



Cisco ONS 15454 and Cisco ONS 15327 Common TL1 Commands Release 3.4

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 and the Cisco ONS 15327, Release 3.4. Refer to the *Cisco ONS 15454 and Cisco ONS 15327 TL1 Command Guide, Release 3.4* 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-BLSR:[<TID>]:<AID>:<CTAG>[::]; Deletes the BLSR of the NE
ED-BLSR:[<TID>]:<AID>:<CTAG>:::[RINGID=<RINGID>],[NODEID=<NODEID>],[RVRTV=<RVRTV>],[RVTM=<RVTM>],[SRVRTV=<SRVRTV>],[SRVTM=<SRVTM>][:]; Edits the BLSR attributes
ENT-BLSR:[<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
REPT EVT RING Reports the occurrence of a non-alarmed event against a ring object for a BLSR
RTRV-BLSR:[<TID>]:<AID>:<CTAG>[::]; Retrieves all of 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>]” ;

Table 1 BLSR (continued)

RTRV-COND-RING:[<TID>]:[<AID>]:<CTAG>::[<TYPEREQ>][,.,,];
Retrieves the current standing condition against a ring object for BLSR
Output format:
SID DATE TIME
M CTAG COMPLD
“<AID>:[<NTFCNCDE>],<TYPEREP>,[<SRVEFF>],,,,[<DESC>]”
;

2 Cross Connections

Table 2 Cross Connections

DLT-CRS-<STS_PATH>:[<TID>]:<FROM>,<TO>:<CTAG>[:];
Deletes a cross-connection between STS paths

DLT-CRS-VT1:[<TID>]:<FROM>,<TO>:<CTAG>[:];
Deletes the virtual tributary cross-connections

ED-CRS-<STS_PATH>:[<TID>]:<SRC>,<DST>:<CTAG>::::[<PST>],[<SST>];
Edits the state of an STS cross-connection

ED-CRS-VT1:[<TID>]:<SRC>,<DST>:<CTAG>::::[<PST>],[<SST>];
Edits VT cross-connections

ENT-CRS-<STS_PATH>:[<TID>]:<FROM>,<TO>:<CTAG>::[<CCT>]::[<PST>],[<SST>];
Creates an STS cross-connection with cross-connection types (CCT)

ENT-CRS-VT1:[<TID>]:<FROM>,<TO>:<CTAG>::[<CCT>]::[<PST>],[<SST>];
Creates a VT1 cross-connection

RTRV-CRS:[<TID>]:<AID>:<CTAG>:::[<CRSTYPE=<CRSTYPE>][:];
Retrieves all the cross-connections based on the required CRSTYPE (STS, VT, or both)
Output format:
SID DATE TIME
M CTAG COMPLD
“<FROM>,<TO>:<CCT>,<MOD>::<PST>,[<SST>]”
;

Table 2 Cross Connections (continued)

RTRV-CRS-<STS_PATH>:[<TID>]:<AID>:<CTAG>[:::];
Retrieves any connections associated with the entered AID(s) or AID range
Output format:
SID DATE TIME
M CTAG COMPLD
“<FROM>,<TO>:<CCT>,<MOD>::<PST>,[<SST>]”
;
RTRV-CRS-VT1:[<TID>]:<AID>:<CTAG>[:::];
Retrieves the VT cross-connection information
Output format:
SID DATE TIME
M CTAG COMPLD
“<FROM>,<TO>:<CCT>::<PST>,[<SST>]”
;

3 Environment Alarms and Controls

Table 3 Environment Alarms and Controls

OPR-ACO-ALL:[<TID>]::<CTAG>;
Instructs the NE to cut-off 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 user-defined condition on an environmental alarm input
REPT EVT ENV
Reports a non-alarmed event against an environment alarm input
RLS-EXT-CONT:[<TID>]:<AID>:<CTAG>[::,];
Releases a forced contact state and returns the control of the contact to an automatic control state

Table 3 Environment Alarms and Controls (continued)

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 the 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 the 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>,,,,,<DESC>”
;

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

Retrieves 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 the attributes associated with an external control

Table 3 Environment Alarms and Controls (continued)

SET-ATTR-ENV:[<TID>]:<AID>:<CTAG>::<NTFCNCDE>],[<ALMTYPE>],[<ALMMSG>];
Sets the attributes associated with an external alarm

4 Equipment

Table 4 Equipment

ALW-SWDX-EQPT:[<TID>]:<AID>:<CTAG>[::];
Allows automatic or manual switching on a duplex system containing duplexed or redundant equipment

ALW-SWTOPROTN-EQPT:[<TID>]:<AID>:<CTAG>[::<DIRN>];
Allows automatic or manual switching of an equipment unit back to protection

ALW-SWTOWKG-EQPT:[<TID>]:<AID>:<CTAG>[::<DIRN>];
Allows automatic or manual switching of an equipment unit back to a working status

DLT-EQPT:[<TID>]:<AID>:<CTAG>[::];
Deletes a card from the NE

ED-EQPT:[<TID>]:<AID>:<CTAG>:::[PROTID=<PROTID>],[PRTYPE=<PRTYPE>],[RVRTV=<RVRTV>],[RVTM=<RVTM>][:];
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>][:];
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

INH-SWTOPROTN-EQPT:[<TID>]:<AID>:<CTAG>[::<DIRN>];
Inhibits automatic or manual switching of an equipment unit to protection

INH-SWTOWKG-EQPT:[<TID>]:<AID>:<CTAG>[::<DIRN>];
Inhibits automatic or manual switching of an equipment unit back to the working unit

REPT ALM EQPT
Reports an alarm condition against an equipment unit or slot

REPT EVT EQPT
Reports the occurrence of a non-alarmed event against an equipment unit or slot

Table 4 Equipment (continued)

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>,.,.,:<DESC>”
;
RTRV-COND-EQPT:[<TID>]:<AID>:<CTAG>::<TYPEREQ>][,.,.];
Retrieves the condition equipment
Output format:
SID DATE TIME
M CTAG COMPLD
“<AID>],[<AIDTYPE>]:<NTFCNCDE>,<TYPEREP>,<SRVEFF>,.,.,:<DESC>”
;
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>],[
[PRTYPE=<PRTYPE>],[RVRTV=<RVRTV>],[RVTM=<RVTM>],[
[CARDNAME=<CARDNAME>]:[<PST>],[<SST>]”
;
SW-DX-EQPT:[<TID>]:<AID>:<CTAG>::<MODE>][,];
Switches an XC/XCVT card with the mate card within the NE
SW-TOPROTN-EQPT:[<TID>]:<AID>:<CTAG>::<MODE>],[<PROTID>],[<DIRN>];
Performs an equipment unit protection switch
SW-TOWKG-EQPT:[<TID>]:<AID>:<CTAG>::<MODE>],[<DIRN>];
Switches the protected working unit back to the working unit

5 Fault

Table 5 Fault

<p>REPT ALM <MOD2ALM> Reports an alarm condition against a facility or a path</p>
<p>REPT ALM COM Reports an alarm condition when an AID cannot be given</p>
<p>REPT ALM RING Reports an alarm condition against a ring object for BLSR</p>
<p>REPT EVT <MOD2ALM> Reports the occurrence of a non-alarmed event</p>
<p>REPT EVT COM Reports a non-alarmed event against an NE when there is no AID associated with it</p>
<p>RTRV-ALM-<MOD2ALM>:[<TID>]:<AID>:<CTAG>::<NTFCNCDE>, [<CONDTYPE>],[<SRVEFF>][,,,] Retrieves and sends the current status of the alarm conditions Output format: SID DATE TIME M CTAG COMPLD “<AID>,[<AIDTYPE>]:<NTFCNCDE>,<CONDTYPE>,<SRVEFF>,,:[<DESC>]” ;</p>
<p>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>]” ;</p>
<p>RTRV-ALM-RING:[<TID>]:<AID>:<CTAG>::<NTFCNCDE>],[<CONDITION>],[[<SRVEFF>][,,,]; Retrieves and sends the current status of all active alarm conditions against a ring object for BLSR Output format: SID DATE TIME M CTAG COMPLD “<AID>:<NTFCNCDE>,<CONDTYPE>,<SRVEFF>,,:[<DESC>]” ;</p>

Table 5 Fault (continued)

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>],,,,,[<DESC>]” ;
RTRV-COND-ALL:[<TID>]:<CTAG>::<TYPEREQ>][,,,]; Retrieves the current standing condition for all entities Output format: SID DATE TIME M CTAG COMPLD “<AID>,[<AIDTYPE>]:[<NTFCNCDE>],<TYPEREP>,[<SRVEFF>],,,,,[<DESC>]” ;

6 Log

Table 6 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
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>” ;

7 Performance

Table 7 Performance

ALW-PMREPT-ALL:[<TID>]::<CTAG>; Resumes processing all the PM reports that are inhibited
INH-PMREPT-ALL:[<TID>]::<CTAG>; Inhibits all scheduled PM reporting
INIT-REG-<MOD2>:[<TID>]:<AID>:<CTAG>::, [<LOCN>], [<DIRN>], [<TMPER>][, .]; Initializes the performance monitoring (PM) registers
REPT PM <MOD2> Reports of Performance Monitoring statistics as a result of schedule created by SCHED-PMREPT
RTRV-PM-<MOD2>:[<TID>]:<AID>:<CTAG>:: [<MONTYPE>], [<MONLEV>], [<LOCN>], [<DIRN>], [<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>], [<DIRN>], [<TMPER>], [<MONDAT>], [<MONTM>]” ;
RTRV-PMMODE-<STS_PATH>:[<TID>]:AID>:<CTAG>:::<LOCN>; Retrieves the PM mode that has been previously set in the NE data collection Output format: SID DATE TIME M CTAG COMPLD “<AID>:[<LOCN>], <MODETYPE>” ;
RTRV-PMSCHED-<MOD2>:[<TID>]:<AID>:<CTAG>; Retrieves the PM reporting schedule that was set for the NE by SCHED-PMREPT Output format: SID DATE TIME M CTAG COMPLD “<AID>, [<AIDTYPE>]:<REPTINVL>, <REPTDAT>, <REPTTM>, [<NUMINVL>], [<MONLEV>], <LOCN>, [<TMPER>], [<INHMODE>]” ;

Table 7 Performance (continued)

RTRV-PMSCHED-ALL:[<TID>]::<CTAG>;
Retrieves all the PM reporting schedules that were set for the NE by SCHED-PMREPT
Output format:
M CTAG COMPLD
“<AID>,[<AIDTYPE>]:<REPTINVL>,<REPTDAT>,<REPTTM>,[<NUMINVL>],,
[<MONLEV>],<LOCN>,,[<TMPER>],,[<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>]”
;

SCHED-PMREPT-<MOD2>:[<TID>]:<SRC>:<CTAG>::<REPTINVL>],[<REPTSTATM>],
[<NUMREPT>],,[<MONLEV>],[<LOCN>],,[<TMPER>][,];
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-PMMODE-<STS_PATH>:[<TID>]:<AID>:<CTAG>::<LOCN>,<MODETYPE>,[<PMSTATE>;
Sets the mode and turns on or off the mode of the PM data collection

SET-TH-<MOD2>:[<TID>]:<AID>:<CTAG>::<MONTYPE>,<THLEV>,[<LOCN>],,[<TMPER>;
Sets the threshold of PM parameters

8 Ports

Table 8 Ports

ED-<OCN_TYPE>:[<TID>]:<AID>:<CTAG>:::[DCC=<DCC>],[SYNCSMSG=<SYNCSMSG>],
[SENDDUS=<SENDDUS>],[PJMON=<PJMON>],[SFBER=<SFBER>],[SDBER=<SDBER>],
[MODE=<MODE>],[MUX=<MUX>],[SOAK=<SOAK>]:[<PST>],[<SST>];
Edits the attributes and state of an OC-N facility

ED-DS1:[<TID>]:<AID>:<CTAG>:::[TACC=<TACC>];
Edits the test access attributes for DS1 access on a DS3XM

ED-EC1:[<TID>]:<AID>:<CTAG>:::[PJMON=<PJMON>],[LBO=<LBO>],
[SOAK=<SOAK>]:[<PST>],[<SST>];
Edits the attributes of an EC1

Table 8 Ports (continued)

ED-G1000:[<TID>]:<AID>:<CTAG>:::[MFS=<MFS>],[FLOW=<FLOW>]:[<PST>],[<SST>];
Edits the attributes related to a G1000 port

ED-T1:[<TID>]:<AID>:<CTAG>:::[LINECDE=<LINECDE>],[FMT=<FMT>],[LBO=<LBO>],[TACC=<TACC>],[SOAK=<SOAK>]:[<PST>],[<SST>];
Edits the attributes related a DS1/T1 port

ED-T3:[<TID>]:<AID>:<CTAG>:::[FMT=<FMT>],[LINECDE=<LINECDE>],[LBO=<LBO>],[TACC=<TACC>],[SOAK=<SOAK>]:[<PST>],[<SST>];
Edits the attributes related to a DS3/T3 port

REPT RMV <MOD2_IO>
Reports the occurrence of a non-alarm or event that is triggered by removing a facility

REPT RST <MOD2_IO>
Reports the occurrence of a non-alarm or event that is triggered by restoring a facility

RMV-<MOD2_IO>:[<TID>]:<AID>:<CTAG>::[<CMDMODE>],[<PST>],[<SST>];
Removes a facility from service

RST-<MOD2_IO>:[<TID>]:<AID>:<CTAG>:[:];
Provisions a facility in service

RTRV-<OCN_TYPE>:[<TID>]:<AID>:<CTAG>[:::];
Retrieves the attributes and state of an OC-N facility
Output format:

```

  SID DATE TIME
M CTAG COMPLD
  "<AID>:.,[<ROLE>],[<STATUS>]:[DCC=<DCC>],[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>]:<PST>,[<SST>]"

```

RTRV-DS1:[<TID>]:<AID>:<CTAG>[:::];
Retrieves the test access attributes on a DS1 layer of DS3XM
Output format:

```

  SID DATE TIME
M CTAG COMPLD
  "<AID>:::[TACC=<TACC>]"

```

Table 8 Ports (continued)

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

Retrieves the facility status of an EC1 card

Output format:

SID DATE TIME
M CTAG COMPLD
“<AID>::[PJMON=<PJMON>],[LBO=<LBO>],[RXEQUAL=<RXEQUAL>,
[SOAK=<SOAK>]:<PST>,[<SST>]”
;

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

Retrieves the G1000 facilities configuration

Output format:

SID DATE TIME
M CTAG COMPLD
“<AID>::[MFS=<MFS>],[FLOW=<FLOW>],[LAN=<LAN>,
[OPTICS=<OPTICS>]:<PST>,[<SST>]”
;

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

Retrieves the DS1 facilities configuration

Output format:

SID DATE TIME
M CTAG COMPLD
“<AID>::[LINECDE=<LINECDE>],[FMT=<FMT>],[LBO=<LBO>],[TACC=<TAP>,
[SOAK=<SOAK>]:<PST>,[<SST>]”
;

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

Retrieves the facilities properties of a DS3 and DS3XM card

Output format:

SID DATE TIME
M CTAG COMPLD
“<AID>::[FMT=<FMT>],[LINECDE=<LINECDE>],[LBO=<LBO>],[TACC=<TAP>,
[SOAK=<SOAK>]:<PST>,[<SST>]”
;

9 Security

Table 9 Security

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

Sets up 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

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

Removes a user; can only be performed by a Superuser

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

REPT EVT SECU

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

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>,<UAP>”

;

10 SONET Line Protection

Table 10 SONET Line Protection

DLT-FFP-<OCN_TYPE>:[<TID>]:<WORK>,<PROTECT>:<CTAG>[:::];
Deletes an OC-N facility protection group in a 1+1 architecture
ED-FFP-<OCN_TYPE>:[<TID>]:<AID>:<CTAG>:::[PROTID=<PROTID>],[RVRTV=<RVRTV>],[RVTM=<RVTM>],[PSDIRN=<PSDIRN>][:];
Edits the optical facility protection
ENT-FFP-<OCN_TYPE>:[<TID>]:<WORK>,<PROTECT>:<CTAG>:::[PROTID=<PROTID>],[RVRTV=<RVRTV>],[RVTM=<RVTM>],[PSDIRN=<PSDIRN>][:];
Creates an optical 1+1 protection
EX-SW-<OCN_BLSR>:[TID]:<AID>:<CTAG>:::<ST>;
Exercises the algorithm for switching from a working facility to a protection facility without actually performing a switch
OPR-PROTNSW-<OCN_TYPE>:[<TID>]:<AID>:<CTAG>::<SC>,[<SWITCHTYPE>];
Initiates a SONET line protection switch request
RLS-PROTNSW-<OCN_TYPE>:[<TID>]:<AID>:<CTAG>[::];
Releases 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>]”
;

11 STS Paths

Table 11 STS Paths

ED-<STS_PATH>:[<TID>]:<AID>:<CTAG>:::[SFBER=<SFBER>],[SDBER=<SDBER>],[RVRTV=<RVRTV>],[RVTM=<RVTM>],[SWPDIP=<SWPDIP>],[EXPTRC=<EXPTRC>],[TRC=<TRC>],[TRCMODE=<TRCMODE>],[TACC=<TACC>]:[<PST>],[<SST>];
Edits the attributes associated with an STS path

RTRV-<STS_PATH>:[<TID>]:<AID>:<CTAG>[:::];
Retrieves the attributes associated with an STS path
Output format:

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

RTRV-PTHTRC-<STS_PATH>:[<TID>]:<AID>:<CTAG>:::[<MSGTYPE>][[:<LOCN>];
Retrieves the contents of the SONET path trace message that is transported in the J1 byte of the SONET STS path
Output format:
SID DATE TIME
M CTAG COMPLD
“<TRACMSG>”
;

12 STS and VT Paths

Table 12 STS and VT Paths

ED-VT1:[<TID>]:<AID>:<CTAG>:::[RVRTV=<RVRTV>],[RVTM=<RVTM>],[TACC=<TACC>]:
[<PST>],[<SST>];

Edits the attributes associated with a VT1 path

RTRV-VT1:[<TID>]:<AID>:<CTAG>[:::];

Retrieves the attributes associated with a VT1 path

Output format:

SID DATE TIME
M CTAG COMPLD

“<AID>::[RVRTV=<RVRTV>],[RVTM=<RVTM>],[TACC=<TACC>]:[<PST>],[<SST>]”

;

13 Synchronization

Table 13 Synchronization

ED-BITS:[<TID>]:<AID>:<CTAG>:::[LINECDE=<LINECDE>],[FMT=<FMT>],[LBO=<LBO>],
[SYNCMSG=<SYNCMSG>],[AISTHRSHLD=<AISTHRSHLD>]:[<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

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

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

REPT ALM SYNCN

Reports an alarm condition against a synchronization reference

REPT EVT BITS

Reports the occurrence of a non-alarmed event against a BITS facility

Table 13 Synchronization (continued)

<p>REPT EVT SYNCN Reports the occurrence of a non-alarmed event against a synchronization entity</p>
<p>RLS-SYNCNSW:[<TID>]:<AID>:<CTAG>; Releases the previous synchronization reference provided by the OPR-SYNCNSW command</p>
<p>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>” ;</p>
<p>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>” ;</p>
<p>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>]:<PST>” ;</p>
<p>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>],.,.,:<DESC>” ;</p>

Table 13 Synchronization (continued)

RTRV-COND-SYCN:[<TID>]:<AID>:<CTAG>::[<TYPEREQ>][,.,,];
Retrieves the synchronization condition
Output format:
SID DATE TIME
M CTAG COMPLD
“<AID>,[<AIDTYPE>]:[<NTFCNCDE>],<TYPEREP>,[<SRVEFF>],,,,,[<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>]”
;

14 System

Table 14 System

ALW-MSG-ALL:[<TID>]:<CTAG>[:,:,:];
Allows REPT ALM and REPT EVT autonomous messages to be transmitted
APPLY:[<TID>]:<CTAG>[::<MEM_SW_TYPE>];
Activates or reverts a software load during a software upgrade or downgrade process
COPY-RFILE:[<TID>]:<SRC>:<CTAG>::TYPE=<XFERTYPE>,[SRC=<SRC1>];
Downloads a new software package from the location specified by the FTP URL
ED-DAT:[<TID>]:<CTAG>::[<DATE>],[<TIME>];
Edits the date and the time

Table 14 System (continued)

ED-NE-GEN:[<TID>]::<CTAG>:::[NAME=<NAME>],[IPADDR=<IPADDR>],[IPMASK=<IPMASK>],[DEFRTR=<DEFRTR>],[IIOPPORT=<IIOPPORT>],[NTP=<NTP>];	Edits the general node attributes of an NE
INH-MSG-ALL:[<TID>]::<CTAG>[::,];	Inhibits REPT ALM and REPT EVT autonomous messages from being transmitted
INIT-SYS:[<TID>]:<AID>:<CTAG>[::];	Initializes the specified card and its associated subsystem(s)
REPT EVT FXFR	Reports the FTP software download status of the start, completion, and completed percentage
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>]” ;
RTRV-MAP-NETWORK:[<TID>]::<CTAG>;	Retrieves all the NE attributes which can be reached from the GNE Output format: SID DATE TIME M CTAG COMPLD “<IPADDR>,<NODENAME>,<PRODUCT>” ;
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>],[NAME=<NAME>],[SWVER=<SWVER>],[LOAD=<LOAD>],[PROTSWVER=<PROTSWVER>],[PROTLOAD=<PROTLOAD>],[DEFDESC=<DEFDESC>]” ;

Table 14 System (continued)

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

Retrieves the IP addresses and the node names of the NEs which are DCC-connected to this NE

Output format:

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

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>”
;

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

Sets the system date and time for the NE

15 Test Access

Table 15 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>]:<AID>:<CTAG>::<TAP>:MD=<MD>;

Connects the STS or VT defined by AID to the STS specified by the 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

Table 15 Test Access (continued)

RTRV-TACC:[<TID>]:<TAP>:<CTAG>;
Retrieves details associated with a TAP
Output format:
SID DATE TIME
M CTAG COMPLD
“<TAP>:<TACC_AID1>,<TACC_AID2>,<MD>],[<E_CONN>],[<F_CONN>]”
;

16 Testing

Table 16 Testing

OPR-LPBK-<MOD2_IO>:[<TID>]:<AID>:<CTAG>::,,,[<LPBKTYPE>;
Operates a signal loopback on an I/O card
RLS-LPBK-<MOD2_IO>:[<TID>]:<AID>:<CTAG>::,,,[<LPBKTYPE>;
Releases a signal loopback on an I/O card

17 UCP

Table 17 UCP

DLT-UCP-CC:[<TID>]:<AID>:<CTAG>[:::];
Deletes an UCP IP control channel
DLT-UCP-IF:[<TID>]:<AID>:<CTAG>[:::];
Deletes an UCP interface
DLT-UCP-NBR:[<TID>]:<AID>:<CTAG>[:::];
Deletes an UCP neighbor
ED-UCP-CC:[<TID>]:<AID>:<CTAG>:::[LOCALIPCC=<LOCALIPCC>, [REMOTEIPCC=<REMOTEIPCC>],[LMPHELLOINT=<LMPHELLOINT>, [LMPHELLODEADINT=<LMPHELLODEADINT>],[MTU=<MTU>],[CRCMD=<CRCMD>][:];
Edits UCP IP control channel attributes
ED-UCP-IF:[<TID>]:<AID>:<CTAG>:::[TNATYPE=<TNATYPE>],[TNAADDR=<TNAADDR>],[CORENETWORKID=<CORENETWORKID>][:];
Edits UCP interface attributes

Table 17 UCP (continued)

<p>ED-UCP-NBR:[<TID>]:<AID>:<CTAG>:::[NAME=<NAME>],[HELLOEN=<HELLOEN>],[HELLOINT=<HELLOINT>],[REFREDEN=<REFREDEN>][:];</p> <p>Edits an UCP neighbor</p>
<p>ED-UCP-NODE:[<TID>]:<CTAG>:::[NODEID=<NODEID>],[INITRETRY=<INITRETRY>],[MAXRETRY=<MAXRETRY>],[RESTARTTM=<RESTARTTM>],[RECOVTM=<RECOVTM>],[RXMTINT=<RXMTINT>],[RFRSHINT=<RFRSHINT>],[RESVTIMEOUT=<RESVTIMEOUT>],[RESVCONFTIMEOUT=<RESVCONFTIMEOUT>],[SOURCEDIP=<SOURCEDIP>],[DESTINATIONDIP=<DESTINATIONDIP>][:];</p> <p>Edits the UCP node level attributes</p>
<p>ENT-UCP-CC:[<TID>]:<AID>:<CTAG>:::[NBRIX=<NBRIX>],[CCTYPE=<CCTYPE>],[PORT=<PORT>],[LOCALCCID=<LOCALCCID>],[LOCALIPCC=<LOCALIPCC>],[REMOCCID=<REMOCCID>],[REMOCCIPCC=<REMOCCIPCC>],[LMPHELLOINT=<LMPHELLOINT>],[LMPHELLODEADINT=<LMPHELLODEADINT>],[MTU=<MTU>],[CRCMD=<CRCMD>],[TUNMD=<TUNMD>][:];</p> <p>Creates an UCP IP control channel</p>
<p>ENT-UCP-IF:[<TID>]:<AID>:<CTAG>:::[NBRIX=<NBRIX>],[CCID=<CCID>],[LOCALIFID=<LOCALIFID>],[REMOEIFID=<REMOEIFID>],[TNATYPE=<TNATYPE>],[TNAADDR=<TNAADDR>],[CORENETWORKID=<CORENETWORKID>][:];</p> <p>Creates an UCP interface</p>
<p>ENT-UCP-NBR:[<TID>]:<AID>:<CTAG>:::[NBRIX=<NBRIX>],[NODEID=<NODEID>],[NAME=<NAME>],[NDEN=<NDEN>],[HELLOEN=<HELLOEN>],[HELLOINT=<HELLOINT>],[REFREDEN=<REFREDEN>],[NUMRXMTS=<NUMRXMTS>][:];</p> <p>Creates an UCP neighbor</p>
<p>REPT ALM UCP</p> <p>Reports an alarm condition against an UCP object</p>
<p>REPT EVT UCP</p> <p>Reports the occurrence of a non-alarmed event against an UCP object</p>
<p>RTRV-ALM-UCP:[<TID>]:<AID>:<CTAG>:::[<NTFCNCDE>],[<CONDTYPE>],[<SRVEFF>][,.,,];</p> <p>Retrieves and sends the current status of all active alarm conditions against an UCP object</p> <p>Output format:</p> <p>SID DATE TIME</p> <p>M CTAG COMPLD</p> <p>“<AID>:<NTFCNCDE>,<CONDTYPE>,<SRVEFF>,.,.,:[<DESC>]”</p> <p>;</p>

Table 17 UCP (continued)

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

Retrieves the current standing condition against an UCP object

Output format:

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

RTRV-UCP-CC:[<TID>]:[<AID >]:<CTAG>[:::];

Retrieves UCP IP control channel attributes

Output format:

SID DATE TIME
M CTAG COMPLD
“[<AID>]::NBRIX=<NBRIX>,CCTYPE=<CCTYPE>,[PORT=<PORT>,
LOCALCCID=<LOCALCCID>,LOCALIPCC=<LOCALIPCC>,
REMOTECCID=<REMOTECCID>,[REMOTEIPCC=<REMOTEIPCC>,
LMPHELLOINT=<LMPHELLOINT>,OPERLMPHELLOINT=<OPERLMPHELLOINT>,
LMPHELLODEADINT=<LMPHELLODEADINT>,
OPERLMPHELLODEADINT=<OPERLMPHELLODEADINT>,[TUNMD=<TUNMD>,
[MTU=<MTU>],[CRCMD=<CRCMD>]”
;

RTRV-UCP-IF:[<TID>]:[<AID>]:<CTAG>[:::];

Retrieves UCP interface attributes

Output formats:

SID DATE TIME
M CTAG COMPLD
“[<AID>]::NBRIX=<NBRIX>,CCID=<CCID>,LOCALIFID=<LOCALIFID>,
REMOTEIFID=<REMOTEIFID>,TNATYPE=<TNATYPE>,TNAADDR=<TNAADDR>,
CORENETWORKID=<CORENETWORKID>”
;

RTRV-UCP-NBR:[<TID>]:[<AID>]:<CTAG>[:::];

Retrieves an UCP neighbor

Output format:

SID DATE TIME
M CTAG COMPLD
“<AID>:[NBRIX=<NBRIX>],[NODEID=<NODEID>],[NAME=<NAME>,
[NDEN=<NDEN>],[HELLOEN=<HELLOEN>],[HELLOINT=<HELLOINT>,
[REFREDEN=<REFREDEN>],[NUMRXMTS=<NUMRXMTS>]”
;

Table 17 UCP (continued)

RTRV-UCP-NODE:[<TID>]::<CTAG>[:::];

Retrieves UCP node-level attributes

Output formats:

```
SID DATE TIME
M CTAG COMPLD
“<:::[NODEID=<NODEID>],[INITRETRY=<INITRETRY>],[MAXRETRY=<MAXRETRY>],[
  [RESTARTTM=<RESTARTTM>],[RECOVTM=<RECOVTM>],[RXMTINT=<RXMTINT>],[
  [RFRSHINT=<RFRSHINT>],[RESVTIMEOUT=<RESVTIMEOUT>],[
  [RESVCONFTIMEOUT=<RESVCONFTIMEOUT>],[SOURCEDIP=<SOURCEDIP>],[
  [DESTINATIONDIP=<DESTINATIONDIP>]”
```

;

18 UPSR Switching

Table 18 UPSR Switching

OPR-PROTNSW-<STS_PATH>:[<TID>]:<AID>:<CTAG>::<SC>[:];

Initiates a SONET path protection (UPSR) switch request

OPR-PROTNSW-VT1:[<TID>]:<AID>:<CTAG>::<SC>[:];

Initiates a SONET path protection (UPSR) switch request

REPT SW

Reports the autonomous switching of a unit in a duplex equipment pair to standby and its mate to the active state

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

Releases a SONET path protection switch request that was established with the OPR-PROTNSW-<STS_PATH> command

RLS-PROTNSW-VT1:[<TID>]:<AID>:<CTAG>[::];

Releases a SONET path protection switch request that was established with the OPR-PROTNSW-VT1 command

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

Retrieves the switching state of a SONET UPSR STS path specified in the AID

Output format:

```
SID DATE TIME
M CTAG COMPLD
“<AID>:<SC>,[<SWITCHTYPE>]”
```

;

Table 18 UPSR Switching (continued)

RTRV-PROTNSW-VT1:[<TID>]:<AID>:<CTAG>[:::];

Retrieves the switching state of a SONET UPSR VT path specified in the AID

Output format:

SID DATE TIME
M CTAG COMPLD
“<AID>:<SC>,[<SWITCHTYPE>]”
;



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