



## QUICK REFERENCE



### **Cisco ONS SONET TL1 Command Quick Reference Guide, Release 8.5**

Cisco ONS 15454, ONS 15310-CL, ONS 15310-MA, ONS 15600



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**Note**

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

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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, Cisco ONS 15310-CL, Cisco ONS 15310-MA, and Cisco ONS 15600. Refer to the *Cisco ONS SONET 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.

## 1 BLSR

**Table 1** **BLSR**

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**DLT-`<MOD_RING>`:`<TID>`:`<AID>`:`<CTAG>``<::>`;**

Deletes the BLSR of the Network Element (NE).

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

Edits the BLSR attributes.

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**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 two-fiber or four-fiber BLSR (four-fiber BLSR is supported on the ONS 15454 and the ONS 15600 only).

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

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

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**Table 1** *BLSR (continued)*

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<p>RTRV-&lt;MOD_RING&gt;:[&lt;TID&gt;]:[&lt;AID&gt;]:&lt;CTAG&gt;[:::];</p> <p>Retrieves the BLSR information of the NE.</p> <p>Output format:</p> <p>SID DATE TIME</p> <p>M CTAG COMPLD</p> <p>“[&lt;AID&gt;]:[RINGID=&lt;RINGID&gt;],[NODEID=&lt;NODEID&gt;],[MODE=&lt;MODE&gt;],[RVRTV=&lt;RVRTV&gt;],[RVTM=&lt;RVTM&gt;],[SRVRTV=&lt;SRVRTV&gt;],[SRVTM=&lt;SRVTM&gt;],[EASTWORK=&lt;EASTWORK&gt;],[WESTWORK=&lt;WESTWORK&gt;],[EASTPROT=&lt;EASTPROT&gt;],[WESTPROT=&lt;WESTPROT&gt;]”</p> <p>;</p>
<hr/> <p>RTRV-TRC-&lt;OCN_BLSR&gt;:[&lt;TID&gt;]:&lt;AID&gt;:&lt;CTAG&gt;[:::];</p> <p>Retrieves the valid J1 expected trace string, received trace string, trace mode, C2 byte, and STS bandwidth of the OC-N port if the port has a BLSR.</p> <p>Output format:</p> <p>SID DATE TIME</p> <p>M CTAG COMPLD</p> <p>“&lt;AID&gt;:[LEVEL=&lt;LEVEL&gt;],[EXPTRC=&lt;EXPTRC&gt;],[INCTRC=&lt;INCTRC&gt;],[TRCMODE=&lt;TRCMODE&gt;],[C2=&lt;C2&gt;]”</p> <p>;</p>

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## 2 Bridge and Roll

**Table 2** *Bridge and Roll*

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<p>DLT-BULKROLL-&lt;OCN_TYPE&gt;:[&lt;TID&gt;]:&lt;FROM&gt;:&lt;CTAG&gt;:::[RFROMSTART=&lt;RFROMSTART&gt;],[RFROMEND=&lt;RFROMEND&gt;],[WHY=&lt;WHY&gt;];</p> <p>Cancels or completes an attempted bulk rolling operation.</p>
<hr/> <p>DLT-ROLL-&lt;MOD_PATH&gt;:[&lt;TID&gt;]:&lt;FROM&gt;,&lt;TO&gt;:&lt;CTAG&gt;:::WHY=&lt;WHY&gt;;</p> <p>Cancels or completes an attempted rolling operation of a facility.</p>
<hr/> <p>ED-BULKROLL-&lt;OCN_TYPE&gt;:[&lt;TID&gt;]:&lt;FROM&gt;:&lt;CTAG&gt;:::[RFROMSTART=&lt;RFROMSTART&gt;],[RFROMEND=&lt;RFROMEND&gt;],[CMDMDE=&lt;CMDMDE&gt;];</p> <p>Edits information about rolling traffic from one end point to another without interrupting service.</p>
<hr/> <p>ED-ROLL-&lt;MOD_PATH&gt;:[&lt;TID&gt;]:&lt;FROM&gt;,&lt;TO&gt;:&lt;CTAG&gt;[:::CMDMDE=&lt;CMDMDE&gt;];</p> <p>Forces a valid signal to complete a rolling operation.</p>

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**Table 2 Bridge and Roll (continued)**

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<p><b>ENT-BULKROLL-<i>&lt;OCN_TYPE&gt;</i>:<i>&lt;TID&gt;</i>:<i>&lt;FROM&gt;</i>:<i>&lt;CTAG&gt;</i>...<i>RTOSTART</i>=<i>&lt;RTOSTART&gt;</i>,  <i>[RFROMSTART</i>=<i>&lt;RFROMSTART&gt;</i>],<i>[RFROMEND</i>=<i>&lt;RFROMEND&gt;</i>],<i>RMODE</i>=<i>&lt;RMODE&gt;</i>,  <i>[CMDMDE</i>=<i>&lt;CMDMDE&gt;</i>];</b></p> <p>Enters information for rolling traffic from one endpoint to another without interrupting service. Line level rolling/bulk rolling only.</p>
<p><b>ENT-ROLL-<i>&lt;MOD_PATH&gt;</i>:<i>&lt;TID&gt;</i>:<i>&lt;FROM&gt;</i>,<i>&lt;TO&gt;</i>:<i>&lt;CTAG&gt;</i>...<i>RFROM</i>=<i>&lt;RFROM&gt;</i>,  <i>RTO</i>=<i>&lt;RTO&gt;</i>,<i>RMODE</i>=<i>&lt;RMODE&gt;</i>,<i>[CMDMDE</i>=<i>&lt;CMDMDE&gt;</i>];</b></p> <p>Enters information for rolling traffic from one endpoint to another without interrupting service. Single paths (STS or VT).</p>
<p><b>RTRV-BULKROLL-<i>&lt;OCN_TYPE&gt;</i>:<i>&lt;TID&gt;</i>:<i>&lt;SRC&gt;</i>:<i>&lt;CTAG&gt;</i>;</b></p> <p>Retrieves roll data parameters on a line.</p> <p>Output Format:</p> <p>SID DATE TIME  M CTAG COMPLD  “<i>&lt;FROM&gt;</i>:<i>RFROM</i>=<i>&lt;RFROM&gt;</i>,<i>RTO</i>=<i>&lt;RTO&gt;</i>,<i>[RMODE</i>=<i>&lt;RMODE&gt;</i>],<i>VLDSIG</i>=<i>&lt;VLDSIG&gt;</i>”  ;</p>
<p><b>RTRV-ROLL-<i>&lt;MOD_PATH&gt;</i>:<i>&lt;TID&gt;</i>:<i>&lt;SRC&gt;</i>:<i>&lt;CTAG&gt;</i>;</b></p> <p>Retrieves roll data parameters.</p> <p>Output format:</p> <p>SID DATE TIME  M CTAG COMPLD  “<i>&lt;FROM&gt;</i>,<i>&lt;TO&gt;</i>:<i>RFROM</i>=<i>&lt;RFROM&gt;</i>,<i>RTO</i>=<i>&lt;RTO&gt;</i>,<i>[RMODE</i>=<i>&lt;RMODE&gt;</i>],  <i>VLDSIG</i>=<i>&lt;VLDSIG&gt;</i>”  ;</p>

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# 3 Cross Connections

**Table 3** Cross Connections

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<code>DLT-CRS-&lt;PATH&gt;:[&lt;TID&gt;]:&lt;SRC&gt;,&lt;DST&gt;:&lt;CTAG&gt;[::&lt;CKTID=&lt;CKTID&gt;], [CMDMDE=&lt;CMDMDE&gt;];</code>
Deletes a cross-connection between STS or VT paths.
<code>ED-CRS-&lt;PATH&gt;:[&lt;TID&gt;]:&lt;SRC&gt;,&lt;DST&gt;:&lt;CTAG&gt;::[&lt;CCT&gt;]:[ADD=&lt;ADD&gt;], [REMOVE=&lt;REMOVE&gt;],[CKTID=&lt;CKTID&gt;],[CMDMDE=&lt;CMDMDE&gt;]:&lt;PST&gt;[,&lt;SST&gt;];</code>
Edits the state of an STS or VT cross-connection.
<code>ENT-CRS-&lt;PATH&gt;:[&lt;TID&gt;]:&lt;SRC&gt;,&lt;DST&gt;:&lt;CTAG&gt;::[&lt;CCT&gt;]:[DRITYPE=&lt;DRITYPE&gt;], [DRINODE=&lt;DRINODE&gt;],[CKTID=&lt;CKTID&gt;],[CMDMDE=&lt;CMDMDE&gt;]:[&lt;PST&gt;[,&lt;SST&gt;];</code>
Creates an STS or VT cross-connection with cross-connection types (CCT).
<code>RTRV-CRS:[&lt;TID&gt;]:&lt;AID&gt;:&lt;CTAG&gt;[::&lt;CRSTYPE=&lt;CRSTYPE&gt;][:];</code>
Retrieves all the cross-connections based on the required cross-connection type for all STS or VT connections. Output format: SID DATE TIME M CTAG COMPLD “<SRC>,<DST>:<CCT>,<CRSTYPE>:[DRITYPE=<DRITYPE>],[DRINODE=<SYNCSW>], [CKTID=<CKTID>]:<PSTPSTQ>,[<SSTQ>]” ;
<code>RTRV-CRS-&lt;PATH&gt;:[&lt;TID&gt;]:&lt;SRC&gt;:&lt;CTAG&gt;[:::];</code>
Retrieves all connections that are associated with the entered AID(s) or AID range. Output format: SID DATE TIME M CTAG COMPLD “<SRC>,<DST>:<CCT>,<CRSTYPE>:[DRITYPE=<DRITYPE>],[DRINODE=<DRINODE>], [CKTID=<CKTID>]:<PSTPSTQ>,[<SSTQ>]” ;

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# 4 DWDM



**Note** ONS 15454 only.

**Table 4**                      **DWDM**

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<b>DLT-FFP-&lt;MOD2DWDMPAYLOAD&gt;:[&lt;TID&gt;]:&lt;SRC&gt;,&lt;DST&gt;:&lt;CTAG&gt;[::];</b>
Deletes Y-cable protection on client facilities.
<b>DLT-LMP-CTRL:[&lt;TID&gt;]:&lt;SRC&gt;:&lt;CTAG&gt;;</b>
Deletes a Link Management Protocol (LMP) control channel.
<b>DLT-LMP-TLINK:[&lt;TID&gt;]:&lt;SRC&gt;:&lt;CTAG&gt;;</b>
Deletes an LMP TE link.
<b>DLT-LMP-DLINK:[&lt;TID&gt;]:&lt;SRC&gt;:&lt;CTAG&gt;;</b>
Deletes an LMP data link.
<b>DLT-LNK:[&lt;TID&gt;]:&lt;FROM&gt;,&lt;TO&gt;:&lt;CTAG&gt;;</b>
Deletes an optical link between two optical connection points.
<b>DLT-OCHCC:[&lt;TID&gt;]:&lt;AID&gt;:&lt;CTAG&gt;[::CKTID=&lt;CKTID&gt;],[CMDMDE=&lt;CMDMDE&gt;;]</b>
Deletes the optical channel (OCH) client connection.
<b>DLT-OCHNC:[&lt;TID&gt;]:&lt;SRC&gt;,&lt;DST&gt;:&lt;CTAG&gt;:::[CKTID=&lt;CKTID&gt;],[CMDMDE=&lt;CMDMDE&gt;;]</b>
Deletes the OCH network connection.
<b>DLT-OSC:[&lt;TID&gt;]:&lt;AID&gt;:&lt;CTAG&gt;;</b>
Deletes the optical service channel (OSC) group of the NE.
<b>DLT-WDMSIDE:[&lt;TID&gt;]:&lt;AID&gt;:&lt;CTAG&gt;[::];</b>
Deletes a wavelength division multiplexing (WDM) side.
<b>ED-&lt;MOD2DWDMPAYLOAD&gt;:[&lt;TID&gt;]:&lt;AID&gt;:&lt;CTAG&gt;:::[NAME=&lt;NAME&gt;],[CMDMDE=&lt;CMDMDE&gt;],[FREQ=&lt;FREQ&gt;],[LOSSB=&lt;LOSSB&gt;]:[&lt;PST&gt;[,&lt;SST&gt;]]</b>
Edits the operating parameters for a DWDM client facility.
<b>ED-APC:[&lt;TID&gt;]:&lt;CTAG&gt;[::APCENABLE=&lt;APCENABLE&gt;;]</b>
Modifies the amplification power control (APC) application attributes.
<b>ED-FFP-&lt;MOD2DWDMPAYLOAD&gt;:[&lt;TID&gt;]:&lt;AID&gt;:&lt;CTAG&gt;:::[PROTID=&lt;PROTID&gt;],[RVRTV=&lt;RVRTV&gt;],[RVTM=&lt;RVTM&gt;],[PSDIRN=&lt;PSDIRN&gt;][:];</b>
Edits a Y-cable protection group on client facilities.
<b>ED-FFP-OCH:[&lt;TID&gt;]:&lt;AID&gt;:&lt;CTAG&gt;:::[PROTID=&lt;PROTID&gt;],[RVRTV=&lt;RVRTV&gt;],[RVTM=&lt;RVTM&gt;],[PSDIRN=&lt;PSDIRN&gt;][:];</b>
Edits the provisioning for the default protection group on the DWDM port of a TXP_MR_2.5G or TXPP_MR_2.5G card.

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**Table 4 DWDM (continued)**

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**ED-LMP:**[<TID>]:<CTAG>:::[ENABLED=<ENABLED>],[WDMEXT=<WDM>],[ROLE=<ROLE>],[LMPNODEID-<NODEID>][:];

Edits the global LMP attributes.

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**ED-LMP-CTRL:**[<TID>]:<SRC>:<CTAG>:::[LOCALPORT=<LOCALPORT>],[RE MOTENE=<RE MOTENE>],[RE MOT EIP=<RE MOT EIP>],[HELLO=<HELLO>],[HELLOMIN=<HELLOMIN>],[HELLOMAX=<HELLOMAX>],[DEAD=<DEAD>],[DEADMIN=<DEADMIN>],[DEADMAX=<DEADMAX>]:[<PST>],[<SST>];

Edits an LMP control channel.

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**ED-LMP-TLINK:**[<TID>]:<SRC>:<CTAG>:::RE MOT EID=<RE MOT E\_ID>,RE MOT ETE=<RE MOT E\_TELINK>,[MUXCAP=<MUXCAP>]:[<PST>],[<SST>];

Edits an LMP TE link.

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**ED-LMP-DLINK:**[<TID>]:<SRC>:<CTAG>:::[LINKTYPE=<LINKTYPE>],TE LINK=<TE LINK>,RE MOT EID=<RE MOT EID>;

Edits an LMP data link.

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**ED-LNK:**[<TID>]:<FROM>,<TO>:<CTAG>:::[CMDMDE=<CMDMDE>]:[<PST>],[<SST>];

Edits an optical link.

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

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

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

Edits the OCH client connection.

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**ED-OCHNC:**[<TID>]:<SRC>,<DST>:<CTAG>:::[CKTID=<CKTID>],[CMDMDE=<CMDMDE>]:[<PST>],[<SST>];

Edits the OCH network connection.

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**Table 4 DWDM (continued)**

<p><b>ED-OMS:</b>[&lt;TID&gt;]:&lt;AID&gt;:&lt;CTAG&gt;:::[RDIRN=&lt;RDIRN&gt;],[EXPBAND=&lt;EXPBAND&gt;],[VOAATTN=&lt;VOAATTN&gt;],[VOAPWR=&lt;VOAPWR&gt;],[CALOPWR=&lt;CALOPWR&gt;],[CHPOWER=&lt;CHPOWER&gt;],[NAME=&lt;NAME&gt;],[SOAK=&lt;SOAK&gt;],[CMDMDE=&lt;CMDMDE&gt;]:[&lt;PST&gt;],[&lt;SST&gt;];</p> <p>Edits the attributes (service parameters) and state of an optical multiplex section (OMS) facility.</p>
<p><b>ED-OSC:</b>[&lt;TID&gt;]:&lt;AID&gt;:&lt;CTAG&gt;:::[RINGID=&lt;RINGID&gt;],[NODEID=&lt;NODEID&gt;];</p> <p>Edits the OSC group attributes.</p>
<p><b>ED-OTS:</b>[&lt;TID&gt;]:&lt;AID&gt;:&lt;CTAG&gt;:::[RDIRN=&lt;RDIRN&gt;],[VOAATTN=&lt;VOAATTN&gt;],[VOAPWR=&lt;VOAPWR&gt;],[OFFSET=&lt;OFFSET&gt;],[CALTILT=&lt;CALTILT&gt;],[OSRI=&lt;OSRI&gt;],[AMPLMODE=&lt;AMPLMODE&gt;],[CHPOWER=&lt;CHPOWER&gt;],[EXPGAIN=&lt;EXPGAIN&gt;],[NAME=&lt;NAME&gt;],[SOAK=&lt;SOAK&gt;],[CMDMDE=&lt;CMDMDE&gt;]:[&lt;PST&gt;],[&lt;SST&gt;];</p> <p>Edits the attributes (service parameters) and state of an optical transport section (OTS) facility.</p>
<p><b>ED-SLV-WDMANS:</b>[&lt;TID&gt;]:&lt;AID&gt;:&lt;CTAG&gt;:::[HIGHSLVEXP=&lt;HIGHSLVEXP&gt;],[LOWSLVEXP=&lt;LOWSLVEXP&gt;];</p> <p>Edits the expected span loss verification.</p>
<p><b>ED-TRC-OCH:</b>[&lt;TID&gt;]:&lt;SRC&gt;:&lt;CTAG&gt;:::[EXPTRC=&lt;EXPTRC&gt;],[TRC=&lt;TRC&gt;],[TRCMODE=&lt;TRCMODE&gt;],[TRCLEVEL=&lt;TRCLEVEL&gt;],[TRCFORMAT=&lt;TRCFORMAT&gt;][:];</p> <p>Edits trace-related OCH facilities.</p>
<p><b>ED-WDMANS:</b>[&lt;TID&gt;]:&lt;AID&gt;:&lt;CTAG&gt;:::[POWERIN=&lt;POWERIN&gt;],[POWEROUT=&lt;POWEROUT&gt;],[POWEREXP=&lt;POWEREXP&gt;],[POWEROSC=&lt;POWEROSC&gt;],[NTWTYPE=&lt;RINGTYPE&gt;],[PPMESH=&lt;PPMESH&gt;],[DITHER=&lt;DITHER&gt;];</p> <p>Edits the automatic optical node setup (AONS) application attributes.</p>
<p><b>ED-WDMSIDE:</b>[&lt;TID&gt;]:&lt;AID&gt;:&lt;CTAG&gt;:::[NEWSIDE=&lt;NEWSIDE&gt;][:];</p> <p>Modifies the WDM node side attribute.</p>
<p><b>ENT-FFP-&lt;MOD2DWDMPAYLOAD&gt;:</b>[&lt;TID&gt;]:&lt;SRC&gt;,&lt;DST&gt;:&lt;CTAG&gt;:::[PROTTYPE=&lt;PROTTYPE&gt;],[PROTID=&lt;PROTID&gt;],[RVRTV=&lt;RVRTV&gt;],[RVTM=&lt;RVTM&gt;],[PSDIRN=&lt;PSDIRN&gt;][:];</p> <p>Creates Y cable protection on client facilities.</p>
<p><b>ENT-LMP-CTRL:</b>[&lt;TID&gt;]:&lt;SRC&gt;:&lt;CTAG&gt;:::[LOCALPORT=&lt;LOCALPORT&gt;],[RE MOTENE=&lt;RE MOTENE&gt;],[RE MOT EIP=&lt;RE MOT EIP&gt;],[HELLO=&lt;HELLO&gt;],[HELLOMIN=&lt;HELLOMIN&gt;],[HELLOMAX=&lt;HELLOMAX&gt;],[DEAD=&lt;DEAD&gt;],[DEADMIN=&lt;DEADMIN&gt;],[DEADMAX=&lt;DEADMAX&gt;]:[&lt;PST&gt;],[&lt;SST&gt;];</p> <p>Creates an LMP control channel.</p>

**Table 4 DWDM (continued)**

<p><b>ENT-LMP-TLINK:</b>&lt;TID&gt;:&lt;SRC&gt;:&lt;CTAG&gt;:::REMOTEID=&lt;REMOTE_ID&gt;, REMOTETE=&lt;REMOTE_TELINK&gt;, [MUXCAP=&lt;MUXCAP&gt;]:&lt;PST&gt;[,&lt;SST&gt;];</p> <p>Creates an LMP TE link.</p>
<p><b>ENT-LMP-DLINK:</b>&lt;TID&gt;:&lt;SRC&gt;:&lt;CTAG&gt;:::[LINKTYPE=&lt;LINKTYPE&gt;], TELINK=&lt;TELINK&gt;,REMOTEID=&lt;REMOTEID&gt;;</p> <p>Creates an LMP data link.</p>
<p><b>ENT-LNK:</b>&lt;TID&gt;:&lt;FROM&gt;,&lt;TO&gt;:&lt;CTAG&gt;::::&lt;PST&gt;[,&lt;SST&gt;];</p> <p>Creates an optical link between two optical connection points.</p>
<p><b>ENT-OCHCC:</b>&lt;TID&gt;:&lt;AID&gt;:&lt;CTAG&gt;[:::CKTID=&lt;CKTID&gt;], [CMDMDE=&lt;CMDMDE&gt;]:&lt;PST&gt;[,&lt;SST&gt;];</p> <p>Allocates an OCH client connection.</p>
<p><b>ENT-OCHNC:</b>&lt;TID&gt;:&lt;SRC&gt;,&lt;DST&gt;:&lt;CTAG&gt;::&lt;WCT&gt;:[CKTID=&lt;CKTID&gt;], [CMDMDE=&lt;CMDMDE&gt;]:&lt;PST&gt;[,&lt;SST&gt;];</p> <p>Allocates an OCH network connection.</p>
<p><b>ENT-OSC:</b>&lt;TID&gt;:&lt;AID&gt;:&lt;CTAG&gt;:::[RINGID=&lt;RINGID&gt;],[NODEID=&lt;NODEID&gt;], [EAST=&lt;EAST&gt;],[WEST=&lt;WEST&gt;];</p> <p>Creates the OSC group of the NE.</p>
<p><b>ENT-WDMSIDE:</b>&lt;TID&gt;:&lt;AID&gt;:&lt;CTAG&gt;:::LINEIN=&lt;LINEIN&gt;,LINEOUT=&lt;LINEOUT&gt;[:];</p> <p>Adds a new WDM node side and defines its attributes.</p>
<p><b>OPR-APC:</b>&lt;TID&gt;::&lt;CTAG&gt;[::::];</p> <p>Permits the APC application inside the NE to force regulation of the optical power to the entire DWDM ring.</p>
<p><b>OPR-LASER-OTS:</b>&lt;TID&gt;:&lt;AID&gt;:&lt;CTAG&gt;;</p> <p>Instructs a laser to be switched on.</p>
<p><b>OPR-LNK:</b>&lt;TID&gt;::&lt;CTAG&gt;;</p> <p>Permits the optical link application inside the NE to calculate all the automatic optical links between end points which can be identified by the NE.</p>
<p><b>OPR-PROTNSW-OCH:</b>&lt;TID&gt;:&lt;AID&gt;:&lt;CTAG&gt;::&lt;SW&gt;;</p> <p>Performs a protection switch on the trunk port of a TXPP_MR_2.5G card (protect version only).</p>
<p><b>OPR-SLV-WDMANS:</b>&lt;TID&gt;:&lt;AID&gt;:&lt;CTAG&gt;;</p> <p>Invokes the calculation of the expected span loss verification.</p>

**Table 4 DWDM (continued)**

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<p><b>OPR-WDMANS:</b>[&lt;TID&gt;]::&lt;CTAG&gt;;</p> <p>Operates the AONS application inside the NE to force a recalculation of the value to be assigned to all variable optical attenuators (VOA) representing the optical path inside the node.</p>
<p><b>RLS-LASER-OTS:</b>[&lt;TID&gt;]:&lt;AID&gt;:&lt;CTAG&gt;;</p> <p>Instructs a laser to be switched off.</p>
<p><b>RLS-PROTNSW-&lt;MOD2DWDMPAYLOAD&gt;:</b>[&lt;TID&gt;]:&lt;SRC&gt;:&lt;CTAG&gt;[::];</p> <p>Releases a Y-cable protection switch on client facilities.</p>
<p><b>RLS-PROTNSW-OCH:</b>[&lt;TID&gt;]:&lt;AID&gt;:&lt;CTAG&gt;;</p> <p>Performs a protection switch on the trunk port of a TXPP_MR_2.5G card.</p>
<p><b>RTRV-&lt;MOD2DWDMPAYLOAD&gt;:</b>[&lt;TID&gt;]:&lt;AID&gt;:&lt;CTAG&gt;[:::];</p> <p>Retrieves the configuration parameter of a DWDM client.</p> <p>Output format:</p> <p>SID DATE TIME M CTAG COMPLD “&lt;AIDUNIONID&gt;,&lt;AIDTYPE&gt;,,[&lt;ROLE&gt;],[&lt;STATUS&gt;]:[NAME=&lt;NAME&gt;],[LBCL=&lt;LBCL&gt;], [OPT=&lt;OPT&gt;],[OPR=&lt;OPR&gt;],[FREQ=&lt;FREQ&gt;],[LOSSB=&lt;LOSSB&gt;]:&lt;PSTPSTQ&gt;,&lt;SST&gt;”</p> <p>;</p>
<p><b>RTRV-ALMTH-&lt;MOD2&gt;:</b>[&lt;TID&gt;]:&lt;AID&gt;:&lt;CTAG&gt;::[&lt;CONDTYPE&gt;][,,:];</p> <p>Retrieves the alarm threshold values.</p> <p>Output format:</p> <p>SID DATE TIME M CTAG COMPLD “&lt;AID&gt;,&lt;MOD&gt;:&lt;CONDTYPE&gt;,,,&lt;THLEVEL&gt;”</p> <p>;</p>
<p><b>RTRV-APC:</b>[&lt;TID&gt;]::&lt;CTAG&gt;;</p> <p>Retrieves the APC application attributes.</p> <p>Output format:</p> <p>SID DATE TIME M CTAG COMPLD “::[APCENABLE=&lt;APCENABLE&gt;],[APCSTATE=&lt;APCSTATE&gt;]”</p> <p>;</p>

---

**Table 4** *DWDM (continued)*

---

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

Retrieves Y-cable protection on client facilities.

Output format:

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

---

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

Retrieves the protection group information for the TXP\_MR\_2.5G and TXPP\_MR\_2.5G trunk port.

Output format:

SID DATE TIME  
M CTAG COMPLD  
“<WORK>,<PROTECT>::[PROTOTYPE=<PROTOTYPE>],[PROTID=<PROTID>],  
[RVRTV=<RVRTV>],[RVTM=<RVTM>],[PSDIRN=<PSDIRN>],[VRGRDTM=<VRGRDTM>],  
[DTGRDTM=<DTGRDTM>],[RCGRDTM=<RCGRDTM>],[OPOTYPE=<OPOTYPE>]”  
;

---

**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>]”  
;

---

**Table 4** *DWDM (continued)*

---

**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=<REMOTEIP>,[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>],[REMOETE=<REMOETE>],
[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>]"
;
```

---

**Table 4**                    **DWDM (continued)**

---

**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 APC application ports that are involved in node setup regulation.

Output format:

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

---

**RTRV-NE-WDMANS:*<TID>*:::*<CTAG>*;**

Retrieves the 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>*]*”  
;

---

**Table 4 DWDM (continued)**

---

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

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

Output format:

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

---

**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>”  
;

---

**Table 4 DWDM (continued)**

---

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

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

Output format:

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

---

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

Retrieves the optical power monitoring (OPM) parameters present at the OCH layer in a reconfigurable optical add/drop mode (ROADM) node.

Output format:

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

---

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

Retrieves all of the OSC information of the NE.

Output format:

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

---

**Table 4** *DWDM (continued)*

---

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

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

Output format:

```
SID DATE TIME
M CTAG COMPLD
“<AID>:RDIRN=<RDIRN>,OPTYPE=<OPTICALPORTTYPE>,[OPWR=<POWER>],
[ILOSS=<ILOSS>],[VOAMODE=<VOAMODE>],[VOAATTN=<VOAATTN>],
[VOAPWR=<VOAPWR>],[VOAREFATTN=<VOAREFATTN>],
[VOAREFPWR=<VOAREFPWR>],[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 card.

Output format:

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

---

**Table 4**                    **DWDM (continued)**

---

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

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

Output format:

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

---

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

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

Output format:

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

---

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

Retrieves the AONS application attributes.

Output format:

SID DATE TIME  
“<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>][:]”  
;

---

**Table 4** *DWDM (continued)*

---

**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 alarm thresholds on MXP\_2.5G\_10G, TXP\_MR\_10G, TXP\_MR\_2.5G, TXPP\_MR\_2.5G, OSCM, OSC-CSM, OPT-PRE, OPT-BST, MD-4, MUX-32, DMX-32, AD-1C, AD-2C, AD-4C, AD-1B, AD-4B facilities, ports and channels.

---

## 5 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>"  
;

---

## 6 Environment

**Table 6**      **Environment**

---

<p><b>OPR-ACO-ALL:</b>[&lt;TID&gt;]:[&lt;AID&gt;]:&lt;CTAG&gt;;</p> <p>Operates the cut-off of the office audible alarm indications without changing the local alarm indications.</p> <hr/> <p><b>OPR-EXT-CONT:</b>[&lt;TID&gt;]:&lt;AID&gt;:&lt;CTAG&gt;::[&lt;CONTTYPE&gt;],[&lt;DURATION&gt;];</p> <p>Operates an external control and closes the external control contact.</p> <hr/> <p><b>REPT ALM ENV:</b></p> <p>Reports a customer-defined condition on an environmental alarm input.</p> <p>Output format:</p> <p>    SID DATE TIME</p> <p>** ATAG REPT ALM ENV</p> <p>    “&lt;AID&gt;:&lt;NTFCNCDE&gt;,&lt;ALMTYPE&gt;,[&lt;OCRDAT&gt;],[&lt;OCRTM&gt;],[&lt;DESC&gt;]”</p> <p>;</p> <hr/> <p><b>REPT EVT ENV:</b></p> <p>Reports a non-alarmed event against an environmental alarm input.</p> <p>Output format:</p> <p>    SID DATE TIME</p> <p>A ATAG REPT EVT ENV</p> <p>    “&lt;AID&gt;:&lt;ALMTYPE&gt;,[&lt;CONDEFF&gt;],,,,,,:[&lt;DESC&gt;]”</p> <p>;</p> <hr/> <p><b>RLS-EXT-CONT:</b>[&lt;TID&gt;]:&lt;AID&gt;:&lt;CTAG&gt;[::,];</p> <p>Releases a forced contact state to return the control of the contact to an automatic control state.</p> <hr/> <p><b>RTRV-ALM-ENV:</b>[&lt;TID&gt;]:&lt;AID&gt;:&lt;CTAG&gt;::[&lt;NTFCNCDE&gt;],[&lt;ALMTYPE&gt;];</p> <p>Retrieves the environmental alarms.</p> <p>Output format:</p> <p>    SID DATE TIME</p> <p>M CTAG COMPLD</p> <p>    “&lt;AID&gt;:&lt;NTFCNCDE&gt;,&lt;ALMTYPE&gt;,[&lt;OCRDAT&gt;],[&lt;OCRTM&gt;],[&lt;DESC&gt;]”</p> <p>;</p> <hr/>
---

**Table 6**                      **Environment (continued)**

---

**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 (not supported on the ONS 15600).

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 environmental alarm.

---

# 7 Equipment

**Table 7**      **Equipment**

<b>ALW-SWDX-EQPT:</b> [<TID>]:<AID>:<CTAG>[::];
Allows automatic or manual switching on a duplex system containing duplexed or redundant equipment (ONS 15454 only).
<b>ALW-SWTOPROTN-EQPT:</b> [<TID>]:<AID>:<CTAG>[::<DIRN>];
Allows automatic or manual switching of a acrd/port back to a protection status (ONS 15454 only).
<b>ALW-SWTOWKG-EQPT:</b> [<TID>]:<AID>:<CTAG>[::<DIRN>];
Allows automatic or manual switching of a card/port back to a working status (ONS 15454 only).
<b>CHG-EQPT:</b> [<TID>]:<AID>:<CTAG>::<EQPTTYPE>:[PPMTYPE=PPMTYPE>], [PPMNUM=<PPMNUM>],[PORTNUM=<PORTNUM>],[PORTRATE=<PORTRATE>];
Performs an in-service upgrade from low-density (LD) electrical cards to high-density (HD) cards.
<b>DLT-EQPT:</b> [<TID>]:<AID>:<CTAG>[::];
Deletes a card from the NE. Deletes a shelf that is no longer used.
<b>ED-EQPT:</b> [<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 slot in the NE. Modifies a shelf role from node control (NC) to shelf control (SC) on an NE configured in multishelf mode.
<b>ENT-EQPT:</b> [<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 slot in the NE. Pre-provisions an NE configured in multishelf mode.
<b>INH-SWDX-EQPT:</b> [<TID>]:<AID>:<CTAG>[::];
Inhibits the automatic or manual switching on an NE containing duplex equipment (ONS 15454 only).

**Table 7                      Equipment (continued)**

---

**INH-SWTOPROTN-EQPT:**[<TID>]:<AID>:<CTAG>[::<DIRN>];  
 Inhibits automatic or manual switching of a card/port to protection (ONS 15454 only).

---

**INH-SWTOWKG-EQPT:**[<TID>]:<AID>:<CTAG>[::<DIRN>];  
 Inhibits automatic or manual switching of an equipment unit back to the working unit (ONS 15454 only).

---

**REPT ALM EQPT**  
 Reports an alarm condition against an equipment unit or slot.  
 Output format:  
 SID DATE TIME  
 \*\* ATAG REPT ALM EQPT  
 “<AID>:<NTFCNCDE>,<CONDITION>,<SRVEFF>,[<OCRDAT>],  
 [<OCRMTM>],,:[<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 equipment from the in service (IS) state and places it into the maintenance (MT) state.

---

**RST-EQPT:**[<TID>]:<AID>:<CTAG>[::];  
 Provisions equipment IS. It is applicable only to equipment in transition from the MT 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>],  
 [<OCRMTM>],,:[<DESC>]”  
 ;

---

**Table 7                      Equipment (continued)**

---

**RTRV-ALMTH-EQPT:** [<TID>]: [<AID>]: <CTAG>:: [<CONDTYPE>][,,:];

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

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>],

    [<OCRMT>], , , [<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 (ONS 15454 only).

---

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

Switches an XCVT/XC10G card with the redundant card within the NE.

---

**Table 7**            **Equipment (continued)**

---

SW-TOPROTN-EQPT:[<TID>]:<AID>:<CTAG>::[<MODE>],[<PROTID>],[<DIRN>];
Performs a card protection switch (ONS 15454 only).
SW-TOWKG-EQPT:[<TID>]:<AID>:<CTAG>::[<MODE>],[<DIRN>];
Switches the protected working card/port back to the original working card/port (ONS 15454 only).

---

## 8 Ethernet

**Table 8**            **Ethernet**

---

ED-ETH:[<TID>]:<AID>:<CTAG>:::[FLOW=<FLOW>],[EXPDUPLICATION=<EXPDUPLICATION>], [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.
RTRV-ETH:[<TID>]:<AID>:<CTAG>[:::];
Retrieves the front-end port information of an Ethernet card.
Output format: SID DATE TIME M CTAG COMPLD " <AID>::[LINKSTATE=<LINKSTATE>],[FLOWCTRL=<FLOWCTRL>],[DUPLEX=<DUPLEX>], [SPEED=<SPEED>],[FLOW=<FLOW>],[EXPDUPLICATION=<EXPDUPLICATION>], [EXPSPEED=<EXPSPEED>],[VLANCOS=<VLANCOS>],[IPTOS=<IPTOS>], [OPTICS=<OPTICS>],[NAME=<NAME>],[SOAK=<SOAK>],[SOAKLEFT=<SOAKLEFT>], [SELECTIVEAUTO=<SELECTIVEAUTO>]:<PST_PSTQ>,[<SSTQ>]" ;

---

# 9 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 the LMP-FAIL alarms for the control channels and TE links.

```
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>]"
;
```

---

**Table 9**                      **Fault (continued)**

---

**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>],[<LOCN>,<DIRECTION>],[<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>]”  
;

---

# 10 File Transfer

**Table 10**      **File Transfer**

---

**APPLY:**[<TID>]:<CTAG>[:<MEM\_SW\_TYPE>];

Activates or reverts a software load during a software upgrade or downgrade (not supported on the ONS 15600).

---

**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 (not supported on the ONS 15600).

Output format:

```
SID DATE TIME
A ATAG REPT EVT FXFR
  "<FILENAME>,<FXFR_STATUS>,<FXFR_RSLT>,<PRCNT_XFRD>]"
;
```

---

**REPT EVT IOSCFG**

Reports the status of copying 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>]"
;
```

---

# 11 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>,<OCR TM>,<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=<OCR TIME>],[DATE=<OCR DAT>]:<ALMDESCR>"
;
```

---

# 12 Network

**Table 12**      **Network**

---

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

Retrieves all the NE attributes which are reachable from the gateway network element (GNE).

Output format:

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

---

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

Retrieves the IP address and node name of the NEs that have the data communication channel (DCC) connection with this NE.

Output format:

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

---

# 13 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>],[TRCFORMAT=<TRCFORMAT>][TACC=<TACC>],[TAPTYPE=<TAPTYPE>],[CMDMDE=<CMDMDE>]:[<PST>[,<SST>]];**

Edits the attributes associated with an STS or VT path.

---

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

Retrieves the attributes associated with an STS or VT path.

Output format:

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

;

---

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

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

Output format:

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

;

---

# 14 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 remote monitoring (RMON) alarm table. Not supported for the ONS 15600.

---

**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. Not supported for the ONS 15600.

---

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

Inhibits all scheduled PM reporting.

---

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

Initializes the performance monitoring (PM) registers.

---

**REPT PM <MOD2>**

Reports 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 performance monitoring parameters.

Output format:

```
SID DATE TIME
M CTAG COMPLD
  "<AID>:<MONTYPE>,<MONVAL>,<BUCKET>"
```

;

---

**Table 14 Performance (continued)**

---

**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 PM parameters for the specified AID.

SID DATE TIME  
M CTAG COMPLD  
“<AID>,[<AIDTYPE>]:<MONTYPE>,<MONVAL>,[<VLDTY>],[<LOCN>],[<DIRECTION>],[<TMPER>],[<MONDAT>],[<MONTM>]”  
;

---

**RTRV-PMMODE-<STS\_PATH>:[<TID>]:<SRC>:<CTAG>::<LOCN>;**

Retrieves the PM mode that was set in the NE data collection.

Output format:

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

---

**RTRV-PMMODE-<VT\_PATH>:[<TID>]:<SRC>:<CTAG>::<LOCN>;**

Retrieves the type of PM mode that was set in the NE.

Output format:

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

---

**Table 14 Performance (continued)**

---

**RTRV-PMSCHED- $\langle$ MOD2 $\rangle$ : $\langle$ TID $\rangle$ : $\langle$ AID $\rangle$ : $\langle$ CTAG $\rangle$ ;**

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

Output format:

```
SID DATE TIME
M CTAG COMPLD
“ $\langle$ AID $\rangle$ , $\langle$ AIDTYPE $\rangle$ : $\langle$ REPTINVL $\rangle$ , $\langle$ REPTDAT $\rangle$ , $\langle$ REPTTM $\rangle$ , $\langle$ NUMINVL $\rangle$ ,,
 $\langle$ MONLEV $\rangle$ , $\langle$ LOCN $\rangle$ ,, $\langle$ TMPER $\rangle$ , $\langle$ TMOFST $\rangle$ , $\langle$ INHMODE $\rangle$ ”
;
```

---

**RTRV-PMSCHED-ALL: $\langle$ TID $\rangle$ :: $\langle$ CTAG $\rangle$ ;**

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

Output format:

```
SID DATE TIME
M CTAG COMPLD
“ $\langle$ AID $\rangle$ , $\langle$ AIDTYPE $\rangle$ : $\langle$ REPTINVL $\rangle$ , $\langle$ REPTDAT $\rangle$ , $\langle$ REPTTM $\rangle$ , $\langle$ NUMINVL $\rangle$ ,,
 $\langle$ MONLEV $\rangle$ , $\langle$ LOCN $\rangle$ ,, $\langle$ TMPER $\rangle$ , $\langle$ TMOFST $\rangle$ , $\langle$ INHMODE $\rangle$ ”
;
```

---

**RTRV-RMONTH- $\langle$ MOD2\_RMON $\rangle$ : $\langle$ TID $\rangle$ : $\langle$ AID $\rangle$ : $\langle$ CTAG $\rangle$ :: $\langle$ MONTYPE $\rangle$ ,,,,
 $\langle$ INTVL $\rangle$ : $\langle$ RISE $\rangle$ = $\langle$ RISE $\rangle$ , $\langle$ FALL $\rangle$ = $\langle$ FALL $\rangle$ , $\langle$ SAMPLE $\rangle$ = $\langle$ SAMPLE $\rangle$ , $\langle$ STARTUP $\rangle$ = $\langle$ STARTUP $\rangle$ 
[:];**

Retrieves the thresholds defined in the RMON alarm table. Not supported for the ONS 15600.

Output format:

```
SID DATE TIME
M CTAG COMPLD
“ $\langle$ AIDUNIONID $\rangle$ , $\langle$ AIDTYPE $\rangle$ : $\langle$ MONTYPE $\rangle$ ,,,, $\langle$ INTVL $\rangle$ :INDEX= $\langle$ INDEX $\rangle$ ,RISE= $\langle$ RISE $\rangle$ ,
FALL= $\langle$ FALL $\rangle$ ,SAMPLE= $\langle$ SAMPLE $\rangle$ ,STARTUP= $\langle$ STARTUP $\rangle$ ”
;
```

---

**RTRV-TH- $\langle$ MOD2 $\rangle$ : $\langle$ TID $\rangle$ : $\langle$ AID $\rangle$ : $\langle$ CTAG $\rangle$ :: $\langle$ MONTYPE $\rangle$ , $\langle$ LOCN $\rangle$ , $\langle$ TMPER $\rangle$ [::];**

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

Output format:

```
SID DATE TIME
M CTAG COMPLD
“ $\langle$ AID $\rangle$ , $\langle$ AIDTYPE $\rangle$ : $\langle$ MONTYPE $\rangle$ , $\langle$ LOCN $\rangle$ ,, $\langle$ THLEV $\rangle$ , $\langle$ TMPER $\rangle$ ”
;
```

---

**Table 14**            **Performance (continued)**

---

<b>RTRV-TH-ALL:</b> <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>” ;

---

<b>SCHED-PMREPT-</b> <MOD2>:<TID>:<SRC>:<CTAG>::<REPTINVL>],[<REPTSTATM>],[<NUMREPT>],[<MONLEV>],[<LOCN>],[<TMPER>],[<TMOFST>];
Schedules/reschedules the NE to report the performance monitoring data for a line facility or for an STS/VT path periodically, using an automatic REPT PM message.

---

<b>SET-PMMODE-</b> <VT_PATH>:<TID>:<SRC>:<CTAG>::<LOCN>,<MODETYPE>,[<PMSTATE>];
Sets the mode and turns the PM data collection mode on or off.

---

<b>SET-TH-</b> <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.

---

## 15 Ports

**Table 15**            **Ports**

---

<b>DLT-</b> <MOD1PAYLOAD>:<TID>:<AID>:<CTAG>[:];
Deletes the specified port (support limited to ports with pluggable port modules [PPMs]).

---

<b>DLT-NNI-ETH:</b> <TID>:<AID>:<CTAG>::<SVLANID>[:];
Deletes the network-to-network interface (NNI) SVLAN ID for the NNI of an L2 Ethernet port.

---

<b>DLT-QNQ-ETH:</b> <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 uniprot provisioning associated to an L2 Ethernet port.

---

<b>DLT-VLAN:</b> <TID>:<AID>:<CTAG>[:];
Deletes a virtual LAN from the VLAN database.

---

**Table 15**            **Ports (continued)**

---

**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 the 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 with the fibre channel facility (ONS 15454 only).

---

**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 with the fiber connection payload facility (ONS 15454 only).

---

**ED-<OCN\_TYPE>:**[<TID>]:<AID>:<CTAG>:::[DCC=<DCC>],[AREA=<AREA>],  
[SYNCMSG=<SYNCMSG>],[SENDDUS=<SENDDUS>],[PJMOM=<PJMOM>],  
[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>],[FOREIGNNIP=<FOREIGNNIP>],[OPRNOMINAL=<OPRNOMINAL>]:[<PST>],[<SST>]];

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

---

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

Modifies the Automatic Laser Shutdown (ALS) attributes for all facilities that support the ALS feature. (Not supported by ONS 15600)

---

**Table 15**                      **Ports (continued)**

---

**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-DS1:**[<TID>]:<AID>:<CTAG>:::[TACC=<TACC>],[TAPTYPE=<TAPTYPE>],[AISONLPBK=<AISONLPBK>],[MODE=<MODE>],[FMT=<FMT>],[BERTMODE=<BERTMODE>],[BERTPATTERN=<BERTPATTERN>],[BERTERRCOUNT=<BERTERRCOUNT>];

Edits the test access attributes for DS-1 access on a DS3XM-12 card (ONS 15454 only).

---

**ED-EC1:**[<TID>]:<AID>:<CTAG>:::[PJMON=<PJMON>],[LBO=<LBO>],[SOAK=<SOAK>],[SFBER=<SFBER>],[SDBER=<SDBER>],[NAME=<NAME>],[EXPTRC=<EXPTRC>],[TRC=<TRC>],[TRCMODE=<TRCMODE>],[<TRCFORMAT>],[AISONLPBK=<AISONLPBK>],[CMDMDE=<CMDMDE>]:[<PST>],[<SST>];

Edits the attributes of an EC1 facility (ONS 15454, ONS 15310-CL, ONS 15310-MA).

---

**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.

---

**ED-FAC:**[<TID>]:<SRC>:<CTAG>:::[PAYLOAD=<PAYLOAD>],[CMDMDE=<CMDMDE>]:[<PST>],[<SST>];

Provisions the payload (or signal) type of 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 fast Ethernet (10/100 Mbps) cards (ONS 15454, ONS 15310-CL, ONS 15310-MA).

---

**ED-G1000:**[<TID>]:<AID>:<CTAG>:::[MFS=<MFS>],[FLOW=<FLOW>],[LOWMRK=<LOWMRK>],[HIWMRK=<HIWMRK>],[AUTONEG=<AUTONEG>],[NAME=<NAME>],[CMDMDE=<CMDMDE>],[SOAK=<SOAK>]:[<PST>],[<SST>];

Edits the attributes related to a G1000-4 port (ONS 15454 only).

---

**Table 15**                      **Ports (continued)**

---

**ED-GFP:**[<TID>]:<AID>:<CTAG>:::[FCS=<FCS>],[AUTOTHGFPBUF=<AUTOTHGFPBUF>],[GFPBUF=<GFPBUF>],[FILTER=<FILTER>];

Edits the Generic Framing Procedure (GFP) port on the ONS 15310-CL/ONS 15310-MA ML-100T-8 card; ONS 15454 CE-100T-8, FC\_MR-4, and CE-1000-4 cards; and the ONS 15600 ASAP-4 card.

---

**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.

---

**ED-POS:**[<TID>]:<AID>:<CTAG>:::[ENCAP=<ENCAP>],[NAME=<NAME>],[CMDMDE=<CMDMDE>],[SOAK=<SOAK>]:<PST>[,<SST>];

Edits the back-end virtual port information on the ONS 15310-CL/ONS 15310-MA ML-100T-8 card; ONS 15454 CE-100T-8 and CE-1000-4 cards; and the ONS 15600 ASAP-4 card.

---

**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-T1:**[<TID>]:<AID>:<CTAG>:::[LINECDE=<LINECDE>],[FMT=<FMT>],[LBO=<LBO>],[TACC=<TACC>],[TAPTYPE=<TAPTYPE>],[SOAK=<SOAK>],[SFBER=<SFBER>],[SDBER=<SDBER>],[SYNCMSG=<SYNCMSG>],[SENDDUS=<SENDDUS>],[NAME=<NAME>],[CMDMDE=<CMDMDE>],[AISONLPBK=<AISONLPBK>],[MODE=<MODE>],[SYNCMAP=<SYNCMAP>],[ADMSSM=<ADMSSM>],[VTMAP=<VTMAP>],[AISVONAIIS=<AISVONAIIS>],[AISONLOF=<AISONLOF>],[INHFELPBK=<INHFELPBK>],[BERTMODE=<BERTMODE>],[BERTPATTERN=<BERTPATTERN>],[BERTERRCOUNT=<BERTERRCOUNT>]:<PST>[,<SST>];

Edits the attributes related a DS1/T1 port (not supported on the ONS 15600).

---

**Table 15**                    **Ports (continued)**

---

<b>ED-T3:</b> [<TID>]:<AID>:<CTAG>:::[FMT=<FMT>],[LINECDE=<LINECDE>],[LBO=<LBO>],[INHFELPBK=<INHFELPBK>],[TACC=<TACC>],[TAPTYPE=<TAPTYPE>],[SOAK=<SOAK>],[SFBER=<SFBER>],[SDBER=<SDBER>],[NAME=<NAME>],[AISONLPBK=<AISONLPBK>],[CMDMDE=<CMDMDE>],[BERTMODE=<BERTMODE>],[BERTPATTERN=<BERTPATTERN>],[BERTERRCOUNT=<BERTERRCOUNT>]:<PST>[,<SST>];
Edits the attributes related to a DS3/T3 port (not supported on the ONS 15600).
<b>ED-VLAN:</b> [<TID>]:<AID>:<CTAG>:::[NAME=<NAME>],[PROTN=<PROTN>][:];
Modifies a VLAN entry in the VLAN database.
<b>ENT-&lt;MOD1PAYLOAD&gt;:</b> [<TID>]:<AID>:<CTAG>[:::];
Provisions the specified port (support limited to ports with pluggable port modules [PPMs]).
<b>ENT-NNI-ETH:</b> [<TID>]:<AID>:<CTAG>::<SVLANID>[:];
Adds a new network-to-network interface service provider VLAN ID to the NNI interface of an L2 Ethernet port.
<b>ENT-QNQ-ETH:</b> [<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.
<b>ENT-VLAN:</b> [<TID>]:<AID>:<CTAG>:::[NAME=<NAME>],[PROTN=<PROTN>];
Adds a new VLAN entry to the VLAN database.
<b>OPR-ALS:</b> [<TID>]:<AID>:<CTAG>[:::];
Restarts the laser of an OC-N facility and all the facilities that support the ALS feature. (ONS 15454, ONS 15310-CL, ONS 15310-MA).
<b>RMV-&lt;MOD2&gt;:</b> [<TID>]:<AID>:<CTAG>[:];
Removes a facility from service.
<b>RST-&lt;MOD2&gt;:</b> [<TID>]:<AID>:<CTAG>:::[<PST>],[<SST>];
Provisions a facility in service.

---

**Table 15**            **Ports (continued)**

---

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

Retrieves the attributes related with the fibre channel (FC) port (ONS 15454 only).

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>*;**

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

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>”
```

;

---

**Table 15**                    **Ports (continued)**

---

**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>],[AREA=<AREA>],[TMGREF=<TMGREF>],
[SYNCMSG=<SYNCMSG>],[SENDDUS=<SENDDUS>],[PJMON=<PJMON>],
[SFBER=<SFBER>],[SDBER=<SDBER>],[MODE=<MODE>],[WVLEN=<WVLEN>],
[RINGID=<RINGID>],[BLSRATYPE=<BLSRATYPE>],[MUX=<MUX>],[UNIC=<UNIC>],
[CCID=<CCID>],[NBRIX=<NBRIX>],[SOAK=<SOAK>],[SOAKLEFT=<SOAKLEFT>],
[SSMRCV=<SSMRCV>],[OSPF=<OSPF>],[LDCC=<LDCC>],[NAME=<NAME>],
[LBCL=<LBCL>],[OPT=<OPT>],[OPR=<OPR>],[EXPTRC=<EXPTRC>],[TRC=<TRC>],
[TRCMODE=<TRCMODE>],[TRCFORMAT=<TRCFORMAT>],[ADMSSM=<ADMSSM>],
[SENDDUSFF=<SENDDUSFF>],[AISONLPBK=<AISONLPBK>],[FREQ=<FREQ>],
[LOSSB=<LOSSB>],[FOREIGNFEND=<FOREIGNFEND>],
[FOREIGNIPADDRESS=<FOREIGNIPADDRESS>],:<PSTPSTQ>,<SSTQ>”
;
```

---

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

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

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 OC-N 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>],[LSRSTAR=<LSRSTAR>]”
;
```

---

**Table 15**            **Ports (continued)**

---

**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-DS1:**[<TID>]:<DS1AID>:<CTAG>[:::];

Retrieves the test access attributes on a DS-1 layer of DS3XM card (ONS 15454 only).

Output format:

```
SID DATE TIME
M CTAG COMPLD
"<DS1AID>::[TACC=<TACC>],[TAPTYPE=<TAPTYPE>],[AISONLPBK=<AISONLPBK>],
[MODE=<MODE>],[FMT=<FMT>],[BERTMODE=<BERTMODE>],
[BERTPATTERN=<BERTPATTERN>],[BERTERRCOUNT=<BERTERRCOUNT>],
[BERTERRRATE=<BERTERRRATE>], [BERTSYNCSTATUS=<BERTSYNCSTATUS>]"
;
```

---

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

Retrieves the facility status of an EC-1 port (ONS 15454, ONS 15310-CL, ONS 15310-MA).

Output format:

```
SID DATE TIME
M CTAG COMPLD
"<AID>::[PJMON=<PJMON>],[LBO=<LBO>],[RXEQUAL=<RXEQUAL>],[SOAK=<SOAK>],
[SOAKLEFT=<SOAKLEFT>],[SFBER=<SFBER>],[SDBER=<SDBER>],[NAME=<NAME>],
[EXPTRC=<EXPTRC>],[TRC=<TRC>],[TRCMODE=<TRCMODE>],
[TRCFORMAT=<TRCFORMAT>],[AISONLPBK=<AISONLPBK>]:<PSTPSTQ>,<SSTQ>"
;
```

---

**Table 15**            **Ports (continued)**

---

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

Retrieves fibre-channel-specific settings for ports that have been configured to carry ESCON traffic (ONS 15454 only).

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. Only applicable to a facility with a provisionable type.

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 Fast Ethernet (10/100 Mbps) cards (ONS 15454, ONS 15310-CL, ONS 15310-MA).

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>]”  
;

---

**Table 15**            **Ports (continued)**

---

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

Retrieves the G1000-4 facility configuration (ONS 15454 only).

Output format:

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

---

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

Retrieves the GFP port information on the ONS 15310-CL/ONS 15310-MA ML-100T-8 card; ONS 15454 CE-100T-8, FC\_MR-4, and CE-1000-4 cards; and the ONS 15600 ASAP-4card.

Output format:

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

---

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

Retrieves the front-end port information for the ONS 15454 ML1000-2 and CE-1000-4 cards and ONS 15600 ASAP-4 card.

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>"
;
```

---

**Table 15**            **Ports (continued)**

---

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

Retrieves the layer 2 port information of 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 ML-Series Ethernet cards when the back-end port is working in POS mode. (This command is not supported on the ONS 15600)

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>]"
;
```

---

**Table 15**            **Ports (continued)**

---

**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 uniprot provisioning associated to an L2 Ethernet port.

Output format:

```
SID DATE TIME
M CTAG COMPLD
“<AID>:<FIRSTCEVLANID>,<LASTCEVLANID>,<SVLANID>:RULE=<RULE>[:]”
;
```

---

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

Retrieves the DS-1 facilities configuration (not supported on the ONS 15600).

Output format:

```
SID DATE TIME
M CTAG COMPLD
“<AID>::[LINECDE=<LINECDE>],[FMT=<FMT>],[LBO=<LBO>],[TACC=<TAP>],
[TAPTYPE=<TAPTYPE>],[SOAK=<SOAK>],[SOAKLEFT=<SOAKLEFT>],[SFBER=<SFBER>],
[SDBER=<SDBER>],[NAME=<NAME>],[SYNCMSG=<SYNCMSG>],
[SENDDUS=<SENDDUS>],[RETIME=<RETIME>],[AISONLPBK=<AISONLPBK>],
[AISVONAIIS=<AISVONAIIS>],[AISONLOF=<AISONLOF>],[MODE=<MODE>],
[SYNCMAP=<SYNCMAP>],[ADMSSM=<ADMSSM>],[PROVIDESYNC=<PROVIDESYNC>],
[VTMAP=<VTMAP>],[INHFELPBK=<INHFELPBK>],[BERTMODE=<BERTMODE>],
[BERTPATTERN=<BERTPATTERN>],[BERTERRCOUNT=<BERTERRCOUNT>],
[BERTERRRATE=<BERTERRRATE>],[BERTSYNCSTATUS=<BERTSYNCSTATUS>]:
<PST>,[<SST>]”
;
```

---

**Table 15**                    **Ports (continued)**

---

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

Retrieves the facilities properties of a DS3, DS3I and a DS3 transmux card (not supported on the ONS 15600).

Output format:

```
SID DATE TIME
M CTAG COMPLD
  "<AID>::[FMT=<FMT>],[LINECDE=<LINECDE>],[LBO=<LBO>],
[INHFELPBK=<INHFELPBK>],[TACC=<TAP>],[TAPTYPE=<TAPTYPE>],
[SOAK=<SOAK>],[SOAKLEFT=<SOAKLEFT>],[SFBER=<SFBER>],[SDBER=<SDBER>],
[NAME=<NAME>],[AISONLPBK=<AISONLPBK>][BERTMODE=<BERTMODE>],
[BERTPATTERN=<BERTPATTERN>],[BERTERRCOUNT=<BERTERRCOUNT>],
[BERTERRRATE=<BERTERRRATE>],[BERTSYNCSTATUS=<BERTSYNCSTATUS>]:
<PST>,[<SST>]"
;
```

---

**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>]:"
;
```

---

**TST-INSERRBITS-<MOD2>:**[<TID>]:<AID>:<CTAG>:::BITERRS=<BITERRS>;

Tests the connectivity and error count on the traffic line, running on a port of an electrical card.

---

# 16 Protection

**Table 16**      **Protection**

---

**DLT-FFP-<OCN\_TYPE>:[<TID>]:<WORK>,<PROTECT>:<CTAG>[:::];**

Deletes an OC-N facility protection group in the 1+1 architecture.

---

**ED-FFP-<OCN\_TYPE>:[<TID>]:<AID>:<CTAG>:::[PROTID=<PROTID>],[RVRTV=<RVRTV>],[RVTM=<RVTM>],[PSDIRN=<PSDIRN>],[VRGRDTM=<VRGRDTM>],[DTGRDTM=<DTGRDTM>],[RCGRDTM=<RCGRDTM>][:];**

Edits the optical facility protection.

---

**ENT-FFP-<OCN\_TYPE>:[<TID>]:<WORK>,<PROTECT>:<CTAG>:::[PROTID=<PROTID>],[RVRTV=<RVRTV>],[RVTM=<RVTM>],[PSDIRN=<PSDIRN>],[OPOTYPE=<OPOTYPE>],[VRGRDTM=<VRGRDTM>],[DTGRDTM=<DEGRDTM>],[RCGRDTM=<RCGRDTM>][:];**

Creates an optical 1+1 protection group.

---

**OPR-PROTNSW-<OCN\_TYPE>:[<TID>]:<AID>:<CTAG>::<SC>,[<SWITCHTYPE>][:<DIRN>];**

Instructs the NE to initiate a SONET line protection switch request.

---

## REPT SW

Reports the autonomous switching of a port in a duplex protection pair to standby and reports the other port in the pair to the active state.

Output format:

SID DATE TIME  
A ATAG REPT SW  
“<ACTID>,<STDBYID>”

;

---

**RLS-PROTNSW-<OCN\_TYPE>:[<TID>]:<AID>:<CTAG>[::<DIRECTION>];**

Instructs a SONET NE to release (clear) a SONET line protection switch request.

---

**RTRV-FFP:[<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>]”

;

---

**Table 16**            **Protection (continued)**

---

RTRV-FFP-<OCN\_TYPE>:[<TID>]:<AID>:<CTAG>[:::];

Retrieves the optical facility protection information.

Output format:

SID DATE TIME  
M CTAG COMPLD  
“<WORK>,<PROTECT>:[PROTOTYPE=<PROTOTYPE>],[PROTID=<PROTID>],  
[RVRTV=<RVRTV>],[RVTM=<RVTM>],[PSDIRN=<PSDIRN>],[VRGRDTM=<VRGRDTM>],  
[DTGRDTM=<DTGRDTM>],[RCGRDTM=<RCGRDTM>],[OPOTYPE=<OPOTYPE>]”  
;

---

RTRV-PROTNSW-<OCN\_TYPE>:[<TID>]:<AID>:<CTAG>[:::];

Retrieves the switching state of a SONET line specified in the AID.

Output format:

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

---

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

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

Output format:

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

---

## 17 Provisionable Patchcords



---

**Note**    Not supported on the ONS 15600.

---

**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>:::[RE MOTENODE=<RE MOTENODE>],[  
[RE MOTELNKTERMID=<RE MOTELNKTERMID>];

Edits the attributes of an existing provisionable patchcord termination.

---

**ENT-LNKTERM:**[<TID>]:<AID>:<CTAG>:::PORT=<PORT>,  
[RE MOTENODE=<RE MOTENODE>],RE MOTELNKTERMID=<RE MOTELNKTERMID>;

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>,[RE MOTENODE=<RE MOTENODE>],  
    [RE MOTELNKTERMID=<RE MOTELNKTERMID>]”

;

---

## 18 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 on the ONS 15600)

---

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

Enables the REPT EVT SECU and REPT ALM SECU autonomous messages.

---

**Table 18**                    **Security (continued)**

---

<b>ALW-USER-SECU:</b> [<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.
<b>CANC</b>
Reports the occurrence of a session timeout event.
Output format:
SID DATE TIME
A ATAG CANC
“<UID>”
;
<b>CANC-USER:</b> [<TID>]:<USERID>:<CTAG>;
Logs a user out of an active session with the NE.
<b>CANC-USER-SECU:</b> [<TID>]:<UID>:<CTAG>;
Logs out all sessions on the NE (TL1, CTC, etc.) for a user whose user ID matches the UID specified in the command.
<b>CLR-COND-SECU:</b> [<TID>]::<CTAG>[:<SECUALMTYPE>];
Clears the specified standing condition.
<b>DLT-USER-SECU:</b> [<TID>]:<UID>:<CTAG>;
Deletes a user; this command can only be performed by a Superuser.
<b>ED-CMD-SECU:</b> [<TID>]:<AID>:<CTAG>::<CAP>;
Edits the command security level of a particular command.
<b>ED-PID:</b> [<TID>]:<UID>:<CTAG>::<OLDPID>,<NEWPID>;
Allows a user to change his or her own password.
<b>ED-PROTOCOL:</b> [<TID>]:<PROTOCOLAID>:<CTAG>::<PROTOCOLSTAT>;
Enables/disables a protocol/service that is supported in the NE.
<b>ED-USER-SECU:</b> [<TID>]:<UID>:<CTAG>::<NEWUID>],[<NEWPID>],[<UAP>][:];
Edits a user’s privileges, password, or ID and can only be performed by a Superuser.
<b>ENT-USER-SECU:</b> [<TID>]:<UID>:<CTAG>::<PID>,,<UAP>[:];
Adds a user account; this command can only be performed by a Superuser.
<b>INH-CONSOLE-PORT:</b> [<TID>]:<AID>:<CTAG>;
Turns off the console port for the ML-Series cards. (Not supported on the ONS 15600)

---

**Table 18**                    **Security (continued)**

---

**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 command security level of the command specified in the AID field.

Output format:

    SID DATE TIME  
M CTAG COMPLD  
    “<AID>:<CAP>”  
;

---

**Table 18**                      **Security (continued)**

---

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

Retrieves the status of the console port for the ML-Series cards.(Not supported on the ONS 15600)

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.

---

# 19 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>],[SYSTEMN=<SYSTEMN>];

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>,<OCRMT>],,:[<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>],[<OCRMT>],,:[<DESC>],[<EQPTTYPE>]”  
;

---

**Table 19 Synchronization (continued)**

---

**REPT EVT BITS**

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

Output format:

```

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

```

---

**RTRV-ALM-SYNCN:[<TID>]:<AID>:<CTAG>::<NTFCNCDE>],<CONDDTYPE>],<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>,<CONDDTYPE>,<SRVEFF>,<OCRDAT>],
    [<OCRTM>],,;:<DESC>]"
;

```

---

**Table 19                    Synchronization (continued)**

---

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

Retrieves the BITS configuration command.

Output format:

    SID DATE TIME

M CTAG COMPLD

    “<AID>:;[LINECDE=<LINECDE>],[FMT=<FMT>],[LBO=<LBO>],[SYNCSMSG=<SYNCSMSG>],  
 [AISTHRSHLD=<AISTHRSHLD>],[SABIT=<SABIT>],[IMPEDANCE=<IMPEDANCE>],  
 [BITSFAC=<BITSFAC>],[ADMSSM=<ADMSSM>]:[<PST>]”

;

---

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

Retrieves the BITS standing condition.

Output format:

    SID DATE TIME

M CTAG COMPLD

    “<AID>,[<AIDTYPE>]:[<NTFCNCDE>],<TYPEREP>,[<SRVEFF>],[<OCRDAT>],  
 [<OCRMTM>],,,[<DESC>]”

;

---

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

Retrieves the synchronization condition.

Output format:

    SID DATE TIME

M CTAG COMPLD

    “<AID>,[<AIDTYPE>]:[<NTFCNCDE>],<TYPEREP>,[<SRVEFF>],  
 [<OCRDAT>],[<OCRMTM>],,,[<DESC>]”

;

---

**Table 19**                    **Synchronization (continued)**

---

**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>],[SYSTEMN=<SYSTEMN>]”  
;

---

**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>”  
;

---

## 20 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.

---

**Table 20**            **System (continued)**

---

**DLT-TRAPTABLE:**[<TID>]:<AID>:<CTAG>;

Deletes the 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.

---

**ED-DAT:**[<TID>]:<CTAG>::[<DATE>],[<TIME>];

Edits the date and the time.

---

**ED-NE-GEN:**[<TID>]:<CTAG>:::[NAME=<NAME>],[IPADDR=<IPADDR>],  
[IPMASK=<IPMASK>],[DEFRTR=<DEFRTR>],[IIOPPORT=<IIOPPORT>],  
[NTP=<NTP>],[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-ALMTYPE:**[<TID>]:<CTAG>:::<ALMTYPE>;

Enters user-defined alarm types on the fly for environmental inputs.

---

**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.

---

**Table 20**            **System (continued)**

---

<b>ENT-TRAPTABLE:</b> [<TID>]:<AID>:<CTAG>::COMMUNITY=<COMMUNITY>, [TRAPPORT=<TRAPPORT>],[TRAPVER=<TRAPVER>];
Provisions a SNMP trap destination and its associated community, UDP port, and SNMP version.
<b>ENT-TUNNEL-FIREWALL:</b> [<TID>]::<CTAG>:::[SRCADDR=<SRCADDR>], [SRCMASK=<SRCMASK>],[DESTADDR=<DESTADDR>],[DESTMASK=<DESTMASK>];
Creates a firewall tunnel.
<b>ENT-TUNNEL-PROXY:</b> [<TID>]::<CTAG>:::[SRCADDR=<SRCADDR>], [SRCMASK=<SRCMASK>],[DESTADDR=<DESTADDR>],[DESTMASK=<DESTMASK>];
Creates a proxy tunnel.
<b>INH-MSG-ALL:</b> [<TID>]:[<AID>]:<CTAG>[::,];
Inhibits REPT ALM and REPT EVT autonomous messages from being transmitted.
<b>INIT-SYS:</b> [<TID>]:<AID>:<CTAG>:::[<CMDMODE=CMDMODE>];
Initializes the specified card and its associated subsystems.
<b>RTRV-ALMTYPE:</b> [<TID>]::<CTAG>;
Retrieves all system and user-defined alarm types.
Output format: SID DATE TIME M CTAG COMPLD " <TYPEOFALM>,<ALMTYPE> " ;
<b>RTRV-HDR:</b> [<TID>]::<CTAG>;
Retrieves the header of a TL1 response message.

---

**Table 20**                      **System (continued)**

---

**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 general NE attributes.

Output format:

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

---

**Table 20**            **System (continued)**

---

**RTRV-NETTYPE:**[<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>]”

;

---

**Table 20**            **System (continued)**

---

**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.

---

# 21 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 (not supported on the ONS 15310-CL).

---

**CONN-TACC-*<MOD\_TACC>*:[*<TID>*]:*<SRC>*:*<CTAG>*::*<TAP>*:MD=*<MD>*;**

Connects the STS or VT defined by the AID to the STS specified by the TAP number (not supported on the ONS 15310-CL).

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 (not supported on the ONS 15310-CL).

---

**OPR-LPBK-*<MOD2>*:[*<TID>*]:*<AID>*:*<CTAG>*::[*<LOCATION>*],,,[*<PBKTYPE>*];**

Operates a signal loopback on an I/O card or on a cross-connect.

---

**RLS-LPBK-*<MOD2>*:[*<TID>*]:*<SRC>*:*<CTAG>*::[*<LOCATION>*],,,[*<PBKTYPE>*];**

Releases a signal loopback on an I/O card or on a cross-connect.

---

**Table 21**            **Troubleshooting and Test Access (continued)**

---

RTRV-PTHTRC-<PATH>:[<TID>]:<SRC>:<CTAG>::[<MSGTYPE>][:<LOCN>];

Instructs a SONET NE to retrieve the contents of the SONET path trace message.

Output format:

SID DATE TIME  
M CTAG COMPLD  
“<TRACMSG>”

;

---

RTRV-TACC:[<TID>]:<TAP>:<CTAG>;

Retrieves details associated with a TAP (not supported on the ONS 15310-CL).

Output format:

SID DATE TIME  
M CTAG COMPLD  
“<TAP>:<TACC\_AIDA>,<TACC\_AIDB>,[<MD>],[<CROSSCONNECTID>],  
<AIDUNIONID>,<PATHWIDTH>”

;

---

## 22 VCAT



---

**Note**    ONS 15454, ONS 15310-CL and 15310-MA only.

---

**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>”
;
```

---

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

Retrieves all of the attributes provisioned for a VCG.

Output format:

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

---

## 23 Obtaining Documentation and Submitting a Service Request

For information on obtaining documentation, submitting a service request, and gathering additional information, see the monthly *What's New in Cisco Product Documentation*, which also lists all new and revised Cisco technical documentation, at:

<http://www.cisco.com/en/US/docs/general/whatsnew/whatsnew.html>

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