Quick Reference

This guide lists TL1 commands and autonomous messages by category. It includes basic descriptions and input and output formats supported by the Cisco ONS 15454 SDH and Cisco ONS 15600 SDH. Refer to the *Cisco ONS 15454 SDH and Cisco ONS 15600 SDH TL1 Command Guide* 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.

Contents

MS-SPRing

Table 1: MS-SPRing

DLT-<MOD_RING>:[<TID>]:<AID>:<CTAG>[:::]; Deletes the multiplex section-shared protection ring (MS-SPRing) of the network element (NE).
ED-<MOD_RING>:[<TID>]:<AID>:<CTAG>:::[RINGID=<RINGID>],[NODEID=<NODEID>], [RVRTV=<RVRTV>],[RVTM=<RVTM>],[SRVRTV=<SRVRTV>],[SRVTM=<SRVTM>][:]; Edits the MS-SPRing 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 a 2-fiber or 4-fiber MS-SPRing.
EX-SW-<STM_MSSPR>:[<TID>]:<AID>:<CTAG>::,[<SWITCHTYPE>],[<DIRECTION>]; Exercises the algorithm for switching from a working facility to a protection facility without actually performing a switch.
RTRV-<MOD_RING>:[<TID>]:[<AID>]:<CTAG>[::::]; Retrieves all of the MS-SPRing information from the 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-<STM_MSSPR>:[<TID>]:<AID>:<CTAG>[::::]; Retrieves the valid J1 expected trace string, received trace string, trace mode, c2 byte, and VC bandwidth of the STM port if the port is provisioned for MS-SPring. Output format: SID DATE TIME M CTAG COMPLD "<AID>::[LEVEL=<LEVEL>],[EXPTRC=<EXPTRC>],[INCTRC=<INCTRC>], [TRCMODE=<TRCMODE>],[C2=<C2>]"

Bridge and Roll

Table 2: Bridge and Roll

DLT-BULKROLL-<STM_TYPE>:[<TID>]:<FROM>:<CTAG>:::[RFROMSTART= <RFROMSTART>],[RFROMEND=<RFROMEND>],WHY=<WHY>; Cancels or completes an attempted bulk rolling operation of a facility.
DLT-ROLL-<MOD_PATH>:[<TID>]:<FROM>,<TO>:<CTAG>:::WHY=<WHY>; Cancels or completes an attempted rolling operation of a facility.
ED-BULKROLL-<STM_TYPE>:[<TID>]:<FROM>:<CTAG>:::[RFROMSTART= <RFROMSTART>],[RFROMEND=<RFROMEND>],[CMDMDE=<CMDMDE>]; Edits information about rolling traffic from one end point to another without interrupting service.
ED-ROLL-<MOD_PATH>:[<TID>]:<FROM>,<TO>:<CTAG>[:::CMDMDE=<CMDMDE>]; Forces a valid signal to complete a rolling operation.
ENT-BULKROLL-<STM_TYPE>:[<TID>]:<FROM>:<CTAG>:::RTOSTART=<RTOSTART>, [RFROMSTART=<RFROMSTART>],[RFROMEND=<RFROMEND>],RMODE=<RMODE>, [CMDMDE=<CMDMDE>]; Enters information for rolling traffic from one endpoint to another without interrupting service. Line level/bulk rolling only.
ENT-ROLL-<MOD_PATH>:[<TID>]:<FROM>,<TO>:<CTAG>:::RFROM=<RFROM>, RTO=<RTO>,RMODE=<RMODE>,[CMDMDE=<CMDMDE>]; Enters information for rolling traffic from one endpoint to another without interrupting service. Single paths only.
RTRV-BULKROLL-<STM_TYPE>:[<TID>]:<SRC>:<CTAG>; Retrieves roll data parameters on a line. Output Format: SID DATE TIME M CTAG COMPLD "<FROM>:RFROM=<RFROM>,RTO=<RTO>,[RMODE=<RMODE>],VLDSIG=<VLDSIG>" ;
RTRV-ROLL-<MOD_PATH>:[<TID>]:<SRC>:<CTAG>;

Retrieves roll data parameters. (ONS 15600 SDH only) Output format: SID DATE TIME M CTAG COMPLD "<FROM>,<TO>:RFROM=<RFROM>,RTO=<RTO>,[RMODE=<RMODE>], VLDSIG=<VLDSIG>" ;

Cross Connections

Table 3: Cross Connections

DLT-CRS-<PATH>:[<TID>]:<SRC>,<DST>:<CTAG>[:::CKTID=<CKTID>], [CMDMDE=<CMDMDE>]; Deletes a cross-connection between virtual channel (VC) paths.
ED-CRS-<PATH>:[<TID>]:<SRC>,<DST>:<CTAG>::[<CCT>]:[ADD=<ADD>], [REMOVE=<REMOVE>],[CKTID=<CKTID>],[CMDMDE=<CMDMDE>]:<PST>[,<SST>]]; Edits the state of a VC cross-connection.
ENT-CRS-<PATH>:[<TID>]:<SRC>,<DST>:<CTAG>::[<CCT>]:[DRITYPE=<DRITYPE>], [DRINODE=<DRINODE>],[CKTID=<CKTID>],[CMDMDE=<CMDMDE>]:[<PST>[,<SST>]]; Creates a VC cross-connection with cross-connection types.
RTRV-CRS:[<TID>]:[<AID>]:<CTAG>[:::CRSTYPE=<CRSTYPE>][:]; Retrieves all the cross-connections based on the required PATH types. Output format: SID DATE TIME M CTAG COMPLD "<SRC>,<DST>:<CCT>,<CRSTYPE>:[DRITYPE=<DRITYPE>],[DRINODE=<SYNCSW>], [CKTID=<CKTID>]:<PSTPSTQ>,[<SSTQ>]" ;
RTRV-CRS-<PATH>:[<TID>]:<SRC>:<CTAG>[::::]; Retrieves any connections associated with the entered AIDs or AID range; end information is returned with the type of connection. Output format: SID DATE TIME M CTAG COMPLD "<SRC>,<DST>:<CCT>,<CRSTYPE>:[DRITYPE=<DRITYPE>],[DRINODE=<DRINODE>], [CKTID=<CKTID>]:<PSTPSTQ>,[<SSTQ>]" ;

DWDM

Table 4: DWDM

DLT-FFP-<MOD2DWDMPAYLOAD>:[<TID>]:<SRC>,<DST>:<CTAG>[:::]; Deletes Y-cable protection on client facilities.
DLT-LMP-CTRL:[<TID>]:<SRC>:<CTAG>; Deletes a link management protocol (LMP) control channel.

DLT-LMP-TLINK:[<TID>]:<SRC>:<CTAG>; Deletes an LMP traffic engineering (TE) link.
DLT-LMP-DLINK:[<TID>]:<SRC>:<CTAG>; Deletes an LMP data link.
DLT-LNK:[<TID>]:<FROM>,<TO>:<CTAG>; Deletes an optical link between two optical connection points.
DLT-OCHCC:[<TID>]:<AID>:<CTAG>[:::CKTID=<CKTID>],[CMDMDE=<CMDMDE>]; Deletes the optical channel (OCH) client connection.
DLT-OCHNC:[<TID>]:<SRC>,<DST>:<CTAG>:::[CKTID=<CKTID>], [CMDMDE=<CMDMDE>]; Deletes the OCH network connection.
DLT-WDMSIDE:[<TID>]:<AID>:<CTAG>[::::]; Deletes a wavelength division multiplexing (WDM) side.
DLT-OSC:[<TID>]:<AID>:<CTAG>; Deletes the optical service channel (OSC) group on an NE.
ED-<MOD2DWDMPAYLOAD>:[<TID>]:<AID>:<CTAG>:::[NAME=<NAME>], [CMDMDE=<CMDMDE>],[FREQ=<FREQ>],[LOSSB=<LOSSB>]:[<PST>[,<SST>]]; Edits the operating parameters for a dense wavelength division multiplexing (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>][:]; Changes the default protection group provisioning on the DWDM port of a TXP_MR_2.5G or TXPP_MR_2.5G card.
ED-LMP:[<TID>]::<CTAG>:::[ENABLED=<ENABLED>],[WDMEXT=<WDM>], [ROLE=<ROLE>], [LMPNODEID-<NODEID>][:]; Edits the global LMP attributes.
ED-LMP-CTRL:[<TID>]:<SRC>:<CTAG>:::[LOCALPORT=<LOCALPORT>], [REMOTENE=<REMOTENE>],[REMOTEIP=<REMOTEIP>],[HELLO=<HELLO>], [HELLOMIN=<HELLOMIN>],[HELLOMAX=<HELLOMAX>],[DEAD=<DEAD>], [DEADMIN=<DEADMIN>], [DEADMAX=<DEADMAX>]:[<PST>][,<SST>]; Edits an LMP control channel.
ED-LMP-TLINK:[<TID>]:<SRC>:<CTAG>:::REMOTEID=<REMOTE_ID>, REMOTETE=<REMOTE_TELINK>, [MUXCAP=<MUX_CAP>]:[<PST>[,<SST>]];

Edits an LMP TE link.
ED-LMP-DLINK:[<TID>]:<SRC>:<CTAG>:::[LINKTYPE=<LINKTYPE>],TELINK=<TELINK>, REMOTEID=<REMOTEID>; Edits an LMP data link.
ED-LNK:[<TID>]:<FROM>,<TO>:<CTAG>:::[CMDMDE=<CMDMDE>]: [<PST>[,<SST>]]; Edits an optical link.
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>], [SYNCMSG=<SYNCMSG>],[SENDDUS=<SENDDUS>],[SOAK=<SOAK>],[OSPF=<OSPF>], [MFS=<MFS>],[CMDMDE=<CMDMDE>]:[<PST>[,<SST>]]; Modifies the service parameter attributes and state of an OCH facility.
ED-OCHCC:[<TID>]:<AID>:<CTAG>[:::CKTID=<CKTID>], [CMDMDE=<CMDMDE>]:[<PST>[,<SST>]]; Edits the OCH client connection.
ED-OCHNC:[<TID>]:<SRC>,<DST>:<CTAG>:::[CKTID=<CKTID>], [CMDMDE=<CMDMDE>]:[<PST>[,<SST>]]; Edits the OCH network connection.
ED-OMS:[<TID>]:<AID>:<CTAG>:::[RDIRN=<RDIRN>],[EXPBAND=<EXPBAND>], [VOAATTN=<VOAATTN>],[VOAPWR=<VOAPWR>],[CALOPWR=<CALOPWR>], [CHPOWER=<CHPOWER>],[NAME=<NAME>],[SOAK=<SOAK>], [CMDMDE=<CMDMDE>]:[<PST>[,<SST>]]; Modifies the service parameter attributes 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>],[OFFSET=<OFFSET>],[CALTILT=<CALTILT>],[OSRI=<OSRI>], [AMPLMODE=<AMPLMODE>],[CHPOWER=<CHPOWER>],[EXPGAIN=<EXPGAIN>], [NAME=<NAME>],[SOAK=<SOAK>],[CMDMDE=<CMDMDE>]:[<PST>[,<SST>]]; Modifies the service parameter attributes and state of an optical transport section (OTS) facility.
ED-SLV-WDMANS:[<TID>]:<AID>:<CTAG>:::[HIGHSLVEXP=<HIGHSLVEXP>], [LOWSLVEXP=<LOWSLVEXP>]; Provisions 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>:::[POWERIN=<POWERIN>], [POWEROUT=<POWEROUT>],[POWEREXP=<POWEREXP>],[POWEROSC=<POWEROSC>],

[NTWTYPE=<RINGTYPE>],[PPMESH=<PPMESH>],[DITHER=<DITHER>]; Modifies the automatic optical node setup (AONS) application attributes.
ED-WDMSIDE:[<TID>]:<AID>:<CTAG>:::[NEWSIDE=<NEWSIDE>][:]; Modifies the WDM node side attribute.
ENT-FFP-<MOD2DWDMPAYLOAD>:[<TID>]:<SRC>, <DST>:<CTAG>:::[PROTTYPE=<PROTTYPE>],[PROTID=<PROTID>],[RVRTV=<RVRTV>], [RVTM=<RVTM>],[PSDIRN=<PSDIRN>][:]; Creates Y-cable protection on client facilities.
ED-LMP:[<TID>]::<CTAG>:::[ENABLED=<ENABLED>],[WDMEXT=<WDM>], [ROLE=<ROLE>], [LMPNODEID-<NODEID>][:]; Edits the global LMP attributes.
ENT-LMP-CTRL:[<TID>]:<SRC>:<CTAG>:::[LOCALPORT=<LOCALPORT>], [REMOTENE=<REMOTENE>],[REMOTEIP=<REMOTEIP>],[HELLO=<HELLO>], [HELLOMIN=<HELLOMIN>],[HELLOMAX=<HELLOMAX>],[DEAD=<DEAD>], [DEADMIN=<DEADMIN>], [DEADMAX=<DEADMAX>]:[<PST>][,<SST>]; Creates an LMP control channel.
ENT-LMP-TLINK:[<TID>]:<SRC>:<CTAG>:::REMOTEID=<REMOTE_ID>, REMOTETE=<REMOTE_TELINK>, [MUXCAP=<MUXCAP>]:[<PST>[,<SST>]]; Creates an LMP TE link.
ENT-LMP-DLINK:[<TID>]:<SRC>:<CTAG>:::[LINKTYPE=<LINKTYPE>], TELINK=<TELINK>,REMOTEID=<REMOTEID>; Creates an LMP data link.
ENT-LNK:[<TID>]:<FROM>,<TO>:<CTAG>::::[<PST>[,<SST>]]; Creates an optical link between two optical connection points.
ENT-OCHCC:[<TID>]:<AID>:<CTAG>[:::CKTID=<CKTID>], [CMDMDE=<CMDMDE>]:[<PST>][,<SST>]; Allocates an OCH client connection.
ENT-OCHNC:[<TID>]:<SRC>,<DST>:<CTAG>::[<WCT>]:[CKTID=<CKTID>], [CMDMDE=<CMDMDE>]:[<PST>[,<SST>]]; Allocates an OCH network connection.
ENT-OSC:[<TID>]:<AID>:<CTAG>:::[RINGID=<RINGID>],[NODEID=<NODEID>], [EAST=<EAST>],[WEST=<WEST>]; Creates the OSC group on an NE.
ENT-WDMSIDE:[<TID>]:<AID>:<CTAG>:::LINEIN=<LINEIN>,LINEOUT=<LINEOUT>[:]; Adds a new WDM node side and defines its attributes.
OPR-APC:[<TID>]::<CTAG>[::::]; Permit the NE's APC application to force regulation of the optical power to the DWDM ring.

OPR-LASER-OTS:[<TID>]:<AID>:<CTAG>; Instructs a laser to be switched on.
OPR-LNK:[<TID>]::<CTAG>; Permits the NE's optical link (OLNK) application to calculate all automatic optical links between points that can be identified by the NE.
OPR-PROTNSW-OCH:[<TID>]:<AID>:<CTAG>::<SW>; Performs a protection switch on the trunk port of a TXPP_MR_2.5G transponder (protect version only).
OPR-SLV-WDMANS:[<TID>]:<AID>:<CTAG>; Invokes the calculation of the expected span loss verification.
OPR-WDMANS:[<TID>]::<CTAG>; Permits the NE's AONS application to force a recalculation of the value assigned to all variable optical attenuators (VOAs) representing the optical path inside the node.
RLS-LASER-OTS:[<TID>]:<AID>:<CTAG>; Instructs a laser to be switched off.
RLS-PROTNSW-<MOD2DWDMPAYLOAD>:[<TID>]:<SRC>:<CTAG>[::]; Releases the Y-cable protection switch on client facilities.
RLS-PROTNSW-OCH:[<TID>]:<AID>:<CTAG>; Releases the protection switch on a TXPP_MR_2.5G transponder trunk port (protect version only).
RTRV-<MOD2DWDMPAYLOAD>:[<TID>]:<AID>:<CTAG>[::::]; Retrieves the configuration parameter of a DWDM client. Output format: SID DATE TIME M CTAG COMPLD "<AIDUNIONID>,<AIDTYPE>:,,[<ROLE>],[<STATUS>]:[NAME=<NAME>],[LBCL=<LBCL>], [OPT=<OPT>],[OPR=<OPR>],[FREQ=<FREQ>],[LOSSB=<LOSSB>]:<PSTPSTQ>,[<SST>]" ;
RTRV-ALMTH-<MOD2>:[<TID>]:<AID>:<CTAG>::[<CONDTYPE>][,,::]; Retrieves the alarm threshold values. Output format: SID DATE TIME M CTAG COMPLD "<AID>,<MOD>:<CONDTYPE>,,,<THLEVEL>" ;
RTRV-APC:[<TID>]::<CTAG>; Retrieves the NE's 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>::[PROTTYPE=<PROTTYPE>],[PROTID=<PROTID>], [RVRTV=<RVRTV>],[RVTM=<RVTM>],[PSDIRN=<PSDIRN>]" ;
RTRV-FFP-OCH:[<TID>]:<AID>:<CTAG>[::::]; Retrieves the protection group information for the TXP_MR_2.5G or TXPP_MR_2.5G transponder trunk port. Output format: SID DATE TIME M CTAG COMPLD "<WORK>,<PROTECT>::[PROTTYPE=<PROTTYPE>],[PROTID=<PROTID>], [RVRTV=<RVRTV>],[RVTM=<RVTM>],[PSDIRN=<PSDIRN>]" ;
RTRV-LMP:[<TID>]::<CTAG>; Retrieves the global LMP attributes. Output format: SID DATE TIME M CTAG COMPLD "::ENABLE=<ENABLE>,[WDM=<LOCALPORT>],[ROLE=<ROLE>],[NODEID=<NODEID>], [OPSTATE=<OPSTATE>]"
RTRV-LMP-CTRL:[<TID>]:<SRC>:<CTAG>; Retrieves an LMP control channel. Output format: SID DATE TIME M CTAG COMPLD "<AID>::REMOTEID=<REMOTEID>,LOCALPORT=<LOCALPORT>, REMOTEIP=<REMOTEP>,[HELLO=<HELLO>],[HELLOMIN=<HELLOMIN>], [HELLOMAX=<HELLOMAX>],[DEAD=<DEAD>],[DEADMIN=<DEADMIN>], [DEADMAX=<DEADMAX>],[OPSTATE=<OPSTATE>]:[<PST>[,<SST>]]"
RTRV-LMP-TLINK:[<TID>]:<SRC>:<CTAG>; Retrieves an LMP TE link. Output format: SID DATE TIME

M CTAG COMPLD "<SRC>::[REMOTEID=<REMOTEID>],[DWDM=<DWDM>],[REMOTETE=<REMOTETE>], [MUXCAP=<MUXCAP>],[OPSTATE=<OPSTATE>]:[<PST>[,<SST>]]"
RTRV-LMP-DLINK:[<TID>]:<SRC>:<CTAG>; Retrieves an LMP data link. Output format: SID DATE TIME M CTAG COMPLD "<AID>::[LINKTYPE=<LINKTYPE>],[REMOTEID=<REMOTEID>],[TELINK=<TELINK>], [OPSTATE=<OPSTATE>]"
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=<OPTICALLINKTYPE>],[CTYPE=<CREATIONTYPE>], [RDIRN=<RDIRN>],[BAND=<BAND>],[WLEN=<WLEN>]:<PST_PSTQ>,[<SST>]" ;
RTRV-NE-APC:[<TID>]:[<AID>]:<CTAG>; Retrieves the NE's APC application ports involved in node setup regulation. Output format: SID DATE TIME M CTAG COMPLD "<AID>,<MOD>::[MODIFDAT=<MODIFDAT>],[MODIFTM=<MODIFTM>], [CHECKDAT=<CHECKDAT>],[CHECKTM=<CHECKTM>]" ;
RTRV-NE-WDMANS:[<TID>]:[<AID>]:<CTAG>; Retrieves the NE's optical node setup (WDMANS) application ports involved in node setup regulation. Output format: SID DATE TIME M CTAG COMPLD "<AID>,<AIDTYPE>::[REGULATED=<REGULATED>],[PARAM=<PARAM>]" ;
RTRV-OCH:[<TID>]:<AID>:<CTAG>;

Retrieves the service parameter attributes 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>],[SYNCMSG=<SYNCMSG>],[SENDDUS=<SENDDUS>], [SOAK=<SOAK>],[SOAKLEFT=<SOAKLEFT>],[OSPF=<OSPF>],[LBCL=<LBCL>], [OPT=<OPT>],[OPR=<OPR>]:<PST_PSTQ>,[<SSTQ>]" ;
RTRV-OCHCC:[<TID>]:<AID>:<CTAG>; Retrieves the OCH client connection provisioning information. Output format: SID DATE TIME M CTAG COMPLD "<AID>::[PAYLOAD=<PAYLOAD>],[CTKID=<CTKID>]:<PSTPSTQ>" ;
RTRV-OCHNC:[<TID>]:<AID>:<CTAG>[::::]; Retrieves the OCH wavelength connection provisioning information. Output format: SID DATE TIME M CTAG COMPLD "<SRC>,<DST>:<WCT>:[CKTID=<CKTID>]::<PSTPSTQ>" ;
RTRV-OMS:[<TID>]:<AID>:<CTAG>; Retrieves the service parameter attributes 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>]" ;
RTRV-OPM:[<TID>]:<AID>:<CTAG>[::::]; Retrieves the optical power monitoring parameters present at the OCH layer in a reconfigurable optical add/drop multiplexing (ROADM) node. Output format:

SID DATE TIME M CTAG COMPLD "<AID>::[POWEROUT=<POWEROUT>],[POWERADD=<POWERADD>], [POWERPT=<POWERPT>]" ;
RTRV-OSC:[<TID>]:<AID>:<CTAG>; Retrieves all OSC information from 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 service parameter attributes 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>],[OSRI=<OSRI>],[AMPLMODE=<AMPLMODE>], [CHPOWER=<CHPOWER>],[GAIN=<GAIN>],[EXPGAIN=<EXPGAIN>], [REFOPWR=<REFOPWR>],[OFFSET=<OFFSET>],[REFTILT=<REFTILT>], [CALTILT=<CALTILT>],[ASEOPWR=<ASEOPWR>],[DCULOSS=<DCULOSS>], [AWGST=<AWGST>],[HEATST=<HEATST>],[NAME=<NAME>]:<PST_PSTQ>,[<SSTQ>]" ;
RTRV-PATH-OCH:[<TID>]:<AID>:<CTAG>; Retrieves the OCH path inside a node. Output format: SID DATE TIME M CTAG COMPLD "<AID>:[WLEN],[PATH]:" ;
RTRV-PROTNSW-OCH:[<TID>]:<AID>:<CTAG>; Retrieves the protection switch status of a TXPP_MR_2.5G transponder trunk port (protect version only). 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-WDMASN 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 security trace information. 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 AONS application attributes. Output format: SID DATE TIME M CTAG COMPLD "<AID>::[POWERIN=<POWERIN>],[POWEROUT=<POWEROUT>], [POWEREXP=<POWEREXP>],[NTWTYPE=<NTWTYPE>], [OPTICALTYPE=<OPTICALTYPE>],[LASTRUNDAT=<LASTRUNDAT>], [LASTRUNTM=<LASTRUNTM>]" ;
RTRV-WDMSIDE:[<TID>]:<AID>:<CTAG>[::::]; Retrieves the WDM side and defines its attributes. Output format: SID DATE TIME M CTAG COMPLD "<AID>::LINEIN=<LINEIN>,LINEOUT=<LINEOUT>,[OCS=<OSC>][:]" ;
RTRV-WLEN:[<TID>]:<AID>:<CTAG>; Retrieves the wavelength provisioning information. Output format: SID DATE TIME M CTAG COMPLD "<AID>:<CCT>:[SIZE=<SIZE>],[CKTID=<CKTID>],[TOSIDE=<TOSIDE>],[SRC=<SRC>], [DST=<DST>]:<PST_PSTQ>,[<SSTQ>]" ;
SET-ALMTH-<MOD2>:[<TID>]:<AID>:<CTAG>::<CONDTYPE>,<THLEV>[,,,]; Sets the alarm thresholds on the following cards/ports/channels: MXP_2.5G_10G/TXP_MR_10G, optical service channel, optical amplifier, dispersion compensation units, multiplex/demultiplex and OADM.

ENE

Table 5: ENE

DLT-FTPSERVER:[<TID>]::<CTAG>:::IPADDR=<IPADDR>; Deletes FTP server entries.
ED-FTPSERVER:[<TID>]::<CTAG>:::IPADDR=<IPADDR>,[ENABLE=<ENABLE>]; Edits FTP server entries.

ENT-FTPSERVER:[<TID>]::<CTAG>:::IPADDR=<IPADDR>,IPMASK=<IPMASK>, ENABLE=<ENABLE>,[TIMER=<TIMER>]; Creates FTP server entries.
RTRV-FTPSERVER:[<TID>]::<CTAG>:::[IPADDR=<IPADDR>],[IPMASK=<IPMASK>], [ENABLE=<ENABLE>]; Retrieves FTP server entries. Output format: SID DATE TIME M CTAG COMPLD ",:IPADDR=<IPADDR>,IPMASK=<IPMASK>, ENABLE=<ENABLE>,TIMER=<TIMER>" ;

Environment

Table 6: Environment

OPR-ACO-ALL:[<TID>]:[<AID>]:<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. Output format: SID DATE TIME ** ATAG REPT ALM ENV "<AID>:<NTFCNCDE>,<ALMTYPE>,[<OCRDAT>],[<OCRTM>],[<DESC>]" ;
REPT EVT ENV: Reports a non-alarmed event against an environmental alarm input. 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>,[<OCRDAT>],[<OCRTM>],[<DESC>]" ;
RTRV-ATTR-CONT:[<TID>]:<AID>:<CTAG>[::<CONTTYPE>]; Retrieves attributes associated with an external control. Output format:

SID DATE TIME M CTAG COMPLD "<AID>:[<CONTTYPE>]" ;
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>]" ;
RTRV-COND-ENV:[<TID>]:<AID>:<CTAG>::[<NTFCNCDE>],[<ALMTYPE>][,,,]; Retrieves the environmental conditions. Output format: SID DATE TIME M CTAG COMPLD "<AID>:<NTFCNCDE>,<ALMTYPE>,[<OCRDAT>],[<OCRTM>],,,,[<DESC>]" ;
RTRV-EXT-CONT:[<TID>]:<AID>:<CTAG>[::<CONTTYPE>]; Instructs an NE to report the control state of an external control. Output format: SID DATE TIME M CTAG COMPLD "<AID>:[<CONTTYPE>],<DUR>,[<CONTSTATE>]" ;
SET-ATTR-CONT:[<TID>]:<AID>:<CTAG>[::<CONTTYPE>]; Instructs the NE to set the attributes associated with an external control.
SET-ATTR-ENV:[<TID>]:<AID>:<CTAG>::<NTFCNCDE>,<ALMTYPE>,<ALMMSG>; Sets attributes associated with an external control.

Equipment

Table 7: Equipment

ALW-SWTOPROTN-EQPT:[<TID>]:<AID>:<CTAG>[::<DIRN>]; Allows automatic or manual switching of a card/port back to a protection status.
ALW-SWTOWKG-EQPT:[<TID>]:<AID>:<CTAG>[::<DIRN>]; Allows automatic or manual switching of a card/port back to a working status.
DLT-EQPT:[<TID>]:<AID>:<CTAG>[:::]; Deletes a card from the NE. Deletes a shelf that is no longer used.
ED-EQPT:[<TID>]:<AID>:<CTAG>:::[PROTID=<PROTID>],[PRTYPE=<PRTYPE>], [RVRTV=<RVRTV>],[RVTM=<RVTM>],[CMDMDE=<CMDMDE>], [CARDMODE=<CARDMODE>],[PEERID=<PEERID>],[REGENNAME=<REGENNAME>], [PWL=<PWL>],[RETIME=<RETIME>],[SHELFROLE=<SHELFROLE>], [NEWSHELFID=<NEWSHELFID>]:[<PST>[,<SST>]]; Edits the attributes for a specific equipment slot in the NE. Modifies a shelf role from node controller (NC) to shelf controller (SC) on an NE configured in multishelf mode.

ENT-EQPT:[<TID>]:<AID>:<CTAG>::[<EQPTTYPE>]:[PROTID=<PROTID>], [PRTYPE=<PRTYPE>],[RVRTV=<RVRTV>],[RVTM=<RVTM>], [CARDMODE=<CARDMODE>],[PEERID=<PEERID>],[REGENNAME=<REGENNAME>], [CMDMDE=<CMDMDE>],[TRANSMODE=<TRANSMODE>],[RETIME=<RETIME>], [SHELFROLE=<SHELFROLE>][:]; Enters the card type and attributes for a specific equipment slot in the NE. Preprovisions an NE configured in multishelf mode.
INH-SWDX-EQPT:[<TID>]:<AID>:<CTAG>[::]; Inhibits the automatic or manual switching on an NE containing duplex equipment.
INH-SWTOPROTN-EQPT:[<TID>]:<AID>:<CTAG>[::<DIRN>]; Inhibits automatic or manual switching of a card/port to protection.
INH-SWTOWKG-EQPT:[<TID>]:<AID>:<CTAG>[::<DIRN>]; Inhibits automatic or manual switching of a card/port back to the working card/port.
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>,[<OCRDAT>], [<OCRTM>],,:[<DESC>],[<AIDDET>" ;
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>:<CONDTYPE>,[<CONDEFF>],,,,,,,,:[<DESC>],[<AIDDET>]" ;
RMV-EQPT:[<TID>]:<AID>:<CTAG>[::]; Removes a card from the In Service (IS) state and places it into the Maintenance (MS) state.
RST-EQPT:[<TID>]:<AID>:<CTAG>[::]; Provisions equipment IS. This command is applicable only to equipment in transition from the MS to the IS state.
RTRV-ALM-EQPT:[<TID>]:<AID>:<CTAG>::[<NTFCNCDE>],[<CONDTYPE>], [<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>,<CONDTYPE>,<SRVEFF>,[<OCRDAT>], [<OCRTM>],,:[<DESC>]" ;
RTRV-ALMTH-EQPT:[<TID>]:[<AID>]:<CTAG>::[<CONDTYPE>][,,::];

Retrieves the alarm thresholds for the power level monitoring. Output format: SID DATE TIME M CTAG COMPLD "[<AID>],<MOD2B>:<CONDTYPE>,,,<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>], [<OCRTM>],,,[<DESC>]" ;
RTRV-EQPT:[<TID>]:<AID>:<CTAG>[::::]; Retrieves the data parameters and state parameters associated with an equipment unit. Also retrieves shelf parameters. Output format: SID DATE TIME M CTAG COMPLD "<AID>:<AIDTYPE>,<EQUIP>,[<ROLE>],[<STATUS>]:[PROTID=<PROTID>], [PRTYPE=<PRTYPE>],[RVRTV=<RVRTV>],[RVTM=<RVTM>], [CARDNAME=<CARDNAME>],[IOSCFG=<IOSCFG>],[CARDMODE=<CARDMODE>], [PEERID=<PEERID>],[REGENNAME=<REGENNAME>,][TRANSMODE=<TRANSMODE>], [RETIME=<RETIME>],[SHELFROLE=<SHELFROLE>]:[<PST_PSTQ>],[<SSTQ>]" ;
SET-ALMTH-EQPT:[<TID>]:[<AID>]:<CTAG>::<CONDTYPE>,<THLEV>[,,,]; Set the alarm threshold to manage the power level monitoring.
SW-DX-EQPT:[<TID>]:<SRC>:<CTAG>::[<MODE>][,]; Switches a cross-connect card with the redundant card within the NE.
SW-TOPROTN-EQPT:[<TID>]:<AID>:<CTAG>::[<MODE>],[<PROTID>],[<DIRN>]; Performs a card/port protection switch.
SW-TOWKG-EQPT:[<TID>]:<AID>:<CTAG>::[<MODE>],[<DIRN>]; Switches the protected working card/port back to the working card/port.

Ethernet

Table 8: Ethernet

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

Edits the front-end port information of a 10/100/1000 Mbps Ethernet card. (Not supported by the ONS 15600 SDH)
RTRV-ETH:[<TID>]:<AID>:<CTAG>[:::]; Retrieves the front-end port information of an Ethernet card. (Not supported by the ONS 15600 SDH) Output format: SID DATE TIME M CTAG COMPLD "<AID>::[LINKSTATE=<LINKSTATE>],[FLOWCTRL=<FLOWCTRL>],[DUPLEX=<DUPLEX>], [SPEED=<SPEED>],[FLOW=<FLOW>],[EXPDUPLEX=<EXPDUPLEX>], [EXPSPEED=<EXPSPEED>],[VLANCOS=<VLANCOS>],[IPTOS=<IPTOS>], [OPTICS=<OPTICS>],[NAME=<NAME>],[SOAK=<SOAK>],[SOAKLEFT=<SOAKLEFT>], [SELECTIVEAUTO=<SELECTIVEAUTO>]:<PST_PSTQ>,[<SSTQ>]"

Fault

Table 9: 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>,[<OCRDAT>], [<OCRTM>],,:[<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>,[<OCRDAT>],[<OCRTM>],,:[<DESC>]" ;
REPT ALM LMP Reports a customer-defined condition on an environmental alarm input. SID DATE TIME** ATAG REPT ALM LMP "[<AID>]:<NTFCNCDE>,<CONDTYPE>,<SRVEFF>,[<OCRDAT>],[<OCRTM>],,:[<DESC>]"
REPT EVT <MOD2ALM> Reports the occurrence of a non-alarmed event. Output format: SID DATE TIME A ATAG REPT EVT <MOD2ALM> "<AID>:<CONDTYPE>,[<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>]" ;
RTRV-ALM-ALL:[<TID>]:[<AID>]:<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>, <OCRDAT>,<OCRTM>,,:[<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>]" ;

File Transfer

Table 10: File Transfer

APPLY:[<TID>]::<CTAG>[::<MEM_SW_TYPE>]; Activates or reverts a software load during a software upgrade or downgrade.
COPY-IOSCFG:[<TID>]:<AID>:<CTAG>::SRC=<SRC>,DEST=<DEST>; Uploads the startup IOS configuration file from the network to the node. Downloads the startup IOS configuration file from the node to the network.
COPY-RFILE:[<TID>]:<SRC>:<CTAG>::TYPE=<XFERTYPE>,[SRC=<SRC1>], [DEST=<DEST>],[OVWRT=<OVWRT>],[FTTD=<FTTD>]; Downloads a new software package from the location specified by the FTP URL. Performs backup/restore on the database and archives the auditlog.
REPT EVT FXFR Reports the FTP software download status of the start, completion, and completed percentage. Output format:

SID DATE TIME A ATAG REPT EVT FXFR "<FILENAME>,<FXFR_STATUS>,[<FXFR_RSLT>],[<PRCNT_XFRD>]" ;
REPT EVT IOSCFG Reports the copying status of the IOS configuration file when the COPY-IOSCFG command is issued. Output format: SID DATE TIME A ATAG REPT EVT IOSCFG "<AID>:<SRC>,<DEST>,<STATUS>,[<RESULT>]" ;

Log

Table 11: 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-AUDIT-LOG:[<TID>]::<CTAG>; Retrieves the contents of the audit log stored in the NE. Output format: SID DATE TIME M CTAG COMPLD "<ENTRYNUM>,<OCRDAT>,<OCRTM>,<TASKID>,<TXSTATUS>,<DESCRIPTION>"
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>" ;

Network

Table 12: Network

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

Reports all the NE attributes that are reachable from the gateway NE (GNE).
RTRV-NE-IPMAP:[<TID>]:[<AID>]:<CTAG>; Retrieves the IP address and node name of the NEs that have the data communications channel (DCC) connection with this NE. Output format: SID DATE TIME M CTAG COMPLD "<AID>:<IPADDR>,<NODENAME>" ;

Paths

Table 13: 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>]]; Modifies the attributes associated with a VC or virtual tributary (VT) path.
RTRV-<PATH>:[<TID>]:<AID>:<CTAG>[:::MSSPRPTHTYPE=<MSSPRPTHTYPE>][:]; Retrieves the attributes associated with an SDH high/low order 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>],[SNCPPTHSTATE=<SNCPPTHSTATE>], [C2=<C>],[MSSPRPTHSTATE=<MSSPRPTHSTATE>]:<PSTPSTQ>,[<SSTQ>]" ;

Performance

Table 14: Performance

ALW-PMREPT-ALL:[<TID>]::<CTAG>; Resumes the processing of all inhibited performance monitoring (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 PM registers.
REPT PM <MOD2>   Reports scheduled PM statistics 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-BFDLPM-<MOD2>:[<TID>]:<AID>:<CTAG>:::REQTYPE=<REQTYPE>;   Retrieves the BFDL PM parameters.   Output format: SID DATE TIME M CTAG COMPLD "<AID>:<MONTYPE>,<MONVAL>,<BUCKET>" ;
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>,[<AIDTYPE>]:<MONTYPE>,<MONVAL>,[<VLDTY>],[<LOCN>],[<DIRECTION>],   [<TMPER>],[<MONDAT>],[<MONTM>]" ;
RTRV-PM-ALL:[<TID>]:<AID>:<CTAG>::[<MONTYPE>],[<MONLEV>],[<LOCN>],   [<DIRECTION>],[<TMPER>],[<DATE>],[<TIME>];   Retrieves the values of all the performance monitoring parameters for the specified AID.   SID DATE TIME M CTAG COMPLD   "<AID>,[<AIDTYPE>]:<MONTYPE>,<MONVAL>,[<VLDTY>],[<LOCN>],[<DIRECTION>],   [<TMPER>],[<MONDAT>],[<MONTM>]" ;
RTRV-PMMODE-<VC_PATH>:[<TID>]:<SRC>:<CTAG>::<LSTM>;   Retrieves the PM mode that was set in the NE data collection.   Output format: SID DATE TIME M CTAG COMPLD "<CROSSCONNECTID>:[<LSTM>],<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 command. Output format: SID DATE TIME M CTAG COMPLD "<AID>,[<AIDTYPE>]:<REPTINVL>,<REPTDAT>,<REPTTM>,[<NUMINVL>],, [<MONLEV>],<LOCN>,,[<TMPER>],<TMOFST>,[<INHMODE>]" ;
RTRV-RMONTH-<MOD2_RMON>:[<TID>]:<AID>:<CTAG>::[<MONTYPE>],,,, [<INTVL>]:[RISE=<RISE>],[FALL=<FALL>],[SAMPLE=<SAMPLE>],[STARTUP=<STARTUP>] [:]; Retrieves the thresholds defined in the RMON alarm table. Output format: SID DATE TIME M CTAG COMPLD "<AIDUNIONID>,<AIDTYPE>:<MONTYPE>,,,,<INTVL>:INDEX=<INDEX>,RISE=<RISE>, FALL=<FALL>,SAMPLE=<SAMPLE>,STARTUP=<STARTUP>" ;
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>]" ;
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 PM data for a line facility or an STM/VC 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.

Ports

Table 15: Ports

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

Deletes the specified port.
DLT-NNI-ETH:[<TID>]:<AID>:<CTAG>::<SVLANID>[::]; Deletes the network-to-netowork interface (NNI) SVLAN ID for the NNI of an L2 Ethernet port.
DLT-QNQ-ETH:[<TID>]:<AID>:<CTAG>::<FIRSTCEVLANID>,<LASTCEVLANID>, <SVLANID>[::]; Deletes the IEEE 802.1Q tunneling (QinQ) relationship between the CE-VLAN and the S-VLAN for Gigabit Ethernet uniport provisioning associated to an L2 Ethernet port.
DLT-VLAN:[<TID>]:<AID>:<CTAG>[::::]; Deletes a virtual LAN from the VLAN database.
ED-<GIGE_TYPE>:[<TID>]:<AID>:<CTAG>:::[ADMINSTATE=<ADMINSTATE>], [LINKSTATE=<LINKSTATE>],[MTU=<MTU>],[FLOWCTRL=<FLOWCTRL>], [AUTONEG=<AUTONEG>],[HIWMRK=<HIWMRK>],[LOWMRK=<LOWMRK>], [OPTICS=<OPTICS>],[DUPLEX=<DUPLEX>],[SPEED=<SPEED>],[NAME=<NAME>], [CMDMDE=<CMDMDE>],[MACADDR=<MACADDR>],[FREQ=<FREQ>],[LOSSB=<LOSSB>], [SOAK=<SOAK>]:[<PST>[,<SST>]]; Edits Gigabit Ethernet facility attributes.
ED-<MOD1FCPAYLOAD>:[<TID>]:<AID>:<CTAG>:::[LINKRCVRY=<LINKRCVRY>], [DISTEXTN=<DISTEXTN>],[AUTODETECTION=<AUTODETECTION>], [LINKCREDITS=<LINKCREDITS>],[MFS=<MFS>],[NAME=<NAME>], [CMDMDE=<CMDMDE>],[SOAK=<SOAK>],[FREQ=<FREQ>], [LOSSB=<LOSSB>]:[<PST>[,<SST>]]; Edits the attributes related to the Fibre Channel facility.
ED-<MOD1FICONPAYLOAD>:[<TID>]:<AID>:<CTAG>:::[LINKRCVRY=<LINKRCVRY>], [DISTEXTN=<DISTEXTN>],[AUTODETECTION=<AUTODETECTION>], [LINKCREDITS=<LINKCREDITS>],[MFS=<MFS>],[NAME=<NAME>], [CMDMDE=<CMDMDE>],[SOAK=<SOAK>],[FREQ=<FREQ>], [LOSSB=<LOSSB>]:[<PST>[,<SST>]]; Edits the attributes related to the FICON payload facility.
ED-<STM_TYPE>:[<TID>]:<AID>:<CTAG>:::[DCC=<DCC>],[AREA=<AREA>], [SYNCMSG=<SYNCMSG>],[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>], [TRCFORMAT=<TRCFORMAT>],[ADMSSM=<ADMSSM>],[SENDDUSFF=<SENDDUSFF>], [AISONLPBK=<AISONLPBK>],[FREQ=<FREQ>],[LOSSB=<LOSSB>], [FOREIGNFEND=<FOREIGNFEND>],[FOREIGNIP=<FOREIGNIP>]:[<PST>[,<SST>]]; Modifies the service parameter attributes and state of an STM facility.
ED-ALS:[<TID>]:<SRC>:<CTAG>:::[ALSMODE=<ALSMODE>],[ALSRCINT=<ALSRCINT>], [ALSRCPW=<ALSRCPW>][:]; Modifies the automatic laser shutdown (ALS) attributes of an STM facility and in general for all the facilities that support the ALS feature. (Not supported by ONS 15600)

ED-COS-ETH:[<TID>]:<AID>:<CTAG>:::[QOSENABLED=<QOSENABLED>],[BW0=<BWO>], [WEIGHT0=<WEIGHT0>],[BW1=<BW1>],[WEIGHT1=<WEIGHT1>],[BW2=<BW2>], [WEIGHT2=<WEIGHT2>],[BW3=<BW3>],[WEIGHT3=<WEIGHT3>],[BW4=<BW4>], [WEIGHT4=<WEIGHT4>],[BW5=<BW5>],[WEIGHT5=<WEIGHT5>],[BW6=<BW6>], [WEIGHT6=<WEIGHT6>],[BW7=<BW7>],[WEIGHT7=<WEIGHT7>][:]; Edits the egress parameter of a cost-of-service table associated to an L2 Ethernet port.
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>]]; Modifies the attributes of a DS3i-N-12 facility. (Not supported by the ONS 15600 SDH)
ED-E1:[<TID>]:<AID>:<CTAG>:::[LINECDE=<LINECDE>],[FMT=<FMT>],[TACC=<TACC>], [TAPTYPE=<TAPTYPE>],[SFBER=<SFBER>],[SDBER=<SDBER>],[SOAK=<SOAK>], [NAME=<NAME>],[CMDMDE=<CMDMDE>],[SYNCMSG=<SYNCMSG>], [SENDDUS=<SENDDUS>],[RETIME=<RETIME>],[ADMSSM=<ADMSSM>], [SABIT=<SABIT>]:[<PST>[,<SST>]]; Supports provisioning of an E1 facility.
ED-E3:[<TID>]:<AID>:<CTAG>:::[TACC=<TACC>],[TAPTYPE=<TAPTYPE>], [SFBER=<SFBER>],[SDBER=<SDBER>],[SOAK=<SOAK>],[NAME=<NAME>], [CMDMDE=<CMDMDE>]:[<PST>[,<SST>]]; Supports provisioning of an E3 facility.
ED-E4:[<TID>]:<AID>:<CTAG>:::[SFBER=<SFBER>],[SDBER=<SDBER>],[SOAK=<SOAK>], [NAME=<NAME>],[CMDMDE=<CMDMDE>]:[<PST>[,<SST>]];[<DNFIELD>]; Modifies the attributes and the state of the E4 port facility.
ED-FAC:[<TID>]:<SRC>:<CTAG>:::[PAYLOAD=<PAYLOAD>], [CMDMDE=<CMDMDE>]:[<PST>[,<SST>]]; Provisions the payload (or signal) type of the facility.
ED-FSTE:[<TID>]:<AID>:<CTAG>:::[FLOW=<FLOW>],[EXPDUPLEX=<EXPDUPLEX>], [EXPSPEED=<EXPSPEED>],[SELECTIVEAUTO=<SELECTIVEAUTO>], [VLANCOS=<VLANCOS>],[IPTOS=<IPTOS>],[NAME=<NAME>], [CMDMDE=<CMDMDE>],[SUPPRESS=<SUPPRESS>],[SOAK=<SOAK>],: [<PST>[,<SST>]]; Edits the front-end port information of a Fast Ethernet (10/100 Mbps) card.
ED-G1000:[<TID>]:<AID>:<CTAG>:::[MFS=<MFS>],[FLOW=<FLOW>], [LOWMRK=<LOWMRK>],[HIWMRK=<HIWMRK>],[AUTONEG=<AUTONEG>], [NAME=<NAME>],[CMDMDE=<CMDMDE>],[SOAK=<SOAK>]:[<PST>[,<SST>]]; Modifies the attributes related to a G1000-4 port. (Not supported on the ONS 15600 SDH)
ED-GFP:[<TID>]:<AID>:<CTAG>:::[FCS=<FCS>],[AUTOTHGFPBUF=<AUTOTHGFPBUF>], [GFPBUF=<GFPBUF>],[FILTER=<FILTER>]; Edits the generic framing procedure (GFP) for GFP management.
ED-L2-ETH:[<TID>]:<AID>:<CTAG>:::[NIMODE=<NIMODE>], [MACLEARNING=<MACLEARNING>],[INGRESSCOS=<INGRESSCOS>], [ETHERCETYPE=<ETHERCETYPE>],[ETHERSTYPE=<ETHERSTYPE>],

[ALWMACADDR=<ALWMACADDR>],[INHMACADDR=<INHMACADDR>], [BPDU=<BPDU>],[BRIDGESTATE=<BRIDGESTATE>],[QNQMODE=<QNQMODE>], [TRNSPSVLAN=<TRNSPSVLAN>],[NAME=<NAME>],[CMDMDE=<CMDMDE>]: [<PST>[,<SST>]]; Edits the layer 2 port information of GE-XP and 10GE-XP Ethernet cards. (Not supported by the ONS 15600 SDH)
ED-POS:[<TID>]:<AID>:<CTAG>:::[ENCAP=<ENCAP>],[NAME=<NAME>], [CMDMDE=<CMDMDE>],[SOAK=<SOAK>]:[<PST>[,<SST>]]; Edits packet-over-SDH (POS); used for POS management.
ED-QNQ-ETH:[<TID>]:<AID>:<CTAG>::<FIRSTCEVLANID>,<LASTCEVLANID>, <SVLANID>:[RULE=<RULE>][:]; Modifies the IEEE 802.1Q tunneling (QinQ) relationship between the customer CE-VLAN and the S-VLAN for Gigabit Ethernet uniport provisioning associated to an L2 Ethernet port.
ED-STM1E:[<TID>]:<SRC>:<CTAG>:::[SYNCMSG=<SYNCMSG>],[SENDDUS=<SENDDUS>], [SFBER=<SFBER>],[SDBER=<SDBER>],[SOAK=<SOAK>],[NAME=<NAME>], [CMDMDE=<CMDMDE>]:[<PST>[,<SST>]]; Modifies the attributes and the state of the STM1E port facility.
ED-VLAN:[<TID>]:<AID>:<CTAG>:::[NAME=<NAME>],[PROTN=<PROTN>][:]; Modifies a VLAN entry in the VLAN database.
ENT-<MOD1PAYLOAD>:[<TID>]:<AID>:<CTAG>[::::]; Creates the specified port.
ENT-NNI-ETH:[<TID>]:<AID>:<CTAG>::<SVLANID>[::]; Adds a new network-to-network interface service provider VLAN ID to the NNI interface of an L2 Ethernet port.
ENT-QNQ-ETH:[<TID>]:<AID>:<CTAG>::<FIRSTCEVLANID>,<LASTCEVLANID>, <SVLANID>:[RULE=<RULE>][:]; Enters a new IEEE 802.1Q tunneling (QinQ) relationship between the CE-VLAN and S-VLAN for Gigabit Ethernet uniport provisioning associated to an L2 Ethernet port.
ENT-VLAN:[<TID>]:<AID>:<CTAG>:::[NAME=<NAME>],[PROTN=<PROTN>]; Adds a new VLAN entry to the VLAN database.
OPR-ALS:[<TID>]:<AID>:<CTAG>[::::]; Restarts the laser of an STM facility.
RMV-<MOD2>:[<TID>]:<AID>:<CTAG>[::]; Removes a facility from service.
RST-<MOD2>:[<TID>]:<AID>:<CTAG>::::[<PST>[,<SST>]]; Provisions a facility or service.
RTRV-<MOD1FCPAYLOAD>:[<TID>]:<AID>:<CTAG>[::::]; Retrieves the attributes related with the Fibre Channel (FC) port.

Output format: SID DATE TIME M CTAG COMPLD "<AID>:,,[<ROLE>],[<STATUS>]:LINKRATE=<LINKRATE>,LINKSTATE=<LINKSTATE>, [LINKRCVRY=<LINKRCVRY>],[DISTEXTN=<DISTEXTN>], [LINKCREDITS=<LINKCREDITS>],[MFS=<MFS>],[ENCAP=<ENCAP>],[NAME=<NAME>], [SOAK=<SOAK>],[SOAKLEFT=<SOAKLEFT>],[FREQ=<FREQ>],[LOSSB=<LOSSB>]: <PST_PSTQ>,[<SST>]" ;
RTRV-<MOD1FICONPAYLOAD>:[<TID>]:<AID>:<CTAG>; Returns FC-specific settings for ports that have been configured to carry FICON traffic using the ENT-FICON command. Output format: SID DATE TIME M CTAG COMPLD "<AID>::[<ROLE>],[<STATUS>]:[LINKRATE=<LINKRATE>],[LINKSTATE=<LINKSTATE>], [LINKRCVRY=<LINKRCVRY>],[DISTEXTN=<DISTEXTN>], [LINKCREDITS=<LINKCREDITS>],[MFS=<MFS>],[ENCAP=<ENCAP>],[NAME=<NAME>], [SOAK=<SOAK>],[SOAKLEFT=<SOAKLEFT>],[FREQ=<FREQ>],[LOSSB=<LOSSB>]: <PST_PSTQ>,<SST>" ;
RTRV-<STM_TYPE>:[<TID>]:<AID>:<CTAG>[MSSPRPTHTYPE=<MSSPRPTHTYPE>:::][:; Retrieves the service parameter attributes and state of an STM facility. Output format: SID DATE TIME M CTAG COMPLD "<AID>:,,[<ROLE>],[<STATUS>]:[DCC=<DCC>],[AREA=<AREA>],[TMGREF=<TMGREF>], [SYNCMSG=<SYNCMSG>],[SENDDUS=<SENDDUS>],[PJMON=<PJMON>], [SFBER=<SFBER>],[SDBER=<SDBER>],[MODE=<MODE>],[WVLEN=<WVLEN>], [RINGID=<RINGID>],[MSSPRTYPE=<MSSPRTYPE>],[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>], [SENDDUSFF=<SENDDUSFF>],[AISONLPBK=<AISONLPBK>],[FREQ=<FREQ>], [LOSSB=<LOSSB>],[FOREIGNFEND=<FOREIGNFEND>], [FOREIGNIPADDRESS=<FOREIGNIPADDRESS>],:<PSTPSTQ>,[<SSTQ>]" ;
RTRV-10GIGE:[<TID>]:<AID>:<CTAG>[::::]; Used to retrieve the 10-Gbps-specific parameters for a port configured to support the gigabyte Ethernet payload using the ENT-10GIGE command. Output format: SID DATE TIME M CTAG COMPLD "<AID>::[<ROLE>],[<STATUS>]:[NAME=<NAME>],[MACADDR=<MACADDR>], [LBCL=<LBCL>],[OPT=<OPT>],[OPR=<OPR>],[FREQ=<FREQ>],[LOSSB=<LOSSB>]: <PSTPSTQ>,[<SST>]" ;
RTRV-ALS:[<TID>]:<AID>:<CTAG>[::::];

Retrieves the ALS attributes of an STM facility and all facilities that support the ALS feature. Output format: SID DATE TIME M CTAG COMPLD "<AID>,<AIDTYPE>::[ALSMODE=<ALSMODE>],[ALSRCINT=<ALSRCINT>], [ALSRCPW=<ALSRCPW>],[LSRSTAT=<LSRSTAT>]" ;
RTRV-COS-ETH:[<TID>]:<AID>:<CTAG>[::::]; Retrieves the egress parameters of a CoS table associated to an L2 Ethernet port. Output format: SID DATE TIME M CTAG COMPLD "<AID>::[QOSENABLED=<QOSENABLED>],[BW0=<BWO>], [WEIGHT0=<WEIGHT0>],[BW1=<BW1>],[WEIGHT1=<WEIGHT1>],[BW2=<BW2>], [WEIGHT2=<WEIGHT2>],[BW3=<BW3>],[WEIGHT3=<WEIGHT3>],[BW4=<BW4>], [WEIGHT4=<WEIGHT4>],[BW5=<BW5>],[WEIGHT5=<WEIGHT5>],[BW6=<BW6>], [WEIGHT6=<WEIGHT6>],[BW7=<BW7>],[WEIGHT7=<WEIGHT7>][:]" ;
RTRV-DS3I:[<TID>]:<AID>:<CTAG>[::::]; Retrieves the properties of a DS3i-N-12 facility. (Not supported by the ONS 15600 SDH) Output format: SID DATE TIME M CTAG COMPLD "<AID>::FMT=<FMT>,LINECDE=<LINECDE>,LBO=<LBO>,[INHFELPBK=<INHFELPBK>], [TACC=<TACC>],[TAPTYPE=<TAPTYPE>],[SFBER=<SFBER>],[SDBER=<SDBER>], [SOAK=<SOAK>],[SOAKLEFT=<SOAKLEFT>],[NAME=<NAME>]:<PSTPSTQ>,[<SSTQ>" ;
RTRV-E1:[<TID>]:<AID>:<CTAG>[::::]; Retrieves the attributes and state information of an E1 port facility. Output format: SID DATE TIME M CTAG COMPLD "<AID>::LINECDE=<LINECDE>,FMT=<FMT>,[TACC=<TACC>],[TAPTYPE=<TAPTYPE>], [SFBER=<SFBER>],[SDBER=<SDBER>],[SOAK=<SOAK>],[SOAKLEFT=<SOAKLEFT>], [NAME=<NAME>],[SYNCMSG=<SYNCMSG>],[SENDDUS=<SENDDUS>], [RETIME=<RETIME>],[ADMSSM=<ADMSSM>],[PROVIDESYNC=<PROVIDESYNC>], [SABIT=<SABIT>]:<PSTPSTQ>,[<SSTQ>]" ;
RTRV-E3:[<TID>]:<AID>:<CTAG>[::::]; Retrieves the attributes and state information of an E3 port facility. Output format: SID DATE TIME M CTAG COMPLD "<AID>::[TACC=<TACC>],[TAPTYPE=<TAPTYPE>],[SFBER=<SFBER>], [SDBER=<SDBER>],[SOAK=<SOAK>],[SOAKLEFT=<SOAKLEFT>], [NAME=<NAME>]:<PST_PSTQ>,[<SSTQ>]" ;
RTRV-E4:[<TID>]:<AID>:<CTAG>[::::];

Retrieves the attributes and state information of an E4 port facility. Output format: SID DATE TIME M CTAG COMPLD "<AID>::[PAYLOAD=<PAYLOAD>],[SFBER=<SFBER>],[SDBER=<SDBER>], [SOAK=<SOAK>], [SOAKLEFT=<SOAKLEFT>],[NAME=<NAME>]:<PSTPSTQ>,[<SSTQ>]" ;
RTRV-ESCON:[<TID>]:<AID>:<CTAG>; Retrieves FC-specific settings for ports that have been configured to carry ESCON traffic using the ENT-ESCON command. Output format: SID DATE TIME M CTAG COMPLD "<AID>:,,[<ROLE>],[<STATUS>]:[ENCAP=<ENCAP>]" ;
RTRV-FAC:[<TID>]:<SRC>:<CTAG>[::::]; Retrieves the payload type of the facility. Output format: SID DATE TIME M CTAG COMPLD "<SRC>::PAYLOAD=<PAYLOAD>:<PST_PSTQ>,[<SSTQ>]" ;
RTRV-FSTE:[<TID>]:<AID>:<CTAG>; Retrieves the front-end port information of a Fast Ethernet (10/100 Mbps) card. 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>],[OPTICS=<OPTICS>],[NAME=<NAME>],[SUPPRESS=<SUPPRESS>], [SOAK=<SOAK>],[SOAKLEFT=<SOAKLEFT>],[SELECTIVEAUTO=<SELECTIVEAUTO>]: <PST_PSTQ>,[<SSTQ>]" ;
RTRV-G1000:[<TID>]:<AID>:<CTAG>; Retrieves the G1000-4 facilities configuration. (Not supported by the ONS 15600 SDH) 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>],[SOAK=<SOAK>],[SOAKLEFT=<SOAKLEFT>]:<PST_PSTQ>,[<SSTQ>]" ;
RTRV-GFP:[<TID>]:<SRC>:<CTAG>; Retrieves GFP for GFP management. Output format:

SID DATE TIME

M CTAG COMPLD
"<AID>::[FCS=<FCS>],[AUTOTHGFPBUF=<AUTOTHGFPBUF>],[GFPBUF=<GFPBUF>],
[FILTER=<FILTER>]" ;

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

Retrieves front-end port information for a 1-Gigabit Ethernet card. (Not supported by the ONS 15600 SDH)

Output format:

SID DATE TIME M CTAG COMPLD
"<AID>:,,<ROLE>,<STATUS>:[ADMINSTATE=<ADMINSTATE>],
[LINKSTATE=<LINKSTATE>],[MTU=<MTU>],[ENCAP=<ENCAP>],
[FLOWCTRL=<FLOWCTRL>],[AUTONEG=<AUTONEG>],[HIWMRK=<HIWMRK>],
[LOWMRK=<LOWMRK>],[OPTICS=<OPTICS>],[DUPLEX=<DUPLEX>],[SPEED=<SPEED>],
[NAME=<NAME>],[FREQ=<FREQ>],[LOSSB=<LOSSB>],[SOAK=<SOAK>],
[SOAKLEFT=<SOAKLEFT>]:<PST>,<SST>" ;

RTRV-L2-ETH:[<TID>]:<AID>:<CTAG>[:::];

Retrieves the layer 2 port information for the Ethernet card.

Output format:

SID DATE TIME M CTAG COMPLD
"<AID>::[NIMODE=<TYPE>],[MACLEARNING=<MACLEARNING>],[
INGRESSCOS=<INGRESSCOS>],[ETHERCETYPE=<ETHERCETYPE>],
[ETHERSTYPE=<ETHERSTYPE>],[ALWMACADDR=<ALWMACADDR>],
[INHMACADDR=<INHMACADDR>],[BPDU=<BPDU>],[BRIDGESTATE=<BRIDGESTATE>],
[QNQMODE=<QNQMODE>],[TRNSPSVLAN=<TRNSPSVLAN>],
[NAME=<NAME>]:[<PST>[,<SST>]]

RTRV-NNI-ETH:[<TID>]:<AID>:<CTAG>::[<SVLANID>][::];

Retrieves the NNI selective S-VLAN-ID table associated to an L2 Ethernet port.

Output format:

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

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

Retrieves the back-end port information for the Ethernet card when the back-end port is working in POS mode.

Output format:

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

RTRV-STM1E:[<TID>]:<AID>:<CTAG>[::::];

Retrieves the attributes and state information of an STM1E facility.

Output format: SID DATE TIME M CTAG COMPLD "<AID>::[PAYLOAD=<PAYLOAD>],[SYNCMSG=<SYNCMSG>],[SENDDUS=<SENDDUS>], [SFBER=<SFBER>],[SDBER=<SDBER>],[SOAK=<SOAK>],[SOAKLEFT=<SOAKLEFT>], [NAME=<NAME>]:<PST_PSTQ>,[<SSTQ>" ;

Protection

Table 16: Protection

DLT-FFP-<STM_TYPE>:[<TID>]:<WORK>,<PROTECT>:<CTAG>[:::]; Deletes a facility protection group (STM4, STM64, STM1, STM16).
ED-FFP-<STM_TYPE>:[<TID>]:<AID>:<CTAG>:::[PROTID=<PROTID>],[RVRTV=<RVRTV>], [RVTM=<RVTM>],[PSDIRN=<PSDIRN>],[VRGRDTM=<VRGRDTM>], [DTGRDTM=<DTGRDTM>],[RCGRDTM=<RCGRDTM>][:]; Edits a facility protection group (STM4, STM64, STM1, STM16).
ENT-FFP-<STM_TYPE>:[<TID>]:<WORK>,<PROTECT>:<CTAG>:::[PROTTYPE= <PROTTYPE>],[PROTID=<PROTID>],[RVRTV=<RVRTV>],[RVTM=<RVTM>], [PSDIRN=<PSDIRN>],[OPOTYPE=<OPOTYPE>],[VRGRDTM=<VRGRDTM>], [DTGRDTM=<DTGRDTM>],[RCGRDTM=<RCGRDTM>][:]; Enters a facility protection group (STM4, STM64, STM1, STM16).
OPR-PROTNSW-<STM_TYPE>:[<TID>]:<AID>:<CTAG>::<SC>,[<SWITCHTYPE>][:<DIRN>] ; Operates a protection switch (STM4, STM64, STM1, STM16).
OPR-PROTNSW-<PATH>:[<TID>]:<SRC>:<CTAG>::<SC>[:]; Instructs an SDH NE to initiate a subnetwork connection protection (SNCP) switch request.
REPT SW Reports the autonomous switching of aport to standby status and the other port in the protection pair to active status. Output format: SID DATE TIME A ATAG REPT SW "<ACTID>,<STDBYID>" ;
RLS-PROTNSW-<STM_TYPE>:[<TID>]:<AID>:<CTAG>[::<DIRECTION>]; Instructs an SDH NE to release (clear) an SDH line protection switch request.
RLS-PROTNSW-<PATH>:[<TID>]:<SRC>:<CTAG>[::]; Instructs an SDH NE to release (clear) an SDH path protection switch request that was established with the OPR-PROTNSW-(MOD_PATH) command.
RTRV-FFP:[<TID>]:<AID>:<CTAG>[::::]; Retrieves all optical 1+1 protection groups. Output format:

SID DATE TIME M CTAG COMPLD "<WORK>,<PROTECT>:<LEVEL>:[PROTID=<PROTID>],[RVRTV=<RVRTV>], [RVTM=<RVTM>],[PSDIRN=<PSDIRN>],[VRGRDTM=<VRGRDTM>], [DTGRDTM=<DTGRDTM>],[RCGRDTM=<RCGRDTM>],[OPOTYPE=<OPOTYPE>]" ;
RTRV-FFP-<STM_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>]" ;
RTRV-PROTNSW-<STM_TYPE>:[<TID>]:<AID>:<CTAG>[::::]; Retrieves the switching state of an SDH line. Output format: SID DATE TIME M CTAG COMPLD "<AID>:<SC>,[<SWITCHTYPE>]" ;
RTRV-QNQ-ETH:[<TID>]:<AID>:<CTAG>::<FIRSTCEVLAN_ID>,<LASTCEVLANID>, <SVLANID>[:]; Retrieves the IEEE 802.1Q tunneling (QinQ) relationship between the CE-VLAN and the S-VLAN for Gigabit Ethernet uniport provisioning associated to an L2 Ethernet port. Output format: SID DATE TIME M CTAG COMPLD "<AID>:<FIRSTCEVLANID>,<LASTCEVLANID>,<SVLANID>:RULE=<RULE>[:]" ;
RTRV-VLAN:[<TID>]:<AID>:<CTAG>[::::]; Retrieves a virtual LAN entry from the VLAN database. Output format: SID DATE TIME M CTAG COMPLD "<AID>::[NAME=<NAME>],[PROTN=<PROTN>]:" ;

Provisionable Patchcords

Table 17: Provisionable Patchcords

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

Security

Table 18: 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-CONSOLE-PORT:[<TID>]:<AID>:<CTAG>; Turns on the console port for the ML-Series cards. (Not supported by the ONS 15600 SDH)
ALW-MSG-SECU:[<TID>]::<CTAG>[::,,]; Enables the REPT EVT SECU and REPT ALM SECU autonomous messages.
ALW-USER-SECU:[<TID>]::<CTAG>::<UID>; Enables a user ID that has been disabled (by the INH-USER-SECU command) so the user can establish a session with the NE.
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 user ID 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; this command 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-PROTOCOL:[<TID>]:<PROTOCOLAID>:<CTAG>::<PROTOCOLSTAT>; Enables/disables a protocol/service that is supported in the NE.
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; this command can only be performed by a Superuser.
INH-CONSOLE-PORT:[<TID>]:<AID>:<CTAG>; Turns off the console port for the ML-Series cards. (Not supported by the ONS 15600 SDH)
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 user ID, so the user is denied access to the NE.
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 security level of the command specified in the AID field.

Output format: SID DATE TIME M CTAG COMPLD "<AID>:<CAP>" ;
RTRV-CONSOLE-PORT:[<TID>]:<AID>:<CTAG>; Retrieves the status of the console port for the ML-Series cards. (Not supported by the ONS 15600 SDH) Output format: SID DATE TIME M CTAG COMPLD "<EQPT>:PORT=<PORT>" ;
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=<PRIVLVL>],[PDIF=<PDIF>]" ;
RTRV-USER-SECU:[<TID>]:<UID>:<CTAG>; Retrieves the security information for 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=<PRIVLVL>],[PDIF=<PDIF>]; Sets the system-wide default values associated with several security parameters.

Synchronization

Table 19: Synchronization

ED-BITS:[<TID>]:<AID>:<CTAG>:::[LINECDE=<LINECDE>],[FMT=<FMT>],[LBO=<LBO>], [SYNCMSG=<SYNCMSG>],[AISTHRSHLD=<AISTHRSHLD>],[SABIT=<SABIT>], [BITSFAC=<BITSFAC>],[ADMSSM=<ADMSSM>][:<PST>]; Edits the BITS reference attributes.
ED-NE-SYNCN:[<TID>]:[<AID>]:<CTAG>:::[TMMD=<TMMD>],[SSMGEN=<SSMGEN>], [QRES=<QRES>],[RVRTV=<RVRTV>],[RVTM=<RVTM>],[SYSTMN=<SYSTMN>]; Edits the synchronization attributes of the NE.
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>],[<OCRTM>],,:[<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>], [<OCRTM>],,:[<DESC>],[<EQPTTYPE>]" ;
REPT EVT BITS Reports the occurrence of a non-alarmed event against a BITS facility. Output format: SID DATE TIME ** ATAG REPT ALM BITS "<AID>:<CONDTYPE>,[<CONDEFF>],,,,,,,:[<DESC>]" ;
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>,[<OCRDAT>], [<OCRTM>],,:[<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>,[<OCRDAT>], [<OCRTM>],,:[<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>],[SYNCMSG=<SYNCMSG>], [AISTHRSHLD=<AISTHRSHLD>],[SABIT=<SABIT>],[IMPEDANCE=<IMPEDANCE>], [BITSFAC=<BITSFAC>],[ADMSSM=<ADMSSM>]:[<PST>]" ;
RTRV-COND-BITS:[<TID>]:<AID>:<CTAG>::[<TYPEREQ>][,,,]; Retrieves the standing BITS condition. Output format: SID DATE TIME M CTAG COMPLD "<AID>,[<AIDTYPE>]:[<NTFCNCDE>],<TYPEREP>,[<SRVEFF>],[<OCRDAT>], [<OCRTM>],,,[<DESC>]" ;
RTRV-COND-SYNCN:[<TID>]:<AID>:<CTAG>::[<TYPEREQ>][,,,]; Retrieves the synchronization condition. Output format: SID DATE TIME M CTAG COMPLD "<AID>,[<AIDTYPE>]:[<NTFCNCDE>],<TYPEREP>,[<SRVEFF>], [<OCRDAT>],[<OCRTM>],,,[<DESC>]" ;
RTRV-NE-SYNCN:[<TID>]:[<AID>]:<CTAG>[::::]; Retrieves the synchronization attributes of the NE. Output format: SID DATE TIME M CTAG COMPLD "[<AID>]::[TMMD=<TMMD>],[SSMGEN=<SSMGEN>],[QRES=<QRES>], [RVRTV=<RVRTV>],[RVTM=<RVTM>],[SYSTMN=<SYSTMN>]"
RTRV-SYNCN:[<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>]" ;

System

Table 20: System

ALW-MSG-ALL:[<TID>]:[<AID>]:<CTAG>[::,,];   Allows REPT ALM and REPT EVT autonomous messages to be transmitted.
DLT-ALMTYPE:[<TID>]::<CTAG>::<ALMTYPE>;   Deletes only user-defined alarm types.
DLT-ROUTE:[<TID>]::<CTAG>::<DESTIP>;   Deletes the static routes.
DLT-ROUTE-GRE:[<TID>]::<CTAG>:::IPADDR=<IPADDR>,IPMASK=<IPMASK>, NSAP=<NSAP>;   Deletes a generic routing encapsulation (GRE) tunnel.
DLT-TADRMAP:[<TID>]::<CTAG>:::[TIDNAME=<TIDNAME>],[ADDRTYPE=<ADDRTYPE>];   Deletes an entry in the TADRMAP table.
DLT-TRAPTABLE:[<TID>]:<AID>:<CTAG>;   Deletes a simple network management protocol (SNMP) trap destination entry. Entering ALL will delete the whole table.
DLT-TUNNEL-FIREWALL:[<TID>]::<CTAG>:::[SRCADDR=<SRCADDR>], [SRCMASK=<SRCMASK>],[DESTADDR=<DESTADDR>],[DESTMASK=<DESTMASK>];   Deletes a firewall tunnel.
DLT-TUNNEL-PROXY:[<TID>]::<CTAG>:::[SRCADDR=<SRCADDR>], [SRCMASK=<SRCMASK>],[DESTADDR=<DESTADDR>],[DESTMASK=<DESTMASK>];   Deletes a proxy tunnel.
ENT-ALMTYPE:[<TID>]::<CTAG>::<ALMTYPE>;   Enters user-defined alarm types on the fly for environmental inputs.
ED-DAT:[<TID>]::<CTAG>::[<DATE>],[<TIME>];   Edits the date and time.
ED-NE-GEN:[<TID>]::<CTAG>:::[NAME=<NAME>],[IPADDR=<IPADDR>], [IPMASK=<IPMASK>],[DEFRTR=<DEFRTR>],[IIOPPORT=<IIOPPORT>], [NTP=<NTP>],[ISPROXYSERVER=<ISPROXYSERVER>],[ISFIREWALL=<ISFIREWALL>], [SUPPRESSIP=<SUPPRESSIP>],[MODE=<MODE>];   Edits the general node attributes of an NE.
ED-NE-PATH:[<TID>]::<CTAG>:::[PDIP=<PDIP>],[XCMODE=<XCMODE>];   Edits path-related parameters for the NE-wide basis.
ED-TRAPTABLE:[<TID>]:<AID>:<CTAG>:::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-ROUTE-GRE:[<TID>]::<CTAG>:::IPADDR=<IPADDR>,IPMASK=<IPMASK>, NSAP=<NSAP>,[COST=<COST>]; Creates a GRE tunnel.
ENT-TADRMAP:[<TID>]::<CTAG>:::[TIDNAME=<TIDNAME>],[IPADDR=<IPADDR>], [PORT=<PORT>],[ENCODING=<ENCODING>],[NSAP=<NSAP>]; Creates an entry in the TADRMAP table which maps the TID of the subtending NEs to their addresses.
ENT-TRAPTABLE:[<TID>]:<AID>:<CTAG>::COMMUNITY=<COMMUNITY>, [TRAPPORT=<TRAPPORT>],[TRAPVER=<TRAPVER>]; Provisions an SNMP trap destination and its associated community, UDP port, and SNMP version.
ENT-TUNNEL-FIREWALL:[<TID>]::<CTAG>:::[SRCADDR=<SRCADDR>], [SRCMASK=<SRCMASK>],[DESTADDR=<DESTADDR>],[DESTMASK=<DESTMASK>]; Creates a firewall tunnel.
ENT-TUNNEL-PROXY:[<TID>]::<CTAG>:::[SRCADDR=<SRCADDR>], [SRCMASK=<SRCMASK>],[DESTADDR=<DESTADDR>],[DESTMASK=<DESTMASK>]; Creates a proxy tunnel.
INH-MSG-ALL:[<TID>]:[<AID>]:<CTAG>[::,,]; Inhibits REPT ALM and REPT EVT autonomous messages from being transmitted.
INIT-SYS:[<TID>]:<AID>:<CTAG>::[<CMDMDE=CMDMODE>]; Initializes the specified card and its associated subsystems.
RTRV-ALMTYPE:[<TID>]::<CTAG>; Retrieves all system and user-defined alarm types. Output format: SID DATE TIME M CTAG COMPLD "<TYPEOFALM>,<ALMTYPE>" ;
RTRV-HDR:[<TID>]::<CTAG>; Retrieves the header of a TL1 response message.
RTRV-INV:[<TID>]:<AID>:<CTAG>[::::]; Retrieves a listing of the equipment inventory. Output format: SID DATE TIME M CTAG COMPLD "<AID>,<AIDTYPE>::[PN=<PN>],[HWREV=<HWREV>],[FWREV=<FWREV>],[SN=<SN>], [CLEI=<CLEI>],[TWL1=<TWL>],[PLUGINVENDORID=<PLUGINVENDORID>], [PLUGINPN=<PLUGINPN>],[PLUGINHWREV=<PLUGINHWREV>],

[PLUGINFWREV=<PLUGINFWREV>],[PLUGINSN=<PLUGINSN>], [ILOSSREF=<ILOSSREF>],[PID=<PID>],[VID=<VID>],[FPGA=<FPGA>], [VENDORID=<VENDORID>]"
RTRV-NE-GEN:[<TID>]::<CTAG>; Retrieves the general NE attributes. Output format: SID DATE TIME M CTAG COMPLD "[IPADDR=<IPADDR>],[IPMASK=<IPMASK>],[DEFRTR=<DEFRTR>], [IIOPPORT=<IIOPPORT>],[NTP=<NTP>],[ETHIPADDR=<ETHIPADDR>], [ETHIPMASK=<ETHIPMASK>],[NAME=<NAME>],[SWVER=<SWVER>],[LOAD=<LOAD>], [PROTSWVER=<PROTSWVER>],[PROTLOAD=<PROTLOAD>],[DEFDESC=<DEFDESC>], [PLATFORM=<PLATFORM>],[SECUMODE=<SECUMODE>],[SUPPRESSIP=<SUPPRESSIP>]" ;
RTRV-NE-PATH:[<TID>]::<CTAG>[::::]; Retrieves the path-level attributes on an NE. Output format: SID DATE TIME M CTAG COMPLD "[PDIP=<PDIP>],[XCMODE=<XCMODE>]" ;
RTRV-NETYPE:[<TID>]::<CTAG>; Retrieves the equipment-related information of an NE. Output format: SID DATE TIME M CTAG COMPLD "<VENDOR>,<MODEL>,<NETYPE>,<SW_ISSUE>" ;
RTRV-ROUTE:[<TID>]::<CTAG>::[<DESTIP>],[<IPMASK>],[<NXTHOP>],[<COST>]; Retrieves static routes. Output format: SID DATE TIME M CTAG COMPLD ",:<DESTIP>,<IPMASK>,<NXTHOP>,<COST>" ;
RTRV-ROUTE-GRE:[<TID>]::<CTAG>[::::]; Retrieves the existing GRE tunnels. Output format: SID DATE TIME M CTAG COMPLD ",:IPADDR=<IPADDR>,IPMASK=<IPMASK>,NSAP=<NSAP>,COST=<COST>" ;
RTRV-TADRMAP:[<TID>]:[<AID>]:<CTAG>[:::MODE=<MODE>]; Retrieves the contents of the TADRMAP table. Output format: SID DATE TIME M CTAG COMPLD "[TID=<TID>],[IP ADDRESS

=<IPADDRESS>],[NSAP=<NSAP>]"
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>, <DIFFERENCE>:<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>" ;
RTRV-TUNNEL-FIREWALL:[<TID>]::<CTAG>; Retrieves the contents of the firewall table. Output format: SID DATE TIME M CTAG COMPLD "[SRC ADDR=<SRCADDR>],[SRC MASK=<SRCMASK>],[DEST ADDR=<DESTADDR>], [DEST MASK=<DESTMASK>]" ;
RTRV-TUNNEL-PROXY:[<TID>]::<CTAG>; Retrieves the contents of the proxy tunnel table. Output format: SID DATE TIME M CTAG COMPLD "[SRC ADDR=<SRCADDR>],[SRC MASK=<SRCMASK>],[DEST ADDR=<DESTADDR>], [DEST MASK=<DESTMASK>]" ;
SET-TOD:[<TID>]::<CTAG>::<YEAR>,<MONTH>,<DAY>,<HOUR>,<MINUTE>, <SECOND>,[<DIFFERENCE>][:DST=<DST>]; Sets the system date and time for the NE.

Troubleshooting and Test Access

Table 21: Troubleshooting and Test Access

CHG-ACCMD-<MOD_TACC>:[<TID>]:<TAP>:<CTAG>::<MD>; Changes the test access mode for the circuit being tested.
CONN-TACC-<MOD_TACC>:[<TID>]:<SRC>:<CTAG>::<TAP>:MD=<MD>; Connects the VC or VT defined by AID to the VC specified by the test access point (TAP) number. Output format: SID DATE TIME M CTAG COMPLD "<TAP>" ;
DISC-TACC:[<TID>]:<TAP>:<CTAG>;

Disconnects the TAP and puts the connection back to its original state.
OPR-LPBK-<MOD2>:[<TID>]:<AID>:<CTAG>::[<LOCATION>],,,[<LPBKTYPE>]; Operates a signal loopback on an input/output (I/O) card or on a cross-connect.
RLS-LPBK-<MOD2>:[<TID>]:<SRC>:<CTAG>::[<LOCATION>],,,[<LPBKTYPE>]; Releases a signal loopback on an I/O card or on a cross-connect.
RTRV-PTHTRC-<PATH>:[<TID>]:<SRC>:<CTAG>::[<MSGTYPE>][:<LSTM>]; Instructs an SDH NE to retrieve the contents of the SDH path trace message. Output format: SID DATE TIME M CTAG COMPLD "<TRACMSG>" ;
RTRV-TACC:[<TID>]:<TAP>:<CTAG>; Retrieves details associated with a TAP. Output format: SID DATE TIME M CTAG COMPLD "<TAP>:<TACC_AIDA>,<TACC_AIDB>,[<MD>],[<CROSSCONNECTID1>], <AIDUNIONID>,<PATHWIDTH>" ;

VCAT

Table 22: 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 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>" ;