wavelength cross-connect spaced at 100 GHz grid
•	AD-1B	OADM 1-Band Filter
•	AD-1C	OADM 1-Channel Filter
•	AD-2C	OADM 2-Channel Filter

•	AD-4B	OADM 4-Band Filter
•	AD-4C	OADM 4-Channel Filter
•	AICI	AIC-I card
•	AIP	Alarm Indication Panel
•	ALM-PWR	Alarm Power
•	ASAP-4	ASAP carrier card with four PIM slots
•	BP	The backplane of the NE
•	CE-100T-8	8-port 100T card
•	CE-1000-4	4-port GIGE mapper card
•	CRFT-TMG	Craft Timing
•	DCC	Data Communications Channel
•	DCU	Dispersion Compensation Unit
•	DMX-32	Optical DMX 32 Channels
•	DS3i-N-12	DS3i-N-12 card
•	E1	E1 card
•	E1-42	42-port E1 card
•	E1000T-2	2-port interface card supporting 1000BaseT Ethernet facilities
•	E100T-12	12-port interface card supporting 100BaseT Ethernet facilities
•	E100T-4	Four-port interface card supporting 100BaseT Ethernet facilities
•	E1N	E1N card
•	E3	E3 card
•	EDRA-1-26	EDRA-1-26 amplifier
•	EDRA-1-35	EDRA-1-35 amplifier
•	EDRA-2-26	EDRA-2-26 amplifier
•	EDRA-2-35	EDRA-2-35 amplifier
•	FBGDCU-1157	
•	FBGDCU-1322	
•	FBGDCU-165	
•	FBGDCU-1653	
•	FBGDCU-1983	
•	FBGDCU-331	
•	FBGDCU-496	
•	FBGDCU-661	
•	FBGDCU-826	
•	FBGDCU-992	
•	FILLER_CARD	Filler card
•	FMEC-155E-1TO1	The equipment type for FMEC STM1E12 card
•	FMEC-155E-1TO3	The equipment type for FMEC STM1E12 card with 1:3 protection

•	FMEC-155E-UNPROT	The equipment type for FMEC STM1E12 card without protection
•	FMEC-SMZ-E1	FMEC card corresponding to E1 card
•	FMEC-SMZ-E3	FMEC card corresponding to E3 card
•	FTA	Fan Tray of the NE
•	FTA1	Fan Tray 1 of the NE
•	FTA2	Fan Tray 2 of the NE
•	G1K-4	G1K-4 card
•	MD-4	Optical Multiplexer/Demultiplexer with 4 Channels
•	MD-48-CM	
•	MD-48-EVEN	
•	MD-48-ODD	
•	MESH-PP-SMR	The passive unit Patch Panel device used to connect upto four 40-SMR2-C cards
•	MF-16AD-CFS	16-channels - 1 direction, colorless, omnidirectional add/drop unit.
•	MF-4x4-COFS	4-channels, 4-directions, colorless, omnidirectional add/drop unit.
•	MF-AST-EDFA	MF-AST-EDFA unit
•	MF-DEG-5	5-degrees mesh patch panel
•	MF-MPO-8LC	MPO to 8-LC adapter
•	MF-UPG-4	4-degrees upgrade module
•	ML100X-8	8-port 100X card with optical interface
•	ML-100T-8	8-port 100T card with optical interface
•	MMU	Multiring mesh upgrade unit
•	MS-ISC-100T	Fast Ethernet switch card used for internal shelf connection
•	MUX-32	Optical MUX 32 Channels
•	MXP-2.5G-10G	10G (4 * 2.5G) Muxponder card
•	MXP-MR-10DME	10 Gbps datamux with enhanced FEC
•	OPT-AMP-L	Optical preamplifier for L-band
•	OPT-BST	Optical booster amplifier
•	OPT-BST-L	Optical booster for L-band
•	OPT-EDFA-17	MAL-less EDFA Optical Amplifier - C-band - 17dB Gain
•	OPT-EDFA-24	MAL-less EDFA Optical Amplifier - C-band - 24dB Gain
•	OPT-PRE	Optical Preamplifier
•	OPT-RAMP-C	Raman pump amplifier C-band
•	OPT-RAMP-CE	An extended version of Raman pump amplifier
•	OPT-RAMP-COP	Raman COP card.
•	OPT-RAMP-CTP	Raman CTP card.
•	OPT-RAMP-E	Raman pump amplifier E-band
•	OSC-CSM	Optical Service Channel with Combiner/Separator Module
•	OSCM	Optical Service Channel Module

Cisco ONS SONET TL1 Command Guide, R10.x.x

• OTU2-XP	A 4x10G transponder that is capable to operate with multiple bit rates - 10G FC, 10GE, and OC192/STM64
• PIM-4	Pluggable interface module with 4 PPM slots
• PP-4-SMR	Patch-Panel, 4 degrees, for SMR cards
• PP-MESH-4	Patch-Panel, 4 degrees
• PP-MESH-8	Patch-Panel, 8 degrees
• PPM-1	Pluggable port module with 1-port SFP module
• PSM	Protection Service Module card
• PTF-4	Fabric card.
• PTM-4	Line card.
• PTSA	CPT 50 panel.
• PTSYS- Fan-Out-Group	PTSYS Fan-Out-Group.
• SHELF	Shelf entity
• STM4	An interface card that supports one or more STM4 (622 Mbps) optical facilities
• STM4-4	A four port STM4 card
• STM4-IR-1	An interface card that supports one intermediate range STM4 (622 Mbps) optical facilities
• STM4-LR-1	An interface card that supports one long range STM4 (622 Mbps) optical facilities
• STM4-SR-1	An interface card that supports one short range STM4 (622 Mbps) optical facilities
• STM64-4	A four port STM64 card
• STM64-LR-1	An interface card that supports one or more STM64 optical facilities
• STM1	An interface card that supports multiple STM1 (155 Mbps) optical facilities
• STM1-IR-4	An interface card that supports four intermediate range STM1 (155 Mbps) optical facilities
• STM1-SR-4	An interface card that supports four short range STM1 (155 Mbps) optical facilities
• STM1ATM-IR-6	An interface card that supports six intermediate range STM1 (155 Mbps) ATM optical fibers
• STM1IR-STM1SH-1310-8	An STM1 card which has 8 ports over the lower speed slot with XC-VXL-10G/XC-VXL-2.5G
• STM1POS-SR-4	An interface card that supports four short range STM1 (155 Mbps) POS optical facilities
• STM16	An interface card that supports one or more STM16 (10 Gbps) optical facilities
• STM16-AS-1	An interface card that supports one short range OC-48 (10 Gbps) optical facilities that can be provisioned in any I/O slot
• STM16-ELR-1	An interface card that supports one short range STM16 (2.5 Gbps) optical facility

•	STM16-IR-1	An interface card that supports one intermediate range STM16 (10 Gbps) optical facility
•	STM16-LR-1	An interface card that supports one long range STM16 (10 Gbps) optical facility
•	STM16-SR-1	An interface card that supports one short range STM16 (10 Gbps) optical facilities
•	TCC	Timing, Communications, and Control card
•	TDC-CC	Coarse tunable dispersion compensation unit
•	TDC-FC	Fine tunable dispersion compensation unit
•	TXP-MR-10G	10G Multirate Transponder card
•	TXP-MR-2.5G	Multirate 2.5G Unprotected
•	TXPP-MR-2.5G	Multirate 2.5G Protected
•	UNKNOWN	Unknown equipment type
•	UNPROVISIONED	Unprovisioned equipment type
•	WSE	Wire Speed Encryption (WSE) card
•	XC-VXC-10G	XC-VXC-10G cross-connect card
•	XCVXL-10G	XC-VXL-10G cross-connect card
•	XCVXL-2.5G	XC-VXL-2.5G cross-connect card

19.11 REPT EVT BITS

(Cisco ONS 15454, ONS 15454 M2, and ONS 15454 M6) The Report Event Building Integrated Timing Supply (REPT EVT BITS) message reports a non-alarmed event against a BITS facility.

Usage Guidelines   None

Category   Synchronization

Security   Retrieve

Output Format
```
   SID DATE TIME
** ATAG REPT EVT BITS
   "<AID>:<CONDTYPE>,[<CONDEFF>],,,[<LOCN>],[<DIRN>],,,:[<DESC>]"
;
```

Output Example
```
   TID-000 1998-06-20 14:30:00
A 100.100 REPT ALM BITS
   "BITS-1:SSM-STU,TC,,,,,,,:\"SYNCHRONIZED - TRACEABILITY UNKNOWN\""
;
```

Output Parameters	<AID>	Access identifier from the "28.6 BITS" section on page 28-22.
	<CONDTYPE>	Condition type for an alarm or a reported event. The parameter type is CONDITION, which is any problem detected on an ONS 15454 node, whether or not the problem is reported (that is, whether it generates a trouble notification). Reported conditions include alarms, Not-Alarmed conditions (NA), and Not-Reported (NR) conditions. See Chapter 29, "Conditions" for a list of conditions.
	<CONDEFF>	The effect of the event on the condition of the NE. The parameter type is COND_EFF, which is the state of the condition upon the affected unit.
	• CL	Standing condition cleared
	• SC	Standing condition raised
	• TC	Transient condition
	<LOCN>	Location associated with a particular command. Identifies the location from which the PM mode is to be retrieved. 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>	The PM count retrieval direction. The parameter type is DIRECTION, which is the transmit and receive directions.
	• BTH	Both transmit and receive directions
	• RCV	Receive direction only
	<DESC>	(Optional) Condition description.

19.12 REPT EVT COM

(Cisco ONS 15454, ONS 15454 M2, and ONS 15454 M6) The Report Event Common
(REPT EVT COM) message reports a nonalarmed event against an NE when there is no AID associated with it.

Usage Guidelines   None

Category   Fault

Security   Retrieve

Output Format
```
    SID DATE TIME
A ATAG REPT EVT COM
   "[<AID>]:<CONDTYPE>,[<CONDEFF>],,,,,,[<LOCN>],[<DIRN>]:[<DESC>]"
;
```

Output Example

TID-000 1998-06-20 14:30:00
A 100.100 REPT EVT COM
  "COM:CLDRESTART,TC,,,,,,,:\"COLD RESTART\","
;

Output Parameters

<AID>	(Optional) Access identifier. Identifies the entity to which the command pertains. AID is a string.
<CONDTYPE>	Condition type for an alarm or a reported event. The parameter type is CONDITION, which is any problem detected on an ONS 15454 shelf, whether or not the problem is reported (that is, whether or not it generates a trouble notification). Reported conditions include alarms, Not-Alarmed conditions (NA), and Not-Reported (NR) conditions. See Chapter 29, "Conditions" for a list of conditions.
<CONDEFF>	The effect of the event on the condition of the NE. The parameter type is COND_EFF, which is the state of the condition upon the affected unit.
• CL	Standing condition cleared
• SC	Standing condition raised
• TC	Transient condition
<LOCN>	Location associated with a particular command. Identifies the location from which the PM mode is to be retrieved. 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>	The PM count retrieval direction. The parameter type is DIRECTION, which is the transmit and receive directions.
• BTH	Both transmit and receive directions
• RCV	Receive direction only
<DESC>	(Optional) Condition description.

19.13 REPT EVT ENV

(Cisco ONS 15454, ONS 15454 M2, and ONS 15454 M6) The Report Event Environment (REPT EVT ENV) message reports the occurrence of a nonalarmed event against an environment alarm input.

Usage Guidelines   None

Category   Environment

Security   Retrieve

Output Format

SID DATE TIME
A ATAG REPT EVT ENV
   "<AID>:<ALMTYPE>,[<CONDEFF>],,,,,,[<LOCN>],[<DIRN>]:[<DESC>]"
;

Output Example

TID-000 1998-06-20 14:30:00
A 100.100 REPT EVT ENV
   "ENV-IN-2:OPENDR,TC,,,,,,,:\"OPEN DOOR\""
;

Output Parameters

<AID>		Access identifier from the "28.14 ENV" section on page 28-39. Identifies an environmental input.
<ALMTYPE>		Abbreviated code identifying the alarm. The parameter type is ENV_ALM (environmental alarm types).
•	AIRCOMPR	Air compressor failure
•	AIRCOND	Air conditioning failure
•	AIRDRYR	Air dryer failure
•	BATDSCHRG	Battery discharging
•	BATTERY	Battery failure
•	CLFAN	Cooling fan failure
•	CPMAJOR	Centralized power major failure
•	CPMINOR	Centralized power minor failure
•	ENGINE	Engine failure
•	ENGOPRG	Engine operating
•	ENGTRANS	Standby engine transfer
•	EXPLGS	Explosive gas
•	FIRDETR	Fire detector failure
•	FIRE	Fire
•	FLOOD	Flood
•	FUELLEAK	Fuel leak
•	FUSE	Fuse failure
•	GASALARM	Explosive gas, toxic gas, ventilation fail, or gas monitor fail
•	HATCH	CEV hatch fail
•	GEN	Generator failure
•	HIAIR	High airflow
•	HIHUM	High humidity
•	HITEMP	High temperature
•	HIWTR	High water
•	INTRUDER	Intrusion
•	LEVELCON	Level converter
•	LVDADSL	Secondary ADSL low voltage disconnect
•	LVDBYPAS	Low voltage disconnect bypass

•	LWBATVG	Low battery voltage
•	LWFUEL	Low fuel
•	LWHUM	Low humidity
•	LWPRES	Low cable pressure
•	LWTEMP	Low temperature
•	LWWTR	Low water
•	MISC	Miscellaneous
•	OPENDR	Open door
•	POWER	Commercial power failure
•	PUMP	Pump failure
•	PWR-48	48 V power supply failure
•	PWR-139	–139 V power converter
•	PWR-190	–190 V power converter
•	PWRMJ	Power supply major
•	PWRMN	Power supply minor
•	RECT	Rectifier failure
•	RECTHI	Rectifier high voltage
•	RECTLO	Rectifier low voltage
•	RINGGENMJ	Ringing generator major
•	RINGGENMN	Ringing generator minor
•	RTACADSL	AC or AC/rectifier power fail ADSL equipment
•	RTACCRIT	AC or AC/rectifier power fail DCL equipment critical site
•	RTACPWR	AC or AC/rectifier power fail DCL equipment
•	RTACPWRENG	Commercial AC fail, site equipped with standby engine
•	RTBAYPWR	AC power loss distributed power RT bay
•	RTRVENG	Retrieve standby engine, commercial AC restored
•	SMOKE	Smoke
•	TEMP	High-low temperature
•	TOXICGAS	Toxic gas
•	TREPEATER	T-repeater shelf
•	VENTN	Ventilation system failure
<CONDEFF>		The effect of the event on the condition of the NE. The parameter type is COND_EFF, which is the state of the condition upon the affected unit.
•	CL	Standing condition cleared
•	SC	Standing condition raised
•	TC	Transient condition

<LOCN>	Location associated with a particular command. Identifies the location from which the PM mode is to be retrieved. 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>	The PM count retrieval direction. The parameter type is DIRECTION, which is the transmit and receive directions.
• BTH	Both transmit and receive directions
• RCV	Receive direction only
<DESC>	(Optional) Condition description.

19.14 REPT EVT EQPT

(Cisco ONS 15454, ONS 15454 M2, and ONS 15454 M6) The Report Event Equipment (REPT EVT EQPT) message reports the occurrence of a nonalarmed event against an equipment unit or slot.

Usage Guidelines   None

Category   Equipment

Security   Retrieve

Output Format
```
   SID DATE TIME
A ATAG REPT EVT EQPT
   "<AID>:<CONDTYPE>,[<CONDEFF>],,,,,,[<LOCN>],[<DIRN>]:[<DESC>],[<AIDDET>]"
;
```

Output Example
```
   TID-000 1998-06-20 14:30:00
A 100.100 REPT EVT EQPT
   "SLOT-7:PLUGIN,TC,,,,,,,:\"EQUIPMENT PLUG-IN\",TCC"
;
```

Output Parameters	**Parameter**	**Description**
	<AID>	Access identifier from the "28.15 EQPT" section on page 28-39. Equipment AID SLOT-{1-17}.
	<CONDTYPE>	Condition type for an alarm or a reported event. The parameter type is CONDITION, which is any problem detected on an ONS 15454 shelf, whether or not the problem is reported (that is, whether or not it generates a trouble notification). Reported conditions include alarms, Not Alarmed (NA) conditions, and Not Reported (NR) conditions. See the Chapter 29, "Conditions" for a list of conditions.
	<CONDEFF>	(Optional) The effect of the event on the condition of the NE. The parameter type is COND_EFF, which is the state of the condition upon the affected unit.
	• CL	Standing condition cleared
	• SC	Standing condition raised
	• TC	Transient condition
	<DESC>	(Optional) Condition description.
	<AIDDET>	(Optional) AIDDET uses the same addressing rules as the AID, but specifies AID type and additional details about the entity being managed. The parameter type is EQPT_TYPE, which is the type of equipment being provisioned into a slot.
	• 100G-LC-C	100G-LC-C card
	• 100G-CK-C	100G-CK-C card
	• 10X10G-LC	10X10G-LC card
	• CFP-LC	CFP-LC card
	• AR-MXP	Any rate muxponder
	• AR-XP	Any rate xponder
	• AR-XPE	Any rate enhanced xponder.
	• 16-WXC-FS	16-WXC-FS card.
	• 15216-MD-40-EVEN	Thermal Multiplex/Demultiplex Passive Unit, spaced at 50 GHz on even grid
	• 15216-MD-40-ODD	Thermal Multiplex/Demultiplex Passive Unit, spaced at 50 GHz on odd grid
	• 15216-MD-ID-50	Thermal Interleaver Passive Unit, spaced at 50 GHz grid
	• 15216-FLD4-30-3	Edge 4-Ch Bi-Directional OADM Module 1530.33 to 1532.68.
	• 15216-FLD4-33-4	Edge 4-Ch Bi-Directional OADM Module 1533.47 to 1535.82.
	• 15216-FLD4-36-6	Edge 4-Ch Bi-Directional OADM Module 1536.61 to 1538.98.
	• 15216-FLD4-39-7	Edge 4-Ch Bi-Directional OADM Module 1539.77 to 1542.14.
	• 15216-FLD4-42-9	Edge 4-Ch Bi-Directional OADM Module 1542.94 to 1545.32.

Parameter	Description
• 15216-FLD4-46-1	Edge 4-Ch Bi-Directional OADM Module 1546.12 to 1548.51.
• 15216-FLD4-49-3	Edge 4-Ch Bi-Directional OADM Module 1549.32 to 1551.72.
• 15216-FLD4-52-5	Edge 4-Ch Bi-Directional OADM Module 1552.52 to 1554.94.
• 15216-FLD4-55-7	Edge 4-Ch Bi-Directional OADM Module 1555.75 to 1558.17.
• 15216-FLD4-58-9	Edge 4-Ch Bi-Directional OADM Module 1558.98 to 1561.42.
• 32DMX-L	3- channel demultiplexer for L-band
• 32WSS-L	32-channel wavelength switch selector for L-band
• 40-MXP-C	40 Gbit/Sec Multirate Muxponder
• 40-SMR1-C	The single module 40-channel ROADM on C-band
• 40-SMR2-C	The single module 40-channel ROADM with EDFA on C-band
• 40-TXP-C	40 Gigabits per second Multirate Transponder
• 80-WXC-C	80-channel wavelength cross-connect spaced at 100 GHz grid
• AD-1B	OADM 1-Band Filter
• AD-1C	OADM 1-Channel Filter
• AD-2C	OADM 2-Channel Filter
• AD-4B	OADM 4-Band Filter
• AD-4C	OADM 4-Channel Filter
• AICI	AIC-I card
• AIP	Alarm Indication Panel
• ALM-PWR	Alarm Power
• ASAP-4	ASAP carrier card with four PIM slots
• BP	The backplane of the NE
• CE-100T-8	8-port 100T card
• CE-1000-4	4-port GIGE mapper card
• CRFT-TMG	Craft Timing
• DCC	Data Communications Channel
• DCU	Dispersion Compensation Unit
• DMX-32	Optical DMX 32 Channels
• DS3i-N-12	DS3i-N-12 card
• E1	E1 card
• E1-42	42-port E1 card
• E1000T-2	2-port interface card supporting 1000BaseT Ethernet facilities
• E100T-12	12-port interface card supporting 100BaseT Ethernet facilities

Parameter	Description
• E100T-4	Four-port interface card supporting 100BaseT Ethernet facilities
• E1N	E1N card
• E3	E3 card
• EDRA-1-26	EDRA-1-26 amplifier
• EDRA-1-35	EDRA-1-35 amplifier
• EDRA-2-26	EDRA-2-26 amplifier
• EDRA-2-35	EDRA-2-35 amplifier
• FBGDCU-1157	
• FBGDCU-1322	
• FBGDCU-165	
• FBGDCU-1653	
• FBGDCU-1983	
• FBGDCU-331	
• FBGDCU-496	
• FBGDCU-661	
• FBGDCU-826	
• FBGDCU-992	
• FILLER_CARD	Filler card
• FMEC-155E-1TO1	The equipment type for FMEC STM1E12 card
• FMEC-155E-1TO3	The equipment type for FMEC STM1E12 card with 1:3 protection
• FMEC-155E-UNPROT	The equipment type for FMEC STM1E12 card without protection
• FMEC-SMZ-E1	FMEC card corresponding to E1 card
• FMEC-SMZ-E3	FMEC card corresponding to E3 card
• FTA	Fan Tray of the NE
• FTA1	Fan Tray 1 of the NE
• FTA2	Fan Tray 2 of the NE
• G1K-4	G1K-4 card
• MD-4	Optical Multiplexer/Demultiplexer with 4 Channels
• MD-48-CM	
• MD-48-EVEN	
• MD-48-ODD	
• MESH-PP-SMR	The passive unit Patch Panel device used to connect upto four 40-SMR2-C cards
• MF-16AD-CFS	16-channels - 1 direction, colorless, omnidirectional add/drop unit.
• MF-4x4-COFS	4-channels, 4-directions, colorless, omnidirectional add/drop unit.
• MF-AST-EDFA	MF-AST-EDFA unit
• MF-DEG-5	5-degrees mesh patch panel

Parameter	Description
• MF-MPO-8LC	MPO to 8-LC adapter
• MF-UPG-4	4-degrees upgrade module
• ML100X-8	8-port 100X card with optical interface
• ML-100T-8	8-port 100T card with optical interface
• MMU	Multiring mesh upgrade unit
• MS-ISC-100T	Fast Ethernet switch card used for internal shelf connection
• MUX-32	Optical MUX 32 Channels
• MXP-2.5G-10G	10G (4 * 2.5G) Muxponder card
• MXP-MR-10DME	10 Gbps datamux with enhanced FEC
• OPT-AMP-L	Optical preamplifier for L-band
• OPT-BST	Optical booster amplifier
• OPT-BST-L	Optical booster for L-band
• OPT-EDFA-17	MAL-less EDFA Optical Amplifier - C-band - 17dB Gain
• OPT-EDFA-24	MAL-less EDFA Optical Amplifier - C-band - 24dB Gain
• OPT-PRE	Optical Preamplifier
• OPT-RAMP-C	Raman pump amplifier C-band
• OPT-RAMP-CE	An extended version of Raman pump amplifier
• OPT-RAMP-COP	Raman COP card.
• OPT-RAMP-CTP	Raman CTP card.
• OPT-RAMP-E	Raman pump amplifier E-band
• OSC-CSM	Optical Service Channel with Combiner/Separator Module
• OSCM	Optical Service Channel Module
• OTU2-XP	A 4x10G transponder that is capable to operate with multiple bit rates - 10G FC, 10GE, and OC192/STM64
• PIM-4	Pluggable interface module with 4 PPM slots
• PP-4-SMR	Patch-Panel, 4 degrees, for SMR cards
• PP-MESH-4	Patch-Panel, 4 degrees
• PP-MESH-8	Patch-Panel, 8 degrees
• PPM-1	Pluggable port module with 1-port SFP module
• PSM	Protection Service Module card
• PTF-4	Fabric card.
• PTM-4	Line card.
• PTSA	CPT 50 panel.
• PTSYS- Fan-Out-Group	PTSYS Fan-Out-Group.
• SHELF	Shelf entity
• STM4	An interface card that supports one or more STM4 (622 Mbps) optical facilities
• STM4-4	A four port STM4 card
• STM4-IR-1	An interface card that supports one intermediate range STM4 (622 Mbps) optical facilities

Parameter	Description
• STM4-LR-1	An interface card that supports one long range STM4 (622 Mbps) optical facilities
• STM4-SR-1	An interface card that supports one short range STM4 (622 Mbps) optical facilities
• STM64-4	A four port STM64 card
• STM64-LR-1	An interface card that supports one or more STM64 optical facilities
• STM1	An interface card that supports multiple STM1 (155 Mbps) optical facilities
• STM1-IR-4	An interface card that supports four intermediate range STM1 (155 Mbps) optical facilities
• STM1-SR-4	An interface card that supports four short range STM1 (155 Mbps) optical facilities
• STM1ATM-IR-6	An interface card that supports six intermediate range STM1 (155 Mbps) ATM optical fibers
• STM1IR-STM1SH-1310-8	An STM1 card which has 8 ports over the lower speed slot with XC-VXL-10G/XC-VXL-2.5G
• STM1POS-SR-4	An interface card that supports four short range STM1 (155 Mbps) POS optical facilities
• STM16	An interface card that supports one or more STM16 (10 Gbps) optical facilities
• STM16-AS-1	An interface card that supports one short range OC-48 (10 Gbps) optical facilities that can be provisioned in any I/O slot
• STM16-ELR-1	An interface card that supports one short range STM16 (2.5 Gbps) optical facility
• STM16-IR-1	An interface card that supports one intermediate range STM16 (10 Gbps) optical facility
• STM16-LR-1	An interface card that supports one long range STM16 (10 Gbps) optical facility
• STM16-SR-1	An interface card that supports one short range STM16 (10 Gbps) optical facilities
• TCC	Timing, Communications, and Control card
• TDC-CC	Coarse tunable dispersion compensation unit
• TDC-FC	Fine tunable dispersion compensation unit
• TXP-MR-10G	10G Multirate Transponder card
• TXP-MR-2.5G	Multirate 2.5G Unprotected
• TXPP-MR-2.5G	Multirate 2.5G Protected
• UNKNOWN	Unknown equipment type
• UNPROVISIONED	Unprovisioned equipment type
• WSE	Wire Speed Encryption (WSE) card
• XC-VXC-10G	XC-VXC-10G cross-connect card
• XCVXL-10G	XC-VXL-10G cross-connect card
• XCVXL-2.5G	XC-VXL-2.5G cross-connect card

19.15 REPT EVT FXFR

(Cisco ONS 15454, ONS 15454 M2, and ONS 15454 M6) The Report Event Software Download (REPT EVT FXFR) message reports the FTP software download status of the start, completion, and completed percentage.

Usage Guidelines
- The FXFR_RSLT is only sent when the FXFR_STATUS is COMPLD.
- The BYTES_XFRD is only sent when the FXFR_STATUS is IP or COMPLD.

Category　　File Transfer

Security　　Retrieve

Output Format
```
   SID DATE TIME
A ATAG REPT EVT FXFR
   "<FILENAME>,<FXFR_STATUS>,[<FXFR_RSLT>],[<BYTES_XFRD>]"
;
```

Output Example
```
   TID-000 1998-06-20 14:30:00
A 100.100 REPT EVT FXFR
   "NEW.PKG,COMPLD,SUCCESS,21215147"
;
```

Output Parameters

<FILENAME>	When a package is being transferred between the FTP server and the controller cards, the filename field will contain the string ACTIVE. Following this transfer, if there is a second common-control card on the NE, the file will be copied over to the second card during which time REPT EVT FXFR messages will be generated with a filename of STANDBY. FILENAME is a string.
<FXFR_STATUS>	The status of the file transfer. The parameter type is TX_STATUS, which is the status of the file transfer.
• COMPLD	The file transmission is completed.
• IP	The file transmission is in progress.
• START	The file transmission is started.
<FXFR_RSLT>	(Optional) The result of the file transfer. The parameter type is TX_RSLT, which is the result of the file transfer.
• FAILURE	A failed result
• SUCCESS	A successful result
<BYTES_XFRD>	(Optional) The percentage of bytes transferred. BYTES_XFRED is a string.

19.16 REPT EVT IOSCFG

(Cisco ONS 15454, ONS 15454 M2, and ONS 15454 M6) The Report Event Internet Operating System Configuration File (REPT EVT IPSCFG) message reports the status of copying the Cisco IOS configuration file when the COPY-IOSCFG command is issued.

Usage Guidelines

- You can identify if this message is caused by a Cisco IOS configuration file downloading, uploading, or merging by looking at the SRC and DEST fields in the message. See the "10.1 COPY-IOSCFG" section on page 10-1 for more details.

- There is no success/failure in the message to indicate the success or failure of the merge process when merging the startup Cisco IOS config file to the running config file.

Category

File Transfer

Security

Retrieve

Output Format

```
   SID DATE TIME
A  ATAG REPT EVT IOSCFG
   "<AID>:<SRC>,<DEST>,<STATUS>,[<RESULT>]"
;
```

Output Example

```
   TID-000 1998-06-20 14:30:00
A 100.100 REPT EVT IOSCFG
   "SLOT-1:STARTUP,IOS-CONFIG-FILE-IN-NETWORK,COMPLD,SUCCESS"
;
```

Output Parameters

<AID>	Access identifier from the "28.15 EQPT" section on page 28-39. Slot AID for the equipment.
<SRC>	Source access identifier. Specifies where the Cisco IOS configuration file is copied from. SRC is a string.
<DEST>	Destination. Specifies where the Cisco IOS configuration file is copied to. DEST is a string.
<STATUS>	The status of COPY-IOSCFG. The parameter type is TX_STATUS, which is the status of the file transfer.
• COMPLD	The file transmission is completed.
• IP	The file transmission is in progress.
• START	The file transmission is started.
<RESULT>	(Optional) The result of the file transfer. The parameter type is TX_RSLT, which is the result of the file transfer.

• FAILURE	A failed result	
• SUCCESS	A successful result	

19.17 REPT EVT SECU

(Cisco ONS 15454, ONS 15454 M2, and ONS 15454 M6) The Report Event Security
(REPT EVT SECU) message reports the occurrence of a nonalarmed security event against the NE.

Usage Guidelines
- Based on TR-NWT-000835 in TR-NWT-000835 and the AID of the security alarm should be the CID, which is not supported in this release. The COM or UID is an acceptable substitute for the AID here. CIDs will be supported in a future release.
- For the rule of single failure, single message/alarm, the security alarm will not be reported as REPT ALM COM, because it is reported as REPT ALM SECU.
- Because the NE sends this security message as a transient message, to make all TL1 autonomous messages consistent, the TL1 agent reports the security message into REPT EVT SECU.
- This message is inhibited by default. A Superuser will have to issue the ALW-MSG-SECU to see this message.

Category   Security

Security   Superuser

Output Format
```
   SID DATE TIME
A  ATAG REPT EVT SECU
   "<AID>:<DNFIELD>,[<CONDEFF>],,,[<LOCN>],[<DIRN>],,,:<SECURITY>:<DNFIELD1>"
;
```

Output Example
```
   TID-000 1998-06-20 14:30:00
A  100.100 REPT EVT SECU
   "COM:LOGIN-FAILURE-PSWD,TC,,,,,,,:\"SECURITY:
   INVALID LOGIN - PASSWORD - SEE AUDIT LOG\""
;
```

Output Parameters

<AID>	Access identifier. Identifies an entity with the condition. Defaults to COM. AID is a string.
<DNFIELD>	String
<CONDEFF>	The effect of the event on the condition of the NE. The parameter type is COND_EFF, which is the state of the condition upon the affected unit.

• CL	Standing condition cleared
• SC	Standing condition raised
• TC	Transient condition
<LOCN>	Location associated with a particular command. Identifies the location from which the PM mode is to be retrieved. 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>	The PM count retrieval direction. The parameter type is DIRECTION, which is the transmit and receive directions.
• BTH	Both transmit and receive directions
• RCV	Receive direction only
<SECURITY>	SECURITY is a string.
<DNFIELD1>	DNFIELD1 is a string.

19.18 REPT EVT SESSION

(Cisco ONS 15454, ONS 15454 M2, and ONS 15454 M6) The Report Event Session (REPT EVT SESSION) message reports a nonalarmed event related to establishing a session with the NE.

Usage Guidelines   The WARN field might contain different information depending on the type of session-related event.

- If the password aging feature has not been enabled (or the feature is enabled but the password is not close to expiring):

    /*USER <UID> LOGGED IN <IP/SERIAL PORT*/

- If the forced password feature is enforced and the user is logging in for the first time (or the password has expired):

    /*PLEASE CHANGE PASSWORD BEFORE CONTINUING*/

- If a session is terminated for any reason (except a user timeout), the reason for the session termination is indicated in the WARN field.

Category   Security

Security   Retrieve

Output Format

```
SID DATE TIME
A  ATAG REPT EVT SESSION
   "<AID>:<EXP>,<PCN>"
   "<WARN>"
;
```

Output Example

```
TID-000 1998-06-20 14:30:00
A  100.100 REPT EVT SESSION
   "TCCP:YES,5-DAY"
   "/* USER TERRI LOGGED IN TO TCCP */"
;
```

Output Parameters

<AID>	Access identifier. Identifies the NE with which a session is established. AID is a string.
<EXP>	Indicates whether the password is alive (for example, no password updating is required at the moment), expired, or is about to expire. The parameter type is YES_NO, which indicates whether the user's password is about to expire, the user is logged into the NE, or the user is locked out of the NE.
• NO	No
• YES	Yes
<PCN>	The number of days still remaining before the existing password expires. PCN appears only if EXP=YES and one of the following conditions has been met: • The warning period has not been exhausted. • The user is a new user establishing a session for the first time and the forced password change policy has been activated. PCN is a string.
<WARN>	Free format text containing additional information about the security event. WARN is a string.

19.19 REPT EVT SYNCN

(Cisco ONS 15454, ONS 15454 M2, and ONS 15454 M6) The Report Event Synchronization (REPT EVT SYNCN) message reports the occurrence of a nonalarmed event against a synchronization entity.

Usage Guidelines

None

Category

Synchronization

Security

Retrieve

Output Format

SID DATE TIME
A ATAG REPT EVT SYNCN
   "<AID>:<CONDTYPE>,[<CONDEFF>],,,,,,[<LOCN>],[<DIRN>]:[<DESC>],[<AIDDET>]"
;

Output Example

TID-000 1998-06-20 14:30:00
A 100.100 REPT EVT SYNCN
   "SYNC-NE:SWTOINT,SC,,,,,,,:\"SWITCH TO INTERNAL CLOCK\",TCC"
;

Output Parameters

Parameter	Description
<AID>	Access identifier from the "28.31 SYNC_REF" section on page 28-60.
<CONDTYPE>	Condition type for an alarm or a reported event. The parameter type is CONDITION, which is any problem detected on an ONS 15454 shelf, whether or not the problem is reported (that is, whether or not it generates a trouble notification). Reported conditions include alarms, Not Alarmed (NA) conditions, and Not Reported (NR) conditions. See the Chapter 29, "Conditions" for a list of conditions.
<CONDEFF>	(Optional) The effect of the event on the condition of the NE. The parameter type is COND_EFF, which is the state of the condition upon the affected unit.
• CL	Standing condition cleared
• SC	Standing condition raised
• TC	Transient condition
<DESC>	(Optional) Condition description.
<AIDDET>	(Optional) AIDDET uses the same addressing rules as the AID, but specifies AID type and additional details about the entity being managed. The parameter type is EQPT_TYPE, which is the type of equipment being provisioned into a slot.
• 100G-LC-C	100G-LC-C card
• 100G-CK-C	100G-CK-C card
• 10X10G-LC	10X10G-LC card
• CFP-LC	CFP-LC card
• AR-MXP	Any rate muxponder
• AR-XP	Any rate xponder
• AR-XPE	Any rate enhanced xponder.
• 16-WXC-FS	16-WXC-FS card.
• 15216-MD-40-EVEN	Thermal Multiplex/Demultiplex Passive Unit, spaced at 50 GHz on even grid
• 15216-MD-40-ODD	Thermal Multiplex/Demultiplex Passive Unit, spaced at 50 GHz on odd grid

Parameter	Description
• 15216-MD-ID-50	Thermal Interleaver Passive Unit, spaced at 50 GHz grid
• 15216-FLD4-30-3	Edge 4-Ch Bi-Directional OADM Module 1530.33 to 1532.68.
• 15216-FLD4-33-4	Edge 4-Ch Bi-Directional OADM Module 1533.47 to 1535.82.
• 15216-FLD4-36-6	Edge 4-Ch Bi-Directional OADM Module 1536.61 to 1538.98.
• 15216-FLD4-39-7	Edge 4-Ch Bi-Directional OADM Module 1539.77 to 1542.14.
• 15216-FLD4-42-9	Edge 4-Ch Bi-Directional OADM Module 1542.94 to 1545.32.
• 15216-FLD4-46-1	Edge 4-Ch Bi-Directional OADM Module 1546.12 to 1548.51.
• 15216-FLD4-49-3	Edge 4-Ch Bi-Directional OADM Module 1549.32 to 1551.72.
• 15216-FLD4-52-5	Edge 4-Ch Bi-Directional OADM Module 1552.52 to 1554.94.
• 15216-FLD4-55-7	Edge 4-Ch Bi-Directional OADM Module 1555.75 to 1558.17.
• 15216-FLD4-58-9	Edge 4-Ch Bi-Directional OADM Module 1558.98 to 1561.42.
• 32DMX-L	3- channel demultiplexer for L-band
• 32WSS-L	32-channel wavelength switch selector for L-band
• 40-MXP-C	40 Gbit/Sec Multirate Muxponder
• 40-SMR1-C	The single module 40-channel ROADM on C-band
• 40-SMR2-C	The single module 40-channel ROADM with EDFA on C-band
• 40-TXP-C	40 Gigabits per second Multirate Transponder
• 80-WXC-C	80-channel wavelength cross-connect spaced at 100 GHz grid
• AD-1B	OADM 1-Band Filter
• AD-1C	OADM 1-Channel Filter
• AD-2C	OADM 2-Channel Filter
• AD-4B	OADM 4-Band Filter
• AD-4C	OADM 4-Channel Filter
• AICI	AIC-I card
• AIP	Alarm Indication Panel
• ALM-PWR	Alarm Power
• ASAP-4	ASAP carrier card with four PIM slots
• BP	The backplane of the NE
• CE-100T-8	8-port 100T card
• CE-1000-4	4-port GIGE mapper card
• CRFT-TMG	Craft Timing

Parameter	Description
• DCC	Data Communications Channel
• DCU	Dispersion Compensation Unit
• DMX-32	Optical DMX 32 Channels
• DS3i-N-12	DS3i-N-12 card
• E1	E1 card
• E1-42	42-port E1 card
• E1000T-2	2-port interface card supporting 1000BaseT Ethernet facilities
• E100T-12	12-port interface card supporting 100BaseT Ethernet facilities
• E100T-4	Four-port interface card supporting 100BaseT Ethernet facilities
• E1N	E1N card
• E3	E3 card
• EDRA-1-26	EDRA-1-26 amplifier
• EDRA-1-35	EDRA-1-35 amplifier
• EDRA-2-26	EDRA-2-26 amplifier
• EDRA-2-35	EDRA-2-35 amplifier
• FBGDCU-1157	
• FBGDCU-1322	
• FBGDCU-165	
• FBGDCU-1653	
• FBGDCU-1983	
• FBGDCU-331	
• FBGDCU-496	
• FBGDCU-661	
• FBGDCU-826	
• FBGDCU-992	
• FILLER_CARD	Filler card
• FMEC-155E-1TO1	The equipment type for FMEC STM1E12 card
• FMEC-155E-1TO3	The equipment type for FMEC STM1E12 card with 1:3 protection
• FMEC-155E-UNPROT	The equipment type for FMEC STM1E12 card without protection
• FMEC-SMZ-E1	FMEC card corresponding to E1 card
• FMEC-SMZ-E3	FMEC card corresponding to E3 card
• FTA	Fan Tray of the NE
• FTA1	Fan Tray 1 of the NE
• FTA2	Fan Tray 2 of the NE
• G1K-4	G1K-4 card
• MD-4	Optical Multiplexer/Demultiplexer with 4 Channels

Parameter	Description
• MD-48-CM	
• MD-48-EVEN	
• MD-48-ODD	
• MESH-PP-SMR	The passive unit Patch Panel device used to connect upto four 40-SMR2-C cards
• MF-16AD-CFS	16-channels - 1 direction, colorless, omnidirectional add/drop unit.
• MF-4x4-COFS	4-channels, 4-directions, colorless, omnidirectional add/drop unit.
• MF-AST-EDFA	MF-AST-EDFA unit
• MF-DEG-5	5-degrees mesh patch panel
• MF-MPO-8LC	MPO to 8-LC adapter
• MF-UPG-4	4-degrees upgrade module
• ML100X-8	8-port 100X card with optical interface
• ML-100T-8	8-port 100T card with optical interface
• MMU	Multiring mesh upgrade unit
• MS-ISC-100T	Fast Ethernet switch card used for internal shelf connection
• MUX-32	Optical MUX 32 Channels
• MXP-2.5G-10G	10G (4 * 2.5G) Muxponder card
• MXP-MR-10DME	10 Gbps datamux with enhanced FEC
• OPT-AMP-L	Optical preamplifier for L-band
• OPT-BST	Optical booster amplifier
• OPT-BST-L	Optical booster for L-band
• OPT-EDFA-17	MAL-less EDFA Optical Amplifier - C-band - 17dB Gain
• OPT-EDFA-24	MAL-less EDFA Optical Amplifier - C-band - 24dB Gain
• OPT-PRE	Optical Preamplifier
• OPT-RAMP-C	Raman pump amplifier C-band
• OPT-RAMP-CE	An extended version of Raman pump amplifier
• OPT-RAMP-COP	Raman COP card.
• OPT-RAMP-CTP	Raman CTP card.
• OPT-RAMP-E	Raman pump amplifier E-band
• OSC-CSM	Optical Service Channel with Combiner/Separator Module
• OSCM	Optical Service Channel Module
• OTU2-XP	A 4x10G transponder that is capable to operate with multiple bit rates - 10G FC, 10GE, and OC192/STM64
• PIM-4	Pluggable interface module with 4 PPM slots
• PP-4-SMR	Patch-Panel, 4 degrees, for SMR cards
• PP-MESH-4	Patch-Panel, 4 degrees
• PP-MESH-8	Patch-Panel, 8 degrees
• PPM-1	Pluggable port module with 1-port SFP module
• PSM	Protection Service Module card

Parameter	Description
• PTF-4	Fabric card.
• PTM-4	Line card.
• PTSA	CPT 50 panel.
• PTSYS- Fan-Out-Group	PTSYS Fan-Out-Group.
• SHELF	Shelf entity
• STM4	An interface card that supports one or more STM4 (622 Mbps) optical facilities
• STM4-4	A four port STM4 card
• STM4-IR-1	An interface card that supports one intermediate range STM4 (622 Mbps) optical facilities
• STM4-LR-1	An interface card that supports one long range STM4 (622 Mbps) optical facilities
• STM4-SR-1	An interface card that supports one short range STM4 (622 Mbps) optical facilities
• STM64-4	A four port STM64 card
• STM64-LR-1	An interface card that supports one or more STM64 optical facilities
• STM1	An interface card that supports multiple STM1 (155 Mbps) optical facilities
• STM1-IR-4	An interface card that supports four intermediate range STM1 (155 Mbps) optical facilities
• STM1-SR-4	An interface card that supports four short range STM1 (155 Mbps) optical facilities
• STM1ATM-IR-6	An interface card that supports six intermediate range STM1 (155 Mbps) ATM optical fibers
• STM1IR-STM1SH-1310-8	An STM1 card which has 8 ports over the lower speed slot with XC-VXL-10G/XC-VXL-2.5G
• STM1POS-SR-4	An interface card that supports four short range STM1 (155 Mbps) POS optical facilities
• STM16	An interface card that supports one or more STM16 (10 Gbps) optical facilities
• STM16-AS-1	An interface card that supports one short range OC-48 (10 Gbps) optical facilities that can be provisioned in any I/O slot
• STM16-ELR-1	An interface card that supports one short range STM16 (2.5 Gbps) optical facility
• STM16-IR-1	An interface card that supports one intermediate range STM16 (10 Gbps) optical facility
• STM16-LR-1	An interface card that supports one long range STM16 (10 Gbps) optical facility
• STM16-SR-1	An interface card that supports one short range STM16 (10 Gbps) optical facilities
• TCC	Timing, Communications, and Control card
• TDC-CC	Coarse tunable dispersion compensation unit

Parameter	Description
• TDC-FC	Fine tunable dispersion compensation unit
• TXP-MR-10G	10G Multirate Transponder card
• TXP-MR-2.5G	Multirate 2.5G Unprotected
• TXPP-MR-2.5G	Multirate 2.5G Protected
• UNKNOWN	Unknown equipment type
• UNPROVISIONED	Unprovisioned equipment type
• WSE	Wire Speed Encryption (WSE) card
• XC-VXC-10G	XC-VXC-10G cross-connect card
• XCVXL-10G	XC-VXL-10G cross-connect card
• XCVXL-2.5G	XC-VXL-2.5G cross-connect card

19.20 REPT PM <MOD2>

(Cisco ONS 15454, ONS 15454 M2, and ONS 15454 M6) The Report Performance Monitoring for 10GFC, 10GIGE, 1GFC, 1GFICON, 2GFC, 2GFICON, CLNT, D1VIDEO, DS1, DV6000, E1, E3, E4, EC1, ESCON, ETRCLO, ETH, FSTE, G1000, GFPOS, GIGE, HDTV, ILK, ISCCOMPAT, ISC3PEER2R, ISC3PEER1G, ISC3PEER2G, OC12, OC192, OC3, OC48, OCH, OMS, OTS, 10GFC, 8GFC,10GIGE,100GIGE,40GIGE,OC192,OTU1,OTU2,OTU3, OTU4, POS, STS1, STS12C, STS18C, STS192C, STS24C, STS36C, STS3C, STS48C, STS6C, STS9C, T1, T3, VC12, VC3, VT1, or VT2 (REPT PM <MOD2>) message reports autonomous monitoring statistics as a result of the schedule created by SCHED-PMREPT.

Usage Guidelines   See Table 30-1 on page 30-1 for supported modifiers by platform.

> **Note**   Autonomous performance monitoring (Auto PM) report will have all PM paths reported without any filtering. If a particular parameter is not applicable to that card or circuit, then the value of MONVAL and VLDTY will be NA.

Category   Performance

Security   Retrieve

Output Format
```
    SID DATE TIME
A  ATAG REPT PM <MOD2>
    "<AID>:<MONTYPE>,<MONVAL>,<VLDTY>,<LOCN>,<DIRN>,<TMPER>,<MONDAT>,
    <MONTM>"
;
```

Output Example TID-000 1998-06-20 14:30:00
A 100 REPT PM 10GFC
  "FAC-3-1:CVL,10,PRTL,NEND,BTH,15-MIN,05-25,14-46"
;

Output Parameters

<AID>	Access identifier from the "28.1 ALL" section on page 28-1.
<MONTYPE>	Monitored type. The parameter type is ALL_MONTYPE, which is the 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
• 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 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, Path Detected
•	HP-NPJC-PGEN	High-Order Path, Negative Pointer Justification Count, Path Generated
•	HP-OI	Outage Intensity
•	HP-PJCDIFF	High-Order Path Pointer Justification Count Difference
•	HP-PJCS-PDET	High-Order Path Pointer Justification Count, Path Detected
•	HP-PJCS-PGEN	High-Order Path Pointer Justification Count Seconds, Path Generated
•	HP-PPJC-PDET	High-Order Path Positive Pointer Justification Count, Path Detected
•	HP-PPJC-PGEN	High-Order Path, Positive Pointer Justification Count, Path Generated
•	HP-SEPI	The number of SEP events in available time
•	HP-SES	High-Order Path Severely Errored Seconds
•	HP-SESR	High-Order Path Severely Errored Second Ratio
•	HP-UAS	High-Order Path Unavailable Seconds
•	ifInBroadcastPkts	Number of broadcast packets received since the last counter reset

•	ifInDiscards	The number of inbound packets
•	ifInErrorBytePktss	Receive Error Byte
•	ifInErrors	The number of inbound packets (or transmission units) that contained errors
•	ifInFramingErrorPkts	Receive Framing Error
•	ifInJunkInterPkts	Receive 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 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	Negative Pointer Justification Count, Path Detected
•	NPJC-PGEN	Negative Pointer Justification Count, Path Generated
•	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 one tenth of a dBm
•	OPWR-MAX	Optical Power—Maximum Interval Value in one tenth of a dBm
•	OPWR-MIN	Optical Power—Minimum Interval Value in one tenth of a dBm
•	PPJC-PDET	Positive Pointer Justification Count, Path Detected
•	PPJC-PGEN	Positive Pointer Justification Count, Path Generated
•	PRE-FECBER	Enum to hold PRE-FECBER value
•	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 (SEF/AIS) Second—CP-Bit Path
•	SASP	Severely Errored Framing/AIS Seconds Path
•	SEFS	Severely Errored Framing Seconds
•	SEFSP	Severely Errored Framing Seconds—Path (DS3XM-12 DS1 PM count)
•	SESCPP	Severely Errored Second—CP-Bit Path
•	SESL	Severely Errored Second—Line
•	SESNPFE	Severely Errored Second—Network Path (DS3XM-12 DS1 PM count)
•	SESP	Severely Errored Second—Path
•	SES-PM	OTN—Severely Errored Second—Path

• SESR-PM	OTN—Severely Errored Second Ratio—Path Monitor Point expressed as 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	Forward Error Correction (FEC)—Uncorrectable Words
• VPC	Valid Packet Count
<MONVAL>	The value to which the register identified by MONTYPE is to be initialized to or the measured value of a monitored parameter. The value is in the form of numeric counts or rates. MONVAL is a string.
<VLDTY>	Indicates whether the information for the specified time period was accumulated over the entire time period or a portion of that time period. Validity indicator for the reported PM data. The parameter type is VALIDITY, which is the response validity.
• COMPL	Complete response
• PRTL	Partial response
<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. Direction of PM relative to the entity identified by the AID. The parameter type is DIRECTION, which is the 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. 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.
\<MONDAT\>	The beginning date of the PM or storage register period specified in TMPER. The format is MM-DD. MONDAT is a string.
\<MONTM\>	The beginning time of day of the PM or storage register period specified in TMPER. The format is HH-MM. MONTM is a string.

19.21 REPT SW

(Cisco ONS 15454, ONS 15454 M2, and ONS 15454 M6) The Report Switch (REPT SW) message reports the autonomous switching of a unit in a duplex equipment pair to the standby state and its mate unit to the active state. An automatic report for the occurrence or clearance of an alarm or event that triggers the switch might be associated with the message.

Usage Guidelines   None

Category   Protection

Security   Retrieve

Output Format
```
   SID DATE TIME
A  ATAG REPT SW
   "<ACTID>,<STDBYID>"
;
```

Output Example
```
   TID-000 1998-06-20 14:30:00
A  100.100 REPT SW
   "SLOT-8,SLOT-10"
;
```

| **Output Parameters** | <ACTID> | Identifies the equipment unit from the "28.15 EQPT" section on page 28-39 that was placed in the active state. Parameter grouping cannot be used with this parameter. |
| | <STDBYID> | Identifies the equipment unit from the "28.15 EQPT" section on page 28-39 that was placed in the standby state. Parameter grouping cannot be used with this parameter. |