



Cisco ONS SONET TL1 Command Quick Reference Guide, Release 5.0

Cisco ONS 15454, 15327, 15310-CL, 15600



Note

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

This guide lists TL1 commands and autonomous messages by category. It includes basic descriptions and input and output formats supported by Cisco ONS 15454, 15327, 15310-CL, and 15600, Release 5.0. Refer to the *Cisco ONS SONET TL1 Command Guide, Release 5.0* for a complete description of TL1 commands.



TL1 commands conform to the following syntax:

a:b:c:d:e: ...z;

where:

“a” is the Command Code

“b” is the Target Identifier (TID)

“c” is the Access Identifier (AID) or the User Identifier (UID)

“d” is the Correlation Tag (CTAG)

“e: ...z;” are other positions required for various commands

The TID, AID, and CTAG route and control the TL1 command.

Other parameters provide additional information required to complete the action requested by the command.

1 BLSR

Table 1 BLSR

DLT-<MOD_RING>[:<TID>]:<AID>:<CTAG>[::];

Deletes the BLSR of the NE.

ED-<MOD_RING>[:<TID>]:<AID>:<CTAG>:::[RINGID=<RINGID>],[NODEID=<NODEID>],[RVRTV=<RVRTV>],[RVTM=<RVTM>],[SRVRTV=<SRVRTV>],[SRVTM=<SRVTM>][:];

Edits the BLSR attributes.

ENT-<MOD_RING>[:<TID>]:<AID>:<CTAG>:::[RINGID=<RINGID>],[NODEID=<NODEID>],[MODE=<MODE>],[RVRTV=<RVRTV>],[RVTM=<RVTM>],[SRVRTV=<SRVRTV>],[SRVTM=<SRVTM>],[EASTWORK=<EASTWORK>],[WESTWORK=<WESTWORK>],[EASTPROT=<EASTPROT>],[WESTPROT=<WESTPROT>];

Creates either a two-fiber or four-fiber BLSR (4-fiber BLSR supported on 15454 only).

EX-SW-<OCN_BLSR>[:<TID>]:<AID>:<CTAG>::,[<SWITCHTYPE>],[<DIRECTION>];

Exercises the algorithm for switching from a working facility to a protection facility without actually performing a switch.

Table 1 *BLSR (continued)*

RTRV-**<MOD_RING>**:**<TID>**:**<AID>**:**<CTAG>**[**<::>**];

Retrieves the BLSR information of the Network Element (NE).

Output format:

SID DATE TIME
M CTAG COMPLD
“**<AID>**::**[RINGID=<RINGID>,][NODEID=<NODEID>,][MODE=<MODE>,]**
[RVRTV=<RVRTV>,][RVTM=<RVTM>,][SRVRTV=<SRVRTV>,][SRVTM=<SRVTM>,]
[EASTWORK=<EASTWORK>,][WESTWORK=<WESTWORK>,][EASTPROT=<EASTPROT>,]
[WESTPROT=<WESTPROT>]”
;

RTRV-TRC-**<OCN_BLSR>**:**<TID>**:**<AID>**:**<CTAG>**;

Retrieves the valid J1 expected trace string, received trace string, trace mode, C2 byte and STS bandwidth of the OCN port if the port has a BLSR.

Output format:

SID DATE TIME
M CTAG COMPLD
“**<AID>**::**[LEVEL=<LEVEL>,][EXPTRC=<EXPTRC>,][INCTRC=<INCTRC>,]**
[TRCMODE=<TRCMODE>,][C2=<C2>]”
;

2 Bridge and Roll



Note Cisco ONS 15600 only.

Table 2 *Bridge and Roll*

ENT-ROLL-**<MOD_PATH>**:**<TID>**:**<SRC>**,**<DST>**:**<CTAG>**[**<::>**]**RFROM=<RFROM>**,
RTO=<RTO>,**RMODE=<RMODE>**,**[FORCE=<FORCE>]**;

Creates information for the rolling of single paths (STS or VT) of traffic from one end-point to another without interrupting service.

Table 2 *Bridge and Roll (continued)*

DLT-ROLL-<MOD_PATH>:[<TID>]:<SRC>,<DST>:<CTAG>:::WHY=<WHY>;
Deletes an attempted rolling operation of a facility, or completes an attempted rolling operation.
RTRV-ROLL-<MOD_PATH>:[<TID>]:<SRC>:<CTAG>;
Retrieves roll data parameters.
Output format:
SID DATE TIME
M CTAG COMPLD
"<FROM>,<TO>:RFROM=<RFROM>,RTO=<RTO>,RMODE=<RMODE>"
;

3 Cross Connections

Table 3 *Cross Connections*

DLT-CRS-<PATH>:[<TID>]:<SRC>,<DST>:<CTAG>:::[CKTID=<CKTID>, [CMDMDE=<CMDMDE>];
Deletes a cross-connection between STS or VT paths.
ED-CRS-<PATH>:[<TID>]:<SRC>,<DST>: <CTAG>:::[ADD=<ADD>],[REMOVE=<REMOVE>],[CKTID=<CKTID>, [CMDMDE=<CMDMDE>]:<PST>,[<SST>];[REMOVE=<REMOVE>]:[<PST>],[<SST>];
Edits the state of an STS or VT cross-connection.
ENT-CRS-<PATH>:[<TID>]:<SRC>,<DST>:<CTAG>::<CCT>:[DRITYPE=<DRITYPE>, [DRINODE=<DRINODE>],[CKTID=<CKTID>],[CMDMDE=<CMDMDE>]:<PST>,[<SST>];
Creates an STS or VT cross-connection with cross-connection types (CCT).

Table 3 **Cross Connections (continued)**

RTRV-CRS:[<TID>]:<AID>:<CTAG>:::[CRSTYPE=<CRSTYPE>][:];

Retrieves all the cross-connections based on the required cross-connection type for all STS or VT connections.

Output format:

 SID DATE TIME
M CTAG COMPLD
 "<SRC>,<DST>:<CCT>,<CRSTYPE>:[DRITYPE=<DRITYPE>],[DRINODE=<DRINODE>],[
 [CKTID=<CKTID>]:<PST_PSTQ>,<SSTQ>]"
;

RTRV-CRS-<PATH>:[<TID>]:<SRC>:<CTAG>[:::];

Retrieves all connections that are associated with the entered AID(s) or AID range.

Output format:

 SID DATE TIME
M CTAG COMPLD
 "<SRC>,<DST>:<CCT>,<MOD>:[DRITYPE=<DRITYPE>],[DRINODE=<DRINODE>],[
 [CKTID=<CKTID>]:<PST_PSTQ>,<SSTQ>]"
;

4 DWDM



Note Cisco ONS 15454 only.

Table 4 DWDM

DLT-FFP-<MOD2DWDMPAYLOAD>:[<TID>]:<SRC>,<DST>:<CTAG>[::];
Deletes Y cable protection on client facilities.
DLT-LNK-<MOD2O>:[<TID>]:<FROM>,<TO>:<CTAG>;
Deletes an optical link between two optical connection points.
DLT-OSC:[<TID>]:<AID>:<CTAG>;
Deletes the optical service channel (OSC) group of the NE.
DLT-WLEN:[<TID>]:<AID>:<CTAG>[:::CMDMDE=<CMDMDE>];
Deletes the provisioned wavelength (WLEN).
ED-<MOD2DWDMPAYLOAD>:[<TID>]:<AID>:<CTAG>[:::[NAME=<NAME>],[CMDMDE=<CMDMDE>]:<PST>,<SST>];
Edits the operating parameters for an DWDM client facility.
ED-APC:[<TID>]::<CTAG>[::APCENABLE=<APCENABLE>];
Modifies the amplification power control (APC) application attributes.
ED-FFP-<MOD2DWDMPAYLOAD>:[<TID>]:<AID>:<CTAG>[:::[PROTID=<PROTID>],[RVRTV=<RVRTV>],[RVTM=<RVTM>],[PSDIRN=<PSDIRN>]][:];
Edits a Y cable protection group on client facilities.
ED-FFP-OCH::[<TID>]:<AID>:<CTAG>[:::[PROTID=<PROTID>],[RVRTV=<RVRTV>],[RVTM=<RVTM>],[PSDIRN=<PSDIRN>]][:];
Edits the provisioning for the default protection group on the DWDM port of a TXP_MR_2.5G or TXPP_MR_2.5G card.
ED-LNK-<MOD2O>:[<TID>]:<FROM>,<TO>:<CTAG>[:::[CMDMDE=<CMDMDE>]:<PST>,<SST>];
Edits an optical link.

Table 4 DWDM (continued)

ED-OCH:[<TID>]:<AID>:<CTAG>:::[RDIRN=<RDIRN>],[EXPWLEN=<EXPWLEN>],[VOAATTN=<VOAATTN>],[VOAPWR=<VOAPWR>],[CALOPWR=<CALOPWR>],[CHPOWER=<CHPOWER>],[NAME=<PORTNAME>],[SFBER=<SFBER>],[SDBER=<SDBER>],[COMM=<COMM>],[GCCRATE=<GCCRATE>],[OSDBER=<OSDBER>],[DWRAP=<DWRAP>],[FEC=<FEC>],[PAYLOADMAP=<PAYLOADMAP>],[MACADDR=<MACADDR>],[SYNCSMSG=<SYNCSMSG>],[SENDDUS=<SENDDUS>],[SOAK=<SOAK>],[OSPF=<OSPF>],[CMDMDE=<CMDMDE>]:<PST>,[<SST>];

Edits the attributes (service parameters) and state of an optical channel (OCH) facility.

ED-OMS:[<TID>]:<AID>:<CTAG>:::[RDIRN=<RDIRN>],[EXPBAND=<EXPBAND>],[VOAATTN=<VOAATTN>],[VOAPWR=<VOAPWR>],[CALOPWR=<CALOPWR>],[CHPOWER=<CHPOWER>],[NAME=<NAME>],[CMDMDE=<CMDMDE>]:<PST>,[<SST>];

Edits the attributes (service parameters) and state of an optical multiplex section (OMS) facility.

ED-OSC:[<TID>]:<AID>:<CTAG>:::[RINGID=<RINGID>],[NODEID=<NODEID>];

Edits the OSC group attributes.

ED-OTS:[<TID>]:<AID>:<CTAG>:::[RDIRN=<RDIRN>],[VOAATTN=<VOAATTN>],[VOAPWR=<VOAPWR>],[CALOPWR=<CALOPWR>],[CALTILT=<CALTILT>],[OSRI=<OSRI>],[ALSMODE=<ALSMODE>],[ALSRCINT=<ALSRCINT>],[ALSRCPW=<ALSRCPW>],[EXPGAIN=<EXPGAIN>],[NAME=<NAME>],[CMDMDE=<CMDMDE>]:<PST>,[<SST>];

Edits the attributes (service parameters) and state of an optical transport section (OTS) facility.

ED-SLV-WDMANS:[<TID>]:<AID>:<CTAG>:::[HIGHSLVEXP=<HIGHSLVEXP>],[LOWSLVEXP=<LOWSLVEXP>];

Edits the expected span loss verification.

ED-TRC-OCH:[<TID>]:<SRC>:<CTAG>:::[EXPTRC=<EXPTRC>],[TRC=<TRC>],[TRCMODE=<TRCMODE>],[TRCLEVEL=<TRCLEVEL>],[TRCFORMAT=<TRCFORMAT>][:];

Edits trace-related OCH facilities.

ED-WDMANS:[<TID>]:<AID>:<CTAG>:::[POWER-IN=<POWERIN>],[POWER-OUT=<POWEROUT>],[POWER-EXP=<POWEREXP>],[POWER-DROP=<POWERDROP>],[SYS-TYPE=<SYSTYPE>],[RING-TYPE=<RINGTYPE>];

Edits the Automatic Optical Node Setup (AONS) application attributes.

ED-WLEN:[<TID>]:<AID>:<CTAG>:::[SIZE=<SIZE>],[CKTID=<CKTID>],[CMDMDE=<CMDMDE>]:<PST>,[<SST>];

Edits wavelength provisioning.

Table 4 DWDM (continued)

<p>ENT-FFP-<MOD2DWDMPAYLOAD>:[<TID>]:<SRC>,<DST>:<CTAG>::: [PROTOTYPE=<PROTOTYPE>],[PROTID=<PROTID>],[RVRTV=<RVRTV>],[RVTM=<RVTM>, [PSDIRN=<PSDIRN>]][:];</p> <p>Creates Y cable protection on client facilities.</p>
<p>ENT-LNK-<MOD2O>:[<TID>]:<FROM>,<TO>:<CTAG>:::<PST>,<SST>;</p> <p>Creates an optical link between two optical connection points.</p>
<p>ENT-OSC:[<TID>]:<AID>:<CTAG>:::[RINGID=<RINGID>],[NODEID=<NODEID>, [EAST=<EAST>],[WEST=<WEST>];</p> <p>Creates the OSC group of the NE.</p>
<p>ENT-WLEN:[<TID>]:<AID>:<CTAG>:::[SIZE=<SIZE>],[CKTID=<CKTID>, [CMDMDE=<CMDMDE>]:[<PST>],[<SST>];</p> <p>Creates a wavelength.</p>
<p>OPR-APC:[<TID>]::<CTAG>[:::];</p> <p>Permits the APC application inside the NE to force regulation of the optical power to the entire DWDM ring.</p>
<p>OPR-LASER-OTS:[<TID>]:<AID>:<CTAG>;</p> <p>Instructs a laser to be switched on.</p>
<p>OPR-LNK:[<TID>]::<CTAG>;</p> <p>Permits the optical link application inside the NE to calculate all the automatic optical links between end points which can be univocally identified by the NE.</p>
<p>OPR-PROTNSW-OCH:[<TID>]:<AID>:<CTAG>::<SW>;</p> <p>Performs a protection switch on the trunk port of a TXPP_MR_2.5G card (protect version only).</p>
<p>OPR-SLV-WDMANS:[<TID>]:<AID>:<CTAG>;</p> <p>Invokes the calculation of the expected span loss verification.</p>
<p>OPR-WDMANS:[<TID>]::<CTAG>;</p> <p>Operates the AONS application inside the NE to force a recompute of the value to be assigned to all Variable Optical Attenuators (VOA) representing the optical path inside the node.</p>
<p>RLS-LASER-OTS:[<TID>]:<AID>:<CTAG>;</p> <p>Instructs a laser to be switched off.</p>
<p>RLS-PROTNSW-<MOD2DWDMPAYLOAD>:[<TID>]:<SRC>:<CTAG>[:];</p> <p>Releases a Y cable protection switch on client facilities.</p>

Table 4 DWDM (continued)

RLS-PROTNSW-OCH:[<TID>]:<AID>:<CTAG>[:];

Performs a protection switch on the trunk port of a TXPP_MR_2.5G card.

RTRV-<MOD2DWDMPAYLOAD>:[<TID>]:<AID>:<CTAG>[:];

Retrieves the configuration parameter of a DWDM client.

Output format:

```

SID DATE TIME
M CTAG COMPLD
" <AIDUNIONID>,<AIDTYPE>::[NAME=<NAME>],[LBCL=<LBCL>],[OPT=<OPT>],[
OPR=<OPR>]:<PST_PSTQ>,<SST>"
;

```

RTRV-ALMTH-<MOD2>:[<TID>]:<AID>:<CTAG>::<ALMTHR>[:,,:];

Retrieves the alarm threshold values.

Output format:

```

SID DATE TIME
M CTAG COMPLD
" <AID>,<MOD>:<CONDTYPE>,,,<THLEVEL>"
;

```

RTRV-APC:[<TID>]::<CTAG>;

Retrieves the APC application attributes.

Output format:

```

SID DATE TIME
M CTAG COMPLD
"::[APCENABLE=<APCENABLE>],[APCSTATE=<APCSTATE>]"
;

```

RTRV-FFP-<MOD2DWDMPAYLOAD>:[<TID>]:<SRC>:<CTAG>[:];

Retrieves Y cable protection on client facilities.

Output format:

```

SID DATE TIME
M CTAG COMPLD
" <AIDUNIONID>,<AIDUNIONID1>::[PROTOTYPE=<PROTOTYPE>],[
PROTID=<PROTID>],[RVRTV=<RVRTV>],[RVTM=<RVTM>],[PSDIRN=<PSDIRN>]"
;

```

Table 4 DWDM (continued)

RTRV-FFP-OCH:[<TID>]:<AID>:<CTAG>[:::];

Retrieves the protection group information for the TXP_MR_2.5G and TXPP_MR_2.5G trunk port.

Output format:

```
SID DATE TIME
M CTAG COMPLD
"<WORK>,<PROTECT>::[PROTOTYPE=<PROTOTYPE>],[PROTID=<PROTID>],[
RVRTV=<RVRTV>],[RVTM=<RVTM>],[PSDIRN=<PSDIRN>]"
;
```

RTRV-LNK:[<TID>]:<CTAG>;

Retrieves all the optical links created in the NE.

Output format:

```
SID DATE TIME
M CTAG COMPLD
"<FROM>,<TO>::[OLNKT=<OLNKT>],[CTYPE=<CTYPE>],[RDIRN=<RDIRN>],[
BAND=<BAND>],[WLEN=<WLEN>]:<PST_PSTQ>,[<SST>]"
;
```

RTRV-LNK-<MOD2O>:[<TID>]:<AID>:<CTAG>:::[OLNKT=<OLNKT>],[CTYPE=<CTYPE>],[RDIRN=<RDIRN>];

Retrieves any optical link associated with the entered AIDs or AID range.

Output format:

```
SID DATE TIME
M CTAG COMPLD
"<FROM>,<TO>::[OLNKT=<OPTICAL LINK TYPE>],[CTYPE=<CREATION TYPE>],[
RDIRN=<RDIRN>],[BAND=<BAND>],[WLEN=<WLEN>]:<PST_PSTQ>,[<SST>]"
;
```

RTRV-NE-APC:[<TID>]:[<AID>]:<CTAG>;

Retrieves the APC application ports that are involved in node setup regulation.

Output format:

```
SID DATE TIME
M CTAG COMPLD
"<AID>,<MOD>::[MODIFDAT=<MODIFDAT>],[MODIFTM=<MODIFTM>],[
CHECKDAT=<CHECKDAT>],[CHECKTM=<CHECKTM>]"
;
```

Table 4 *DWDM (continued)*

RTRV-NE-WDMANS:[<TID>]::<CTAG>;

Retrieves the optical nodes setup (WDMANS) application ports involved in node setup regulation.

Output format:

SID DATE TIME
M CTAG COMPLD
" <AID>,<AIDTYPE>::[REGULATED=<REGULATED>]"
;

RTRV-OCH:[<TID>]:<AID>:<CTAG>;

Retrieves the attributes (service parameters) and state of an OCH facility.

Output format:

SID DATE TIME
M CTAG COMPLD
" <AID>:.,[<ROLE>],[<STATUS>]:[RDIRN=<RDIRN>],[[OPTYPE=<OPTICALPORTTYPE>],[
[OPWR=<POWER>],[EXPWLEN=<EXPWLEN>],[ACTWLEN=<ACTWLEN>],[
[ILOSS=<ILOSS>],[VOAMODE=<VOAMODE>],[VOAATTN=<VOAATTN>],[
[VOAPWR=<VOAPWR>],[VOAREFATTN=<VOAREFATTN>],[
[VOAREFPWR=<VOAREFPWR>],[REFOPWR=<REFOPWR>],[
[CALOPWR=<CALOPWR>],[CHPOWER=<CHPOWER>],[NAME=<PORTNAME>],[
[SFBER=<SFBER>],[SDBER=<SDBER>],[COMM=<COMM>],[GCCRATE=<GCCRATE>],[
[DWRAP=<DWRAP>],[FEC=<FEC>],[PAYLOADMAP=<PAYLOADMAP>],[
[OSFBER=<OSFBER>],[OSDBER=<OSDBER>],[MACADDR=<MACADDR>],[
[SYNCSMSG=<SYNCSMSG>],[SENDDUS=<SENDDUS>],[SOAK=<SOAK>],[
[SOAKLEFT=<SOAKLEFT>],[OSPF=<OSPF>],[LBCL=<LBCL>],[OPT=<OPT>],[
[OPR=<OPR>]:<PST_PSTQ>,<SSTQ>"
;

RTRV-OMS:[<TID>]:<AID>:<CTAG>;

Retrieves the attributes (service parameters) and state of an OMS facility.

Output format:

SID DATE TIME
M CTAG COMPLD
" <AID>::RDIRN=<RDIRN>,OPTYPE=<OPTICALPORTTYPE>,[OPWR=<POWER>],[
EXPBAND=<EXPBAND>],[ACTBAND=<ACTBAND>],[ILOSS=<ILOSS>],[
[VOAMODE=<VOAMODE>],[VOAATTN=<VOAATTN>],[VOAPWR=<VOAPWR>],[
[VOAREFATTN=<VOAREFATTN>],[VOAREFPWR=<VOAREFPWR>],[
[REFOPWR=<REFOPWR>],[CALOPWR=<CALOPWR>],[CHPOWER=<CHPOWER>]
[NAME=<NAME>]:<PST_PSTQ>,<SSTQ>"
;

Table 4 DWDM (continued)

RTRV-OPM:[<TID>]:<AID>:<CTAG>;

Retrieves the optical power monitoring (OPM) parameters present at OCH layer in a ROADM node.

Output format:

```
SID DATE TIME
M CTAG COMPLD
"<AID>::[POWEROUT=<POWEROUT>],[POWERADD=<POWERADD>],[
POWERPT=<POWERPT>]"
;
```

RTRV-OSC:[<TID>]:<AID>:<CTAG>;

Retrieves all of the OSC information of the NE.

Output format:

```
SID DATE TIME
M CTAG COMPLD
"<AID>::[RINGID=<RINGID>],[NODEID=<NODEID>],[EAST=<EAST>],[WEST=<WEST>]"
;
```

RTRV-OTS:[<TID>]:<AID>:<CTAG>;

Retrieves the attributes (service parameters) and state of an OTS facility.

Output format:

```
SID DATE TIME
M CTAG COMPLD
"<AID>:RDIRN=<RDIRN>,OPTYPE=<OPTICALPORTTYPE>,[OPWR=<POWER>],[
ILOSS=<ILOSS>],[VOAMODE=<VOAMODE>],[VOAATTN=<VOAATTN>],[
VOAPWR=<VOAPWR>],[VOAREFATTN=<VOAREFATTN>],[
VOAREFPWR=<VOAREFPWR>],[LASERST=<LASERST>],[OSRI=<OSRI>],[
ALSMODE=<ALSMODE>],[ALSRCINT=<ALSRCINT>],[ALSRCPW=<ALSRCPW>],[
AMPLMODE=<AMPLMODE>],[GAIN=<GAIN>],[EXPGAIN=<EXPGAIN>],[
REFOPWR=<REFOPWR>],[CALOPWR=<CALOPWR>],[REFTILT=<REFTILT>],[
CALTILT=<CALTILT>],[DCULOSS=<DCULOS>],[AWGST=<AWGST>],[
HEATST=<HEATST>],[NAME=<NAME>]:<PST_PSTQ>,<SSTQ>]"
;
```

Table 4 DWDM (continued)

RTRV-PROTNSW-OCH:[<TID>]:<AID>:<CTAG>;

Retrieves the protection switch status of a TXPP_MR_2.5G card.

Output format:

SID DATE TIME
M CTAG COMPLD
“<AID>:<SW>,<SWTYPE>”
;

RTRV-SLV-WDMANS:[<TID>]:<AID>:<CTAG>;

Retrieves the options provisionable by the ED-SLV-WDMANS command.

Output format:

SID DATE TIME
M CTAG COMPLD
“<AID>::[HIGHSLVEXP=<HIGHSLVEXP>],[LOWSLVEXP=<LOWSLVEXP>],
[SLVACT=<SLVACT>],[RESOLUTION=<RESOLUTION>]”
;

RTRV-TRC-OCH:[<TID>]:<SRC>:<CTAG>:[:<MSGTYPE>],[<TRCLEVEL>][::];

Retrieves the sent trace string, expected trace string, received trace string, trace mode, and the trace level for the SONET J0 Section, the TTI PATH and SECTION monitoring levels of the DWDM facility.

Output format:

SID DATE TIME
M CTAG COMPLD
“<CHANNEL>,<MOD>::[TRCLEVEL=<TRCLEVEL>],[EXPTRC=<EXPTRC>],[TRC=<TRC>],
[INCTRC=<INCTRC>],[TRCMODE=<TRCMODE>],[TRCFORMAT=<TRCFORMAT>]”
;

RTRV-WDMANS:[<TID>]:<AID>:<CTAG>;

Retrieves the automatic optical node setup (AONS) application attributes.

Output format:

SID DATE TIME
“<AID>::[POWER-IN=<POWERIN>],[POWER-OUT=<POWEROUT>],
[POWER-EXP=<POWEREXP>],[POWER-DROP=<POWERDROP>],[SYS-TYPE=<SYSTYPE>],
[APC-ENABLE=<APCENABLE>],[RING-TYPE=<RINGTYPE>]”
;

Table 4 *DWDM (continued)*

RTRV-WLEN:[<TID>]:<AID>:<CTAG>;

Retrieves the wavelength provisioning information.

Output format:

 SID DATE TIME
M CTAG COMPLD

"<AID>::[SIZE=<SIZE>],[CKTID=<CKTID>]:<PST_PSTQ>,[<SSTQ>]"
;

SET-ALMTH-<MOD2>:[<TID>]:<AID>:<CTAG>::<CONDTYPE>,<THLEV>[,,];

Sets alarm thresholds on MXP_2.5G_10G, TXP_MR_10G, TXP_MR_2.5G, TXPP_MR_2.5G, OSCM, OSC-CSM, OPT-PRE, OPT-BST, MD-4, MUX-32, DMX-32, AD-1C, AD-2C, AD-4C, AD-1B, AD-4B facilities, ports and channels.

5 Environment

Table 5 *Environment*

OPR-ACO-ALL:[<TID>]::<CTAG>;

Operates the cut-off of the office audible alarm indications without changing the local alarm indications.

OPR-EXT-CONT:[<TID>]:<AID>:<CTAG>::<CONTTYPE>,[<DURATION>];

Operates an external control and closes the external control contact.

REPT ALM ENV:

Reports a customer defined condition on an environmental alarm input (not supported on the Cisco ONS 15600).

Output format:

 SID DATE TIME
** ATAG REPT ALM ENV

"<AID>:<NTFCNCDE>,<ALMTYPE>,,,[<DESC>]"
;

Table 5 *Environment (continued)*

REPT EVT ENV:

Reports a non-alarmed event against an environmental alarm input (not supported on the Cisco ONS 15600).

Output format:

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

RLS-EXT-CONT:[<TID>]:<AID>:<CTAG>[::,];

Releases a forced contact state to return the control of the contact to an automatic control state.

RTRV-ALM-ENV:[<TID>]:<AID>:<CTAG>::[<NTFCNCDE>],[<ALMTYPE>];

Retrieves the environmental alarms.

Output format:

```
SID DATE TIME
M CTAG COMPLD
  "<AID>:<NTFCNCDE>,<ALMTYPE>,,[<DESC>]"
;
```

RTRV-ATTR-CONT:[<TID>]:<AID>:<CTAG>::[<CONTTYPER>];

Retrieves attributes associated with an external control.

Output format:

```
SID DATE TIME
M CTAG COMPLD
  "<AID>:[<CONTTYPER>]"
;
```

RTRV-ATTR-ENV:[<TID>]:<AID>:<CTAG>::[<NTFCNCDE>],[<ALMTYPE>];

Retrieves attributes associated with an environmental alarm.

Output format:

```
SID DATE TIME
M CTAG COMPLD
  "<AID>:[<NTFCNCDE>],[<ALMTYPE>],[<DESC>]"
;
```

Table 5 *Environment (continued)*

RTRV-COND-ENV:[<TID>]:<AID>:<CTAG>::<NTFCNCDE>],[<ALMTYPE>][,,,];

Retrieves the environmental conditions (not supported on the Cisco ONS 15600).

Output format:

SID DATE TIME
M CTAG COMPLD
" <AID>:<NTFCNCDE>,<ALMTYPE>,[<OCRDAT>],[<OCRMTM>],,,,[<DESC>]"
;

RTRV-EXT-CONT:[<TID>]:<AID>:<CTAG>[:<CONTTYPER>];

Instructs an NE to report the control state of an external control.

Output format:

SID DATE TIME
M CTAG COMPLD
" <AID>:[<CONTTYPER>],<DUR>,[<CONTSTATE>]"
;

SET-ATTR-CONT:[<TID>]:<AID>:<CTAG>[:<CONTTYPER>];

Sets attributes associated with an external control.

SET-ATTR-ENV:[<TID>]:<AID>:<CTAG>::<NTFCNCDE>,<ALMTYPE>,<ALMMSG>;

Sets attributes associated with an external control.

6 Equipment

Table 6 *Equipment*

ALW-SWDX-EQPT:[<TID>]:<AID>:<CTAG>[:];

Allows automatic or manual switching on a duplex system containing duplexed or redundant equipment (Cisco ONS 15454 only).

ALW-SWTOPROTN-EQPT:[<TID>]:<AID>:<CTAG>[:<DIRN>];

Allows automatic or manual switching of an equipment unit back to a protection status (Cisco ONS 15454 only).

ALW-SWTOWKG-EQPT:[<TID>]:<AID>:<CTAG>[:<DIRN>];

Allows automatic or manual switching of an equipment unit back to a working status (Cisco ONS 15454 only).

Table 6 Equipment (continued)

DLT-EQPT:[<TID>]:<AID>:<CTAG>[::];

Deletes a card from the NE.

ED-EQPT:[<TID>]:<AID>:<CTAG>:::[PROTID=<PROTID>],[PRTYPE=<PRTYPE>],[RVRTV=<RVRTV>],[RVTM=<RVTM>],[CMDMDE=<CMDMDE>],[CARDMODE=<CARDMODE>],[PEERID=<PEERID>],[REGENNAME=<REGENNAME>],[PWL=<PWL>]:[<PST>],[<SST>];

Edits the attributes for a given equipment slot in the NE.

ENT-EQPT:[<TID>]:<AID>:<CTAG>::<AIDTYPE>:[PROTID=<PROTID>],[PRTYPE=<PRTYPE>],[RVRTV=<RVRTV>],[RVTM=<RVTM>],[CMDMDE=<CMDMDE>],[CARDMODE=<CARDMODE>],[PEERID=<PEERID>],[REGENNAME=<REGENNAME>],[PWL=<PWL>][:];[PRTYPE=<PRTYPE>],[RVRTV=<RVRTV>],[RVTM=<RVTM>],[CMDMDE=<CMDMDE>][:];

Enters the card type and attributes for a given equipment slot in the NE.

INH-SWDX-EQPT:[<TID>]:<AID>:<CTAG>[::];

Inhibits the automatic or manual switching on an NE containing duplex equipment (Cisco ONS 15454 only).

INH-SWTOPROTN-EQPT:[<TID>]:<AID>:<CTAG>[::<DIRN>];

Inhibits automatic or manual switching of an equipment unit to protection (Cisco ONS 15454 only).

INH-SWTOWKG-EQPT:[<TID>]:<AID>:<CTAG>[::<DIRN>];

Inhibits automatic or manual switching of an equipment unit back to the working unit (Cisco ONS 15454 only).

REPT ALM EQPT

Reports an alarm condition against an equipment unit or slot.

Output format:

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

Table 6 Equipment (continued)

REPT EVT EQPT

Reports the occurrence of a non-alarmed event against an equipment unit or slot.

Output format:

```
SID DATE TIME
A ATAG REPT EVT EQPT
  "<AID>:<CONDDTYPE>,<CONDEFF>],,,,,,<DESC>,<AIDDET>]"
;
```

RST-EQPT:<TID>:<AID>:<CTAG>[:];

Provisions equipment In Service. It is applicable only to equipment in transition from the Maintenance State to the In Service State.

RTRV-ALM-EQPT:<TID>:<AID>:<CTAG>::<NTFCNCDE>,<CONDDTYPE>,<SRVEFF>[:];

Retrieves and sends the current status of alarm conditions associated with the equipment units.

Output format:

```
SID DATE TIME
M CTAG COMPLD
  "[<AID>,<AIDTYPE>:<NTFCNCDE>,<CONDDTYPE>,<SRVEFF>],,,,<DESC>]"
;
```

RTRV-ALMTH-EQPT:<TID>::<CTAG>::<ALMTHR>[:];

Retrieves the alarm thresholds for the power level monitoring (Cisco ONS 15454 only).

Output format:

```
SID DATE TIME
M CTAG COMPLD
  "<MOD2B>:<ALMTHR>,,,<DNFIELD>"
;
```

RTRV-COND-EQPT:<TID>:<AID>:<CTAG>::<TYPEREQ>[:];

Retrieves the equipment conditions.

Output format:

```
SID DATE TIME
M CTAG COMPLD
  "<AID>,<AIDTYPE>:<NTFCNCDE>,<TYPEREP>,<SRVEFF>,<OCRDAT>,<OCRMTM>],,,,<DESC>]"
;
```

Table 6 *Equipment (continued)*

RTRV-EQPT:[<TID>]:<AID>:<CTAG>[::];

Retrieves protection group information and status information for all cards.

Output format:

```
SID DATE TIME
M CTAG COMPLD
“<AID>:<AIDTYPE>,<EQUIP>,[<ROLE>],[<STATUS>]:[PROTID=<PROTID>,)
[PRVTYPE=<PRVTYPE>],[RVRTV=<RVRTV>],[RVTM=<RVTM>,)
[CARDNAME=<CARDNAME>],[IOSCFG=<IOSCFG>]:[<PST>],[<SST>]”
;
```

SET-ALMTH-EQPT:[<TID>]:<CTAG>:<ALMTHTYPE>,<THLEV>[,,];

Set the alarm threshold to manage the power level monitoring (Cisco ONS 15454 only).

SW-DX-EQPT:[<TID>]:<AID>:<CTAG>[:<MODE>][,];

Switches an XC/XCVT/XC10G card with the mate card within the NE (Cisco ONS 15454 only).

SW-TOPROTN-EQPT:[<TID>]:<AID>:<CTAG>[:<MODE>],[<PROTID>],[<DIRN>];

Performs an equipment unit protection switch (Cisco ONS 15454 only).

SW-TOWKG-EQPT:[<TID>]:<AID>:<CTAG>[:<MODE>],[<DIRN>];

Switches the protected working unit back to the working unit (Cisco ONS 15454 only).

7 Facility

Table 7 *Facility*

RMV-<MOD2>:[<TID>]:<AID>:<CTAG>[::];

Removes a facility from service.

RST-<MOD2>:[<TID>]:<AID>:<CTAG>[::][<PST>],[<SST>];

Provisions a facility in service.

8 Fault

Table 8 *Fault*

REPT ALM <MOD2ALM>

Reports an alarm condition against a facility or a path.

Output format:

```
    SID DATE TIME
** ATAG REPT ALM <MOD2ALM>
   "<AID>:<NTFCNCDE>,<CONDTYPE>,<SRVEFF>,.,.,:<DESC>,<AIDDET>"
;
```

REPT ALM COM

Reports an alarm condition when an AID cannot be given.

Output format:

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

REPT EVT <MOD2ALM>

Reports the occurrence of a non-alarmed event.

Output format:

```
    SID DATE TIME
A  ATAG REPTCONDTYPE>,<CONDEFF>,,,<LOCN>,,<MONVAL>,<THLEV>,<
   <TMPER>]:<DESC>,<AIDDET>"
;
```

REPT EVT COM

Reports a non-alarmed event against an NE when there is no AID associated with it.

Output format:

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

Table 8 **Fault (continued)**

RTRV-ALM-ALL:[<TID>]::<CTAG>:::<NTFCNCDE>],[<CONDITION>],[<SRVEFF>][,,,];

Retrieves and sends the current status of all active alarm conditions.

Output format:

SID DATE TIME
M CTAG COMPLD
“ [<AID>],[<AIDTYPE>]:<NTFCNCDE>,<CONDTYPE>,<SRVEFF>,.,.,: [<DESC>],[<AIDDET>]”
;

RTRV-COND-<MOD2ALM>:[<TID>]:<AID>:<CTAG>:::<TYPEREQ>][,,,];

Retrieves the current standing condition and/or state associated with an entity.

Output format:

SID DATE TIME
M CTAG COMPLD
“ <AID>,[<AIDTYPE>]: [<NTFCNCDE>],<TYPEREP>,[<SRVEFF>],[<OCRDAT>],
[<OCRTM>][,,,][<DESC>]”
;

RTRV-COND-ALL:[<TID>]: [<AID>]:<CTAG>:::<TYPEREQ>][,,,];

Retrieves the current standing condition for all entities.

Output format:

SID DATE TIME
M CTAG COMPLD
“ <AID>,[<AIDTYPE>]: [<NTFCNCDE>],<TYPEREP>,[<SRVEFF>],[<OCRDAT>],
[<OCRTM>][,,,][<DESC>]”
;

9 File Transfer

Table 9 File Transfer

<code>APPLY:[<TID>]::<CTAG>[:<MEM_SW_TYPE>];</code>
Activates or reverts a software load during a software upgrade or downgrade (not supported on the Cisco ONS 15600).
<code>COPY-IOSCFG:[<TID>]:<AID>:<CTAG>::SRC=<SRC>,DEST=<DEST>;</code>
Uploads the startup IOS configuration file from the network to the node. Downloads the startup IOS configuration file from the node to the network. (Cisco ONS 15454 ML1000-2/ML100T-12 and Cisco ONS 15310-CL ML100T-8 only).
<code>COPY-FILE:[<TID>]:[<SRC>]:<CTAG>::TYPE=<XFERTYPE>,[SRC=<SRC1>],[DEST=<DEST>],[OVWRT=<OVWRT>],[FTTD=<FTTD>];</code>
Downloads a new software package from the location specified by the FTP URL (not supported on the Cisco ONS 15600).
<code>REPT EVT FXFR</code>
Reports the FTP software download status of the start, completion and completed percentage. (not supported on the Cisco ONS 15600).
Output format: SID DATE TIME A ATAG REPT EVT FXFR " <FILENAME>,<FXFR_STATUS>,<FXFR_RSLT>,<BYTES_XFRD>" ;
<code>REPT EVT IOSCFG</code>
Reports the status of copying the IOS configuration file, when the COPY-IOSCFG command is issued (Cisco ONS 15454 ML1000-2/ML100T-12 and Cisco ONS 15310-CL ML100T-8 only).
Output format: SID DATE TIME A ATAG REPT EVT IOSCFG " <AID>:<SRC>,<DEST>,<STATUS>,<RESULT>" ;

10 Log

Table 10 Log

ALW-MSG-DBCHG:[<TID>]::<CTAG>[::,];

Enables REPT DBCHG.

INH-MSG-DBCHG:[<TID>]::<CTAG>[::,];

Disables REPT DBCHG.

REPT DBCHG

Reports any changes on the NE that result from certain TL1 commands or an external event.

Output format:

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

RTRV-LOG:[<TID>]::<CTAG>::<LOGNM>;

Retrieves the alarm log of the NE.

Output format:

```
    SID DATE TIME
M  CTAG COMPLD
   "<AID>,<ALMNUMBER>:CURRENT=<CURRENT>,[PREVIOUS=<PREVIOUS>]
   <CONDITION>,<SRVEFF>,[TIME=<OCRTIME>],[DATE=<OCRDAT>]:<ALMDESCR>"
;
```

11 Network

Table 11 *Network*

RTRV-MAP-NETWORK:[<TID>]::<CTAG>;

Retrieves all the NE attributes which are reachable from the GNE.

Output format:

 SID DATE TIME
M CTAG COMPLD
 “<IPADDR>,<NODENAME>,<PRODUCT>”
;

RTRV-NE-IPMAP:[<TID>]:[<AID>]:<CTAG>;

Retrieves the IP address and node name of the NEs that have the DCC connection with this NE.

Output format:

 SID DATE TIME
M CTAG COMPLD
 “<AID>:<IPADDR>,<NODENAME>”
;

12 Paths

Table 12 Paths

ED-<MOD_PATH>[:<TID>]:<AID>:<CTAG>:::[SFBER=<SFBER>],[SDBER=<SDBER>],[RVRTV=<RVRTV>],[RVTM=<RVTM>],[SWPDIP=<SWPDIP>],[HOLDOFFTIMER=<HOLDOFFTIMER>],[EXPTRC=<EXPTRC>],[TRC=<TRC>],[TRCMODE=<TRCMODE>],[TACC=<TACC>],[TAPTYPE=<TAPTYPE>],[CMDMDE=<CMDMDE>]:[:<PST>],[<SST>];

Edits the attributes associated with an STS or VT path.

RTRV-<PATH>[:<TID>]:<AID>:<CTAG>:::[BLSRPTHSTYPE=<BLSRPTHSTYPE>][:];

Retrieves the attributes associated with an STS or VT path.

Output format:

SID DATE TIME
M CTAG COMPLD
“<AID>::[LEVEL=<LEVEL>],[SFBER=<SFBER>],[SDBER=<SDBER>],[RVRTV=<RVRTV>],[RVTM=<RVTM>],[SWPDIP=<SWPDIP>],[HOLDOFFTIMER=<HOLDOFFTIMER>],[EXPTRC=<EXPTRC>],[TRC=<TRC>],[INCTRC=<INCTRC>],[TRCMODE=<TRCMODE>],[TACC=<TACC>],[TAPTYPE=<TAPTYPE>],[UPSRPTHSTATE=<UPSRPTHSTATE>],[C2=<C2>],[BLSRPTHSTATE=<BLSRPTHSTATE>]:[:<PST>],[<SST>]”

;

RTRV-STs[:<TID>]:<AID>:<CTAG>;

Retrieves the attributes associated with an STS path based on the granularity level of NE/SLOT-specific STSs (not supported on the Cisco ONS 15310-CL).

Output format:

SID DATE TIME
M CTAG COMPLD
“<AID>::[LEVEL=<LEVEL>],[SFBER=<SFBER>],[SDBER=<SDBER>],[RVRTV=<RVRTV>],[RVTM=<RVTM>],[SWPDIP=<SWPDIP>],[HOLDOFFTIMER=<HOLDOFFTIMER>],[EXPTRC=<EXPTRC>],[TRC=<TRC>],[INCTRC=<INCTRC>],[TRCMODE=<TRCMODE>],[TACC=<TACC>],[TAPTYPE=<TAPTYPE>],[UPSRPTHSTATE=<UPSRPTHSTATE>],[C2=<C2>],[BLSRPTHSTATE=<BLSRPTHSTATE>]::PST_PSTQ>,[<SSTQ>]”

;

13 Performance

Table 13 Performance

ALW-PMREPT-ALL:[<TID>]::<CTAG>;

Resumes the processing of all inhibited PM reports.

DLT-RMONTH-<MOD2_RMON>:[<TID>]:<SRC>:<CTAG>::<MONTYPE>,,,,<INTVL>:
RISE=<RISE>,FALL=<FALL>,[SAMPLE=<SAMPLE>],[STARTUP=<STARTUP>][:];

Deletes a threshold entry in the RMON alarm table.

ENT-RMONTH-<MOD2_RMON>:[<TID>]:<SRC>:<CTAG>::<MONTYPE>,,,,<INTVL>:
RISE=<RISE>,FALL=<FALL>,[SAMPLE=<SAMPLE>],[STARTUP=<STARTUP>][:];

Creates an entry in the RMON alarm table for the threshold of data statistics that are managed by the RMON engine.

INH-PMREPT-ALL:[<TID>]::<CTAG>;

Inhibits all scheduled PM reporting.

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

Initializes the performance monitoring (PM) registers.

REPT PM <MOD2>

Reports of performance monitoring statistics as a result of schedule created by the SCHED-PMREPT command.

Output format:

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

;

RTRV-PM-<MOD2>:[<TID>]:<AID>:<CTAG>::<MONTYPE>],[<MONLEV>],[<LOCN>],
<DIRECTION>,[<TMPER>],[<DATE>],[<TIME>];

Retrieves the values of PM parameters for a specified card type.

Output format:

```
SID DATE TIME
M CTAG COMPLD
"<AID>,[<AIDTY>]:<MONTYPE>,<MONVAL>,[<VLDTY>],[<LOCN>],<DIRECTION>,<TMPER>,[<MONDAT>],[<MONTM>]"
```

;

Table 13 Performance (continued)

RTRV-PMMODE-<STS_PATH>:[<TID>]:<SRC>:<CTAG>::<LOCN>;

Retrieves the PM mode that has been previously set in the NE data collection.

Output format:

SID DATE TIME
M CTAG COMPLD
“<CROSSCONNECTID>:[<LOCN>],<MODETYPE>”
;

RTRV-PMSCHED-<MOD2>:[<TID>]:<AID>:<CTAG>;

Retrieves the PM reporting schedule that was set for the NE by the SCHED-PMREPT command.

Output format:

SID DATE TIME
M CTAG COMPLD
“<AID>,[<AIDTYPE>]:<REPTINVL>,<REPTDAT>,<REPTTM>,[<NUMINVL>],,
[<MONLEV>],<LOCN>,,[<TMPER>],[<TMOFST>],[<INHMODE>]”
;

RTRV-PMSCHED-ALL:[<TID>]::<CTAG>;

Retrieves all the PM reporting schedules that were set for the NE by SCHED-PMREPT.

Output format:

SID DATE TIME
M CTAG COMPLD
“<AID>,[<AIDTYPE>]:<REPTINVL>,<REPTDAT>,<REPTTM>,[<NUMINVL>],,
[<MONLEV>],<LOCN>,,[<TMPER>],[<TMOFST>],[<INHMODE>]”
;

RTRV-TH-<MOD2>:[<TID>]:<AID>:<CTAG>::<MONTYPE>],[<LOCN>],[<TMPER>][:];

Retrieves the current threshold level of one or more monitored parameters.

Output format:

SID DATE TIME
M CTAG COMPLD
“<AID>,[<AIDTYPE>]:<MONTYPE>,[<LOCN>],,<THLEV>,[<TMPER>]”
;

Table 13 Performance (continued)

RTRV-TH-ALL:[<TID>]::<CTAG>::<MONTYPE>],[<LOCATION>],[<TMPER>][:];

Retrieves the current threshold level of all monitored parameters.

Output format:

SID DATE TIME

M CTAG COMPLD

“<AID>,<AIDTYPE>:<MONTYPE>,<LOCATION>,,<THLEV>,<TMPER>”

;

SCHED-PMREPT-<MOD2>:[<TID>]:<SRC>:<CTAG>::<REPTINVL>],[<REPTSTATM>],[<NUMREPT>],,<MONLEV>],[<LOCN>],,<TMPER>],[<TMOFST>];

Schedules/reschedules the NE to report the performance monitoring data for a line facility or for an STS/VT path periodically, using an automatic REPT PM message.

SET-TH-<MOD2>:[<TID>]:<AID>:<CTAG>::<MONTYPE>,<THLEV>,[<LOCN>],,<TMPER>];

Sets the threshold for PM and sets the alarm thresholds for the MXP_2.5G_10G and TXP_MR_10G cards.

14 Ports

Table 14 Ports

DLT-<MOD1PAYLOAD>:[<TID>]:<AID>:<CTAG>[:::];

Deletes the specified port (support limited to ports with Pluggable Port Modules [PPM]) (not supported on the Cisco ONS 15327).

ED-<GIGE_TYPE>:[<TID>]:<AID>:<CTAG>:::[NAME=<NAME>],[MACADDR=<MACADDR>],[CMDMDE=<CMDMDE>]:<PST>,[<SST>];

Edits the Gigabit Ethernet Facility attributes (not supported on the Cisco ONS 15327).

ED-<MOD1FCPAYLOAD>:[<TID>]:<AID>:<CTAG>:::[LINKRCVRY=<LINKRCVRY>],[DISTEXTN=<DISTEXTN>],[AUTODETECTION=<AUTODETECTION>],[LINKCREDITS=<LINKCREDITS>],[MFS=<MFS>],[NAME=<NAME>],[CMDMDE=<CMDMDE>]:<PST>,[<SST>];

Edits the attributes related with the fiber channel facility (Cisco ONS 15454 only).

Table 14 *Ports (continued)*

```
ED-<MOD1FICONPAYLOAD>:[<TID>]:<AID>:<CTAG>:::[LINKRCVRY=<LINKRCVRY>,  
[DISTEXTN=<DISTEXTN>],[AUTODETECTION=<AUTODETECTION>,  
[LINKCREDITS=<LINKCREDITS>],[MFS=<MFS>],[NAME=<NAME>,  
[CMDMDE=<CMDMDE>]:<PST>,<SST>;
```

Edits the attributes related with the fiber connection payload facility (Cisco ONS 15454 only).

```
ED-<OCN_TYPE>:[<TID>]:<AID>:<CTAG>:::[DCC=<DCC>],[AREA=<AREA>,  
[SYNCSMSG=<SYNCSMSG>],[SENDDUS=<SENDDUS>],[PJMON=<PJMON>,  
[SFBER=<SFBER>],[SDBER=<SDBER>],[MODE=<MODE>],[MUX=<MUX>],[SOAK=<SOAK>,  
[OSPF=<OSPF>],[LDCC=<LDCC>],[NAME=<NAME>],[CMDMDE=<CMDMDE>,  
[EXPTRC=<EXPTRC>],[TRC=<TRC>],[TRCMODE=<TRCMODE>,  
[TRCFROMAT=<TRCFORMAT>],[ADMSSM=<ADMSSM>,  
[SYNCSMSGOUT=<SYNCSMSGOUT>]:<PST>,<SST>;
```

Edits the attributes and state of an OC-N facility.

```
ED-ALS:[<TID>]:<SRC>:<CTAG>:::[ALSMODE=<ALSMODE>],[ALSRCINT=<ALSRCINT>,  
[ALSRCPW=<ALSRCPW>;
```

Modifies the Automatic Laser Shutdown (ALS) attributes for all facilities that support the ALS feature (Cisco ONS 15454 and 15310-CL only).

```
ED-DS1:[<TID>]:<AID>:<CTAG>:::[TACC=<TACC>],[TAPTYPE=<TAPTYPE>,  
[MODE=<MODE>],[FMT=<FMT>;
```

Edits the test access attributes for DS1 access on a DS3XM card (Cisco ONS 15454 ANSI only).

```
ED-DS3I:[<TID>]:<AID>:<CTAG>:::[FMT=<FMT>],[LINECDE=<LINECDE>],[LBO=<LBO>,  
[INHFELPBK=<INHFELPBK>],[TACC=<TACC>],[TAPTYPE=<TAPTYPE>],[SFBER=<SFBER>,  
[SDBER=<SDBER>],[SOAK=<SOAK>],[NAME=<NAME>],[CMDMDE=<CMDMDE>]:  
<PST>,<SST>;
```

Edits the attributes of a DS3I facility.

```
ED-EC1:[<TID>]:<AID>:<CTAG>:::[PJMON=<PJMON>],[LBO=<LBO>],[SOAK=<SOAK>,  
[SFBER=<SFBER>],[SDBER=<SDBER>]:<PST>,<SST>;
```

Edits the attributes of an EC1 facility (Cisco ONS 15454 ANSI only).

```
ED-FSTE:[<TID>]:<AID>:<CTAG>:::[FLOW=<FLOW>],[EXPDUPLEX=<EXPDUPLEX>,  
[EXPSPEED=<EXPSPEED>],[VLANCOS=<VLANCOS>],[IPTOS=<IPTOS>],[NAME=<NAME>,  
[CMDMDE=<CMDMDE>]:<PST>,<SST>;
```

Edits the front end port information of fast (10/100 Mbps) ethernet cards (Cisco ONS 15454 and 15310-CL only).

Table 14 *Ports (continued)*

ED-G1000:<TID>:<AID>:<CTAG>:::[MFS=<MFS>],[FLOW=<FLOW>],[LOWMRK=<LOWMRK>],[HIWMRK=<HIWMRK>],[AUTONEG=<AUTONEG>],[NAME=<NAME>],[ENCAP=<ENCAP>],[CMDMDE=<CMDMDE>]:<PST>,<SST>;
Edits the attributes related to a G1000 port (Cisco ONS 15454 and 15327 only).
ED-GFP:<TID>:<AID>:<CTAG>:::[FCS=<FCS>],[SUPERBLKS=<SUPERBLKS>;
Edits the Generic Framing Procedure (GFP) port on the Cisco ONS 15310-CL ML-100T-8 L2/L3, 15454 CE-100T-8, and 15454 FC-MR-4 cards.
ED-POS:<TID>:<AID>:<CTAG>:::[ENCAP=<ENCAP>],[NAME=<NAME>],[CMDMDE=<CMDMDE>]:<PST>,<SST>;
Edits the back-end virtual port information on the Cisco ONS 15310-CL ML-100T-8 L2/L3 and 15454 CE-100T-8 cards.
ED-T1:<TID>:<AID>:<CTAG>:::[LINECDE=<LINECDE>],[FMT=<FMT>],[LBO=<LBO>],[TACC=<TACC>],[TAPTYPE=<TAPTYPE>],[SOAK=<SOAK>],[SFBER=<SFBER>],[SDBER=<SDBER>],[SYNMSG=<SYNMSG>],[SENDDUS=<SENDDUS>],[RETIME=<RETIME>],[NAME=<NAME>],[CMDMDE=<CMDMDE>]:<PST>,<SST>;
Edits the attributes related a DS1/T1 port (not supported on the Cisco ONS 15600).
ED-T3:<TID>:<AID>:<CTAG>:::[FMT=<FMT>],[LINECDE=<LINECDE>],[LBO=<LBO>],[INHFELPBK=<INHGELPBK>],[TACC=<TACC>],[TAPTYPE=<TAPTYPE>],[SOAK=<SOAK>],[SFBER=<SFBER>],[SDBER=<SDBER>],[NAME=<NAME>],[CMDMDE=<CMDMDE>]:<PST>,<SST>;
Edits the attributes related to a DS3/T3 port (not supported on the Cisco ONS 15600).
ENT-<MOD1PAYLOAD>:<TID>:<AID>:<CTAG>[:::];
Provisions the specified port (support limited to ports with Pluggable Port Modules [PPM]) (not supported on the Cisco ONS 15327).
OPR-ALS:<TID>:<AID>:<CTAG>[:::];
Restarts the laser of an OC-N facility and in general for all the facilities that support the ALS feature. (Cisco ONS 15454 and 15310-CL only).

Table 14 *Ports (continued)*

RTRV-<MOD1FCPAYLOAD>:[<TID>]:<AID>:<CTAG>[:::];

Retrieves the attributes related with the Fiber Channel (FC) port (Cisco ONS 15454 only).

Output format:

```
SID DATE TIME
M CTAG COMPLD
"<AID>::LINKRATE=<LINKRATE>,LINKSTATE=<LINKSTATE>,
[LINKRCVRY=<LINKRCVRY>,][DISTEXTN=<DISTEXTN>,]
[LINKCREDITS=<LINKCREDITS>,][MFS=<MFS>,][ENCAP=<ENCAP>,][NAME=<NAME>,]
[SOAK=<SOAK>,][SOAKLEFT=<SOAKLEFT>]:<PST_PSTQ>,[<SST>]"
;
```

RTRV-<MOD1FICONPAYLOAD>:[<TID>]:<AID>:<CTAG>;

Retrieves the fiber channel specific settings for ports which have been configured to carry FICON traffic (Cisco ONS 15454 only).

Output format:

```
SID DATE TIME
M CTAG COMPLD
"<AID>::[LINKRATE=<LINKRATE>,][LINKSTATE=<LINKSTATE>,]
[LINKRCVRY=<LINKRCVRY>,][DISTEXTN=<DISTEXTN>,]
[LINKCREDITS=<LINKCREDITS>,][MFS=<MFS>,][ENCAP=<ENCAP>,][NAME=<NAME>]:
<PST_PSTQ>,<SST>"
;
```

Table 14 *Ports (continued)*

RTRV-OCN_TYPE:[<TID>]:<AID>:<CTAG>[:::];

Retrieves the attributes and state of an OC-N facility (not supported on the Cisco ONS 15327).

Output format:

```
SID DATE TIME
M CTAG COMPLD
"<AID>:.,[<ROLE>],[<STATUS>]:[DCC=<DCC>],[AREA=<AREA>],[TMGREF=<TMGREF>],[
[SYNCSMSG=<SYNCSMSG>],[SENDDUS=<SENDDUS>],[PJMON=<PJMON>],[
[SFBER=<SFBER>],[SDBER=<SDBER>],[MODE=<MODE>],[WVLEN=<WVLEN>],[
[RINGID=<RINGID>],[BLSRATYPE=<BLSRATYPE>],[MUX=<MUX>],[UNIC=<UNIC>],[
[CCID=<CCID>],[NBRIX=<NBRIX>],[SOAK=<SOAK>],[SOAKLEFT=<SOAKLEFT>],[
[SSMRCV=<SSMRCV>],[OSPF=<OSPF>],[LDCC=<LDCC>],[NAME=<NAME>],[
[LBCL=<LBCL>],[OPT=<OPT>],[OPR=<OPR>],[EXPTRC=<EXPTRC>],[TRC=<TRC>],[
[TRCMODE=<TRCMODE>],[TRCFORMAT=<TRCFORMAT>],[
[ADMSSM=<ADMSSM>],[SYNCSMSGOUT=<SYNCSMSGOUT>]:
<PST_PSTQ>,[<SSTQ>]"
;
```

RTRV-10GIGE:[<TID>]:<AID>:<CTAG>[:::];

Retrieves the 10 Gigabit per second specific parameters for the port (Cisco ONS 15454 only).

Output format:

```
SID DATE TIME
M CTAG COMPLD
"<AID>:.[NAME=<NAME>],[MACADDR=<MACADDR>],[LBCL=<LBCL>],[OPT=<OPT>],[
[OPR=<OPR>]:<PST_PSTQ>,[<SST>]"
;
```

RTRV-ALS:[<TID>]:<AID>:<CTAG>[:::];

Retrieves the ALS attributes of an OC-N facility and all facilities that support the ALS feature (Cisco ONS 15454 and 15310-CL only).

Output format:

```
SID DATE TIME
M CTAG COMPLD
"<AID>,<AIDTYPE>:.[ALSMODE=<ALSMODE>],[ALSRCINT=<ALSRCINT>],[
[ALSRCPW=<ALSRCPW>],[LSRSTAR=<LSRSTAR>]"
;
```

Table 14 *Ports (continued)*

RTRV-DS1:[<TID>]:<DS1Aid>:<CTAG>[:::];

Retrieves the test access attributes on a DS1 layer of DS3XM card (Cisco ONS 15454 ANSI only).

Output format:

```
SID DATE TIME
M CTAG COMPLD
" <DS1AID>::[TACC=<TACC>],[TAPTYPE=<TAPTYPE>],[MODE=<MODE>],[FMT=<FMT>]"
;
```

RTRV-EC1:[<TID>]:<AID>:<CTAG>[:::];

Retrieves the facility status of an EC1 card (Cisco ONS 15454 only).

Output format:

```
SID DATE TIME
M CTAG COMPLD
" <AID>::[PJMON=<PJMON>],[LBO=<LBO>],[RXEQUAL=<RXEQUAL>],[SOAK=<SOAK>],[
SOAKLEFT=<SOAKLEFT>],[SFBER=<SFBER>],[SDBER=<SDBER>],[NAME=<NAME>]
:<PST_PSTQ>,[<SSTQ>]"
;
```

RTRV-ESCON:[<TID>]:<AID>:<CTAG>;

Retrieves fiber channel specific settings for ports that have been configured to carry ESCON traffic (Cisco ONS 15454 and 15600 only).

Output format:

```
SID DATE TIME
M CTAG COMPLD
" <AID>::[ENCAP=<ENCAP>]"
;
```

RTRV-FSTE:[<TID>]:<AID>:<CTAG>;

Retrieves the front end port information of fast (10/100 Mbps) Ethernet cards (Cisco ONS 15454 and 15310-CL only).

Output format:

```
SID DATE TIME
M CTAG COMPLD
" <AID>::[ADMINSTATE=<ADMINSTATE>],[LINKSTATE=<LINKSTATE>],[MTU=<MTU>],[
FLOWCTRL=<FLOWCTRL>],[DUPLEX=<DUPLEX>],[SPEED=<SPEED>],[
FLOW=<FLOW>],[EXPDUPLEX=<EXPDUPLEX>],[EXPSPEED=<EXPSPEED>],[
VLANCOS=<VLANCOS>],[IPTOS=<IPTOS>],[NAME=<NAME>]:<PST_PSTQ>,[<SSTQ>]"
;
```

Table 14 *Ports (continued)*

RTRV-G1000:[<TID>]:<AID>:<CTAG>;

Retrieves the G1000 facilities configuration (Cisco ONS 15454 and 15327 only).

Output format:

```
SID DATE TIME
M CTAG COMPLD
"<AID>::[MFS=<MFS>,][FLOW=<FLOW>,][LAN=<LAN>,][OPTICS=<OPTICS>,]
[TRANS=<TRANS>,][TPORT=<TPORT>,][LOWMRK=<LOWMRK>,]
[HIWMRK=<HIWMRK>,][AUTONEG=<AUTONEG>,][ENCAP=<ENCAP>,]
[NAME=<NAME>]:<PST_PSTQ>,[<SSTQ>]"
;
```

RTRV-GFP:[<TID>]:<SRC>:<CTAG>;

Retrieves the Generic Framing Procedure (GFP) port information on the Cisco ONS 15310-CL ML-100T-8 L2/L3, 15454 CE-100T-8, and 15454 FC-MR-4 cards.

Output format:

```
SID DATE TIME
M CTAG COMPLD
"<AID>::[FCS=<FCS>,][SUPERBLKS=<SUPERBLKS>]"
;
```

RTRV-GIGE:[<TID>]:<AID>:<CTAG>;

Retrieves the front end port information for the ML1000-2 Ethernet card (Cisco ONS 15454 only).

Output format:

```
SID DATE TIME
M CTAG COMPLD
"<AID>::[ADMINSTATE=<ADMINSTATE>,][LINKSTATE=<LINKSTATE>,]
[MTU=<MTU>,][FLOWCTRL=<FLOWCTRL>,][OPTICS=<OPTICS>,]
[DUPLEX=<DUPLEX>,][SPEED=<SPEED>,][NAME=<NAME>]"
;
```

Table 14 *Ports (continued)*

RTRV-POS:[<TID>]:<AID>:<CTAG>;

Retrieves the back end port information for the ML-series Ethernet cards when the back end port is working in POS mode (Cisco ONS 15454 only).

Output format:

```
SID DATE TIME
M CTAG COMPLD
" <AID>::[ADMINSTATE=<ADMINSTATE>],[LINKSTATE=<LINKSTATE>],[
  [MTU=<MTU>],[ENCAP=<ENCAP>],[NAME=<NAME>]:<PST_PSTQ>,[<SST>]"
;
```

RTRV-T1:[<TID>]:<AID>:<CTAG>[:::];

Retrieves the DS1 facilities configuration (not supported on the Cisco ONS 15600).

Output format:

```
SID DATE TIME
M CTAG COMPLD
" <AID>::[LINECDE=<LINECDE>],[FMT=<FMT>],[LBO=<LBO>],[TACC=<TAP>],[
  [TAPTYPE=<TAPTYPE>],[SOAK=<SOAK>],[SOAKLEFT=<SOAKLEFT>],[SFBER=<SFBER>],[
  [SDBER=<SDBER>]:<PST>,[<SST>]"
;
```

RTRV-T3:[<TID>]:<AID>:<CTAG>[:::];

Retrieves the facilities properties of a DS3, DS3I (on SONET) and a DS3 trans mux card (not supported on the Cisco ONS 15600).

Output format:

```
SID DATE TIME
M CTAG COMPLD
" <AID>::[FMT=<FMT>],[LINECDE=<LINECDE>],[LBO=<LBO>],[
  [INHFELPBK=<INHFELPBK>],[TACC=<TAP>],[TAPTYPE=<TAPTYPE>],[
  [SOAK=<SOAK>],[SOAKLEFT=<SOAKLEFT>],[SFBER=<SFBER>],[
  [SDBER=<SDBER>],[NAME=<NAME>]:<PST_PSTQ>,[<SSTQ>]"
;
```

15 Protection

Table 15 *Protection*

DLT-FFP-<OCN_TYPE>:[<TID>]:<WORK>,<PROTECT>:<CTAG>[:];
Deletes an OCn facility protection group in the 1+1 architecture.
ED-FFP-<OCN_TYPE>:[<TID>]:<AID>:<CTAG>:::[PROTID=<PROTID>],[RVRTV=<RVRTV>],[RVTM=<RVTM>],[PSDIRN=<PSDIRN>],[VRGRDTM=<VRGRDTM>],[DTGRDTM=<DTGRDTM>],[RCGRDTM=<RCGRDTM>][:];
Edits the optical facility protection.
ENT-FFP-<OCN_TYPE>:[<TID>]:<WORK>,<PROTECT>:<CTAG>:::[PROTID=<PROTID>],[RVRTV=<RVRTV>],[RVTM=<RVTM>],[PSDIRN=<PSDIRN>],[OPOTYPE=<OPOTYPE>],[VRGRDTM=<VRGRDTM>],[DTGRDTM=<DEGRDTM>],[RCGRDTM=<RCGRDTM>][:];
Creates an optical 1+1 protection.
OPR-PROTNSW-<OCN_TYPE>:[<TID>]:<AID>:<CTAG>::<SC>,[<SWITCHTYPE>][:<DIRN>];
Instructs the NE to initiate a SONET line protection switch request.
REPT SW
Reports the autonomous switching of an unit in a duplex equipment unit pair to standby and its mate unit to the active state.
Output format: SID DATE TIME A ATAG REPT SW " <ACTID>,<STDBYID>" ;
RLS-PROTNSW-<OCN_TYPE>:[<TID>]:<AID>:<CTAG>[:<DIRECTION>];
Instructs a SONET NE to release (clear) a SONET line protection switch request.
RTRV-FFP-<OCN_TYPE>:[<TID>]:<AID>:<CTAG>[:];
Retrieves the optical facility protection information.
Output format: SID DATE TIME M CTAG COMPLD " <WORK>,<PROTECT>::[PROTID=<PROTID>],[RVRTV=<RVRTV>],[RVTM=<RVTM>],[PSDIRN=<PSDIRN>],[VRGRDTM=<VRGRDTM>],[DTGRDTM=<DTGRDTM>],[RCGRDTM=<RCGRDTM>],[OPOTYPE=<OPOTYPE>]" ;

Table 15 *Protection (continued)*

RTRV-PROTNSW-<OCN_TYPE>:[<TID>]:<AID>:<CTAG>[:::];
Retrieves the switching state of a SONET line specified in the AID.
Output format:
 SID DATE TIME
M CTAG COMPLD
 "<AID>:<SC>,[<SWITCHTYPE>]"
;

RTRV-PROTNSW-<PATH>:[<TID>]:<SRC>:<CTAG>[:::];
Retrieves the switching state of a SONET UPSR STS path specified in the AID.
Output format:
 SID DATE TIME
M CTAG COMPLD
 "<CROSSCONNECTID>:<SC>,[<SWITCHTYPE>]"
;

16 Provisionable Patchcords



Note Not supported on the Cisco ONS 15600.

Table 16 *Provisionable Patchcords*

DLT-LNKTERM:[<TID>]:<AID>:<CTAG>;
Deletes a provisionable patchcord termination that is present on a node.
ED-LNKTERM:[<TID>]:<AID>:<CTAG>:::[RE MOTENODE=<RE MOTENODE> ,]
[RE MOTELNKTERMID=<RE MOTELNKTERMID>];
Edits the attributes of an existing provisionable patchcord termination.

Table 16 *Provisionable Patchcords (continued)*

ENT-LNKTERM:[<TID>]:<AID>:<CTAG>:::PORT=<PORT>,
[REMOTENODE=<REMOTENODE>],[REMOTELNKTERMID=<REMOTELNKTERMID>];

Creates a provisionable patchcord termination (virtual link) on a physical interface.

RTRV-LNKTERM:[<TID>]:<AID>:<CTAG>;

Retrieves information about one or more provisionable patchcord terminations.

Output format:

```
    SID DATE TIME
M CTAG COMPLD
  "<AID>::PORT=<PORT>,[REMOTENODE=<REMOTENODE>],
  [REMOTELNKTERMID=<REMOTELNKTERMID>]"
;
```

17 Security

Table 17 *Security*

ACT-USER:[<TID>]:<UID>:<CTAG>:::<PID>;

Sets up a session with the NE.

Output format:

```
    SID DATE TIME
M CTAG COMPLD
  "<UID>:<LASTLOGINTIME>,<UNSUCCESSFULLOGINS>"
;
```

ALW-MSG-SECU:[<TID>]::<CTAG>;

Allows REPT EVT SECU and REPT ALM SECU.

ALW-USER-SECU:[<TID>]::<CTAG>:::<UID>;

Enables a user ID that has been disabled (by way of the INH-USER-SECU command) so the user can establish a session with the NE.

Table 17 Security (continued)

CANC

Reports the occurrence of a session timeout event.

Output format:

```
SID DATE TIME
A ATAG CANC
  "<UID>"
;
```

CANC-USER:[<TID>]:<USERID>:<CTAG>;

Logs a user out of an active session with the NE.

CANC-USER-SECU:[<TID>]:<UID>:<CTAG>;

Logs out all sessions on the NE (TL1, CTC, etc.) of a user whose userid matches the UID specified in the command.

CLR-COND-SECU:[<TID>]::<CTAG>[::<SECUALMTYPE>];

Clears the specified standing condition.

DLT-USER-SECU:[<TID>]:<UID>:<CTAG>;

Deletes a user; can only be performed by a Superuser.

ED-CMD-SECU:[<TID>]:<AID>:<CTAG>:<CAP>;

Edits the command security level of a particular command.

ED-PID:[<TID>]:<UID>:<CTAG>:<OLDPID>,<NEWPID>;

Allows a user to change his or her own password.

ED-USER-SECU:[<TID>]:<UID>:<CTAG>::[<NEWUID>],[<NEWPID>],,<UAP>[:];

Edits a user's privileges, password, or ID and can only be performed by a Superuser.

ENT-USER-SECU:[<TID>]:<UID>:<CTAG>:<PID>,<UAP>[:];

Adds a user account; can only be performed by a Superuser.

INH-MSG-SECU:[<TID>]::<CTAG>;

Inhibits the REPT EVT SECU and REPT ALM SECU messages.

INH-USER-SECU:[<TID>]::<CTAG>:<UID>;

Disables (without deleting) a userid, so the user is denied access to the NE.

Table 17 *Security (continued)*

REPT ALM SECU

Reports the occurrence of an alarmed security event against the NE.

Output format:

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

REPT EVT SECU

Reports the occurrence of a non-alarmed security event against the NE.

Output format:

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

REPT EVT SESSION

Reports a non-alarmed event related to establishing a session with the NE.

Output format:

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

RTRV-CMD-SECU:[<TID>]:<AID>:<CTAG>;

Retrieves the current command security level of the command specified in the AID field.

Output format:

```
SID DATE TIME
M CTAG COMPLD
  "<AID>:<CAP>"
;
```

Table 17 *Security (continued)*

RTRV-DFLT-SECU:[<TID>]:<AID>:<CTAG>;

Retrieves the system-wide default values associated with several security parameters.

Output format:

```
SID DATE TIME
M CTAG COMPLD
“<NE>:PAGE=<PAGE>,PCND=<PCND>,MXINV=<MXINV>,DURAL=<DURAL>,
  TMOUT=<TMOUT>,UOUT=<UOUT>,PFRCD=<PFRCD>,POLD=<POLD>,PINT=<PINT>,
  LOGIN=<LOGIN>,PRIVLVL=<UAP>”
;
```

RTRV-USER-SECU:[<TID>]:<UID>:<CTAG>;

Retrieves the security information of a specified user or list of users.

Output format:

```
SID DATE TIME
M CTAG COMPLD
“<UID>:,<PRIVILEGE>:LOGGEDIN=<LOGGEDIN>,[NUMSESSIONS=<NUMSESS>,)
  [LOCKEDOUT=<LOCKEDOUT>],[DISABLED=<DISABLED>]”
;
```

SET-ATTR-SECUDFLT:[<TID>]:<CTAG>:::[PAGE=<PAGE>],[PCND=<PCND>,)
 [MXINV=<MXINV>],[DURAL=<DURAL>],[TMOUT=<TMOUT>],[UOUT=<UOUT>,)
 [PFRCD=<PFRCD>],[POLD=<POLD>],[PINT=<PINT>],[LOGIN=<LOGIN>],[PRIVLVL=<UAP>];

Sets the system-wide default values associated with several security parameters.

18 Synchronization

Table 18 *Synchronization*

ED-BITS:[<TID>]:<AID>:<CTAG>:::[LINECDE=<LINECDE>],[FMT=<FMT>],[LBO=<LBO>,)
 [SYNCMSG=<SYNCMSG>],[AISTHRSHLD=<AISTHRSHLD>],[SABIT=<SABIT>,)
 [IMPEDANCE=<IMPEDANCE>],[BITSFAC=<BITSFAC>],[ADMSSM=<ADMSSM>][:<PST>];

Edits the BITS reference attributes.

ED-NE-SYNCN:[<TID>]:<CTAG>:::[TMMD=<TMMD>],[SSMGEN=<SSMGEN>,)
 [QRES=<QRES>],[RVRTV=<RVRTV>],[RVTM=<RVTM>];

Edits the synchronization attributes of the NE.

Table 18 Synchronization (continued)

ED-SYNCN:[<TID>]:<AID>:<CTAG>:::[PRI=<PRI>],[SEC=<SEC>],[THIRD=<THIRD>][:];

Edits the synchronization reference list used to determine the sources for the NE's reference clock and the BITS output clock.

OPR-SYNCNSW:[<TID>]:<AID>:<CTAG>::<SWITCHTO>,[<SC>];

Initiates a switch to the reference specified by the synchronization reference number if the reference supplied is valid.

REPT ALM BITS

Reports an alarm condition on a BITS facility.

Output format:

```
SID DATE TIME
** ATAG REPT ALM BITS
  "<AID>:<NTFCNCDE>,<CONDTYPE>,<SRVEFF>,[<OCRDAT>],[<OCR TM>],,:[<DESC>]"
;
```

REPT ALM SYNCN

Reports an alarm condition against a synchronization reference.

Output format:

```
SID DATE TIME
** ATAG REPT ALM SYNCN
  "<AID>:<NTFCNCDE>,<CONDTYPE>,<SRVEFF>,[<OCRDAT>],
  [<OCR TM>],,:[<DESC>],[<EQPTTYPE>]"
;
```

REPT EVT BITS

Reports the occurrence of a non-alarmed event against a BITS facility (not supported on the Cisco ONS 15600).

Output format:

```
SID DATE TIME
** ATAG REPT ALM BITS
  "<AID>:<NTFCNCDE>,<CONDTYPE>,<SRVEFF>,.,.,:[<DESC>]"
;
```

Table 18 Synchronization (continued)

REPT EVT SYNCN

Reports the occurrence of a non-alarmed event against a synchronization entity.

Output format:

```
SID DATE TIME
A ATAG REPT EVT SYNCN
  "<AID>:<CONDTYPE>,<CONDEFF>,,,,,<DESC>,<AIDDET>"
;
```

RLS-SYNCNSW:<TID>:<AID>:<CTAG>;

Releases the previous synchronization reference provided by the OPR-SYNCNSW command.

RTRV-ALM-BITS:<TID>:<AID>:<CTAG>::<NTFCNCDE>,<CONDTYPE>,<SRVEFF>[,,,];

Retrieves and sends the current status of alarm conditions associated with the BITS facility.

Output format:

```
SID DATE TIME
M CTAG COMPLD
  "<AID>,<AIDTYPE>:<NTFCNCDE>,<CONDTYPE>,<SRVEFF>,,,,:<DESC>"
;
```

RTRV-ALM-SYNCN:<TID>:<AID>:<CTAG>::<NTFCNCDE>,<CONDTYPE>,<SRVEFF>[,,,];

Retrieves and sends the current status of alarm conditions associated with a synchronization facility.

Output format:

```
SID DATE TIME
M CTAG COMPLD
  "<AID>,<AIDTYPE>:<NTFCNCDE>,<CONDTYPE>,<SRVEFF>,,,,:<DESC>"
;
```

RTRV-BITS:<TID>:<AID>:<CTAG>[::::];

Retrieves the BITS configuration command.

Output format:

```
SID DATE TIME
M CTAG COMPLD
  "<AID>::<LINECDE>=<LINECDE>,<FMT>=<FMT>,<LBO>=<LBO>,<SYNCSMSG>=<SYNCSMSG>,<AISTHRSHLD>=<AISTHRSHLD>,<SABIT>=<SABIT>,<IMPEDANCE>=<IMPEDANCE>,<BITSFAC>=<BITSFAC>,<ADMSSM>=<ADMSSM>:<PST>"
;
```

Table 18 Synchronization (continued)

RTRV-COND-BITS:[<TID>]:<AID>:<CTAG>::[<TYPEREQ>][,,,];

Retrieves the standing condition on BITS.

Output format:

SID DATE TIME
M CTAG COMPLD
“<AID>,[<AIDTYPE>]:[<NTFCNCDE>],<TYPEREP>,[<SRVEFF>],[<OCRDAT>],
[<OCRMT>],,,[<DESC>]”
;

RTRV-COND-SYCN:[<TID>]:<AID>:<CTAG>::[<TYPEREQ>][,,,];

Retrieves the synchronization condition.

Output format:

SID DATE TIME
M CTAG COMPLD
“<AID>,[<AIDTYPE>]:[<NTFCNCDE>],<TYPEREP>,[<SRVEFF>],
[<OCRDAT>],[<OCRMT>],,,[<DESC>]”
;

RTRV-NE-SYCN:[<TID>]::<CTAG>[:::];

Retrieves the synchronization attributes of the NE.

Output format:

SID DATE TIME
M CTAG COMPLD
“::[TMMD=<TMMD>],[SSMGEN=<SSMGEN>],[QRES=<QRES>],[RVRTV=<RVRTV>],
[RVTM=<RVTM>]”
;

RTRV-SYCN:[<TID>]:<AID>:<CTAG>[:::];

Retrieves the synchronization reference list used to determine the sources for the NE's reference clock and the BITS output clock.

Output format:

SID DATE TIME
M CTAG COMPLD
“<AID>:<REF>,<REFVAL>,[<QREF>],[<STATUS>],[<PROTECTSTATUS>]”
;

19 System

Table 19 System

ALW-MSG-ALL:[<TID>]::<CTAG>[::,];
Allows REPT ALM and REPT EVT autonomous messages to be transmitted.
DLT-ROUTE:[<TID>]::<CTAG>::<DESTIP>,<IPMASK>;
Deletes the static routes.
DLT-TRAPTABLE:[<TID>]:<AID>:<CTAG>;
Deletes SNMP trap destination entry. Entering ALL will delete the whole table.
ED-DAT:[<TID>]::<CTAG>::<DATE>],[<TIME>];
Edits the date and the time.
ED-NE-GEN:[<TID>]::<CTAG>:::[NAME=<NAME>],[IPADDR=<IPADDR>],[IPMASK=<IPMASK>],[DEFRTR=<DEFRTR>],[IIOPPORT=<IIOPPORT>],[NTP=<NTP>][ETHIPADDR=<ETHIPADDR>],[ETHIPMASK=<ETHIPMASK>];
Edits the general node attributes of an NE.
ED-NE-PATH:[<TID>]::<CTAG>[::PDIP=<PDIP>];
Edits path related parameters for the NE-wide basis.
ED-TRAPTABLE:[<TID>]:<AID>:<CTAG>::<SKIPPED>:COMMUNITY=<COMMUNITY>,[TRAPPORT=<TRAPPORT>],[TRAPVER=<TRAPVER>];
Modifies a trap destination entry identified by a specific trap destination address.
ENT-ROUTE:[<TID>]::<CTAG>::<DESTIP>,<IPMASK>,<NXTHOP>,<COST>;
Creates the static route.
ENT-TRAPTABLE:[<TID>]:<AID>:<CTAG>::COMMUNITY=<COMMUNITY>,[TRAPPORT=<TRAPPORT>],[TRAPVER=<TRAPVER>];
Provisions a SNMP trap destination and its associated community, UDP port and SNMP version.
INH-MSG-ALL:[<TID>]:[<AID>]:<CTAG>[::,];
Inhibits REPT ALM and REPT EVT autonomous messages from being transmitted.
INIT-SYS:[<TID>]:<AID>:<CTAG>::<PH>,[<CMDMODE>];
Initializes the specified card and its associated subsystem(s).
RTRV-HDR:[<TID>]::<CTAG>;
Retrieves the header of a TL1 response message.

Table 19 *System (continued)*

RTRV-INV:[<TID>]:<AID>:<CTAG>[:[:]];

Retrieves a listing of the equipment inventory.

Output format:

```
SID DATE TIME
M CTAG COMPLD
“<AID>,<AIDTYPE>::[PLUGTYPE=<PLUGTYPE>],[PN=<PN>],[HWREV=<HWREV>],[
FWREV=<FWREV>],[SN=<SN>],[CLEI=<CLEI>],[TWL1=<TWL>],[TWL2=<TWL1>],[
TWL3=<TWL2>],[TWL4=<TWL3>],[PLUGINVENDORID=<PLUGINVENDORID>],[
PLUGINPN=<PLUGINPN>],[PLUGINHWREV=<PLUGINHWREV>],[
PLUGINFWREV=<PLUGINFWREV>],[PLUGINSN=<PLUGINSN>],[
ILOSSREF=<ILOSSREF>],[PID=<PID>],[VID=<VID>],[FPGA=<FPGA>]”
;
```

RTRV-NE-GEN:[<TID>]::<CTAG>;

Retrieves the general NE attributes.

Output format:

```
SID DATE TIME
M CTAG COMPLD
“[IPADDR=<IPADDR>],[IPMASK=<IPMASK>],[DEFRTR=<DEFRTR>],[
IIOPORT=<IIOPORT>],[NTP=<NTP>],[ETHIPADDR=<ETHIPADDR>],[
ETHIPMASK=<ETHIPMASK>],[NAME=<NAME>],[SWVER=<SWVER>],[LOAD=<LOAD>],[
PROTSWVER=<PROTSWVER>],[PROTLOAD=<PROTLOAD>],[DEFDESC=<DEFDESC>],[
PLATFORM=<PLATFORM>],[SECUMODE=<SECUMODE>]”
;
```

RTRV-NE-PATH:[<TID>]::<CTAG>[:[:]];

Retrieves the general NE attributes.

Output format:

```
SID DATE TIME
M CTAG COMPLD
“[PDIP=<PDIP>]”
;
```

Table 19 System (continued)

RTRV-ROUTE:[<TID>]::<CTAG>::<DESTIP>],[<IPMASK>],[<NXTHOP>],[<COST>];

Retrieves static routes.

Output format:

```
SID DATE TIME
M CTAG COMPLD
",:<DESTIP>,<IPMASK>,<NXTHOP>,<COST>"
;
```

RTRV-TOD:[<TID>]::<CTAG>;

Retrieves the system date and time at the instant the command is executed.

Output format:

```
SID DATE TIME
M CTAG COMPLD
"<YEAR>,<MONTH>,<DAY>,<HOUR>,<MINUTE>,<SECOND>,<TMTYPE>"
;
```

RTRV-TRAPTABLE:[<TID>]:[<AID>]:<CTAG>;

Retrieves a trap destination entry based on the destination address.

Output format:

```
SID DATE TIME
M CTAG COMPLD
"<DEST>,<TRAPPORT>,<COMMUNITY>,<SNMPVERSION>"
;
```

SET-TOD:[<TID>]::<CTAG>::<YEAR>,<MONTH>,<DAY>,<HOUR>,<MINUTE>,<SECOND>,[<DIFFERENCE>][:DST=<DST>];

Sets the system date and time for the NE.

20 Troubleshooting and Test Access

Table 20 Troubleshooting and Test Access

<code>CHG-ACCMD-<MOD_TACC>[:<TID>]:<TAP>:<CTAG>::<MD>;</code>
Changes the test access mode for the circuit being tested (not supported on Cisco ONS 15310-CL).
<code>CONN-TACC-<MOD_TACC>[:<TID>]:<SRC>:<CTAG>::<TAP>:MD=<MD>;</code>
Connects the STS or VT defined by AID to the STS specified by the TAP number (not supported on Cisco ONS 15310-CL).
Output format: SID DATE TIME M CTAG COMPLD " <TAP> " ;
<code>DISC-TACC[:<TID>]:<TAP>:<CTAG>;</code>
Disconnects the TAP and puts the connection back to its original state.
<code>OPR-LPBK-<MOD2>[:<TID>]:<AID>:<CTAG>::<LOCATION>],,,[<PBKTYPE>;</code>
Operates a signal loopback on an I/O card or on a cross-connect.
<code>RLS-LPBK-<MOD2>[:<TID>]:<SRC>:<CTAG>::<LOCATION>],,,[<PBKTYPE>;</code>
Releases a signal loopback on an I/O card or on a cross-connect.
<code>RTRV-PTHTRC-<PATH>[:<TID>]:<SRC>:<CTAG>::<MSGTYPE>][:<LOCN>;</code>
Instructs a SONET NE to retrieve the contents of the SONET path trace message.
Output format: SID DATE TIME M CTAG COMPLD " <TRACMSG> " ;
<code>RTRV-TACC[:<TID>]:<TAP>:<CTAG>;</code>
Retrieves details associated with a TAP (not supported on Cisco ONS 15310-CL).
Output format: SID DATE TIME M CTAG COMPLD " <TAP>:<TACC_AIDA>,<TACC_AIDB>,[<MD>],[<CROSSCONNECTID1>], [<CROSSCONNECTID2>] " ;

21 VCAT



Note Cisco ONS 15454 only.

Table 21 VCAT

DLT-VCG:[<TID>]:<SRC>:<CTAG>:::[CMDMDE=<CMDMDE>][:];

Deletes a virtual concatenated group (VCG) object.

ED-VCG:[<TID>]:<SRC>:<CTAG>:::[TXCOUNT=<TXCOUNT>],[NAME=<NAME>];

Edits the attributes of a VCG.

ENT-VCG:[<TID>]:<SRC>:<CTAG>:::TYPE=<TYPE>,TXCOUNT=<TXCOUNT>,[CCT=<CCT>],[LCAS=<LCAS>],[BUFFERS=<BUFFERS>],[NAME=<NAME>];

Creates a VCG object.

RTRV-VCG:[<TID>]:<SRC>:<CTAG>[::];

Retrieves all of the attributes provisioned for a VCG.

Output format:

SID DATE TIME
M CTAG COMPLD
" <SRC>::TYPE=<TYPE>,TXCOUNT=<TXCOUNT>,CCT=<CCT>,[LCAS=<LCAS>],[BUFFERS=<BUFFERS>],[NAME=<NAME>]:<PST>"

;



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