



# CHAPTER 11

## ED Commands

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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 chapter provides ED (edit) commands for the Cisco ONS 15454, ONS 15327, ONS 15600 and ONS 15310-CL.

### 11.1 ED-<GIGE\_TYPE>

Edit (10GIGE, GIGE)

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#### Usage Guidelines

Cisco ONS 15454, ONS 15600

This command edits Ethernet facility attributes.

See [Table 27-1 on page 27-1](#) for supported modifiers by platform.

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Ports

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Provisioning

**Related Commands**

DLT-<MOD1PAYLOAD>	RMV-<MOD2>
DLT-FFP-<MOD2DWDMPAYLOAD>	RST-<MOD2>
DLT-FFP-<OCN_TYPE>	RTRV-<MOD1FCPAYLOAD>
ED-<MOD1FCPAYLOAD>	RTRV-<MOD1FICONPAYLOAD>
ED-<MOD1FICONPAYLOAD>	RTRV-<MOD2DWDMPAYLOAD>
ED-<MOD2DWDMPAYLOAD>	RTRV-<OCN_TYPE>
ED-<OCN_TYPE>	RTRV-10GIGE
ED-ALS	RTRV-ALMTH-<MOD2>
ED-DS1	RTRV-ALS
ED-EC1	RTRV-DS1
ED-FFP-<MOD2DWDMPAYLOAD>	RTRV-EC1
ED-FFP-<OCN_TYPE>	RTRV-FAC
ED-FSTE	RTRV-FFP-<MOD2DWDMPAYLOAD>
ED-G1000	RTRV-FFP-<OCN_TYPE>
ED-GFP	RTRV-FSTE
ED-HDLC	RTRV-G1000
ED-POS	RTRV-GFP
ED-T1	RTRV-GIGE
ED-T3	RTRV-HDLC
ED-TRC-<MOD2DWDMPAYLOAD>	RTRV-PM-<MOD2>
ED-TRC-<OCN_TYPE>	RTRV-PMSCHED-<MOD2>
ENT-<MOD1PAYLOAD>	RTRV-POS
ENT-FFP-<MOD2DWDMPAYLOAD>	RTRV-PROTNSW-<MOD2DWDMPAYLOAD>
ENT-FFP-<OCN_TYPE>	RTRV-PROTNSW-<OCN_TYPE>
INIT-REG-<MOD2>	RTRV-T1
OPR-ALS	RTRV-T3
OPR-LPBK-<MOD2>	RTRV-TH-<MOD2>
OPR-PROTNSW-<MOD2DWDMPAYLOAD>	RTRV-TRC-<MOD2DWDMPAYLOAD>
OPR-PROTNSW-<OCN_TYPE>	RTRV-TRC-<OCN_TYPE>
REPT PM <MOD2>	SCHED-PMREPT-<MOD2>
RLS-LPBK-<MOD2>	SET-ALMTH-<MOD2>
RLS-PROTNSW-<MOD2DWDMPAYLOAD>	SET-TH-<MOD2>
RLS-PROTNSW-<OCN_TYPE>	

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ED-<GIGE\_TYPE>:[<TID>]:<AID>:<CTAG>:::[NAME=<NAME>],[MACADDR=<MACADDR>],[CMDMDE=<CMDMDE>],[FREQ=<FREQ>],[LOSSB=<LOSSB>]:[<PST>],[<SST>];

```
ED-GIGE:CISCO:FAC-1-1:123:::NAME="GIGE PORT",
MACADDR=00-0E-AA-BB-CC-FF,CMDMDE=CMDMDE,FREQ=1550,LOSSB=SX:IS,AINS;
```

## Input Parameters

**Table 11-1** ED-<GIGE\_TYPE> Input Parameters

Parameter and Values	Description
<b>AID</b>	Access identifier from the <a href="#">“25.1.14 FACILITY”</a> section on page 25-28
<b>NAME</b>	Port name. String. Defaults to NULL. Maximum length is 32 characters
<b>MACADDR</b>	String. Defaults to NULL. Maximum length is 18 characters
<b>CMDMDE</b>	Command execution mode. NORM for normal (default) and FRCD for forced. FRCD will override any safeguards that normally reject a request to delete an in service resource  Parameter type is CMDMDE—forces the system to execute a given command regardless of any standing conditions. Normal mode is the default behavior for all commands but you can specify FRCD to force the system to override a state where the command would normally be denied
<ul style="list-style-type: none"> <li>FRCD</li> </ul>	Force the system to override a state where the command would normally be denied
<ul style="list-style-type: none"> <li>NORM</li> </ul>	Execute the command normally. Do not override any conditions that might make the command fail
<b>FREQ</b>	Parameter type is OPTICAL-WLEN—optical wavelength
<ul style="list-style-type: none"> <li>1530.33</li> </ul>	Wavelength 1
<ul style="list-style-type: none"> <li>1531.12</li> </ul>	Wavelength 2
<ul style="list-style-type: none"> <li>1531.90</li> </ul>	Wavelength 3
<ul style="list-style-type: none"> <li>1532.68</li> </ul>	Wavelength 4
<ul style="list-style-type: none"> <li>1534.25</li> </ul>	Wavelength 5
<ul style="list-style-type: none"> <li>1535.04</li> </ul>	Wavelength 6
<ul style="list-style-type: none"> <li>1535.82</li> </ul>	Wavelength 7
<ul style="list-style-type: none"> <li>1536.61</li> </ul>	Wavelength 8
<ul style="list-style-type: none"> <li>1538.19</li> </ul>	Wavelength 9
<ul style="list-style-type: none"> <li>1538.98</li> </ul>	Wavelength 10
<ul style="list-style-type: none"> <li>1539.77</li> </ul>	Wavelength 11
<ul style="list-style-type: none"> <li>1540.56</li> </ul>	Wavelength 12
<ul style="list-style-type: none"> <li>1542.14</li> </ul>	Wavelength 13
<ul style="list-style-type: none"> <li>1542.94</li> </ul>	Wavelength 14
<ul style="list-style-type: none"> <li>1543.73</li> </ul>	Wavelength 15
<ul style="list-style-type: none"> <li>1544.53</li> </ul>	Wavelength 16
<ul style="list-style-type: none"> <li>1546.12</li> </ul>	Wavelength 17

Table 11-1 ED-&lt;GIGE\_TYPE&gt; Input Parameters (continued)

Parameter and Values	Description
• 1546.92	Wavelength 18
• 1547.72	Wavelength 19
• 1548.51	Wavelength 20
• 1550.12	Wavelength 21
• 1550.92	Wavelength 22
• 1551.72	Wavelength 23
• 1552.52	Wavelength 24
• 1554.13	Wavelength 25
• 1554.94	Wavelength 26
• 1555.75	Wavelength 27
• 1556.55	Wavelength 28
• 1558.17	Wavelength 29
• 1558.98	Wavelength 30
• 1559.79	Wavelength 31
• 1560.61	Wavelength 32
• USE-TWL1	Use Tunable Wavelength 1
<b>LOSSB</b>	Parameter type is REACH—reach values
• AUTOPROV	Autoprovisioning
• CX	Reach CX
• DX	Reach DX
• HX	Reach HX
• I1	Reach I1
• IR-1	Reach IR-1
• IR-2	Reach IR-2
• L1	Reach L1
• L2	Reach L2
• L3	Reach L3
• LR-1	Reach LR-1
• LR-2	Reach LR-2
• LR-3	Reach LR-3
• LX	Reach LX
• S1	Reach S1
• S2	Reach S2
• SR	Reach SR
• SR-1	Reach SR-1
• SX	Reach SX

Table 11-1 ED-&lt;GIGE\_TYPE&gt; Input Parameters (continued)

Parameter and Values	Description
• T	Reach T
• VX	Reach VX
• ZX	Reach ZX
<b>PST</b>	Primary state Parameter type is PST—indicates the current overall service condition of an entity
• IS	In service
• OOS	Out of service
<b>SST</b>	Secondary state Parameter type is SST—provides additional information pertaining to PST and PSTQ
• AINS	Automatic in service
• DSBLD	Disabled
• LPBK	Loopback
• MEA	Mismatch of equipment and attributes
• MT	Maintenance mode
• OOG	Out of group
• SWDL	Software downloading
• UAS	Unassigned
• UEQ	Unequipped

## 11.2 ED-<MOD1FCPAYLOAD>

Edit (1GFC, 2GFC, ESCON)

### Usage Guidelines

Cisco ONS 15454

See [Table 27-1 on page 27-1](#) for supported modifiers by platform.

This command edits the attributes related to the Fibre Channel (FC) facility. The state IS,AINS is not supported on the FC port.



#### Note

- The port parameters: VIZ, LINKRCVRY, DISTEXTN, AUTODETECTION, LINKCREDITS and MFS can be edited only if the port state is OOS,MT or OOS,DSBLD.
- The port parameters: AUTODETECTION, LINKCREDITS and MFS can be edited only if distance extension is enabled (set to B2B).

- When 1GFICON and 2GFICON payloads are provisioned, distance extension=B2B is the default and only valid setting. Setting distance extension (using the ED-nGFICON command) to any other setting will be denied with an error message, for example, Provisioning Rules Failed.

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Ports

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Provisioning

**Related Commands**

DLT-<MOD1PAYLOAD>	RMV-<MOD2>
DLT-FFP-<MOD2DWDMPAYLOAD>	RST-<MOD2>
DLT-FFP-<OCN_TYPE>	RTRV-<MOD1FCPAYLOAD>
ED-<GIGE_TYPE>	RTRV-<MOD1FICONPAYLOAD>
ED-<MOD1FICONPAYLOAD>	RTRV-<MOD2DWDMPAYLOAD>
ED-<MOD2DWDMPAYLOAD>	RTRV-<OCN_TYPE>
ED-<OCN_TYPE>	RTRV-10GIGE
ED-ALS	RTRV-ALMTH-<MOD2>
ED-DS1	RTRV-ALS
ED-EC1	RTRV-DS1
ED-FFP-<MOD2DWDMPAYLOAD>	RTRV-EC1
ED-FFP-<OCN_TYPE>	RTRV-FAC
ED-FSTE	RTRV-FFP-<MOD2DWDMPAYLOAD>
ED-G1000	RTRV-FFP-<OCN_TYPE>
ED-GFP	RTRV-FSTE
ED-HDLC	RTRV-G1000
ED-POS	RTRV-GFP
ED-T1	RTRV-GIGE
ED-T3	RTRV-HDLC
ED-TRC-<MOD2DWDMPAYLOAD>	RTRV-PM-<MOD2>
ED-TRC-<OCN_TYPE>	RTRV-PMSCHED-<MOD2>
ENT-<MOD1PAYLOAD>	RTRV-POS
ENT-FFP-<MOD2DWDMPAYLOAD>	RTRV-PROTNSW-<MOD2DWDMPAYLOAD>
ENT-FFP-<OCN_TYPE>	RTRV-PROTNSW-<OCN_TYPE>
INIT-REG-<MOD2>	RTRV-T1
OPR-ALS	RTRV-T3
OPR-LPBK-<MOD2>	RTRV-TH-<MOD2>
OPR-PROTNSW-<MOD2DWDMPAYLOAD>	RTRV-TRC-<MOD2DWDMPAYLOAD>
OPR-PROTNSW-<OCN_TYPE>	RTRV-TRC-<OCN_TYPE>
REPT PM <MOD2>	SCHED-PMREPT-<MOD2>
RLS-LPBK-<MOD2>	SET-ALMTH-<MOD2>
RLS-PROTNSW-<MOD2DWDMPAYLOAD>	SET-TH-<MOD2>
RLS-PROTNSW-<OCN_TYPE>	

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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>];

```
ED-1GFC:CISCO:FAC-6-1:1:::LINKRCVRY=Y,DISTEXTN=NONE,AUTODETECTION=Y,
LINKCREDITS=10,MFS=2148,NAME="FC PORT",CMDMDE=CMDMDE,SOAK=32,
FREQ=1550,LOSSB=LR-1:OOS,MT;
```

## Input Parameters

Table 11-2 ED-&lt;MOD1FCPAYLOAD&gt; Input Parameters

Parameter and Values	Description
<b>AID</b>	Access identifier from the “ <a href="#">25.1.14 FACILITY</a> ” section on <a href="#">page 25-28</a>
<b>LINKRCVRY</b>	Link recovery Parameter type is ON_OFF—disable or enable an attribute
• N	Disable an attribute
• Y	Enable an attribute
<b>DISTEXTN</b>	Distance extension. It can be set to Buffer-to-Buffer (B2B) Credit Management state or None. <b>Note</b> B2B and link recovery are mutually exclusive. You cannot turn on both B2B and link recovery at the same time Parameter type is DISTANCE_EXTENSION—distance extension
• B2B	Buffer to buffer flow control
• NONE	No distance extension
<b>AUTODETECTION</b>	Autodetection. Turns autodetection on or off Parameter type is ON_OFF—disable or enable an attribute
• N	Disable an attribute
• Y	Enable an attribute
<b>LINKCREDITS</b>	Number of link credits. If autodetection is set to off the value of the link credits will be used to configure the hardware. Integer
<b>MFS</b>	Maximum frame size. Integer
<b>NAME</b>	String
<b>CMDMDE</b>	Command execution mode, forced or normal. FRCD deletes all the VCG members and member cross-connects of a VCG Parameter type is CMDMDE—forces the system to execute a given command regardless of any standing conditions. Normal mode is the default behavior for all commands but you can specify FRCD to force the system to override a state where the command would normally be denied
• FRCD	Force the system to override a state where the command would normally be denied
• NORM	Execute the command normally. Do not override any conditions that might make the command fail



Table 11-2 ED-&lt;MOD1FCPAYLOAD&gt; Input Parameters (continued)

Parameter and Values	Description
<b>SOAK</b>	OOS-AINS to IS transition soak time as measured in 15-minute intervals. A value of 4 equals a soak time of 1 hour. The allowable range is 0 to 192 intervals (maximum of 48 hours). Integer
<b>FREQ</b>	Parameter type is OPTICAL-WLEN—optical wavelength
• 1530.33	Wavelength 1
• 1531.12	Wavelength 2
• 1531.90	Wavelength 3
• 1532.68	Wavelength 4
• 1534.25	Wavelength 5
• 1535.04	Wavelength 6
• 1535.82	Wavelength 7
• 1536.61	Wavelength 8
• 1538.19	Wavelength 9
• 1538.98	Wavelength 10
• 1539.77	Wavelength 11
• 1540.56	Wavelength 12
• 1542.14	Wavelength 13
• 1542.94	Wavelength 14
• 1543.73	Wavelength 15
• 1544.53	Wavelength 16
• 1546.12	Wavelength 17
• 1546.92	Wavelength 18
• 1547.72	Wavelength 19
• 1548.51	Wavelength 20
• 1550.12	Wavelength 21
• 1550.92	Wavelength 22
• 1551.72	Wavelength 23
• 1552.52	Wavelength 24
• 1554.13	Wavelength 25
• 1554.94	Wavelength 26
• 1555.75	Wavelength 27
• 1556.55	Wavelength 28
• 1558.17	Wavelength 29
• 1558.98	Wavelength 30
• 1559.79	Wavelength 31
• 1560.61	Wavelength 32
• USE-TWL1	Use Tunable Wavelength 1

Table 11-2 ED-&lt;MOD1FCPAYLOAD&gt; Input Parameters (continued)

Parameter and Values	Description
<b>LOSSB</b>	Parameter type is REACH—reach values
• AUTOPROV	Autoprovisioning
• CX	Reach CX
• DX	Reach DX
• HX	Reach HX
• I1	Reach I1
• IR-1	Reach IR-1
• IR-2	Reach IR-2
• L1	Reach L1
• L2	Reach L2
• L3	Reach L3
• LR-1	Reach LR-1
• LR-2	Reach LR-2
• LR-3	Reach LR-3
• LX	Reach LX
• S1	Reach S1
• S2	Reach S2
• SR	Reach SR
• SR-1	Reach SR-1
• SX	Reach SX
• T	Reach T
• VX	Reach VX
• ZX	Reach ZX
<b>PST</b>	Primary state Parameter type is PST—indicates the current overall service condition of an entity
• IS	In service
• OOS	Out of service
<b>SST</b>	Secondary state Parameter type is SST—provides additional information pertaining to PST and PSTQ
• AINS	Automatic in service
• DSBLD	Disabled
• LPBK	Loopback
• MEA	Mismatch of equipment and attributes
• MT	Maintenance mode
• OOG	Out of group

Table 11-2 ED-&lt;MOD1FCPAYLOAD&gt; Input Parameters (continued)

Parameter and Values	Description
• SWDL	Software downloading
• UAS	Unassigned
• UEQ	Unequipped

## 11.3 ED-<MOD1FICONPAYLOAD>

Edit (1GFICON, 2GFICON, ESCON)

### Usage Guidelines

Cisco ONS 15454

See [Table 27-1 on page 27-1](#) for supported modifiers by platform.

This command edits the attributes related with the FICON payload facility. The state IS,AINS is not supported on the FICON port.

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Ports

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Provisioning

**Related Commands**

DLT-<MOD1PAYLOAD>	RMV-<MOD2>
DLT-FFP-<MOD2DWDMPAYLOAD>	RST-<MOD2>
DLT-FFP-<OCN_TYPE>	RTRV-<MOD1FCPAYLOAD>
ED-<GIGE_TYPE>	RTRV-<MOD1FICONPAYLOAD>
ED-<MOD1FCPAYLOAD>	RTRV-<MOD2DWDMPAYLOAD>
ED-<MOD2DWDMPAYLOAD>	RTRV-<OCN_TYPE>
ED-<OCN_TYPE>	RTRV-10GIGE
ED-ALS	RTRV-ALMTH-<MOD2>
ED-DS1	RTRV-ALS
ED-EC1	RTRV-DS1
ED-FFP-<MOD2DWDMPAYLOAD>	RTRV-EC1
ED-FFP-<OCN_TYPE>	RTRV-FAC
ED-FSTE	RTRV-FFP-<MOD2DWDMPAYLOAD>
ED-G1000	RTRV-FFP-<OCN_TYPE>
ED-GFP	RTRV-FSTE
ED-HDLC	RTRV-G1000
ED-POS	RTRV-GFP
ED-T1	RTRV-GIGE
ED-T3	RTRV-HDLC
ED-TRC-<MOD2DWDMPAYLOAD>	RTRV-PM-<MOD2>
ED-TRC-<OCN_TYPE>	RTRV-PMSCHED-<MOD2>
ENT-<MOD1PAYLOAD>	RTRV-POS
ENT-FFP-<MOD2DWDMPAYLOAD>	RTRV-PROTNSW-<MOD2DWDMPAYLOAD>
ENT-FFP-<OCN_TYPE>	RTRV-PROTNSW-<OCN_TYPE>
INIT-REG-<MOD2>	RTRV-T1
OPR-ALS	RTRV-T3
OPR-LPBK-<MOD2>	RTRV-TH-<MOD2>
OPR-PROTNSW-<MOD2DWDMPAYLOAD>	RTRV-TRC-<MOD2DWDMPAYLOAD>
OPR-PROTNSW-<OCN_TYPE>	RTRV-TRC-<OCN_TYPE>
REPT PM <MOD2>	SCHED-PMREPT-<MOD2>
RLS-LPBK-<MOD2>	SET-ALMTH-<MOD2>
RLS-PROTNSW-<MOD2DWDMPAYLOAD>	SET-TH-<MOD2>
RLS-PROTNSW-<OCN_TYPE>	

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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>]];

ED-1GFICON:CISCO:FAC-6-1:1:::LINKRCVRY=Y,DISTEXTN=NONE,AUTODETECTION=Y, LINKCREDITS=10,MFS=2148,NAME="FC PORT",CMDMDE=CMDMDE,SOAK=32,FREQ=1550, LOSSB=LR-1:OOS,MT;

## Input Parameters

**Table 11-3** ED-<MOD1FICONPAYLOAD> Input Parameters

Parameter and Values	Description
<b>AID</b>	Access identifier from the “25.1.14 FACILITY” section on page 25-28
<b>LINKRCVRY</b>	Link recovery Parameter type is ON_OFF—disable or enable an attribute
<ul style="list-style-type: none"> <li>• N</li> <li>• Y</li> </ul>	Disable an attribute Enable an attribute
<b>DISTEXTN</b>	Distance extension. It can be set to Buffer-to-Buffer (B2B) Credit Management state or None.  <b>Note</b> B2B and link recovery are mutually exclusive. You cannot turn on both B2B and link recovery at the same time  Parameter type is DISTANCE_EXTENSION—distance extension
<ul style="list-style-type: none"> <li>• B2B</li> <li>• NONE</li> </ul>	Buffer to buffer flow control No distance extension
<b>AUTODETECTION</b>	Autodetection. Turns autodetection on or off Parameter type is ON_OFF—disable or enable an attribute
<ul style="list-style-type: none"> <li>• N</li> <li>• Y</li> </ul>	Disable an attribute Enable an attribute
<b>LINKCREDITS</b>	Number of link credits. If autodetection is set to off the value of the link credits will be used to configure the hardware. Integer
<b>MFS</b>	Maximum frame size. Integer
<b>NAME</b>	String
<b>CMDMDE</b>	Command execution mode, forced or normal. FRCD deletes all the VCG members and member cross-connects of a VCG Parameter type is CMDMDE—forces the system to execute a given command regardless of any standing conditions. Normal mode is the default behavior for all commands but you can specify FRCD to force the system to override a state where the command would normally be denied
<ul style="list-style-type: none"> <li>• FRCD</li> <li>• NORM</li> </ul>	Force the system to override a state where the command would normally be denied Execute the command normally. Do not override any conditions that might make the command fail

Table 11-3 ED-&lt;MOD1FICONPAYLOAD&gt; Input Parameters (continued)

Parameter and Values	Description
<b>SOAK</b>	OOS-AINS to IS transition soak time as measured in 15-minute intervals. A value of 4 equals a soak time of 1 hour. The allowable range is 0 to 192 intervals (maximum of 48 hours). Integer
<b>FREQ</b>	Parameter type is OPTICAL-WLEN—optical wavelength
• 1530.33	Wavelength 1
• 1531.12	Wavelength 2
• 1531.90	Wavelength 3
• 1532.68	Wavelength 4
• 1534.25	Wavelength 5
• 1535.04	Wavelength 6
• 1535.82	Wavelength 7
• 1536.61	Wavelength 8
• 1538.19	Wavelength 9
• 1538.98	Wavelength 10
• 1539.77	Wavelength 11
• 1540.56	Wavelength 12
• 1542.14	Wavelength 13
• 1542.94	Wavelength 14
• 1543.73	Wavelength 15
• 1544.53	Wavelength 16
• 1546.12	Wavelength 17
• 1546.92	Wavelength 18
• 1547.72	Wavelength 19
• 1548.51	Wavelength 20
• 1550.12	Wavelength 21
• 1550.92	Wavelength 22
• 1551.72	Wavelength 23
• 1552.52	Wavelength 24
• 1554.13	Wavelength 25
• 1554.94	Wavelength 26
• 1555.75	Wavelength 27
• 1556.55	Wavelength 28
• 1558.17	Wavelength 29
• 1558.98	Wavelength 30
• 1559.79	Wavelength 31
• 1560.61	Wavelength 32
• USE-TWL1	Use Tunable Wavelength 1

**Table 11-3** ED-<MOD1FICONPAYLOAD> Input Parameters (continued)

Parameter and Values	Description
<b>LOSSB</b>	Parameter type is REACH—reach values
• AUTOPROV	Autoprovisioning
• CX	Reach CX
• DX	Reach DX
• HX	Reach HX
• I1	Reach I1
• IR-1	Reach IR-1
• IR-2	Reach IR-2
• L1	Reach L1
• L2	Reach L2
• L3	Reach L3
• LR-1	Reach LR-1
• LR-2	Reach LR-2
• LR-3	Reach LR-3
• LX	Reach LX
• S1	Reach S1
• S2	Reach S2
• SR	Reach SR
• SR-1	Reach SR-1
• SX	Reach SX
• T	Reach T
• VX	Reach VX
• ZX	Reach ZX
<b>PST</b>	Primary state Parameter type is PST—indicates the current overall service condition of an entity
• IS	In service
• OOS	Out of service
<b>SST</b>	Secondary state Parameter type is SST—provides additional information pertaining to PST and PSTQ
• AINS	Automatic in service
• DSBLD	Disabled
• LPBK	Loopback
• MEA	Mismatch of equipment and attributes
• MT	Maintenance mode
• OOG	Out of group

Table 11-3 ED-&lt;MOD1FICONPAYLOAD&gt; Input Parameters (continued)

Parameter and Values	Description
• SWDL	Software downloading
• UAS	Unassigned
• UEQ	Unequipped

## 11.4 ED-<MOD2DWDMPAYLOAD>

Edit (10GFC, 10GIGE, 1GFC, 1GFICON, 2GFC, 2GFICON, D1VIDEO, DV6000, ESCON,ETRCLO, GIGE, HDTV, ISC1, ISC3, PASSTHRU)

### Usage Guidelines

Cisco ONS 15454

See [Table 27-1 on page 27-1](#) for supported modifiers by platform.

This command edits the operating parameters for a DWDM client facility.

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DWDM

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Provisioning



**Related Commands**

DLT-<MOD1PAYLOAD>	RMV-<MOD2>
DLT-FFP-<MOD2DWDMPAYLOAD>	RST-<MOD2>
DLT-FFP-<OCN_TYPE>	RTRV-<MOD1FCPAYLOAD>
ED-<GIGE_TYPE>	RTRV-<MOD1FICONPAYLOAD>
ED-<MOD1FCPAYLOAD>	RTRV-<MOD2DWDMPAYLOAD>
ED-<MOD1FICONPAYLOAD>	RTRV-<OCN_TYPE>
ED-<OCN_TYPE>	RTRV-10GIGE
ED-ALS	RTRV-ALMTH-<MOD2>
ED-DS1	RTRV-ALS
ED-EC1	RTRV-DS1
ED-FFP-<MOD2DWDMPAYLOAD>	RTRV-EC1
ED-FFP-<OCN_TYPE>	RTRV-FAC
ED-FSTE	RTRV-FFP-<MOD2DWDMPAYLOAD>
ED-G1000	RTRV-FFP-<OCN_TYPE>
ED-GFP	RTRV-FSTE
ED-HDLC	RTRV-G1000
ED-POS	RTRV-GFP
ED-T1	RTRV-GIGE
ED-T3	RTRV-HDLC
ED-TRC-<MOD2DWDMPAYLOAD>	RTRV-PM-<MOD2>
ED-TRC-<OCN_TYPE>	RTRV-PMSCHED-<MOD2>
ENT-<MOD1PAYLOAD>	RTRV-POS
ENT-FFP-<MOD2DWDMPAYLOAD>	RTRV-PROTNSW-<MOD2DWDMPAYLOAD>
ENT-FFP-<OCN_TYPE>	RTRV-PROTNSW-<OCN_TYPE>
INIT-REG-<MOD2>	RTRV-T1
OPR-ALS	RTRV-T3
OPR-LPBK-<MOD2>	RTRV-TH-<MOD2>
OPR-PROTNSW-<MOD2DWDMPAYLOAD>	RTRV-TRC-<MOD2DWDMPAYLOAD>
OPR-PROTNSW-<OCN_TYPE>	RTRV-TRC-<OCN_TYPE>
REPT PM <MOD2>	SCHED-PMREPT-<MOD2>
RLS-LPBK-<MOD2>	SET-ALMTH-<MOD2>
RLS-PROTNSW-<MOD2DWDMPAYLOAD>	SET-TH-<MOD2>
RLS-PROTNSW-<OCN_TYPE>	

---

ED-<MOD2DWDMPAYLOAD>:[<TID>]:<AID>:<CTAG>:::[NAME=<NAME>],  
[CMDMDE=<CMDMDE>],[FREQ=<FREQ>],[LOSSB=<LOSSB>]:[<PST>[,<SST>]];

```
ED-HDTV::FAC-1-1:1:::NAME="PORTNAME",CMDMDE=CMDMDE,FREQ=1550,
LOSSB=LR-1:IS,AINS;
```

## Input Parameters

Table 11-4 ED-&lt;MOD2DWDMPAYLOAD&gt; Input Parameters

Parameter and Values	Description
<b>AID</b>	Access identifier from the “ <a href="#">25.1.14 FACILITY</a> ” section on <a href="#">page 25-28</a>
<b>LINKCREDITS</b>	Number of link credits. If autodetection is set to off the value of the link credits will be used to configure the hardware. Integer
<b>NAME</b>	String
<b>CMDMDE</b>	Command execution mode, forced or normal. FRCD deletes all the VCG members and member cross-connects of a VCG Parameter type is CMDMDE—forces the system to execute a given command regardless of any standing conditions. Normal mode is the default behavior for all commands but you can specify FRCD to force the system to override a state where the command would normally be denied
<ul style="list-style-type: none"> <li>FRCD</li> </ul>	Force the system to override a state where the command would normally be denied
<ul style="list-style-type: none"> <li>NORM</li> </ul>	Execute the command normally. Do not override any conditions that might make the command fail
<b>FREQ</b>	Parameter type is OPTICAL-WLEN—optical wavelength
<ul style="list-style-type: none"> <li>1530.33</li> </ul>	Wavelength 1
<ul style="list-style-type: none"> <li>1531.12</li> </ul>	Wavelength 2
<ul style="list-style-type: none"> <li>1531.90</li> </ul>	Wavelength 3
<ul style="list-style-type: none"> <li>1532.68</li> </ul>	Wavelength 4
<ul style="list-style-type: none"> <li>1534.25</li> </ul>	Wavelength 5
<ul style="list-style-type: none"> <li>1535.04</li> </ul>	Wavelength 6
<ul style="list-style-type: none"> <li>1535.82</li> </ul>	Wavelength 7
<ul style="list-style-type: none"> <li>1536.61</li> </ul>	Wavelength 8
<ul style="list-style-type: none"> <li>1538.19</li> </ul>	Wavelength 9
<ul style="list-style-type: none"> <li>1538.98</li> </ul>	Wavelength 10
<ul style="list-style-type: none"> <li>1539.77</li> </ul>	Wavelength 11
<ul style="list-style-type: none"> <li>1540.56</li> </ul>	Wavelength 12
<ul style="list-style-type: none"> <li>1542.14</li> </ul>	Wavelength 13
<ul style="list-style-type: none"> <li>1542.94</li> </ul>	Wavelength 14
<ul style="list-style-type: none"> <li>1543.73</li> </ul>	Wavelength 15
<ul style="list-style-type: none"> <li>1544.53</li> </ul>	Wavelength 16
<ul style="list-style-type: none"> <li>1546.12</li> </ul>	Wavelength 17

**Table 11-4** ED-<MOD2DWDMPAYLOAD> Input Parameters (continued)

Parameter and Values	Description
• 1546.92	Wavelength 18
• 1547.72	Wavelength 19
• 1548.51	Wavelength 20
• 1550.12	Wavelength 21
• 1550.92	Wavelength 22
• 1551.72	Wavelength 23
• 1552.52	Wavelength 24
• 1554.13	Wavelength 25
• 1554.94	Wavelength 26
• 1555.75	Wavelength 27
• 1556.55	Wavelength 28
• 1558.17	Wavelength 29
• 1558.98	Wavelength 30
• 1559.79	Wavelength 31
• 1560.61	Wavelength 32
• USE-TWL1	Use Tunable Wavelength 1
<b>LOSSB</b>	Parameter type is REACH—reach values
• AUTOPROV	Autoprovisioning
• CX	Reach CX
• DX	Reach DX
• HX	Reach HX
• I1	Reach I1
• IR-1	Reach IR-1
• IR-2	Reach IR-2
• L1	Reach L1
• L2	Reach L2
• L3	Reach L3
• LR-1	Reach LR-1
• LR-2	Reach LR-2
• LR-3	Reach LR-3
• LX	Reach LX
• S1	Reach S1
• S2	Reach S2
• SR	Reach SR
• SR-1	Reach SR-1
• SX	Reach SX

Table 11-4 ED-&lt;MOD2DWDMPAYLOAD&gt; Input Parameters (continued)

Parameter and Values	Description
• T	Reach T
• VX	Reach VX
• ZX	Reach ZX
<b>PST</b>	Primary state Parameter type is PST—indicates the current overall service condition of an entity
• IS	In service
• OOS	Out of service
<b>SST</b>	Secondary state Parameter type is SST—provides additional information pertaining to PST and PSTQ
• AINS	Automatic in service
• DSBLD	Disabled
• LPBK	Loopback
• MEA	Mismatch of equipment and attributes
• MT	Maintenance mode
• OOG	Out of group
• SWDL	Software downloading
• UAS	Unassigned
• UEQ	Unequipped

## 11.5 ED-<MOD\_PATH>

Edit (STS1, STS12C, STS18C, STS192C, STS24C, STS36C, STS3C, STS48C, STS6C, STS9C, VC12, VC3, VT1, VT2)

This command edits the attributes associated with STS and VT paths.

### Usage Guidelines

Cisco ONS 15454, 15327, 15600, 15310

The SFBER, SDBER, RVRTV, and RVTM parameters only apply to path protection at the STS path level and ONS 15310\_CL and ONS 15454 VT paths.

SFBER and SDBER also apply to the VT path level on the ONS 15310-CL and ONS 15454 when the ONS 15454 has an XC-VXC-10G card.

SWPDIP does not apply to the VT path level (VT1 and VT2).

The path trace message is a 64 character string including the terminating CR (carriage return) and LF (line feed) that is transported in the J1 byte of the SONET STS Path overhead. Both the EXPTRC and TRC string can be provisioned by user with up to 62 character string.

The EXPTRC indicates the contents of the expected incoming path trace are provisioned by the user. The TRC indicates the contents of the outgoing path trace message. The INCTRC indicates the contents of the incoming path trace message.

The path trace mode has three modes: OFF, MANUAL, and AUTO. The path trace mode defaults to OFF. The MANUAL mode performs the comparison of the received string with the user-entered expected string. The AUTO mode performs the comparison of the present received string with an expected string set to a previously received string. If there is a mismatch, TIM-P alarm is raised. When the path trace is in OFF mode, there is no path trace processing, and all the alarm and state conditions are reset.

The TACC parameter edits an existing single STS or VT and changes it to a test access point. When an editing command on TACC is executed, it assigns the STS or VT for the first 2-way connection and STS+1 as the second 2-way connection. For single FAD test access only a single STS/VT is used for the TAP creation. For more information on TACC, refer to the *Cisco ONS SDH and Cisco ONS 15600 SDH TL1 Reference Guide*.

J1 is implemented on the DS1/DS1N, DS3E/DS3NE, DS3XM, EC1, OC3, OC12-4, OC48AS and OC192 cards.

DS3/DS3N, OC12, OC48, E100, and E1000 cards do not support path trace.

DS1/DS1N, DS3E/DS3NE, and DS3XM support both TRC and EXPTRC in the ED-STS-PATH command.

EC1, OC3, OC48AS, and OC192 only support EXPTRC in the ED-STS-PATH command.

**Note**

Each TL1 command must be less than or equal to 255 characters. Any command larger than 255 characters must be split into multiple commands. For example, if you use the ED-<MOD\_PATH> command to edit the J1 EXPTRC/TRC message, path protection attributes, and TACC attributes and the command exceeds 255 characters the command will not be processed. You must use multiple ED-<MOD\_PATH> commands instead.

The following actions will produce error messages:

1. Sending this command to edit SFBER, SDBER, RVRTV or RVTM for the non-path protection STS path.
2. Sending this command to edit the EXPTRC string with the AUTO path trace mode (TRCMODE=AUTO).
3. Sending this command to edit TRC on any card other than DS3(N)E, DS1(N), and DS3XM cards, will return the “TRC-not allowed for monitor paths. Incorrect card type” error message.
4. Sending this command to edit both TACC and any other attribute(s) will return the “Parameters Not compatible” error message.
5. Sending this command to edit TACC on an AID with cross-connections will return the “STS in Use” error message.

**Note**

- TACC creation will be denied on the protect ports/cards for 1:1, 1:N, and 1+1.
- The VFAC AID is only valid on slots containing an ML-Series card. TACC is not supported for the ML-Series cards.
- After the BLSR switching, provisioning of the J1 trace string or trace mode is not allowed on the protection path.
- TACC creation is allowed on PCA for two-fiber and four-fiber BLSR.

- TACC is not supported on G1000, MXP\_2.5\_10G/TXP\_MR-10G, ML1000-2 and ML100T-12 cards.
- HOLDOFFTIMER is not specific to a path. It is applicable to the path protection selector. If HOLDOFFTIMER is changed on one path associated with the selector, the HOLDOFFTIMER of the other path associated with the same selector is also changed.
- The test set physical connection set up through ED-T3/DS1/STS1/VT1 of the DS3XM-12 card is only allowed on the physical front ports (PORTED ports, ports 1-12), which are the monitoring ports.
  - The monitoring test access ports follow the common rules for the other cards. For example, ED-T3 on port 2 (FAC-6-2) with a TACC number (8), the next port, port 3 (FAC-6-3) is used as the monitoring point also. The RTRV-T3 on both port-2 and port-3 return the same TACC number (8) used to monitor the cross-connection end (A-B). The last port (port 12) is not allowed to set up a physical connection with the test set because there is no next available port to be the monitoring port.
  - The TACC disconnection (DISC-TACC) and the test access mode change command (CHG-TACC) follow the same requirement as in the step above, but it is applied on the ported ports of the DS3XM-12 card.
  - The test access connection set-up command (CONN-TACC) has monitored points, which can be portless ports. This command is applied on both ported and portless ports of the DS3XM-12 card.
- If the entity has a TACC connection, the entity is not allowed to have ported or portless STS/VT cross-connection (or circuit) provisioning on the DS3XM-12 card.
- Test Access is not supported on the ONS 15310-CL.
- J2 path trace is not supported on the 15310-CL-CTX card of the ONS 15310-CL, however the CE-100T-8/ML-100T-8 card provisioned in mapper mode does allow J2 provisioning.
- The cross-connects on the DS3I card will be STS3C width, but the individual STS 1s within the 3C will be accessible. For editing the path attributes use the ED-STS1 command with the FAC AID. For TACC creation, use the ED-STS3C command because the TACC path width (like the cross-connect) has to be 3C on the DS3I card. In this case, you are creating a new entity (TAP) on the DS3I card that has to be of 3C width. On the DS3I card the ED0STS command can be used either with STS1 or STS3C depending on the parameter to be modified.
- For the selector path on a BLSR, the SWPDIP is not editable and is always in the ON state. If you attempt to edit SWPDIP (for the selector path on a BLSR), an error message will be returned.
- You can create an STS1 or VT1.5 single TAP on the DS3XM-12 card's last ported port (12) if the bandwidth is available on that port.
- Optical ports do not support MAN and AUTO trace mode because they are not capable of raising AIS on TIM-P. Use AUTO-NO-AIS or MAN-NO-AIS trace mode on optical ports.
- Sending the ED-VT1/VT2 commands over ONS 15454 path protection paths to edit SFBER or SDBER (when the ONS 15454 does not have an XC-VXC-10G cross-connect) will return the "Invalid Operation For The XCON" error message.
- Sending the ED-VT1/VT2 commands to edit SDBER with 1E-9 will return the "Out Of Range" error message.

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Paths

## Provisioning

Related Commands	DLT-CRS-<PATH>	ENT-CRS-<PATH>	RTRV-CRS-<PATH>
	DLT-ROLL-<MOD_PATH>	ENT-ROLL-<MOD_PATH>	RTRV-NE-PATH
	ED-CRS-<PATH>	OPR-PROTNSW-<PATH>	RTRV-PROTNSW-<PATH>
	ED-NE-PATH	RLS-PROTNSW-<PATH>	RTRV-PTHTRC-<PATH>
	ED-ROLL-<MOD_PATH>	RTRV-<PATH>	RTRV-ROLL-<MOD_PATH>

```
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>]];
```

```
ED-STS3C:FERNDAL:STS-2-1-4:115:::SFBER=1E-3,SDBER=1E-5,RVRTV=Y,RVTM=1.0,
SWPDIP=Y,HOLDOFFTIMER=2000,EXPTRC="EXPTRCSTRING",TRC="TRCSTRING",
TRCMODE=OFF,TRCFORMAT=64-BYTE,TACC=8,TAPTYPE=SINGLE,
CMDMDE=CMDMDE:IS,AINS;
```

**Table 11-5** ED-<MOD\_PATH> Input Parameters

Parameter and Values	Description
<b>AID</b>	Access identifier from the <a href="#">“25.1.10 CrossConnectId1”</a> section on page 25-20
<b>SFBER</b>	Signal failure threshold. Applies only to path protection. Applies to STS-level paths in SONET (STSn) and to VT-level paths on the ONS 15310-CL with an XC-VXC-10G card. Defaults to 1E-4 Parameter type is SF_BER—the threshold for declaring signal failure on a facility or path
• 1E-3	SFBER is 1E-3
• 1E-4	SFBER is 1E-4
• 1E-5	SFBER is 1E-5
<b>SDBER</b>	Signal degrade threshold. Applies only to path protection. Applies to STS-level paths in SONET (STSn) and to VT-level paths on the ONS 15310-CL with an XC-VXC-10G card. 1E-9 is not allowed for VT-level/LO paths. Defaults to 1E-6 Parameter type is SD_BER—the threshold for declaring signal degrade on a facility or path
• 1E-5	SDBER is 1E-5
• 1E-6	SDBER is 1E-6
• 1E-7	SDBER is 1E-7

Table 11-5 ED-&lt;MOD\_PATH&gt; Input Parameters (continued)

Parameter and Values	Description
<ul style="list-style-type: none"> <li>1E-8</li> </ul>	SDBER is 1E-8
<ul style="list-style-type: none"> <li>1E-9</li> </ul>	SDBER is 1E-9
<b>RVRTV</b>	<p>Revertive mode. The value Y indicates that the protection switching system reverts service to the original line after restoration. The value N indicates that the protection switching system does not revert service to the original line after restoration. RVRTV is applicable only for 1+1 protection switching. Null defaults to N. Only applies to path protection</p> <p>Parameter type is ON_OFF—disable or enable an attribute</p>
<ul style="list-style-type: none"> <li>N</li> </ul>	Disable an attribute
<ul style="list-style-type: none"> <li>Y</li> </ul>	Enable an attribute
<b>RVTM</b>	<p>Revertive time. RVTM is not allowed to be set while “RVRTV” is N. Only applies to path protection</p> <p>Parameter type is REVERTIVE_TIME—revertive time</p>
<ul style="list-style-type: none"> <li>0.5 to 12.0</li> </ul>	Revertive time is 0.5 to 12.0 minutes
<b>SWPDIP</b>	<p>On-off switch for path protection payload defect level switching. Applicable only to STS-level paths in SONET (STS<sub>n</sub>). For the selector path on a BLSR, SWPDIP is not editable and always ON. Defaults to N</p> <p>Parameter type is ON_OFF—disable or enable an attribute</p>
<ul style="list-style-type: none"> <li>N</li> </ul>	Disable an attribute
<ul style="list-style-type: none"> <li>Y</li> </ul>	Enable an attribute
<b>HOLDOFFTIMER</b>	Hold off timer for path protection DRI. Values must be within 0 and 10000 ms (0 - 10 seconds), with increments of 100 ms. Defaults to “existed value.” Integer
<b>EXPTRC</b>	Expected path trace content. Indicates the expected path trace message (J1) contents. EXPTRC is any 64-character ASCII string, including the terminating CR (carriage return) and LF (line feed). Applicable to STS-level paths in SONET (STS <sub>n</sub> ). Applicable to VT-level paths for the DS3XM-12 and CE-100T-8 card on the ONS 15454 and the CE-100T-8 card on ONS 15310-CL. Defaults to 64 null characters. String
<b>TRC</b>	The path trace message to be transmitted. The trace byte (J1) continuously transmits a 64-byte, fixed length ASCII string, one byte at a time. A null value defaults to the NE transmitting 62 null characters (hex 00) and CR and LF. Applicable to STS-level paths in SONET (STS <sub>n</sub> ). Applicable to VT-level paths for the DS3XM-12 and CE-100T-8 card on the ONS 15454 and the CE-100T-8 card on ONS 15310-CL. For ONS 15310-CL, TRC is not provisionable on the EC/OC ports. Defaults to 64 null characters. String



Table 11-5 ED-&lt;MOD\_PATH&gt; Input Parameters (continued)

Parameter and Values	Description
<b>TRCMODE</b>	Path trace mode. Applicable only to STS-level paths in SONET (STSn). Defaults to the OFF mode. ONS 15310-CL EC/OC ports do not support MAN and AUTO, but can be configured as MAN-NO-AIS and AUTO-NO-AIS. <b>Note</b> The ONS 15600 does not support MAN and AUTO Parameter type is TRCMODE—trace mode
• AUTO	Use the previously received path trace string as the expected string. Not applicable to MXP/TXP cards
• AUTO-NO-AIS	Use the previously received path trace string as the expected string and do not turn on AIS and RDI if TIM-P is detected
• MAN	Use the provisioned expected string as the expected string
• MAN-NO-AIS	Use the provisioned expected string as the expected string and do not turn on AIS and RDI if TIM-P is detected
• OFF	Turn off path trace capability. Nothing will be reported
<b>TRCFORMAT</b>	Path trace format. Only 64-byte is supported. Defaults to 64-byte Parameter type is TRCFORMAT—trace format
• 64-BYTE	64 byte trace message
<b>TACC</b>	TAP number within a range of 0 to 999. Indicates whether the digroup being provisioned is to be used as a test access digroup. When TACC is 0 (zero), the TAP is deleted. Integer
<b>TAPTYPE</b>	TAP type. Defaults to DUAL Parameter type is TAPTYPE—test access point type
• DUAL	Dual FAD
• SINGLE	Single FAD
<b>CMDMDE</b>	Command mode Parameter type is CMDMDE—forces the system to execute a given command regardless of any standing conditions. Normal mode is the default behavior for all commands but you can specify FRCD to force the system to override a state where the command would normally be denied. Defaults to NORM
• FRCD	Force the system to override a state where the command would normally be denied
• NORM	Execute the command normally. Do not override any conditions that might make the command fail
<b>PST</b>	Primary state. Defaults to IS Parameter type is PST—indicates the current overall service condition of an entity
• IS	In service
• OOS	Out of service

Table 11-5 ED-&lt;MOD\_PATH&gt; Input Parameters (continued)

Parameter and Values	Description
SST	Secondary state. Defaults to AINS Parameter type is SST—provides additional information pertaining to PST and PSTQ
• AINS	Automatic in service
• DSBLD	Disabled
• LPBK	Loopback
• MEA	Mismatch of equipment and attributes
• MT	Maintenance mode
• OOG	Out of group
• SWDL	Software downloading
• UAS	Unassigned
• UEQ	Unequipped

## 11.6 ED-<MOD\_RING>

Edit Bidirectional Line Switched Ring

### Usage Guidelines

Cisco ONS 15454, ONS 15327, ONS 15600

This command edits the BLSR attributes.

ONS 15327 and ONS 15600 do not support four-fiber BLSR.

The RVRTV, RVTM, SRVRTV, SRVTM, NODEID, and RINGID attributes can be edited for the four-fiber BLSR.

The RVRTV, RVTM, NODEID, and RINGID attributes can be edited for the two-Fiber BLSR.

The following actions will produce errors:

- If the system fails on getting IOR, a SROF (Get IOR Failed) error message is returned
- If the AID is invalid, an IIAC (Invalid AID) error message is returned.
- If the BLSR does not exist, a SRQN (BLSR Does Not Exist) error message is returned.
- The SROF (Facility Not Provisioned) or (Cannot Access BLSR) error message will be returned for an invalid query.
- The SRQN (BLSR Edition Failed) error message is returned for an invalid edition query.
- Sending this command to modify SRVRTV or SRVTM on a two-fiber BLSR will return an IDNV (Invalid Data For 2F-BLSR) error message.
- Sending this command to modify the nodeid with invalid data will return an IIAC (Invalid NodeId) error message.
- Sending this command to change the ringid into invalid data will return an IIAC (Invalid RingId) error message.

- Changing the BLSR nodeid with a duplicated ID will return a SROF (Cannot Set NodeId) error message.
- Changing the BLSR ringid with a duplicated ID will return a SROF (Cannot Set RingId) error message is returned.

**Note**

- The ALL AID is invalid for this command.
- The list AID format has been supported since R4.6.

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BLSR

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Provisioning

**Related Commands**

DLT-<MOD_RING>	EX-SW-<OCN_BLSR>	RTRV-TRC-<OCN_BLSR>
ENT-<MOD_RING>	RTRV-<MOD_RING>	

---

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

---

ED-BLSR:PETALUMA:BLSR-43:123:::RINGID=43,NODEID=3,RVRTV=Y,RVTM=2.0,SRVRTV=Y,SRVTM=5.0;

**Table 11-6** ED-<MOD\_RING> Input Parameters

Parameter and Values	Description
<b>AID</b>	Access identifier from the <a href="#">“25.1.3 AidUnionId1”</a> section on page 25-12. Identifies the BLSR of the NE. ALL or BLSR-ALL AID is not allowed for editing a BLSR
<b>RINGID</b>	The BLSR ID of the NE up to six characters. Valid characters are A-Z and 0-9. String
<b>NODEID</b>	The BLSR node ID of the NE. NODEID ranges from 0 to 31. Integer

Table 11-6 ED-&lt;MOD\_RING&gt; Input Parameters (continued)

Parameter and Values	Description
<b>RVRTV</b>	Revertive mode. The value Y indicates that the protection switching system reverts service to the original line after restoration. The value N indicates that the protection switching system does not revert service to the original line after restoration. RVRTV is applicable only for 1+1 protection switching. Null defaults to N Parameter type is ON_OFF—disable or enable an attribute
• N	Disable an attribute
• Y	Enable an attribute
<b>RVTM</b>	Revertive time. RVTM is not allowed to be set while “RVRTV” is N Parameter type is REVERTIVE_TIME—revertive time
• 0.5 to 12.0	Revertive time is 0.5 to 12.0 minutes
<b>SRVRTV</b>	The span revertive mode for four-fiber BLSR only Parameter type is ON_OFF—disable or enable an attribute
• N	Disable an attribute
• Y	Enable an attribute
<b>SRVTM</b>	The span revertive time for four-fiber BLSR only. SRVTM is not allowed to be set while SRVRTV is N Parameter type is REVERTIVE_TIME—revertive time
• 0.5 to 12.0	Revertive time is 0.5 to 12.0 minutes

## 11.7 ED-<OCN\_TYPE>

Edit (OC3, OC12, OC48, OC192)

### Usage Guidelines

Cisco ONS 15454, 15327, 15600, 15310

See [Table 27-1 on page 27-1](#) for supported modifiers by platform.

This command edits the attributes (for example, service parameters) and status of an OC-N facility. Allowable states for a facility are Out Of Service (OOS), Out Of Service with Automatic In Service transitioning (OOS-AINS), Out Of Service for Maintenance (OOS-MT), and In Service (IS).

The DCC transmit is bridged to both working and protect in a 1+1 protection scheme. On the receive side, the active one is selected for DCC. The DCC is provisioned on the working port only in a 1+1 protection scheme.

All lines in a 1+1 BLSR must have the same mode. If you change the mode of a line that is in a 1+1 BLSR, an error message will be returned.

UNI-C DCC provisioning notes:

1. The attributes DCC(Y/N) and mode (SONET/SDH) remain the same in the ED/RTRV-OCN commands when the DCC is used for UNI-C, in which case the port attribute UNIC is enables (UNIC=Y).

2. UNI-C DCC termination cannot be deleted by the regular DCC deprovisioning command.
3. If the DCC is created under regular SONET provisioning, and this port is used by UNI-C, the port is converted as a UNI-C DCC automatically.
4. Deprovisioning UNI-C IF/IB IPCC will free up DCC termination automatically.
5. The parameters ALSMODE, ALSCRINT and ALSRCPW are valid only for OC3-8, OC-192, and OC48ELR cards.
6. SDCC/LDCC termination cannot be unprovisioned if a provisionable patchcord termination end point is provisioned on the port.
7. SSM selectable (admssm) and synchronization messaging for output (syncmsgout) are not applicable to ONS 15600.
8. The default values for all optional parameters are NE default values. These values might not be the current value for a parameter. In order to obtain the current value, issue the RTRV-XX command.
9. J0 Support (EXPTRC, TRC, TRCMODE and TRCFORMAT parameters) is supported only by DWDM cards with an OCn payload. J0 is not supported by OC3-8, OC12, OC48, OC192 and other optical cards.

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 Ports

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 Provisioning

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**Related Commands**

DLT-FFP-<OCN_TYPE>	ENT-FFP-<OCN_TYPE>	RTRV-G1000
ED-DS1	OPR-PROTNSW-<OCN_TYPE>	RTRV-GFP
ED-EC1	RLS-PROTNSW-<OCN_TYPE>	RTRV-GIGE
ED-FFP-<OCN_TYPE>	RTRV-<OCN_TYPE>	RTRV-HDLC
ED-G1000	RTRV-DS1	RTRV-POS
ED-GFP	RTRV-EC1	RTRV-PROTNSW-<OCN_TYPE>
ED-HDLC	RTRV-FAC	RTRV-T1
ED-T1	RTRV-FFP-<OCN_TYPE>	RTRV-T3
ED-T3	RTRV-FSTE	RTRV-TRC-<OCN_TYPE>
ED-TRC-<OCN_TYPE>		

---

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

```
ED-OC48:PENNGROVE:FAC-6-1:114:::DCC=Y,AREA=10.92.63.1,SYNCMSG=N,
SENDDUS=N,PJMON=48,SFBER=1E-4,SDBER=1E-6,MODE=SONET,MUX=E2,SOAK=10,
OSPF=Y,LDCC=N,NAME="OCNPORT",CMDMDE=CMDMDE,EXPTRC="AAA",
TRC="AAA",TRCMODE=MAN,TRCFORMAT=16-BYTE,ADMSSM=PRS,SENDDUSFF=N,
AISONLPBK=AIS_ON_LPBK_ALL,FREQ=1550,LOSSB=LR-1,FOREIGNFEND=N,
FOREIGNIP="IP ADDRESS":IS,AINS;
```

**Table 11-7** ED-<OCN\_TYPE> Input Parameters

Parameter and Values	Description
<b>AID</b>	Access identifier from the “ <a href="#">25.1.14 FACILITY</a> ” section on <a href="#">page 25-28</a>
<b>DCC</b>	Indicates whether or not the section DCC is to be used. Identifies the section DCC connection of the port Parameter type is ON_OFF—disable or enable an attribute
<ul style="list-style-type: none"> <li>• N</li> <li>• Y</li> </ul>	Disable an attribute Enable an attribute
<b>AREA</b>	The area ID and shows up only if the DCC is enabled. String
<b>SYNCMSG</b>	Synchronization status message Parameter type is EXT_RING—indicates if the ring supports the extended K1/K2/K3 protocol
<ul style="list-style-type: none"> <li>• N</li> <li>• Y</li> </ul>	The ring does not support the extended K1/K2/K3 protocol The ring does support the extended K1/K2/K3 protocol
<b>SENDDUS</b>	The facility will send the DUS (Don’t use for Synchronization) value as the sync status message for that facility Parameter type is ON_OFF—disable or enable an attribute
<ul style="list-style-type: none"> <li>• N</li> <li>• Y</li> </ul>	Disable an attribute Enable an attribute
<b>PJMON</b>	Identifies an OC-N port PJMON. PJMON is an integer. It defaults to 0 (zero). Set a valid STS number of the optical port. <b>Note</b> The PJMON number displayed in TL1 interface does not correspond to the PJVC4MON number in CTC, but instead corresponds to the STS number of the optical port.
<b>SFBER</b>	Signal failure threshold Parameter type is SF_BER—the threshold for declaring signal failure on a facility or path
<ul style="list-style-type: none"> <li>• 1E-3</li> <li>• 1E-4</li> <li>• 1E-5</li> </ul>	SFBER is 1E-3 SFBER is 1E-4 SFBER is 1E-5

Table 11-7 ED-&lt;OCN\_TYPE&gt; Input Parameters (continued)

Parameter and Values	Description
<b>SDBER</b>	Signal degrade threshold Parameter type is SD_BER—the threshold for declaring signal degrade on a facility or path
• 1E-5	SDBER is 1E-5
• 1E-6	SDBER is 1E-6
• 1E-7	SDBER is 1E-7
• 1E-8	SDBER is 1E-8
• 1E-9	SDBER is 1E-9
<b>MODE</b>	OCn port mode Parameter type is OPTICAL_MODE—the facility's optical mode
• SDH	SDH/ETSI optical mode using European/International format
• SONET	SONET/ANSI optical mode using the American format
<b>MUX</b>	BLSR extension byte (supported only on the OC48AS card). MUX cannot be configured if: <ul style="list-style-type: none"> <li>• The card is SONET and the media type is SDHT</li> <li>• The card has an orderwire or UDC connection</li> <li>• This is a protect line and the working line has an orderwire or UDC connection</li> </ul> Parameter type is MUX_TYPE—BLSR extension type
• E2	E2 byte (orderwire)
• F1	F1 byte (user)
• K3	K3 byte
• Z2	Z2 byte
<b>SOAK</b>	OOS-AINS to IS transition soak time as measured in 15-minute intervals. A value of 4 equals a soak time of 1 hour. The allowable range is 0 to 192 intervals (maximum of 48 hours). Defaults to 32. Integer
<b>OSFP</b>	The open shortest path first discovery. Defaults to Y Parameter type is ON_OFF—disable or enable an attribute
• N	Disable an attribute
• Y	Enable an attribute
<b>LDCC</b>	The line DCC connection on the port. Defaults to N Parameter type is EXT_RING—indicates if the ring supports the extended K1/K2/K3 protocol
• N	The ring does not support the extended K1/K2/K3 protocol
• Y	The ring does support the extended K1/K2/K3 protocol

Table 11-7 ED-&lt;OCN\_TYPE&gt; Input Parameters (continued)

Parameter and Values	Description
<b>NAME</b>	String. Defaults to NULL. Maximum length is 32 characters
<b>CMDMDE</b>	Command Mode. The FRCD mode of operation is applicable to delete a VCAT member cross-connect from IS-NR or OOS-AU,AINS service state. Defaults to NORM  Parameter type is CMDMDE—forces the system to execute a given command regardless of any standing conditions. Normal mode is the default behavior for all commands but you can specify FRCD to force the system to override a state where the command would normally be denied
<ul style="list-style-type: none"> <li>FRCD</li> </ul>	Force the system to override a state where the command would normally be denied
<ul style="list-style-type: none"> <li>NORM</li> </ul>	Execute the command normally. Do not override any conditions that might make the command fail
<b>EXPTRC</b>	Expected path trace content. Indicates the expected path trace message (J1) contents. EXPTRC is any 64-character ASCII string, including the terminating CR (carriage return) and LF (line feed). Applicable to STS-level paths in SONET (STS <sub>n</sub> ). Applicable to VT-level paths for the DS3XM-12 card on the ONS 15454. Defaults to NULL. String
<b>TRC</b>	The path trace message to be transmitted. The trace byte (J1) continuously transmits a 64-byte, fixed length ASCII string, one byte at a time. A null value defaults to the NE transmitting 62 null characters (hex 00) and CR and LF. Applicable to STS-level paths in SONET (STS <sub>n</sub> ). Applicable to VT-level paths for the DS3XM-12 card on the ONS 15454. String
<b>TRCMODE</b>	Path trace mode. Applicable only to STS-level Paths in SONET (STS <sub>n</sub> ). Defaults to MAN  Parameter type is TRCMODE—trace mode
<ul style="list-style-type: none"> <li>AUTO</li> </ul>	Use the previously received path trace string as the expected string. Not applicable to MXP/TXP cards
<ul style="list-style-type: none"> <li>AUTO-NO-AIS</li> </ul>	Use the previously received path trace string as the expected string and do not turn on AIS and RDI if TIMP is detected
<ul style="list-style-type: none"> <li>MAN</li> </ul>	Use the provisioned expected string as the expected string
<ul style="list-style-type: none"> <li>MAN-NO-AIS</li> </ul>	Use the provisioned expected string as the expected string and do not turn on AIS and RDI if TIMP is detected
<ul style="list-style-type: none"> <li>OFF</li> </ul>	Turn off path trace capability. Nothing will be reported
<b>TRCFORMAT</b>	Trace message size  Parameter type is TRCFORMAT—trace format
<ul style="list-style-type: none"> <li>1-BYTE</li> </ul>	1 byte trace message
<ul style="list-style-type: none"> <li>16-BYTE</li> </ul>	16 byte trace message
<ul style="list-style-type: none"> <li>64-BYTE</li> </ul>	64 byte trace message



Table 11-7 ED-&lt;OCN\_TYPE&gt; Input Parameters (continued)

Parameter and Values	Description
<b>ADMSSM</b>	SSM selectable value. It will only appear when SSM is disabled. Defaults to STU  Parameter type is SYNC_CLOCK_REF_QUALITY_LEVEL—clock source quality level for SONET
• DUS	Do Not Use For Synchronization
• PRS	Primary Reference Source, Stratum 1 Traceable
• RES	Reserved For Network Synchronization Use
• SMC	SONET Minimum Clock Traceable
• ST2	Stratum 2 Traceable
• ST3	Stratum 3 Traceable
• ST3E	Stratum 3E Traceable
• ST4	Stratum 4 Traceable
• STU	Synchronized, Traceability Unknown
• TNC	Transit Node Clock (2nd Generation Only)
<b>SENDUSFF</b>	Parameter type is ON_OFF—disable or enable an attribute
• N	Disable an attribute
• Y	Enable an attribute
<b>AISONLPBK</b>	Parameter type is AIS_ON_LPBK—Indicates if AIS is sent on a loopback
• AIS_ONLPBK_FACILITY	AIS is sent on facility loopbacks
• AIS_ON_LPBK_ALL	AIS is sent on all loopbacks
• AIS_ON_LPBK_OFF	AIS is not sent on loopbacks
• AIS_ON_LPBK_TERMINAL	AIS is sent on terminal loopbacks
<b>FREQ</b>	Parameter type is OPTICAL-WLEN—optical wavelength
• 1530.33	Wavelength 1
• 1531.12	Wavelength 2
• 1531.90	Wavelength 3
• 1532.68	Wavelength 4
• 1534.25	Wavelength 5
• 1535.04	Wavelength 6
• 1535.82	Wavelength 7
• 1536.61	Wavelength 8
• 1538.19	Wavelength 9
• 1538.98	Wavelength 10
• 1539.77	Wavelength 11
• 1540.56	Wavelength 12

Table 11-7 ED-&lt;OCN\_TYPE&gt; Input Parameters (continued)

Parameter and Values	Description
• 1542.14	Wavelength 13
• 1542.94	Wavelength 14
• 1543.73	Wavelength 15
• 1544.53	Wavelength 16
• 1546.12	Wavelength 17
• 1546.92	Wavelength 18
• 1547.72	Wavelength 19
• 1548.51	Wavelength 20
• 1550.12	Wavelength 21
• 1550.92	Wavelength 22
• 1551.72	Wavelength 23
• 1552.52	Wavelength 24
• 1554.13	Wavelength 25
• 1554.94	Wavelength 26
• 1555.75	Wavelength 27
• 1556.55	Wavelength 28
• 1558.17	Wavelength 29
• 1558.98	Wavelength 30
• 1559.79	Wavelength 31
• 1560.61	Wavelength 32
• USE-TWL1	Use Tunable Wavelength 1
<b>LOSSB</b>	Parameter type is REACH—reach values
• AUTOPROV	Autoprovisioning
• CX	Reach CX
• DX	Reach DX
• HX	Reach HX
• I1	Reach I1
• IR-1	Reach IR-1
• IR-2	Reach IR-2
• L1	Reach L1
• L2	Reach L2
• L3	Reach L3
• LR-1	Reach LR-1
• LR-2	Reach LR-2
• LR-3	Reach LR-3
• LX	Reach LX

Table 11-7 ED-&lt;OCN\_TYPE&gt; Input Parameters (continued)

Parameter and Values	Description
• S1	Reach S1
• S2	Reach S2
• SR	Reach SR
• SR-1	Reach SR-1
• SX	Reach SX
• T	Reach T
• VX	Reach VX
• ZX	Reach ZX
<b>FOREIGNFEND</b>	Indicates whether the far-end NE on the DCC is a foreign NE Parameter type is ON_OFF—disable or enable an attribute
• N	Disable an attribute
• Y	Enable an attribute
FOREIGNIP	The IP address of the far-end NE on the DCC. Used only if FOREIGNFEND is Y. String
<b>PST</b>	Primary state. Parameter type is PST—indicates the current overall service condition of an entity
• IS	In service
• OOS	Out of service
<b>SST</b>	Secondary state. Defaults to AINS Parameter type is SST—provides additional information pertaining to PST and PSTQ
• AINS	Automatic in service
• DSBLD	Disabled
• LPBK	Loopback
• MEA	Mismatch of equipment and attributes
• MT	Maintenance mode
• OOG	Out of group
• SWDL	Software downloading
• UAS	Unassigned
• UEQ	Unequipped

## 11.8 ED-ALS

Edit Automatic Laser Shutdown

**Usage Guidelines**

Cisco ONS 15454, ONS 15310-CL

This command is used to modify the ALS attributes of an OC-N facility and all the facilities that support the ALS feature. For MXP\_2.5G\_10E, TXP\_MR\_10E, MXP\_2.5G\_10G, TXP\_MR\_10G, TXP\_MR\_2.5G, and TXPP\_MR\_2.5G cards this command is used to modify the ALS parameter of the OC48 and OC192 ports.

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Ports

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Provisioning

**Related Commands**

DLT-<MOD1PAYLOAD>	RMV-<MOD2>
DLT-FFP-<MOD2DWDMPAYLOAD>	RST-<MOD2>
DLT-FFP-<OCN_TYPE>	RTRV-<MOD1FCPAYLOAD>
ED-<GIGE_TYPE>	RTRV-<MOD1FICONPAYLOAD>
ED-<MOD1FCPAYLOAD>	RTRV-<MOD2DWDMPAYLOAD>
ED-<MOD1FICONPAYLOAD>	RTRV-<OCN_TYPE>
ED-<MOD2DWDMPAYLOAD>	RTRV-10GIGE
ED-<OCN_TYPE>	RTRV-ALMTH-<MOD2>
ED-DS1	RTRV-ALS
ED-EC1	RTRV-DS1
ED-FFP-<MOD2DWDMPAYLOAD>	RTRV-EC1
ED-FFP-<OCN_TYPE>	RTRV-FAC
ED-G1000	RTRV-FFP-<MOD2DWDMPAYLOAD>
ED-GFP	RTRV-FFP-<OCN_TYPE>
ED-HDLC	RTRV-FSTE
ED-POS	RTRV-G1000
ED-T1	RTRV-GFP
ED-T3	RTRV-GIGE
ED-TRC-<MOD2DWDMPAYLOAD>	RTRV-HDLC
ED-TRC-<OCN_TYPE>	RTRV-PM-<MOD2>
ENT-<MOD1PAYLOAD>	RTRV-PMSCHED-<MOD2>
ENT-FFP-<MOD2DWDMPAYLOAD>	RTRV-POS
ENT-FFP-<OCN_TYPE>	RTRV-PROTNSW-<MOD2DWDMPAYLOAD>
INIT-REG-<MOD2>	RTRV-PROTNSW-<OCN_TYPE>
OPR-ALS	RTRV-T1
OPR-LPBK-<MOD2>	RTRV-T3
OPR-PROTNSW-<MOD2DWDMPAYLOAD>	RTRV-TH-<MOD2>
OPR-PROTNSW-<OCN_TYPE>	RTRV-TRC-<MOD2DWDMPAYLOAD>
REPT PM <MOD2>	RTRV-TRC-<OCN_TYPE>
RLS-LPBK-<MOD2>	SCHED-PMREPT-<MOD2>
RLS-PROTNSW-<MOD2DWDMPAYLOAD>	SET-ALMTH-<MOD2>
RLS-PROTNSW-<OCN_TYPE>	SET-TH-<MOD2>

---

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

---

ED-ALS:CISCO:FAC-1-1:100:::ALSMODE=AUTO,ALSRCINT=130,ALSRCPW=35.1;

**Table 11-8 ED-ALS Input Parameters**

Parameter and Values	Description
<b>SRC</b>	Access identifier from the “25.1.2 AidUnionId” section on page 25-9
<b>ALSMODE</b>	ALS is enabled or disabled Parameter type is ALS_MODE—the working mode for automatic laser shutdown
<ul style="list-style-type: none"> <li>• AUTO</li> </ul>	Automatic
<ul style="list-style-type: none"> <li>• DISABLED</li> </ul>	Disabled
<ul style="list-style-type: none"> <li>• MAN</li> </ul>	Manual
<ul style="list-style-type: none"> <li>• MAN-RESTART</li> </ul>	Manual restart for test
<b>ALSRCINT</b>	ALS recovery interval. The range is 60 to 300 seconds. Integer
<b>ALSRCPW</b>	ALS recovery pulse width. The range is 2.0 to 100.00 seconds, in increments of 100 ms. Float

## 11.9 ED-APC

Edit Amplification Power Control

### Usage Guidelines

Cisco ONS 15454

This command is used to modify the APC application attributes. The default value for an optional parameter is the NE default value. The value might not be the current value for the parameter. Use a RTRV-xx command to retrieve the current value.

DWDM

Provisioning

Related Commands	DLT-LNK-<MOD2O>	ED-WLEN	RTRV-FFP-OCH
	DLT-LNKTERM	ENT-LNK-<MOD2O>	RTRV-LNK-<MOD2O>
	DLT-OSC	ENT-LNKTERM	RTRV-LNKTERM
	DLT-WLEN	ENT-OSC	RTRV-NE-APC
	ED-CLNT	ENT-WLEN	RTRV-NE-WDMANS
	ED-DWDM	OPR-APC	RTRV-OCH
	ED-FFP-OCH	OPR-LASER-OTS	RTRV-OMS
	ED-LNK-<MOD2O>	OPR-PROTNSW-OCH	RTRV-OPM
	ED-LNKTERM	OPR-SLV-WDMANS	RTRV-OSC
	ED-OCH	OPR-WDMANS	RTRV-OTS
	ED-OMS	RLS-LASER-OTS	RTRV-PROTNSW-OCH
	ED-OSC	RLS-PROTNSW-OCH	RTRV-SLV-WDMANS
	ED-OTS	RTRV-APC	RTRV-TRC-OCH
	ED-SLV-WDMANS	RTRV-CLNT	RTRV-WDMANS
	ED-TRC-OCH	RTRV-DWDM	RTRV-WLEN
	ED-WDMANS	RTRV-ESCON	

---

```
ED-APC:[<TID>]::<CTAG>[::APCENABLE=<APCENABLE>];
```

---

```
ED-APC:PENNGROVE::CTAG:::APCENABLE=N;
```

---

**Table 11-9 ED-APC Input Parameters**

Parameter and Values	Description
<b>APCENABLE</b>	The enable/disable of the APC application. Default is N Parameter type is ON_OFF—disable or enable an attribute
• N	Disable an attribute
• Y	Enable an attribute

## 11.10 ED-BITS

Edit Building Integrated Timing Supply

### Usage Guidelines

Cisco ONS 15454, 15327, 15600, 15310

This command edits the BITS reference attributes.

SYNC-BITS1 and SYNC-BITS2 AIDs can be used to set the BITS-OUT port state. For a BITS facility, 64 k and 6 MHz are only applicable to ON. SSM selectable (ADMSSM) is not applicable to ONS 15600.

The default values for all optional parameters are NE default values. These values might not be the current value for a parameter. In order to obtain the current value, issue the RTRV-XX command.

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Synchronization

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Provisioning

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**Related Commands**

ED-NE-SYCN	REPT EVT BITS	RTRV-BITS
ED-SYCN	REPT EVT SYCN	RTRV-COND-BITS
OPR-SYCN	RLS-SYCN	RTRV-COND-SYCN
REPT ALM BITS	RTRV-ALM-BITS	RTRV-NE-SYCN
REPT ALM SYCN	RTRV-ALM-SYCN	RTRV-SYCN

---

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

---

```
ED-BITS:SONOMA:BITS-2:779:::LINECDE=AMI,FMT=ESF,LBO=0-133,SYCNMSG=N,
AISTHRSHLD=PRS,SABIT=BYTE-5,IMPEDANCE=120-OHM,BITSFAC=T1,ADMSSM=PRS:IS;
```

---

**Table 11-10 ED-BITS Input Parameters**

Parameter and Values	Description
<b>AID</b>	Access identifier from the <a href="#">“25.1.5 BITS”</a> section on page 25-13
<b>LINECDE</b>	Line code Parameter type is LINE_CODE—line code
<ul style="list-style-type: none"> <li>• AMI</li> <li>• B8ZS</li> </ul>	Line code value is AMI Line code value is B8ZS (bipolar with three-zero substitution)
<b>FMT</b>	Digital signal frame format Parameter type is FRAME_FORMAT—frame format for a T1 port
<ul style="list-style-type: none"> <li>• D4</li> <li>• ESF</li> <li>• UNFRAMED</li> </ul>	Frame format is D4 Frame format is ESF Frame format is unframed
<b>LBO</b>	Line build out settings. BITS line build out. Default value is 0 to 133. Integer Parameter type is BITS_LineBuildOut—BITS line buildout
<ul style="list-style-type: none"> <li>• 0–133</li> <li>• 134–266</li> </ul>	BITS line buildout range is 0–133 BITS line buildout range is 134–266



Table 11-10 ED-BITS Input Parameters (continued)

Parameter and Values	Description
• 267–399	BITS line buildout range is 267–399
• 400–533	BITS line buildout range is 400–533
• 534–655	BITS line buildout range is 534–655
<b>SYNCMSG</b>	Indicates if the BITS facility supports synchronization status message. Default is on (Y) Parameter type is EXT_RING—indicates if the ring supports the extended K1/K2/K3 protocol
• N	The ring does not support the extended K1/K2/K3 protocol
• Y	The ring does support the extended K1/K2/K3 protocol
<b>AISTHRSHLD</b>	Alarm indication signal threshold Parameter type is SYNC_CLOCK_REF_QUALITY_LEVEL—clock source quality level for SONET
• DUS	Do Not Use For Synchronization
• PRS	Primary Reference Source, Stratum 1 Traceable
• RES	Reserved For Network Synchronization Use
• SMC	SONET Minimum Clock Traceable
• ST2	Stratum 2 Traceable
• ST3	Stratum 3 Traceable
• ST3E	Stratum 3E Traceable
• ST4	Stratum 4 Traceable
• STU	Synchronized, Traceability Unknown
• TNC	Transit Node Clock (2nd Generation Only)
<b>SABIT</b>	When the frame format selection is E1, SABIT is the bit used to receive and transmit the SSM Parameter type is SABITS—SA BITS
• BYTE-4	SABIT is BYTE-4
• BYTE-5	SABIT is BYTE-5
• BYTE-6	SABIT is BYTE-6
• BYTE-7	SABIT is BYTE-7
• BYTE-8	SABIT is BYTE-8
<b>IMPEDANCE</b>	When the frame format selection is E1, IMPEDANCE is the terminal impedance of the BITS-IN port Parameter type is IMPEDANCE—the terminal impedance of the BITS-IN port
• 120-OHM	Impedance of 120 ohm
• 75-OHM	Impedance of 75 ohm

Table 11-10 ED-BITS Input Parameters (continued)

Parameter and Values	Description
<b>BITSFAC</b>	BITS facility settings. BITS-2 always inherits the value of BITS-1 Parameter type is BITS_FAC—BITS facility rate. 64 k and 6 MHz are only applicable to the ONS 15454
• 2 M	2 MHz rate
• 64 K	64 K rate
• 6 M	6 MHz rate
• E1	E1 rate
• T1	T1 rate
<b>ADMSSM</b>	SSM selectable. Only applicable to BITS-IN when SSM is disabled. <b>Note</b> Not applicable for ONS 15600 Parameter type is SYNC_CLOCK_REF_QUALITY_LEVEL—clock source quality level for SONET
• DUS	Do Not Use For Synchronization
• PRS	Primary Reference Source, Stratum 1 Traceable
• RES	Reserved For Network Synchronization Use
• SMC	SONET Minimum Clock Traceable
• ST2	Stratum 2 Traceable
• ST3	Stratum 3 Traceable
• ST3E	Stratum 3E Traceable
• ST4	Stratum 4 Traceable
• STU	Synchronized, Traceability Unknown
• TNC	Transit Node Clock (2nd Generation Only)
<b>PST</b>	Primary state Parameter type is PST—indicates the current overall service condition of an entity
• IS	In service
• OOS	Out of service

## 11.11 ED-BULKROLL-<OCN\_TYPE>

Edit Bulkroll (OC12, OC192, OC3, OC48)

### Usage Guidelines

Cisco ONS 15454, ONS 15327, ONS 15600

This command edits information about rolling of traffic from one end point to another without interrupting service. This command uses the FORCE option to force a valid signal. The only parameters that can be edited are RMODE and FORCE. The time slots cannot be edited. Use ED-ROLL-<MOD\_PATH> for single path level rolling.

See [Table 27-1 on page 27-1](#) for supported modifiers by platform.

---

Bridge and Roll

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Provisioning

**Related Commands**


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DLT-<MOD1PAYLOAD>	RLS-PROTNSW-<MOD2DWDMPAYLOAD>
DLT-BULKROLL-<OCN_TYPE>	RLS-PROTNSW-<OCN_TYPE>
DLT-FFP-<MOD2DWDMPAYLOAD>	RMV-<MOD2>
DLT-FFP-<OCN_TYPE>	RST-<MOD2>
ED-<GIGE_TYPE>	RTRV-<MOD1FCPAYLOAD>
ED-<MOD1FCPAYLOAD>	RTRV-<MOD1FICONPAYLOAD>
ED-<MOD1FICONPAYLOAD>	RTRV-<MOD2DWDMPAYLOAD>
ED-<MOD2DWDMPAYLOAD>	RTRV-<OCN_TYPE>
ED-<OCN_TYPE>	RTRV-10GIGE
ED-ALS	RTRV-ALMTH-<MOD2>
ED-DS1	RTRV-ALS
ED-DS3I	RTRV-BULKROLL-<OCN_TYPE>
ED-EC1	RTRV-DS1
ED-FFP-<MOD2DWDMPAYLOAD>	RTRV-DS3I
ED-FFP-<OCN_TYPE>	RTRV-EC1
ED-FSTE	RTRV-FAC
ED-G1000	RTRV-FFP-<MOD2DWDMPAYLOAD>
ED-GFP	RTRV-FFP-<OCN_TYPE>
ED-HDLC	RTRV-FSTE
ED-POS	RTRV-G1000
ED-T1	RTRV-GFP
ED-T3	RTRV-GIGE
ENT-<MOD1PAYLOAD>	RTRV-HDLC
ENT-FFP-<MOD2DWDMPAYLOAD>	RTRV-PM-<MOD2>
ENT-FFP-<OCN_TYPE>	RTRV-PMSCHED-<MOD2>
INIT-REG-<MOD2>	RTRV-POS
OPR-ALS	RTRV-PROTNSW-<MOD2DWDMPAYLOAD>
OPR-LPBK-<MOD2>	RTRV-PROTNSW-<OCN_TYPE>
OPR-PROTNSW-<MOD2DWDMPAYLOAD>	RTRV-T1
OPR-PROTNSW-<OCN_TYPE>	RTRV-T3
REPT PM <MOD2>	RTRV-TH-<MOD2>
REPT RMV <MOD2_IO>	SCHED-PMREPT-<MOD2>
REPT RST <MOD2_IO>	SET-ALMTH-<MOD2>
RLS-LPBK-<MOD2>	SET-TH-<MOD2>

---

ED-BULKROLL-<OCN\_TYPE>:[<TID>]:<FROM>:<CTAG>::  
 [RFROMSTART=<RFROMSTART>],[RFROMEND=<RFROMEND>],[CMDMDE=<CMDMDE>];

---

```
ED-BULKROLL-OC48:CISCO:FAC-1-1:1:::RFROMSTART=STS-1-1-1,
RFROMEND=STS-1-1-11,CMDMDE=FRCD;
```

---

**Table 11-11** ED-BULKROLL-<OCN\_TYPE> Input Parameters

Parameter and Values	Description
<b>FROM</b>	One of the end points. Access identifier from the “25.1.14 FACILITY” section on page 25-28 for line level rolling and bulk rolling
<b>RFROMSTART</b>	The starting time slot in the source roll port. For bulk rolling only. The AID is from the “25.1.10 CrossConnectId1” section on page 25-20 (except VCM and FACILITY). Defaults to STS-<FROMSLOT>-<FROMPORT>-1, where <FROMSLOT> and <FROMPORT> are the slot and port of the <FROM> AID.
<b>RFROMEND</b>	The ending time slot in the source roll port. For bulk rolling only. The AID is from the “25.1.10 CrossConnectId1” section on page 25-20 (except VCM and FACILITY). Defaults to STS-<FROMSLOT>-<FROMPORT>-N, where <FROMSLOT> and <FROMPORT> are the slot and port of the <FROM> AID and N is the value of OCn. (for example, OC48, n=48)
<b>CMDMDE</b>	Command execution mode. Defaults to NORM  Parameter type is CMDMDE—forces the system to execute a given command regardless of any standing conditions. Normal mode is the default behavior for all commands but you can specify FRCD to force the system to override a state where the command would normally be denied
<ul style="list-style-type: none"> <li>FRCD</li> </ul>	Force the system to override a state where the command would normally be denied
<ul style="list-style-type: none"> <li>NORM</li> </ul>	Execute the command normally. Do not override any conditions that might make the command fail

## 11.12 ED-CMD-SECU

Edit Command Security

---

### Usage Guidelines

Cisco ONS 15454, 15327, 15600, 15310

This command edits the command security level of a particular command.

---

Security

---

Superuser

**Related Commands**

ACT-USER	REPT ALM SECU	REPT EVT SECU
ALW-MSG-SECU	DLT-USER-SECU	REPT EVT SESSION
ALW-USER-SECU	ED-PID	RTRV-CMD-SECU
CANC	ED-USER-SECU	RTRV-DFLT-SECU
CANC-USER	ENT-USER-SECU	RTRV-USER-SECU
CANC-USER-SECU	INH-MSG-SECU	SET-ATTR-SECUDFLT
CLR-COND-SECU	INH-USER-SECU	

---

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

---

ED-CMD-SECU::INIT-REG:1::SUPER;

**Table 11-12** ED-CMD-SECU Input Parameters

Parameter and Values	Description
<b>AID</b>	Access identifier string. Identifies the entity in the NE to which the command pertains. It is the command verb along with verb modifier(s), as it currently exists. It can be a single command or a block of commands, where the block might include all commands. Only INIT-REG will be supported. String. Must not be null
<b>CAP</b>	Command access privilege. Must not be null Parameter type is PRIVILEGE—security level
• PROV	Provision security level. 60 minutes of idle time
• SUPER	Superuser security level. 15 minutes of idle time

## 11.13 ED-CRS-<PATH>

Edit Cross-Connect (STS1, STS12C, STS18C, STS192C, STS24C, STS36C, STS3C, STS48C, STS6C, STS9C, VT1, VT2)

**Usage Guidelines**

Cisco ONS 15454, 15327, 15600, 15310

See [Table 27-1 on page 27-1](#) for supported modifiers by platform.

This command edits a cross-connection.

**Note**

- ADD and REMOVE cannot be used together. The example provided is for informational purposes only. ADD and REMOVE are mutually exclusive.
- Add/Remove drops is possible only on ONEWAY, UPSR\_DROP, UPSR\_DC, and UPSR\_EN type of cross-connects (one-way only).

- Traditional cross-connections cannot be upgraded to DRI cross-connections using the ED\_CRS command.
- CKTID is a string of ASCII characters. The maximum length of CKTID is 48. If the CKTID is EMPTY or NULL this field will not appear.
- You cannot add a drop onto unidirectional connections on BLSR DRI primary or secondary nodes.

**Category**

Cross Connections

**Security**

Provisioning

**Input Format**

```
ED-CRS-<PATH>:[<TID>]:<SRC>,<DST>:<CTAG>::[<CCT>]:[ADD=<ADD>],
[REMOVE=<REMOVE>],[CKTID=<CKTID>],[CMDMDE=<CMDMDE>]:[<PST>[,<SST>]];
```

**Input Example**

```
ED-CRS-STS3C::STS-1-1-1,STS-2-1-1:1::ADD=STS-13-1-1,REMOVE=STS-2-1-1,CKTID=CKTID
CMDMDE=FRCD:IS,AINS;
```

**Input Parameters**

<SRC>	Source AID from the “ <a href="#">25.1.10 CrossConnectId1</a> ” section on page 25-20.
<DST>	Destination AID from the “ <a href="#">25.1.10 CrossConnectId1</a> ” section on page 25-20.
<CCT>	Cross-connection. The parameter type is CCT which indicates the type of cross-connection to be created.
<ul style="list-style-type: none"> <li>• 1WAY</li> </ul>	A unidirectional connection from a source tributary to a destination tributary
<ul style="list-style-type: none"> <li>• 1WAYDC</li> </ul>	Path Protection multicast drop (one-way continue)
<ul style="list-style-type: none"> <li>• 1WAYEN</li> </ul>	Path Protection multicast end node (one-way continue)
<ul style="list-style-type: none"> <li>• 1WAYMON</li> </ul>	A bidirectional connection between the two tributaries  <b>Note</b> In ONS 15454 Software Release 3.0 and later, 1WAYMON is not supported with TL1. However, it is still supported from Cisco Transport Controller (CTC). Using CTC, you can create 1WAYMON cross-connects that can be retrieved with TL1.
<ul style="list-style-type: none"> <li>• 1WAYPCA</li> </ul>	A unidirectional connection from a source tributary to a destination tributary on the protection path/fiber
<ul style="list-style-type: none"> <li>• 2WAY</li> </ul>	A bidirectional connection between the two tributaries
<ul style="list-style-type: none"> <li>• 2WAYDC</li> </ul>	A bidirectional drop and continue connection applicable only to path protection traditional and integrated DRIs
<ul style="list-style-type: none"> <li>• 2WAYPCA</li> </ul>	A bidirectional connection between the two tributaries on the extra protection path/fiber

• DIAG	Diagnostics cross-connect. Supports BERT (BLSR PCA diagnostics cross-connect).
<ADD>	AID from the <a href="#">“25.1.2 AidUnionId” section on page 25-9.</a>
<REMOVE>	AID from the <a href="#">“25.1.2 AidUnionId” section on page 25-9.</a>
<CKTID>	Cross-connect ID. The default is Blank or None. String of ASCII characters. Maximum length is 48. If CKTID is empty or null, the CKTID field will not be displayed.
<CMDMDE>	The parameter type is command mode (CMDMDE). Normal (NORM) mode is the default behavior for all commands but you can specify forced (FRCD) mode to force the system to override a state where the command would normally be denied. The FRCD mode of operation is applicable to delete a virtual concatenated (VCAT) member cross-connect in IS-NR or OOS-AU,AINS service states.
• FRCD	Force the system to override a state where the command would normally be denied.
• NORM	Execute the command normally. Do not override any conditions that might make the command fail.
<PST>	Primary state. The parameter type is PST, which indicates the current overall service condition of an entity.
• IS	In service
• OOS	Out of service
<SST>	Secondary state. The parameter type is SST, which provides additional information pertaining to PST and PSTQ.
• AINS	Automatic in service
• DSBLD	Disabled
• LPBK	Loopback
• MEA	Mismatch of equipment and attributes
• MT	Maintenance mode
• OOG	Out of group
• SWDL	Software downloading
• UAS	Unassigned
• UEQ	Unequipped

## 11.14 ED-DAT

Edit Date and Time

### Usage Guidelines

Cisco ONS 15454, 15327, 15600, 15310

This command edits the date and the time

System



---

 Provisioning

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**Related Commands**

ACT-USER	INH-MSG-ALL	RTRV-NE-IPMAP
ALW-MSG-ALL	INH-MSG-DBCHG	RTRV-NE-PATH
ALW-MSG-DBCHG	INH-MSG-SECU	RTRV-NE-SYNCN
ALW-MSG-SECU	INIT-SYS	RTRV-NE-WDMANS
ED-NE-GEN	RTRV-HDR	RTRV-TOD
ED-NE-PATH	RTRV-INV	SET-TOD
ED-NE-SYNCN	RTRV-NE-GEN	

---

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

---

 ED-DAT:CISCO::1234::99-12-21,14-35-15;

---

**Table 11-13 ED-DAT Input Parameters**

Parameter and Values	Description
DATE	Date. String
TIME	Time. String

## 11.15 ED-DS1

Edit DS1

---

**Usage Guidelines**

Cisco ONS 15454

This command edits the test access attribute for DS1 access on a DS3XM card.


**Note**

- This command is not allowed if the card is a protect card.
- Both the MODE and FMT fields of this command apply to the DS3XM-12 card only.
- For the DS3XM-12 card, the DS1 frame format NE default is AUTO\_PROV\_FMT for the first 30 seconds to determine the real format. After 30 seconds, the DS1 frame format will be detected as FRAMED. If the frame format is not detected, it will be in the UNFRAMED format.
- For preprovisioning the DS3XM-12 card, the DS1 frame format defaults to UNFRAMED.
- For the DS3XM-12 card, the DS1 configurable attributes (PM, TH, alarm, etc.) only apply on the ported ports (1-12) and the VT-mapped (odd) portless ports in xxx-xxx-DS1 commands. If you provision or retrieve DS1 attributes on the DS3-mapped (even) portless port in xxx-xxx-DS1 commands, an error message will be returned.

- The test set physical connection set up through ED-T3/DS1/STS1/VT1 of the DS3XM-12 card is only allowed on the physical front ports (PORTED ports, ports 1-12), which are the monitoring ports.
  - The monitoring test access ports follow the common rules for the other cards. For example, ED-T3 on port 2 (FAC-6-2) with a TACC number (8), the next port, port 3 (FAC-6-3) is used as the monitoring point also. The RTRV-T3 on both port-2 and port-3 return the same TACC number (8) being used to monitor the cross-connection end (A-B). The last port (port 12) is not allowed to set up a physical connection with the test set because there is no next available port to be the monitoring port.
  - The TACC disconnection (DISC-TACC) and the test access mode change command (CHG-TACC) follow the same requirement as in the step above, but it is applied on the ported ports of the DS3XM-12 card.
  - The test access connection set-up command (CONN-TACC) has monitored points, which can be portless ports. This command is applied on both ported and portless ports of the DS3XM-12 card.
- If the entity has a TACC connection, the entity is not allowed to have ported or portless STS/VT cross-connection (or circuit) provisioning on the DS3XM-12 card.

---

 Ports

---

 Provisioning

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**Related Commands**

DLT-FFP-<OCN_TYPE>	ENT-FFP-<OCN_TYPE>	RTRV-G1000
ED-<OCN_TYPE>	OPR-PROTNSW-<OCN_TYPE>	RTRV-GFP
ED-EC1	RLS-PROTNSW-<OCN_TYPE>	RTRV-GIGE
ED-FFP-<OCN_TYPE>	RTRV-<OCN_TYPE>	RTRV-HDLC
ED-G1000	RTRV-DS1	RTRV-POS
ED-GFP	RTRV-EC1	RTRV-PROTNSW-<OCN_TYPE>
ED-HDLC	RTRV-FAC	RTRV-T1
ED-T1	RTRV-FFP-<OCN_TYPE>	RTRV-T3
ED-T3	RTRV-FSTE	RTRV-TRC-<OCN_TYPE>
ED-TRC-<OCN_TYPE>		

---

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

---

```
ED-DS1:PETALUMA:DS1-2-1-6-12:123:::TACC=8,TAPTYPE=DUAL,MODE=FDL,FMT=ESF;
```

Table 11-14 ED-DS1 Input Parameters

Parameter and Values	Description
<b>AID</b>	Access identifier from the “25.1.11 DS1” section on page 25-26
<b>TACC</b>	TAP number within a range of 0 to 999. Indicates whether the digroup being provisioned is to be used as a test access digroup. When TACC is 0 (zero), the TAP is deleted. Integer
<b>TAPTYPE</b>	TAP type Parameter type is TAPTYPE—test access point type
<ul style="list-style-type: none"> <li>• DUAL</li> <li>• SINGLE</li> </ul>	Dual FAD Single FAD
<b>MODE</b>	Mode with which the command is to be implemented. DS1 path mode of the DS3XM-12 card. Defaults to FDL Parameter type is DS1MODE—the DS1 path mode of the DS3XM-12 card
<ul style="list-style-type: none"> <li>• ATT</li> <li>• FDL</li> </ul>	The DS1 path of the DS3XM-12 card is in AT&T 54016 mode The DS1 path of the DS3XM-12 card is in FDL T1-403 mode
<b>FMT</b>	Digital signal format. The DS1 path frame format of the DS3XM-12 card. Defaults to UNFRAMED Parameter type is FRAME_FORMAT—frame format for a T1 port
<ul style="list-style-type: none"> <li>• D4</li> <li>• ESF</li> <li>• UNFRAMED</li> </ul>	Frame format is D4 Frame format is ESF Frame format is unframed

## 11.16 ED-EC1

Edit Electrical Carrier

### Usage Guidelines

Cisco ONS 15454, ONS 15310-CL

This command edits the attributes of an EC1.



#### Note

This command is not allowed if the card is a protecting card.

Ports

Provisioning

Related Commands	DLT-FFP-<OCN_TYPE>	ENT-FFP-<OCN_TYPE>	RTRV-G1000
	ED-<OCN_TYPE>	OPR-PROTNSW-<OCN_TYPE>	RTRV-GFP
	ED-DS1	RLS-PROTNSW-<OCN_TYPE>	RTRV-GIGE
	ED-FFP-<OCN_TYPE>	RTRV-<OCN_TYPE>	RTRV-HDLC
	ED-G1000	RTRV-DS1	RTRV-POS
	ED-GFP	RTRV-EC1	RTRV-PROTNSW-<OCN_TYPE>
	ED-HDLC	RTRV-FAC	RTRV-T1
	ED-T1	RTRV-FFP-<OCN_TYPE>	RTRV-T3
	ED-T3	RTRV-FSTE	RTRV-TRC-<OCN_TYPE>
	ED-TRC-<OCN_TYPE>		

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

```
ED-EC1:CISCO:FAC-1-1:123::PJMOM=0,LBO=0-225,SOAK=10,SFBER=1E-4,SDBER=1E-6,
NAME="EC1 PORT",EXPTRC="AAA",TRC="AAA",TRCMODE=MAN,TRCFORMAT="16-BYTE,
AISONLPBK=AIS_ON_LPBK_ALL,CMDMDE=CMDMDE:IS,AINS;
```

**Table 11-15** ED-EC1 Input Parameters

Parameter and Values	Description
<b>AID</b>	Access identifier from the <a href="#">“25.1.14 FACILITY”</a> section on page 25-28
<b>PJMOM</b>	A SONET pointer number (0 or 1) of an EC1 port. Integer. Defaults to 0
<b>LBO</b>	Line build out settings. Integer. Defaults to 0–225 Parameter type is E_LBO—electrical signal line buildout
• 0–225	Electrical signal line buildout range is 0–225
• 226–450	Electrical signal line buildout range is 226–450
<b>SOAK</b>	IS-AINS to IS transition soak time as measured in 15-minute intervals. A value of 4 equals a soak time of 1 hour. The allowable range is 0 to 192 intervals (maximum of 48 hours). Integer. Defaults to 32
<b>SFBER</b>	Signal failure threshold. Defaults to 1E-4 Parameter type is SF_BER—the threshold for declaring signal failure on a facility or path
• 1E-3	SFBER is 1E-3
• 1E-4	SFBER is 1E-4
• 1E-5	SFBER is 1E-5

Table 11-15 ED-EC1 Input Parameters (continued)

Parameter and Values	Description
<b>SDBER</b>	Signal degrade threshold. Defaults to 1E-7 Parameter type is SD_BER—the threshold for declaring signal degrade on a facility or path
• 1E-5	SDBER is 1E-5
• 1E-6	SDBER is 1E-6
• 1E-7	SDBER is 1E-7
• 1E-8	SDBER is 1E-8
• 1E-9	SDBER is 1E-9
<b>NAME</b>	String. Default value is NULL. Maximum length is 32 characters
<b>EXPTRC</b>	String
<b>TRC</b>	String
<b>TRCMODE</b>	Trace mode Parameter type is TRCMODE—trace mode
• AUTO	Use the previously received path trace string as the expected string. Not applicable to MXP/TXP cards
• AUTO-NO-AIS	Use the previously received path trace string as the expected string and do not turn on AIS and RDI if TIMP is detected
• MAN	Use the provisioned expected string as the expected string
• MAN-NO-AIS	Use the provisioned expected string as the expected string and do not turn on AIS and RDI if TIMP is detected
• OFF	Turn off path trace capability. Nothing will be reported
<b>TRCFORMAT</b>	Trace message size Parameter type is TRCFORMAT—trace format
• 1-BYTE	1 byte trace message
• 16-BYTE	16 byte trace message
• 64-BYTE	64 byte trace message
• Y	Enable an attribute
<b>AISONLPBK</b>	Defaults to AIS_ONLPBK_FACILITY Parameter type is AIS_ON_LPBK—Indicates if AIS is sent on a loopback
• AIS_ONLPBK_FACILITY	AIS is sent on facility loopbacks
• AIS_ON_LPBK_ALL	AIS is sent on all loopbacks
• AIS_ON_LPBK_OFF	AIS is not sent on loopbacks
• AIS_ON_LPBK_TERMINAL	AIS is sent on terminal loopbacks

Table 11-15 ED-EC1 Input Parameters (continued)

Parameter and Values	Description
<b>CMDMDE</b>	Command Mode. Defaults to NORM Parameter type is CMDMDE—forces the system to execute a given command regardless of any standing conditions. Normal mode is the default behavior for all commands but you can specify FRCD to force the system to override a state where the command would normally be denied
• FRCD	Force the system to override a state where the command would normally be denied
• NORM	Execute the command normally. Do not override any conditions that might make the command fail
<b>PST</b>	Primary state. Defaults to IS Parameter type is PST—indicates the current overall service condition of an entity
• IS	In service
• OOS	Out of service
<b>SST</b>	Secondary state. Defaults to AINS Parameter type is SST—provides additional information pertaining to PST and PSTQ
• AINS	Automatic in service
• DSBLD	Disabled
• LPBK	Loopback
• MEA	Mismatch of equipment and attributes
• MT	Maintenance mode
• OOG	Out of group
• SWDL	Software downloading
• UAS	Unassigned
• UEQ	Unequipped

## 11.17 ED-EQPT

Edit Equipment

### Usage Guidelines

Cisco ONS 15454, 15327, 15600, 15310

This command edits the attributes for a given equipment slot in the NE. If the card is in an equipment slot, this command is allowed only on the working AID.



### Note

The ONS 15600 only supports these parameters: TID, AID, CTAG, PST and SST.

The PROTID parameter indicates the unique identifier of the protection group (the protect card). “NULL” is a special value of the PROTID parameter and indicates absence of a protection group. For the 1:1 protection type, RVRTV and RVTM parameters can be changed. For the 1:N protection type, if the PROTID parameter is entered as “NULL”, the protection group is deleted.

```
ED-EQPT:[<TID>]:SLOT-2:<CTAG>:::PROTID=NULL;
```

For the 1:N protection type, if the PROTID is “NULL”, the AIDs in the list are removed from the protection group. If all the working cards are in the AID list, the protection group is deleted.

Example: if Slot-1, Slot-2 and Slot-4 were the only working cards in the protection group. The following command will remove Slot-4 from the protection group:

```
ED-EQPT:[<TID>]:SLOT-4:<CTAG>:::PROTID=NULL;
```

The protection group still has Slot-1 and Slot-2 as working cards.

The following command will remove all the other working cards in the above example and consequently, delete the protection group itself:

```
ED-EQPT:[<TID>]:SLOT-2&SLOT-1:<CTAG>:::PROTID=NULL;
```

The ED-EQPT command can be successfully executed on an already provisioned card to add or remove a working card from a protection group. This command is not valid on a protect card. Only cards can be added to or removed from a protection group. Protection type is immutable and is determined at the time of creation of a protection group (while adding the first working card). Once provisioned, the equipment type cannot be edited either.

Examples of adding an existing card to a protection group using the ED-EQPT command:

1:1 protection group

```
ED-EQPT::SLOT-2:12:::PROTID=SLOT-1,RVRTV=Y,RVTM=9.0;
```

1:N protection group

```
ED-EQPT::SLOT-2:12:::PROTID=SLOT-3,PRTYPE=1-N,RVTM=6.5;
```

Error conditions for editing a 1:1 or 1:N protection group might be:

1. Editing the PRTYPE or PROTID (non-NULL value) parameters.
2. Editing RVRTV or RVTM when no protection group exists.
3. Editing RVRTV for 1:N protection.
4. Failed to remove, currently switched to protect.
5. The CARDMODE provisioning is allowed on the DS3XM-12 and ML-Series cards
  - a. The DS3XM’s provisioning is based on the XCON type and DS3XM-12’s location. For example:  
The DS3XM-12 card in the lower speed I/O slot with the XCVT/XC10G card only allows the DS3XM-12-STS12 CARDMODE. Other cases allow the CARDMODE to be DS3XM-12-STS-48
  - b. There is no card reboot if the CARDMODE is changed on the DS3XM-12 card.
  - c. The DS3XM-12 card can be upgraded or downgraded by changing the CARDMODE with the ED-EQPT command.
6. If the command mode (CMDMDE) is set to forced (FRCD) during the creation of a 1:1 or 1:N protection group, all cards must be physically plugged in and in the service state (IS). If the cards are not physically plugged in, then the command is denied with an appropriate error message. When the command mode is set to normal (NORM) (which is the default) the cards do not have to be physically plugged in and in the service state.

- If the command mode is set to forced (FRCD) during the removal of a card in a 1:1 or 1:N protection group, there must be no cross-connects (for example, services) present on the card. If there are cross-connects present on the card, the command is denied with an appropriate error message. If the command mode is set to normal (NORM) (which is the default), it does not require that cross-connects be deleted on the card.

**Note**

For the FC\_MR-4 card, the card mode cannot be changed to FCMR-LINERATE when the payload on any port is 1GFICON or 2GFICON. These payloads are allowed only in distance extension card mode.

---

Equipment

---

Provisioning

**Related Commands**

ALW-SWDX-EQPT	INH-SWTOPROTN-EQPT	RTRV-COND-EQPT
ALW-SWTOPROTN-EQPT	INH-SWTOWKG-EQPT	RTRV-EQPT
ALW-SWTOWKG-EQPT	REPT ALM EQPT	SET-ALMTH-EQPT
DLT-EQPT	REPT EVT EQPT	SW-DX-EQPT
ENT-EQPT	RTRV-ALM-EQPT	SW-TOPROTN-EQPT
INH-SWDX-EQPT	RTRV-ALMTH-EQPT	SW-TOWKG-EQPT

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

ED-EQPT:CISCO:SLOT-2:123:::PROTID=SLOT-1,PRTYPE=1-1,RVRTV=Y,RVTM=9.0,CMDMDE=FRCD,CARDMODE=DS3XM12-ST548,PEERID=SLOT-2,REGENNAME="THIS GROUP",PWL=1530.33,RETIME=Y:OOS,MT;

**Table 11-16 ED-EQPT Input Parameters**

Parameter and Values	Description
<b>AID</b>	Access identifier from the <a href="#">“25.1.13 EQPT”</a> section on page 25-27
<b>PROTID</b>	Protecting card slot number of the protection group from the <a href="#">“25.1.20 PRSLOT”</a> section on page 25-33
<b>PRTYPE</b>	Protection group type Parameter type is PROTECTION_GROUP—protection group type
• 1-1	1 for 1 protection group
• 1-N	1 for N protection group



Table 11-16 ED-EQPT Input Parameters (continued)

Parameter and Values	Description
<b>RVRTV</b>	Revertive mode. The value Y indicates that the protection switching system reverts service to the original line after restoration. The value N indicates that the protection switching system does not revert service to the original line after restoration. RVRTV is applicable only for 1+1 protection switching. Null defaults to N Parameter type is ON_OFF—disable or enable an attribute
• N	Disable an attribute
• Y	Enable an attribute
<b>RVTM</b>	Revertive time Parameter type is REVERTIVE_TIME—revertive time
• 0.5 to 12.0	Revertive time is 0.5 to 12.0 minutes
<b>CMDMDE</b>	Command mode. Only applicable when creating or deleting a protection group (1:1 or 1:N) and/or adding cards to an existing protection group (1:N). Default is NORM. If creating or adding cards to a protection group, specifying FRCD requires the card to be physically plugged in and in the service state (IS). If removing cards from a protection group (1:N) or deleting the protection group (1:1, 1:N), specifying FRCD requires that there are no cross-connects (services) on the card Parameter type is CMDMDE—forces the system to execute a given command regardless of any standing conditions. Normal mode is the default behavior for all commands but you can specify FRCD to force the system to override a state where the command would normally be denied
• FRCD	Force the system to override a state where the command would normally be denied
• NORM	Execute the command normally. Do not override any conditions that might make the command fail
<b>CARDMODE</b>	Card mode <b>Note</b> The card will reboot after the mode changes so the mode change request will not go through if all the ports on the card are not in OOS mode. TL1 will not set a default CARD_MODE value at the management interface level if no PWL value is given Parameter type is CARDMODE—card mode. Card mode is applicable to cards that have multiple capabilities, for example, the ML card can operate in two distinct modes: Linear Mapper Mode and L2/L3 Mode
• DS3XM12-ST512	The DS3XM-12 card in the STS12 back plane rate mode
• DS3XM12-ST548	The DS3XM-12 card in the STS48 back plane rate mode
• DWDM-LINE	Line terminating mode
• DWDM-SEC	Section terminating mode

**Table 11-16 ED-EQPT Input Parameters (continued)**

Parameter and Values	Description
• DWDM-TRANS-AIS	Transparent mode AIS
• DWDM-TRANS-SQUELCH	Transparent mode SQUELCH
• FCMR-DISTEXTN	FC_MR-4 card with distance extension support
• FCMR-LINERATE	FC_MR-4 card without distance extension support
• ML-GFP	ML-Series card in DOS FPGA using GFP framing type
• ML-HDLC	ML-Series card in DOS FPGA using HDLC framing type
• MXPMR25G-FCGE	Fibre channel or GIGE mode for the MXP-MR-2.5G card
<b>PEERID</b>	The regeneration peer slot from the <a href="#">“25.1.13 EQPT”</a> section on <a href="#">page 25-27</a>
<b>REGENNAME</b>	The name of a regeneration group. String
<b>PWL</b>	Provisioned wavelength. TL1 will not set a default PWL value at the management level if no PWL value is given Parameter type is OPTICAL_WLEN—optical wavelength
• 1530.33	Wavelength 1
• 1531.12	Wavelength 2
• 1531.90	Wavelength 3
• 1532.68	Wavelength 4
• 1534.25	Wavelength 5
• 1535.04	Wavelength 6
• 1535.82	Wavelength 7
• 1536.61	Wavelength 8
• 1538.19	Wavelength 9
• 1538.98	Wavelength 10
• 1539.77	Wavelength 11
• 1540.56	Wavelength 12
• 1542.14	Wavelength 13
• 1542.94	Wavelength 14
• 1543.73	Wavelength 15
• 1544.53	Wavelength 16
• 1546.12	Wavelength 17
• 1546.92	Wavelength 18
• 1547.72	Wavelength 19
• 1548.51	Wavelength 20
• 1550.12	Wavelength 21
• 1550.92	Wavelength 22
• 1551.72	Wavelength 23
• 1552.52	Wavelength 24

**Table 11-16 ED-EQPT Input Parameters (continued)**

Parameter and Values	Description
• 1554.13	Wavelength 25
• 1554.94	Wavelength 26
• 1555.75	Wavelength 27
• 1556.55	Wavelength 28
• 1558.17	Wavelength 29
• 1558.98	Wavelength 30
• 1559.79	Wavelength 31
• 1560.61	Wavelength 32
• USE-TWL1	Use Tunable Wavelength 1
<b>RETIME</b>	Indicates if retiming is needed. Applicable only to the DS1-E1-56 card (ONS 15454)  Parameter type is YES_NO—whether the user's password is about to expire, the user is logged into the NE, or the user is locked out of the NE
• NO	No
• YES	Yes
<b>PST</b>	Primary state  Parameter type is PST—indicates the current overall service condition of an entity
• IS	In service
• OOS	Out of service
<b>SST</b>	Secondary state  Parameter type is SST—provides additional information pertaining to PST and PSTQ
• AINS	Automatic in service
• DSBLD	Disabled
• LPBK	Loopback
• MEA	Mismatch of equipment and attributes
• MT	Maintenance mode
• OOG	Out of group
• SWDL	Software downloading
• UAS	Unassigned
• UEQ	Unequipped

## 11.18 ED-FAC

Edit Facility

**Usage Guidelines**

Cisco ONS 15454, 15327, 15600, 15310

This command provisions the payload (or signal) type of facility. The default values for all optional parameters are NE default values. These values might not be the current value for a parameter. In order to obtain the current value, issue the RTRV-XX command to retrieve them.

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Ports

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Provisioning

**Related Commands**

DLT-<MOD1PAYLOAD>	RLS-PROTNSW-<OCN_TYPE>
DLT-BULKROLL-<OCN_TYPE>	RMV-<MOD2>
DLT-FFP-<MOD2DWDMPAYLOAD>	RST-<MOD2>
DLT-FFP-<OCN_TYPE>	RTRV-<MOD1FCPAYLOAD>
ED-<GIGE_TYPE>	RTRV-<MOD1FICONPAYLOAD>
ED-<MOD1FCPAYLOAD>	RTRV-<MOD2DWDMPAYLOAD>
ED-<MOD1FICONPAYLOAD>	RTRV-<OCN_TYPE>
ED-<MOD2DWDMPAYLOAD>	RTRV-10GIGE
ED-<OCN_TYPE>	RTRV-ALMTH-<MOD2>
ED-ALS	RTRV-ALS
ED-BULKROLL-<OCN_TYPE>	RTRV-BFDLPM-<MOD2>
ED-DS1	RTRV-BULKROLL-<OCN_TYPE>
ED-EC1	RTRV-DS1
ED-FFP-<MOD2DWDMPAYLOAD>	RTRV-EC1
ED-FFP-<OCN_TYPE>	RTRV-FAC
ED-FSTE	RTRV-FFP-<MOD2DWDMPAYLOAD>
ED-G1000	RTRV-FFP-<OCN_TYPE>
ED-GFP	RTRV-FSTE
ED-HDLC	RTRV-G1000
ED-POS	RTRV-GFP
ED-T1	RTRV-GIGE
ED-T3	RTRV-HDLC
ENT-<MOD1PAYLOAD>	RTRV-PM-<MOD2>
ENT-BULKROLL-<OCN_TYPE>	RTRV-PMSCHED-<MOD2>
ENT-FFP-<MOD2DWDMPAYLOAD>	RTRV-POS
ENT-FFP-<OCN_TYPE>	RTRV-PROTNSW-<MOD2DWDMPAYLOAD>
INIT-REG-<MOD2>	RTRV-PROTNSW-<OCN_TYPE>
OPR-ALS	RTRV-T1
OPR-LPBK-<MOD2>	RTRV-T3
OPR-PROTNSW-<MOD2DWDMPAYLOAD>	RTRV-TH-<MOD2>
OPR-PROTNSW-<OCN_TYPE>	SCHED-PMREPT-<MOD2>
REPT PM <MOD2>	SET-ALMTH-<MOD2>
RLS-LPBK-<MOD2>	SET-TH-<MOD2>
RLS-PROTNSW-<MOD2DWDMPAYLOAD>	

---

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

---

```
ED-FAC:CISCO:FAC-3-9:2222:::PAYLOAD=E4-FRAMED,CMDMDE=CMDMDE:IS,AINS;
```

---

**Table 11-17 ED-FAC Input Parameters**

Parameter and Values	Description
<b>SRC</b>	Source access identifier from the “25.1.14 FACILITY” section on <a href="#">page 25-28</a>
<b>PAYLOAD</b>	The payload for the card Parameter type is PAYLOAD—identifies payload type
• 10GFC	10 Gigabit Ethernet Fibre Channel mode
• 10GIGE	10 Gigabit Ethernet
• 1GFC	1 Gigabit Fibre Channel mode
• 1GFICON	1 Gigabit FICON mode
• 2GFC	2 Gigabit Fibre Channel mode
• 2GFICON	2 Gigabit FICON mode
• DS3	DS3 mode
• DV6000	Video mode
• EC1	EC1 mode
• ESCON	ESCON mode
• ETRCLO	ETR/CLO payload mode
• GIGE	Gigabit Ethernet Payload
• HDTV	HDTV mode
• ISC1	ISC1 Mode
• ISC3	ISC3 Mode
• OC12	SONET OC-12 mode
• OC3	SONET OC-3 mode
• OC48	SONET OC-48 mode
• PASS-THROUGH	Pass through mode
• SDI-D1-VIDEO	SDI-D1-Video mode
• SONET	SONET Payload Mode
<b>CMDMDE</b>	Command Mode. Defaults to NORM Parameter type is CMDMDE—forces the system to execute a given command regardless of any standing conditions. Normal mode is the default behavior for all commands but you can specify FRCD to force the system to override a state where the command would normally be denied
• FRCD	Force the system to override a state where the command would normally be denied
• NORM	Execute the command normally. Do not override any conditions that might make the command fail

Table 11-17 ED-FAC Input Parameters (continued)

Parameter and Values	Description
PST	Primary state. Defaults to IS Parameter type is PST—indicates the current overall service condition of an entity
• IS	In service
• OOS	Out of service
SST	Secondary state. Defaults to AINS Parameter type is SST—provides additional information pertaining to PST and PSTQ
• AINS	Automatic in service
• DSBLD	Disabled
• LPBK	Loopback
• MEA	Mismatch of equipment and attributes
• MT	Maintenance mode
• OOG	Out of group
• SWDL	Software downloading
• UAS	Unassigned
• UEQ	Unequipped

## 11.19 ED-FFP-<MOD2DWDMPAYLOAD>

Edit Facility Protection Group (10GFC, 10GIGE, 1GFC, 1GFICON, 2GFC, 2GFICON, D1VIDEO, DV6000, ETRCLO, GIGE, HDTV, ISC1)

### Usage Guidelines

Cisco ONS 15454

This command edits a Y-cable protection group on client facilities.

DWDM

Provisioning

**Related Commands**

ALW-SWDX-EQPT	INH-SWTOWKG-EQPT
ALW-SWTOPROTN-EQPT	OPR-PROTNSW-<OCN_TYPE>
ALW-SWTOWKG-EQPT	REPT SW
DLT-FFP-<MOD2DWDMPAYLOAD>	RLS-PROTNSW-<OCN_TYPE>
DLT-FFP-<OCN_TYPE>	RTRV-FFP-<MOD2DWDMPAYLOAD>
ED-FFP-<OCN_TYPE>	RTRV-FFP-<OCN_TYPE>
ED-FFP-OCH	RTRV-FFP-OCH
ENT-FFP-<MOD2DWDMPAYLOAD>	RTRV-PROTNSW-<OCN_TYPE>
ENT-FFP-<OCN_TYPE>	SW-DX-EQPT
EX-SW-<OCN_BLSR>	SW-TOPROTN-EQPT
INH-SWDX-EQPT	SW-TOWKG-EQPT
INH-SWTOPROTN-EQPT	

---

ED-FFP-<MOD2DWDMPAYLOAD>:[<TID>]:<AID>:<CTAG>:::[PROTID=<PROTID>],  
[RVRTV=<RVRTV>],[RVTM=<RVTM>],[PSDIRN=<PSDIRN>][:];

---



---

ED-FFP-CLNT:CISCO:FAC-1-1:100:::PROTID=DC-METRO,RVRTV=N,RVTM=1.0,PSDIRN=BI;

---

**Table 11-18** ED-FFP-<MOD2DWDMPAYLOAD> Input Parameters

Parameter and Values	Description
<b>AID</b>	Access identifier from the <a href="#">“25.1.14 FACILITY”</a> section on page 25-28
<b>PROTAID</b>	The protection group identifier (protection group name). Defaults to the protecting port AID of the protection group. PROTAID can have a maximum length of 32 characters. String
<b>RVRTV</b>	Revertive mode. The value Y indicates that the protection switching system reverts service to the original line after restoration. The value N indicates that the protection switching system does not revert service to the original line after restoration. RVRTV is applicable only for 1+1 protection switching. Null defaults to N. Only applies to path protection Parameter type is ON_OFF—disable or enable an attribute
• N	Disable an attribute
• Y	Enable an attribute
<b>RVTM</b>	Revertive time. RVTM is not allowed to be set while “RVRTV” is N. Only applies to path protection Parameter type is REVERTIVE_TIME—revertive time
• 0.5 to 12.0	Revertive time is 0.5 to 12.0 minutes



Table 11-18 ED-FFP-&lt;MOD2DWDMPAYLOAD&gt; Input Parameters (continued)

Parameter and Values	Description
PSDIRN	Protection switch operation. Identifies the switching mode. Defaults to UNI. <b>Note</b> The MXP_2.5G_10G and TXP_MR_10G cards do not support BI-DIRECTIONAL switching Parameter type is UNI_BI—unidirectional switch operations
• BI	Bidirectional protection switching
• UNI	Unidirectional protection switching

## 11.20 ED-FFP-<OCN\_TYPE>

Edit Facility Protection Group (OC3, OC12, OC48, OC192)

### Usage Guidelines

Cisco ONS 15454, 15327, 15600, 15310

See [Table 27-1 on page 27-1](#) for supported modifiers by platform.

This command edits the optical facility protection.



#### Note

- This command can be used on both protecting and working AIDs. Optimized 1+1 and related attributes are only applicable to the ONS 15454.
- Optimized 1+1 and related attributes are only applicable to ONS 15454.
- The default values for all optional parameters are NE default values. These values might not be the current value for a parameter. In order to obtain the current value, issue the RTRV-XX command to retrieve them.

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Protection

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Provisioning

**Related Commands**

ALW-SWDX-EQPT	RTRV-FFP-<OCN_TYPE>
ALW-SWTOPROTN-EQPT	RTRV-FFP-OCH
ALW-SWTOWKG-EQPT	RTRV-FSTE
DLT-FFP-<MOD2DWDMPAYLOAD>	RTRV-G1000
DLT-FFP-<OCN_TYPE>	RTRV-GFP
ED-<OCN_TYPE>	RTRV-GIGE
ED-DS1	RTRV-HDLC
ED-EC1	RTRV-POS
ED-FFP-<MOD2DWDMPAYLOAD>	RTRV-PROTNSW-<OCN_TYPE>
ED-FFP-OCH	RTRV-T1
ED-G1000	RTRV-T3
ED-GFP	RTRV-TRC-<OCN_TYPE>
ED-HDLC	SW-DX-EQPT
ED-T1	SW-TOPROTN-EQPT
ED-T3	SW-TOWKG-EQPT
ED-TRC-<OCN_TYPE>	OPR-PROTNSW-<OCN_TYPE>
ENT-FFP-<MOD2DWDMPAYLOAD>	REPT SW
ENT-FFP-<OCN_TYPE>	RLS-PROTNSW-<OCN_TYPE>
EX-SW-<OCN_BLSR>	RTRV-<OCN_TYPE>
INH-SWDX-EQPT	RTRV-DS1
INH-SWTOPROTN-EQPT	RTRV-EC1
INH-SWTOWKG-EQPT	RTRV-FAC
RTRV-FFP-<MOD2DWDMPAYLOAD>	
ED-FFP-<OCN_TYPE>:[<TID>]:<AID>:<CTAG>:::[PROTID=<PROTID>], [RVRTV=<RVRTV>],[RVTM=<RVTM>],[PSDIRN=<PSDIRN>],[VRGRDTM=<VRGRDTM>], [DTGRDTM=<DTGRDTM>],[RCGRDTM=<RCGRDTM>][:];	
ED-FFP-OC3:PETALUMA:FAC-1-1:1:::PROTID=PROT_NAME,RVRTV=Y,RVTM=1.0, PSDIRN=BI,VRGRDTM=0.5,DTGRDTM=1.0,RCGRDTM=1.0;	

**Table 11-19** ED-FFP-<OCN\_TYPE> Input Parameters

Parameter and Values	Description
AID	Access identifier from the <a href="#">“25.1.14 FACILITY”</a> section on page 25-28
PROTAID	The protection group identifier (protection group name). PROTAID can have a maximum length of 32 characters. String

Table 11-19 ED-FFP-&lt;OCN\_TYPE&gt; Input Parameters (continued)

Parameter and Values	Description
<b>RVRTV</b>	Revertive mode. The value Y indicates that the protection switching system reverts service to the original line after restoration. The value N indicates that the protection switching system does not revert service to the original line after restoration. RVRTV is applicable only for 1+1 protection switching. Null defaults to N Parameter type is ON_OFF—disable or enable an attribute
• N	Disable an attribute
• Y	Enable an attribute
<b>RVTM</b>	Revertive time Parameter type is REVERTIVE_TIME—revertive time
• 0.5 to 12.0	Revertive time is 0.5 to 12.0 minutes
<b>PSDIRN</b>	Protection switch operation. Indicates the switch mode. Defaults to UNI Parameter type is UNI_BI—unidirectional and bidirectional switch operations
• BI	Bidirectional protection switching
• UNI	Unidirectional protection switching
<b>VRGRDTM</b>	Verification guard timer. Only applicable to optimized 1+1 Parameter type is VERIFICATION_GUARD_TIMER—optimized 1+1 verification guard timer
• 0.5	500 ms
• 1.0	1 second
<b>DTGRDTM</b>	Detection guard timer. Only applicable to optimized 1+1 Parameter type is DETECTION_GUARD_TIMER—optimized 1+1 detection guard timer
• 0.0	0 seconds
• 0.05	50 ms
• 0.1	100 ms
• 0.5	500 ms
• 1.0 to 5.0	1 second to 5 seconds
<b>RCGRDTM</b>	Recovery guard timer. Only applicable to optimized 1+1 Parameter type is RECOVERY_GUARD_TIMER—optimized 1+1 recovery guard timer
• 0.0	0 seconds
• 0.05	50 ms
• 0.1	100 ms
• 0.5	500 ms
• 1.0 to 10.0	1 second to 10 seconds

## 11.21 ED-FFP-OCH

Edit Facility Protection Group Optical Channel

### Usage Guidelines

Cisco ONS 15454

This command changes the provisioning for the default protection group on the DWDM port of a TXP\_MR\_2.5G and TXPP\_MR\_2.5G card.

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DWDM

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Provisioning

### Related Commands

ALW-SWDX-EQPT	OPR-LASER-OTS
ALW-SWTOPROTN-EQPT	OPR-PROTNSW-<OCN_TYPE>
ALW-SWTOWKG-EQPT	OPR-PROTNSW-OCH
DLT-FFP-<MOD2DWDMPAYLOAD>	REPT SW
DLT-FFP-<OCN_TYPE>	RLS-LASER-OTS
DLT-LNK-<MOD2O>	RLS-PROTNSW-<OCN_TYPE>
ED-DWDM	RLS-PROTNSW-OCH
ED-FFP-<MOD2DWDMPAYLOAD>	RTRV-DWDM
ED-FFP-<OCN_TYPE>	RTRV-FFP-<MOD2DWDMPAYLOAD>
ED-LNK-<MOD2O>	RTRV-FFP-<OCN_TYPE>
ED-OCH	RTRV-FFP-OCH
ED-OMS	RTRV-LNK-<MOD2O>
ED-OTS	RTRV-OCH
ED-TRC-OCH	RTRV-OMS
ENT-FFP-<MOD2DWDMPAYLOAD>	RTRV-OTS
ENT-FFP-<OCN_TYPE>	RTRV-PROTNSW-<OCN_TYPE>
ENT-LNK-<MOD2O>	RTRV-PROTNSW-OCH
EX-SW-<OCN_BLSR>	RTRV-TRC-OCH
INH-SWDX-EQPT	SW-DX-EQPT
INH-SWTOPROTN-EQPT	SW-TOPROTN-EQPT
INH-SWTOWKG-EQPT	SW-TOWKG-EQPT

---

ED-FFP-OCH:[<TID>]:<AID>:<CTAG>:::[PROTID=<PROTID>],[RVRTV=<RVRTV>],[RVTM=<RVTM>],[PSDIRN=<PSDIRN>][:];

ED-FFP-OCH:VA454-22:CHAN-2-2:100:::PROTID="FIXEDPROTECTION",RVRTV=N,  
RVTM=1.0,PSDIRN=BI;

**Table 11-20 ED-FFP-OCH Input Parameters**

Parameter and Values	Description
<b>AID</b>	Access identifier from the <a href="#">“25.1.7 CHANNEL”</a> section on page 25-14
<b>PROTAID</b>	The protection group identifier (protection group name). String
<b>RVRTV</b>	Revertive mode. The value Y indicates that the protection switching system reverts service to the original line after restoration. The value N indicates that the protection switching system does not revert service to the original line after restoration. RVRTV is applicable only for 1+1 protection switching. Null defaults to N Parameter type is ON_OFF—disable or enable an attribute
• N	Disable an attribute
• Y	Enable an attribute
<b>RVTM</b>	Revertive time Parameter type is REVERTIVE_TIME—revertive time
• 0.5 to 12.0	Revertive time is 0.5 to 12.0 minutes
<b>PSDIRN</b>	Protection switch operation Parameter type is TRANS_MODE—G1000 transponder mode
• BI	Bidirectional
• NONE	Not in transponder mode
• UNI	Unidirectional

## 11.22 ED-FSTE

Edit Fast Ethernet

### Usage Guidelines

Cisco ONS 15454, ONS 15310-CL

This command edits the front end port information of the fast (10/100 Mbps) Ethernet card.

The default values for all optional parameters are NE default values. These values might not be the current value for a parameter. In order to obtain the current value, issue the RTRV-XX command to retrieve them.



### Note

For the ML-100T-8 card, only the NAME parameter can be set.

\_\_\_\_\_ Ports

\_\_\_\_\_ Provisioning

**Related Commands**


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DLT-<MOD1PAYLOAD>	RMV-<MOD2>
DLT-FFP-<MOD2DWDMPAYLOAD>	RST-<MOD2>
DLT-FFP-<OCN_TYPE>	RTRV-<MOD1FCPAYLOAD>
ED-<GIGE_TYPE>	RTRV-<MOD1FICONPAYLOAD>
ED-<MOD1FCPAYLOAD>	RTRV-<MOD2DWDMPAYLOAD>
ED-<MOD1FICONPAYLOAD>	RTRV-<OCN_TYPE>
ED-<MOD2DWDMPAYLOAD>	RTRV-10GIGE
ED-<OCN_TYPE>	RTRV-ALMTH-<MOD2>
ED-ALS	RTRV-ALS
ED-DS1	RTRV-DS1
ED-EC1	RTRV-EC1
ED-FFP-<MOD2DWDMPAYLOAD>	RTRV-FAC
ED-FFP-<OCN_TYPE>	RTRV-FFP-<MOD2DWDMPAYLOAD>
ED-G1000	RTRV-FFP-<OCN_TYPE>
ED-GFP	RTRV-FSTE
ED-HDLC	RTRV-G1000
ED-POS	RTRV-GFP
ED-T1	RTRV-GIGE
ED-T3	RTRV-HDLC
ED-TRC-<MOD2DWDMPAYLOAD>	RTRV-PM-<MOD2>
ED-TRC-<OCN_TYPE>	RTRV-PMSCHED-<MOD2>
ENT-<MOD1PAYLOAD>	RTRV-POS
ENT-FFP-<MOD2DWDMPAYLOAD>	RTRV-PROTNSW-<MOD2DWDMPAYLOAD>
ENT-FFP-<OCN_TYPE>	RTRV-PROTNSW-<OCN_TYPE>
INIT-REG-<MOD2>	RTRV-T1
OPR-ALS	RTRV-T3
OPR-LPBK-<MOD2>	RTRV-TH-<MOD2>
OPR-PROTNSW-<MOD2DWDMPAYLOAD>	RTRV-TRC-<MOD2DWDMPAYLOAD>
OPR-PROTNSW-<OCN_TYPE>	RTRV-TRC-<OCN_TYPE>
REPT PM <MOD2>	SCHED-PMREPT-<MOD2>
RLS-LPBK-<MOD2>	SET-ALMTH-<MOD2>
RLS-PROTNSW-<MOD2DWDMPAYLOAD>	SET-TH-<MOD2>
RLS-PROTNSW-<OCN_TYPE>	

---

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

```
ED-FSTE:CISCO:FAC-1-1:123:::FLOW=FLOW,EXPDUPLICATE=EXPDUPLICATE,
EXPSPEED=EXPSPEED, VLANCOS=VLANCOS,IPTOS=IPTOS,
NAME="FSTE PORT",CMDMDE=CMDMDE,SOAK=32:IS,AINS;
```

**Table 11-21 ED-FSTE Input Parameters**

Parameter and Values	Description
<b>AID</b>	Access identifier from the <a href="#">“25.1.14 FACILITY”</a> section on page 25-28
<b>FLOW</b>	Flow control Parameter type is ON_OFF—disable or enable an attribute
<ul style="list-style-type: none"> <li>• N</li> <li>• Y</li> </ul>	Disable an attribute Enable an attribute
<b>EXPDUPLICATE</b>	Ethernet duplex mode Parameter type is ETHER_DUPLEX—duplex mode
<ul style="list-style-type: none"> <li>• AUTO</li> <li>• FULL</li> <li>• HALF</li> </ul>	Auto mode Full mode Half mode
<b>EXPSPEED</b>	Ethernet speed Parameter type is ETHER_SPEED—Ethernet speed
<ul style="list-style-type: none"> <li>• 100_MBPS</li> <li>• 10_GBPS</li> <li>• 10_MBPS</li> <li>• 1_GBPS</li> <li>• AUTO</li> </ul>	100 Mbps 10 Gbps 10 Mbps 1 Gbps Auto
<b>VLANCOS</b>	Priority queuing threshold based on VLAN class of service of incoming Ethernet packets. Default value is 1175. Integer
<b>IPTOS</b>	Priority queuing threshold based on IP type of service of incoming Ethernet packets. Default value is 368. Integer
<b>NAME</b>	Name. String
<b>CMDMDE</b>	Command Mode. The FRCD mode of operation is applicable to delete a VCAT member cross-connect from IS-NR or OOS-AU,AINS service state Parameter type is CMDMDE—forces the system to execute a given command regardless of any standing conditions. Normal mode is the default behavior for all commands but you can specify FRCD to force the system to override a state where the command would normally be denied
<ul style="list-style-type: none"> <li>• FRCD</li> </ul>	Force the system to override a state where the command would normally be denied



**Table 11-21 ED-FSTE Input Parameters (continued)**

Parameter and Values	Description
<ul style="list-style-type: none"> <li>NORM</li> </ul>	Execute the command normally. Do not override any conditions that might make the command fail
<b>SOAK</b>	OOS-AINS to IS transition soak time as measured in 15 minute intervals, so a value of 4 translates to a soak time of 1 hour. The allowable range is 0 to 192 intervals (maximum of 48 hours). Integer
<b>PST</b>	Primary state Parameter type is PST—indicates the current overall service condition of an entity
<ul style="list-style-type: none"> <li>IS</li> <li>OOS</li> </ul>	In service Out of service
<b>SST</b>	Secondary state Parameter type is SST—provides additional information pertaining to PST and PSTQ
<ul style="list-style-type: none"> <li>AINS</li> <li>DSBLD</li> <li>LPBK</li> <li>MEA</li> <li>MT</li> <li>OOG</li> <li>SWDL</li> <li>UAS</li> <li>UEQ</li> </ul>	Automatic in service Disabled Loopback Mismatch of equipment and attributes Maintenance mode Out of group Software downloading Unassigned Unequipped

## 11.23 ED-G1000

Edit G1000

### Usage Guidelines

Cisco ONS 15454

This command edits the attributes related to a G1000 port.

The default values for all optional parameters are NE default values. These values might not be the current value for a parameter. In order to obtain the current value, issue the RTRV-XX command.

---

Ports

---

Provisioning

Related Commands	DLT-FFP-<OCN_TYPE>	ENT-FFP-<OCN_TYPE>	RTRV-G1000
	ED-<OCN_TYPE>	OPR-PROTNSW-<OCN_TYPE>	RTRV-GFP
	ED-DS1	RLS-PROTNSW-<OCN_TYPE>	RTRV-GIGE
	ED-EC1	RTRV-<OCN_TYPE>	RTRV-HDLC
	ED-FFP-<OCN_TYPE>	RTRV-DS1	RTRV-POS
	ED-GFP	RTRV-EC1	RTRV-PROTNSW-<OCN_TYPE>
	ED-HDLC	RTRV-FAC	RTRV-T1
	ED-T1	RTRV-FFP-<OCN_TYPE>	RTRV-T3
	ED-T3	RTRV-FSTE	RTRV-TRC-<OCN_TYPE>
	ED-TRC-<OCN_TYPE>		

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

ED-G1000:TID:FAC-1-1:CTAG:::MFS=1548,FLOW=Y,LOWMRK=20,HIWMRK=492,  
AUTONEG=Y,NAME="G1000 PORT",CMDMDE=FRCD,SOAK=32:OOS,DSBLD;

**Table 11-22 ED-G1000 Input Parameters**

Parameter and Values	Description
<b>AID</b>	Access identifier from the <a href="#">“25.1.14 FACILITY”</a> section on page 25-28
<b>MFS</b>	Maximum frame size Parameter type is MFS_TYPE—maximum frame size used by an Ethernet card
<ul style="list-style-type: none"> <li>• 1548</li> <li>• JUMBO</li> </ul>	Normal frame size Jumbo frame size
<b>FLOW</b>	Flow control Parameter type is ON_OFF—disable or enable an attribute
<ul style="list-style-type: none"> <li>• N</li> <li>• Y</li> </ul>	Disable an attribute Enable an attribute
<b>LOWMRK</b>	Low watermark value. Integer. Defaults to 25. LOWMRK is available starting with Release 4.0.1
<b>HIWMRK</b>	High watermark value. Integer. Defaults to 485
<b>AUTONEG</b>	Automatic negotiation. Defaults to Y Parameter type is ON_OFF—disable or enable an attribute

**Table 11-22 ED-G1000 Input Parameters (continued)**

Parameter and Values	Description
• N	Disable an attribute
• Y	Enable an attribute
<b>NAME</b>	Name. String. Default is NULL. Maximum length is 32 characters
<b>CMDMDE</b>	Command execution mode Parameter type is CMDMDE—forces the system to execute a given command regardless of any standing conditions. Normal mode is the default behavior for all commands but you can specify FRCD to force the system to override a state where the command would normally be denied
• FRCD	Force the system to override a state where the command would normally be denied
• NORM	Execute the command normally. Do not override any conditions that might make the command fail
<b>SOAK</b>	OOS-AINS to IS transition soak time as measured in 15-minute intervals. A value of 4 equals a soak time of 1 hour. The allowable range is 0 to 192 intervals (maximum of 48 hours). Integer. Defaults to 32
<b>ENCAP</b>	Encapsulation. String
<b>PST</b>	Primary state. Defaults to OOS Parameter type is PST—indicates the current overall service condition of an entity
• IS	In service
• OOS	Out of service
<b>SST</b>	Secondary state. Defaults to DSBLD Parameter type is SST—provides additional information pertaining to PST and PSTQ
• AINS	Automatic in service
• DSBLD	Disabled
• LPBK	Loopback
• MEA	Mismatch of equipment and attributes
• MT	Maintenance mode
• OOG	Out of group
• SWDL	Software downloading
• UAS	Unassigned
• UEQ	Unequipped

## 11.24 ED-GFP

Edit Generic Framing Protocol

**Usage Guidelines**

Cisco ONS 15454, ONS 15310-CL, ONS 15600

This command applies to the ONS 15454 CE-100T-8 card, the ONS 15454 FC\_MR-4 card, the ONS 15310-CL CE-100T-8 card and the ONS 15600 ASAP card.

**Note**

- The ONS 15600 only supports these parameters: TID, AID, CTAG and FCS.
- This command does not apply to ONS 15310-CL ML-100T-8 card.
- For the FC\_MR-4 card, the parameters AUTOTHGFPBUF, GFPBUF and FILTER can be edited only if distance extension is enabled (set to B2B).

Ports

Provisioning

**Related Commands**

DLT-FFP-<OCN_TYPE>	ENT-FFP-<OCN_TYPE>	RTRV-G1000
ED-<OCN_TYPE>	OPR-PROTNSW-<OCN_TYPE>	RTRV-GFP
ED-DS1	RLS-PROTNSW-<OCN_TYPE>	RTRV-GIGE
ED-EC1	RTRV-<OCN_TYPE>	RTRV-HDLC
ED-FFP-<OCN_TYPE>	RTRV-DS1	RTRV-POS
ED-G1000	RTRV-EC1	RTRV-PROTNSW-<OCN_TYPE>
ED-HDLC	RTRV-FAC	RTRV-T1
ED-T1	RTRV-FFP-<OCN_TYPE>	RTRV-T3
ED-T3	RTRV-FSTE	RTRV-TRC-<OCN_TYPE>
ED-TRC-<OCN_TYPE>		

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

ED-GFP:CISCO:VFAC-1-0:123:::FCS=N,AUTOTHGFPBUF=Y,GFPBUF=16,FILTER=EGRESS;

**Table 11-23 ED-GFP Input Parameters**

Parameter and Values	Description
<b>AID</b>	Access identifier from the “ <a href="#">25.1.14 FACILITY</a> ” section on page 25-28.  <b>Note</b> VFAC AID is used for the CE-100T-8 cards on ONS 15310-CL and ONS 15454 and ASAP cards on ONS 15600. ML-100T-8 GFP management is done through the Cisco IOS CLI and not through the TL1 interface. FAC AID is used for ONS 15454 FC_MR-4
<b>FCS</b>	Payload frame check sequence Parameter type is FCS—frame check sequence
• FCS-16	Frame check sequencing using 16 bits
• FCS-32	Frame check sequencing using 32 bits
• NONE	No frame check sequence
<b>AUTOTHGFPBUF</b>	Parameter type is ON_OFF—disable or enable an attribute
• N	Disable an attribute
• Y	Enable an attribute
<b>FILTER</b>	Parameter type is GFP_FILTER—filter feature in GFP
• EGRESS	Activate filter feature on egress port
• NONE	Turn off filter feature

## 11.25 ED-HDLC

Edit High-Level Data Link Control

### Usage Guidelines

Cisco ONS 15600

This command edits HDLC-related attributes for HDLC-encapsulated payloads.

Ports

Provisioning

Related Commands	DLT-FFP-<OCN_TYPE>	ENT-FFP-<OCN_TYPE>	RTRV-G1000
	ED-<OCN_TYPE>	OPR-PROTNSW-<OCN_TYPE>	RTRV-GFP
	ED-DS1	RLS-PROTNSW-<OCN_TYPE>	RTRV-GIGE
	ED-EC1	RTRV-<OCN_TYPE>	RTRV-HDLC
	ED-FFP-<OCN_TYPE>	RTRV-DS1	RTRV-POS
	ED-G1000	RTRV-EC1	RTRV-PROTNSW-<OCN_TYPE>
	ED-GFP	RTRV-FAC	RTRV-T1
	ED-T1	RTRV-FFP-<OCN_TYPE>	RTRV-T3
	ED-T3	RTRV-FSTE	RTRV-TRC-<OCN_TYPE>
	ED-TRC-<OCN_TYPE>		

---

ED-HDLC:[<TID>]:<SRC>:<CTAG>[:FCS=<FCS>];

---

ED-HDLC:TID:VFAC-SLOT-PORT:CTAG::FCS=FCS-16;

**Table 11-24 ED-HDLC Input Parameters**

Parameter and Values	Description
<b>SRC</b>	Access identifier from the <a href="#">“25.1.14 FACILITY”</a> section on page 25-28. The ONS 15600 ASAP card uses the VFAC AID
<b>FCS</b>	Payload frame check sequence Parameter type is FCS—frame check sequence
<ul style="list-style-type: none"> <li>• FCS-16</li> <li>• FCS-32</li> <li>• NONE</li> </ul>	<ul style="list-style-type: none"> <li>Frame check sequence using 16 bits</li> <li>Frame check sequence using 32 bits</li> <li>No frame check sequence</li> </ul>

## 11.26 ED-LNK-<MOD20>

Edit Link (OCH, OMS, OTS)

### Usage Guidelines

Cisco ONS 15454

This command edits an optical link state.

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DWDM

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Provisioning

Related Commands	DLT-LNK-<MOD2O>	ENT-LNK-<MOD2O>	RTRV-LNK-<MOD2O>
	ED-DWDM	OPR-LASER-OTS	RTRV-OCH
	ED-FFP-OCH	OPR-PROTNSW-OCH	RTRV-OMS
	ED-OCH	RLS-LASER-OTS	RTRV-OTS
	ED-OMS	RLS-PROTNSW-OCH	RTRV-PROTNSW-OCH
	ED-OTS	RTRV-DWDM	RTRV-TRC-OCH
	ED-TRC-OCH	RTRV-FFP-OCH	

---

```
ED-LNK-<MOD2O>:[<TID>]:<FROM>,
<TO>:<CTAG>:::[CMDMDE=<CMDMDE>]:[<PST>[,<SST>]];
```

---

```
ED-LNK-OMS:PENNGROVE:BAND-6-1-TX,BAND-13-1-RX:114:::CMDMDE=CMDMDE:IS,
AINS;
```

---

**Table 11-25** ED-LNK-<MODO> Input Parameters

Parameter and Values	Description
<b>FROM</b>	Identifier at one end of the optical link from the <a href="#">“25.1.4 BAND” section on page 25-13</a>
<b>TO</b>	Identifier at the other end of the optical link from the <a href="#">“25.1.4 BAND” section on page 25-13</a>
<b>CMDMDE</b>	Command Mode. The FRCD mode of operation is applicable to delete a VCAT member cross-connect from IS-NR or OOS-AU,AINS service state  Parameter type is CMDMDE—forces the system to execute a given command regardless of any standing conditions. Normal mode is the default behavior for all commands but you can specify FRCD to force the system to override a state where the command would normally be denied
<ul style="list-style-type: none"> <li>FRCD</li> </ul>	Force the system to override a state where the command would normally be denied
<ul style="list-style-type: none"> <li>NORM</li> </ul>	Execute the command normally. Do not override any conditions that might make the command fail
<b>PST</b>	Primary state  <b>Note</b> PST is not supported for OCH provisioning  Parameter type is PST—indicates the current overall service condition of an entity
<ul style="list-style-type: none"> <li>IS</li> </ul>	In service
<ul style="list-style-type: none"> <li>OOS</li> </ul>	Out of service

Table 11-25 ED-LNK-&lt;MODO&gt; Input Parameters (continued)

Parameter and Values	Description
SST	Secondary state <b>Note</b> SST is not supported for OCH provisioning Parameter type is SST—provides additional information pertaining to PST and PSTQ
• AINS	Automatic in service
• DSBLD	Disabled
• LPBK	Loopback
• MEA	Mismatch of equipment and attributes
• MT	Maintenance mode
• OOG	Out of group
• SWDL	Software downloading
• UAS	Unassigned
• UEQ	Unequipped

## 11.27 ED-LNKTERM

Edit Provisionable Patchcord Termination

### Usage Guidelines

Cisco ONS 15454, ONS 15327, ONS 15310-CL

This command edits the attributes of a provisionable patchcord that has already been created. Only the remote end attributes (REMOTENODE, REMOTELNKTERMID) can be edited.



### Note

- No two provisionable patchcord terminations on a node can have the same remote end link termination information. An attempt to modify an existing provisionable patchcord termination while not following the above restriction will lead to an error message being responded.
- If the provisionable patchcord termination does not exist, an error message will be responded.
- This command does not accept multiple and ALL AIDs.
- REMOTENODE is a string with a maximum length of 20 characters.

Provisionable Patchcords

Provisioning



Related Commands	DLT-LNK-<MOD2O>	ED-WDMANS	RTRV-FFP-OCH
	DLT-LNKTERM	ED-WLEN	RTRV-LNK-<MOD2O>
	DLT-OSC	ENT-LNK-<MOD2O>	RTRV-LNKTERM
	DLT-WLEN	ENT-LNKTERM	RTRV-NE-WDMANS
	ED-DWDM	ENT-OSC	RTRV-OCH
	ED-FFP-OCH	ENT-WLEN	RTRV-OMS
	ED-LNK-<MOD2O>	OPR-LASER-OTS	RTRV-OSC
	ED-OCH	OPR-PROTNSW-OCH	RTRV-OTS
	ED-OMS	OPR-SLV-WDMANS	RTRV-PROTNSW-OCH
	ED-OSC	OPR-WDMANS	RTRV-SLV-WDMANS
	ED-OTS	RLS-LASER-OTS	RTRV-TRC-OCH
	ED-SLV-WDMANS	RLS-PROTNSW-OCH	RTRV-WDMANS
	ED-TRC-OCH	RTRV-DWDM	RTRV-WLEN

---

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

---



---

ED-LNKTERM::LNKTERM-1:CTAG:::RE MOTENODE=172.20.208.226,  
RE MOTELNKTERMID=25;

---

**Table 11-26 ED-LNKTERM Input Parameters**

Parameter and Values	Description
<b>AID</b>	Access identifier from the “ <a href="#">25.1.17 LNKTERM</a> ” section on <a href="#">page 25-32</a> . Indicates a link (provisionable patchcord) termination on the local node
<b>RE MOTENODE</b>	The node where the other end of the provisionable patchcord resides. This can be an IP address or a valid TID. Defaults to the IP address of the local node/existing value. String
<b>RE MOTELNKTERMID</b>	The corresponding provisionable patchcord termination on the remote node (as specified by the RE MOTENODE parameter). Integer value within the range of 1 to 65535. Defaults to existing value

## 11.28 ED-NE-GEN

Edit Network Element General

### Usage Guidelines

Cisco ONS 15454, 15327, 15600, 15310

This command edits the node attributes of the NE.

**Note**

- Only the IPADDR, IPMASK, DEFRTTR, IOP PORT and node name can be modified with this command.
- The node name can be a maximum of 20 characters. If the entered name exceeds 20 characters, an IPNV (Node Name Too Long) error message is returned.
- An existing NTP timing source can be removed by setting the address to 0.0.0.0.
- The maximum length of IPMASK is 18 characters. The default is the mask of the local IP address.
- ETHIPADDR and ETHIPMASK are disabled in this command. ETHIPADDR and ETHIPMASK are used to show the Ethernet interface address and mask. Both default to the nodes' IP address and masks.

**Caution**

Changing the IPADDR, IPMASK, or IOP Port will cause a reset of the controller card.

---

System

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Superuser

**Related Commands**

ACT-USER	INH-MSG-ALL	RTRV-NE-IPMAP
ALW-MSG-ALL	INH-MSG-DBCHG	RTRV-NE-PATH
ALW-MSG-DBCHG	INH-MSG-SECU	RTRV-NE-SYNCN
ALW-MSG-SECU	INIT-SYS	RTRV-NE-WDMANS
ED-DAT	RTRV-HDR	RTRV-TOD
ED-NE-PATH	RTRV-INV	SET-TOD
ED-NE-SYNCN	RTRV-NE-GEN	

---

```
ED-NE-GEN:[<TID>]::<CTAG>:::[NAME=<NAME>],[IPADDR=<IPADDR>],
[IPMASK=<IPMASK>],[DEFRTTR=<DEFRTTR>],[IOPPORT=<IOPPORT>],[NTP=<NTP>],
[ETHIPADDR=<ETHIPADDR>],[ETHIPMASK=<ETHIPMASK>],
[SUPPRESSIP=<SUPPRESSIP>];
```

---

```
ED-NE-GEN:CISCO::123:::NAME=NODENAME,IPADDR=192.168.100.52,
IPMASK=255.255.255.0,DEFRTTR=192.168.100.1,IOPPORT=57790,
NTP=192.168.100.52,ETHIPADDR=172.20.208.225,ETHIPMASK=255.255.255.0,
SUPPRESSIP=NO;
```

**Table 11-27 ED-NE-GEN Input Parameters**

Parameter and Values	Description
NAME	Node name. String. Defaults to NULL
IPADDR	Node IP address. String
IPMASK	Node IP mask. String
DEFRTR	Node default router. String
IIOPPORT	Node IIO port. Integer. Defaults to 57790
NTP	Node NTP timing origin address. String. Defaults to 0.0.0.0
ETHIPADDR	Not supported in this release
ETHIPMASK	Not supported in this release
SUPPRESSIP	Parameter type is YES_NO—whether the user's password is about to expire, the user is logged into the NE, or the user is locked out of the NE
• NO	No
• YES	Yes

## 11.29 ED-NE-PATH

Edit Network Element Path

### Usage Guidelines

Cisco ONS 15454, ONS 15327, ONS 15310-CL

This command edits the path attributes of the NE. The default value for an optional parameter is the NE default value.

System

Provisioning

### Related Commands

ACT-USER	INH-MSG-ALL	RTRV-NE-IPMAP
ALW-MSG-ALL	INH-MSG-DBCHG	RTRV-NE-PATH
ALW-MSG-DBCHG	INH-MSG-SECU	RTRV-NE-SYCN
ALW-MSG-SECU	INIT-SYS	RTRV-NE-WDMANS
ED-DAT	RTRV-HDR	RTRV-TOD
ED-NE-GEN	RTRV-INV	SET-TOD
ED-NE-SYCN	RTRV-NE-GEN	

---

```
ED-NE-PATH:[<TID>]::<CTAG>:::[PDIP=<PDIP>],[XCMODE=<XCMODE>];
```

---

```
ED-NE-PATH:::CTAG:::PDIP=Y,XCMODE=MIXED;
```

---

**Table 11-28** ED-NE-PATH Input Parameters

Parameter and Values	Description
<b>PDIP</b>	Flag used to indicate whether PDI-P should be generated on the outgoing VT structured STSs Parameter type is ON_OFF—disable or enable an attribute
<ul style="list-style-type: none"> <li>N</li> </ul>	Disable an attribute
<ul style="list-style-type: none"> <li>Y</li> </ul>	Enable an attribute
<b>XCMODE</b>	Cross-connect mode Parameter type is XCMODE—applicable only to a node with cross connect cards; XC-VXC-10G, XC-VXC-2.5G for example, that support cross connect mode change
<ul style="list-style-type: none"> <li>MIXED</li> </ul>	Both VT1 and VT2 cross connects can be provisioned on the node
<ul style="list-style-type: none"> <li>VT1</li> </ul>	Only VT1 cross connects can be provisioned on the node
<ul style="list-style-type: none"> <li>VT2</li> </ul>	Only VT2 cross connects can be provisioned on the node

## 11.30 ED-NE-SYNCN

Edit Network Element Synchronization

### Usage Guidelines

Cisco ONS 15454, 15327, 15600, 15310

This command edits the synchronization attributes of the NE.



#### Note

Although mixed mode timing is supported in this release, it is not recommended. Refer to the *Cisco ONS SDH and Cisco ONS 15600 SDH TL1 Reference Guide* for more information.



#### Note

The existing external and line modes have the same functionality in all ONS 15454 4.x and 5.x releases:

- External mode: the node derives its timing from the BITS inputs
- Line mode: the node derives its timing from the SONET line(s)
- Mixed mode: the node derives its timing from the BITS input or SONET lines

---

Synchronization

---

Provisioning

---

**Related Commands**

ACT-USER	INIT-SYS	RTRV-COND-SYNCN
ALW-MSG-ALL	OPR-SYNCNSW	RTRV-HDR
ALW-MSG-DBCHG	REPT ALM BITS	RTRV-INV
ALW-MSG-SECU	REPT ALM SYNCN	RTRV-NE-GEN
ED-BITS	REPT EVT BITS	RTRV-NE-IPMAP
ED-DAT	REPT EVT SYNCN	RTRV-NE-PATH
ED-NE-GEN	RLS-SYNCNSW	RTRV-NE-SYNCN
ED-NE-PATH	RTRV-ALM-BITS	RTRV-NE-WDMANS
ED-SYNCN	RTRV-ALM-SYNCN	RTRV-SYNCN
INH-MSG-ALL	RTRV-BITS	RTRV-TOD
INH-MSG-DBCHG	RTRV-COND-BITS	SET-TOD
INH-MSG-SECU		

---

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

---

```
ED-NE-SYNCN:CISCO::123::TMMD=LINE,SSMGEN=GEN1,QRES=ABOVE-PRS,
RVRTV=Y,RVTM=8.0;
```

---

**Table 11-29** ED-NE-SYNCN Input Parameters

Parameter and Values	Description
<b>TMMD</b>	Timing mode. A null value is equivalent to ALL Parameter type is TIMING_MODE—timing mode for the current node
<ul style="list-style-type: none"> <li>EXTERNAL</li> </ul>	The node derives its clock from the BITS input
<ul style="list-style-type: none"> <li>LINE</li> </ul>	The node derives its clock from the SONET lines
<ul style="list-style-type: none"> <li>MIXED</li> </ul>	The node derives its clock from the mixed timing mode
<b>SSMGEN</b>	Synchronization status message set. A null value is equivalent to ALL Parameter type is SYNC_GENERATION—synchronization status message set generation

Table 11-29 ED-NE-SYNCN Input Parameters (continued)

Parameter and Values	Description
• GEN1	First generation SSM set
• GEN2	Second generation SSM set
<b>QRES</b>	Quality of the RES. A null value is equivalent to ALL Parameter type is SYNC_QUALITY_LEVEL—network synchronization quality level
• ABOVE-PRS	Better than primary reference source. Valid setting for Generation-1 and Generation-2 SSM Set
• ABOVE-SMC	Between SMC and ST3. Valid setting for Generation-1 and Generation-2 SSM Set
• ABOVE-ST2	Between ST2 and STU. Valid setting for Generation-1 and Generation-2 SSM Set
• ABOVE-ST3	For Generation-1 SSM set, between ST3 and ST2. For Generation-2 SSM set, between ST3 and ST3E
• ABOVE-ST3E	Between ST3E and TNC. Valid setting only for Generation-2 SSM set
• ABOVE-ST4	Between ST4 and ST3. Valid setting for Generation-1 and Generation-2 SSM Set
• ABOVE-STU	Between STU and PRS. Valid setting for Generation-1 and Generation-2 SSM Set. This is Default Setting
• ABOVE-TNC	Between TNC and ST2. Valid setting only for Generation-2 SSM set
• BELOW-ST4	Below ST4 but still usable. Valid setting for Generation-1 and Generation-2 SSM Set
• SAME-AS-DUS	Disable the RES message by equating it to DUS. Valid setting for Generation-1 and Generation-2 SSM Set
<b>RVRTV</b>	Revertive mode. The value Y indicates that the protection switching system reverts service to the original line after restoration. The value N indicates that the protection switching system does not revert service to the original line after restoration. RVRTV is applicable only for 1+1 protection switching. Null defaults to N. A null value is equivalent to ALL Parameter type is ON_OFF—disable or enable an attribute
• N	Disable an attribute
• Y	Enable an attribute
<b>RVTM</b>	Revertive time. A null value is equivalent to ALL Parameter type is REVERTIVE_TIME—revertive time
• 0.5 to 12.0	Revertive time is 0.5 to 12.0 minutes

## 11.31 ED-OCH

Edit Optical Channel (OCH)

**Usage Guidelines**

Cisco ONS 15454

This command edits the attributes (service parameters) and state of an OCH facility.

Refer to the *Cisco ONS SDH and Cisco ONS 15600 SDH TLI Reference Guide* for specific card provisioning rules.

**Note**

Primary=OOS and secondary=AINS states do not apply to Ethernet mode.

DWDM

Provisioning

**Related Commands**

DLT-LNK-<MOD2O>	ENT-LNK-<MOD2O>	RTRV-LNK-<MOD2O>
ED-DWDM	OPR-LASER-OTS	RTRV-OCH
ED-FFP-OCH	OPR-PROTNSW-OCH	RTRV-OMS
ED-LNK-<MOD2O>	RLS-LASER-OTS	RTRV-OTS
ED-OMS	RLS-PROTNSW-OCH	RTRV-PROTNSW-OCH
ED-OTS	RTRV-DWDM	RTRV-TRC-OCH
ED-TRC-OCH	RTRV-FFP-OCH	

```
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>]];
```

```
ED-OCH:CISCO:CHAN-6-2:114:::RDIRN=W-E,EXPWLEN=1530.32,VOAATTN=2.5,
VOAPWR=7.5,CALOPWR=0,CHPOWER=2.0,NAME="NYLINE",SFBER=1E-5,
SDBER=1E-6,COMM=DCC,GCCRATE=192K,OSDBER=1E-6,DWRAP=Y,FEC=STD,
PAYLOADMAP=ASYNCH,MACADDR=00-0E-AA-BB-CC-DD,SYNCSMSG=N,
SENDDUS=Y,SOAK=10,OSPF=Y,MFS=2152,CMDMDE=CMDMDE:IS,AINS;
```

Table 11-30 ED-OCH Input Parameters

Parameter and Values	Description
<b>AID</b>	Access identifier from the “25.1.7 CHANNEL” section on page 25-14
<b>RDIRN</b>	Ring directionality of the optical line Parameter type is RDIRN_MODE—the optical ring directionality
• E-W	The direction of the signal is from east to west (clockwise)
• W-E	The direction of the signal is from west to east (counterclockwise)
<b>EXPWLEN</b>	Optical wavelength for this port. Applicable only to the following cards: optical service channel cards, optical amplifier cards, dispersion compensation units, multiplexer and demultiplexer cards and OADM cards Parameter type is OPTICAL_WLEN—optical wavelength
• 1530.33	Wavelength 1
• 1531.12	Wavelength 2
• 1531.90	Wavelength 3
• 1532.68	Wavelength 4
• 1534.25	Wavelength 5
• 1535.04	Wavelength 6
• 1535.82	Wavelength 7
• 1536.61	Wavelength 8
• 1538.19	Wavelength 9
• 1538.98	Wavelength 10
• 1539.77	Wavelength 11
• 1540.56	Wavelength 12
• 1542.14	Wavelength 13
• 1542.94	Wavelength 14
• 1543.73	Wavelength 15
• 1544.53	Wavelength 16
• 1546.12	Wavelength 17
• 1546.92	Wavelength 18
• 1547.72	Wavelength 19
• 1548.51	Wavelength 20
• 1550.12	Wavelength 21
• 1550.92	Wavelength 22
• 1551.72	Wavelength 23
• 1552.52	Wavelength 24
• 1554.13	Wavelength 25



Table 11-30 ED-OCH Input Parameters (continued)

Parameter and Values	Description
• 1554.94	Wavelength 26
• 1555.75	Wavelength 27
• 1556.55	Wavelength 28
• 1558.17	Wavelength 29
• 1558.98	Wavelength 30
• 1559.79	Wavelength 31
• 1560.61	Wavelength 32
• USE-TWL1	Use Tunable Wavelength 1
<b>VOATTN</b>	The value of calibrated attenuation for the VOA. It is expressed in dBm. For the following cards: optical service channel, optical amplifier, dispersion compensation units, multiplexer and demultiplexer and OADM, the range is 0.0 to +30.0. Not supported for TXP or MXP cards. Float
<b>VOAPWR</b>	The value of calibrated output power that the VOA is going to set as a result of its attenuation. Applicable only to the following cards: optical service channel, optical amplifier, dispersion compensation units, multiplexer and demultiplexer and OADM. Float
<b>CALOPWR</b>	The value of the calibrated optical power expected for the line added to the calculated value which equals the total expected output power. Expressed in dBm. Applicable only to the following cards: optical service channel, optical amplifier, dispersion compensation units, multiplexer and demultiplexer and OADM. Defaults to 0 dBm. Float
<b>CHPOWER</b>	The value of per channel optical power expected to the OCH drop port of an AD-4C unit. CHPOWER is a float expressed in dBm Parameter type is REVERTIVE_TIME—revertive time
• 0.5 to 12.0	Revertive time is 0.5 to 12.0 minutes
<b>PORTNAME</b>	Port name. String
<b>SFBER</b>	Signal failure threshold for the SONET payload. Can only be provisioned on the working port Parameter type is SF_BER—the threshold for declaring signal failure on a facility or path
• 1E-3	SFBER is 1E-3
• 1E-4	SFBER is 1E-4
• 1E-5	SFBER is 1E-5
<b>SDBER</b>	Signal degrade threshold for the SONET payload. Can only be provisioned on the working port Parameter type is SD_BER—the threshold for declaring signal degrade on a facility or path
• 1E-5	SDBER is 1E-5
• 1E-6	SDBER is 1E-6

Table 11-30 ED-OCH Input Parameters (continued)

Parameter and Values	Description
• 1E-7	SDBER is 1E-7
• 1E-8	SDBER is 1E-8
• 1E-9	SDBER is 1E-9
<b>COMM</b>	<p>The GCC or DCC is enabled or disabled. The GCC can be enabled only if the digital wrapper has been enabled for the card. The default is NONE. Rules for an MXP_2.5G_10G/TXP_MR_10G client port are; only the DCC can be provisioned, if the termination mode is not transparent and the payload is SONET. On an MXP_2.5G_10G/TXP_MR_10G DWDM port, the DCC can be enabled only if the G.709 is not enabled and if the payload is SONET and the termination mode is not transparent. On an MXP_2.5G_10G/TXP_MR_10G DWDM port, the GCC can be enabled if there is no DCC and the G.709 flag is enabled. On a TXP/MXP DWDM port, the DCC/GCC can be disabled only if there are no provisionable patchcord terminations provisioned on the trunk port</p> <p>Parameter type is COMM_TYPE—out of band communications channel termination type</p>
• DCC	Section DCC type
• GCC	Generic communication channel (OTN) type
• NONE	Disable DCC or GCC if enabled
<b>GCCRATE</b>	<p>The data rate of the GCC traffic. The default is 192 Kbps. For MXP_2.5G_10G/TXP_MR_10G cards this applies only to the DWDM port.</p> <p><b>Note</b> The 576K option is not supported for this release.</p> <p>Parameter type is GCCRATE—the data rate of the GCC traffic</p>
• 192K	192 kbps
• 576K	576 kbps
<b>OSDBER</b>	<p>OTN SDBER. Can only be provisioned on the working port. Defaults to 1E-7</p> <p>Parameter type is SD_BER—the threshold for declaring signal degrade on a facility or path</p>
• 1E-5	SDBER is 1E-5
• 1E-6	SDBER is 1E-6
• 1E-7	SDBER is 1E-7
• 1E-8	SDBER is 1E-8
• 1E-9	SDBER is 1E-9

Table 11-30 ED-OCH Input Parameters (continued)

Parameter and Values	Description
<b>DWRAP</b>	<p>The G.709 digital wrapper. It is either on or off. The system default is ON. For MXP_2.5G_10G/TXP_MR_10G cards, this applies only to the DWDM port.</p> <p>To enable G.709:</p> <ul style="list-style-type: none"> <li>there should be no GCC on the DWDM port</li> <li>the payload (where the card is configured) should not be UNFRAMED</li> </ul> <p>To disable G.709:</p> <ul style="list-style-type: none"> <li>there should be no GCC on the DWDM port</li> <li>the FEC should be turned to off</li> <li>there should be no overhead circuit created on the DWDM port</li> <li>none of the client ports on the card should be part of a Y-cable protection group (MXP only)</li> </ul> <p>Parameter type is ON_OFF—disable or enable an attribute</p>
• N	Disable an attribute
• Y	Enable an attribute
<b>FEC</b>	<p>Forward error correction. It can be enabled only if the G.709 is turned ON. It is either off or enabled in standard or enhanced mode. The system default is standard FE enabled. The FEC level PM and thresholds apply if the FEC is turned ON</p> <p>Parameter type is FEC_MODE—specifies the type of forward error correction</p>
• ENH	Enhanced FEC is enabled
• OFF	FEC is disabled
• STD	Standard FEC is enabled
<b>PAYLOADMAP</b>	<p>The type of payload mapping. It can be enabled only if the G.709 is turned ON and FEC is enabled</p> <p>Parameter type is PAYLOAD_MAPPING—payload mapping mode</p>
• ASYNCH	Asynchronous mapping mode
• ODU	ODU multiplex structure mode
• SYNCH	Synchronous mapping mode
<b>MACADDR</b>	MAC address for the 10GigE payload. String
<b>SYNCMSG</b>	<p>The facility be enabled to provide the synchronization clock. This does not apply to the TXPD-10G card. This applies to an MXPD-10G card, only if the payload is SONET/SDH and the card termination mode is as follows:</p> <p>TRANSPARENT - All Client ports are available for all timing selections. All Trunk ports are not available.</p> <p>LINE - All ports are available for all-timing selections</p> <p>Parameter type is ON_OFF—disable or enable an attribute</p>

Table 11-30 ED-OCH Input Parameters (continued)

Parameter and Values	Description
<ul style="list-style-type: none"> <li>N</li> </ul>	Disable an attribute
<ul style="list-style-type: none"> <li>Y</li> </ul>	Enable an attribute
<b>SENDDUS</b>	<p>The facility sends out a Do not Use for Sync message. This does not apply to the TXPD-10G card. This applies to an MXPDP-10G card, only if the payload is SONET/SDH and the card termination mode is as follows:</p> <p>TRANSPARENT- All Client ports are available for all timing selections. All Trunk ports are not available.</p> <p>LINE - All ports are available for all-timing selections</p> <p>Parameter type is ON_OFF—disable or enable an attribute</p>
<ul style="list-style-type: none"> <li>N</li> </ul>	Disable an attribute
<ul style="list-style-type: none"> <li>Y</li> </ul>	Enable an attribute
<b>SOAK</b>	OOS-AINS to IS transition soak time as measured in 15-minute intervals. A value of 4 equals a soak time of 1 hour. The allowable range is 0 to 192 intervals (maximum of 48 hours). Integer
<b>OSPF</b>	<p>Open shortest path first</p> <p>Parameter type is EXT_RING—indicates if the ring supports the extended K1/K2/K3 protocol</p>
<ul style="list-style-type: none"> <li>N</li> </ul>	The ring does not support the extended K1/K2/K3 protocol
<ul style="list-style-type: none"> <li>Y</li> </ul>	The ring does support the extended K1/K2/K3 protocol
<b>MFS</b>	Integer
<b>CMDMDE</b>	<p>Command mode</p> <p>Parameter type is CMDMDE—forces the system to execute a given command regardless of any standing conditions. Normal mode is the default behavior for all commands but you can specify FRCD to force the system to override a state where the command would normally be denied</p>
<ul style="list-style-type: none"> <li>FRCD</li> </ul>	Force the system to override a state where the command would normally be denied
<ul style="list-style-type: none"> <li>NORM</li> </ul>	Execute the command normally. Do not override any conditions that might make the command fail
<b>PST</b>	<p>Primary state</p> <p>Parameter type is PST—indicates the current overall service condition of an entity</p>
<ul style="list-style-type: none"> <li>IS</li> </ul>	In service
<ul style="list-style-type: none"> <li>OOS</li> </ul>	Out of service
<b>SST</b>	<p>Secondary state</p> <p>Parameter type is SST—provides additional information pertaining to PST and PSTQ</p>
<ul style="list-style-type: none"> <li>AINS</li> </ul>	Automatic in service
<ul style="list-style-type: none"> <li>DSBLD</li> </ul>	Disabled

**Table 11-30 ED-OCH Input Parameters (continued)**

Parameter and Values	Description
• LPBK	Loopback
• MEA	Mismatch of equipment and attributes
• MT	Maintenance mode
• OOG	Out of group
• SWDL	Software downloading
• UAS	Unassigned
• UEQ	Unequipped

## 11.32 ED-OMS

Edit Optical Multiplex Section (OMS)

### Usage Guidelines

Cisco ONS 15454

This command edits the attributes (service parameters) and state of an OMS facility.

DWDM

Provisioning

### Related Commands

DLT-LNK-<MOD2O>	ENT-LNK-<MOD2O>	RTRV-LNK-<MOD2O>
ED-DWDM	OPR-LASER-OTS	RTRV-OCH
ED-FFP-OCH	OPR-PROTNSW-OCH	RTRV-OMS
ED-LNK-<MOD2O>	RLS-LASER-OTS	RTRV-OTS
ED-OCH	RLS-PROTNSW-OCH	RTRV-PROTNSW-OCH
ED-OTS	RTRV-DWDM	RTRV-TRC-OCH
ED-TRC-OCH	RTRV-FFP-OCH	

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

```
ED-OMS:PENNGROVE:BAND-6-1:114:::RDIRN=W-E,EXPBAND=1530.32-1532.68,
VOAATTN=2.5,VOAPWR=7.5,CALOPWR=0.0,CHPOWER=2.0,NAME="OMS PORT",
SOAK=8,CMDMDE=CMDMDE:IS,AINS;
```

Table 11-31 ED-OMS Input Parameters

Parameter and Values	Description
<b>AID</b>	Access identifier from the <a href="#">“25.1.4 BAND”</a> section on page 25-13
<b>RDIRN</b>	Ring directionality of the optical line Parameter type is RDIRN_MODE—the optical ring directionality
<ul style="list-style-type: none"> <li>E-W</li> </ul>	The direction of the signal is from east to west (clockwise)
<ul style="list-style-type: none"> <li>W-E</li> </ul>	The direction of the signal is from west to east (counterclockwise)
<b>EXPBAND</b>	The expected value of band for this port Parameter type is OPTICAL_BAND—optical band
<ul style="list-style-type: none"> <li>1530.33 to 1532.68</li> </ul>	Band 1
<ul style="list-style-type: none"> <li>1534.25 to 1536.61</li> </ul>	Band 2
<ul style="list-style-type: none"> <li>1538.19 to 1540.56</li> </ul>	Band 3
<ul style="list-style-type: none"> <li>1542.14 to 1544.53</li> </ul>	Band 4
<ul style="list-style-type: none"> <li>1546.12 to 1548.51</li> </ul>	Band 5
<ul style="list-style-type: none"> <li>1550.12 to 1552.52</li> </ul>	Band 6
<ul style="list-style-type: none"> <li>1554.13 to 1556.55</li> </ul>	Band 7
<ul style="list-style-type: none"> <li>1558.17 to 1560.61</li> </ul>	Band 8
<ul style="list-style-type: none"> <li>USE-DEFAULT</li> </ul>	This band is not yet configured/retrieved from unit
<b>VOAATTN</b>	The value of calibrated attenuation for the VOA expressed in dBm. The range is 0.0 to +30.0. Float
<b>VOAPWR</b>	The value of calibrated output power that the VOA is going to set as a result of its attenuation. Float
<b>CALOPWR</b>	The value of the calibrated optical power expected for the line added to the calculated value which equals the total expected output power. Expressed in dBm. Defaults to 0 dBm. Float
<b>CHPOWER</b>	The value of per channel optical power. Float expressed in dBm Parameter type is REVERTIVE_TIME—revertive time
<ul style="list-style-type: none"> <li>0.5 to 12.0</li> </ul>	Revertive time is 0.5 to 12.0 minutes
<b>NAME</b>	Port name. String
<b>SOAK</b>	Integer. Defaults to 8
<b>CMDMDE</b>	Command mode Parameter type is CMDMDE—forces the system to execute a given command regardless of any standing conditions. Normal mode is the default behavior for all commands but you can specify FRCD to force the system to override a state where the command would normally be denied
<ul style="list-style-type: none"> <li>FRCD</li> </ul>	Force the system to override a state where the command would normally be denied
<ul style="list-style-type: none"> <li>NORM</li> </ul>	Execute the command normally. Do not override any conditions that might make the command fail

**Table 11-31 ED-OMS Input Parameters (continued)**

Parameter and Values	Description
<b>PST</b>	Primary state Parameter type is PST—indicates the current overall service condition of an entity
• IS	In service
• OOS	Out of service
<b>SST</b>	Secondary state Parameter type is SST—provides additional information pertaining to PST and PSTQ
• AINS	Automatic in service
• DSBLD	Disabled
• LPBK	Loopback
• MEA	Mismatch of equipment and attributes
• MT	Maintenance mode
• OOG	Out of group
• SWDL	Software downloading
• UAS	Unassigned
• UEQ	Unequipped

## 11.33 ED-OSC

Edit Optical Service Channel (OSC)

### Usage Guidelines

Cisco ONS 15454

This command edits the OSC (optical service channel) group attributes.

DWDM

Provisioning

Related Commands	DLT-LNK-<MOD2O>	ED-WDMANS	RTRV-FFP-OCH
	DLT-LNKTERM	ED-WLEN	RTRV-LNK-<MOD2O>
	DLT-OSC	ENT-LNK-<MOD2O>	RTRV-LNKTERM
	DLT-WLEN	ENT-LNKTERM	RTRV-NE-WDMANS
	ED-DWDM	ENT-OSC	RTRV-OCH
	ED-FFP-OCH	ENT-WLEN	RTRV-OMS
	ED-LNK-<MOD2O>	OPR-LASER-OTS	RTRV-OSC
	ED-LNKTERM	OPR-PROTNSW-OCH	RTRV-OTS
	ED-OCH	OPR-SLV-WDMANS	RTRV-PROTNSW-OCH
	ED-OMS	OPR-WDMANS	RTRV-SLV-WDMANS
	ED-OTS	RLS-LASER-OTS	RTRV-TRC-OCH
	ED-SLV-WDMANS	RLS-PROTNSW-OCH	RTRV-WDMANS
	ED-TRC-OCH	RTRV-DWDM	RTRV-WLEN

---

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

---

```
ED-OSC:PENNGROVE:OSC-1:114:::RINGID=1,NODEID=10;
```

---

**Table 11-32 ED-OSC Input Parameters**

Parameter and Values	Description
<b>AID</b>	Access identifier from the <a href="#">“25.1.19 OSC” section on page 25-33</a>
<b>RINGID</b>	The OSC ring ID of the NE, up to six characters. Valid characters are A-Z and 0-9. String. Default value is “# of AID OSC-#”. Integer
<b>NODEID</b>	The OSC node ID of the NE. NODEID ranges from 0 to 31. Integer

## 11.34 ED-OTS

Edit Optical Transport Section (OTS)

### Usage Guidelines

Cisco ONS 15454

This command edits the attributes (service parameters) and state of an OTS facility.

---

DWDM

---

Provisioning



Related Commands	DLT-LNK-<MOD2O>	ENT-LNK-<MOD2O>	RTRV-LNK-<MOD2O>
	ED-DWDM	OPR-LASER-OTS	RTRV-OCH
	ED-FFP-OCH	OPR-PROTNSW-OCH	RTRV-OMS
	ED-LNK-<MOD2O>	RLS-LASER-OTS	RTRV-OTS
	ED-OCH	RLS-PROTNSW-OCH	RTRV-PROTNSW-OCH
	ED-OMS	RTRV-DWDM	RTRV-TRC-OCH
	ED-TRC-OCH	RTRV-FFP-OCH	

ED-OTS:[<TID>]:<AID>:<CTAG>:::[RDIRN=<RDIRN>],[VOAATTN=<VOAATTN>],[VOAPWR=<VOAPWR>],[OFFSET=<OFFSET>],[CALTILT=<CALTILT>],[OSRI=<OSRI>],[AMPLMODE=<AMPLMODE>],[CHPOWER=<CHPOWER>],[EXPGAIN=<EXPGAIN>],[NAME=<NAME>],[SOAK=<SOAK>],[CMDMDE=<CMDMDE>]:<PST>,[<SST>];

ED-OTS:PENNGROVE:LINE-6-1:114:::RDIRN=W-E,VOAATTN=5.0,VOAPWR=10.0,OFFSET=0.0,CALTILT=0.0,OSRI=N,AMPLMODE=GAIN,CHPOWER=10.0,EXPGAIN=-5.0,NAME="OTS PORT",SOAK=8,CMDMDE=CMDMDE:IS,AINS;

**Table 11-33 ED-OTS Input Parameters**

Parameter and Values	Description
<b>AID</b>	Access identifier from the <a href="#">“25.1.16 LINE” section on page 25-31</a>
<b>RDIRN</b>	Ring directionality of the optical line Parameter type is RDIRN_MODE—the optical ring directionality
<ul style="list-style-type: none"> <li>E-W</li> <li>W-E</li> </ul>	<p>The direction of the signal is from east to west (clockwise)</p> <p>The direction of the signal is from west to east (counterclockwise)</p>
<b>VOAATTN</b>	The value of calibrated attenuation for the VOA expressed in dBm. The range is 0.0 to +30.0. Float
<b>VOAPWR</b>	The value of calibrated output power that the VOA is going to set as a result of its attenuation. Float
<b>OFFSET</b>	The calibration value of the optical power added to the calculated reference value. Defaults to 0 dBm. Float
<b>CALTILT</b>	The amplifier calibration tilt offset to be added to the calculated reference value. Defaults to 0 dBm. Float. Optional
<b>OSRI</b>	OSRI enabled or disabled. Present only on a port where the safety is supported. Optional Parameter type is ON_OFF—disable or enable an attribute
<ul style="list-style-type: none"> <li>N</li> <li>Y</li> </ul>	<p>Disable an attribute</p> <p>Enable an attribute</p>
<b>AMPLMODE</b>	The optical amplification control mode Parameter type is AMPL_MODE—defines amplifier control mode

Table 11-33 ED-OTS Input Parameters (continued)

Parameter and Values	Description
<ul style="list-style-type: none"> <li>GAIN</li> </ul>	The amplifier always maintains a fixed gain
<ul style="list-style-type: none"> <li>POWER</li> </ul>	The amplifier maintains the output power to a fixed value
<b>CHPOWER</b>	The per channel optical power. Float
<b>EXPGAIN</b>	The gain expected value to be reached from an amplifier when the node is part of a DWDM access network. Float
<b>NAME</b>	The name of the port. String
<b>SOAK</b>	Integer. Defaults to 8
<b>CMDMDE</b>	Command mode Parameter type is CMDMDE—forces the system to execute a given command regardless of any standing conditions. Normal mode is the default behavior for all commands but you can specify FRCD to force the system to override a state where the command would normally be denied
<ul style="list-style-type: none"> <li>FRCD</li> </ul>	Force the system to override a state where the command would normally be denied
<ul style="list-style-type: none"> <li>NORM</li> </ul>	Execute the command normally. Do not override any conditions that might make the command fail
<b>PST</b>	Primary state Parameter type is PST—indicates the current overall service condition of an entity
<ul style="list-style-type: none"> <li>IS</li> </ul>	In service
<ul style="list-style-type: none"> <li>OOS</li> </ul>	Out of service
<b>SST</b>	Secondary state Parameter type is SST—provides additional information pertaining to PST and PSTQ
<ul style="list-style-type: none"> <li>AINS</li> </ul>	Automatic in service
<ul style="list-style-type: none"> <li>DSBLD</li> </ul>	Disabled
<ul style="list-style-type: none"> <li>LPBK</li> </ul>	Loopback
<ul style="list-style-type: none"> <li>MEA</li> </ul>	Mismatch of equipment and attributes
<ul style="list-style-type: none"> <li>MT</li> </ul>	Maintenance mode
<ul style="list-style-type: none"> <li>OOG</li> </ul>	Out of group
<ul style="list-style-type: none"> <li>SWDL</li> </ul>	Software downloading
<ul style="list-style-type: none"> <li>UAS</li> </ul>	Unassigned
<ul style="list-style-type: none"> <li>UEQ</li> </ul>	Unequipped

## 11.35 ED-PID

Edit Password

**Usage Guidelines**

Cisco ONS 15454, 15327, 15600, 15310

This command allows a user to change his or her own password.

**Note**

- Passwords are masked for the following security commands: ACT-USER, ED-PID, ENT-USER-SECU and ED-USER-SECU. Access to a TL1 session by any means will have the password masked. The CTC Request History and Message Log will also show the masked commands. When a password-masked command is reissued by double-clicking the command from CTC Request History, the password will still be masked in the CTC Request History and Message Log. The actual password that was previously issued will be sent to the NE. To use a former command as a template only, single-click the command in CTC Request History. The command will be placed in the Command Request text box, where you can edit the appropriate fields prior to reissuing it.

- The password will not appear in the TL1 log on the NE.

- For the ED-PID command:

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

The syntax of OLDPID is not checked. The NEWPID is required to follow Telcordia standards (for example, 10 characters maximum including 1 letter, 1 number, and any one of the following characters: #, %, or +). The OLDPID must match what is in the database.

You must use the ED-USER-SECU command to change the default password for the CISCO15 superuser.

- The ED-PID command cannot be used to change the empty password to a valid password.

---

Security

---

Retrieve

**Related Commands**

ACT-USER	DLT-USER-SECU	REPT EVT SECU
ALW-MSG-SECU	ED-CMD-SECU	REPT EVT SESSION
ALW-USER-SECU	ED-USER-SECU	RTRV-CMD-SECU
CANC	ENT-USER-SECU	RTRV-DFLT-SECU
CANC-USER	INH-MSG-SECU	RTRV-USER-SECU
CANC-USER-SECU	INH-USER-SECU	SET-ATTR-SECUDFLT
CLR-COND-SECU	REPT ALM SECU	

---

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

---

```
ED-PID:CISCO:UID:123::OLDPWD,NEWPWD;
```

**Table 11-34 ED-PID Input Parameters**

Parameter and Values	Description
UID	User identifier. Up to 10 alphanumeric characters. String
OLDPID	The user's old password. Up to 10 alphanumeric characters. Passwords are encrypted and will appear as asterisks (*). String
NEWPID	The user's new password. Up to 10 alphanumeric characters. Passwords are encrypted and will appear as asterisks (*). String

## 11.36 ED-POS

Edit Packet Over SONET

### Usage Guidelines

Cisco ONS 15454, ONS 15310-CL, ONS 15600

This command edits the back end port information for the Ethernet card when the back end port is working in POS mode. The default values for all optional parameters are NE default values. These values might not be the current value for a parameter. In order to obtain the current value, issue the RTRV-XX command to retrieve them. ED-POS cannot set ENCAP and PST/SST.



### Note

This command is supported for the ONS 15454 CE-100T-8 card, the ONS 15310-CL ML-100T-8 and CE-100T-8 cards and the ONS 15600 ASAP card.

Ports

Provisioning

**Related Commands**


---

DLT-<MOD1PAYLOAD>	RLS-PROTNSW-<OCN_TYPE>
DLT-FFP-<MOD2DWDMPAYLOAD>	RMV-<MOD2>
DLT-FFP-<OCN_TYPE>	RST-<MOD2>
ED-<GIGE_TYPE>	RTRV-<MOD1FCPAYLOAD>
ED-<MOD1FCPAYLOAD>	RTRV-<MOD1FICONPAYLOAD>
ED-<MOD1FICONPAYLOAD>	RTRV-<MOD2DWDMPAYLOAD>
ED-<MOD2DWDMPAYLOAD>	RTRV-<OCN_TYPE>
ED-<OCN_TYPE>	RTRV-10GIGE
ED-ALS	RTRV-ALMTH-<MOD2>
ED-DS1	RTRV-ALS
ED-EC1	RTRV-DS1
ED-FFP-<MOD2DWDMPAYLOAD>	RTRV-EC1
ED-FFP-<OCN_TYPE>	RTRV-FAC
ED-FSTE	RTRV-FFP-<MOD2DWDMPAYLOAD>
ED-G1000	RTRV-FFP-<OCN_TYPE>
ED-GFP	RTRV-FSTE RTRV-G1000
ED-HDLC	RTRV-GFP
ED-T1	RTRV-GIGE
ED-T3	RTRV-HDLC
ED-TRC-<MOD2DWDMPAYLOAD>	RTRV-PM-<MOD2>
ED-TRC-<OCN_TYPE>	RTRV-PMSCHED-<MOD2>
ENT-<MOD1PAYLOAD>	RTRV-POS
ENT-FFP-<MOD2DWDMPAYLOAD>	RTRV-PROTNSW-<MOD2DWDMPAYLOAD>
ENT-FFP-<OCN_TYPE>	RTRV-PROTNSW-<OCN_TYPE>
INIT-REG-<MOD2>	RTRV-T1
OPR-ALS	RTRV-T3
OPR-LPBK-<MOD2>	RTRV-TH-<MOD2>
OPR-PROTNSW-<MOD2DWDMPAYLOAD>	RTRV-TRC-<MOD2DWDMPAYLOAD>
OPR-PROTNSW-<OCN_TYPE>	RTRV-TRC-<OCN_TYPE>
REPT PM <MOD2>	SCHED-PMREPT-<MOD2>
RLS-LPBK-<MOD2>	SET-ALMTH-<MOD2>
RLS-PROTNSW-<MOD2DWDMPAYLOAD>	SET-TH-<MOD2>

---

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

ED-POS:CISCO:VFAC-2-0:123:::ENCAP=HDLC,NAME=NAME,CMDMDE=CMDMDE,  
SOAK=32:IS,AINS;

Table 11-35 ED-POS Input Parameters

Parameter and Values	Description
<b>AID</b>	Access identifier from the “25.1.14 FACILITY” section on page 25-28
<b>ENCAP</b>	Encapsulation Parameter type is ENCAP—frame encapsulation type
• GFP_F	GFP frame mode
• GFP_T	GFP transparent mode
• HDLC	HDLC frame mode
• HDLC_LEX	HDLC LAN extension frame mode
• HDLC_X86	HDLC X.86 frame mode
<b>NAME</b>	Port name. String
<b>CMDMDE</b>	Command Mode. The FRCD mode of operation is applicable to delete a VCAT member cross-connect from IS-NR or OOS-AU,AINS service state Parameter type is CMDMDE—forces the system to execute a given command regardless of any standing conditions. Normal mode is the default behavior for all commands but you can specify FRCD to force the system to override a state where the command would normally be denied
• FRCD	Force the system to override a state where the command would normally be denied
• NORM	Execute the command normally. Do not override any conditions that might make the command fail
<b>SOAK</b>	OOS-AINS to IS transition soak time as measured in 15 minute intervals, so a value of 4 translates to a soak time of 1 hour. The allowable range is 0 to 192 intervals (maximum of 48 hours). Integer
<b>PST</b>	Primary state Parameter type is PST—indicates the current overall service condition of an entity
• IS	In service
• OOS	Out of service
<b>SST</b>	Secondary state Parameter type is SST—provides additional information pertaining to PST and PSTQ
• AINS	Automatic in service
• DSBLD	Disabled
• LPBK	Loopback
• MEA	Mismatch of equipment and attributes
• MT	Maintenance mode

**Table 11-35 ED-POS Input Parameters (continued)**

Parameter and Values	Description
• OOG	Out of group
• SWDL	Software downloading
• UAS	Unassigned
• UEQ	Unequipped

## 11.37 ED-PROTOCOL

Edit Protocol

### Usage Guidelines

Cisco ONS 15454, 15327, 15600, 15310

This command is used to enable/disable a protocol/service that is supported in the NE. Valid protocols include shell/file system access (SHELL), EMS, TL1 and SNMP.



#### Note

If the AID is TL1 the command will be denied because TL1 users are not allowed to change the setting for TL1 protocol.



#### Note

If the AID is SNMP the SECURE PROTOCOLSTAT is not supported. SNMP can only be enabled or disabled. To enable SNMP, set PROTOCOLSTAT to UNSECURE.

Security

Superuser

### Related Commands

ACT-USER	ED-CMD-SECU	REPT EVT SECU
ALW-CONSOLE-PORT	ED-PID	REPT EVT SESSION
ALW-MSG-SECU	ED-USER-SECU	RTRV-AUDIT-LOG
ALW-USER-SECU	ENT-USER-SECU	RTRV-CMD-SECU
CANC	INH-CONSOLE-PORT	RTRV-CONSOLE-PORT
CANC-USER	INH-MSG-SECU	RTRV-DFLT-SECU
CANC-USER-SECU	INH-USER-SECU	RTRV-USER-SECU
CLR-COND-SECU	REPT ALM SECU	SET-ATTR-SECUDFLT
DLT-USER-SECU		

ED-PROTOCOL:[<TID>]:<PROTOCOLAID>:<CTAG>::<PROTOCOLSTAT>;

---

ED-PROTOCOL:CISCONODE:EMS:123::SECURE;

---

**Table 11-36** ED-PROTOCOL Input Parameters

Parameter and Values	Description
<b>PROTOCOLAID</b>	The protocol/service to which the command pertains Parameter type is PROTOCOLAID—AID for protocol/service
<ul style="list-style-type: none"> <li>EMS</li> </ul>	CTC/CTM protocol/service
<ul style="list-style-type: none"> <li>SHELL</li> </ul>	Shell/file system access protocol
<ul style="list-style-type: none"> <li>SNMP</li> </ul>	SNMP protocol/service
<ul style="list-style-type: none"> <li>TL1</li> </ul>	TL1 protocol service
<b>PROTOCOLSTAT</b>	Identifies the status of the protocol/service Parameter type is PROTOCOLSTAT—status of the protocol
<ul style="list-style-type: none"> <li>DISABLED</li> </ul>	The protocol cannot be used
<ul style="list-style-type: none"> <li>SECURE</li> </ul>	The protocol is enabled and communications using the protocol are sure, for example, through SSH. Not applicable for SNMP protocols
<ul style="list-style-type: none"> <li>UNSECURE</li> </ul>	The protocol is enabled but communication is not secure, for example, through telnet

## 11.38 ED-ROLL-<MOD\_PATH>

Edit Roll (STS1, STS12C, STS192C, STS24C, STS3C, STS48C, STS6C, STS9C, VT1, VT2)

### Usage Guidelines

Cisco ONS 15454, ONS 15327, ONS 15600

This command forces a rolling operation. Force attempts to force a valid signal to complete the rolling operation.

See [Table 27-1 on page 27-1](#) for supported modifiers by platform.



### Note

STS18C and STS36C are not supported for this command in this release.

### Category

Bridge and Roll

### Security

Provisioning



**Related Commands**

DLT-BULKROLL-<MOD_PATH>	OPR-PROTNSW-<PATH>
DLT-CRS-<PATH>	RLS-PROTNSW-<PATH>
DLT-ROLL-<MOD_PATH>	RTRV-<PATH>
ED-<MOD_PATH>	RTRV-BULKROLL-<MOD_PATH>
ED-BULKROLL-<MOD_PATH>	RTRV-CRS-<PATH>
ED-CRS-<PATH>	RTRV-NE-PATH
ED-NE-PATH	RTRV-PROTNSW-<PATH>
ENT-BULKROLL-<MOD_PATH>	RTRV-PTHTRC-<PATH>
ENT-CRS-<PATH>	RTRV-ROLL-<MOD_PATH>
ENT-ROLL-<MOD_PATH>	

**Input Format**

ED-ROLL-<MOD\_PATH>:[<TID>]:<FROM>,<TO>:<CTAG>[:::CMDMDE=<CMDMDE>];

**Input Example**

ED-ROLL-ST1:CISCO:STS-1-1-1,STS-2-1-1:1:::CMDMDE=FRCD;

**Input Parameters**

**Table 11-37 ED-ROLL-<MOD\_PATH> Input Parameters**

Parameter and Values	Description
FROM	Source access identifier from the “ <a href="#">25.1.10 CrossConnectId1</a> ” section on page 25-20. It is one of the termination points (legs) of the existing cross-connection. If the existing cross-connection is one-way, then this termination point (leg) should be the FROM-AID termination point. Otherwise, FROM is non-significant. FROM and TO should be entered as they are entered in the ENT-CRS command. You can issue RTRV-CRS command, and use the response for FROM and TO parameters
TO	Destination access identifier from the “ <a href="#">25.1.10 CrossConnectId1</a> ” section on page 25-20. It is one of the termination points (legs) of the existing cross-connection. If the existing cross-connection is one-way, then this termination point (leg) should be the TO-AID termination point. Otherwise, the TO is non-significant. FROM and TO should be entered as they are entered in the ENT-CRS command. You can issue RTRV-CRS command, and use the response for FROM and TO parameters
CMDMDE	Command execution mode. Defaults to NORM.  <b>Note</b> CMDMDE can only go from NORM to FRCD (cannot go from FRCD to NORM). CMDMDE cannot be set to NORM using this command  Parameter type is CMDMDE—forces the system to execute a given command regardless of any standing conditions. Normal mode is the default behavior for all commands but you can specify FRCD to force the system to override a state where the command would normally be denied

Table 11-37 ED-ROLL-&lt;MOD\_PATH&gt; Input Parameters (continued)

Parameter and Values	Description
<ul style="list-style-type: none"> <li>FRC</li> </ul>	Force the system to override a state where the command would normally be denied
<ul style="list-style-type: none"> <li>NORM</li> </ul>	Execute the command normally. Do not override any conditions that might make the command fail

## 11.39 ED-SLV-WDMANS

Edit Span Loss Verification Wavelength Division Multiplexing Automatic Node Set Up

### Usage Guidelines

Cisco ONS 15454

This command edits the expected span loss verification.

DWDM

Maintenance

### Related Commands

DLT-LNK-<MOD2O>	ED-WDMANS	RTRV-FFP-OCH
DLT-LNKTERM	ED-WLEN	RTRV-LNK-<MOD2O>
DLT-OSC	ENT-LNK-<MOD2O>	RTRV-LNKTERM
DLT-WLEN	ENT-LNKTERM	RTRV-NE-WDMANS
ED-DWDM	ENT-OSC	RTRV-OCH
ED-FFP-OCH	ENT-WLEN	RTRV-OMS
ED-LNK-<MOD2O>	OPR-LASER-OTS	RTRV-OSC
ED-LNKTERM	OPR-PROTNSW-OCH	RTRV-OTS
ED-OCH	OPR-SLV-WDMANS	RTRV-PROTNSW-OCH
ED-OMS	OPR-WDMANS	RTRV-SLV-WDMANS
ED-OSC	RLS-LASER-OTS	RTRV-TRC-OCH
ED-OTS	RLS-PROTNSW-OCH	RTRV-WDMANS
ED-TRC-OCH	RTRV-DWDM	RTRV-WLEN

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

```
ED-SLV-WDMANS:VA454-22:WDMANS-E:116:::HIGHSLVEXP=10.0,LOWSLVEXP=5.0;
```

**Table 11-38 ED-SLV-WDMANS Input Parameters**

Parameter and Values	Description
AID	Access identifier from the “25.1.29 WDMANS” section on page 25-42
HIGHSLVEXP	The high range value of the expected span loss verification. Float
LOWSLVEXP	The low range value of the expected span loss verification. Float

## 11.40 ED-SYNCN

Edit Synchronization

### Usage Guidelines

Cisco ONS 15454, 15327, 15600, 15310

This command edits the synchronization reference list used to determine the sources for the NE's reference clock and the BITS output clock. For each clock, up to three synchronization sources might be specified (for example, PRIMARY, SECOND, THIRD). To view or edit the system timing mode, use the RTRV-NE-SYNCN or ED-NE-SYNCN commands.



### Note

To retrieve/set the timing mode, SSM message Set or Quality of RES information, use the RTRV-NE-SYNCN and ED-NE-SYNCN commands.

Synchronization

Provisioning

### Related Commands

ED-BITS	REPT EVT BITS	RTRV-BITS
ED-NE-SYNCN	REPT EVT SYNCN	RTRV-COND-BITS
OPR-SYNCNSW	RLS-SYNCNSW	RTRV-COND-SYNCN
REPT ALM BITS	RTRV-ALM-BITS	RTRV-NE-SYNCN
REPT ALM SYNCN	RTRV-ALM-SYNCN	RTRV-SYNCN

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

```
ED-SYNCN:BOYES:SYNC-NE:112:::PRI=INTERNAL,SEC=INTERNAL,THIRD=INTERNAL;
```

**Table 11-39 ED-SYNCN Input Parameters**

Parameter and Values	Description
<b>AID</b>	Access identifier from the “25.1.25 SYNC_REF” section on page 25-40
<b>PRI</b>	Primary reference of the synchronization from the “25.1.24 SYN_SRC” section on page 25-39
<b>SEC</b>	Secondary reference of the synchronization from the “25.1.24 SYN_SRC” section on page 25-39
<b>THIRD</b>	Third reference of the synchronization from the “25.1.24 SYN_SRC” section on page 25-39

## 11.41 ED-T1

Edit Digital Signal Facility

### Usage Guidelines

Cisco ONS 15454, ONS 15327, ONS 15310-CL

This command edits the attributes related to a DS1/T1 port.



#### Note

- The T1 facilities on the ONS 15327 and ONS 15310-CL are on the XTC/15310-CL-CTX card.
- This command is not allowed if the card is a protecting card.
- If sending this command to edit TACC and any other attribute(s), and the port having the cross-connection, the (Parameters Not compatible) error message will be returned.
- Editing TACC using an ED-xxx command is only allowed when there is no circuit/cross-connection on this port and the port/VT does not have a test access point (TAP or TACC number). Otherwise, an error message (for example, VT in Use) will be returned.
- TACC creation will also be denied on the protect ports/cards.
- AUTO-PROV is not supported.
- The AISONLPBK and RETIME options are applicable only to the ONS 15310-CL and the DS2-E1-56 card on the ONS 15454.
- The default values for all optional parameters are NE default values. These values might not be the current value for a parameter. Use the RTRV-XX commands to retrieve the current values.
- The parameters: SYNCMAP, ADMSSM, VTMAP and INHFELPBK are only supported on the DS1-E1-56 card (ONS 15454).

Ports

Provisioning

**Related Commands**

DLT-<MOD1PAYLOAD>	RLS-PROTNSW-<OCN_TYPE>
DLT-FFP-<MOD2DWDMPAYLOAD>	RMV-<MOD2>
DLT-FFP-<OCN_TYPE>	RST-<MOD2>
ED-<GIGE_TYPE>	RTRV-<MOD1FCPAYLOAD>
ED-<MOD1FCPAYLOAD>	RTRV-<MOD1FICONPAYLOAD>
ED-<MOD1FICONPAYLOAD>	RTRV-<MOD2DWDMPAYLOAD>
ED-<MOD2DWDMPAYLOAD>	RTRV-<OCN_TYPE>
ED-<OCN_TYPE>	RTRV-10GIGE
ED-ALS	RTRV-ALMTH-<MOD2>
ED-DS1	RTRV-ALS
ED-EC1	RTRV-DS1
ED-FFP-<MOD2DWDMPAYLOAD>	RTRV-EC1
ED-FFP-<OCN_TYPE>	RTRV-FAC
ED-FSTE	RTRV-FFP-<MOD2DWDMPAYLOAD>
ED-G1000	RTRV-FFP-<OCN_TYPE>
ED-GFP	RTRV-FSTE RTRV-G1000
ED-HDLC	RTRV-GFP
ED-POS	RTRV-GIGE
ED-T3	RTRV-HDLC
ED-TRC-<MOD2DWDMPAYLOAD>	RTRV-PM-<MOD2>
ED-TRC-<OCN_TYPE>	RTRV-PMSCHED-<MOD2>
ENT-<MOD1PAYLOAD>	RTRV-POS
ENT-FFP-<MOD2DWDMPAYLOAD>	RTRV-PROTNSW-<MOD2DWDMPAYLOAD>
ENT-FFP-<OCN_TYPE>	RTRV-PROTNSW-<OCN_TYPE>
INIT-REG-<MOD2>	RTRV-T1
OPR-ALS	RTRV-T3
OPR-LPBK-<MOD2>	RTRV-TH-<MOD2>
OPR-PROTNSW-<MOD2DWDMPAYLOAD>	RTRV-TRC-<MOD2DWDMPAYLOAD>
OPR-PROTNSW-<OCN_TYPE>	RTRV-TRC-<OCN_TYPE>
REPT PM <MOD2>	SCHED-PMREPT-<MOD2>
RLS-LPBK-<MOD2>	SET-ALMTH-<MOD2>
RLS-PROTNSW-<MOD2DWDMPAYLOAD>	SET-TH-<MOD2>

ED-T1:[<TID>]:<AID>:<CTAG>:::[LINECDE=<LINECDE>],[FMT=<FMT>],[LBO=<LBO>],[TACC=<TACC>],[TAPTYPE=<TAPTYPE>],[SOAK=<SOAK>],[SFBER=<SFBER>],[SDBER=<SDBER>],[SYNCSMSG=<SYNCSMSG>],[SENDDUS=<SENDDUS>],[RETIME=<RETIME>],[NAME=<NAME>],[MODE=<MODE>],[SYNCSMAP=<SYNCSMAP>],[ADMSSM=<ADMSSM>],[VTMAP=<VTMAP>],[INHFELPBK=<INHFELPBK>],[AISONLPBK=<AISONLPBK>],[CMDMDE=<CMDMDE>],[AISVONAI=<AISVONAI>]:[<PST>[,<SST>]];

```
ED-T1:CISCO:FAC-2-1:1223:::LINECDE=AMI,FMT=ESF,LBO=0-131,TACC=8,
TAPTYPE=SINGLE,SOAK=10,SFBER=1E-4,SDBER=1E-6,SYNCSMSG=Y,SENDDUS=Y,
RETIME=Y,NAME="T1PORT",MODE=FDL,SYNCSMAP=ASYNCS,ADMSSM=STU,
VTMAP=GR253,INHFELPBK=N,AISONLPBK=AIS_ON_LPBK_ALL,CMDMDE=CMDMDE,
AISVONAIIS=Y:IS,AINS;
```

**Table 11-40 ED-T1 Input Parameters**

Parameter and Values	Description
<b>AID</b>	Access identifier from the <a href="#">“25.1.14 FACILITY”</a> section on page 25-28
<b>LINECDE</b>	Line code Parameter type is LINE_CODE—line code
<ul style="list-style-type: none"> <li>• AMI</li> </ul>	Line code value is AMI
<ul style="list-style-type: none"> <li>• B8ZS</li> </ul>	Line code value is B8ZS (bipolar with three-zero substitution)
<b>FMT</b>	Digital signal frame format Parameter type is FRAME_FORMAT—frame format for a T1 port
<ul style="list-style-type: none"> <li>• D4</li> </ul>	Frame format is D4
<ul style="list-style-type: none"> <li>• ESF</li> </ul>	Frame format is ESF
<ul style="list-style-type: none"> <li>• UNFRAMED</li> </ul>	Frame format is unframed
<b>LBO</b>	Line buildout settings. Integer Parameter type is LINE_BUILDOUT—Line buildout
<ul style="list-style-type: none"> <li>• 0–131</li> </ul>	Line buildout range is 0–131
<ul style="list-style-type: none"> <li>• 132–262</li> </ul>	Line buildout range is 132–262
<ul style="list-style-type: none"> <li>• 263–393</li> </ul>	Line buildout range is 263–393
<ul style="list-style-type: none"> <li>• 394–524</li> </ul>	Line buildout range is 394–524
<ul style="list-style-type: none"> <li>• 525–655</li> </ul>	Line buildout range is 525–655
<b>TACC</b>	TAP number within a range of 0 to 999. Indicates whether the digroup being provisioned is to be used as a test access digroup. When TACC is 0 (zero), the TAP is deleted. Default is N. Integer
<b>TAPTYPE</b>	TAP type. Defaults to DUAL Parameter type is TAPTYPE—test access point type
<ul style="list-style-type: none"> <li>• DUAL</li> </ul>	Dual FAD
<ul style="list-style-type: none"> <li>• SINGLE</li> </ul>	Single FAD
<b>SOAK</b>	OOS-AINS to IS transition soak time as measured in 15-minute intervals. A value of 4 equals a soak time of 1 hour. The allowable range is 0 to 192 intervals (maximum of 48 hours). Integer
<b>SFBER</b>	The port signal failure threshold Parameter type is SF_BER—the threshold for declaring signal failure on a facility or path

Table 11-40 ED-T1 Input Parameters (continued)

Parameter and Values	Description
• 1E-3	SFBER is 1E-3
• 1E-4	SFBER is 1E-4
• 1E-5	SFBER is 1E-5
<b>SDBER</b>	Port signal degrade threshold Parameter type is SD_BER—the threshold for declaring signal degrade on a facility or path
• 1E-5	SDBER is 1E-5
• 1E-6	SDBER is 1E-6
• 1E-7	SDBER is 1E-7
• 1E-8	SDBER is 1E-8
• 1E-9	SDBER is 1E-9
<b>SYNCMSG</b>	Synchronization status messaging is enabled or disabled on the T1 facility. <b>Note</b> For ONS 15310-CL, SYNCMSG defaults to N. SYNCMSG is not supported on the ONS 15454 or ONS 15327 Parameter type is YES_NO—whether the user's password is about to expire, the user is logged into the NE, or the user is locked out of the NE
• NO	No
• YES	Yes
<b>SENDDUS</b>	The facility will send the DUS (Don't use for Synchronization) value as the sync status message for that facility <b>Note</b> For ONS 15310-CL, SENDDUS is optional and defaults to N. SENDDUS is not supported on the ONS 15454 or ONS 15327 Parameter type is YES_NO—whether the user's password is about to expire, the user is logged into the NE, or the user is locked out of the NE
• NO	No
• YES	Yes
<b>RETIME</b>	Indicates if retiming is needed. <b>Note</b> For ONS 15310-CL, RETIME is optional and defaults to N. RETIME is not supported on the ONS 15454 or ONS 15327 Parameter type is YES_NO—whether the user's password is about to expire, the user is logged into the NE, or the user is locked out of the NE
• NO	No
• YES	Yes
<b>NAME</b>	Name. String

**Table 11-40 ED-T1 Input Parameters (continued)**

Parameter and Values	Description
MODE	Mode. Default value is FDL Parameter type is DS1MODE—the DS1 path mode of the DS3XM-12 card
• ATT	Indicates the DS1 path of the DS3XM-12 is in AT&T 54016 mode
• FDL	Indicates the DS1 path of the DS3XM-12 is in FDL T1-403 mode
<b>SYNCMAP</b>	The synchronous mapping for the DS1 facility. Defaults to ASYNC. Only supported on ONS 15454. Parameter type is SYNCMAP—synchronous mapping type
• ASYNC	Asynchronous
• BYTE	Mapping in byte
• JBYTE	Mapping in jbyte
<b>ADMSSM</b>	The administrative synchronization status message. Only supported on the ONS 15454. Defaults to STU Parameter type is SYNC_CLOCK_REF_QUALITY_LEVEL—clock source quality level
• DUS	Do Not Use For Synchronization
• PRS	Primary Reference Source, Stratum 1 Traceable
• RES	Reserved For Network Synchronization Use
• SMC	SONET Minimum Clock Traceable
• ST2	Stratum 2 Traceable
• ST3	Stratum 3 Traceable
• ST3E	Stratum 3E Traceable
• ST4	Stratum 4 Traceable
• STU	Synchronized, Traceability Unknown
• TNC	Transit Node Clock (2nd Generation Only)
<b>VTMAP</b>	The port to VT mapping type for that particular STS. Only supported on ONS 15454. Defaults to GR253 Parameter type is VTMAP—VT mapping
• GR253	Mapping based on GR253
• INDUSTRY	Mapping based on industry standard
<b>INHFELPBK</b>	Indicates whether far end loopbacks are inhibited on the facility. Only supported on ONS 15454. Defaults to N Parameter type is ON_OFF—disable/enable an attribute
• N	Disable an attribute
• Y	Enable an attribute



Table 11-40 ED-T1 Input Parameters (continued)

Parameter and Values	Description
<b>AISONLPBK</b>	Defaults to AIS_ON_LPBK_ALL Parameter type is AIS_ON_LPBK—Indicates if AIS is sent on a loopback
• AIS_ONLPBK_FACILITY	AIS is sent on facility loopbacks
• AIS_ON_LPBK_ALL	AIS is sent on all loopbacks
• AIS_ON_LPBK_OFF	AIS is not sent on loopbacks
• AIS_ON_LPBK_TERMINAL	AIS is sent on terminal loopbacks
<b>CMDMDE</b>	Command mode Parameter type is CMDMDE—forces the system to execute a given command regardless of any standing conditions. Normal mode is the default behavior for all commands but you can specify FRCD to force the system to override a state where the command would normally be denied
• FRCD	Force the system to override a state where the command would normally be denied
• NORM	Execute the command normally. Do not override any conditions that might make the command fail
<b>AISVONAIS</b>	Defaults to N Parameter type is ON_OFF—disable/enable an attribute
• N	Disable an attribute
• Y	Enable an attribute
<b>PST</b>	Primary state Parameter type is PST—indicates the current overall service condition of an entity
• IS	In service
• OOS	Out of service
<b>SST</b>	Secondary state Parameter type is SST—provides additional information pertaining to PST and PSTQ
• AINS	Automatic in service
• DSBLD	Disabled
• LPBK	Loopback
• MEA	Mismatch of equipment and attributes
• MT	Maintenance mode
• OOG	Out of group
• SWDL	Software downloading
• UAS	Unassigned
• UEQ	Unequipped

## 11.42 ED-T3

Edit Digital Signal Facility

### Usage Guidelines

Cisco ONS 15454, ONS 15327, ONS 15310-CL

This command edits the attributes related to a DS3/T3 port and DS3I card.



### Note

- The T3 facilities on the ONS 15327 and ONS 15310-CL are on the XTC/15310-CL-CTX card.
- This command is not allowed if the card is a protecting card.
- Both FMT and Line code are not supported for T3/DS3 facility. They are supported on both the DS3XM and DS3E card. The unframed value of the framing format is only supported on the DS3E facility.
- If sending this command to edit TACC and any other attribute(s), and the port having the cross-connection or the port/VT has a test access point (TAP or TACC number), the (Parameters Not compatible) error message will be returned.
- Editing TACC using an ED-xxx command is only allowed when there is no circuit/cross-connection on the port and the port/VT does not have a test access point (TAP or TACC number). Otherwise, an error message (VT in Use) will be returned.
- TACC creation will also be denied on the protect ports/cards.
- Automatic application of loopbacks originating from the far end can be initiated on the T3 ports of a DS3E, DS3NE, or DS3XM card.
- CTC can set the FMT attribute of a DS3(N)E line to AUTOPROVISION to set the framing based on the framing that is coming in. The result is the FMT field being blanked out for a few seconds or blanked out indefinitely for a preprovisioned DS3(N)E card in CTC. The AUTOPROVISION is not considered a valid DS3 framing type. It is only used to trigger an autosense and subsequent auto provisioning of a valid DS3 framing type (unframed, M13, C-BIT). TL1 does not have the AUTOPROVISION mode. TL1 maps/returns the AUTOPROVISION mode to the unframed framing type.
- For the DS3XM-12 card, the DS3/T3 configurable attributes (PM, TH, alarm, etc.) only apply on the ported ports (1-12) and the DS3-mapped (even) portless ports in xxx-xxx-T3 commands. If you attempt to provision or retrieve DS3/T3 attributes on the VT-mapped (odd) portless port in xxx-xxx-T3 commands, an error message will be returned.
- For the DS3XM-12 card, if the admin state is already set for a portless port the state setting operation over its associated ported port is an invalid operation.
- The test set physical connection set up through ED-T3/DS1/STS1/VT1 of the DS3XM-12 card is only allowed on the physical front ports (PORTED ports, ports 1-12), which are the monitoring ports.
  - The monitoring test access ports follow the common rules for the other cards. For example, ED-T3 on port 2 (FAC-6-2) with a TACC number (8), the next port, port 3 (FAC-6-3) is used as the monitoring point also. The RTRV-T3 on both port-2 and port-3 return the same TACC number (8) being used to monitor the cross-connection end (A-B). The last port (port 12) is not allowed to set-up a physical connection with the test set because there is no next available port to be the monitoring port.

- The TACC disconnection (DISC-TACC) command and the test access mode change (CHG-TACC) command follow the same requirement as in note 11a. above, but applied on the ported ports of the DS3XM-12 card.
  - The test access connection set-up (CONN-TACC) command has monitored points which can be portless ports. This command is applied on both ported and portless ports of the DS3XM-12 card.
  - If the entity has a TACC connection, the entity is not allowed to have ported or portless STS/VT cross-connection (or circuit) provisioning on the DS3XM-12 card.
  - ED-T3 cannot be used to create TAPs on the DS3I card on the SONET platform because the DS3I card only supports STS3C TAPs.
  - You cannot use this command to change the default provisioning on Slots 3 and 15 for the DS3-EC1-48 card.
  - The AISONLPBK is only applicable to the ONS 15310-CL.
  - The default values for all optional parameters are NE default values. These values might not be the current value for a parameter. Use the RTRV-XX command to retrieve current default values.
- 

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Ports

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Provisioning

**Related Commands**


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DLT-<MOD1PAYLOAD>	RMV-<MOD2>
DLT-FFP-<MOD2DWDMPAYLOAD>	RST-<MOD2>
DLT-FFP-<OCN_TYPE>	RTRV-<MOD1FCPAYLOAD>
ED-<GIGE_TYPE>	RTRV-<MOD1FICONPAYLOAD>
ED-<MOD1FCPAYLOAD>	RTRV-<MOD2DWDMPAYLOAD>
ED-<MOD1FICONPAYLOAD>	RTRV-<OCN_TYPE>
ED-<MOD2DWDMPAYLOAD>	RTRV-10GIGE
ED-<OCN_TYPE>	RTRV-ALMTH-<MOD2>
ED-ALS	RTRV-ALS
ED-DS1	RTRV-DS1
ED-EC1	RTRV-EC1
ED-FFP-<MOD2DWDMPAYLOAD>	RTRV-FAC
ED-FFP-<OCN_TYPE>	RTRV-FFP-<MOD2DWDMPAYLOAD>
ED-FSTE	RTRV-FFP-<OCN_TYPE>
ED-G1000	RTRV-FSTE
ED-GFP	RTRV-G1000
ED-HDLC	RTRV-GFP
ED-POS	RTRV-GIGE
ED-T1	RTRV-HDLC
ED-TRC-<MOD2DWDMPAYLOAD>	RTRV-PM-<MOD2>
ED-TRC-<OCN_TYPE>	RTRV-PMSCHED-<MOD2>
ENT-<MOD1PAYLOAD>	RTRV-POS
ENT-FFP-<MOD2DWDMPAYLOAD>	RTRV-PROTNSW-<MOD2DWDMPAYLOAD>
ENT-FFP-<OCN_TYPE>	RTRV-PROTNSW-<OCN_TYPE>
INIT-REG-<MOD2>	RTRV-T1
OPR-ALS	RTRV-T3
OPR-LPBK-<MOD2>	RTRV-TH-<MOD2>
OPR-PROTNSW-<MOD2DWDMPAYLOAD>	RTRV-TRC-<MOD2DWDMPAYLOAD>
OPR-PROTNSW-<OCN_TYPE>	RTRV-TRC-<OCN_TYPE>
REPT PM <MOD2>	SCHED-PMREPT-<MOD2>
RLS-LPBK-<MOD2>	SET-ALMTH-<MOD2>
RLS-PROTNSW-<MOD2DWDMPAYLOAD>	SET-TH-<MOD2>
RLS-PROTNSW-<OCN_TYPE>	

---

ED-T3:[<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>]:[<PST>[,<SST>]];

```
ED-T3:CISCO:FAC-1-2:123:::FMT=C-BIT,LINECDE=B3ZS,LBO=0-225,INHFELPBK=N,
TACC=8,TAPTYPE=SINGLE,SOAK=10,SFBER=1E-4,SDBER=1E-6,NAME="T3 PORT",
AISONLPBK=AIS_ON_LPBK_ALL,CMDMDE=CMDMDE:IS,AINS;
```

**Table 11-41 ED-T3 Input Parameters**

Parameter and Values	Description
<b>AID</b>	Access identifier from the <a href="#">“25.1.14 FACILITY”</a> section on page 25-28
<b>FMT</b>	Digital signal frame format. The unframed value of the framing format is only supported for the DS3E card Parameter type is DS_LINE_TYPE—DS123 line type
<ul style="list-style-type: none"> <li>• C-BIT</li> </ul>	C-BIT line type applies to the DS3XM and DS3E cards
<ul style="list-style-type: none"> <li>• M13</li> </ul>	M13 line type applies to the DS3XM and DS3E cards
<ul style="list-style-type: none"> <li>• UNFRAMED</li> </ul>	Line type is unframed. The old DS3 (L3M) and DS3CR cards can only run in unframed mode
<b>LINECDE</b>	Line code Parameter type is DS_LINE_CODE—DS123 line code
<ul style="list-style-type: none"> <li>• B3ZS</li> </ul>	Bipolar with three-zero substitution
<b>LBO</b>	Line build out settings. Integer Parameter type is E_LBO—electrical signal line buildout
<ul style="list-style-type: none"> <li>• 0–225</li> </ul>	Electrical signal line buildout range is 1–225
<ul style="list-style-type: none"> <li>• 226–450</li> </ul>	Electrical signal line buildout range is 226–450
<b>INHFELPBK</b>	Far end loopback inhibition attribute of the port. If it is Y, the automatic far end loopbacks are inhibited. It is either on or off. The system default is N. Optional Parameter type is ON_OFF—disable or enable an attribute
<ul style="list-style-type: none"> <li>• N</li> </ul>	Disable an attribute
<ul style="list-style-type: none"> <li>• Y</li> </ul>	Enable an attribute
<b>TACC</b>	TAP number within a range of 0 to 999. Indicates whether the digroup being provisioned is to be used as a test access digroup. When TACC is 0 (zero), the TAP is deleted. Default is N. Integer
<b>TAPTYPE</b>	TAP type. Defaults to DUAL Parameter type is TAPTYPE—test access point type
<ul style="list-style-type: none"> <li>• DUAL</li> </ul>	Dual FAD
<ul style="list-style-type: none"> <li>• SINGLE</li> </ul>	Single FAD
<b>SOAK</b>	OOS-AINS to IS transition soak time as measured in 15-minute intervals. A value of 4 equals a soak time of 1 hour. The allowable range is 0 to 192 intervals (maximum of 48 hours). Integer

Table 11-41 ED-T3 Input Parameters (continued)

Parameter and Values	Description
<b>SFBER</b>	The port signal failure threshold Parameter type is SF_BER—the threshold for declaring signal failure on a facility or path
• 1E-3	SFBER is 1E-3
• 1E-4	SFBER is 1E-4
• 1E-5	SFBER is 1E-5
<b>SDBER</b>	Port signal degrade threshold Parameter type is SD_BER—the threshold for declaring signal degrade on a facility or path
• 1E-5	SDBER is 1E-5
• 1E-6	SDBER is 1E-6
• 1E-7	SDBER is 1E-7
• 1E-8	SDBER is 1E-8
• 1E-9	SDBER is 1E-9
<b>NAME</b>	Name. String
<b>AISONLPBK</b>	Defaults to AIS_ON_LPBK_ALL Parameter type is AIS_ON_LPBK—Indicates if AIS is sent on a loopback
• AIS_ONLPBK_FACILITY	AIS is sent on facility loopbacks
• AIS_ON_LPBK_ALL	AIS is sent on all loopbacks
• AIS_ON_LPBK_OFF	AIS is not sent on loopbacks
• AIS_ON_LPBK_TERMINAL	AIS is sent on terminal loopbacks
<b>CMDMDE</b>	Command mode Parameter type is CMDMDE—forces the system to execute a given command regardless of any standing conditions. Normal mode is the default behavior for all commands but you can specify FRCD to force the system to override a state where the command would normally be denied
• FRCD	Force the system to override a state where the command would normally be denied
• NORM	Execute the command normally. Do not override any conditions that might make the command fail
<b>PST</b>	Primary state Parameter type is PST—indicates the current overall service condition of an entity
• IS	In service
• OOS	Out of service

**Table 11-41 ED-T3 Input Parameters (continued)**

Parameter and Values	Description
SST	Secondary state Parameter type is SST—provides additional information pertaining to PST and PSTQ
• AINS	Automatic in service
• DSBLD	Disabled
• LPBK	Loopback
• MEA	Mismatch of equipment and attributes
• MT	Maintenance mode
• OOG	Out of group
• SWDL	Software downloading
• UAS	Unassigned
• UEQ	Unequipped

## 11.43 ED-TRAPTABLE

Edit Trap Table

### Usage Guidelines

Cisco ONS 15454, 15327, 15600, 15310

This command edits a trap destination entry identified by a specific trap destination address.

System

Provisioning

### Related Commands

ACT-USER	ED-NE-SYNCN	RTRV-NE-GEN
ALW-MSG-ALL	ENT-TRAPTABLE	RTRV-NE-IPMAP
ALW-MSG-DBCHG	INH-MSG-ALL	RTRV-NE-PATH
ALW-MSG-SECU	INH-MSG-DBCHG	RTRV-NE-SYNCN
DLT-TRAPTABLE	INH-MSG-SECU	RTRV-NE-WDMANS
ED-DAT	INIT-SYS	RTRV-TOD
ED-NE-GEN	RTRV-HDR	RTRV-TRAPTABLE
ED-NE-PATH	RTRV-INV	SET-TOD

ED-TRAPTABLE:[<TID>]:<AID>:<CTAG>::COMMUNITY=<COMMUNITY>,  
[TRAPPORT=<TRAPPORT>],[TRAPVER=<TRAPVER>];

---

```
ED-TRAPTABLE::1.2.3.4:1::COMMUNITY="PUBLIC",TRAPPORT=162,TRAPVER=SNMPV1;
```

---

**Table 11-42** ED-TRAPTABLE Input Parameters

Parameter and Values	Description
<b>AID</b>	Access identifier from the “ <a href="#">25.1.15 IPADDR</a> ” section on <a href="#">page 25-31</a> . IP address identifying the trap destination
<b>COMMUNITY</b>	Community name associated to the trap destination. Maximum of 32 characters. String
<b>TRAPPORT</b>	UDP port number associated with the trap destination. Default to 162. Integer
<b>TRAPVER</b>	SNMP version number. Defaults to SNMPv1 Parameter type is SNMP_VERSION—SNMP version
<ul style="list-style-type: none"> <li>• SNMPV1</li> </ul>	SNMP version 1 (default)
<ul style="list-style-type: none"> <li>• SNMPV2</li> </ul>	SNMP version 2

## 11.44 ED-TRC-OCH

Edit Trace Optical Channel Facility

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### Usage Guidelines

Cisco ONS 15454

The command edits trace-related optical channel facilities.

Refer to the *Cisco ONS SDH and Cisco ONS 15600 SDH TL1 Reference Guide* for specific card provisioning rules.

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DWDM

---

Provisioning



Related Commands			
	DLT-LNK-<MOD2O>	ED-WDMANS	RTRV-FFP-OCH
	DLT-LNKTERM	ED-WLEN	RTRV-LNK-<MOD2O>
	DLT-OSC	ENT-LNK-<MOD2O>	RTRV-LNKTERM
	DLT-WLEN	ENT-LNKTERM	RTRV-NE-WDMANS
	ED-DWDM	ENT-OSC	RTRV-OCH
	ED-FFP-OCH	ENT-WLEN	RTRV-OMS
	ED-LNK-<MOD2O>	OPR-LASER-OTS	RTRV-OSC
	ED-LNKTERM	OPR-PROTNSW-OCH	RTRV-OTS
	ED-OCH	OPR-WDMANS	RTRV-PROTNSW-OCH
	ED-OMS	RLS-LASER-OTS	RTRV-TRC-OCH
	ED-OSC	RLS-PROTNSW-OCH	RTRV-WDMANS
	ED-OTS	RTRV-DWDM	RTRV-WLEN

---

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

---

```
ED-TRC-OCH:CISCO:CHAN-6-2:10::EXPTRC="AAA",TRC="AAA",TRCMODE=MAN,
TRCLEVEL=TTI-PM,TRCFORMAT=64-BYTE;
```

---

**Table 11-43 ED-TRC-OCH Input Parameters**

Parameter and Values	Description
<b>SRC</b>	Source access identifier from the <a href="#">“25.1.7 CHANNEL”</a> section on page 25-14
<b>EXPTRC</b>	Expected path trace content. Indicates the expected path trace message (J1) contents. EXPTRC is any 64-character ASCII string, including the terminating CR (carriage return) and LF (line feed). A null value is equivalent to ALL. String
<b>TRC</b>	The path trace message to be transmitted. The trace byte continuously transmits a 64 byte, fixed length ASCII string, one byte at a time. A null value defaults to the NE transmitting 62 null characters (Hex 00) and CR and LF. A null value is equivalent to ALL
<b>TRCMODE</b>	Trace mode. Defaults to the OFF mode Parameter type is TRCMODE—trace mode
<ul style="list-style-type: none"> <li>AUTO</li> </ul>	Use the previously received path trace string as the expected string. Not applicable to MXP/TXP cards
<ul style="list-style-type: none"> <li>AUTO-NO-AIS</li> </ul>	Use the previously received path trace string as the expected string and do not turn on AIS and RDI if TIMP is detected
<ul style="list-style-type: none"> <li>MAN</li> </ul>	Use the provisioned expected string as the expected string

Table 11-43 ED-TRC-OCH Input Parameters (continued)

Parameter and Values	Description
<ul style="list-style-type: none"> <li>MAN-NO-AIS</li> </ul>	Use the provisioned expected string as the expected string and do not turn on AIS and RDI if TIMP is detected
<ul style="list-style-type: none"> <li>OFF</li> </ul>	Turn off path trace capability. Nothing will be reported
<b>TRCLEVEL</b>	The trace level to be managed. String
<b>TRCFORMAT</b>	Trace message size Parameter type is TRCFORMAT—trace format
<ul style="list-style-type: none"> <li>1-BYTE</li> </ul>	1 byte trace message
<ul style="list-style-type: none"> <li>16-BYTE</li> </ul>	16 byte trace message
<ul style="list-style-type: none"> <li>64-BYTE</li> </ul>	64 byte trace message
<ul style="list-style-type: none"> <li>Y</li> </ul>	Enable an attribute

## 11.45 ED-USER-SECU

Edit User Security

### Usage Guidelines

Cisco ONS 15454, 15327, 15600, 15310

This command edits a user's privileges, password, or ID. Only a Superuser might perform this operation. Privilege levels are described in the ENT-USER-SECU command.



### Note

- Passwords are masked for the following security commands: ACT-USER, ED-PID, ENT-USER-SECU and ED-USER-SECU. Access to a TL1 session by any means will have the password masked. The CTC Request History and Message Log will also show the masked commands. When a password-masked command is reissued by double-clicking the command from CTC Request History, the password will still be masked in the CTC Request History and Message Log. The actual password that was previously issued will be sent to the NE. To use a former command as a template only, single-click the command in CTC Request History. The command will be placed in the Command Request text box, where you can edit the appropriate fields prior to reissuing it.
- Although the CTC allows both <UID> and <PID> of up to 20 characters, the CTC-entered users (<UID>, <PID>) are not valid TL1 users (for example, if issuing an ACT-USER command and using the CTC-entered <UID> that is greater than 10 characters long, TL1 will respond with DENY).
- For the ED-USER-SECU command;
 

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

  - If the <NEWPID> is specified, the syntax is checked.
  - The syntax of <UID> is not checked.
  - Old users can change their password without changing their userid, but the new password must meet the new requirements.
  - The <NEWPID> is required when changing the <USERID>.

- In this release, when <NEWUID> is specified, <NEWPID> (and the <UAP>) become mandatory, but it is possible to change a USERID without changing the password by providing the same password. You cannot keep your old password if the old password does not meet the new syntax requirements. For example:
  - <USERID> = CISCO2345  
 <PASSWORD>=CISCO#234 /\*PASSWORD ALREADY MEETS REQUIREMENTS\*/  
 ED-USER-SECU::CISCO2345:1::CISCO3456,CISCO#234,,PROV;  
 TCCP 1970-01-02 13:15:35 M 1 COMPLD ;
  - <NEWUSERID> = CISCO60  
 <USERID> = CISCO40 <PASSWORD>=CISCO40 /\*PASSWORD DOES NOT MEET REQUIREMENTS\*/  
 ED-USER-SECU::CISCO40:1::CISCO60,CISCO40,,PROV;  
 BRONCOS4 1970-01-02 13:14:24 M 1 DENY IIFM /\* INVALID PASSWORD \*/ ;
- The ED-USER-SECU command should be used to change the default password for the CISCO15 default superuser.
- The ED-PID command cannot be used to change the empty password to a valid password.

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 Security

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 Superuser

---

**Related Commands**

ACT-USER	DLT-USER-SECU	REPT EVT SECU
ALW-MSG-SECU	ED-CMD-SECU	REPT EVT SESSION
ALW-USER-SECU	ED-PID	RTRV-CMD-SECU
CANC	ENT-USER-SECU	RTRV-DFLT-SECU
CANC-USER	INH-MSG-SECU	RTRV-USER-SECU
CANC-USER-SECU	INH-USER-SECU	SET-ATTR-SECUDFLT
CLR-COND-SECU	REPT ALM SECU	

---

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

---

 ED-USER-SECU:PETALUMA:CISCO15:123::NEWUID,NEWPID,,MAINT;



**Table 11-45 ED-VCG Input Parameters**

Parameter and Values	Description
SRC	Source access identifier from the “25.1.14 FACILITY” section on page 25-28
TXCOUNT	Number of members in the Tx direction. For ML1000-2 and ML100T-12 cards the only valid value is 2. For the FC_MR-4 card the only valid value is 8. Integer
NAME	Name of the VCAT group. Maximum length is 64 characters. String.

## 11.47 ED-WDMANS

Edit Wavelength Division Multiplexing Automatic Node Set Up

### Usage Guidelines

Cisco ONS 15454

This command edits the optical node set-up application (AONS) attributes.

DWDM

Maintenance

### Related Commands

DLT-LNK-<MOD2O>	ED-TRC-OCH	RTRV-FFP-OCH
DLT-LNKTERM	ED-WLEN	RTRV-LNK-<MOD2O>
DLT-OSC	ENT-LNK-<MOD2O>	RTRV-LNKTERM
DLT-WLEN	ENT-LNKTERM	RTRV-NE-WDMANS
ED-DWDM	ENT-OSC	RTRV-OCH
ED-FFP-OCH	ENT-WLEN	RTRV-OMS
ED-LNK-<MOD2O>	OPR-LASER-OTS	RTRV-OSC
ED-LNKTERM	OPR-PROTNSW-OCH	RTRV-OTS
ED-OCH	OPR-WDMANS	RTRV-PROTNSW-OCH
ED-OMS	RLS-LASER-OTS	RTRV-TRC-OCH
ED-OSC	RLS-PROTNSW-OCH	RTRV-WDMANS
ED-OTS	RTRV-DWDM	RTRV-WLEN

ED-WDMANS:[<TID>]:<AID>:<CTAG>:::[POWER-IN=<POWERIN>],[POWER-OUT=<POWEROUT>],[POWER-EXP=<POWEREXP>],[NTWTYPE=<NTWTYPE>];

```
ED-WDMANS:PENNGROVE:WDMANS-W:114:::POWERIN=10.0,POWEROUT=10.0,|
POWEREXP=10.0,NTWTYPE=METRO-CORE;
```

**Table 11-46 ED-WDMANS Input Parameters**

Parameter and Values	Description
<b>AID</b>	Access identifier from the “25.1.29 WDMANS” section on page 25-42
<b>POWERIN</b>	Input power for OADM section or Mux/Demux for terminal nodes. Float
<b>POWEROUT</b>	Output power for OADM section or Mux/Demux for terminal nodes. Float
<b>POWEREXP</b>	Express power for OADM section. Float
<b>NTWTYPE</b>	Network type where a DWDM node is installed Parameter type is DWDM_RING_TYPE—network type where NE is installed
• METRO-ACCESS	The network where a DWDM node is installed is a metro access network
• METRO-CORE	The network where a DWDM node is installed is a metro core network
• NONE	A node that does not have a standard DWDM configuration

## 11.48 ED-WLEN

Edit Wavelength

### Usage Guidelines

Cisco ONS 15454

This command edits WLEN (wavelength) provisioning.



#### Note

- The fields after CTAG (trailing colons) are optional.
- This command does not support multiple editing of WLEN provisioning.
- The maximum length of the SIZE parameter is 48 characters.
- CKTID is a string of ASCII characters. The maximum length of a CKTID can be 48. If CKTID is EMPTY or NULL this field will not appear.

DWDM

## Provisioning

Related Commands			
DLT-LNK-<MOD2O>	ED-TRC-OCH	RTRV-FFP-OCH	
DLT-LNKTERM	ED-WLEN	RTRV-LNK-<MOD2O>	
DLT-OSC	ENT-LNK-<MOD2O>	RTRV-LNKTERM	
DLT-WDMANS	ENT-LNKTERM	RTRV-NE-WDMANS	
ED-DWDM	ENT-OSC	RTRV-OCH	
ED-FFP-OCH	ENT-WLEN	RTRV-OMS	
ED-LNK-<MOD2O>	OPR-LASER-OTS	RTRV-OSC	
ED-LNKTERM	OPR-PROTNSW-OCH	RTRV-OTS	
ED-OCH	OPR-WDMANS	RTRV-PROTNSW-OCH	
ED-OMS	RLS-LASER-OTS	RTRV-TRC-OCH	
ED-OSC	RLS-PROTNSW-OCH	RTRV-WDMANS	
ED-OTS	RTRV-DWDM	RTRV-WLEN	

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

ED-WLEN:PENNGROVE:WLEN-W-ADD-1530.33:144::1WAY:SIZE=NOT-SPEC,CKTID=CKTID,CMDMDE=CMDMDE:IS,AINS;

**Table 11-47 ED-WLEN Input Parameters**

Parameter and Values	Description
<b>AID</b>	Access identifier from the “ <a href="#">25.1.30 WLEN</a> ” section on page 25-43
<b>WCT</b>	Wavelength connection type Parameter type is WCT—wavelength connection types The default wavelength connection type is 1WAY
<ul style="list-style-type: none"> <li>1WAY</li> </ul>	A unidirectional wavelength connection for one specified ring direction
<ul style="list-style-type: none"> <li>2WAY</li> </ul>	A bidirectional wavelength connection for both ring directions
<b>SIZE</b>	Size of the switching network. Defaults to NOT-SPEC Parameter type is CIRCUIT_SIZE—the DWDM circuit size used on a wavelength
<ul style="list-style-type: none"> <li>10G-FEC</li> </ul>	The circuit size is 10 Gbps with FEC
<ul style="list-style-type: none"> <li>10G-NO-FEC</li> </ul>	The circuit size is 10 Gbps without FEC
<ul style="list-style-type: none"> <li>2G5-FEC</li> </ul>	The circuit size is 2.5 Gbps with FEC
<ul style="list-style-type: none"> <li>2G5-NO-FEC</li> </ul>	The circuit size is 2.5 Gbps without FEC

**Table 11-47 ED-WLEN Input Parameters (continued)**

Parameter and Values	Description
<ul style="list-style-type: none"> <li>MULTI-RATE</li> </ul>	The circuit size is supports multirate
<ul style="list-style-type: none"> <li>NOT-SPEC</li> </ul>	The circuit size is not equipment specific
<b>CKTID</b>	Circuit ID. String. Defaults to “ ” (empty string)
<b>CMDMDE</b>	<p>Command execution mode, forced or normal. FRCD is only applicable if the PST=OOS and SST=DSBLD</p> <p>Parameter type is CMDMDE—forces the system to execute a given command regardless of any standing conditions. Normal mode is the default behavior for all commands but you can specify FRCD to force the system to override a state where the command would normally be denied</p>
<ul style="list-style-type: none"> <li>FRCD</li> </ul>	Force the system to override a state where the command would normally be denied
<ul style="list-style-type: none"> <li>NORM</li> </ul>	Execute the command normally. Do not override any conditions that might make the command fail
<b>PST</b>	<p>Primary state</p> <p>Parameter type is PST—indicates the current overall service condition of an entity</p>
<ul style="list-style-type: none"> <li>IS</li> </ul>	In service
<ul style="list-style-type: none"> <li>OOS</li> </ul>	Out of service
<b>SST</b>	<p>Secondary state</p> <p>Parameter type is SST—provides additional information pertaining to PST and PSTQ</p>
<ul style="list-style-type: none"> <li>AINS</li> </ul>	Automatic in service
<ul style="list-style-type: none"> <li>DSBLD</li> </ul>	Disabled
<ul style="list-style-type: none"> <li>LPBK</li> </ul>	Loopback
<ul style="list-style-type: none"> <li>MEA</li> </ul>	Mismatch of equipment and attributes
<ul style="list-style-type: none"> <li>MT</li> </ul>	Maintenance mode
<ul style="list-style-type: none"> <li>OOG</li> </ul>	Out of group
<ul style="list-style-type: none"> <li>SWDL</li> </ul>	Software downloading
<ul style="list-style-type: none"> <li>UAS</li> </ul>	Unassigned
<ul style="list-style-type: none"> <li>UEQ</li> </ul>	Unequipped