



CHAPTER 11

ED Commands



Note

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

This chapter provides edit (ED) commands for the Cisco ONS 15454, Cisco ONS 15454 M2, and Cisco ONS 15454 M6.



Note

All commands supported on the Cisco ONS 15454 platform are also supported on Cisco ONS 15454 M2 and Cisco ONS 15454 M6 platforms.

11.1 ED-<GIGE_TYPE>

(Cisco ONS 15454) The Edit 10GIGE or GIGE (ED-<GIGE_TYPE>) command edits Ethernet facility attributes. See [Table 28-1 on page 28-1](#) for supported modifiers by platform.

Usage Guidelines

The default values for all optional parameters are network element (NE) default values. These values might not be the current value for a parameter. Use a retrieve command to obtain the current value.

The user can change the service state of a facility to OOS-MA OR DSBLD, only if all the following conditions are met

- The facility is not sourcing a synchronization clock
- The facility's DCC is disabled.
- The facility is not part of a protection group
- The facility is not supporting cross-connects



Note

The conditions stipulated can be overridden by using the CMDMDE=FRCD option. The FRCD option will immediately remove the facility from service with no consideration for orderly interruption. Do not use in scripts or automated batch operations.

**Note**

To completely disable the CMDMDE=FRCD option, provision the <to be defined parameter> in the NE defaults to FALSE. This will prevent the FRCD option from being honored by the NE. The NE default parameter can be provisioned using the CTC only.

**Note**

The following parameters apply only to ED-GIGE; ADMINSTATE, LINKSTATE, MTU, FLOWCTRL, AUTONEG, HIWMRK, LOWMRK, DUPLEX, SPEED, and SOAK.

**Note**

The MACADDR parameter is applicable for ED-10GIGE only.

Category

Ports

Security

Provisioning

Input Format

ED-<GIGE_TYPE>[:<TID>]:<AID>:<CTAG>[:ADMINSTATE=<ADMINSTATE>],[LINKSTATE=<LINKSTATE>],[MTU=<MTU>],[MFS=<MFS>],[FLOW=<FLOW>],[FLOWCTRL=<FLOWCTRL>],[AUTONEG=<AUTONEG>],[HIWMRK=<INT>],[LOWMRK=<INT>],[OPTICS=<OPTICS>],[DUPLEX=<DUPLEX>],[SPEED=<SPEED>],[NAME=<NAME>],[CMDMDE=<CMDMDE>],[MACADDR=<MACADDR>],[FREQ=<FREQ>],[LOSSB=<LOSSB>],[SUPPRESS=<SUPPRESS>],[SOAK=<SOAK>],[SQUELCH=<SQUELCH>],[CIR=<CIR>],[CBS=<CBS>],[EBS=<EBS>],[LIENABLE=<LIENABLE>],[LITIMER=<LITIMER>],[ENCAP=<ENCAP>],[OSC=<OSC>],[PAUSEFRAME=<PAUSEFRAME>],[CLNTDST=<CLNTDST>],EXPDUPLICATION=<EXPDUPLICATION>],[EXPSPEED=<EXPSPEED>],[SELECTIVEAUTO=<SELECTIVEAUTO>][:<PST>[:<SST>]];

Input Example

ED-GIGE:PETALUMA:FAC-1-1:123::ADMINSTATE=DOWN,LINKSTATE=DOWN,MTU=1548, FLOWCTRL=NONE,AUTONEG=Y,HIWMRK=485,LOWMRK=25,OPTICS=1000_BASE_LX, DUPLEX=AUTO,SPEED=AUTO,NAME="GIGE PORT",CMDMDE=FRCD, MACADDR=00-0E-AA-BB-CC-FF,FREQ=1550,LOSSB=XX,SOAK=32,LIENABLE=Y, LITIMER=200:IS,AINS;

Input Parameters

<AID>	Access identifier from the “26.17 FACILITY” section on page 26-40.
<ADMINSTATE>	(Optional) The parameter type is UP_DOWN, which indicates an up or down value.
• DOWN	Down
• UP	Up
<LINKSTATE>	(Optional) The parameter type is UP_DOWN, which indicates an up or down value.
• DOWN	Down

• UP	Up
<MTU>	(Optional) Maximum transport unit. The parameter type is MTU_TYPE, which indicates the maximum transport unit used by an Ethernet card. Defaults to 9600.
• 10004	10004. Indicates jumbo size.
• 1500	1500
• 1548	1548
• 9600	9600. Indicates jumbo size.
• 64	64
• 9700	9700. Indicates jumbo size.
<MFS>	(Optional) Maximum frame size. The parameter type is MFS_TYPE, which is the maximum frame size used by an Ethernet card.
• 1548	Normal frame size
• JUMBO	Jumbo frame size
<FLOWCTRL>	(Optional) Flow control. The parameter type is FLOW, which indicates the type of flow control that has been negotiated for an Ethernet port. Defaults to NONE.
• ASYMMETRIC	Asymmetric flow control
• ASYMMETRIC_LOCAL	Asymmetric local flow control
• NONE	No flow control
• PASSTHRU	Passthrough flow control
• SYMMETRIC	Symmetric flow control
<AUTONEG>	(Optional) Autonegotiation. The parameter is ON_OFF, which disables or enables an attribute. Defaults to Y.
• N	Disable an attribute.
• Y	Enable an attribute.
<HIWMRK>	(Optional) High water mark. HIWMRK is an integer. Defaults to 485.
<LOWMRK>	(Optional) Low water mark. LOWMRK is an integer. Defaults to 25.
<OPTICS>	(Optional) The parameter is OPTICS, which indicates the type of Gigabyte Ethernet optics being used.
• 1000_BASE_CX	1000BaseCX
• 1000_BASE_LX	1000BaseLX
• 1000_BASE_SX	1000BaseSX
• 1000_BASE_T	1000BaseT
• 1000_BASE_ZX	1000BaseZX
• 100_BASE_BX_D	100BaseBX_D
• 100_BASE_BX_U	100BaseBX_U
• 100_BASE_FX	100BaseFX
• 100_BASE_LX	100BaseLX
• CWDM_1470	Coarse wavelength division multiplexing (CWDM) 1470
• CWDM_1490	CWDM 1490

• CWDM_1510	CWDM 1510
• CWDM_1530	CWDM 1530
• CWDM_1550	CWDM 1550
• CWDM_1570	CWDM 1570
• CWDM_1590	CWDM 1590
• CWDM_1610	CWDM 1610
• ITU_100G_1530_33	ITU-100G 1530.33
• ITU_100G_1531_12	ITU-100G 1531.12
• ITU_100G_1531_90	ITU-100G 1531.90
• ITU_100G_1532_68	ITU-100G 1532.68
• ITU_100G_1534_25	ITU-100G 1534.25
• ITU_100G_1535_04	ITU-100G 1535.04
• ITU_100G_1535_82	ITU-100G 1535.82
• ITU_100G_1536_61	ITU-100G 1536.61
• ITU_100G_1538_19	ITU-100G 1538.19
• ITU_100G_1538_98	ITU-100G 1538.98
• ITU_100G_1539_77	ITU-100G 1539.77
• ITU_100G_1540_56	ITU-100G 1540.56
• ITU_100G_1542_14	ITU-100G 1542.14
• ITU_100G_1542_94	ITU-100G 1542.94
• ITU_100G_1543_73	ITU-100G 1543.73
• ITU_100G_1544_53	ITU-100G 1544.53
• ITU_100G_1546_12	ITU-100G 1546.12
• ITU_100G_1546_92	ITU-100G 1546.92
• ITU_100G_1547_72	ITU-100G 1547.72
• ITU_100G_1548_51	ITU-100G 1548.51
• ITU_100G_1550_12	ITU-100G 1550.12
• ITU_100G_1550_92	ITU-100G 1550.92
• ITU_100G_1551_72	ITU-100G 1551.72
• ITU_100G_1552_52	ITU-100G 1552.52
• ITU_100G_1554_13	ITU-100G 1554.13
• ITU_100G_1554_94	ITU-100G 1554.94
• ITU_100G_1555_75	ITU-100G 1555.75
• ITU_100G_1556_55	ITU-100G 1556.55
• ITU_100G_1558_17	ITU-100G 1558.17
• ITU_100G_1558_98	ITU-100G 1558.98
• ITU_100G_1559_79	ITU-100G 1559.79
• ITU_100G_1560_61	ITU-100G 1560.61
• UNKNOWN	Unknown
• UNPLUGGED	Unplugged
<EXDUPLEX>	(Optional) The parameter is ETHER_DUPLEX, which indicates duplex mode. Defaults to AUTO.

• AUTO	Auto mode
• FULL	Full mode
• HALF	Half mode
<SELECTIVEAUTO>	(Optional) Selective auto-negotiation. The parameter is Y or N (enable or disable auto-negotiation) This indicates selective auto-negotiation of EXPSPEED and EXPDUPLEX only.
• Y	Enable selective auto-negotiation.
• N	Disable selective auto-negotiation.
<EXSPEED>	(Optional) The parameter type is ETHER_SPEED, which indicates Ethernet speed. Defaults to AUTO.
• 100_MBPS	100 Megabits per second
• 10_GBPS	10 Gigabits per second
• 10_MBPS	10 Megabits per second
• 1_GBPS	1 Gigabit per second
• 40_GBPS	40 Gigabit per second
• AUTO_FDX	Enable auto negotiation with full duplex
• AUTO	Automatic
<NAME>	(Optional) Port name. NAME is a string. Defaults to NULL. Maximum length is 32 characters.
<CMDMDE>	(Optional) Command mode. 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 Unlocked-Enabled or Locked-Disabled, AutomaticInService 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.
<MACADDR>	(Optional) MACADDR is a string. Defaults to NULL. Maximum length is 18 characters.
<FREQ>	(Optional) The parameter type is OPTICAL_WLEN, which indicates the optical wavelength.
• 1310	Wavelength 1310
• 1470	Wavelength 1470
• 1490	Wavelength 1490
• 1510	Wavelength 1510
• 1528.77	Wavelength 1528.77
• 1529.55	Wavelength 1529.55
• 1529.94	Wavelength 1529.94
• 1530	Wavelength 1530
• 1530.33	Wavelength 1530.33
• 1530.73	Wavelength 1530.73

• 1531.12	Wavelength 1531.12
• 1531.51	Wavelength 1531.51
• 1531.90	Wavelength 1531.90
• 1532.29	Wavelength 1532.29
• 1532.68	Wavelength 1532.68
• 1533.07	Wavelength 1533.07
• 1533.47	Wavelength 1533.47
• 1533.86	Wavelength 1533.86
• 1534.25	Wavelength 1534.25
• 1534.64	Wavelength 1534.64
• 1535.04	Wavelength 1535.04
• 1535.43	Wavelength 1535.43
• 1535.82	Wavelength 1535.82
• 1536.22	Wavelength 1536.22
• 1536.61	Wavelength 1536.61
• 1537	Wavelength 1537
• 1537.40	Wavelength 1537.40
• 1537.79	Wavelength 1537.79
• 1538.19	Wavelength 1538.19
• 1538.58	Wavelength 1538.58
• 1538.98	Wavelength 1538.98
• 1539.37	Wavelength 1539.37
• 1539.77	Wavelength 1539.77
• 1540.16	Wavelength 1540.16
• 1540.56	Wavelength 1540.56
• 1540.95	Wavelength 1540.95
• 1541.35	Wavelength 1541.35
• 1541.75	Wavelength 1541.75
• 1542.14	Wavelength 1542.14
• 1542.35	Wavelength 1542.35
• 1542.54	Wavelength 1542.54
• 1542.94	Wavelength 1542.94
• 1543.33	Wavelength 1543.33
• 1543.73	Wavelength 1543.73
• 1544.13	Wavelength 1544.13
• 1544.53	Wavelength 1544.53
• 1544.92	Wavelength 1544.92
• 1545.32	Wavelength 1545.32
• 1545.72	Wavelength 1545.72
• 1546.12	Wavelength 1546.12
• 1546.52	Wavelength 1546.52

• 1546.92	Wavelength 1546.92
• 1547.32	Wavelength 1547.32
• 1547.72	Wavelength 1547.72
• 1548.12	Wavelength 1548.12
• 1548.51	Wavelength 1548.51
• 1548.92	Wavelength 1548.92
• 1549.32	Wavelength 1549.32
• 1549.71	Wavelength 1549.71
• 1550	Wavelength 1500
• 1550.12	Wavelength 1550.12
• 1550.52	Wavelength 1550.52
• 1550.92	Wavelength 1550.92
• 1551.32	Wavelength 1551.32
• 1551.72	Wavelength 1551.72
• 1552.12	Wavelength 1552.12
• 1552.52	Wavelength 1552.52
• 1552.93	Wavelength 1552.93
• 1553.33	Wavelength 1553.33
• 1553.73	Wavelength 1553.73
• 1554.13	Wavelength 1554.13
• 1554.13	Wavelength 1554.13
• 1554.94	Wavelength 1554.94
• 1555.34	Wavelength 1555.34
• 1555.75	Wavelength 1555.75
• 1556.15	Wavelength 1556.15
• 1556.55	Wavelength 1556.55
• 1556.96	Wavelength 1556.96
• 1557.36	Wavelength 1557.36
• 1557.77	Wavelength 1557.77
• 1558.17	Wavelength 1558.17
• 1558.58	Wavelength 1558.58
• 1558.98	Wavelength 1558.98
• 1559.39	Wavelength 1559.39
• 1559.79	Wavelength 1559.79
• 1560.20	Wavelength 1560.20
• 1560.61	Wavelength 1560.61
• 1561.01	Wavelength 1561.01
• 1561.42	Wavelength 1561.42
• 1561.83	Wavelength 1561.83
• 1570	Wavelength 1570
• 1570.83	Wavelength 1570.83

• 1571.24	Wavelength 1571.24
• 1571.65	Wavelength 1571.65
• 1572.06	Wavelength 1572.06
• 1572.48	Wavelength 1572.48
• 1572.89	Wavelength 1572.89
• 1573.30	Wavelength 1573.30
• 1573.71	Wavelength 1573.71
• 1574.13	Wavelength 1574.13
• 1574.54	Wavelength 1574.54
• 1574.95	Wavelength 1574.95
• 1575.37	Wavelength 1575.37
• 1575.78	Wavelength 1575.78
• 1576.20	Wavelength 1576.20
• 1576.61	Wavelength 1576.61
• 1577.03	Wavelength 1577.03
• 1577.44	Wavelength 1577.44
• 1577.86	Wavelength 1577.86
• 1578.27	Wavelength 1578.27
• 1578.69	Wavelength 1578.69
• 1579.10	Wavelength 1579.10
• 1579.52	Wavelength 1579.52
• 1579.93	Wavelength 1579.93
• 1580.35	Wavelength 1580.35
• 1580.77	Wavelength 1580.77
• 1581.18	Wavelength 1581.18
• 1581.60	Wavelength 1581.60
• 1582.02	Wavelength 1582.02
• 1582.44	Wavelength 1582.44
• 1582.85	Wavelength 1582.85
• 1583.27	Wavelength 1583.27
• 1583.69	Wavelength 1583.69
• 1584.11	Wavelength 1584.11
• 1584.53	Wavelength 1584.53
• 1584.95	Wavelength 1584.95
• 1585.36	Wavelength 1585.36
• 1585.78	Wavelength 1585.78
• 1586.20	Wavelength 1586.20
• 1586.62	Wavelength 1586.62
• 1587.04	Wavelength 1587.04
• 1587.46	Wavelength 1587.46
• 1587.88	Wavelength 1587.88

• 1588.30	Wavelength 1588.30
• 1588.73	Wavelength 1588.73
• 1589.15	Wavelength 1589.15
• 1589.57	Wavelength 1589.57
• 1589.99	Wavelength 1589.99
• 1590	Wavelength 1590
• 1590.41	Wavelength 1590.41
• 1590.83	Wavelength 1590.83
• 1591.26	Wavelength 1591.26
• 1591.68	Wavelength 1591.68
• 1592.10	Wavelength 1592.10
• 1592.52	Wavelength 1592.52
• 1592.95	Wavelength 1592.95
• 1593.37	Wavelength 1593.37
• 1593.79	Wavelength 1593.79
• 1594.22	Wavelength 1594.22
• 1594.64	Wavelength 1594.64
• 1595.06	Wavelength 1595.06
• 1595.49	Wavelength 1595.49
• 1596.34	Wavelength 1596.34
• 1596.76	Wavelength 1596.76
• 1597.19	Wavelength 1597.19
• 1597.62	Wavelength 1597.62
• 1598.04	Wavelength 1598.04
• 1598.47	Wavelength 1598.47
• 1598.89	Wavelength 1598.89
• 1599.32	Wavelength 1599.32
• 1599.75	Wavelength 1599.75
• 1600.06	Wavelength 1600.06
• 1601.03	Wavelength 1601.03
• 1601.46	Wavelength 1601.46
• 1601.88	Wavelength 1601.88
• 1602.31	Wavelength 1602.31
• 1602.74	Wavelength 1602.74
• 1603.17	Wavelength 1603.17
• 1603.60	Wavelength 1603.60
• 1604.03	Wavelength 1604.03
• 1610	Wavelength 1610
• USE-TWL1	Use Tunable Wavelength 1
<LOSSB>	(Optional) The parameter type is REACH, which indicates the reach values.
• AUTOPROV	Autoprovisioning

• CWDM	Coarse wavelength division multiplexing (CWDM)
• CWDM-40KM	CWDM 40 kilometers.
• CX	Reach CX
• CX1	Reach CX1
• 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
• TEN-GE-ER	10 GE extended range
• TEN-GE-LR	10 GE long range
• TEN-GE-SR	10 GE short range
• ULH	Reach ULH
• VSR	Reach VSR
• VX	Reach VX
• ZX	Reach ZX
<SOAK>	(Optional) Locked-AutomaticInService to Unlocked 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). SOAK is an integer. Defaults to 32.
<LIENABLE>	(Optional) Enable or Disable link integrity timer. Takes either Y or N. Value Y enables the LITIMER and value N disables LITIMER. By default LITIMER is enabled. Note The LIENABLE parameter is supported on only CE-1000-4 and CE-1000T-8 cards on the 15454.

<LITIMER>	(Optional) Link integrity timer duration in the range between 200 ms and 10000 ms in multiples on 100 ms. Note The LITIMER parameter is supported on only CE-1000-4 and CE-1000T-8 cards on the 15454.
<ENCAP>	(Optional) Frame encapsulation type. The parameter type is ENCAP, which is the 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.
<OSC>	To enable or disable the OSC on the port. Note The OSC parameter is supported only on 15454-M2 and 15454-M6.
<PAUSEFRAME>	To Enable or Disable the Pause Frame.
• Y	Enable
• N	Disable
<CLNTDST>	Client distance in kilometers.
• 10KM	10 kilometers.
• 30KM	30 kilometers.
<PST>	(Optional) 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>	(Optional) Secondary state. Defaults to AINS. 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

11.2 ED-<MOD1FCPAYLOAD>

(Cisco ONS 15454) The Edit 1GISC3, 2GISC3, D1VIDEO, DV6000, ESCON, ETRCLO, HDTV or PASSTHRU (ED-<MODFCPAYLOAD>) command edits the attributes related to the Fibre Channel (FC) facility. The state IS,AINS is not supported on the FC port. See [Table 28-1 on page 28-1](#) for supported modifiers by platform.

Usage Guidelines

The user can change the service state of a facility to locked-enabled or disabled, only if all the following conditions are met

- The facility is not sourcing a synchronization clock
- The facility's DCC is disabled.
- The facility is not part of a protection group
- The facility is not supporting cross-connects

**Note**

The conditions stipulated can be overridden by using the CMDMDE=FRCD option. The FRCD option will immediately remove the facility from service with no consideration for orderly interruption. Do not use in scripts or automated batch operations.

**Note**

To completely disable the CMDMDE=FRCD option, provision the <to be defined parameter> in the NE defaults to FALSE. This will prevent the FRCD option from being honored by the NE. The NE default parameter can be provisioned using the CTC only.

**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.

Category

Ports

Security

Provisioning

Input Format

```
ED-<MOD1FCPAYLOAD>:[<TID>]:<AID>:<CTAG>:::[LINKRCVRY=<LINKRCVRY>],[DISTEXTN=
<DISTANCE_EXTENSION>],[AUTODETECTION=<AUTO_DETECTION>],
[LINKCREDITS=<CREDITS>],[FASTSWITCH=<FASTSWITCH>],[MFS=<MAXFRMSIZE>]
,[NAME=<NAME>],[CMDMDE=<CMDMDE>],[SOAK=<SOAK>],[FREQ=<FREQ>],
[LOSSB=<LOSSB>],[SQUELCH=<SQUELCH>][:<PST>[:<SST>]];
```

Input Example

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

Input Parameters

<AID>	Access identifier from the “ 26.17 FACILITY ” section on page 26-40.
<LINKRCVRY>	Link recovery. The parameter type is ON_OFF, which disables or enables an attribute.
• N	Disable an attribute.
• Y	Enable an attribute.
<DISTEXTN>	Distance extension. It can be set to Buffer-to-Buffer (B2B) Credit Management state or None.
	Note B2B and link recovery are mutually exclusive. You cannot turn on both B2B and link recovery at the same time.
	The parameter type is DISTANCE_EXTENSION (distance extension).
• B2B	Buffer to buffer flow control
• NONE	No distance extension
<AUTODETECTION>	Autodetection. Turns autodetection on or off. The parameter type is ON_OFF, which disables or enables an attribute.
• N	Disable an attribute
• Y	Enable an attribute
<LINKCREDITS>	Number of link credits. If autodetection is set to off, the value of the link credits will be used to configure the hardware. LINKCREDITS is an integer.
<FASTSWITCH>	When Fast Switchover is ON switchover must be less than 150 ms. In case of client Failure Fast Switchover is not supported. This switch time is achieved for fc1g/fc2g/fc4g traffic for trunk failures and manual/forced/lockout switches only. The parameter type is ON_OFF, which disables or enables an attribute.
• N	Disable an attribute.
• Y	Enable an attribute.
<MFS>	Maximum frame size. MFS is an integer.
<NAME>	String. User-assigned port name.
<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.
<SOAK>	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). SOAK is an integer.
<FREQ>	The parameter type is OPTICAL_WLEN, which is the optical wavelength.

• 1310	Wavelength 1310
• 1470	Wavelength 1470
• 1490	Wavelength 1490
• 1510	Wavelength 1510
• 1528.77	Wavelength 1528.77
• 1529.55	Wavelength 1529.55
• 1529.94	Wavelength 1529.94
• 1530	Wavelength 1530
• 1530.33	Wavelength 1530.33
• 1530.73	Wavelength 1530.73
• 1531.12	Wavelength 1531.12
• 1531.51	Wavelength 1531.51
• 1531.90	Wavelength 1531.90
• 1532.29	Wavelength 1532.29
• 1532.68	Wavelength 1532.68
• 1533.07	Wavelength 1533.07
• 1533.47	Wavelength 1533.47
• 1533.86	Wavelength 1533.86
• 1534.25	Wavelength 1534.25
• 1534.64	Wavelength 1534.64
• 1535.04	Wavelength 1535.04
• 1535.43	Wavelength 1535.43
• 1535.82	Wavelength 1535.82
• 1536.22	Wavelength 1536.22
• 1536.61	Wavelength 1536.61
• 1537	Wavelength 1537
• 1537.40	Wavelength 1537.40
• 1537.79	Wavelength 1537.79
• 1538.19	Wavelength 1538.19
• 1538.58	Wavelength 1538.58
• 1538.98	Wavelength 1538.98
• 1539.37	Wavelength 1539.37
• 1539.77	Wavelength 1539.77
• 1540.16	Wavelength 1540.16
• 1540.56	Wavelength 1540.56
• 1540.95	Wavelength 1540.95
• 1541.35	Wavelength 1541.35
• 1541.75	Wavelength 1541.75
• 1542.14	Wavelength 1542.14
• 1542.35	Wavelength 1542.35
• 1542.54	Wavelength 1542.54

• 1542.94	Wavelength 1542.94
• 1543.33	Wavelength 1543.33
• 1543.73	Wavelength 1543.73
• 1544.13	Wavelength 1544.13
• 1544.53	Wavelength 1544.53
• 1544.92	Wavelength 1544.92
• 1545.32	Wavelength 1545.32
• 1545.72	Wavelength 1545.72
• 1546.12	Wavelength 1546.12
• 1546.52	Wavelength 1546.52
• 1546.92	Wavelength 1546.92
• 1547.32	Wavelength 1547.32
• 1547.72	Wavelength 1547.72
• 1548.12	Wavelength 1548.12
• 1548.51	Wavelength 1548.51
• 1548.92	Wavelength 1548.92
• 1549.32	Wavelength 1549.32
• 1549.71	Wavelength 1549.71
• 1550	Wavelength 1500
• 1550.12	Wavelength 1550.12
• 1550.52	Wavelength 1550.52
• 1550.92	Wavelength 1550.92
• 1551.32	Wavelength 1551.32
• 1551.72	Wavelength 1551.72
• 1552.12	Wavelength 1552.12
• 1552.52	Wavelength 1552.52
• 1552.93	Wavelength 1552.93
• 1553.33	Wavelength 1553.33
• 1553.73	Wavelength 1553.73
• 1554.13	Wavelength 1554.13
• 1554.13	Wavelength 1554.13
• 1554.94	Wavelength 1554.94
• 1555.34	Wavelength 1555.34
• 1555.75	Wavelength 1555.75
• 1556.15	Wavelength 1556.15
• 1556.55	Wavelength 1556.55
• 1556.96	Wavelength 1556.96
• 1557.36	Wavelength 1557.36
• 1557.77	Wavelength 1557.77
• 1558.17	Wavelength 1558.17
• 1558.58	Wavelength 1558.58

• 1558.98	Wavelength 1558.98
• 1559.39	Wavelength 1559.39
• 1559.79	Wavelength 1559.79
• 1560.20	Wavelength 1560.20
• 1560.61	Wavelength 1560.61
• 1561.01	Wavelength 1561.01
• 1561.42	Wavelength 1561.42
• 1561.83	Wavelength 1561.83
• 1570	Wavelength 1570
• 1570.83	Wavelength 1570.83
• 1571.24	Wavelength 1571.24
• 1571.65	Wavelength 1571.65
• 1572.06	Wavelength 1572.06
• 1572.48	Wavelength 1572.48
• 1572.89	Wavelength 1572.89
• 1573.30	Wavelength 1573.30
• 1573.71	Wavelength 1573.71
• 1574.13	Wavelength 1574.13
• 1574.54	Wavelength 1574.54
• 1574.95	Wavelength 1574.95
• 1575.37	Wavelength 1575.37
• 1575.78	Wavelength 1575.78
• 1576.20	Wavelength 1576.20
• 1576.61	Wavelength 1576.61
• 1577.03	Wavelength 1577.03
• 1577.44	Wavelength 1577.44
• 1577.86	Wavelength 1577.86
• 1578.27	Wavelength 1578.27
• 1578.69	Wavelength 1578.69
• 1579.10	Wavelength 1579.10
• 1579.52	Wavelength 1579.52
• 1579.93	Wavelength 1579.93
• 1580.35	Wavelength 1580.35
• 1580.77	Wavelength 1580.77
• 1581.18	Wavelength 1581.18
• 1581.60	Wavelength 1581.60
• 1582.02	Wavelength 1582.02
• 1582.44	Wavelength 1582.44
• 1582.85	Wavelength 1582.85
• 1583.27	Wavelength 1583.27
• 1583.69	Wavelength 1583.69

• 1584.11	Wavelength 1584.11
• 1584.53	Wavelength 1584.53
• 1584.95	Wavelength 1584.95
• 1585.36	Wavelength 1585.36
• 1585.78	Wavelength 1585.78
• 1586.20	Wavelength 1586.20
• 1586.62	Wavelength 1586.62
• 1587.04	Wavelength 1587.04
• 1587.46	Wavelength 1587.46
• 1587.88	Wavelength 1587.88
• 1588.30	Wavelength 1588.30
• 1588.73	Wavelength 1588.73
• 1589.15	Wavelength 1589.15
• 1589.57	Wavelength 1589.57
• 1589.99	Wavelength 1589.99
• 1590	Wavelength 1590
• 1590.41	Wavelength 1590.41
• 1590.83	Wavelength 1590.83
• 1591.26	Wavelength 1591.26
• 1591.68	Wavelength 1591.68
• 1592.10	Wavelength 1592.10
• 1592.52	Wavelength 1592.52
• 1592.95	Wavelength 1592.95
• 1593.37	Wavelength 1593.37
• 1593.79	Wavelength 1593.79
• 1594.22	Wavelength 1594.22
• 1594.64	Wavelength 1594.64
• 1595.06	Wavelength 1595.06
• 1595.49	Wavelength 1595.49
• 1596.34	Wavelength 1596.34
• 1596.76	Wavelength 1596.76
• 1597.19	Wavelength 1597.19
• 1597.62	Wavelength 1597.62
• 1598.04	Wavelength 1598.04
• 1598.47	Wavelength 1598.47
• 1598.89	Wavelength 1598.89
• 1599.32	Wavelength 1599.32
• 1599.75	Wavelength 1599.75
• 1600.06	Wavelength 1600.06
• 1601.03	Wavelength 1601.03
• 1601.46	Wavelength 1601.46

• 1601.88	Wavelength 1601.88
• 1602.31	Wavelength 1602.31
• 1602.74	Wavelength 1602.74
• 1603.17	Wavelength 1603.17
• 1603.60	Wavelength 1603.60
• 1604.03	Wavelength 1604.03
• 1610	Wavelength 1610
• USE-TWL1	Use Tunable Wavelength 1
<LOSSB>	The parameter type is REACH, which is the reach value.
• AUTOPROV	Autoprovisioning
• CX	Reach CX
• CX1	Reach CX1
• 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
• TEN-GE-ER	10 GE extended range
• TEN-GE-LR	10 GE long range
• TEN-GE-SR	10 GE short range
• VX	Reach VX
• ZX	Reach ZX
<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

11.3 ED-<MOD1FICONPAYLOAD>

(Cisco ONS 15454) The Edit 1GFICON, 2GFICON, 4GFICON, or ESCON (ED-<MOD1FICONPAYLOAD>) command edits the attributes related with the fiber connectivity (FICON) payload facility. The state IS,AINS is not supported on the FICON port.

Usage Guidelines

See [Table 28-1 on page 28-1](#) for supported modifiers by platform.

Category

Ports

Security

Provisioning

Input Format

ED-<MOD1FICONPAYLOAD>:[<TID>]:<AID>:<CTAG>:::[LINKRCVRY=<LINKRCVRY>],[DISTEXTN=<DISTANCE_EXTENSION>],[AUTODETECTION=<AUTO_DETECTION>],[LINKCREDITS=<CREDITS>],[FASTSWITCH=<FASTSWITCH>],[MFS=<MAXFRMSIZE>],[NAME=<NAME>],[CMDMDE=<CMDMDE>],[SOAK=<SOAK>],[FREQ=<FREQ>],[LOSSB=<LOSSB>],[SQUELCH=<SQUELCH>][:<PST>[:<SST>]]];

Input Example

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

Input Parameters

<AID>	Access identifier from the “26.17 FACILITY” section on page 26-40 .
<LINKRCVRY>	Link recovery. The parameter type is ON_OFF, which disables or enables an attribute.
• N	Disable an attribute
• Y	Enable an attribute

<DISTEXTN>	Distance extension. It can be set to B2B Credit Management state or None.
	Note B2B and link recovery are mutually exclusive. You cannot turn on both B2B and link recovery at the same time.
	The parameter type is DISTANCE_EXTENSION (distance extension).
• B2B	Buffer-to-buffer flow control
• NONE	No distance extension
<AUTODETECTION>	Autodetection. Turns autodetection on or off. The parameter type is ON_OFF, which disables or enables an attribute.
• N	Disable an attribute
• Y	Enable an attribute
<LINKCREDITS>	Number of link credits. If autodetection is set to off the value of the link credits will be used to configure the hardware. LINKCREDITS is an integer.
<FASTSWITCH>	When Fast Switchover is ON switchover must be less than 150 ms. In case of client Failure Fast Switchover is not supported. This switch time is achieved for fc1g/fc2g/fc4g traffic for trunk failures and manual/forced/lockout switches only. The parameter type is ON_OFF, which disables or enables an attribute.
• N	Disable an attribute.
• Y	Enable an attribute.
<MFS>	Maximum frame size. MFS is an integer.
<NAME>	String. User-assigned port name.
<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.
<SOAK>	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). SOAK is an integer.
<FREQ>	The parameter type is OPTICAL_WLEN (optical wavelength).
• 1310	Wavelength 1310
• 1470	Wavelength 1470
• 1490	Wavelength 1490
• 1510	Wavelength 1510
• 1529.55	Wavelength 1529.55
• 1529.94	Wavelength 1529.94

• 1530	Wavelength 1530
• 1530.33	Wavelength 1530.33
• 1530.73	Wavelength 1530.73
• 1531.12	Wavelength 1531.12
• 1531.51	Wavelength 1531.51
• 1531.90	Wavelength 1531.90
• 1532.29	Wavelength 1532.29
• 1532.68	Wavelength 1532.68
• 1533.07	Wavelength 1533.07
• 1533.47	Wavelength 1533.47
• 1533.86	Wavelength 1533.86
• 1534.25	Wavelength 1534.25
• 1534.64	Wavelength 1534.64
• 1535.04	Wavelength 1535.04
• 1535.43	Wavelength 1535.43
• 1535.82	Wavelength 1535.82
• 1536.22	Wavelength 1536.22
• 1536.61	Wavelength 1536.61
• 1537	Wavelength 1537
• 1537.40	Wavelength 1537.40
• 1537.79	Wavelength 1537.79
• 1538.19	Wavelength 1538.19
• 1538.58	Wavelength 1538.58
• 1538.98	Wavelength 1538.98
• 1539.37	Wavelength 1539.37
• 1539.77	Wavelength 1539.77
• 1540.16	Wavelength 1540.16
• 1540.56	Wavelength 1540.56
• 1540.95	Wavelength 1540.95
• 1541.35	Wavelength 1541.35
• 1541.75	Wavelength 1541.75
• 1542.14	Wavelength 1542.14
• 1542.35	Wavelength 1542.35
• 1542.54	Wavelength 1542.54
• 1542.94	Wavelength 1542.94
• 1543.33	Wavelength 1543.33
• 1543.73	Wavelength 1543.73
• 1544.13	Wavelength 1544.13
• 1544.53	Wavelength 1544.53
• 1544.92	Wavelength 1544.92
• 1545.32	Wavelength 1545.32

• 1545.72	Wavelength 1545.72
• 1546.12	Wavelength 1546.12
• 1546.52	Wavelength 1546.52
• 1546.92	Wavelength 1546.92
• 1547.32	Wavelength 1547.32
• 1547.72	Wavelength 1547.72
• 1548.12	Wavelength 1548.12
• 1548.51	Wavelength 1548.51
• 1548.92	Wavelength 1548.92
• 1549.32	Wavelength 1549.32
• 1549.71	Wavelength 1549.71
• 1550	Wavelength 1500
• 1550.12	Wavelength 1550.12
• 1550.52	Wavelength 1550.52
• 1550.92	Wavelength 1550.92
• 1551.32	Wavelength 1551.32
• 1551.72	Wavelength 1551.72
• 1552.12	Wavelength 1552.12
• 1552.52	Wavelength 1552.52
• 1552.93	Wavelength 1552.93
• 1553.33	Wavelength 1553.33
• 1553.73	Wavelength 1553.73
• 1554.13	Wavelength 1554.13
• 1554.13	Wavelength 1554.13
• 1554.94	Wavelength 1554.94
• 1555.34	Wavelength 1555.34
• 1555.75	Wavelength 1555.75
• 1556.15	Wavelength 1556.15
• 1556.55	Wavelength 1556.55
• 1556.96	Wavelength 1556.96
• 1557.36	Wavelength 1557.36
• 1557.77	Wavelength 1557.77
• 1558.17	Wavelength 1558.17
• 1558.58	Wavelength 1558.58
• 1558.98	Wavelength 1558.98
• 1559.39	Wavelength 1559.39
• 1559.79	Wavelength 1559.79
• 1560.20	Wavelength 1560.20
• 1560.61	Wavelength 1560.61
• 1561.01	Wavelength 1561.01
• 1561.42	Wavelength 1561.42

• 1561.83	Wavelength 1561.83
• 1570	Wavelength 1570
• 1570.83	Wavelength 1570.83
• 1571.24	Wavelength 1571.24
• 1571.65	Wavelength 1571.65
• 1572.06	Wavelength 1572.06
• 1572.48	Wavelength 1572.48
• 1572.89	Wavelength 1572.89
• 1573.30	Wavelength 1573.30
• 1573.71	Wavelength 1573.71
• 1574.13	Wavelength 1574.13
• 1574.54	Wavelength 1574.54
• 1574.95	Wavelength 1574.95
• 1575.37	Wavelength 1575.37
• 1575.78	Wavelength 1575.78
• 1576.20	Wavelength 1576.20
• 1576.61	Wavelength 1576.61
• 1577.03	Wavelength 1577.03
• 1577.44	Wavelength 1577.44
• 1577.86	Wavelength 1577.86
• 1578.27	Wavelength 1578.27
• 1578.69	Wavelength 1578.69
• 1579.10	Wavelength 1579.10
• 1579.52	Wavelength 1579.52
• 1579.93	Wavelength 1579.93
• 1580.35	Wavelength 1580.35
• 1580.77	Wavelength 1580.77
• 1581.18	Wavelength 1581.18
• 1581.60	Wavelength 1581.60
• 1582.02	Wavelength 1582.02
• 1582.44	Wavelength 1582.44
• 1582.85	Wavelength 1582.85
• 1583.27	Wavelength 1583.27
• 1583.69	Wavelength 1583.69
• 1584.11	Wavelength 1584.11
• 1584.53	Wavelength 1584.53
• 1584.95	Wavelength 1584.95
• 1585.36	Wavelength 1585.36
• 1585.78	Wavelength 1585.78
• 1586.20	Wavelength 1586.20
• 1586.62	Wavelength 1586.62

• 1587.04	Wavelength 1587.04
• 1587.46	Wavelength 1587.46
• 1587.88	Wavelength 1587.88
• 1588.30	Wavelength 1588.30
• 1588.73	Wavelength 1588.73
• 1589.15	Wavelength 1589.15
• 1589.57	Wavelength 1589.57
• 1589.99	Wavelength 1589.99
• 1590	Wavelength 1590
• 1590.41	Wavelength 1590.41
• 1590.83	Wavelength 1590.83
• 1591.26	Wavelength 1591.26
• 1591.68	Wavelength 1591.68
• 1592.10	Wavelength 1592.10
• 1592.52	Wavelength 1592.52
• 1592.95	Wavelength 1592.95
• 1593.37	Wavelength 1593.37
• 1593.79	Wavelength 1593.79
• 1594.22	Wavelength 1594.22
• 1594.64	Wavelength 1594.64
• 1595.06	Wavelength 1595.06
• 1595.49	Wavelength 1595.49
• 1596.34	Wavelength 1596.34
• 1596.76	Wavelength 1596.76
• 1597.19	Wavelength 1597.19
• 1597.62	Wavelength 1597.62
• 1598.04	Wavelength 1598.04
• 1598.47	Wavelength 1598.47
• 1598.89	Wavelength 1598.89
• 1599.32	Wavelength 1599.32
• 1599.75	Wavelength 1599.75
• 1600.06	Wavelength 1600.06
• 1601.03	Wavelength 1601.03
• 1601.46	Wavelength 1601.46
• 1601.88	Wavelength 1601.88
• 1602.31	Wavelength 1602.31
• 1602.74	Wavelength 1602.74
• 1603.17	Wavelength 1603.17
• 1603.60	Wavelength 1603.60
• 1604.03	Wavelength 1604.03
• 1610	Wavelength 1610

• USE-TWL1	Use Tunable Wavelength 1
<LOSSB>	The parameter type is REACH, which is the reach value.
• 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
<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

11.4 ED-**<MOD2DWDMPAYLOAD>**

(Cisco ONS 15454) The Edit 10GFC, 10GIGE, 40GIGE, 1GFC, 1GFICON, 1GISC3, 2GFC, 2GFICON, 2GISC3, 4GFC, 4GFICON, 5GIB, 8GFC, D1VIDEO, DV6000, DVBASI, ESCON, ETRCLO, GIGE, HDTV, ISC1, ISC3, OTU3, or PASSTHRU (ED-**<MOD2DWDMPAYLOAD>**) command edits the operating parameters for a dense wavelength division multiplexing (DWDM) client facility.

Usage Guidelines

See [Table 28-1 on page 28-1](#) for supported modifiers by platform.

Category

DWDM

Security

Provisioning

Input Format

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

Input Example

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

Input Parameters

<AID>	Access identifier from the “26.17 FACILITY” section on page 26-40 .
<LINKCREDITS>	Number of link credits. If autodetection is set to off the value of the link credits will be used to configure the hardware. LINKCREDITS is an integer.
<NAME>	String. User-assigned port name.
<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.
<FREQ>	The parameter type is OPTICAL_WLEN (optical wavelength).
1310	Wavelength 1310
1470	Wavelength 1470
1490	Wavelength 1490
1510	Wavelength 1510

• 1529.55	Wavelength 1529.55
• 1529.94	Wavelength 1529.94
• 1530	Wavelength 1530
• 1530.33	Wavelength 1530.33
• 1530.73	Wavelength 1530.73
• 1531.12	Wavelength 1531.12
• 1531.51	Wavelength 1531.51
• 1531.90	Wavelength 1531.90
• 1532.29	Wavelength 1532.29
• 1532.68	Wavelength 1532.68
• 1533.07	Wavelength 1533.07
• 1533.47	Wavelength 1533.47
• 1533.86	Wavelength 1533.86
• 1534.25	Wavelength 1534.25
• 1534.64	Wavelength 1534.64
• 1535.04	Wavelength 1535.04
• 1535.43	Wavelength 1535.43
• 1535.82	Wavelength 1535.82
• 1536.22	Wavelength 1536.22
• 1536.61	Wavelength 1536.61
• 1537	Wavelength 1537
• 1537.40	Wavelength 1537.40
• 1537.79	Wavelength 1537.79
• 1538.19	Wavelength 1538.19
• 1538.58	Wavelength 1538.58
• 1538.98	Wavelength 1538.98
• 1539.37	Wavelength 1539.37
• 1539.77	Wavelength 1539.77
• 1540.16	Wavelength 1540.16
• 1540.56	Wavelength 1540.56
• 1540.95	Wavelength 1540.95
• 1541.35	Wavelength 1541.35
• 1541.75	Wavelength 1541.75
• 1542.14	Wavelength 1542.14
• 1542.35	Wavelength 1542.35
• 1542.54	Wavelength 1542.54
• 1542.94	Wavelength 1542.94
• 1543.33	Wavelength 1543.33
• 1543.73	Wavelength 1543.73
• 1544.13	Wavelength 1544.13
• 1544.53	Wavelength 1544.53

• 1544.92	Wavelength 1544.92
• 1545.32	Wavelength 1545.32
• 1545.72	Wavelength 1545.72
• 1546.12	Wavelength 1546.12
• 1546.52	Wavelength 1546.52
• 1546.92	Wavelength 1546.92
• 1547.32	Wavelength 1547.32
• 1547.72	Wavelength 1547.72
• 1548.12	Wavelength 1548.12
• 1548.51	Wavelength 1548.51
• 1548.92	Wavelength 1548.92
• 1549.32	Wavelength 1549.32
• 1549.71	Wavelength 1549.71
• 1550	Wavelength 1500
• 1550.12	Wavelength 1550.12
• 1550.52	Wavelength 1550.52
• 1550.92	Wavelength 1550.92
• 1551.32	Wavelength 1551.32
• 1551.72	Wavelength 1551.72
• 1552.12	Wavelength 1552.12
• 1552.52	Wavelength 1552.52
• 1552.93	Wavelength 1552.93
• 1553.33	Wavelength 1553.33
• 1553.73	Wavelength 1553.73
• 1554.13	Wavelength 1554.13
• 1554.13	Wavelength 1554.13
• 1554.94	Wavelength 1554.94
• 1555.34	Wavelength 1555.34
• 1555.75	Wavelength 1555.75
• 1556.15	Wavelength 1556.15
• 1556.55	Wavelength 1556.55
• 1556.96	Wavelength 1556.96
• 1557.36	Wavelength 1557.36
• 1557.77	Wavelength 1557.77
• 1558.17	Wavelength 1558.17
• 1558.58	Wavelength 1558.58
• 1558.98	Wavelength 1558.98
• 1559.39	Wavelength 1559.39
• 1559.79	Wavelength 1559.79
• 1560.20	Wavelength 1560.20
• 1560.61	Wavelength 1560.61

• 1561.01	Wavelength 1561.01
• 1561.42	Wavelength 1561.42
• 1561.83	Wavelength 1561.83
• 1570	Wavelength 1570
• 1570.83	Wavelength 1570.83
• 1571.24	Wavelength 1571.24
• 1571.65	Wavelength 1571.65
• 1572.06	Wavelength 1572.06
• 1572.48	Wavelength 1572.48
• 1572.89	Wavelength 1572.89
• 1573.30	Wavelength 1573.30
• 1573.71	Wavelength 1573.71
• 1574.13	Wavelength 1574.13
• 1574.54	Wavelength 1574.54
• 1574.95	Wavelength 1574.95
• 1575.37	Wavelength 1575.37
• 1575.78	Wavelength 1575.78
• 1576.20	Wavelength 1576.20
• 1576.61	Wavelength 1576.61
• 1577.03	Wavelength 1577.03
• 1577.44	Wavelength 1577.44
• 1577.86	Wavelength 1577.86
• 1578.27	Wavelength 1578.27
• 1578.69	Wavelength 1578.69
• 1579.10	Wavelength 1579.10
• 1579.52	Wavelength 1579.52
• 1579.93	Wavelength 1579.93
• 1580.35	Wavelength 1580.35
• 1580.77	Wavelength 1580.77
• 1581.18	Wavelength 1581.18
• 1581.60	Wavelength 1581.60
• 1582.02	Wavelength 1582.02
• 1582.44	Wavelength 1582.44
• 1582.85	Wavelength 1582.85
• 1583.27	Wavelength 1583.27
• 1583.69	Wavelength 1583.69
• 1584.11	Wavelength 1584.11
• 1584.53	Wavelength 1584.53
• 1584.95	Wavelength 1584.95
• 1585.36	Wavelength 1585.36
• 1585.78	Wavelength 1585.78

• 1586.20	Wavelength 1586.20
• 1586.62	Wavelength 1586.62
• 1587.04	Wavelength 1587.04
• 1587.46	Wavelength 1587.46
• 1587.88	Wavelength 1587.88
• 1588.30	Wavelength 1588.30
• 1588.73	Wavelength 1588.73
• 1589.15	Wavelength 1589.15
• 1589.57	Wavelength 1589.57
• 1589.99	Wavelength 1589.99
• 1590	Wavelength 1590
• 1590.41	Wavelength 1590.41
• 1590.83	Wavelength 1590.83
• 1591.26	Wavelength 1591.26
• 1591.68	Wavelength 1591.68
• 1592.10	Wavelength 1592.10
• 1592.52	Wavelength 1592.52
• 1592.95	Wavelength 1592.95
• 1593.37	Wavelength 1593.37
• 1593.79	Wavelength 1593.79
• 1594.22	Wavelength 1594.22
• 1594.64	Wavelength 1594.64
• 1595.06	Wavelength 1595.06
• 1595.49	Wavelength 1595.49
• 1596.34	Wavelength 1596.34
• 1596.76	Wavelength 1596.76
• 1597.19	Wavelength 1597.19
• 1597.62	Wavelength 1597.62
• 1598.04	Wavelength 1598.04
• 1598.47	Wavelength 1598.47
• 1598.89	Wavelength 1598.89
• 1599.32	Wavelength 1599.32
• 1599.75	Wavelength 1599.75
• 1600.06	Wavelength 1600.06
• 1601.03	Wavelength 1601.03
• 1601.46	Wavelength 1601.46
• 1601.88	Wavelength 1601.88
• 1602.31	Wavelength 1602.31
• 1602.74	Wavelength 1602.74
• 1603.17	Wavelength 1603.17
• 1603.60	Wavelength 1603.60

• 1604.03	Wavelength 1604.03
• 1610	Wavelength 1610
• USE-TWL1	Use Tunable Wavelength 1
<LOSSB>	the parameter type is REACH, which is the reach value.
• AUTOPROV	Autoprovisioning
• CX	Reach CX
• CX1	Reach CX1
• 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
• TEN-GE-ER	10 GE extended range
• TEN-GE-LR	10 GE long range
• TEN-GE-SR	10 GE short range
• VX	Reach VX
• ZX	Reach ZX
<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

11.5 ED-<MOD_PATH>

(Cisco ONS 15454) The Edit STS1, STS12C, STS18C, STS192C, STS24C, STS36C, STS3C, STS48C, STS96C, STS6C, STS9C, VC12, VC3, VT1, or VT2 (ED-<MOD_PATH>) command edits the attributes associated with synchronous transport signal (STS) and Virtual Tributary (VT) paths.

Usage Guidelines

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

SFBER and SDBER also apply to the VT path level on the 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 that 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.

Path trace 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 that is set to a previously received string. If there is a mismatch, a TIM-P alarm is raised. When the path trace is in OFF mode, there is no path trace processing, and all of 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 two-way connection and STS+1 as the second two-way connection. For single facility access digroup (FAD) test access, only a single STS/VT is used for the test access point (TAP) creation. For more information on TACC, refer to the *Cisco ONS 15454 SONET 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-STP-PATH command.

EC1, OC3, OC48AS, and OC192 only support EXPTRC in the ED-STP-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:

- Sending this command to edit SFBER, SDBER, RVRTV, or RVTM for the non-path protection STS path.
- Sending this command to edit the EXPTRC string with the AUTO path trace mode (TRCMODE=AUTO).
- 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.
- Sending this command to edit both TACC and any other attribute(s) will return the “Parameters Not compatible” error message.
- 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 protection.
- The VFAC AID is only valid on slots containing an ML-Series card. TACC is not supported for the ML-Series cards.
- After bidirectional line switched ring (BLSR) switching, provisioning of the J1 trace string or trace mode is not allowed on the protection path.
- TACC creation is allowed on protection channel access (PCA) for two-fiber and four-fiber BLSR.
- TACC is not supported on G1000, MXP_2.5G_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 to 12), which are the monitoring ports.
 - The monitoring test access ports follow the common rules for the other cards. For example, with an ED-T3 command on Port 2 (FAC-6-2) that has 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 previous step, but it is applied on the ported ports of the DS3XM-12 card.
 - The test access connection setup 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.
- The cross-connections on the DS3i-N-12 card will be STS3c width, but the individual STS 1s within the 3C will be accessible. To edit 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-N-12 card. In this case, you are creating a new entity (TAP) on the DS3i-N-12 card that has to be of 3C width. On the DS3i-N-12 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 the 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.

Category

Paths

Security

Provisioning

Input Format

```
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>]];
```

Input Example

```
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;
```

Input Parameters

<AID>	Access identifier from the “26.12 CrossConnectId1” section on page 26-29.
<SFBER>	Signal failure threshold. Applies only to path protection. Defaults to 1E-4. The parameter type is SF_BER, which is 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.

<SDBER>	Signal degrade threshold. Applies only to path protection. 1E-9 is not allowed for VT-level/LO paths. Defaults to 1E-6. The parameter type is SD_BER, which is 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.
<RVRTV>	Revertive mode. The value Y indicates that protection switching system reverts service to the original line after restoration. The value N indicates that 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. The parameter type is ON_OFF, which disables or enables an attribute.
• N	Does not revert service to original line after restoration.
• Y	Reverts service to original line after restoration.
<RVTM>	Revertive time. RVTM is not allowed to be set while RVRTV is N. Only applies to path protection. The parameter type is REVERTIVE_TIME (revertive time).
• 0.5 to 12.0	Revertive time is 0.5 to 12.0 minutes.
<SWPDIP>	On/off switch for path protection payload defect level switching. Applicable only to STS-level paths in SONET (STS _n). For the selector path on a BLSR, SWPDIP is not editable and always ON. Defaults to N. The parameter type is ON_OFF, which disables or enables an attribute.
• N	Disable an attribute.
• Y	Enable an attribute.
<HOLDOFFTIMER>	Hold off timer for path protection dual-ring interconnect (DRI). Values must be within 0 and 10000 ms (0 to 10 seconds), with increments of 100 ms. Defaults to “existed value.” HOLDOFFTIMER is an integer.
<EXPTRC>	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 _n). Applicable to VT-level paths for the DS3XM-12 and CE-100T-8 card on the ONS 15454. Defaults to 64 null characters. EXPTRC is a string.
<TRC>	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 network element (NE) transmitting 62 null characters (hex 00) and CR and LF. Applicable to STS-level paths in SONET (STS _n). Applicable to VT-level paths for the DS3XM-12 and CE-100T-8 card on the ONS 15454.

<TRCMODE>	Path trace mode. Applicable only to STS-level paths in SONET (STS _n). Defaults to the OFF mode. The parameter type is TRCMODE (trace mode).
• AUTO	Use the previously received path trace string as the expected string. Not applicable to muxponder (MXP) and transponder (TXP) cards.
• AUTO-NO-AIS	Use the previously received path trace string as the expected string and do not turn on the alarm indication signal (AIS) and remote defect indication (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.
<TRCFORMAT>	Path trace format. Only 64-byte is supported. Defaults to 64-byte. The parameter type is TRCFORMAT (trace format).
• 64-BYTE	64 byte trace message
<TACC>	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. TACC is an integer.
<TAPTYPE>	TAP type. Defaults to DUA. The parameter type is TAPTYPE, which is the test access point type.
• DUAL	Dual FAD
• SINGLE	Single FAD
<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. Defaults to IS. 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. Defaults to AINS. 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

11.6 ED-<MOD_RING>

(Cisco ONS 15454) The Edit Bidirectional Line Switched Ring (ED-<MOD_RING>) command edits the BLSR attributes.

Usage Guidelines

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 is supported for Software Release 4.6 and later.

Category

BLSR

Security

Provisioning

Input Format

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

Input Example

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

Input Parameters

<AID>	Access identifier from the “ 26.3 AidUnionId1 ” section on page 26-20 . Identifies the BLSR of the NE. The ALL and BLSR-ALL AIDs are not allowed for editing BLSRs.
<RINGID>	The BLSR ID of the NE up to six characters. Valid characters are A–Z and 0–9. RINGID is a string.
<NODEID>	The BLSR node ID of the NE. NODEID ranges from 0 to 31. It is an integer.
<RVRTV>	Revertive mode. The value Y indicates that protection switching system reverts service to the original line after restoration. The value N indicates that 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. The parameter type is ON_OFF, which disables or enables an attribute.
• N	Does not revert service to original line after restoration.
• Y	Reverts service to original line after restoration.
<RVTM>	Revertive time. RVTM is not allowed to be set while RVRTV is N. The parameter type is REVERTIVE_TIME (revertive time).
• 0.5 to 12.0	Revertive time is 0.5 to 12.0 minutes.
<SRVRTV>	The span revertive mode for four-fiber BLSR only. The parameter type is ON_OFF, which disables or enables an attribute.
• N	Disable an attribute.
• Y	Enable an attribute.
<SRVTM>	The span revertive time for four-fiber BLSR only. SRVTM is not allowed to be set while SRVRTV is N. The 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>

(Cisco ONS 15454) The Edit OC3, OC12, OC48, OC192, or OC768 (ED-<OCN_TYPE>) 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 and Automatic In Service (OOS-AINS), Out Of Service and Maintenance (OOS-MT), and In Service (IS). See [Table 28-1 on page 28-1](#) for supported modifiers by platform.

Usage Guidelines

- The OPRNOMINAL parameter is supported only by optical card types that support Optical PM. The following cards support OPRNOMINAL: OC3-8, MRC-12, MRC-12-2.5G, MRC-4-2.5G, OC192-XFP, CTX-2500, CTX, OC192-4, OC48-16, OC192-4-DWDM, ASAP-4.

- The data communications channel (DCC) transmit side 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.
- You cannot directly transition a facility from IS to OOS-MA,DSBLD service state. You can transition a facility to OOS-MA,DSBLD service state from any state except OOS-MA,MT. To transition a facility from OOS-MA,MT to OOS-MA,DSBLD service state, all the following conditions must be met:
 - The facility is not sourcing a synchronization clock
 - The facility's DCC is disabled
 - The facility is not part of a protection group
 - The facility is not supporting cross-connects
 - The facility is not using overhead connections or overhead terminations (such as express orderwire, local orderwire, or user data channels [UDCs])

**Note**

The conditions stipulated can be overridden by using the CMDMDE=FRCD option. The FRCD option will immediately remove the facility from service (except for IS to OOS-MA,DSBLD transition) with no consideration for orderly interruption.

**Note**

OSI parameters are not supported in Release 9.0 and 9.1.

Category

Ports

Security

Provisioning

Input Format

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

Input Example

```
ED-OC48:PENNGROVE:FAC-6-1:114:::DCC=Y,AREA=10.92.63.1,SYNCSMSG=N,SENDDUS=N,PJMON=48,SFBER=1E-4,SDBER=1E-6,MODE=SINGLESHELF,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",OPRNOMINAL=Y,OSISDCC=Y,OSILDCC=Y,OSIROUTER=1:IS,AINS;
```

Input Parameters

<AID>	Access identifier from the “26.17 FACILITY” section on page 26-40.
<DCC>	Indicates whether or not the SDCC is to be used. Identifies the SDCC connection of the port. The parameter type is ON_OFF, which disables or enables an attribute.
• N	Disable an attribute.
• Y	Enable an attribute.
<AREA>	The area ID and shows up only if the DCC is enabled. AREA is a string.
<SYNCSMSG>	Synchronization status message. The parameter type is EXT_RING, which indicates whether 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.
<SENDDUS>	The facility will send the DUS (Do not use for Synchronization) value as the SSM for that facility. The parameter type is ON_OFF, which disables or enables an attribute.
• N	Disable an attribute.
• Y	Enable an attribute.
<PJMON>	Identifies an OC-N port PJMON. PJMON is an integer. It defaults to 0 (zero). Set a valid STS number of the optical port. Note 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.
<SFBER>	Signal failure threshold. The parameter type is SF_BER, which is 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.
<SDBER>	Signal degrade threshold. The parameter type is SD_BER, which is 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.
<MODE>	This parameter identifies the facility's operating mode. The mode could be either SONET or SDH.
• SDH	SDH/ETSI mode
• SONET	SONET/ANSI mode

<MUX>	BLSR extension byte (supported only on the OC48AS card). MUX cannot be configured if: • The card is SONET and the media type is SDHT. • The card has an orderwire or user data channel (UDC) connection. • This is a protect line and the working line has an orderwire or UDC connection. The parameter type is MUX_TYPE, which is the BLSR extension type.
• E2	E2 byte (orderwire)
• F1	F1 byte (user)
• K3	K3 byte
• Z2	Z2 byte
<SOAK>	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. SOAK is an integer.
<OSFP>	The Open Shortest Path First discovery. Defaults to Y. The parameter type is ON_OFF, which disables or enables an attribute.
• N	Disable an attribute.
• Y	Enable an attribute.
<LDCC>	The LDCC connection on the port. Defaults to N. the parameter type is EXT_RING, which 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.
<NAME>	NAME is a user-specified string to identify the facility. It defaults to NULL. Its maximum length is 32 characters.
<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.
<EXPTRC>	Expected section trace content. Indicates the expected section 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 _n). Applicable to VT-level paths for the DS3XM-12 card on the ONS 15454. Defaults to NULL. EXPTRC is a string.

<TRC>	The section 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 _n). Applicable to VT-level paths for the DS3XM-12 card on the ONS 15454. TRC is a string.
<TRCMODE>	Section trace mode. Applicable only to STS-level paths in SONET (STS _n). Defaults to MAN. The parameter type is TRCMODE (trace mode).
• AUTO	Use the previously received section trace string as the expected string. Not applicable to MXP or TXP cards.
• AUTO-NO-AIS	Use the previously received section 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 section trace capability. Nothing will be reported.
<TRCFORMAT>	Trace message size. The parameter type is TRCFORMAT (trace format).
• 1-BYTE	1 byte trace message
• 16-BYTE	16 byte trace message
• 64-BYTE	64 byte trace message
<ADMSSM>	SSM selectable value. It will only appear when SSM is disabled. Defaults to STU. The parameter type is SYNC_CLOCK_REF_QUALITY_LEVEL, which is the 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)
<SENDDUSFF>	The parameter type is ON_OFF, which disables or enables an attribute.
• N	Disable an attribute.
• Y	Enable an attribute.
<AISONLPBK>	The parameter type is AIS_ON_LPBK, which indicates if AIS is sent on a loopback.
• FACILITY	AIS is sent on facility loopbacks.
• ALL	AIS is sent on all loopbacks.
• OFF	AIS is not sent on loopbacks.

• TERMINAL	AIS is sent on terminal loopbacks.
<FREQ>	The parameter type is OPTICAL_WLEN (optical wavelength).
• 1310	Wavelength 1310
• 1470	Wavelength 1470
• 1490	Wavelength 1490
• 1510	Wavelength 1510
• 1528.77	Wavelength 1528.77
• 1529.55	Wavelength 1529.55
• 1529.94	Wavelength 1529.94
• 1530	Wavelength 1530
• 1530.33	Wavelength 1530.33
• 1530.73	Wavelength 1530.73
• 1531.12	Wavelength 1531.12
• 1531.51	Wavelength 1531.51
• 1531.90	Wavelength 1531.90
• 1532.29	Wavelength 1532.29
• 1532.68	Wavelength 1532.68
• 1533.07	Wavelength 1533.07
• 1533.47	Wavelength 1533.47
• 1533.86	Wavelength 1533.86
• 1534.25	Wavelength 1534.25
• 1534.64	Wavelength 1534.64
• 1535.04	Wavelength 1535.04
• 1535.43	Wavelength 1535.43
• 1535.82	Wavelength 1535.82
• 1536.22	Wavelength 1536.22
• 1536.61	Wavelength 1536.61
• 1537	Wavelength 1537
• 1537.40	Wavelength 1537.40
• 1537.79	Wavelength 1537.79
• 1538.19	Wavelength 1538.19
• 1538.58	Wavelength 1538.58
• 1538.98	Wavelength 1538.98
• 1539.37	Wavelength 1539.37
• 1539.77	Wavelength 1539.77
• 1540.16	Wavelength 1540.16
• 1540.56	Wavelength 1540.56
• 1540.95	Wavelength 1540.95
• 1541.35	Wavelength 1541.35
• 1541.75	Wavelength 1541.75
• 1542.14	Wavelength 1542.14

• 1542.35	Wavelength 1542.35
• 1542.54	Wavelength 1542.54
• 1542.94	Wavelength 1542.94
• 1543.33	Wavelength 1543.33
• 1543.73	Wavelength 1543.73
• 1544.13	Wavelength 1544.13
• 1544.53	Wavelength 1544.53
• 1544.92	Wavelength 1544.92
• 1545.32	Wavelength 1545.32
• 1545.72	Wavelength 1545.72
• 1546.12	Wavelength 1546.12
• 1546.52	Wavelength 1546.52
• 1546.92	Wavelength 1546.92
• 1547.32	Wavelength 1547.32
• 1547.72	Wavelength 1547.72
• 1548.12	Wavelength 1548.12
• 1548.51	Wavelength 1548.51
• 1548.92	Wavelength 1548.92
• 1549.32	Wavelength 1549.32
• 1549.71	Wavelength 1549.71
• 1550	Wavelength 1500
• 1550.12	Wavelength 1550.12
• 1550.52	Wavelength 1550.52
• 1550.92	Wavelength 1550.92
• 1551.32	Wavelength 1551.32
• 1551.72	Wavelength 1551.72
• 1552.12	Wavelength 1552.12
• 1552.52	Wavelength 1552.52
• 1552.93	Wavelength 1552.93
• 1553.33	Wavelength 1553.33
• 1553.73	Wavelength 1553.73
• 1554.13	Wavelength 1554.13
• 1554.13	Wavelength 1554.13
• 1554.94	Wavelength 1554.94
• 1555.34	Wavelength 1555.34
• 1555.75	Wavelength 1555.75
• 1556.15	Wavelength 1556.15
• 1556.55	Wavelength 1556.55
• 1556.96	Wavelength 1556.96
• 1557.36	Wavelength 1557.36
• 1557.77	Wavelength 1557.77

• 1558.17	Wavelength 1558.17
• 1558.58	Wavelength 1558.58
• 1558.98	Wavelength 1558.98
• 1559.39	Wavelength 1559.39
• 1559.79	Wavelength 1559.79
• 1560.20	Wavelength 1560.20
• 1560.61	Wavelength 1560.61
• 1561.01	Wavelength 1561.01
• 1561.42	Wavelength 1561.42
• 1561.83	Wavelength 1561.83
• 1570	Wavelength 1570
• 1570.83	Wavelength 1570.83
• 1571.24	Wavelength 1571.24
• 1571.65	Wavelength 1571.65
• 1572.06	Wavelength 1572.06
• 1572.48	Wavelength 1572.48
• 1572.89	Wavelength 1572.89
• 1573.30	Wavelength 1573.30
• 1573.71	Wavelength 1573.71
• 1574.13	Wavelength 1574.13
• 1574.54	Wavelength 1574.54
• 1574.95	Wavelength 1574.95
• 1575.37	Wavelength 1575.37
• 1575.78	Wavelength 1575.78
• 1576.20	Wavelength 1576.20
• 1576.61	Wavelength 1576.61
• 1577.03	Wavelength 1577.03
• 1577.44	Wavelength 1577.44
• 1577.86	Wavelength 1577.86
• 1578.27	Wavelength 1578.27
• 1578.69	Wavelength 1578.69
• 1579.10	Wavelength 1579.10
• 1579.52	Wavelength 1579.52
• 1579.93	Wavelength 1579.93
• 1580.35	Wavelength 1580.35
• 1580.77	Wavelength 1580.77
• 1581.18	Wavelength 1581.18
• 1581.60	Wavelength 1581.60
• 1582.02	Wavelength 1582.02
• 1582.44	Wavelength 1582.44
• 1582.85	Wavelength 1582.85

• 1583.27	Wavelength 1583.27
• 1583.69	Wavelength 1583.69
• 1584.11	Wavelength 1584.11
• 1584.53	Wavelength 1584.53
• 1584.95	Wavelength 1584.95
• 1585.36	Wavelength 1585.36
• 1585.78	Wavelength 1585.78
• 1586.20	Wavelength 1586.20
• 1586.62	Wavelength 1586.62
• 1587.04	Wavelength 1587.04
• 1587.46	Wavelength 1587.46
• 1587.88	Wavelength 1587.88
• 1588.30	Wavelength 1588.30
• 1588.73	Wavelength 1588.73
• 1589.15	Wavelength 1589.15
• 1589.57	Wavelength 1589.57
• 1589.99	Wavelength 1589.99
• 1590	Wavelength 1590
• 1590.41	Wavelength 1590.41
• 1590.83	Wavelength 1590.83
• 1591.26	Wavelength 1591.26
• 1591.68	Wavelength 1591.68
• 1592.10	Wavelength 1592.10
• 1592.52	Wavelength 1592.52
• 1592.95	Wavelength 1592.95
• 1593.37	Wavelength 1593.37
• 1593.79	Wavelength 1593.79
• 1594.22	Wavelength 1594.22
• 1594.64	Wavelength 1594.64
• 1595.06	Wavelength 1595.06
• 1595.49	Wavelength 1595.49
• 1596.34	Wavelength 1596.34
• 1596.76	Wavelength 1596.76
• 1597.19	Wavelength 1597.19
• 1597.62	Wavelength 1597.62
• 1598.04	Wavelength 1598.04
• 1598.47	Wavelength 1598.47
• 1598.89	Wavelength 1598.89
• 1599.32	Wavelength 1599.32
• 1599.75	Wavelength 1599.75
• 1600.06	Wavelength 1600.06

• 1601.03	Wavelength 1601.03
• 1601.46	Wavelength 1601.46
• 1601.88	Wavelength 1601.88
• 1602.31	Wavelength 1602.31
• 1602.74	Wavelength 1602.74
• 1603.17	Wavelength 1603.17
• 1603.60	Wavelength 1603.60
• 1604.03	Wavelength 1604.03
• 1610	Wavelength 1610
• USE-TWL1	Use Tunable Wavelength 1
<LOSSB>	The parameter type is REACH (reach value)
• AUTOPROV	Autoprovisioning
• CX	Reach CX
• CX1	Reach CX1
• 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
• TEN-GE-ER	10 GE extended range
• TEN-GE-LR	10 GE long range
• TEN-GE-SR	10 GE short range
• VX	Reach VX
• ZX	Reach ZX
<FOREIGNFEND>	Indicates whether the far-end NE on the DCC is a foreign NE. The parameter type is ON_OFF, which disables or enables 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. FOREIGNNIP is a string.
<OPRNOMINAL>	Reads the current raw optical receive power and sets the raw OPR value as the nominal optical receive power.
• N	Not Supported.
• Y	Sets the OPR.
OSISDCC	Indicates whether or not the OSI SDCC is to be used. Identifies the SDCC connection of the port. The parameter type is ON_OFF, which disables or enables an attribute.
• Y	Enable an attribute.
• N	Disable an attribute.
OSILDCC	Indicates whether or not the OSI LDCC is to be used. Identifies the SDCC connection of the port. The parameter type is ON_OFF, which disables or enables an attribute.
• Y	Enable an attribute.
• N	Disable an attribute.
OSIROUTER	The OSI virtual router number in the range of 1 to 3 for 15454.
<PORTMODE>	Describes the termination mode of each interface on the OTU2-XP card.
• DWDM-LINE	Line terminating mode.
• DWDM-SECTION	Section terminating mode.
• DWDM-TRANS-AIS	Transparent mode AIS.
• DWDM-TRANS-SQUELCH	Transparent mode squelch.
• 10GLANWAN-SQUELCH	10G LAN to WAN Squelch.
<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. Defaults to AINS. 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

11.8 ED-ALS

(Cisco ONS 15454) The Edit Automatic Laser Shutdown (ED-ALS) command is used to modify the ALS attributes of an OC-N facility and all the facilities that support the ALS feature. For transponder and muxponder cards, this command is used to modify the ALS parameter of the OC48 and OC192 ports.

Usage Guidelines None

Category Ports

Security Provisioning

Input Format ED-ALS[:<TID>]:<AID>:<CTAG>[::<ALSMODE>=<ALSMODE>],[<ALSRCINT>=<ALSRCINT>],[<ALSRCPW>=<ALSRCPW>],[<OSRI>=<OSRI>],[[:];

Input Example ED-ALS::CHAN-1-1-1:100::ALSMODE=AUTO,ALSRCINT=130,ALSRCPW=80.1;

Input Parameters	<SRC>	Access identifier from the “ 26.2 AidUnionId ” section on page 26-13 .
	<ALSMODE>	ALS is enabled or disabled. The parameter type is ALS_MODE, which is the working mode for automatic laser shutdown.
	• AUTO	Automatic
	• DISABLED	Disabled
	• MAN	Manual
	• MAN-RESTART	Manual restart for test
	<ALSRCINT>	ALS recovery interval. The range is 60 to 300 seconds. ALSRCINT is an integer.
	<ALSRCPW>	ALS recovery pulse width. The range is 2.0 to 100.00 seconds, in increments of 100 ms. ALSRCWP is a float.
	<OSRI>	(Optional) OSRI enabled or disabled. Present only on a port where the safety is supported. The parameter type is ON_OFF (disable or enable an attribute).
	• N	Disable an attribute.
	• Y	Enable an attribute.

11.9 ED-APC

(Cisco ONS 15454) The Edit Amplification Power Control (ED-APC) 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 retrieve command to retrieve the current value.

Usage Guidelines

None

Category

DWDM

Security

Provisioning

Input Format

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

Input Example

ED-APC:PENNGROVE:WDMSIDE-A:CTAG:::APCENABLE=N;

Input Parameters

<WDMSIDE>	The AID is used to access the WDM side of an MSTP node.
WDMSIDE-{UNKNOWN,A, B,C,D,E,F,G,H}	
<ROLE>	The role the unit is playing in the protection group.
- PROT - WORK	
The entity is the protection unit in the protection group.	
The entity is the working unit in the protection group.	
<APCENABLE>	Enable or disable the APC application. Default is N. The parameter type is ON_OFF, which disables or enables an attribute.
- N - Y	
Disable an attribute.	
Enable an attribute.	

11.10 ED-BITS

(Cisco ONS 15454) The Edit Building Integrated Timing Supply (ED-BITS) command edits the building integrated timing supply (BITS) reference attributes.

Usage Guidelines

The 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. The default values for all optional parameters are NE default values. These values might not be the current value for a parameter. Use a retrieve command to obtain the current value.

Category Synchronization

Security Provisioning

Input Format Cisco ONS 15454

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

Input Example Cisco ONS 15454

```
ED-BITS:SONOMA:BITS-2:779:::LINECDE=AMI,FMT=E1-MF,SYNCSMSG=N,
,SABIT=BYTE-5,BITSFAC=E1,ADMSSM=G811:UNLOCKED
```

Input Parameters	<AID>	Access identifier from the “26.6 BITS” section on page 26-21 .
	<LINECDE>	The parameter type is LINE_CODE (line code).
	• AMI	Line code value is AMI.
	• B8ZS	Line code value is B8ZS (binary 8-zero substitution).
	<FMT>	Digital signal frame format. The parameter type is FRAME_FORMAT, which is the frame format for a T1 port.
	• D4	Frame format is D4.
	• ESF	Frame format is Extended Superframe (ESF).
	• UNFRAMED	Frame format is unframed.
	<IMPEDANCE>	(Optional) Impedance is the total opposition that a circuit presents to alternating current. The maximum power transfer that takes place from the source to load when the impedance match.
	• 120 ohms	120 ohm termination.
	• 100 ohms	100 ohm termination.
	• 75 ohms	75 ohm termination.
	<LBO>	Line build-out settings. BITS line build-out. Default value is 0 to 133. LBO is an integer. The parameter type is BITS_LineBuildOut (BITS line build-out).
	• 0–133	BITS line build-out range is 0–133.
	• 134–266	BITS line build-out range is 134–266.
	• 267–399	BITS line build-out range is 267–399.
	• 400–533	BITS line build-out range is 400–533.
	• 534–655	BITS line build-out range is 534–655.
	<SYNCSMSG>	Indicates if the BITS facility supports synchronization status message. Default is ON (Y). The parameter type is EXT_RING, which indicates whether 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.
<AISTHRSHLD>	Alarm indication signal threshold. The parameter type is SYNC_CLOCK_REF_QUALITY_LEVEL, which is the 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)
<SABIT>	When the frame format selection is E1, SABIT is the bit used to receive and transmit the SSM. The 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.
<IMPEDANCE>	When the frame format selection is E1, IMPEDANCE is the terminal impedance of the BITS-IN port. The parameter type is IMPEDANCE, which is the terminal impedance of the BITS-IN port.
• 120-OHM	Impedance of 120 ohm
• 75-OHM	Impedance of 75 ohm
<BITSFAC>	BITS facility settings. BITS-2 always inherits the value of BITS-1. The parameter type is BITS_FAC (the 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
<ADMSSM>	SSM selectable. Only applicable to BITS-IN when SSM is disabled. The parameter type is SYNC_CLOCK_REF_QUALITY_LEVEL, which is the 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)
<PST>	The primary state. The parameter type is PST, which indicates the current overall service condition of an entity.
• IS	In service
• OOS	Out of service

11.11 ED-BULKROLL-<OCN_TYPE>

(Cisco ONS 15454) The Edit Bulkroll for OC12, OC192, OC3, OC48, or OC768 (ED-BULKROLL-<OCN_TYPE>) command edits information about the rolling of traffic from one endpoint 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.

Usage Guidelines

See [Table 28-1 on page 28-1](#) for supported modifiers by platform.

Category

Bridge and Roll

Security

Provisioning

Input Format

```
ED-BULKROLL-<OCN_TYPE>:[<TID>]:<FROM>:<CTAG>:::
[RFROMSTART=<RFROMSTART>],[RFROMEND=<RFROMEND>],[CMDMDE=<CMDMDE>];
```

Input Example

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

Input Parameters	<FROM>	One of the endpoints. Access identifier from the “ 26.17 FACILITY ” section on page 26-40 for line level rolling and bulk rolling.
	<RFROMSTART>	The starting time slot in the source roll port. For bulk rolling only. The AID is from the “ 26.12 CrossConnectId1 ” section on page 26-29 (except VCM and FACILITY). Defaults to STS-<FROMSLOT>-<FROMPORT>-1, where <FROMSLOT> and <FROMPORT> are the slot and port of the <FROM> AID.
	<RFROMEND>	The ending time slot in the source roll port. For bulk rolling only. The AID is from the “ 26.12 CrossConnectId1 ” section on page 26-29 (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).
	<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.

11.12 ED-BWP-ETH

(Cisco ONS 15454) This command is used to modify a Bandwidth Profile entry in BWP DB. The BWP DB is a collection of BWP used in a Network Element.

Usage Guidelines	Error conditions for deleting bandwidth profile can be: - Invalid AID. If the AID is invalid, an IIAC (Invalid AID) error message is returned. - The "ALL" AID is invalid for this command. - The BWP having the specified AID should be present in the node, that is, already been entered by ENT-BWP-ETH command.
Category	ETHERNET
Security	Provisioning
Input Format	ED-BWP-ETH:[<TID>]:<AID>:<CTAG>:::[NAME=<NAME>],[CIR=<CIR>],[CBS=<CBS>],[PBS=<PBS>],[PIR=<PIR>],[CFMSTATE=<CFM_STATE>][:];

Input Example

ED-BWP-ETH:ROCKS:BWP-10000:1:::NAME="MyBWP",CIR=10,CBS=1M,PBS=1M,PIR=20,CFM STATE=Y;

Input Parameters

<AID>	This AID is used to access BWP.BWP AID Format is: BWP-[bwpid]Values
• BWP-ALL	All aid for BWP.
• BWP-{1-10000}	Single AID for BWP. The valid identifiers ranges from 1 to 10000.
<NAME>	indicates the BWP name. bwp name is a String. - Default value is -
<CIR>	Ingress committed information rate. This is a value between 0 and 100.Default value is - 100.
<CBS>	Ingress committed burst bucket size.
• 4K	4 Kbit bucket size
• 8K	16 Kbit bucket size
• 16K	32 Kbit bucket size
• 32K	64 Kbit bucket size
• 64K	128 Kbit bucket size
• 128K	256 Kbit bucket size
• 256K	512 Kbit bucket size
• 512K	1 Mbit bucket size
• 1M	2 Mbit bucket size
• 2M	4 Mbit bucket size
• 4M	8 Mbit bucket size
• 8M	16 Mbit bucket size
• 16M	16 Kbit bucket size
<EBS>	Ingress peak burst bucket size
• 4K	4 Kbit bucket size
• 8K	8 Kbit bucket size
• 16K	16 Kbit bucket size
• 32K	32 Kbit bucket size
• 64K	64 Kbit bucket size
• 128K	128 Kbit bucket size
• 256K	256 Kbit bucket size
• 512K	512 Kbit bucket size
• 1M	1 Mbit bucket size
• 2M	2 Mbit bucket size
• 4M	4 Mbit bucket size
• 8M	8 Mbit bucket size
• 16M	16 Mbit bucket size
<PIR>	Excess information rate. This is a value between 0 and 100. Default value is - 100.

<CFMSTATE>	Link Integrity status
• Y	Enabled
• N	Disabled

11.13 ED-CFM

(Cisco ONS 15454) The Edit Connectivity Fault Management (ED-CFM) command edits the Connectivity Fault Management (CFM) protocol at the port level.

Usage Guidelines

- This command is applicable only to GE_XP and 10GE_XP cards.
- The card should be in Layer2 over DMDM mode.

Category

Port

Security

Provisioning

Input Format

ED-CFM:[<TID>]:<AID>:<CTAG>;

Input Example

ED-CFM:454-156:ETH-1-1-1:1::CFMSTATE=enable;

Input Parameters

Table 11-1 ED-CFM Command - Parameter Support

Input Parameters	Description
<AID>	Ethernet AIDs are used to access L2 Ethernet ports. Access identifier from the “26.16 ETH” section on page 26-40.
<CFM_STATE>	Indicates whether the CFM is enabled or disabled on the port.
• ENABLE	Indicates the CFM is enabled on the port.
• DISABLE	Indicates the CFM is disabled on the port.

11.14 ED-CHGRP

(Cisco ONS 15454) The Edit Channel Group (ED-CHGRP) command edits the layer 2 channel group information of GE_XP and 10GE_XP ethernet cards.

Usage Guidelines

The default values for all optional parameters are network element (NE) default values. These values might not be the current value for a parameter. Use a retrieve command to obtain the current value.

Category

Channel Group

Security

Provisioning

Input Format

ED-CHGRP:[<TID>]:<AID>:<CTAG>:::[ATTACH=<ATTACH>],[DETACH=<DETACH>],[LACPMODE=<LACPMODE>],[HASHALGO=<HASHALGO>],[NIMODE=<NIMODE>],[MACLEARNING=<MACLEARNING>],[INGRESSCOS=<INGRESSCOS>],[ETHERCETYPE=<ETHERCETYPE>],[ETHERSTYPE=<ETHERSTYPE>],[BPDU=<BPDU>],[QNQMODE=<QNQMODE>],[TRNSPSVLAN=<TRNSP_SVLAN>],[MTU=<MTU>],[FLOWCONTROL=<FLOWCONTROL>],[SPEED=<SPEED>],[EXPSPEED=<EXPSPEED>],[CIR=<CIR>],[CBS=<CBS>],[EBS=<EBS>]:[<PST>[,<SST>]];;

Input Example

ED-CHGRP::CHGRP-12-2:1:::ATTACH=ETH-12-5-1Ð-12-1-1,LACPMODE=ON,HASHINGALGO=HASHING-UCAST-SA-DA-VLAN-INCOMING-PORT,NIMODE=UNI,MACLEARNING=Y,INGRESSCOS=0,ETHERCETYPE=8100,ETHERSTYPE=8100,BPDU=Y,QNQMODE=SELECTIVE,MTU=9700,FLOWCTRL=ASYMMETRIC,SPEED=10_GBPS,EXPSPEED=1_GBPS,CIR=100,CBS=4K,EBS=4k;

Input Parameters

<AID>	Access identifier from the “26.9 CHGRP” section on page 26-24 .
<NIMODE>	Identifies the Ethernet Network Interface Mode.
• NNI	(Default) Network-Network Interface Mode
• UNI	User-Network Interface Mode
<LACPMODE>	LACP mode values
• ON	Manual mode of LACP
• ACTIVE	Active mode of LACP
• PASSIVE	Passive mode of LACP
<HASHINGALGO>	Hashing algorithm value
• HASHING_SA_VLAN_INCOMING_PORT	The Hashing Algorithm value is HASHING_SA_VLAN_INCOMING_PORT.
• HASHING_DA_VLAN_INCOMING_PORT	The Hashing Algorithm is HASHING_DA_VLAN_INCOMING_PORT.
• HASHING_SA_DA_VLAN_INCOMING_PORT	The Hashing Algorithm is HASHING_SA_DA_VLAN_INCOMING_PORT.
• HASHING_SRC_IP_TCP_UDP	The Hashing Algorithm is HASHING_SRC_IP_TCP_UDP.
• HASHING_DST_IP_TCP_UDP	The Hashing Algorithm is HASHING_DST_IP_TCP_UDP.

• HASHING_SRC_DST_IP_TCP_UDP	The Hashing Algorithm is HASHING_SRC_DST_IP_TCP_UDP.
<MTU>	(Optional) Maximum transport unit. The parameter type is MTU_TYPE, which indicates the maximum transport unit used by an Ethernet card. Defaults to 9600.
• 10004	10004. Indicates jumbo size.
• 1500	1500
• 1548	1548
• 9600	9600. Indicates jumbo size.
• 64	64
• 9700	9700. Indicates jumbo size.
<ATTACH >	Ethernet AID for the ethernet port on GE_XP and 10GE_XP card.
<DETACH>	To remove or detach the port.
<SPEED>	(Optional) The parameter type is ETHER_SPEED, which indicates Ethernet speed. Defaults to AUTO.
• 100_MBPS	100 Megabits per second
• 10_GBPS	10 Gigabits per second
• 10_MBPS	10 Megabits per second
• 1_GBPS	1 Gigabit per second
<EXPSPEED>	(Optional) Ethernet speed. The parameter type is ETHER_SPEED, which is the Ethernet speed.
• 100_MBPS	100 Megabits per second
• 10_GBPS	10 Gigabits per second
• 10_MBPS	10 Megabits per second
• 1_GBPS	1 Gigabit per second
• 40_GBPS	40 Gigabit per second
• AUTO_FDX	Enable auto negotiation with full duplex
• AUTO	Auto
<CIR>	Ingress committed information rate. The value ranges from 0 to 100. The default value is 100.
<CBS>	Ingress committed burst bucket size.
• 4K	4 Kbit bucket size
• 8K	16 Kbit bucket size
• 16K	32 Kbit bucket size
• 32K	64 Kbit bucket size
• 64K	128 Kbit bucket size
• 128K	256 Kbit bucket size
• 256K	512 Kbit bucket size
• 512K	1 Mbit bucket size
• 1M	2 Mbit bucket size
• 2M	4 Mbit bucket size

• 4M	8 Mbit bucket size
• 8M	16 Mbit bucket size
• 16M	16 Kbit bucket size
<EBS>	Ingress excess burst bucket size.
<MACLEARNING>	MAC Address Learning Mode. This activates the MAC address learning on the interface to avoid packet broadcasting.
• Y	Enables the MAC learning on the interface.
• N	Disables the MAC learning on the interface.
<INGRESSCOS>	Identifies the COS value set in the S-VLAN tag.
• 0 to 7	Set a Cos value
• TRUST	Use the Customer COS
• VLAN	The COS will be provisioned on CVLAN basis (QinQ selective mode)
<ETHERCETYPE>	Identifies a customer foreseen Ethernet type. If the customer uses a non-standard Ethernet type, the incoming packets will be accepted only if the CE-VLAN Ethernet type matches this parameter.
<ETHERSTYPE>	Identifies a customer foreseen Ethernet type. If the customer uses a non-standard Ethernet type, the incoming packets will be accepted only if the CE-VLAN Ethernet type matches this parameter.
<BPDU>	BPDU (Bridge Protocol Data Unit) management mode; Drop/Passthrough BPDU tagged packets.
• Y	Enables the BPDU tag.
• N	Disables the BPDU tag.
<QNQMODE>	This is used to represent the QinQ mode operations.
• Selective	The S-VLAN tag is added only on specified CE-VLANs. The other packets are dropped.
• Transparent	The S-VLAN tag is always performed where all packets having the S-VLAN-ID identified by TRNSPSVLAN parameter are allowed.
<TRNSPSVLAN>	VLAN identifier. A VLAN ID is a number between 1 and 4096. The value 0 is reserved for untagged VLANs. This identifier is used for customer VLAN IDs and service provider VLAN IDs.
<NAME>	(Optional) NAME is a string. User-assigned port name.

11.15 ED-CMD-SECU

(Cisco ONS 15454) The Edit Command Security (ED-CMD-SECU) command edits the command security level of a particular command.

Usage Guidelines

None

Category	Security	
Security	Superuser	
Input Format	ED-CMD-SECU:[<TID>]:<AID>:<CTAG>::<CAP>;	
Input Example	ED-CMD-SECU::INIT-REG:1::SUPER;	
Input Parameters	<AID>	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.
	<CAP>	Command access privilege. Must not be null. The parameter type is PRIVILEGE, which is the security level.
	• PROV	Provision security level. 60 minutes of idle time.
	• SUPER	Superuser security level. 15 minutes of idle time.

11.16 ED-COS-ETH

(Cisco ONS 15454) The Edit Ethernet Cost of Service Table (ED-COS-ETH) command edits the egress parameter of a cost of service table associated to an L2 Ethernet port.

Usage Guidelines	The default values for all optional parameters are NE default values, but these values might not be the current value for a parameter. Use a retrieve command to obtain the current value.	
Category	Ethernet	
Security	Provisioning	
Input Format	ED-COS-ETH:[<TID>]:<AID>:<CTAG>:::[AISACTION=<AISACTION>],[IGMPROUTE=<IGMPROUTE>],[QOSENABLED=<QOSENABLED>],[BW0=<BWO>],[WEIGHT0=<WEIGHT0>],[BW1=<BW1>],[WEIGHT1=<WEIGHT1>],[BW2=<BW2>],[WEIGHT2=<WEIGHT2>],[BW3=<BW3>],[WEIGHT3=<WEIGHT3>],[BW4=<BW4>],[WEIGHT4=<WEIGHT4>],[BW5=<BW5>],[WEIGHT5=<WEIGHT5>],[BW6=<BW6>],[WEIGHT6=<WEIGHT6>],[BW7=<BW7>],[WEIGHT7=<WEIGHT7>][:];	

Input Example

ED-COS-ETH:PETALUMA:ETH-1-1-1:1:::QOSENABLED=Y,BW0=10,WEIGHT0=0,BW1=20,WEIGHT1=2,BW2=40,WEIGHT2=4,BW3=60,WEIGHT3=6,BW4=70,WEIGHT4=8,BW5=80,WEIGHT5=10,BW6=85,WEIGHT6=12,BW7=100,WEIGHT7=15::;

Input Parameters

<AID>	Ethernet AIDs are used to access L2 Ethernet ports. Access identifier from the “26.16 ETH” section on page 26-40 .
<AISACTION>	VLAN-AIS Action. Indicates what action take place on port when VLAN-AIS alarm is raised.
• AIS-NONE	No action after VLAN-AIS
• AIS-SQUELCH	The port is squelched.
<IGMPROUTE>	IGMP M Router port. Indicates the type of connection between this port and the IGMP M Router.
• STATIC	A static connection is present between this port and the IGMP M Router
• NONE	No connection is present
<INGRESSCOS>	Identifies the COS value set in the S-VLAN tag.
• 0 to 7	Set a Cos value
• TRUST	Use the customer COS
• VLAN	The COS to be provisioned on CVLAN basis (QinQ selective mode).
<QOSENABLED>	Used to enable or disable the egress QOS policy of an L2 Ethernet port.
• N	Disable the service.
• Y	Enable the service.
<BW0>	Bandwidth percentage, a value between 0 and 100.
<WEIGHT0>	Value represents the weighted round-robin (WRR) weight associated to the COS values, an integer value between 0 and 15.
<BW1>	Bandwidth percentage, a value between 0 and 100.
<WEIGHT1>	Value represents the WRR weight associated to the COS values, an integer value between 0 and 15.
<BW2>	Bandwidth percentage, a value between 0 and 100.
<WEIGHT2>	Value represents the WRR weight associated to the COS values, an integer value between 0 and 15.
<BW3>	Bandwidth percentage, a value between 0 and 100.
<WEIGHT3>	Value represents the WRR weight associated to the COS values, an integer value between 0 and 15.
<BW4>	Bandwidth percentage, a value between 0 and 100.
<WEIGHT4>	Value represents the WRR weight associated to the COS values, an integer value between 0 and 15.
<BW5>	Bandwidth percentage, a value between 0 and 100.
<WEIGHT5>	Value represents the WRR weight associated to the COS values, an integer value between 0 and 15.
<BW6>	Bandwidth percentage, a value between 0 and 100.

<WEIGHT6>	Value represents the WRR weight associated to the COS values, an integer value between 0 and 15.
<BW7>	Bandwidth percentage, a value between 0 and 100.
<WEIGHT7>	Value represents the WRR weight associated to the COS values, an integer value between 0 and 15.

11.17 ED-CRS-<PATH>

(Cisco ONS 15454) The Edit Cross-Connect for STS1, STS12C, STS18C, STS192C, STS24C, STS36C, STS3C, STS48C, STS96C, STS6C, STS9C, VT1, or VT2 (ED-CRS-<PATH>) command edits a cross-connection.

Usage Guidelines

See [Table 28-1 on page 28-1](#) for supported modifiers by platform.



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 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 “ 26.12 CrossConnectId1 ” section on page 26-29.
	<DST>	Destination AID from the “ 26.12 CrossConnectId1 ” section on page 26-29.
	<CCT>	Cross-connection. The parameter type is CCT which indicates the type of cross-connection to be created.
	• 1WAY	A unidirectional connection from a source tributary to a destination tributary
	• 1WAYDC	Path Protection multicast drop (one-way continue)
	• 1WAYEN	Path Protection multicast end node (one-way continue)
	• 1WAYMON	A bidirectional connection between the two tributaries
		Note 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.
	• 1WAYPCA	A unidirectional connection from a source tributary to a destination tributary on the protection path/fiber
	• 2WAY	A bidirectional connection between the two tributaries
	• 2WAYDC	A bidirectional drop and continue connection applicable only to path protection traditional and integrated DRIs
	• 2WAYPCA	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 “ 26.2 AidUnionId ” section on page 26-13.
	<REMOVE>	AID from the “ 26.2 AidUnionId ” section on page 26-13.
	<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

11.18 ED-CRS-ETH

This command modifies an ethernet connection relationship between two or more ethernet connection end points inside the ethernet facilities.

Usage Guidelines

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

The ethernet connection end point identifier must be the same for all the ethernet ports inside the connection and must be kept the same for all the ethernet circuit.

CKTID is a string of ASCII characters. The maximum length of CKTID can be 48. If the CKTID is EMPTY or NULL this field is not displayed

If the AID is invalid, an IIAC (Invalid AID) error message is returned.

The "ALL" AID is invalid for this command.

Category

ETHERNET

Security

Provisioning

Input Format

ED-CRS-ETH:[<TID>]:<src>,<dst>:<CTAG>:::[ADD=<add>],[REMOVE=<remove>],[CKTID=<cktid>][:];

Input Example

ED-CRS-ETH:KARTHIK:ETH-1-1-1-12,ETH-1-21-1-12:1:::CKTID=NEW,ADD=ETH-1-2-1;

Input Parameters

<SRC>	Ethernet connection identifier AIDs are used to access L2 ethernet connection end point.
ALL	The ALL aid is applicable for RTRV-only commands, basically the RTRV-rr type of commands. For e.g. RTRV-CRS-ETH with ALL aid returns all ETH connections on the node.
ETHID[-{1-12}]-{1-5,12-16}-{1-22}-1-{1-20}	Ethernet connection end point aid for GE-XP card in the format of:ETHID-[shelf]-[slot]-[ppm]-[port]-[cepid], where [cepid] is the connection end point identifier, that identifies a single 1 Gbit/sec. circuit inside an ethernet port.
ETHID[-{1-12}]-{1-6,12-17}-{1-4}-1-{1-20}	Facility aid for 10GE-XP card in the format of:ETHID-[shelf]-[slot]-[ppm]-[port]-[cepid], where [cepid] is the connection end point identifier, that identifies a single 1 Gbit/sec. circuit inside an ethernet port.
<DST>	Ethernet connection identifier AIDs are used to access L2 ethernet connection end point
ALL	The ALL aid is applicable for RTRV-only commands, basically the RTRV-rr type of commands. For e.g. RTRV-CRS-ETH with ALL aid returns all ETH connections on the node.
ETHID[-{1-12}]-{1-5,12-16}-{1-22}-1-{1-20}	Ethernet connection end point aid for GE-XP card in the format of:ETHID-[shelf]-[slot]-[ppm]-[port]-[cepid], where [cepid] is the connection end point identifier, that identifies a single 1 Gbit/sec. circuit inside an ethernet port.
ETHID[-{1-12}]-{1-6,12-17}-{1-4}-1-{1-20}	Facility aid for 10GE-XP card in the format of:ETHID-[shelf]-[slot]-[ppm]-[port]-[cepid], where [cepid] is the connection end point identifier, that identifies a single 1 Gbit/sec. circuit inside an ethernet port.
<ADD>	add is the AID AidUnionId.Default value is - NULL
<REMOVE>	remove is the AID AidUnionId. Default value is - "NULL".
<CKTID>	Circuit identification parameter contains the Common Language Circuit ID or other alias of the circuit being provisioned. May not contain blank spaces. CKTID is a string of ASCII characters. The maximum length of CKTID can be 48. cktid is a String. cktid is optional. Default value is - "NULL"

11.19 ED-DAT

(Cisco ONS 15454) The Edit Date and Time (ED-DAT) command edits the date and the time.

Usage Guidelines

None

Category

System

Security	Provisioning				
Input Format	ED-DAT:[<TID>]::<CTAG>::[<DATE>],[<TIME>];				
Input Example	ED-DAT:PETALUMA::1234::99-12-21,14-35-15;				
Input Parameters	<table> <tr> <td><DATE></td><td>The new date. DATE is a string</td></tr> <tr> <td><TIME></td><td>The new time. TIME is a string.</td></tr> </table>	<DATE>	The new date. DATE is a string	<TIME>	The new time. TIME is a string.
<DATE>	The new date. DATE is a string				
<TIME>	The new time. TIME is a string.				

11.20 ED-DS1

(Cisco ONS 15454) The Edit DS1 (ED-DS1) command edits the test access attribute for DS1 access on a DS3XM-6 and DS3XM-12 card.

Usage Guidelines

- 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 (Ports 1 to 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 that is set up through the ED-T3/DS1/STS1/VT1 command of the DS3XM-12 card is only allowed on the physical front ports (PORTED ports, Ports 1 to 12), which are the monitoring ports, as follows:
 - The monitoring test access ports follow the common rules for the other cards. For example, when issuing the ED-T3 command 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 command 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 previous step, 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.

- The parameters BERTMODE, BERTPATTERN, and BERTERRCOUNT apply only to DS1/E1-56 and DS3XM-12 cards
- BERT is implemented on a single port.

Category

Ports

Security

Provisioning

Input Format

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

Input Example

ED-DS1:PETALUMA:DS1-2-1-6-12:123:::TACC=8,TAPTYPE=DUAL,MODE=FDL,
FMT=ESF,BERTMODE=NONE,BERTPATTERN=NONE;

Input Parameters

<AID>	Access identifier from the “26.13 DS1” section on page 26-36 .
<TACC>	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. TACC is an integer.
<TAPTYPE>	TAP type. The parameter type is TAPTYPE (test access point type).
• DUAL	Dual FAD
• SINGLE	Single FAD
<AISONLPBK>	The parameter type is AIS_ON_LPBK, which indicates whether AIS is sent on a loopback.
• FACILITY	AIS is sent on facility loopbacks.
• ALL	AIS is sent on all loopbacks.
• OFF	AIS is not sent on loopbacks.
• TERMINAL	AIS is sent on terminal loopbacks.
<MODE>	Mode with which the command is to be implemented. DS1 path mode of the DS3XM-12 card. Defaults to FDL. The parameter type is DS1MODE, which is the DS1 path mode of the DS3XM-12 card.
• ATT	The DS1 path of the DS3XM-12 card is in AT&T 54016 mode.
• FDL	The DS1 path of the DS3XM-12 card is in FDL T1-403 mode.
<FMT>	Digital signal format. The DS1 path frame format of the DS3XM-12 card. Defaults to UNFRAMED. The parameter type is FRAME_FORMAT, which is the frame format for a T1 port.
• D4	Frame format is D4.
• ESF	Frame format is ESF.
• UNFRAMED	Frame format is unframed.

<BERTMODE>	Specifies the mode [Test Pattern Generator (TPG) or Test Pattern Monitor (TPM)] of the port for BERT.
• NONE	BERT mode not enabled.
• TPGM-L	Test pattern generator and monitor on line side.
• TPGM-B	Test pattern generator and monitor on backplane.
• TPG-L	Test pattern generator on line side.
• TPM-L	Test pattern monitor on line side.
• TPG-B	Test pattern generator on backplane.
• TPM-B	Test pattern monitor on backplane.
<BERTPATTERN>	Specifies the error pattern to be injected for BERT.
• NONE	BERT pattern not enabled.
• PRBS15	PRBS15 test pattern.
• PRBS20	PRBS20 test pattern.
• PRBS23	PRBS23 test pattern.
• QRSS	QRSS test pattern.
• ALT-ONE-ALT-ZERO	Alternate one and zero pattern.
<BERTERRCOUNT>	Integer value. Value –1 indicates that BERT is disabled/not supported.

11.21 ED-DSCP-<MOD2>

(Cisco ONS 15454) The Edit ETH or CHGRP (ED-DSCP-<MOD2>) command edits Differentiated Service Code Points (DSCP) to COS conversion table associated to a L2 ethernet port or a channel group.

Usage Guidelines

This command is applicable when the INGRESSCOS parameter is set to DSCP value on the ethernet port or channel group.

Category

Ethernet or Channel Group

Security

Provisioning

Input Format

ED-DSCP-MOD2:[<TID>]:<AID>:<CTAG>::<COS>:DSCPFIRST=<DSCP_FIRST>,DSCPLAST=<DSCP_LAST>[:];

Input Example

ED-DSCP-ETH::ETH-5-1-1:1234::3:DSCPFIRST=26,DSCPLAST=30;
ED-DSCP-CHGRP::CHGRP-5-1-1::3:DSCPFIRST=26,DSCPLAST=30;

Table 11-2 ED-DSCP-MOD2 Command - Parameter Support

Input Parameters	Description
<AID>	Access identifier.
Ethernet	Ethernet AIDs are used to access L2 Ethernet ports. Access identifier from the “26.16 ETH” section on page 26-40 .
Channel Group	Access identifier from the “26.9 CHGRP” section on page 26-24 .
<INGRESSCOS>	Identifies the COS value set in the S-VLAN tag.
0 to 7	Set a Cos value
DSCP	The COS is set according to DSCP to COS mapping table.
TRUST	Use the Customer COS
VLAN	The COS will be provisioned on CVLAN basis (QinQ selective mode)
<DSCPFIRST>	DSCP range. Indicates a DSCP value used in the ethernet frame to define the QoS in L3 ethernet transport. It is a number in the range 0..64. Default values is 0
<DSCPLAST>	DSCP range. Indicates a DSCP value used in the ethernet frame to define the QoS in L3 ethernet transport. It is a number in the range 0..64. Default values is 0.

11.22 ED-EC1

(Cisco ONS 15454) The Edit Electrical Carrier (ED-EC1) command edits the attributes of an EC1 card.

Usage Guidelines

- This command is not allowed if the card is a protecting card.
- You cannot directly transition a facility from IS to OOS-MA,DSBLD service state. You can transition a facility to OOS-MA,DSBLD service state from any state except OOS-MA,MT. To transition a facility from OOS-MA,MT to OOS-MA,DSBLD service state, all the following conditions must be met:
 - The facility is not sourcing a synchronization clock
 - The facility's DCC is disabled
 - The facility is not part of a protection group
 - The facility is not supporting cross-connects
 - The facility is not using overhead connections or overhead terminations (such as express orderwire, local orderwire, or user data channels [UDCs])



Note

The conditions stipulated can be overridden by using the CMDMDE=FRCD option. The FRCD option will immediately remove the facility from service (except for IS to OOS-MA,DSBLD transition) with no consideration for orderly interruption.

Category Ports

Security Provisioning

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

Input Example ED-EC1:PETALUMA:FAC-1-1:123:::PJMON=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;

Input Parameters	<AID>	Access identifier from the “26.17 FACILITY” section on page 26-40.
	<PJMON>	A SONET pointer number (0 or 1) of an EC1 port. PJMON is an integer.
	<LBO>	Line build-out settings. LBO is an integer. It defaults to 0–225. The parameter type is E_LBO (electrical signal line build-out).
	• 0–225	Electrical signal line build-out range is 0–225.
	• 226–450	Electrical signal line build-out range is 226–450.
	<SOAK>	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). SOAK is an integer. Defaults to 32.
	<SFBER>	Signal failure threshold. Defaults to 1E-4. The parameter type is SF_BER, which is 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.
	<SDBER>	Signal degrade threshold. Defaults to 1E-7. The parameter type is SD_BER, which is 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.
	<NAME>	NAME is a string. Default value is NULL. Maximum length is 32 characters.
	<EXPTRC>	String

<TRC>	String
<TRCMODE>	The 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.
<TRCFORMAT>	Trace message size. The 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.
<AISONLPBK>	Defaults to AIS_ONLPBK_FACILITY. The parameter type is AIS_ON_LPBK, which indicates whether AIS is sent on a loopback.
• AIS_ONLPBK_FACILITY	AIS is sent on facility loopbacks.
• ALL	AIS is sent on all loopbacks.
• OFF	AIS is not sent on loopbacks.
• TERMINAL	AIS is sent on terminal loopbacks.
<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. Defaults to IS. 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. Defaults to AINS. 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

11.23 ED-EFM

(Cisco ONS 15454) The Edit Ethernet in the First Mile (ED-EFM) command edits ethernet OAM parameters on the front end port of the fast (10/100 Mbps) ethernet card.

Usage Guidelines

- The EFMSTATE parameter should be “enabled” for the facility by ED-FSTE to edit the EFM parameters.
- You cannot enable or disable the remote loopback through the local interface on the remote OAM peer entity if any other type of loopback (facility/terminal) is already configured on the local interface.

Category

Ports

Security

Provisioning

Input Format

ED-EFM:[<TID>]:<AID>:<CTAG>:::[STATE=<STATE>],[MODE=<MODE>],[LFAC
TION=<LFAC
TION>],[SESSIONTIMER=<SESSIONTIMER>];

Input Example

ED-EFM::ETH-12-1-1:1:::MODE=PASSIVE,LFAC
TION=ERROR-BLOCK,DG
ACTION=ERROR-B
LOCK,SESSIONTIMER=40;

Input Parameters

<AID>	Access identifier from the “26.16 ETH” section on page 26-40.
<STATE>	Indicates whether the EFM is enabled or disabled on the port.
• ENABLE	Indicates the EFM is enabled on the port.
• DISABLE	Indicates the EFM is disabled on the port.
<MODE>	Indicates the mode of the EFM port.
• ACTIVE	The port is in the active state.
• PASSIVE	The port is in the passive state.
<LFAC TION>	Action to be taken for the failure of the link on the port.
• RFI ACTION-NONE	No action.
• ERROR-BLOCK	Block the port.
<SESSION TIMER>	Session expire timer for EFM (in seconds).

11.24 ED-ETH

(Cisco ONS 15454) The Edit Ethernet (ED-ETH) command edits the front-end port information of a 10/100/1000 Mbps Ethernet card.

Usage Guidelines

The default values for all optional parameters are NE default values, but these values might not be the current value for a parameter. Use a retrieve command to obtain the current value.

The SELECTIVEAUTO parameter is applicable only when EXPSPEED and EXPDUPLEX are not set to AUTO mode.



Note

This command is available in Software Release 8.0.1 and later. It is not available in R8.0 and earlier.

Category

Ethernet

Security

Provisioning

Input Format

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

Input Example

ED-ETH:CISCO:FAC-1-1:123::FLOW=Y,EXPDUPLEX=HALF,EXPSPEED=10_MBPS,SELECTIVEAUTO=Y,VLANCOS=2,IPTOS=4,NAME="ETHPORT",CMDMDE=FRCD,SOAK=32,LIENABLE=Y,LITIMER=200:IS,AINS;

Input Parameters

<AID>	Ethernet AIDs are used to access L2 Ethernet ports. Access identifier from the “26.16 ETH” section on page 26-40.
<FACILITY>	Access identifier from the “26.17 FACILITY” section on page 26-40
<FLOW>	(Optional) Flow. The parameter type is ON_OFF (disable or enable an attribute).
• N	Disable an attribute.
• Y	Enable an attribute.
<EXPDUPLEX>	(Optional) Ethernet duplex mode. The parameter type is ETHER_DUPLEX, which is the duplex mode.
• AUTO	Auto mode
• FULL	Full mode
• HALF	Half mode

<SELECTIVEAUTO>	(Optional) Selective auto-negotiation. The parameter is Y or N (enable or disable auto-negotiation). This indicates selective auto-negotiation of EXPSPEED and EXPDUPLEX only.
• Y	Enable selective auto-negotiation.
• N	Disable selective auto-negotiation.
<EXPSPEED>	(Optional) Ethernet speed. The parameter type is ETHER_SPEED, which is the Ethernet speed.
• 100_MBPS	100 Megabits per second
• 10_GBPS	10 Gigabits per second
• 10_MBPS	10 Megabits per second
• 1_GBPS	1 Gigabit per second
• 40_GBPS	40 Gigabit per second
• AUTO_FDX	Enable auto negotiation with full duplex
• AUTO	Auto
<VLANCOS>	(Optional) Priority queuing threshold based on VLAN class of service for incoming Ethernet packets. VLANCOS is an integer.
<IPTOS>	(Optional) Priority queuing threshold based on IP type of service for incoming Ethernet packets. IPTOS is an integer.
<NAME>	(Optional) Name. NAME is a string.
<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.
<SUPPRESS>	Pre-service alarm flag for data ports.
• ON	Enable suppress.
• OFF	Disable suppress. Default is Off.
<SOAK>	(Optional) OOS-AINS to IS transition soak time as measured in 15-minute intervals. SOAK is an integer.
<LIENABLE>	(Optional) Enable or Disable link integrity timer. Takes either Y or N. Value Y enables the LITIMER and value N disables LITIMER. By default LITIMER is enabled.
	Note The LIENABLE parameter is supported on only CE-1000-4 and CE-1000T-8 cards on the 15454.
<LITIMER>	(Optional) Link integrity timer duration in the range between 200 ms and 10000 ms in multiples on 100 ms.
	Note The LITIMER parameter is supported on only CE-1000-4 and CE-1000T-8 cards on the 15454.
<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

11.25 ED-EQPT

(Cisco ONS 15454) The Edit Equipment (ED-EQPT) 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.

The ED-EQPT command also modifies a shelf role from node controller (NC) to shelf controller (SC) on an NE configured in multishelf mode.

Usage Guidelines

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 the absence of a protection group. For the 1:1 protection type, RVRTV and RVTM parameters can be changed. For the 1:1 protection type, if the PROTID parameter is entered as “NULL”, the protection group is deleted, as shown in the following command:

```
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.

For example, if Slot 1, Slot 2, and Slot 4 were the only working cards in the protection group, the following command would 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). After it is 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:

- Editing the PRTYPE or PROTID (non-NULL value) parameters.
- Editing RVRTV or RVTM when no protection group exists.
- Editing RVRTV for 1:N protection.
- Failed to remove, currently switched to protect.
- CARDMODE provisioning is allowed on the DS3XM-12 cards as follows:
 - DS3XM-12 card provisioning is based on the XCON type and DS3XM-12 card's location. For example, the DS3XM-12 card in the lower speed I/O slot with the XCVT card only allows the DS3XM-12-ST512 CARDMODE. Other cases allow the CARDMODE to be DS3XM-12-ST548.
 - There is no card reboot if the CARDMODE is changed on the DS3XM-12 card.
 - The DS3XM-12 card can be upgraded or downgraded by changing the CARDMODE with the ED-EQPT command.

CMDMDE provisioning behaves as follows:

- If the command mode (CMDMDE) is set to NORM 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 and are not in ready state, the command is denied with an appropriate error message. CMDMDE=FRCD will override the default behavior and allow creation of protection group regardless of the physical presence and ready state of cards.
- If the command mode is set to NORM 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. CMDMDE=FRCD will override the default behavior and allow deletion of protection group regardless of presence of cross-connects 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.

Category

Equipment

Security

Provisioning

Input Format

ED-EQPT[:<TID>]:<AID>:<CTAG>[:<PROTID=<PROTID>],[PRTYPE=<PRTYPE>],[RVRTV=<RVRTV>],[RVTM=<RVTM>],[CARDMODE=<CARDMODE>],[PEERID=<PEERID>],[REGENNAME=<REGENNAME>],[PEERNAME=<PEERNAME>],[CMDMDE=<CMDMDE>],[RETIME=<RETIME>],[SHELFROLE=<SHELFROLE>],[NEWSHELFID=<NEWSHELFID>],[FRPROLE=<FRPROLE>],[FRPSTATE=<FRPSTATE>],[FRPHOLDOFFTIME=<FRPHOLDOFFTIME>],[ADMINCVLAN=<ADMINCVLAN>],[ADMINSVLAN=<ADMINSVLAN>],[CFMSTATE=<CFMSTATE>],[CCTIMER

```
=<CCTIMER>],[PROTOPMODE=<PROTOPMODE>],[SWITCHWITHCRCALARM=<SWITCHWITHCRCALARM>],[CRCTHR=<CRCTHR>],[CRCPOLLINTRVL=<CRCPOLLINTRVL>],[CRCSOAKCNT=<CRCSOAKCNT>],[USB=<USB>][:<PST>[:<SST>]]];
```

Input Example

```
ED-EQPT::SLOT-15:a::CARDMODE=GEXP-L2ETH,SWITCHWITHCRCALARM=Y;
ED-EQPT::SLOT-15:a::CARDMODE=GEXP-L2ETH,CRC POLLINTRVL=4;
```

Input Parameters

<AID>	Access identifier from the “26.15 EQPT” section on page 26-37.
<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.
<CARDMODE>	Defines the card mode.
• 10GLAN-WAN-LINE-SQUELCH	Changes the card mode from LAN to WAN.
• DS1E1-DS1ONLY	DS1 mode on DS1E1 card.
• DS1E1-E1ONLY	E1 mode on DS1E1 card.
• DS1E1-E1MIXED	Hybrid/E1-retimed port usage profile.
• DS1E1-DS1MIXED	Hybrid/DS1-retimed port usage profile.
• DS3XM12-STS12	Indicates the DS3XM-12 card in the STS12 back plane rate mode.
• DS3XM12-STS48	Indicates the DS3XM-12 card in the STS12 back plane rate mode.
• DWDM-LINE	Line terminating mode.
• DWDM-SECTION	Section terminating mode.
• 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	ML1 series card in DOS FPGA using GFP framing type.
• ML-HDLC	ML1 series card in DOS FPGA using HDLC framing type.
• ML-IEEE-RPR	ML1 series card in DOS FPGA which supports Resilient Packet Ring (RPR).
• MXPMR25G-FCGE	Fiber channel or GIGE mode for the MXP-MR-2.5G.
• MXPMR10DME-FC-GEISC	Fiber channel, GIGE, or ISC mode for the Cisco ONS 15454 MXP-MR-10DME, MXP-MR-10DMEX card series.

• MXPMR10DME-FC-GEISC-4GFC	1..4 facilities with fiber channel, GIGE, or ISC traffic mode and facility 5 with 4 Gbps fiber channel traffic mode for the Cisco ONS 15454 MXP-MR-10DME, MXP-MR-10DMEX card series.
• MXPMR10DME-4GFC-FC-GEISC	Facility 1 with 4 Gbps fiber channel traffic mode and 5..8 facilities with fiber channel, GIGE, or ISC traffic mode for the Cisco ONS 15454 MXP-MR-10DME, MXP-MR-10DMEX card series.
• MXPMR10DME-4GFC	4 Gbps fiber channel traffic mode for the Cisco ONS 15454 MXP-MR-10DME, MXP-MR-10DMEX card series.
• PSM-NORMAL	PSM working in classic configuration.
• PSM-STANDALONE	PSM working in stand-alone mode.
• AMPL-BST	Booster mode for amplifier cards: OPT-AMP-L, OPT-AMP-17-C and OPT-AMP-23-C cards.
• AMPL-PRE	Pre-amplifier mode for amplifier cards: OPT-AMP-L, OPT-AMP-17-C and OPT-AMP-23-C cards.
• 10GEXP-TXP	10GE-XP behaves as two separate transponders, where client 1 is associated to trunk 3 and client 2 is associated to trunk 4.
• 10GEXP-L2ETH	10GE-XP behaves as an L2 Ethernet switch.
• GEXP-10x1Gx2-MXP	GE-XP behaves as a double Muxponder having ten 1 Gbps client facilities with one trunk. The first 10 GIGE clients are associated to the first trunk (21), while GIGE facilities from 11 to 20 are associated to trunk 22.
• GEXP-20x1G-MXP	GE-XP behaves as a single Muxponder having ten 1 Gbps client facilities with one trunk. Only the first 10 GIGE clients are associated to the first trunk (21) while the other facilities are unused.
• GEXP-L2ETH	GE-XP behaves as an L2 Ethernet Switch.
• CEMR-AUTO	Auto allocation of back-end channels for CE-MR-10 (Cisco ONS 15454 SONET only) cards.
• CEMR-MANUAL	Manual allocation of back-end channels for CE-MR-10 (Cisco ONS 15454 SONET only) cards.
• UNKNOWN	Unknown.
• WXC80-BIDI	80-WXC-C working in bidirectional mode.
• WXC80-DMX	80-WXC-C working as demultiplexer.
• WXC80-MUX	80-WXC-C working as multiplexer.
• 40G-MXP-MUXPONDER	40G-MXP-MUXPONDER working as multiplexer.
• 40G-MXP-UNIDIR-REGEN	40G-MXP-UNIDIR-REGEN working as regenerator.
<FRPHOLDOFFTIME>	Indicates the hold off timer value. The protection does not start until the hold off time expires.
• 100-MSEC	Indicates the hold off timer value as 100 milliseconds.
• 1-MSEC	Indicates the hold off timer value as 1milisecond.
• 200-MSEC	Indicates the hold off timer value as 200 milliseconds.
• 2-MSEC	Indicates the hold off timer value as 2 milliseconds.
• 500-MSEC	Indicates the hold off timer value as 500 milliseconds.

• 50-MSEC	Indicates the hold off timer value as 50 milliseconds.
• 5-MSEC	Indicates the hold off timer value as 50 milliseconds.
• DISABLED	Indicates that the hold off timer is disabled.
<ADMINCVLAN>	Customer VLAN identifier for REP. ADMINCVLAN is a number between 1 and 4096. The value 0 is reserved to untagged VLAN.
<ADMINSVLAN >	Service provider VLAN identifier for REP. ADMINSVLAN is a number between 1 and 4096. The value 0 is reserved to untagged VLAN.
<CFMSTATE>	Link Integrity status.
• Y	Enabled
• N	Disabled
<CCTIMER>	Indicates continuity check message timer.
• ONE-MIN	1 minute.
• ONE-SEC	1 second.
• TEN-SEC	10 seconds.
<PROTOPMODE>	PROTOPMODE
<FRPROLE>	Indicates the fast ring protection enable mode for GE-XP/10GE-XP units involved in a protection scheme.
• MASTER	Role is of card master of the ring.
• SLAVE	Role is of card slave of the ring.
<FRPSTATE>	Indicates the fast ring protection enable state.
• DISABLED	Disabled protection
• ENABLED	Enabled protection
• FORCED	Forced protection
<NEWSHELFID>	(Optional) New shelf identifier is used to change the value of the shelf identifier for the addressed shelf. The value must be different by one and can be in the range from two to eight. This field can only be changed if (in the same command) the SHELFROLE is equal to SC. Integer.
<PEERID>	The regeneration peer slot from the “26.9 CHGRP” section on page 26-24 .
<PROTID>	(Optional) Protection group name. PROTID is a string.
<REGENNAME>	The name of a regeneration group. REGENNAME is a string.
<RETIME>	(Optional) Indicates the RETIME function for all the facilities on this card. The parameter type is ON_OFF (disable or enable an attribute). (Supported on the DS1/E1-56 card for the Cisco ONS 15454 platform).
• N	Disable an attribute.
• Y	Enable an attribute.
<RVRTV>	(Optional) Revertive mode. The value Y indicates that protection switching system reverts service to the original line after restoration. The value N indicates that protection switching system does not revert service to the original line after restoration. RVRTV is applicable only for 1+1 protection switching. Defaults to N, non-revertive.

• N	Does not revert service to original line after restoration.
• Y	Reverts service to original line after restoration.
<RVTM>	(Optional) Revertive time. The parameter type is REVERTIVE_-TIME (revertive time).
• 0.5 to 12.0	Revertive time is 0.5 to 12.0 minutes.
<SWITCHWITHCRCA-LARM>	Switch the GZ card with CRC Alarms
<CRCTHR>	CRC threshold values beyond which alarms are raised. The available threshold values are 10E-2, 10E-3, and 10E-4.
<CRCPOLLINTRVL>	Interval of time after which the polling starts.
<CRCSOAKCNT>	Number of poll cycles during which defect is integrated. The value ranges from 3 to 10.
<USB>	Identifies the USB port where a passive unit is connected.
<PST>	(Optional) Primary state. The parameter type is PST, which indicates the current overall service condition of an entity.
• Unlocked	In service
• Locked	Out of service
<SHELFROLE>	The role of the shelf in the context of the node. When it is omitted it defaults to SC. The parameter is SHELF_ROLE.
<SST>	(Optional) Secondary state. The parameter type is SST, which provides additional information pertaining to PST and PSTQ.
• AutomaticInService	Automatic in service
• Disabled	Disabled
• Loopback	Loopback
• MismatchofEquipmentAlarm	Mismatch of equipment and attributes
• Maintenance	Maintenance mode
• OutOfGroup	Out of group
• SoftwareDownload	Software downloading
• Unassigned	Unassigned
• NotInstalled	Unequipped

11.26 ED-FAC

(Cisco ONS 15454) The Edit Facility (ED-FAC) 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. Use a retrieve command to obtain the current value.

Usage Guidelines

The DS3/EC1 values for the payload parameter are applicable to the following cards:

- DS3/EC1-48 (ONS 15454)"

Category

Ports

Security

Provisioning

Input Format

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

Input Example

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

Input Parameters

<SRC>	Source access identifier from the “26.17 FACILITY” section on page 26-40.
<PAYLOAD>	The payload for the card. The parameter type is PAYLOAD, which identifies the payload type.
• DS3	DS3/T3 facility
• EC1	EC1 facility
• E3	E3 facility
• OC3	OC3 facility
• OC12	OC12 facility
• OC48	OC48 facility
<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. Defaults to IS. 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. Defaults to AINS. The parameter type is SST, which provides additional information pertaining to PST and PSTQ.
• AINS	Automatic in service
• DSBLD	Disabled
• MT	Maintenance mode

11.27 ED-FFP-<MOD2DWDMPAYLOAD>

(Cisco ONS 15454) The Edit Facility Protection Group for 10GFC, 10GIGE, 40GIGE, 1GFC, 1GFICON, 2GFC, 2GFICON, 4GFC, 4GFICON, 8GFC, D1VIDEO, DV6000, DVBASI, ETRCLO, FSTE, GIGE, HDTV, ISC1, or OTU3 (ED-FFP-<MOD2DWDMPAYLOAD>) command edits a Y-cable protection group on client facilities.

Usage Guidelines

None

Category

DWDM

Security

Provisioning

Input Format

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

Input Example

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

Input Parameters

<AID>	Access identifier from the “26.17 FACILITY” section on page 26-40 .
<PROTAID>	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. It is a string.
<RVRTV>	Revertive mode. The value Y indicates that protection switching system reverts service to the original line after restoration. The value N indicates that 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 configurations. The parameter type is ON_OFF, which disables or enables an attribute. • N Does not revert service to original line after restoration. • Y Reverts service to original line after restoration.
<RVTM>	Revertive time. RVTM is not allowed to be set while “RVRTV” is N. Only applies to path protection configurations. The parameter type is REVERTIVE_TIME (revertive time). • 0.5 to 12.0 Revertive time is 0.5 to 12.0 minutes.

<PSDIRN>	Protection switch operation. Identifies the switching mode. Defaults to UNI.
Note	The MXP_2.5G_10G and TXP_MR_10G cards do not support bidirectional switching.
	The parameter type is UNI_BI (unidirectional switch operations).
• BI	Bidirectional protection switching
• UNI	Unidirectional protection switching

11.28 ED-FFP-<OCN_TYPE>

(Cisco ONS 15454) The Edit Facility Protection Group for OC3, OC12, OC48, OC192, or OC768 (ED-FFP-<OCN_TYPE>) command edits the optical facility protection.

Usage Guidelines

See [Table 28-1 on page 28-1](#) for supported modifiers by platform.



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. Use a retrieve command obtain the current value.

Category

Protection

Security

Provisioning

Input Format

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

Input Example

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;

Input Parameters

<AID>	Access identifier from the “26.17 FACILITY” section on page 26-40 .
<PROTAID>	The protection group identifier (protection group name). PROTAID can have a maximum length of 32 characters. It is a string.

<RVRTV>	Revertive mode. The value Y indicates that protection switching system reverts service to the original line after restoration. The value N indicates that 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. The parameter type is ON_OFF, which disables or enables an attribute.
• N	Does not revert service to original line after restoration.
• Y	Reverts service to original line after restoration.
<RVTM>	Revertive time. The parameter type is REVERTIVE_TIME (revertive time).
• 0.5 to 12.0	Revertive time is 0.5 to 12.0 minutes.
<PSDIRN>	Protection switch operation. Indicates the switch mode. Defaults to UNI. The parameter type is UNI_BI (unidirectional and bidirectional switch operations).
• BI	Bidirectional protection switching
• UNI	Unidirectional protection switching
<VRGRDTM>	Verification guard timer. Only applicable to optimized 1+1. The parameter type is VERIFICATION_GUARD_TIMER (optimized 1+1 verification guard timer).
• 0.5	500 milliseconds
• 1.0	1 second
<DTGRDTM>	Detection guard timer. Only applicable to optimized 1+1. The parameter type is DETECTION_GUARD_TIMER (optimized 1+1 detection guard timer).
• 0.0	0 seconds
• 0.05	50 milliseconds
• 0.1	100 milliseconds
• 0.5	500 milliseconds
• 1.0 to 5.0	1 second to 5 seconds
<RCGRDTM>	Recovery guard timer. Only applicable to optimized 1+1. The parameter type is RECOVERY_GUARD_TIMER (optimized 1+1 recovery guard timer).
• 0.0	0 seconds
• 0.05	50 milliseconds
• 0.1	100 milliseconds
• 0.5	500 milliseconds
• 1.0 to 10.0	1 second to 10 seconds

11.29 ED-FFP-OCH

(Cisco ONS 15454) The Edit Facility Protection Group Optical Channel (ED-FFP-OCH) 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.

Usage Guidelines None

Category DWDM

Security Provisioning

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

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

Input Parameters	<AID>	Access identifier from the “26.8 CHANNEL” section on page 26-22 .
	<PROTAID>	The protection group identifier (protection group name). PROTAID is a string.
	<RVRTV>	Revertive mode. The value Y indicates that protection switching system reverts service to the original line after restoration. The value N indicates that 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. The parameter type is ON_OFF, which disables or enables an attribute.
	• N	Does not revert service to original line after restoration.
	• Y	Reverts service to original line after restoration.
	<RVTM>	Revertive time. The parameter type is REVERTIVE_TIME (revertive time).
	• 0.5 to 12.0	Revertive time is 0.5 to 12.0 minutes
	<PSDIRN>	Protection switch operation. The parameter type is TRANS_MODE (G1000 transponder mode)
	• BI	Bidirectional
	• NONE	Not in transponder mode
	• UNI	Unidirectional

11.30 ED-FFP-OTS

(Cisco ONS 15454)

The Edit Facility Protection Group OTS (ED-FFP-OTS) command changes provisioning for the Y-cable or splitter protection group on the OTU2-XP card

Usage Guidelines

The default values for all optional parameters are NE default values. These values might not be the current value for a parameter. Use a retrieve command to obtain the current value.

Category

DWDM

Security

Provisioning

Input Format

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

Input Example

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

Table 11-3 *Parameter Support*

Parameter	Description
<AID>	Access identifier from the “26.8 CHANNEL” section on page 26-22.
<PROTAID>	The protection group identifier (protection group name). PROTAID is a string.
<RVRTV>	(Optional) Revertive mode. The value Y indicates that protection switching system reverts service to the original line after restoration. The value N indicates that 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. The parameter type is ON_OFF (disable or enable an attribute).
- N - Y	Does not revert service to original line after restoration. Reverts service to original line after restoration.
<RVTM>	(Optional) Revertive time. The parameter type is REVERTIVE_TIME (revertive time).
0.5 to 12.0	Revertive time is 0.5 to 12.0 minutes.
<PSDIRN>	(Optional) Protection switch operation. The parameter type is TRANS_MODE, which is the G1000 transponder mode.
BI	Bidirectional

Table 11-3 Parameter Support

Parameter	Description
• NONE	Not in transponder mode
• UNI	Unidirectional

11.31 ED-FOG

(Cisco ONS 15454) The Edit Fan-Out-Group (ED-FOG) command adds and deletes the members connecting to the CPT 50 panel and applied on the carrier packet transport (CPT) system.

Usage Guidelines

The interfaces that can be attached should be valid for the FOG. At least one interface must be always attached to the FOG.

Category

Equipment

Security

Provisioning

Input Format

ED-FOG:[<TID>]:<AID>:<CTAG>:::[ATTACH=<ATTACH>],[DETACH=<DETACH>];

Input Examples

ED-FOG::FOG-1-36:1:::ATTACH=FAC-2-2-1;

Input Parameters

<AID>	Access identifier from the “26.15 EQPT” section on page 26-37 .
<ATTACH>	AID of the fabric and line card ports used as the Fan-out members. This is the AID of the interface to be attached to the FOG.
<DETACH>	AID of the fabric and line card ports used as the Fan-out members. This is the AID of the interface to be detached from the FOG.

11.32 ED-FSTE

(Cisco ONS 15454) The Edit Fast Ethernet (ED-FSTE) command edits the front-end port information of the fast (10/100 Mbps) Ethernet card.

Usage Guidelines

The default values for all optional parameters are NE default values. These values might not be the current value for a parameter. Use a retrieve command to obtain the current value.

The SELECTIVEAUTO parameter is applicable only when EXPSPEED and EXPDUPLEX are not set to AUTO mode.

**Note**

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

Category

Ports

Security

Provisioning

Input Format

ED-FSTE[:<TID>]:<SRC>:<CTAG>[:<FLOW=<FLOW>>],[EXPDUPLICATION=<EXPDUPLICATION>],[EXPSP
EED=<EXPSPEED>],[SELECTIVEAUTO=<SELECTIVEAUTO>],[VLANCOS=<VLANCOSTHRE
SHOLD>],[IPTOS=<IPTOSTHRESHOLD>],[NAME=<NAME>],[CMDMDE=<CMDMDE>],[SUPP
RESS=<SUPPRESS>],[SOAK=<SOAK>],[LIENABLE=<LIENABLE>],[LITIMER=<LITIMER>],[F
REQ=<FREQ>],[LOSSB=<LOSSB>],[CIR=<CIR>],[CBS=<CBS>],[EBS=<EBS>],[OSC=<OSC>][:
<PST>[:<SST>]];

Input Example

ED-FSTE:CISCO:FAC-1-1:123:::FLOW=Y,EXPDUPLICATION=HALF,EXPSPEED=10_Mbps,
SELECTIVEAUTO=Y,VLANCOS=2,IPTOS=4,NAME="FSTEPORT",CMDMDE=FRCD,
SUPPRESS=Y,SOAK=32,LIENABLE=Y,LITIMER=200:IS,AINS;

Input Parameters

<AID>	Access identifier from the “26.17 FACILITY” section on page 26-40 .
<FLOW>	Flow control. The parameter type is ON_OFF, which disables or enables an attribute.
• N	Disable an attribute.
• Y	Enable an attribute.
<EXPDUPLICATION>	Ethernet duplex mode. The parameter type is ETHER_DUPLEX (duplex mode).
• AUTO	Auto mode
• FULL	Full mode
• HALF	Half mode
<EXPSPEED>	Ethernet speed. The parameter type is ETHER_SPEED (Ethernet speed).
• 100_Mbps	100 Megabits per second
• 10_Gbps	10 Gigabits per second
• 10_Mbps	10 Megabits per second
• 1_Gbps	1 Gigabits per second
• 40_Gbps	40 Gigabit per second
• AUTO_FDX	Enable auto negotiation with full duplex
• AUTO	Auto

<SELECTIVEAUTO>	(Optional) Selective auto-negotiation. The parameter is Y or N (enable or disable auto-negotiation). This indicates selective auto-negotiation of EXPSPEED and EXPDUPLEX only.
• Y	Enable selective auto-negotiation.
• N	Disable selective auto-negotiation.
<VLANCOS>	Priority queuing threshold based on VLAN class of service of incoming Ethernet packets. Default value is 1175. VLANCOS is an integer.
<IPTOS>	Priority queuing threshold based on IP type of service of incoming Ethernet packets. Default value is 368. IPTOS is an integer.
<NAME>	Name. NAME is a string.
<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.
<SUPPRESS>	Pre-service alarm flag for data ports.
• ON	Enable suppress.
• OFF	Disable suppress. Default is Off.
<SOAK>	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). SOAK is an integer.
<LIENABLE>	(Optional) Enable or Disable link integrity timer. Takes either Y or N. Value Y enables the LITIMER and value N disables LITIMER. By default LITIMER is enabled. Note The LIENABLE parameter is supported on only CE-1000-4 and CE-1000T-8 cards on the 15454.
<LITIMER>	(Optional) Link integrity timer duration in the range between 200 ms and 10000 ms in multiples on 100 ms. Note The LITIMER parameter is supported on only CE-1000-4 and CE-1000T-8 cards on the 15454.
<FREQ>	(Optional) The parameter type is OPTICAL_WLEN, which indicates the optical wavelength.
• 1310	Wavelength 1310.
<LOSSB>	(Optional) The parameter type is REACH, which indicates the reach values.
• AUTOPROV	Auto provisioning
• CWDM	Coarse wavelength division multiplexing (CWDM)
• CX1	Reach CX1
• LR	Reach LR

• LR-2	Reach LR-2
• LX	Reach LX
• SR	Reach SR
• TEN-GE-ER	10 GE extended range
• TEN-GE-LR	10 GE long range
• TEN-GE-SR	10 GE short range
<CIR>	Ingress committed information rate. This is a value between 0 and 100. Default value is - 100.
<CBS>	Ingress committed burst bucket size.
4K	4 Kbit bucket size
8K	8 Kbit bucket size
16K	16 Kbit bucket size
32K	32 Kbit bucket size
64K	64 Kbit bucket size
128K	128 Kbit bucket size
256K	256 Kbit bucket size
512K	512 Kbit bucket size
1M	1 Mbit bucket size
2M	1 Mbit bucket size
4M	4 Mbit bucket size
8M	8 Mbit bucket size
16M	16 Mbit bucket size
<EBS>	Ingress excess burst bucket size.
<OSC>	To enable or disable the OSC on the port.
	Note The OSC parameter is supported only on 15454-M2 and 15454-M6.
<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

11.33 ED-FTPSERVER

(Cisco ONS 15454) The Edit FTP Server (ED-FTPSERVER) command edits FTP server entries.

Usage Guidelines

This command is used to edit only the ENABLE and TIMER parameters.

Category

ENE

Security

Superuser

Input Format

ED-FTPSERVER:[<TID>]::<CTAG>::IPADDR=<IPADDR>,[ENABLE=<ENABLE>],
[TIMER=<TIMER>];

Input Examples

1. ED-FTPSERVER::A::IPADDR=10.20.30.40,ENABLE=Y,TIMER=30;
2. ED-FTPSERVER:TID::CTAG::IPADDR="[3ffe:0501:0008:0000:0260:97ff:fe40:efab]",ENABLE=Y
,
TIMER=45;

Input Parameters

<IPADDR>	Specifies the IP address of the FTP server.
<ENABLE>	Specifies the enable/disable option of the FTP server. The parameter type is ON_OFF (disable or enable an attribute).
• N	Disable an attribute.
• Y	Enable an attribute.
<TIMER>	(Optional) Specifies the timeout value of the FTP server in minutes. Timer is an integer that can be set between 0 and 60 minutes.

11.34 ED-G1000

(Cisco ONS 15454) The Edit G1000 (ED-G1000) command edits the attributes related to a G1000 port.

Usage Guidelines

The default values for all optional parameters are NE default values. These values might not be the current value for a parameter. Use a retrieve command to obtain the current value.

Category

Ports

Security

Provisioning

Input Format

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

Input Example

```
ED-G1000:PETALUMA:FAC-1-1:CTAG::MFS=1548,FLOW=Y,LOWMRK=20,HIWMRK=492,
AUTONEG=Y,NAME="G1000 PORT",CMDMDE=FRCD,SOAK=32,LIENABLE=Y
LITIMER=300:OOS,DSBLD;
```

Input Parameters

<AID>	Access identifier from the “26.17 FACILITY” section on page 26-40.
<MFS>	Maximum frame size. the parameter type is MFS_TYPE, which is the maximum frame size used by an Ethernet card.
• 1548	Normal frame size
• JUMBO	Jumbo frame size
<FLOW>	Flow control. The parameter type is ON_OFF, which disables or enables an attribute.
• N	Disable an attribute.
• Y	Enable an attribute.
<LOWMRK>	Low watermark value. LOWMRK is an integer. Defaults to 25. LOWMRK is available in Software Release 4.0.1 and later.
<HIWMRK>	High watermark value. HIWMRK is an integer. Defaults to 485.
<AUTONEG>	Automatic negotiation. Defaults to Y. The parameter type is ON_OFF, which disables or enables an attribute.
• N	Disable an attribute.
• Y	Enable an attribute.
<NAME>	Name. NAME is a string. Default is NULL. Maximum length is 32 characters.
<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.
<SOAK>	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). SOAK is an integer. Defaults to 32.

<LIENABLE>	(Optional) Enable or Disable link integrity timer. Takes either Y or N. Value Y enables the LITIMER and value N disables LITIMER. By default LITIMER is enabled. Note The LIENABLE parameter is supported on only CE-1000-4 and CE-1000T-8 cards on the 15454.
<LITIMER>	(Optional) Link integrity timer duration in the range between 200 ms and 10000 ms in multiples on 100 ms. Note The LITIMER parameter is supported on only CE-1000-4 and CE-1000T-8 cards on the 15454.
<ENCAP>	(Optional) Frame encapsulation type. The parameter type is ENCAP, which is the 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.
<PST>	Primary state. Defaults to OOS. 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. Defaults to DSBLD. 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

11.35 ED-GFP

(Cisco ONS 15454) The Edit Generic Framing Protocol (ED-GFP) command edits GFP parameters on the ONS 15454 CE-100T-8 AND FC_MR-4, CE-1000-4 cards.

Usage Guidelines

- For the FC_MR-4 card, the parameters AUTOTHGFPBUF, GFPBUF, and FILTER can be edited only if distance extension is enabled (set to B2B).
- On POS ports of CE-MR-10 card, FCS cannot be set to NONE when the encapsulation is set to GFP.

Category	Ports	
Security	Provisioning	
Input Format	ED-GFP:[<TID>]:<AID>:<CTAG>:::[FCS=<FCS>],[AUTOTHGFPBUF=<AUTOTHGFPBUF>],[GFPBUF=<GFPBUF>],[FILTER=<FILTER>];	
Input Example	ED-GFP:PETALUMA:VFAC-1-0:123:::FCS=N,AUTOTHGFPBUF=Y,GFPBUF=16,FILTER=INGRESS;	
Input Parameters	<AID>	Access identifier from the “26.17 FACILITY” section on page 26-40 . Note VFAC AID is used for the CE-100T-8 cards on the ONS 15454. ML-100T-8 GFP management is done through the Cisco IOS command-line interface (CLI) and not through the TL1 interface. The FAC AID is used for the ONS 15454 FC_MR-4.
	<FCS>	Payload frame check sequence. The 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
	<AUTOTHGFPBUF>	The parameter type is ON_OFF, which disables or enables an attribute.
	• N	Disable an attribute.
	• Y	Enable an attribute.
	<FILTER>	The parameter type is GFP_FILTER, which is the filter feature in GFP.
	• INGRESS	Activate filter feature on the egress port.
	• NONE	Turn off filter feature.

11.36 ED-HDLC

(Cisco ONS 15454) The Edit High-Level Data Link Control (ED-HDLC) command edits HDLC-related attributes for HDLC-encapsulated payloads.

Usage Guidelines	None
Category	Ports

Security

Provisioning

Input Format

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

Input Example

ED-HDLC:PETALUMA:VFAC-1-1-PORT:CTAG:::FCS=FCS-16,CRC=CRC-32;

Input Parameters

<SRC>	Access identifier from the “26.17 FACILITY” section on page 26-40.
<FCS>	Payload frame check sequence. The parameter type is FCS (frame check sequence).
• FCS-16	Frame check sequence using 16 bits
• FCS-32	Frame check sequence using 32 bits
• NONE	No frame check sequence
<CRC>	Cyclic Redundancy Check.
	Note CRC is applicable only to ADM10G card.
• CRC-16	Cyclic Redundancy Check using 16 bits.
• CRC-32	Cyclic Redundancy Check using 32 bits.

11.37 ED-L2-ETH

(Cisco ONS 15454) The Edit Layer 2 Ethernet (ED-L2-ETH) command edits the layer 2 port information of GE-XP and 10GE-XP Ethernet cards.

Usage Guidelines

The default values for all optional parameters are NE default values, but these values might not be the current value for a parameter. Use a retrieve command to obtain the current value.

Category

Ethernet

Security

Provisioning

Input Format

ED-L2-ETH[:<TID>]:<AID>:<CTAG>[:<NIMODE=<NIMODE>>],[MACLEARNING=<MACLEAR
NING>],[INGRESSCOS=<INGRESSCOS>],[ETHERCETYPE=<ETHER_CE_TYPE>],[ETHERSTY
PE=<ETHER_S_TYPE>],[ALWMACADDR=<ALW_MAC_ADDR>],[INHMACADDR=<INH_MAC
_ADDR>],[BPDU=<BPDU>],[BRIDGESTATE=<BRIDGE_STATE>],[QNQMODE=<QNQMODE>],
[TRNSPSVLAN=<TRNSP_SVLAN>],[NAME=<NAME>],[IGMPROUTER=<IGMPROUTER>],[AI
SACTION=<AISACTION>],[PROTACTION=<PROTACTION>],[CMDMDMDE=<CMDMDM>],[IGMPO

```
NCVLAN=<IGMPONCVLAN>],[IGMPCVLAN=<IGMPCVLAN>],[DLF=<DLF>],[DLFTHRES=<DLFTHRES>],[MCAST=<MCAST>],[MCASTTHRES=<MCASTTHRES>],[BCAST=<BCAST>],[BCASTTHRES=<BCASTTHRES>],[CLRCRCALM=<CLRCRCALM>][:];
```

Input Example

```
"ETH-2-21-1::NIMODE=NNI,MACLEARNING=N,INGRESSCOS=0,ETHERCETYPE=8100,ETHERSTYPE=8100,BPDU=N,BRIDGESTATE=FORWARDING,ACTBRIDGESTATE=UNKNOWN,QNQMODE=SELECTIVE,IGMPROUTER=NONE,AISACTION=AIS-NONE,PROTACTION=PROT-SQU
ELCH,IGMPONCVLAN=N,DLF=N,DLFTHRES=0,MCAST=N,MCASTTHRES=0,BCAST=N,BCASTTHRES=0,CLRCRCALM=N:"
```

```
"ETH-2-22-1::NIMODE=NNI,MACLEARNING=N,INGRESSCOS=0,ETHERCETYPE=8100,ETHERSTYPE=8100,BPDU=N,BRIDGESTATE=FORWARDING,ACTBRIDGESTATE=UNKNOWN,QNQMODE=SELECTIVE,IGMPROUTER=NONE,AISACTION=AIS-NONE,PROTACTION=PROT-SQU
ELCH,IGMPONCVLAN=N,DLF=N,DLFTHRES=0,MCAST=N,MCASTTHRES=0,BCAST=N,BCASTTHRES=0,CLRCRCALM=Y:"
```

Input Parameters

<AID>	Ethernet AIDs are used to access L2 Ethernet ports. Access identifier from the “26.16 ETH” section on page 26-40 .
<NIMODE>	Identifies the Ethernet Network Interface Mode.
• NNI	(Default) Network-Network Interface Mode
• UNI	User-Network Interface Mode
<MACLEARNING>	MAC address learning mode. This activates the MAC address learning on the interface to avoid packet broadcasting.
• Y	Enables MAC learning
• N	Disable MAC learning
<INGRESSCOS>	Identifies the COS value set in the S-VLAN tag.
• 0 to 7	Set a Cos value
• TRUST	Use the customer COS
• VLAN	The COS to be provisioned on CVLAN basis (QinQ selective mode).
<ETHERCETYPE>	Identifies a customer foreseen Ethernet type. If the customer uses a non-standard Ethernet type, the incoming packets will be accepted only if the CE-VLAN Ethernet type matches this parameter.
<ETHERSTYPE>	Identifies a customer foreseen Ethernet type. If the customer uses a non-standard Ethernet type, the incoming packets will be accepted only if the CE-VLAN Ethernet type matches this parameter.
<ALWMACADDR>	Identifies the allowed MAC addresses filtered out by the L2 Ethernet port. Every single MAC address is in the format of aa-bb-cc-dd-ee-ff, where every digit is in a hexadecimal form.
<INHMACADDR>	Identifies the inhibited MAC addresses filtered out by the L2 Ethernet port. Every single MAC address is in the format of aa-bb-cc-dd-ee-ff, where every digit is in a hexadecimal form.

<BPDU>	BPDU (Bridge Protocol Data Unit) management mode; Drop/Passthrough BPDU tagged packets.
• Y	Enables the BPDU tag.
• N	Disables the BPDU tag.
<BRIDGESTATE>	Defines if the traffic is blocked on the port.
• Unknown	Unknown state
• Disabled	Disabled state
• Blocking	Blocking state
• Listening	Listening state
• Learning	Learning state
• Forwarding	Forwarding state
• Broken	Broken state
<QNQMODE>	This is used to represent the QinQ mode operations.
• Selective	The S-VLAN tag is added only on specified CE-VLANs. The other packets are dropped.
• Transparent	The S-VLAN tag is always performed where all packets having the S-VLAN-ID identified by TRNSPSVLAN parameter are allowed.
<TRNSPSVLAN>	VLAN identifier. A VLAN ID is a number between 1 and 4096. The value 0 is reserved for untagged VLANs. This identifier is used for customer VLAN IDs and service provider VLAN IDs.
<NAME>	(Optional) Name. NAME is a string.
<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.
<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

<IGMPROUTE>	IGMP M Router port. Indicates the type of connection between this port and the IGMP M Router.
• STATIC	A static connection is present between this port and the IGMP M Router
• NONE	No connection is present
<AISACTION>	VLAN-AIS Action. Indicates what action take place on port when VLAN-AIS alarm is raisedValues
• AIS-SQUELCH	The port is squelched
• AIS-NONE	No action after VLAN-AIS
<PROTACTION>	Indicates the action that takes place on the standby port in the protection unit when a ONEPLUSONEL2 protection is activated.
• SQUELCH	The port is squelched.
• NONE	Ethernet traffic is blocked.
<IGMPCVLAN>	Indicates the customer VLAN value for IGMP on CVLAN.
<DLF>	To enable or disable storm control on DLFPC packet.
<DLFTHRES>	Indicates the DLFPC packet threshold value for storm control.
<MCAST>	To enable or disable the storm control on multicast packet.
<MCASTTHRES>	Indicates the multicast packet threshold value for storm control.
<BCAST>	To enable or disable the storm control on broadcast packet.
<BCASTTHRES>	Indicates the broadcast packet threshold value for storm control.
<CLRRCALM>	Clears the DATA-CRC alarm.

11.38 ED-LM-EFM

(Cisco ONS 15454) The Edit Link Monitoring Ethernet in the First Mile (ED-LM-EFM) command edits the Ethernet in the First Mile (EFM) link monitoring parameters and the action associated with each of the parameters.

Usage Guidelines

- This command is applicable only to GE_XP and 10GE_XP cards.
- The card should be in Layer2 over DMDM mode.

Category

Ports

Security

Provisioning

Input Format

ED-LM-EFM:[<TID>]:<AID>:<CTAG>::LMPARAM=<LMPARAM>,[LOWTH=<LOWTH>],[HIGH TH=<HIGHTH>],[ACTION=<ACTION>],[WINDOW=<WINDOW>];

Input Example

ED-LM-EFM::ETH-12-1-1:1::LMPARAM=ERR-FRAME,LOWTH=20,HIGHTH=30,ACTION=DIS ABLE-PORT,WINDOW=40;

Input Parameters

<AID>	Access identifier from the “26.16 ETH” section on page 26-40 .
<LMPARAM>	Name of the link monitoring parameter.
• ERR-FRAME	Error frames.
• ERR-FRAME-PRD	Error frame period.
• ERR-FRAME-SEC	Error frames second.
<LOWTH>	The lowest value of the link monitoring parameter. It is an integer.
<HIGHTH>	The highest value of the link monitoring parameter. It is an integer.
<ACTION>	Action to be taken when the link monitoring parameter crosses the HIGH value, which is set by the user. The value can be NONE or DISABLED.
<WINDOW>	This indicates the window associated with each of the link monitoring parameter (number of packets, number of frames or the timer). It is an integer.

11.39 ED-LMP

(Cisco ONS 15454) The Edit Link Management Protocol (ED-LMP) command edits the global LMP protocol attributes.

Usage Guidelines This command is only available on platforms that support the LMP protocol.

Category LMP

Security Provisioning

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

Input Example ED-LMP:PETALUMA::704::ENABLED=Y,WDMEXT=Y,ROLE=PEER,LMPNODEID=198.133.219.25;

Input Parameters	<ENABLED>	LMP protocol status.
	• Y	The protocol is enabled.
	• N	The protocol is disabled.
	• <WDM>	Determines if the LMP wave division multiplexing (WDM) extensions are in effect.
	• Y	The LMP WDM extensions are in effect.
	• N	The LMP WDM extensions are not in effect.
	• <ROLE>	The role the LMP protocol is configured to play.
	• OLS	The LMP protocol is configured to respond as an optical line system (OLS).
	• PEER	The LMP protocol is configured to respond as a peer node.
	• <NODEID>	LMP node ID. NODEID is a stable IP address that is always reachable if there is any connectivity to it. The default LMP node ID value is the IP address of the node.

11.40 ED-LMP-CTRL

(Cisco ONS 15454) The Edit Link Management Protocol Control Channel (ED-LMP-CTRL) command edits the LMP control channels.

Usage Guidelines This command is only available on nodes where the LMP protocol is available and has been enabled.

Category LMP

Security Provisioning

Input Format ED-LMP-CTRL:[<TID>]:<SRC>:<CTAG>:::[LOCALPORT=<LOCALPORT>],
[REMOTENE=<REMOTENE>],[REMOTEIP=<REMOTEIP>],[HELLO=<HELLO>],
[HELLOMIN=<HELLOMIN>],[HELLOMAX=<HELLOMAX>],[DEAD=<DEAD>],
[DEADMIN=<DEADMIN>],[DEADMAX=<DEADMAX>]:[<PST>][,<SST>];

Input Example ED-LMP-CTRL:PETALUMA:CTRL-123:704:::LOCALPORT=FAC-1-1-1
,REMOTENE=15.15.15.115,REMOTEIP=126.0.0.1,HELLO=500,HELLOMIN=300,
HELLOMAX=5000,DEAD=12000,DEADMIN=2000,DEADMAX=20000:OOS,DSBLD;

Input Parameters	<SRC>	The LMP control channel AID values.
	- CTRL-ALL - CTRL-{1-4}	Specifies all the control channels. Specifies an individual control channel.
	<LOCALPORT>	The pathway that the LMP control channel will use to send and receive messages.
	<REMOTENE>	Remote IP address used by the far-end LMP control channel.
	<REMOTEIP>	Remote IP address used by the LMP control channel to send and receive messages.
	<HELLO>	The time interval in which the LMP protocol sends HELLO messages.
	<HELLOMIN>	The minimum amount of time within which the LMP control channels can send out HELLO messages to the remote node.
	<HELLOMAX>	The maximum amount of time that the LMP control channel can wait between HELLO messages.
	<DEAD>	Time interval an LMP control channel will wait for a HELLO message from the remote side before listing the control channel as down.
	<DEADMIN>	The minimum amount of time that an LMP control channel can wait before listing the control channel status as down.
	<DEADMAX>	The maximum amount of time that the LMP control channel can wait before listing the control channel as down.
	<PST>	Primary state. This parameter indicates the current overall service condition of an entity.
	- IS - OOS	In service Out of service
	<SST>	Secondary state. The parameter type is SST, which provides additional information pertaining to PST and PSTQ.
	- AINS - DSBLD	Automatic in service Disabled

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

11.41 ED-LMP-TLINK

(Cisco ONS 15454) The Edit Link Management Protocol Traffic Engineering (TE) Link (ED-LMP-TLINK) command edits the LMP TE link.

Usage Guidelines

This command can only be used on nodes that have the LMP protocol available and enabled.

Category

LMP

Security

Provisioning

Input Format

ED-LMP-TLINK:[<TID>]:<SRC>:<CTAG>:::REMOTEID=<REMOTE_ID>,
REMOTETE=<REMOTE_TELINK>, [MUXCAP=<MUXCAP>]:[<PST>[,<SST>]];

Input Example

ED-LMP-TLINK:PETALUMA:TLINK-123:704:::REMOTEID=15.15.15.115,REMOTETE=123,
MUXCAP=LAMBDA:OOS,DSBLD;

Input Parameters

<SRC>	LMP TE link AID values.
• TLINK-ALL	Specifies all the TE links.
• TLINK-{1-256}	Specifies an individual TE link.
<REMOTEID>	Remote node ID associated with the LMP TE link.
<REMOTETE>	Remote ID used by the far end LMP TE link.
<MUXCAP>	The muxponder capability of the LMP TE link.
• PKTSWITCH1	Packet Switching 1
• PKTSWITCH2	Packet Switching 2
• PKTSWITCH3	Packet Switching 3
• PKTSWITCH4	Packet Switching 4
• LAYER2	Layer 2 switching
• TDM	Time-division multiplexing (TDM) switching

• LAMBDA	Lambda switching
• FIBER	Fiber switching
<PST>	Primary state. This parameter 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

11.42 ED-LMP-DLINK

(Cisco ONS 15454) The Edit Link Management Protocol Data Link (ED-LMP-DLINK) command edits the LMP data link.

Usage Guidelines

This command can only be used on nodes that have the LMP protocol available and enabled.

Category

LMP

Security

Provisioning

Input Format

ED-LMP-DLINK:[<TID>]:<SRC>:<CTAG>:::[LINKTYPE=<LINKTYPE>],TELINK=<TELINK>,REMOTEID=<REMOTEID>;

Input Example

ED-LMP-DLINK:PETALUMA:FAC-14-1-1:704:::LINKTYPE=PORT,TELINK=TLNK-45,REMOTEID=646631;

Input Parameters

<SRC>	Access identifier from the “26.17 FACILITY” section on page 26-40 .
<LINKTYPE>	The type of LMP data link.

• PORT	Port data link
• COMPONENT	Component data link
<TELINK>	Used to map LMP data links to LMP TE links.
<REMOTEID>	The remote LMP data link ID.

11.43 ED-LNK

(Cisco ONS 15454) The Edit Link (ED-LNK) command edits an optical link state.

Usage Guidelines

The default values for all optional parameters are NE default values. These values might not be the current value for a parameter. Use a retrieve command to obtain the current value.

Categories

DWDM

Security

Provisioning

Input Format

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

Input Example

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

Input Parameters

<FROM>	Identifier at one end of the optical link from the “26.4 BAND” section on page 26-20 .
<TO>	Identifier at the other end of the optical link from the “26.4 BAND” section on page 26-20 .
<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.
	Note PST is not supported for optical channel (OCH) provisioning.
	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.
	Note SST is not supported for OCH provisioning.
	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

11.44 ED-LNKTERM

(Cisco ONS 15454) The Edit Provisionable Patchcord Termination (ED-LNKTERM) command edits the attributes of a provisionable patchcord that has already been created. Only the remote end attributes (REMOTENODE and REMOTELNKTERMID) can be edited.

Usage Guidelines

- 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 this 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.

Category

Provisionable Patchcords

Security

Provisioning

Input Format	ED-LNKTERM:[<TID>]:<AID>:<CTAG>:::[REMOTENODE=<REMOTENODE>], [REMOTELNKTERMID=<REMOTELNKTERMID>];	
Input Example	ED-LNKTERM::LNKTERM-1:CTAG:::REMOTENODE=172.20.208.226, REMOTELNKTERMID=25;	
Input Parameters	<AID>	Access identifier from the “26.21 LNKTERM” section on page 26-50 . Indicates a link (provisionable patchcord) termination on the local node.
	<REMOTENODE>	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. REMOTENODE is a string.
	<REMOTELNKTERMID>	The corresponding provisionable patchcord termination on the remote node (as specified by the REMOTENODE parameter). Integer value within the range of 1 to 65535. Defaults to the existing value.

11.45 ED-MA-CFM

(Cisco ONS 15454) The Edit Maintenance Association Connectivity Fault Management (ED-MA-CFM) command edits the maintenance association present on the card.

Usage Guidelines	- This command is applicable only to GE_XP and 10GE_XP cards. - The card should be in Layer2 over DMDM mode. - The ALL AID is invalid for this command.	
Category	Equipment	
Security	Provision	
Input Format	ED-MA-CFM:[<TID>]:<AID>:<CTAG>:::MANAME=<MANAME>,SVLANID=<SVLANID>,[NEW MANAME=<NEWMANAME>],[NEWSVLANID=<NEWSVLNAID>],[CCENABLE=<CCENABLE >];	
Input Example	ED-MA-CFM:454-156:SLOT-1:1:::MANAME=MANAME,SVLANID=4,NEWMANAME=NEWMA, NEWSVLANID=5;	

Input Parameters	<AID>	Access identifier from the “26.15 EQPT” section on page 26-37.
	<MANAME>	Maintenance Association Name. It is a string. The MA name length should not exceed more than 43 characters.
	<SVLANID>	VLAN identifier. A VLAN ID is a number between 1 and 4096. The value 0 is reserved for untagged VLANs. This identifier is used for customer VLAN IDs and service provider VLAN IDs.
	<CCENABLE>	Enable or disable Continuous Check messaging
	• Y	Enable
	• N	Disable
	<NEWMANAME>	New name for Maintenance Association. It is a string.
	<NEWSVLANID>	New service Vlan ID. It is an integer.

11.46 ED-MCAST

(Cisco ONS 15454)

Edit Multicast attributes command is used to modify the Multicast VLAN Registration attributes.

Usage Guidelines	The default values for all optional parameters are NE default values. These values may not be the current value for a parameter. In order to obtain the current value use RTRV-XX command to retrieve them.
	Error conditions: • If the AID is invalid, an IIAC (Invalid AID) error message is returned. • The “ALL” AID is invalid for this command.

Category	ETHERNET
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Security	Provisioning
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Input Format	ED-MCAST[:<TID>]:<AID>:<CTAG>[:MVRSTATE=<MVRSTATE>],[MVRSVLAN=<MVRSVLAN>],[MVRSTARTIP=<MVRSTARTIP>],[MVRIPRANGE=<MVRIPRANGE>],[IGMPONCVLAN=<IGMPONCVLAN>][:];
---------------------	---

Input Example	ED-MCAST::SLOT-1-4:321::MVRSTATE=Y,MVRSVLAN=46,MVRSTARTIP=230.64.72.57,MVRIPRANGE=20;;
----------------------	--

Input Parameters	<AID>	Equipment aids are used to access specific cards.
	• ALL	It is only used for RTRV-INV, RTRV-EQPT, RTRV-ALM/COND-EQPT commands.
	• SLOT-ALL	The NE equipment AIDs.
	• SLOT[-{1-30}]-{1-6,12-17}	Individual equipment AID of the I/O card units or slots.
	<MVRSTATE>	Multicast VLAN Registration status. Default values is - N
	• Y	Enabled
	• N	Disabled
	<MVRSVLAN>	Define the SVLAN used to distribute the Multicast stream inside the Network. Default values is 0
	<MVRSTARTIP>	Define the first IP Address of the Multicast IP Group.
	<MVRIPRANGE>	MVR IP Range. Indicates the number of IP address starting from mvrStartIp used to identified the multicast IP group. It is a number in the range 0..255. Default values is 0
	<IGMPONCVLAN>	To Enable IGMP on Customer VLAN.

11.47 ED-MIP-CFM

(Cisco ONS 15454) The Edit Maintenance Intermediate Point Connectivity Fault Management (ED-MIP-CFM) command edits the maintenance intermediate points on the port.

Usage Guidelines

- This command is applicable only to GE_XP and 10GE_XP cards.
- The card should be in Layer2 over DMDM mode.

Category

Ports

Security

Provisioning

Input Format

ED-MIP-CFM:[<TID>]:<AID>:<CTAG>::VLANID=<VLANID>,LEVEL=<LEVEL>;

Input Example

ED-MIP-CFM::ETH-1-1-1:1::VLANID=2,LEVEL=3;

Input Parameters	<AID>	Access identifier from the “26.16 ETH” section on page 26-40.
	<VLANID>	VLAN identifier. A VLAN ID is a number between 1 and 4096. The value 0 is reserved for untagged VLANs. This identifier is used for customer VLAN IDs and service provider VLAN IDs.
	<LEVEL>	This indicates the level of the maintenance domain. The value ranges from 0 to 7.

11.48 ED-NE-GEN

(Cisco ONS 15454) The Edit Network Element General (ED-NE-GEN) command edits the node attributes of the NE.

Usage Guidelines

- 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 IPADDR and DEFRTTR is 20 characters. The default value is the local IP address and default router.
- 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.
- The default values for all optional parameters are NE default values. These values might not be the current value for a parameter. Use a retrieve command to obtain the current value.
- An existing NTP and Backup NTP timing source can be removed by setting the address to 0.0.0.0.



Caution

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



Note

OSI parameters are not supported in Release 9.0 and 9.1.

Category

System

Security

Superuser

Input Format

```
ED-NE-GEN[:<TID>]::<CTAG>[::<NAME=<NAME>>],[IPADDR=<IPADDR>],[IPMASK=<IPMASK>],
[DEFRTTR=<DEFRTTR>],[IPV6ADDR=<IPV6ADDR>],[IPV6PREFLEN=<IPV6PREFLEN>],[IPV
6DEFRTTR=<IPV6DEFRTTR>],[IPV6ENABLE=<IPV6ENABLE>],[IIOPPORT=<IIOPPORT>],[NTP=
<NTP>],[SUPPRESSIP=<SUPPRESSIP>],[MODE=<MODE>],[MSPUBVLANID=<MSPUBVLANI
D>],[MSINTLVLANID=<MSINTLVLANID>],[SERIALPORTECHO=<SERIALPORTECHO>],[OSI
ROUTINGMODE=<OSIROUTINGMODE>],[OSIL1BUFSIZE=<OSIL1BUFSIZE>],[OSIL2BUFSIZ
E=<OSIL2BUFSIZE>],[BKUPNTP=<BKUPNTP>];
```

Input Example

```
ED-NE-GEN:CISCO::123:::NAME=NODENAME,IPADDR=192.168.100.52,
IPMASK=255.255.255.0,DEFRTTR=192.168.100.1,IPV6ADDR="[3ffe:0501:0008:0000:0260:97ff:efa
b]",IPV6PREFLEN=112,IPV6DEFRTTR="[3ffe:0501:0008:0000:0260:97ff:fe40:efab]",
```

IPV6ENABLE=Y,IIOPPORT=57790, NTP=192.168.100.52, SUPPRESSIP=NO,
 MODE=SINGLESHELF,MSPUBVLANID=1,MSINTLVLANID=5,SERIALPORTECHO=Y,OSIROU
 TINGMODE=ES,OSIL1BUFSIZE=512,OSIL2BUFSIZE=512,bkupntp=10.1.1.2;;

Input Parameters

<NAME>	Node name. NAME is a string. Defaults to NULL.
<IPADDR>	Node IP address. IPADDR is a string.
<IPMASK>	Node IP mask. IPMASK is a string.
<DEFRTR>	Node default router. DEFRTR is a string.
<IPV6ADDR>	Specifies the IPv6 address of the NE. IPV6ADDR is a string.
 Note IPV6ADDR parameter can be set only if IPV6ENABLE parameter is set to Y	
<IPV6PREFLEN>	Specifies the prefix length for the IPv6 address of the NE. IPV6PREFLEN is an integer
<IPV6DEFRTR>	Specifies the IPv6 default router address for the NE. IPV6DEFRTR is a string
<IPV6ENABLE>	Specifies if the IPv6 enable mode for the NE is enabled or disabled.
• Y	Indicates that IPV6 mode is enabled.
• N	Indicates that IPV6 mode is disabled.
<IIOPPORT>	Node IIO port. IIOPPORT is an integer. Defaults to 57790.
<NTP>	Node NTP timing origin address. NTP is a string. Defaults to 0.0.0.0.
<SUPPRESSIP>	Suppress the IP display.
• NO	No
• YES	Yes
<MODE>	(Optional) Indicates the AID mode to access shelf identifier objects. Defaults to SINGLESHELF. This field is always set to MULTISHELF in the case of DWDM nodes with more than one shelf managed. Parameter type is SHELF_MODE which is the NE mode.
• SINGLESHELF	The NE contains only one shelf and the AID representation does not consider the shelf identifier for command requests/response and autonomous reports.
• MULTISHELF	The AID representation considers the shelf identifier for command requests/response and autonomous reports. This means the NE has more than one shelf configured or the user wants to use the new AID style.
• MULTISHELFETH	The AID representation considers the shelf identifier for command requests/response and autonomous reports. This means the NE has more than one shelf configured or the user wants to use the new AID style. The shelves are connected by means of an external Ethernet switch.

<MSPUBVLANID>	Public VLAN ID used by the node controller to communicate with the external network. The VLAN ID can be in the range of 1 to 4094. But for M6 shelf, you cannot modify the MSPUBVLANID value. The MSPUBVLANID value is 1.
<MSINTLVLANID>	Internal VLAN ID used by the node controller to communicate with the Subtending shelves. The VLAN ID can be in the range of 1 to 4094. But for M6 shelf, you cannot modify the MSINTLVLANID value. The MSINTLVLANID value is 2.
<SERIALPORTECHO>	Indicates if echo is turned on for the TL1 serial port sessions.
• Y	Echo is turned on.
• N	Echo is turned off.
<OSIROUTINGMODE>	Indicates the routing mode of the node.
• ES	Provisions the node as an OSI ES. The ONS node performs all ES functions and relies upon an IS for communication with other IS nodes inside and outside the ES OSI area.
• IS1	Provisions the node as an OSI IS. The ONS node performs all IS functions including routing data between ISs and ESs, between networks, and between parts of a network.
• IS2	The ONS node performs all IS functions. It communicates with other IS and ES nodes within an OSI area. It also broadcasts ISHs to IS nodes in other areas to which it is connected.
<OSIL1BUFSIZE>	Level 1 Link State Protocol Data Unit (LSP) buffer size. The default is 512.
<OSIL2BUFSIZE>	Level 2 Link State Protocol Data Unit (LSP) buffer size. The default is 512.
<BKUPNTP>	Indicates that the Secondary NTP server is used as backup for primary.

11.49 ED-NE-PATH

(Cisco ONS 15454) The Edit Network Element Path (ED-NE-PATH) command edits the path attributes of the NE.

Usage Guidelines

The default value for an optional parameter is the NE default value.

Category

System

Security

Provisioning

Input Format

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

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

Input Parameters	<PDIP>	Flag used to indicate whether PDI-P should be generated on the outgoing VT structured STSs. The parameter type is ON_OFF, which disables or enables an attribute.
	• N	Disable an attribute.
	• Y	Enable an attribute.
	<XCMODE>	Cross-connect mode. The parameter type is XCMODE, which is applicable only to a node with cross-connect cards (XC-VXC-10G or XC-VXC-2.5G, for example) that support cross-connect mode change.
	• MIXED	Both VT1 and VT2 cross-connects can be provisioned on the node.
	• VT1	Only VT1 cross-connects can be provisioned on the node.
	• VT2	Only VT2 cross-connects can be provisioned on the node.

11.50 ED-NE-SYNCN

(Cisco ONS 15454) The Edit Network Element Synchronization (ED-NE-SYNCN) command edits the synchronization attributes of the NE.

Usage Guidelines 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.



Note

Although mixed mode timing is supported in this release, it is not recommended. Refer to the *Cisco ONS 15454 SONET TL1 Reference Guide* for more information.

Category Synchronization

Security Provisioning

Input Format ED-NE-SYNCN:[<TID>]:[<AID>]:<CTAG>:::[TMMD=<TMMD>],[SSMGEN=<SSMGEN>],[QRES=<QRES>],[RVRTV=<RVRTV>],[RVTM=<RVTM>];
 ED-NE-SYNCN:[<TID>]:[<AID>]:<CTAG>:::[TMMD=<TMMD>],[RVRTV=<RVRTV>],[RVTM=<RVTM>],[SYSTEMN=<SYSTEMN>];

Input Example

```
ED-NE-SYCN:PETALUMA::123::TMMD=LINE,SSMGEN=GEN1,QRES=ABOVE-PRS,
RVRTV=Y,RVTM=8.0,SYSTEMN=SONET;
```

```
ED-NE-SYCN:PETALUMA::123::TMMD=LINE,RVRTV=Y,RVTM=8.0,SYSTEMN=SONET;
```

Input Parameters

<AID>	The node or shelf access identifier from the “26.26 SHELF” section on page 26-52. If omitted it addresses the node or first shelf of the node. Must not be null. This is applicable only to ONS 15454.
<TMMD>	Timing mode. A null value is equivalent to ALL. Defaults to EXTERNAL. The parameter type is TIMING_MODE, which is the timing mode for the current node.
- EXTERNAL - LINE - MIXED	The node derives its clock from the BITS input. The node derives its clock from the SONET lines. The node derives its clock from the mixed timing mode.
<SSMGEN>	Synchronization status message set. Defaults to GEN1. A null value is equivalent to ALL. The default is ABOVE-STU. The parameter type is SYNC_GENERATION (synchronization status message set generation).
- GEN1 - GEN2	First generation SSM set Second generation SSM set
<QRES>	Quality of the RES. A null value is equivalent to ALL. Defaults to DUS. The parameter type is SYNC_QUALITY_LEVEL, which is the network synchronization quality level.
- ABOVE-PRS - ABOVE-SMC - ABOVE-ST2 - ABOVE-ST3 - ABOVE-ST3E - ABOVE-ST4 - ABOVE-STU - ABOVE-TNC - BELOW-ST4 - SAME-AS-DUS	Better than primary reference source. Valid setting for Generation-1 and Generation-2 SSM Set. Between SMC and ST3. Valid setting for Generation-1 and Generation-2 SSM Set. Between ST2 and STU. Valid setting for Generation-1 and Generation-2 SSM Set. For Generation-1 SSM set, between ST3 and ST2. For Generation-2 SSM set, between ST3 and ST3E. Between ST3E and TNC. Valid setting only for Generation-2 SSM set. Between ST4 and ST3. Valid setting for Generation-1 and Generation-2 SSM Set. Between STU and PRS. Valid setting for Generation-1 and Generation-2 SSM Set. This is default setting. Between TNC and ST2. Valid setting only for Generation-2 SSM set. Below ST4 but still usable. Valid setting for Generation-1 and Generation-2 SSM Set. Disable the RES message by equating it to DUS. Valid setting for Generation-1 and Generation-2 SSM Set.

<RVRTV>	Revertive mode. The value Y indicates that protection switching system reverts service to the original line after restoration. The value N indicates that 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. The parameter type is ON_OFF, which disables or enables an attribute.
• N	Does not revert service to original line after restoration.
• Y	Reverts service to original line after restoration.
<RVTM>	Revertive time. A null value is equivalent to ALL. The parameter type is REVERTIVE_TIME (revertive time).
• 0.5 to 12.0	Revertive time is 0.5 to 12.0 minutes.
<SYSTEMN>	(ONS 15454 only) Identifies the system timing standard used by the node.
• SONET	SONET timing standard
• SDH	SDH timing standard

11.51 ED-OCH

(Cisco ONS 15454) The Edit Optical Channel (ED-OCH) command edits the attributes (service parameters) and state of an OCH facility. Refer to the *Cisco ONS 15454 SONET TL1 Reference Guide* for specific card provisioning rules.

Usage Guidelines

- Primary=OOS and secondary=AINS states do not apply to Ethernet mode.
- Disable all the ports, before you change the card mode from LAN to WAN mode.

Category

DWDM

Security

Provisioning

Input Format

```
ED-OCH[:<TID>]:<AID>:<CTAG>[:EXPWLEN=<EXPWLEN>],[VOAATTN=<VOAATTN>],[VO
APWR=<VOAPWR>],[CALOPWR=<CALOPWR>],[NAME=<PORTNAME>],[OSDBER=<SDBER
>],[GCC=<GCC>],[GCCRATE=<GCCRATE>],[DWRAP=<DRWAP>],[FEC=<FEC>],[PAYLOADM
AP=<PAYLOADMAP>],[SOAK=<SOAK>],[LOSSB=<LOSSB>],[CMDMDE=<CMDMDE>],[PEERI
D=<PEERID>],[REGENNAME=<REGENNAME>],[PORTMODE=<PORTMODE>],[ODUTRANS
MODE=<ODUTRANSMODE>],[ERRORDECORRELATOR=<ERRORDECORRELATOR>],[FCS=<F
CS>],[PPR=<PPR>],[TRIGTH=<TRIGTH>],[RVRTTH=<RVRTTH>],[TRIGWINDOW=<TRIGWIN
DOW>],[RVRTWINDOW=<RVRTWINDOW>],[OVRCLK=<OVRCLK>],[RXWLEN=<RXWLEN>][
:<PST>[:<SST>]];
```

Input Example

ED-OCH:CISCO:CHAN-6-2:114:::EXPWLEN=1530.32,NAME="NYLINE",GCC=Y,
GCCRATE=192K,OSDBER=1E-6,DWRAP=Y,FEC=STD,PAYLOADMAP=ASYNCH,
SOAK=10,CMDMDE=FRCD:IS,AINS;

Input Parameters

<AID>	Access identifier from the “26.8 CHANNEL” section on page 26-22.
<EXPWLEN>	(Optional) Optical wavelength for this port. Applicable only to the following types of cards: optical service channel cards, optical amplifier cards, dispersion compensation units, multiplexer and demultiplexer cards, and optical add/drop multiplexing (OADM) cards. The parameter type is OPTICAL_WLEN, which is the optical wavelength.
• 1310	Wavelength 1310
• 1470	Wavelength 1470
• 1490	Wavelength 1490
• 1510	Wavelength 1510
• 1528.77	Wavelength 1528.77
• 1529.55	Wavelength 1529.55
• 1529.94	Wavelength 1529.94
• 1530	Wavelength 1530
• 1530.33	Wavelength 1530.33
• 1530.72	Wavelength 1530.72
• 1531.12	Wavelength 1531.12
• 1531.51	Wavelength 1531.51
• 1531.90	Wavelength 1531.90
• 1532.29	Wavelength 1532.29
• 1532.68	Wavelength 1532.68
• 1533.07	Wavelength 1533.07
• 1533.47	Wavelength 1533.47
• 1533.86	Wavelength 1533.86
• 1534.25	Wavelength 1534.25
• 1534.64	Wavelength 1534.64
• 1535.04	Wavelength 1535.04
• 1535.43	Wavelength 1535.43
• 1535.82	Wavelength 1535.82
• 1536.22	Wavelength 1536.22
• 1536.61	Wavelength 1536.61
• 1537	Wavelength 1537
• 1537.40	Wavelength 1537.40
• 1537.79	Wavelength 1537.79
• 1538.19	Wavelength 1538.19

• 1538.58	Wavelength 1538.58
• 1538.98	Wavelength 1538.98
• 1539.37	Wavelength 1539.37
• 1539.77	Wavelength 1539.77
• 1540.16	Wavelength 1540.16
• 1540.56	Wavelength 1540.56
• 1540.95	Wavelength 1540.95
• 1541.35	Wavelength 1541.35
• 1541.75	Wavelength 1541.75
• 1542.14	Wavelength 1542.14
• 1542.35	Wavelength 1542.35
• 1542.54	Wavelength 1542.54
• 1542.94	Wavelength 1542.94
• 1543.33	Wavelength 1543.33
• 1543.73	Wavelength 1543.73
• 1544.13	Wavelength 1544.13
• 1544.53	Wavelength 1544.53
• 1544.92	Wavelength 1544.92
• 1545.32	Wavelength 1545.32
• 1545.72	Wavelength 1545.72
• 1546.12	Wavelength 1546.12
• 1546.52	Wavelength 1546.52
• 1546.92	Wavelength 1546.92
• 1547.32	Wavelength 1547.32
• 1547.72	Wavelength 1547.72
• 1548.11	Wavelength 1548.11
• 1548.51	Wavelength 1548.51
• 1548.91	Wavelength 1548.91
• 1549.32	Wavelength 1549.32
• 1549.72	Wavelength 1549.72
• 1550	Wavelength 1500
• 1550.12	Wavelength 1550.12
• 1550.52	Wavelength 1550.52
• 1550.92	Wavelength 1550.92
• 1551.32	Wavelength 1551.32
• 1551.72	Wavelength 1551.72
• 1552.12	Wavelength 1552.12
• 1552.52	Wavelength 1552.52
• 1552.93	Wavelength 1552.93
• 1553.33	Wavelength 1553.33
• 1553.73	Wavelength 1553.73

• 1554.13	Wavelength 1554.13
• 1554.13	Wavelength 1554.13
• 1554.94	Wavelength 1554.94
• 1555.34	Wavelength 1555.34
• 1555.75	Wavelength 1555.75
• 1556.15	Wavelength 1556.15
• 1556.55	Wavelength 1556.55
• 1556.96	Wavelength 1556.96
• 1557.36	Wavelength 1557.36
• 1557.77	Wavelength 1557.77
• 1558.17	Wavelength 1558.17
• 1558.58	Wavelength 1558.58
• 1558.98	Wavelength 1558.98
• 1559.39	Wavelength 1559.39
• 1559.79	Wavelength 1559.79
• 1560.20	Wavelength 1560.20
• 1560.61	Wavelength 1560.61
• 1561.01	Wavelength 1561.01
• 1561.42	Wavelength 1561.42
• 1561.83	Wavelength 1561.83
• 1570	Wavelength 1570
• 1570.83	Wavelength 1570.83
• 1571.24	Wavelength 1571.24
• 1571.65	Wavelength 1571.65
• 1572.06	Wavelength 1572.06
• 1572.48	Wavelength 1572.48
• 1572.89	Wavelength 1572.89
• 1573.30	Wavelength 1573.30
• 1573.71	Wavelength 1573.71
• 1574.13	Wavelength 1574.13
• 1574.54	Wavelength 1574.54
• 1574.95	Wavelength 1574.95
• 1575.37	Wavelength 1575.37
• 1575.78	Wavelength 1575.78
• 1576.20	Wavelength 1576.20
• 1576.61	Wavelength 1576.61
• 1577.03	Wavelength 1577.03
• 1577.44	Wavelength 1577.44
• 1577.86	Wavelength 1577.86
• 1578.27	Wavelength 1578.27
• 1578.69	Wavelength 1578.69

• 1579.10	Wavelength 1579.10
• 1579.52	Wavelength 1579.52
• 1579.93	Wavelength 1579.93
• 1580.35	Wavelength 1580.35
• 1580.77	Wavelength 1580.77
• 1581.18	Wavelength 1581.18
• 1581.60	Wavelength 1581.60
• 1582.02	Wavelength 1582.02
• 1582.44	Wavelength 1582.44
• 1582.85	Wavelength 1582.85
• 1583.27	Wavelength 1583.27
• 1583.69	Wavelength 1583.69
• 1584.11	Wavelength 1584.11
• 1584.53	Wavelength 1584.53
• 1584.95	Wavelength 1584.95
• 1585.36	Wavelength 1585.36
• 1585.78	Wavelength 1585.78
• 1586.20	Wavelength 1586.20
• 1586.62	Wavelength 1586.62
• 1587.04	Wavelength 1587.04
• 1587.46	Wavelength 1587.46
• 1587.88	Wavelength 1587.88
• 1588.30	Wavelength 1588.30
• 1588.73	Wavelength 1588.73
• 1589.15	Wavelength 1589.15
• 1589.57	Wavelength 1589.57
• 1589.99	Wavelength 1589.99
• 1590	Wavelength 1590
• 1590.41	Wavelength 1590.41
• 1590.83	Wavelength 1590.83
• 1591.26	Wavelength 1591.26
• 1591.68	Wavelength 1591.68
• 1592.10	Wavelength 1592.10
• 1592.52	Wavelength 1592.52
• 1592.95	Wavelength 1592.95
• 1593.37	Wavelength 1593.37
• 1593.79	Wavelength 1593.79
• 1594.22	Wavelength 1594.22
• 1594.64	Wavelength 1594.64
• 1595.06	Wavelength 1595.06
• 1595.49	Wavelength 1595.49

• 1596.34	Wavelength 1596.34
• 1596.76	Wavelength 1596.76
• 1597.19	Wavelength 1597.19
• 1597.62	Wavelength 1597.62
• 1598.04	Wavelength 1598.04
• 1598.47	Wavelength 1598.47
• 1598.89	Wavelength 1598.89
• 1599.32	Wavelength 1599.32
• 1599.75	Wavelength 1599.75
• 1600.06	Wavelength 1600.06
• 1601.03	Wavelength 1601.03
• 1601.46	Wavelength 1601.46
• 1601.88	Wavelength 1601.88
• 1602.31	Wavelength 1602.31
• 1602.74	Wavelength 1602.74
• 1603.17	Wavelength 1603.17
• 1603.60	Wavelength 1603.60
• 1604.03	Wavelength 1604.03
• 1610	Wavelength 1610
• USE-TWL1	Use Tunable Wavelength 1
<VOAATTN>	(Optional) The value of calibrated attenuation for the VOA expressed in dBm. The range is 0.0 to +30.0. VOAATTN is a float.
<FCS>	(Optional) First Circuit Startup. An automatic channel startup that operates the VOA when the light is detected on the ingress port.
• Y	Automatic Channel startup enabled.
• N	Automatic Channel startup disabled.
<VOAPWR>	(Optional) The value of calibrated output power that the VOA is going to set as a result of its attenuation. VOAPWR is a float.
<CALOPWR>	(Optional) 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. CALOPWR is a float.
<NAME>	(Optional) Port name. PORTNAME is a string.
<OSDBER>	OTN SDBER. Can only be provisioned on the working port. 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
<GCC>	Identifies the Generic communication channel (GCC) connection of the port.
• Y	GCC can be utilized
• N	GCC cannot be utilized
<GCCRATE>	(Optional) The data rate of the GCC traffic. The default is 192 Kbps. For MXP_2.5G_10G and TXP_MR_10G cards, this applies only to the DWDM port. The parameter type is GCCRATE, which is the data rate of the GCC traffic.
• 192K	192 Kbps
• 576K	576 Kbps
<DWRAP>	(Optional) The ITU-T G.709 monitoring digital wrapper. It is either on or off. The system default is ON. For MXP_2.5G_10G and TXP_MR_10G cards, this applies only to the DWDM port. The parameter type is ON_OFF (disable or enable an attribute). To enable ITU-T G.709 monitoring, there should be no GCC on the DWDM port and the payload (in which the card is configured) should not be UNFRAMED. To disable ITU-T G.709 monitoring, there should be no GCC on the DWDM port, the FEC should be turned to off, there should be no overhead circuit created on the DWDM port, and none of the client ports on the card should be part of a Y-cable protection group (muxponder only).
• N	Disable an attribute.
• Y	Enable an attribute.
<FEC>	(Optional) Forward error correction. It can be enabled only if ITU-T G.709 monitoring is turned ON. It is either off or enabled in standard or enhanced mode. The system default is standard FEC enabled. The FEC level PM and thresholds apply if the FEC is turned ON. The parameter type is FEC_MODE, which specifies the type of forward error correction.
• ENH	Enhanced FEC is enabled.
• ENH-14	Enhanced FEC 1.4 is enabled
• ENH-17	Enhanced FEC 1.7 is enabled
• OFF	FEC is disabled.
• STD	Standard FEC is enabled.
<PAYLOADMAP>	(Optional) The type of payload mapping. It can be enabled only if ITU-T G.709 monitoring is turned ON and FEC is enabled. The parameter type is PAYLOAD_MAPPING, which is the payload mapping mode.
• ASYNCH	Asynchronous mapping mode
• ODU	ODU multiplex structure mode
• SYNCH	Synchronous mapping mode
• N	Disable an attribute.
• Y	Enable an attribute.

• NOOPU2FIXEDSTUFF	Mapping with no FIXEDSTUFF
<SOAK>	(Optional) Locked-AutomaticInService to Unlocked 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). SOAK is an integer.
<LOSSB>	The parameter type is REACH which indicates the reach values.
• AUTOPROV	Autoprovisioning
• CWDM-40KM	CWDM 40 kilometers.
• CX	Reach CX
• CX1	Reach CX1
• 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
• TEN-GE-ER	10 GE extended range
• TEN-GE-LR	10 GE long range
• TEN-GE-SR	10 GE short range
• ULH	Reach ULH
• VSR	Reach VSR
• VX	Reach VX
• ZX	Reach ZX
<CMDMDE>	(Optional) Command mode. 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 Unlocked-Enabled or Locked-Disabled, AutomaticInService service states.

• FRCD	Force the system to override a state in which the command would normally be denied.
• NORM	Execute the command normally. Do not override any conditions that could make the command fail.
<PEERID>	Indicates the peer trunk facility of the regeneration group on the OTU2-XP card. Accessed using the CHAN AID.
<REGENNAME>	Indicates the name of a regeneration group. Applicable only to DWDM flavored cards, which support regeneration group. Regenname is a string. The default value is "NULL".
<PORTMODE>	Describes the termination mode of each interface on the OTU2-XP card.
• DWDM-LINE	Line terminating mode.
• DWDM-SECTION	Section terminating mode.
• DWDM-TRANS-AIS	Transparent mode AIS.
• DWDM-TRANS-SQUELCH	Transparent mode squelch.
• 10GLANWAN-SQUELCH	10G LAN to WAN Squelch.
<ODUTRANSMODE>	To configure the "ODUk OH" transparency on the OTU2-XP card.
• CISCO-EXT	Cisco Extended. When the Cisco Extended configuration is selected, two bytes of the ODU layer is terminated to guarantee the interoperability with the older Transponder/Muxponder cards.
• TRANS-STD	Transparent Standard Use. The transponder, behaving as a regenerator, terminates the OUT layer and is transparent to the ODU layer. Also in this case the FEC-MISM (FEC Mismatch) alarm is not generated.
<ERRORDECORRELATOR>	To enable or disable the MLSE module on the card. This applies only to TXP_MR_10EX_C, MXP_2.5G_10EX_C, and MXP_MR_10DMEX_C cards
• Y	To enable the MLSE module on the card.
• N	To disable the MLSE module on the card.
<PPR>	(Optional) To enable or disable the Proactive Protection Regen (PPR) in the OTU2 Card in Regen Mode.
• Y	PPR enabled.
• N	PPR disabled.
<TRIGTH>	Specifies the trigger threshold value for Proactive Protection Regen. The parameter type is TRIGGER_THRESHOLD.
• 1E-3	Trigger threshold is 1E-3.
• 1E-4	Trigger threshold is 1E-4.
• 1E-5	Trigger threshold is 1E-5.
• 1E-6	Trigger threshold is 1E-6.
• 1E-7	Trigger threshold is 1E-7.
• 2E-4	Trigger threshold is 2E-4.
• 2E-5	Trigger threshold is 2E-5.
• 2E-6	Trigger threshold is 2E-6.

• 2E-7	Trigger threshold is 2E-7.
• 3E-4	Trigger threshold is 3E-4
• 3E-5	Trigger threshold is 3E-5
• 3E-6	Trigger threshold is 3E-6
• 3E-7	Trigger threshold is 4E-7.
• 4E-4	Trigger threshold is 4E-4
• 4E-5	Trigger threshold is 4E-5
• 4E-6	Trigger threshold is 4E-6.
• 4E-7	Trigger threshold is 4E-7.
• 5E-4	Trigger threshold is 5E-4
• 5E-5	Trigger threshold is 5E-5
• 5E-6	Trigger threshold is 5E-6.
• 5E-7	Trigger threshold is 5E-7.
• 6E-4	Trigger threshold is 6E-4.
• 6E-5	Trigger threshold is 6E-5
• 6E-6	Trigger threshold is 6E-6.
• 6E-7	Trigger threshold is 6E-7.
• 7E-4	Trigger threshold is 7E-4.
• 7E-5	Trigger threshold is 7E-5
• 7E-6	Trigger threshold is 7E-6.
• 7E-7	Trigger threshold is 7E-7.
• 8E-4	Trigger threshold is 8E-4.
• 8E-5	Trigger threshold is 8E-5
• 8E-6	Trigger threshold is 8E-6.
• 8E-7	Trigger threshold is 8E-7.
• 9E-4	Trigger threshold is 9E-4.
• 9E-5	Trigger threshold is 9E-5
• 9E-6	Trigger threshold is 9E-6.
• 9E-7	Trigger threshold is 9E-7.
<RVRTTH>	Specifies the revert threshold for Proactive Protection Regen. The parameter type is REP_PORT_ROLE
• 1E-4	Revert threshold is 1E-4.
• 1E-5	Revert threshold is 1E-5
• 1E-6	Revert threshold is 1E-6.
• 1E-7	Revert threshold is 1E-7.
• 2E-5	Revert threshold is 2E-5
• 2E-6	Revert threshold is 2E-6.
• 2E-7	Revert threshold is 2E-7.
• 3E-6	Revert threshold is 3E-6
• 3E-7	Revert threshold is 4E-7.
• 4E-5	Revert threshold is 4E-5
• 4E-6	Revert threshold is 4E-6.

• 4E-7	Revert threshold is 4E-7.
• 5E-5	Revert threshold is 5E-5
• 5E-6	Revert threshold is 5E-6.
• 5E-7	Revert threshold is 5E-7.
• 5E-8	Revert threshold is 5E-8.
• 6E-5	Revert threshold is 6E-5
• 6E-6	Revert threshold is 6E-6.
• 6E-7	Revert threshold is 6E-7.
• 6E-8	Revert threshold is 6E-8.
• 7E-5	Revert threshold is 7E-5
• 7E-6	Revert threshold is 7E-6.
• 7E-7	Revert threshold is 7E-7.
• 7E-8	Revert threshold is 7E-8.
• 8E-5	Revert threshold is 8E-5
• 8E-6	Revert threshold is 8E-6.
• 8E-7	Revert threshold is 8E-7.
• 8E-8	Revert threshold is 8E-8.
• 9E-5	Revert threshold is 9E-5
• 9E-6	Revert threshold is 9E-6.
• 9E-7	Revert threshold is 9E-7.
• 9E-8	Revert threshold is 9E-8.
<TRIGWINDOW>	Specifies the trigger window value for Proactive Protection Regen in milli seconds. It should always be a multiple of the sample slot value, derived from the trigger threshold value. The maximum TRIGWINDOW value is 10000.
<RVRTWINDOW>	Specifies the revert window value for Proactive Protection Regen in milli seconds. It should always be a multiple of the sample slot value, derived from the revert threshold value. The maximum RVRTWINDOW value is 10000 and minimum value is 2000.
<OVRCLK>	Indicates whether the optical trunk is over-clocked or not. It can be Y or N. The default is N.
• DQPSK	Indicates the D-QPSK modulation format.
• QPSK	Indicates the QPSK modulation format.
<RXWLEN>	The RX wavelength. It is applicable in unidirectional regeneration mode of a muxponder card. In this case the RX wavelength can be different from the nominal TX wavelength (EXPWLEN). It can be any valid DWDM wavelength value. The default value is USE-TWL1.
<PST>	(Optional) Primary state. The parameter type is PST, which indicates the current overall service condition of an entity.
• Unlocked	In service
• Locked	Out of service

<SST>	(Optional) Secondary state. The parameter type is SST, which provides additional information pertaining to PST and PSTQ.
• AutomaticInService	Automatic in service
• Disabled	Disabled
• Loopback	Loopback
• MismatchofEquipmentAlarm	Mismatch of equipment and attributes
• Maintenance	Maintenance mode
• OutOfGroup	Out of group
• SoftwareDownload	Software downloading
• Unassigned	Unassigned
• NotInstalled	Unequipped

11.52 ED-OCHCC

(Cisco ONS 15454) The Edit Optical Channel Client Connection (ED-OCHCC) command edits the OCH client connection.

Usage Guidelines

- The fields after CTAG (trailing colons) are optional.
- This command does not support multiple editing of OCH client connection provisioning.
- The default values for all optional parameters are NE default values. These values might not be the current value for a parameter. Use a retrieve command to obtain the current value.

Category

DWDM

Security

Provisioning

Input Format

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

Input Example

ED-OCHCC:VA454-22:FAC-2-1-1:116:::CKTID=OCHCC,CMDMDE=FRCD:OOS,DSBLD;

Input Parameters

<AID>	Access identifier from the “26.17 FACILITY” section on page 26-40.
<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 in which 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. The default is IS.
• IS	In service
• OOS	Out of service
<SST>	Secondary state. The parameter type is SST, which provides additional information pertaining to PST and PSTQ. The default is AINS.
• 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

11.53 ED-OCHNC

(Cisco ONS 15454) The Edit Optical Channel Network Connection (ED-OCHNC) command edits the OCH network connection.

Usage Guidelines

- The fields after CTAG (trailing colons) are optional.
- This command does not support multiple editing of wavelength connection provisioning.
- The default values for all optional parameters are NE default values. These values might not be the current value for a parameter. Use a retrieve command to obtain the current value.

Category

DWDM

Security

Provisioning

Input Format

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

Input Example

ED-OCHNC:VA454-22:CHANWL-1-3-TX-1530.33,
LINEWL-4-1-RX-1530.33:116:::CKTID=CIRCUIT,CMDMDE=FRCD:LOCKED,DISABLED;

Input Parameters

<SRC>	Source access identifier from the “26.8 CHANNEL” section on page 26-22. In two-way wavelength connection sources, both directions need to be indicated.
<DST>	Destination access identifier from the “26.20 LINEWL” section on page 26-46. In two-way wavelength connection sources, both directions need to be indicated.
<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 in which the command would normally be denied.
• NORM	Execute the command normally. Do not override any conditions that might make the command fail.
<WLOPWR>	The value of calibrated output power that the VOA is going to set as a result of its attenuation. WLOPWR is a float.
<VOAATTN>	The value of calibrated attenuation for the VOA expressed in dBm. The range is 0.0 to +30.0. VOAATTN is a float.
<PST>	Primary state. The parameter type is PST, which indicates the current overall service condition of an entity. The default is IS.
• IS	In service
• OOS	Out of service
<SST>	Secondary state. The parameter type is SST, which provides additional information pertaining to PST and PSTQ. The default is AINS.
• 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

11.54 ED-OMS

(Cisco ONS 15454) The Edit Optical Multiplex Section (ED-OMS) command edits the attributes (service parameters) and state of an OMS facility.

Usage Guidelines None

Category DWDM

Security Provisioning

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

Input Example ED-OMS:PENNGROVE:BAND-6-1:114:::,EXPBAND=1530.32-1532.68,VOAATTN=2.5,VOAPWR=7.5,CALOPWR=0.0,NAME="OMSPORT",SOAK=8,CMDMDE=NORM:UNLOCKED,AUTOMATICINSERVICE;

Input Parameters	<AID>	Access identifier from the “26.4 BAND” section on page 26-20 .
	<RDIRN>	Ring directionality of the optical line. The parameter type is RDIRN_MODE, which is 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).
	<EXPBAND>	The expected value of the optical band for this port. The parameter type is OPTICAL_BAND (optical band).
	• 1530.33 to 1532.68	Band 1
	• 1534.25 to 1536.61	Band 2
	• 1538.19 to 1540.56	Band 3
	• 1542.14 to 1544.53	Band 4
	• 1546.12 to 1548.51	Band 5
	• 1550.12 to 1552.52	Band 6
	• 1554.13 to 1556.55	Band 7
	• 1558.17 to 1560.61	Band 8
	• USE-DEFAULT	This band is not yet configured/retrieved from unit.
	<VOAATTN>	The value of calibrated attenuation for the VOA expressed in dBm. The range is 0.0 to +30.0. VOAATTN is a float.
	<VOAPWR>	The value of calibrated output power that the VOA is going to set as a result of its attenuation. VOAPWR is a float.

<CALOPWR>	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. CALOPWR is a float.
• 0.5 to 12.0	Revertive time is 0.5 to 12.0 minutes.
<NAME>	Port name. NAME is a string.
<SOAK>	SOAK is an integer. Defaults to 8.
<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

11.55 ED-OTS

(Cisco ONS 15454) The Edit Optical Transport Section (ED-OTS) command edits the attributes (service parameters) and state of an OTS facility.

Usage Guidelines

None

Category

DWDM

Security

Provisioning

Input Format

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

Input Example

ED-OTS:PENNGROVE:LINE-6-1:114:::RDIRN=W-E,VOAATTN=5.0,VOAPWR=10.0,OFFSET=0.0,CALTILT=0.0,OSRI=N,NAME="OTS PORT",SOAK=8,CMDMDE=NORM:UNLOCKED,AUTOMATICINSERVICE;

Input Parameters

<AID>	Access identifier from the “26.19 LINE” section on page 26-43 .
<RDIRN>	Ring directionality of the optical line. The parameter type is RDIRN_MODE, which is 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).
<VOAATTN>	The value of calibrated attenuation for the VOA expressed in dBm. The range is 0.0 to +30.0. VOAATTN is a float.
<VOAPWR>	The value of calibrated output power that the VOA is going to set as a result of its attenuation. VOAPWR is a float.
<OFFSET>	The calibration value of the optical power added to the calculated reference value. Defaults to 0 dBm. OFFSET is a float.
<CALTILT>	(Optional) The amplifier calibration tilt offset to be added to the calculated reference value. Defaults to 0 dBm. CALTILT is a float.
<OSRI>	(Optional) Optical safety remote interlock (OSRI) is enabled or disabled. Present only on a port where the OSRI is supported. The parameter type is ON_OFF, which disables or enables an attribute.
• N	Disable an attribute.
• Y	Enable an attribute.
<NAME>	The name of the port. NAME is a string.
<SOAK>	SOAK is an integer. It defaults to 8.
<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.
<CG>	TDCU coarse grain value
• 0	TDCU coarse grain value
• -110	TDCU coarse grain value

• -1100	TDCU coarse grain value
• -1210	TDCU coarse grain value
• -1320	TDCU coarse grain value
• -1430	TDCU coarse grain value
• -1540	TDCU coarse grain value
• -1650	TDCU coarse grain value
• -220	TDCU coarse grain value
• -330	TDCU coarse grain value
• -440	TDCU coarse grain value
• -550	TDCU coarse grain value
• -660	TDCU coarse grain value
• -770	TDCU coarse grain value
• -880	TDCU coarse grain value
• -990	TDCU coarse grain value
<FG>	TDCU fine grain value
• 0	TDCU fine grain value
• -45	TDCU fine grain value
• -450	TDCU fine grain value
• -495	TDCU fine grain value
• -540	TDCU fine grain value
• -585	TDCU fine grain value
• -630	TDCU fine grain value
• -675	TDCU fine grain value
• -90	TDCU fine grain value
• -135	TDCU fine grain value
• -180	TDCU fine grain value
• -225	TDCU fine grain value
• -270	TDCU fine grain value
• -315	TDCU fine grain value
• -360	TDCU fine grain value
• -405	TDCU fine grain value
<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

11.56 ED-OTU2

(Cisco ONS 15454) The Edit Optical Transport Unit Level 2 (ED-OTU2) command edits the attributes (service parameters) and state of an OTU2 facility.

Usage Guidelines

The default values for all optional parameters are NE default values. These values might not be the current value for a parameter. Use a retrieve command to obtain the current value.

Category

DWDM

Security

Provisioning

Input Format

ED-OTU2[:<TID>]:<AID>:<CTAG>[:<OSDBER=<SDBER>],[GCC=<GCC>],[DWRAP=<DRWAP>],[FEC=<FEC>],[PAYLOADMAP=<PAYLOADMAP>],[PMMODE=<PMMODE>],[FREQ=<FREQ>],[LOSSB=<LOSSB>],[NAME=<PORTNAME>],[SOAK=<SOAK>],[CMDMDE=<CMDMDE>][:<PST>[:<SST>]];

Input Example

ED-OTU2:CISCO:FAC-6-1-1:114:::NAME="NY LINE",GCC=Y,OSDBER=1E-6,DWRAP=Y,FEC=STD,PAYLOADMAP=ASYNCH,PMMODE=STD,CMDMDE=FRCD:IS,AINS;

Input Parameters.

<AID>	Access identifier from the “26.19 LINE” section on page 26-43 .
<OSDBER>	OTN SDBER. Can only be provisioned on the working port. 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
<GCC>	Identifies the generic communication channel (GCC) connection of the port.

• Y	GCC can be utilized.
• N	GCC cannot be utilized.
<DWRAP>	(Optional) The ITU-T G.709 monitoring digital wrapper. It is either on or off. The system default is ON. For MXP_2.5G_10G and TXP_MR_10G cards, this applies only to the DWDM port. The parameter type is ON_OFF (disable or enable an attribute). To enable ITU-T G.709 monitoring, there should be no GCC on the DWDM port and the payload (in which the card is configured) should not be UNFRAMED. To disable ITU-T G.709 monitoring, there should be no GCC on the DWDM port, the FEC should be turned to off, there should be no overhead circuit created on the DWDM port, and none of the client ports on the card should be part of a Y-cable protection group (muxponder only).
• N	Disable an attribute.
• Y	Enable an attribute.
<FEC>	(Optional) Forward error correction. It can be enabled only if ITU-T G.709 monitoring is turned ON. It is either off or enabled in standard or enhanced mode. The system default is standard FEC enabled. The FEC level PM and thresholds apply if the FEC is turned ON. The parameter type is FEC_MODE, which specifies the type of forward error correction.
• ENH	Enhanced FEC is enabled.
• ENH-14	Enhanced FEC 1.4 is enabled
• ENH-17	Enhanced FEC 1.7 is enabled
• OFF	FEC is disabled.
• STD	Standard FEC is enabled.
<PAYLOADMAP>	(Optional) The type of payload mapping. It can be enabled only if ITU-T G.709 monitoring is turned ON and FEC is enabled. The parameter type is PAYLOAD_MAPPING, which is the payload mapping mode.
• ASYNCH	Asynchronous mapping mode
• ODU	ODU multiplex structure mode
• SYNCH	Synchronous mapping mode
• NOOPU2FIXEDSTUFF	Mapping with no FIXEDSTUFF
<FREQ>	(Optional) The parameter type is OPTICAL_WLEN, which indicates the optical wavelength.
• 1310	Wavelength 1310
• 1470	Wavelength 1470
• 1490	Wavelength 1490
• 1510	Wavelength 1510
• 1528.77	Wavelength 1528.77
• 1529.55	Wavelength 1529.55
• 1529.94	Wavelength 1529.94
• 1530	Wavelength 1530
• 1530.33	Wavelength 1530.33

• 1530.73	Wavelength 1530.73
• 1531.12	Wavelength 1531.12
• 1531.51	Wavelength 1531.51
• 1531.90	Wavelength 1531.90
• 1532.29	Wavelength 1532.29
• 1532.68	Wavelength 1532.68
• 1533.07	Wavelength 1533.07
• 1533.47	Wavelength 1533.47
• 1533.86	Wavelength 1533.86
• 1534.25	Wavelength 1534.25
• 1534.64	Wavelength 1534.64
• 1535.04	Wavelength 1535.04
• 1535.43	Wavelength 1535.43
• 1535.82	Wavelength 1535.82
• 1536.22	Wavelength 1536.22
• 1536.61	Wavelength 1536.61
• 1537	Wavelength 1537
• 1537.40	Wavelength 1537.40
• 1537.79	Wavelength 1537.79
• 1538.19	Wavelength 1538.19
• 1538.58	Wavelength 1538.58
• 1538.98	Wavelength 1538.98
• 1539.37	Wavelength 1539.37
• 1539.77	Wavelength 1539.77
• 1540.16	Wavelength 1540.16
• 1540.56	Wavelength 1540.56
• 1540.95	Wavelength 1540.95
• 1541.35	Wavelength 1541.35
• 1541.75	Wavelength 1541.75
• 1542.14	Wavelength 1542.14
• 1542.35	Wavelength 1542.35
• 1542.54	Wavelength 1542.54
• 1542.94	Wavelength 1542.94
• 1543.33	Wavelength 1543.33
• 1543.73	Wavelength 1543.73
• 1544.13	Wavelength 1544.13
• 1544.53	Wavelength 1544.53
• 1544.92	Wavelength 1544.92
• 1545.32	Wavelength 1545.32
• 1545.72	Wavelength 1545.72
• 1546.12	Wavelength 1546.12

• 1546.52	Wavelength 1546.52
• 1546.92	Wavelength 1546.92
• 1547.32	Wavelength 1547.32
• 1547.72	Wavelength 1547.72
• 1548.12	Wavelength 1548.12
• 1548.51	Wavelength 1548.51
• 1548.92	Wavelength 1548.92
• 1549.32	Wavelength 1549.32
• 1549.71	Wavelength 1549.71
• 1550	Wavelength 1500
• 1550.12	Wavelength 1550.12
• 1550.52	Wavelength 1550.52
• 1550.92	Wavelength 1550.92
• 1551.32	Wavelength 1551.32
• 1551.72	Wavelength 1551.72
• 1552.12	Wavelength 1552.12
• 1552.52	Wavelength 1552.52
• 1552.93	Wavelength 1552.93
• 1553.33	Wavelength 1553.33
• 1553.73	Wavelength 1553.73
• 1554.13	Wavelength 1554.13
• 1554.13	Wavelength 1554.13
• 1554.94	Wavelength 1554.94
• 1555.34	Wavelength 1555.34
• 1555.75	Wavelength 1555.75
• 1556.15	Wavelength 1556.15
• 1556.55	Wavelength 1556.55
• 1556.96	Wavelength 1556.96
• 1557.36	Wavelength 1557.36
• 1557.77	Wavelength 1557.77
• 1558.17	Wavelength 1558.17
• 1558.58	Wavelength 1558.58
• 1558.98	Wavelength 1558.98
• 1559.39	Wavelength 1559.39
• 1559.79	Wavelength 1559.79
• 1560.20	Wavelength 1560.20
• 1560.61	Wavelength 1560.61
• 1561.01	Wavelength 1561.01
• 1561.42	Wavelength 1561.42
• 1561.83	Wavelength 1561.83
• 1570	Wavelength 1570

• 1570.83	Wavelength 1570.83
• 1571.24	Wavelength 1571.24
• 1571.65	Wavelength 1571.65
• 1572.06	Wavelength 1572.06
• 1572.48	Wavelength 1572.48
• 1572.89	Wavelength 1572.89
• 1573.30	Wavelength 1573.30
• 1573.71	Wavelength 1573.71
• 1574.13	Wavelength 1574.13
• 1574.54	Wavelength 1574.54
• 1574.95	Wavelength 1574.95
• 1575.37	Wavelength 1575.37
• 1575.78	Wavelength 1575.78
• 1576.20	Wavelength 1576.20
• 1576.61	Wavelength 1576.61
• 1577.03	Wavelength 1577.03
• 1577.44	Wavelength 1577.44
• 1577.86	Wavelength 1577.86
• 1578.27	Wavelength 1578.27
• 1578.69	Wavelength 1578.69
• 1579.10	Wavelength 1579.10
• 1579.52	Wavelength 1579.52
• 1579.93	Wavelength 1579.93
• 1580.35	Wavelength 1580.35
• 1580.77	Wavelength 1580.77
• 1581.18	Wavelength 1581.18
• 1581.60	Wavelength 1581.60
• 1582.02	Wavelength 1582.02
• 1582.44	Wavelength 1582.44
• 1582.85	Wavelength 1582.85
• 1583.27	Wavelength 1583.27
• 1583.69	Wavelength 1583.69
• 1584.11	Wavelength 1584.11
• 1584.53	Wavelength 1584.53
• 1584.95	Wavelength 1584.95
• 1585.36	Wavelength 1585.36
• 1585.78	Wavelength 1585.78
• 1586.20	Wavelength 1586.20
• 1586.62	Wavelength 1586.62
• 1587.04	Wavelength 1587.04
• 1587.46	Wavelength 1587.46

• 1587.88	Wavelength 1587.88
• 1588.30	Wavelength 1588.30
• 1588.73	Wavelength 1588.73
• 1589.15	Wavelength 1589.15
• 1589.57	Wavelength 1589.57
• 1589.99	Wavelength 1589.99
• 1590	Wavelength 1590
• 1590.41	Wavelength 1590.41
• 1590.83	Wavelength 1590.83
• 1591.26	Wavelength 1591.26
• 1591.68	Wavelength 1591.68
• 1592.10	Wavelength 1592.10
• 1592.52	Wavelength 1592.52
• 1592.95	Wavelength 1592.95
• 1593.37	Wavelength 1593.37
• 1593.79	Wavelength 1593.79
• 1594.22	Wavelength 1594.22
• 1594.64	Wavelength 1594.64
• 1595.06	Wavelength 1595.06
• 1595.49	Wavelength 1595.49
• 1596.34	Wavelength 1596.34
• 1596.76	Wavelength 1596.76
• 1597.19	Wavelength 1597.19
• 1597.62	Wavelength 1597.62
• 1598.04	Wavelength 1598.04
• 1598.47	Wavelength 1598.47
• 1598.89	Wavelength 1598.89
• 1599.32	Wavelength 1599.32
• 1599.75	Wavelength 1599.75
• 1600.06	Wavelength 1600.06
• 1601.03	Wavelength 1601.03
• 1601.46	Wavelength 1601.46
• 1601.88	Wavelength 1601.88
• 1602.31	Wavelength 1602.31
• 1602.74	Wavelength 1602.74
• 1603.17	Wavelength 1603.17
• 1603.60	Wavelength 1603.60
• 1604.03	Wavelength 1604.03
• 1610	Wavelength 1610
• USE-TWL1	Use Tunable Wavelength 1
<LOSSB>	(Optional) The parameter type is REACH, which indicates the reach values.

• AUTOPROV	Autoprovisioning
• CX	Reach CX
• CX1	Reach CX1
• 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
• TEN-GE-ER	10 GE extended range
• TEN-GE-LR	10 GE long range
• TEN-GE-SR	10 GE short range
• VX	Reach VX
• ZX	Reach ZX
<PORTNAME>	(Optional) Port name. PORTNAME is a string.
<SOAK>	(Optional) Locked-AutomaticInService to Unlocked 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). SOAK is an integer.
<CMDMDE>	(Optional) Command mode. 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 Unlocked-Enabled or Locked-Disabled, AutomaticInService service states.
<PST>	(Optional) Primary state. The parameter type is PST, which indicates the current overall service condition of an entity.
• Unlocked	In service
• Locked	Out of service
<SST>	(Optional) Secondary state. The parameter type is SST, which provides additional information pertaining to PST and PSTQ.

11.57 ED-PID

(Cisco ONS 15454) The Edit Password (ED-PID) command allows a user to change his or her own password.

Usage Guidelines

- 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 Cisco Transport Controller (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.

Category

Security

Security

Retrieve

Input Format

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

Input Example

ED-PID:PETALUMA:UID:123::OLDPWD,NEWPWD;

Input Parameters

<UID>	User identifier. Up to 10 alphanumeric characters. UID is a string.
<OLDPID>	The user's old password. Up to 10 alphanumeric characters. Passwords are encrypted and will appear as asterisks (*). OLDPID is a string.
<NEWPID>	The user's new password. Up to 10 alphanumeric characters. Passwords are encrypted and will appear as asterisks (*). NEWPID is a string.

11.58 ED-POS

(Cisco ONS 15454) The Edit Packet-Over-SONET (ED-POS) 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. Use the retrieve command to obtain the current value. ED-POS cannot set ENCAP and PST/SST.

Usage Guidelines

This command is supported for the ONS 15454 CE-100T-8 and CE-1000-4 cards.

Category

Ports

Security

Provisioning

Input Format

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

Input Example

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

Input Parameters

<AID>	Access identifier from the “26.17 FACILITY” section on page 26-40.
<ENCAP>	Encapsulation. The parameter type is ENCAP, which is the 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
<NAME>	Port name. NAME is a string.
<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.

<SOAK>	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). SOAK is an integer.
<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

11.59 ED-PROTOCOL

(Cisco ONS 15454) The Edit Protocol (ED-PROTOCOL) 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 Simple Network Management Protocol (SNMP).

Usage Guidelines

- If the AID is TL1, the command will be denied because TL1 users are not allowed to change the setting for TL1 protocol.
- If the PROTOCOLAID is SNMP, the SECURE PROTOCOLSTAT is supported. To enable SNMP, set PROTOCOLSTAT to either SECURE or UNSECURE.

Category

Security

Security

Superuser

Input Format

ED-PROTOCOL:[<TID>]:<AID>:<CTAG>::<PROTSTAT>;

Input Example

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

Input Parameters	<AID>	The protocol/service to which the command pertains. The parameter type is PROTOCOLAID, which is the AID for the protocol/service.
	• EMS	CTC/CTM protocol/service
	• SHELL	Shell/file system access protocol
	• SNMP	SNMP protocol/service
	• TL1	TL1 protocol service
	<PROTSTAT>	Identifies the status of the protocol/service. The parameter type is PROTOCOLSTAT, which is the status of the protocol.
	• DISABLED	The protocol cannot be used.
	• SECURE	The protocol is enabled and communication using the protocol are sure, for example, through Secure Shell Protocol (SSH).
	• UNSECURE	The protocol is enabled but communication is not secure, for example, through Telnet.

11.60 ED-QNQ-CHGRP

(Cisco ONS 15454) The Edit Channel Group QinQ (ED-QNQ-CHGRP) command edits the IEEE 802.1Q tunneling (QinQ) relationship between the CE-VLAN and the S-VLAN for Gigabit Ethernet uniprot provisioning associated to a channel group.

Usage Guidelines

- The default values for all optional parameters are NE default values, but these values might not be the current value for a parameter. Use the RTRV-ETH command to obtain the current value.
- If the AID is invalid, an IIAC (Invalid AID) error message is returned.
- The ALL AID is invalid for this command.

Category

Channel Group

Security

Provisioning

Input Format

ED-QNQ-CHGRP:[<TID>]:<AID>:<CTAG>::<FIRST_CE_VLAN_ID>,<LAST_CE_VLAN_ID>,<S_VLAN_ID>:[RULE=<RULE>],[INTERNALVLAN=<INTERNAL_VLAN_ID>],[INGRESSCOS=<INGRESSCOS>][:];

Input Example

ED-QNQ-CHGRP:CISCO:CHGRP-1-1-1::10,11,100:RULE=ADD;

Input Parameters

<AID>	Access identifier from the “26.9 CHGRP” section on page 26-24.
<FIRSTCEVLANID>	VLAN identifier. A VLAN ID is a number between 1 and 4096. The value 0 is reserved for untagged VLANs. This identifier is used for customer VLAN IDs and service provider VLAN IDs.
<LASTCEVLANID>	VLAN identifier. A VLAN ID is a number between 1 and 4096. The value 0 is reserved for untagged VLANs. This identifier is used for customer VLAN IDs and service provider VLAN IDs.
<SVLANID>	VLAN identifier. A VLAN ID is a number between 1 and 4096. The value 0 is reserved for untagged VLANs. This identifier is used for customer VLAN IDs and service provider VLAN IDs.
<RULE>	Used to represent the rules allowed for the VLAN tagging operations. The default value is ADD.
• ADD	The S-VLAN tag is added to the CE-VLAN tag.
• XLTE	The S-VLAN tag replaces the CE-VLAN tag (single Q).
• XLTE-ADD	XLTE and ADD rule applied together. This rule request to supply an internal S-VLAN. First the Internal VLAN substitutes the Customer VLAN, then Service Provider VLAN TAG (S-VLAN) is added
• DOUBLE-ADD	ADD rule applied two times. This rule request to supply an internal S-VLAN. First the Internal VLAN is added, then Service Provider VLAN TAG (S-VLAN) is added to have a double tag
<INTERNAL_VLAN_ID>	Internal VLAN ID.
<INGRESSCOS>	Identifies the COS value set in the S-VLAN tag.
• 0 to 7	Set a Cos value
• DSCP	The COS is set according to DSCP to COS mapping table.
• TRUST	Use the Customer COS
• VLAN	The COS provisioned on CVLAN basis (QinQ selective mode)

11.61 ED-QNQ-ETH

(Cisco ONS 15454) The Edit ETH QinQ Table (ED-QNQ-ETH) command modifies the IEEE 802.1Q tunneling (QinQ) relationship between the customer VLAN (CE-VLAN) and the service provider VLAN (S-VLAN) for Gigabit Ethernet uniprot provisioning associated to an L2 Ethernet port.

Usage Guidelines

- The default values for all optional parameters are NE default values, but these values might not be the current value for a parameter. Use a retrieve command to obtain the current value.
- If the AID is invalid, an IIAC (Invalid AID) error message is returned.
- The ALL AID is invalid for this command.

Category	Ethernet	
Security	Provisioning	
Input Format	ED-QNQ-ETH:[<TID>]:<AID>:<CTAG>::<FIRSTCEVLANID>,<LASTCEVLANID>,<S_VLAN_ID>[:RULE=<RULE>],[INTERNALVLAN=<INTERNAL_VLAN_ID>],[INGRESSCOS=<INGRESSCOS>][:];	
Input Example	ED-QNQ-ETH:PETALUMA:ETH-1-1-1:1::10,11,100:RULE=ADD;	
Input Parameters	<AID>	Ethernet AIDs are used to access L2 Ethernet ports. Access identifier from the “26.16 ETH” section on page 26-40 .
	<FIRSTCEVLANID>	VLAN identifier. A VLAN ID is a number between 1 and 4096. The value 0 is reserved for untagged VLANs. This identifier is used for customer VLAN IDs and service provider VLAN IDs.
	<LASTCEVLANID>	VLAN identifier. A VLAN ID is a number between 1 and 4096. The value 0 is reserved for untagged VLANs. This identifier is used for customer VLAN IDs and service provider VLAN IDs.
	<SVLANID>	VLAN identifier. A VLAN ID is a number between 1 and 4096. The value 0 is reserved for untagged VLANs. This identifier is used for customer VLAN IDs and service provider VLAN IDs.
	<RULE>	Used to represent the rules allowed for VLAN tagging operations.
	• ADD	The service provider VLAN tag is added to the customer VLAN tag.
	• XLTE	The service provider VLAN tag replaces the CE-VLAN tag (single Q).
	• XLTE-ADD	XLTE and ADD rule applied together. This rule request to supply an internal S-VLAN. First the Internal VLAN substitutes the Customer VLAN, then Service Provider VLAN TAG (S-VLAN) is added
	• DOUBLE-ADD	ADD rule applied two times. This rule request to supply an internal S-VLAN. First the Internal VLAN is added, then Service Provider VLAN TAG (S-VLAN) is added to have a double tag
	<INTERNAL_VLAN_ID>	Internal VLAN ID
	<INGRESSCOS>	Identifies the COS value set in the S-VLAN tag.
	• 0 to 7	Set a Cos value
	• DSCP	The COS is set according to DSCP to COS mapping table.

• TRUST	Use the Customer COS.
• VLAN	The COS provisioned on CVLAN basis (QinQ selective mode)

11.62 ED-REP

(Cisco ONS 15454) The Edit Resilient Ethernet Protocol (ED-REP) command edits the Resilient Ethernet Protocol (REP) configuration on the ethernet port.

Usage Guidelines

- The PREEMPTDELAY parameter value “0” indicates the automatic VLB is disabled on the Edge Ports.
- The NE generates a REPT-DBCHG notification when the preempt delay timer is changed.
- This command is applicable only to GE_XP and 10GE_XP cards.

Category

Ethernet

Security

Provisioning

Input Format

ED-REP:[<TID>]:<AID>:<CTAG>::<PREEMPTDELAY>;

Input Example

ED-REP:CISCO:ETH-12-1-1:1::20;

Input Parameters

<AID>	Ethernet AIDs are used to access L2 Ethernet ports. Access identifier from the “26.16 ETH” section on page 26-40.
<PREEMPT DELAY>	Specifies the time in minutes after which the VLAN load balancing is triggered automatically. The valid range is from 15 to 300 minutes. The default value is 0.

11.63 ED-ROLL-<MOD_PATH>

(Cisco ONS 15454) The Edit Roll for STS1, STS12C, STS192C, STS24C, STS3C, STS48C, STS96C, STS6C, STS9C, VT1, or VT2 (ED-ROLL-<MOD_PATH>) command forces a rolling operation, which attempts to force a valid signal to complete the rolling operation.

Usage Guidelines

See [Table 28-1 on page 28-1](#) for supported modifiers by platform.


Note

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

Category	Bridge and Roll
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Security	Provisioning
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Input Format	ED-ROLL-<MOD_PATH>:[<TID>]:<FROM>,<TO>:<CTAG>:::[CMDMDE=<CMDMDE>];
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Input Example	ED-ROLL-STs1:PETALUMA:STS-1-1-1,STS-2-1-1:1:::CMDMDE=FRCD;
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Input Parameters	<FROM>	Source access identifier from the “ 26.12 CrossConnectId1 ” section on page 26-29. 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 not 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 “ 26.12 CrossConnectId1 ” section on page 26-29. 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 not 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>	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. Note CMDMDE can only go from NORM to FRCD (cannot go from FRCD to NORM). CMDMDE cannot be set to NORM using this command.
	• 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.

11.64 ED-SLV-WDMANS

(Cisco ONS 15454) The Edit Span Loss Verification Wavelength Division Multiplexing Automatic Node Set-Up (ED-SLV-WMANS) command edits the expected span loss verification.

Usage Guidelines

None

Category

DWDM

Security

Maintenance

Input Format

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

Input Example

ED-SLV-WDMANS:VA454-22:WDMANS-E:116;

Input Parameters

<AID>	Access identifier from the “26.34 WDMANS” section on page 26-59.
<ROLE>	The role the unit is playing in the protection group.
• PROT	The entity is the protection unit in the protection group.
• WORK	The entity is the working unit in the protection group.

11.65 ED-STCN-REP

(Cisco ONS 15454) The Edit Segment Topology Change Notification Resilient Ethernet Protocol (ED-STCN-REP) command edits the Segment Topology Change Notification (STCN) for REP Segment on the ethernet ports.

Usage Guidelines

- STCN can be enabled only on the EDGE ports of the REP Segment.
- If the STCN is not enabled, you cannot edit any other parameters related to STCN.
- Only one Segment range can be added or removed at a time
- A maximum of 2 Segment range can be configured on the ethernet edge port.
- This command is applicable only to GE_XP and 10GE_XP cards.

Category

Ethernet

Security

Provisioning

Input Format

ED-STCN-REP:[<TID>]:<AID>:<CTAG>:::[STCNENABLED=<STCNENABLED>],[STCNOPERATION=<STCNOPERATION>],[SEGRANGESTART=<SEGRANGESTART>],[SEGRANGEEND=<SEGRANGEEND>],[STCNPORT=<STCNPORT>];

Input Example

ED-STCN-REP::ETH-16-1-1:1:::STCNENABLED=Y,STCNOPERATION=ADD,SEGRANGESTART=1000,SEGRANGEEND=1004,STCNPORT=ETH-16-2-1;

Input Parameters

<AID>	Access identifier from the “26.17 FACILITY” section on page 26-40.
<STCNENABLED>	To enable or disable the Segment Topology Notification on ethernet entity for REP.
- Y - N	Enables STCN on the ethernet port. Disables STCN on the ethernet port.
<STCNOPERATION>	Adds or removes the range for STCN notification.
- ADD - REMOVE	Adds the range to a list of segment ranges for STCN notification. Removes the range from the list of ranges for STCN notification.
<SEGRANGESTART>	Indicates the segment range start value for the STCN. The valid range is from 0 to 1024.
<SEGRANGEEND>	Indicates the segment range end value for the STCN. The valid range is from 0 to 1024.
<STCNPORT>	Determines on which ethernet port the STCN should be sent. STCNPORT is an AID, it takes ETH AID value. The default is NULL.

11.66 ED-SYNCN

(Cisco ONS 15454) The Edit Synchronization (ED-SYNCN) 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.

Usage Guidelines

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

Category

Synchronization

Security

Provisioning

Input Format

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

Input Example

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

Input Parameters

<AID>	Access identifier from the “ 26.30 SYNC_REF ” section on page 26-58.
<PRI>	Primary reference of the synchronization from the “ 26.29 SYN_SRC ” section on page 26-56.
<SEC>	Secondary reference of the synchronization from the “ 26.29 SYN_SRC ” section on page 26-56.
<THIRD>	Third reference of the synchronization from the “ 26.29 SYN_SRC ” section on page 26-56.

11.67 ED-T1

(Cisco ONS 15454) The Edit Digital Signal Facility (ED-T1) command edits the attributes related to a DS1/T1 port.

Usage Guidelines

- This command is not allowed if the card is a protect 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 the 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 TAP or TACC number. Otherwise, an error message (for example, VT in Use) will be returned.
- TACC creation will be denied on protect ports/cards.
- AUTO-PROV is not supported.
- The AISONLPBK and RETIME options are applicable to the DS1/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 a retrieve command to retrieve the current value.
- The parameters SYNCMAP, and VTMAP are only supported on the DS1/E1-56 card on the ONS 15454.
- The parameters ADMSSM and INHFELPBK are only supported on the DS1/E1-56 card on the ONS 15454.
- You cannot directly transition a facility from IS to OOS-MA,DSBLD service state. You can transition a facility to OOS-MA,DSBLD service state from any state except OOS-MA,MT. To transition a facility from OOS-MA,MT to OOS-MA,DSBLD service state, all the following conditions must be met:
 - The facility is not sourcing a synchronization clock

- The facility's DCC is disabled
- The facility is not part of a protection group
- The facility is not supporting cross-connects
- The facility is not using overhead connections or overhead terminations (such as express orderwire, local orderwire, or user data channels [UDCs])

**Note**

The conditions stipulated can be overridden by using the CMDMDE=FRCD option. The FRCD option will immediately remove the facility from service (except for IS to OOS-MA,DSBLD transition) with no consideration for orderly interruption.

- The parameters BERTMODE, BERTPATTERN, and BERTERRCOUNT apply to DS1/E1-56 and DS3XM-12 cards.
- BERT is implemented on a single port.

Category

Ports

Security

Provisioning

Input Format

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>],[NAME=<NAME>],[CMDMDE=<CMDMDE>],[AISONLPBK=<AISONLPBK>],[MODE=<MODE>],[SYNCSMAP=<SYNCSMAP>],[ADMSSM=<ADMSSM>],[VTMAP=<VTMAP>],[AISVONAI=<AISVONAI>],[AISONLOF=<AISONLOF>],[INHFELPBK=<INHFELPBK>],[INHFEBPLPBK=<INHFEBPLPBK>],[BERTMODE=<BERTMODE>],[BERTPATTERN=<BERTPATTERN>],[BERTERRCOUNT=<BERTERRCOUNT>][:<PST>][:,<SST>]];

Input Example

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,NAME="T1 PORT",CMDMDE=FRCD,AISONLPBK=AIS_ON_LPBK_ALL,MODE=FDL,SYNCSMAP=ASYNCS,ADMSSM=STU,VTMAP=GR253,AISVONAI=Y,AISONLOF=Y,INHFELPBK=N,BERTMODE=NONE,BERTPATTERN=NONE,BERTERRCOUNT=0:IS,AINS;

Input Parameters

<AID>	Access identifier from the “26.17 FACILITY” section on page 26-40.
<LINECDE>	Line code. The parameter type is LINE_CODE.
• AMI	Line code value is AMI.
• B8ZS	Line code value is B8ZS.
<FMT>	Digital signal frame format. The parameter type is FRAME_FORMAT, which is the frame format for a T1 port.

• D4	Frame format is D4.
• ESF	Frame format is ESF.
• UNFRAMED	Frame format is unframed.
<LBO>	Line build-out settings. The parameter type is LINE_BUILDOUT.
• 0–131	Line build-out range is 0–131.
• 132–262	Line build-out range is 132–262.
• 263–393	Line build-out range is 263–393.
• 394–524	Line build-out range is 394–524.
• 525–655	Line build-out range is 525–655.
<TACC>	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. TACC is an integer.
<TAPTYPE>	TAP type. Defaults to DUAL. The parameter type is TAPTYPE (test access point type).
• DUAL	Dual FAD
• SINGLE	Single FAD
<SOAK>	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). SOAK is an integer.
<SFBER>	The port signal failure threshold. The parameter type is SF_BER, which is 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.
<SDBER>	Port signal degrade threshold. The parameter type is SD_BER, which is 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.
<SYNCSMSG>	Synchronization status messaging is enabled or disabled on the T1 facility.
• N	Disable an attribute.
• Y	Enable an attribute.
<SENDDUS>	The facility will send the DUS value as the SSM for that facility.
• N	Disable an attribute.
• Y	Enable an attribute.
<NAME>	Name. NAME is a string.

<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.
<AISONLPBK>	Defaults to AIS_ON_LPBK_ALL. The parameter type is AIS_ON_LPBK, which indicates if AIS is sent on a loopback.
• FACILITY	AIS is sent on facility loopbacks.
• ALL	AIS is sent on all loopbacks.
• OFF	AIS is not sent on loopbacks.
• TERMINAL	AIS is sent on terminal loopbacks.
<MODE>	Mode. Default value is FDL. The parameter type is DS1MODE, which is the DS1 path mode of the DS3XM-12 card.
• ATT	Indicates that the DS1 path of the DS3XM-12 is in AT&T 54016 mode.
• FDL	Indicates that the DS1 path of the DS3XM-12 is in FDL T1-403 mode.
<SYNCPMAP>	The synchronous mapping for the DS1 facility. Defaults to ASYNC. Only supported on ONS 15454. The parameter type is SYNCPMAP (synchronous mapping type).
• ASYNC	Asynchronous
• BYTE	Mapping in byte
• JBYTE	Mapping in jbyte
<ADMSSM>	The administrative synchronization status message. Only supported on the ONS 15454. Defaults to STU. The parameter type is SYNC_CLOCK_REF_QUALITY_LEVEL, which is the 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)
<VTMAP>	The port to VT mapping type for that particular STS. Only supported on ONS 15454. Defaults to GR253. The parameter type is VTMAP (VT mapping).

• GR253	Mapping based on Telcordia GR-253.
• INDUSTRY	Mapping based on industry standard.
<AISVONAI>	Defaults to N. The parameter type is ON_OFF, which disables or enables an attribute.
• N	Disable an attribute.
• Y	Enable an attribute.
<AISVONLOF>	(Optional) The parameter type is ON_OFF (disable or enable an attribute).
<INHFELPBK>	Indicates whether far-end loopbacks are inhibited on the facility. Defaults to N. The parameter type is ON_OFF.
• N	Disable an attribute.
• Y	Enable an attribute.
<INHFEPLPBK>	Indicates whether far-end backplane loopbacks are inhibited on the facility.
• N	Disable an attribute.
• Y	Enable an attribute.
<BERTMODE>	Specifies the mode TPG or TPM of the port for BERT.
• NONE	BERT mode not enabled.
• TPGM-L	Test pattern generator and monitor on line side.
• TPGM-B	Test pattern generator and monitor on backplane.
• TPG-L	Test pattern generator on line side.
• TPM-L	Test pattern monitor on line side.
• TPG-B	Test pattern generator on backplane.
• TPM-B	Test pattern monitor on backplane.
<BERTPATTERN>	Specifies the error pattern to be injected for BERT.
• NONE	BERT pattern not enabled.
• PRBS15	PRBS15 test pattern.
• PRBS20	PRBS20 test pattern.
• PRBS23	PRBS23 test pattern.
• QRSS	QRSS test pattern.
• ALT-ONE-ALT-ZERO	Alternate one and zero pattern.
<BERTERRCOUNT>	Integer value. Value -1 indicates that BERT is disabled/not supported.
<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

11.68 ED-T3

(Cisco ONS 15454) The Edit Digital Signal Facility (ED-T3) command edits the attributes related to a DS3/T3 port and the DS3i-N-12 card.

Usage Guidelines

- This command is not allowed if the card is a protect card.
- Neither FMT nor Line code are 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 you send this command to edit TACC and any other attribute(s), and the port having the cross-connection or the port/VT has a TAP or TACC number, the Parameters Not Compatible error message is 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 TAP or TACC number. Otherwise, an error message (VT in Use) will be returned.
- TACC creation will 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. AUTOPROVISION is not considered a valid DS3 framing type. It is only used to trigger an autosense and subsequent autoprovisioning 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 to 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 is returned.
- For the DS3XM-12 card, if the administrative 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 to 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 DISC-TACC and CHG-TACC commands follow the same requirements as in the previous bullet, but applied on the ported ports of the DS3XM-12 card.
- The CONN-TACC command has monitored points that 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-N-12 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 default values for all optional parameters are NE default values. These values might not be the current value for a parameter. Use a retrieve command to retrieve the current default values.
- You cannot directly transition a facility from IS to OOS-MA,DSBLD service state. You can transition a facility to OOS-MA,DSBLD service state from any state except OOS-MA,MT. To transition a facility from OOS-MA,MT to OOS-MA,DSBLD service state, all the following conditions must be met:
 - The facility is not sourcing a synchronization clock.
 - The facility's DCC is disabled.
 - The facility is not part of a protection group.
 - The facility is not supporting cross-connects.
 - The facility is not using overhead connections or overhead terminations (such as express orderwire, local orderwire, or user data channels [UDCs]).

**Note**

The conditions stipulated can be overridden by using the CMDMDE=FRCD option. The FRCD option will immediately remove the facility from service (except for IS to OOS-MA,DSBLD transition) with no consideration for orderly interruption.

- The parameters BERTMODE, BERTPATTERN, and BERTERRCOUNT apply to DS1/E1-56 and DS3XM-12 cards.
- BERT is implemented on a single port.

Category

Ports

Security

Provisioning

Input Format

```
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>],[BERTMODE=<BERTMODE>],[BERTPATTERN=<BERTPATTERN>],
[BERTERRCOUNT=<BERTERRCOUNT>]:[<PST>[,<SST>]];
```

Input Example

```
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=ALL,CMDMDE=FRCD,BERTMODE=NONE,BERTPATTERN=NONE,
BERTERRCOUNT=0:IS,AINS;
```

Input Parameters

<AID>	Access identifier from the “26.17 FACILITY” section on page 26-40.
<FMT>	Digital signal frame format. The parameter type is DS_LINE_TYPE, which is the DS123 line type.
• C-BIT	C-BIT line type applies to the DS3XM and DS3E cards.
• M13	M13 line type applies to the DS3XM and DS3E cards.
• UNFRAMED	Line type is unframed. The old DS3 (L3M) and DS3CR cards can only run in unframed mode.
<LINECDE>	Line code. The parameter type is DS_LINE_CODE, which is the DS123 line code.
• B3ZS	Bipolar with three-zero substitution
<LBO>	Line build-out settings. LBO is an integer. The parameter type is E_LBO, which is the electrical signal line build-out.
• 0–225	Electrical signal line build-out range is 1–225.
• 226–450	Electrical signal line build-out range is 226–450.
<INHFELPBK>	(Optional) 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. The parameter type is ON_OFF, which disables or enables an attribute.
• N	Disable an attribute.
• Y	Enable an attribute.
<TACC>	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. TACC is an integer.
<TAPTYPE>	TAP type. Defaults to DUAL. The parameter type is TAPTYPE, which is the test access point type.
• DUAL	Dual FAD
• SINGLE	Single FAD
<SOAK>	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). SOAK is an integer.

<SFBER>	The port signal failure threshold. The parameter type is SF_BER, which is 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.
<SDBER>	Port signal degrade threshold. The parameter type is SD_BER, which is 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.
<NAME>	Name. NAME is a string.
<AISONLPBK>	The parameter type is AIS_ON_LPBK, which indicates whether AIS is sent on a loopback. Defaults to AIS_ON_LPBK_ALL.
• FACILITY	AIS is sent on facility loopbacks.
• ALL	AIS is sent on all loopbacks.
• OFF	AIS is not sent on loopbacks.
• TERMINAL	AIS is sent on terminal loopbacks.
<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.
<BERTMODE>	Specifies the mode TPG and TPM of the port for BERT.
• NONE	BERT mode not enabled.
• TPGM-L	Test pattern generator and monitor on line side.
• TPGM-B	Test pattern generator and monitor on backplane.
• TPG-L	Test pattern generator on line side.
• TPM-L	Test pattern monitor on line side.
• TPG-B	Test pattern generator on backplane.
• TPM-B	Test pattern monitor on backplane.
<BERTPATTERN>	Specifies the error pattern to be injected for BERT.
• NONE	BERT pattern not enabled.
• PRBS15	PRBS15 test pattern.
• PRBS20	PRBS20 test pattern.
• PRBS23	PRBS23 test pattern.

• QRSS	QRSS test pattern.
• ALT-ONE-ALT-ZERO	Alternate one and zero pattern.
<BERTERRCOUNT>	Integer value. Value –1 indicates that BERT is disabled/not supported.
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

11.69 ED-TRAPTABLE

(Cisco ONS 15454) The Edit Trap Table (ED-TRAPTABLE) command edits a trap destination entry identified by a specific trap destination address.

Usage Guidelines

None

Category

System

Security

Provisioning

Input Format

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

Input Examples

- 1. ED-TRAPTABLE::1.2.3.4:1::COMMUNITY="PUBLIC",TRAPPORT=162,TRAPVER=SNMPV1;
- 2. ED-TRAPTABLE:("[3ffe:0501:0008:0000:0260:97ff:fe40:efab]":1::COMMUNITY="PUBLIC",TRA
PPORT=162,TRAPVER=SNMPV1;

Input Parameters

<AID>	Access identifier from the "26.18 IPADDR" section on page 26-43. IP address identifying the trap destination.
<COMMUNITY>	Community name associated to the trap destination. Maximum of 32 characters. COMMUNITY is a string.
<TRAPPORT>	User datagram protocol (UDP) port number associated with the trap destination. Default to 162. TRAPPORT is an integer.
<TRAPVER>	SNMP version number. Defaults to SNMPv1. The parameter type is SNMP_VERSION (SNMP version).
• SNMPV1	SNMP version 1 (default)
• SNMPV2	SNMP version 2

11.70 ED-TRC-OCH

(Cisco ONS 15454) The Edit Trace Optical Channel Facility (ED-TRC-OCH) command edits trace-related optical channel facilities. Refer to the *Cisco ONS 15454 SONET TL1 Reference Guide* for specific card provisioning rules.

Usage Guidelines

None

Category DWDM

Security Provisioning

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

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

Input Parameters	<SRC>	Source access identifier from the “26.8 CHANNEL” section on page 26-22 .
	<EXPTRC>	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. EXPTRC is a string.
	<TRC>	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.
	<TRCMODE>	Trace mode. Defaults to the OFF mode. The 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.
	<TRCLEVEL>	The trace level to be managed. TRCLEVEL is a string.
	<TRCFORMAT>	Trace message size. The parameter type is TRCFORMAT (trace format).
	• 1-BYTE	1 byte trace message
	• 16-BYTE	16 byte trace message
	• 64-BYTE	64 byte trace message

11.71 ED-TRC-OTU2

(Cisco ONS 15454) The Edit Trace Optical Transport Unit Level 2 (ED-TRC-OTU2) command edits trace-related attributes of an OTU2 facility.

Usage Guidelines

The default values for all optional parameters are NE default values. These values might not be the current value for a parameter. Use a retrieve command to obtain the current value.

Category

DWDM

Security

Provisioning

Input Format

ED-TRC-OTU2:[<TID>]:<SRC>:<CTAG>:::[EXPTRC=<EXPTRC>],[TRC=<TRC>],[TRCMODE=<TRCMODE>],[TRCLEVEL=<TRCLEVEL>],[TRCFORMAT=<TRCFORMAT>][:];

Input Example

ED-TRC-OTU2:CISCO:CHAN-6-2:10::EXPTRC="AAA",TRC="AAA",TRCMODE=MAN,TRCLEVEL=TTI-PM,TRCFORMAT=64-BYTE;

Input Parameters

<SRC>	Source access identifier from the “26.8 CHANNEL” section on page 26-22 .
<EXPTRC>	(Optional) 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. EXPTRC is a string.
<TRC>	(Optional) 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.
<TRCMODE>	(Optional) Trace mode. Defaults to the OFF mode. A null value is equivalent to ALL. The 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.
<TRCLEVEL>	(Optional) The trace level to be managed. A null value is equivalent to ALL. TRCLEVEL is a string.

<TRCFORMAT>	(Optional) Trace message size. A null value is equivalent to ALL. The parameter type is TRCFORMAT (trace format).
• 1-BYTE	1-byte trace message
• 16-BYTE	16-byte trace message
• 64-BYTE	64-byte trace message

11.72 ED-TRC-OTU3

(Cisco ONS 15454) The Edit Trace Optical Transport Unit Level 3(ED-TRC-OTU3) command edits trace-related attributes of an OTU3 facility.

Usage Guidelines

The default values for all optional parameters are NE default values. These values might not be the current value for a parameter. Use a retrieve command to obtain the current value.

Category

DWDM

Security

Provisioning

Input Format

ED-TRC-OTU3:[<TID>]:<SRC>:<CTAG>:::[EXPTRC=<EXPTRC>],[TRC=<TRC>],[TRCMODE=<TRCMODE>],[TRCLEVEL=<TRCLEVEL>],[TRCFORMAT=<TRCFORMAT>][:];

Input Example

ED-TRC-OTU3:CISCO:CHAN-6-2:10::EXPTRC="AAA",TRC="AAA",TRCMODE=MAN,TRCLEVEL=TTI-PM,TRCFORMAT=64-BYTE;

Input Parameters

<SRC>	Source access identifier from the “26.8 CHANNEL” section on page 26-22 .
<EXPTRC>	(Optional) 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. EXPTRC is a string.
<TRC>	(Optional) 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.
<TRCMODE>	(Optional) Trace mode. Defaults to the OFF mode. A null value is equivalent to ALL. The 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.
<TRCLEVEL>	(Optional) The trace level to be managed. A null value is equivalent to ALL. TRCLEVEL is a string.
<TRCFORMAT>	(Optional) Trace message size. A null value is equivalent to ALL. The parameter type is TRCFORMAT (trace format).
• 1-BYTE	1-byte trace message
• 16-BYTE	16-byte trace message
• 64-BYTE	64-byte trace message

11.73 ED-USER-SECU

(Cisco ONS 15454) The Edit User Security (ED-USER-SECU) command edits a user's privileges, password, or ID. Only a Superuser can perform this operation. Privilege levels are described in the ENT-USER-SECU command.

Usage Guidelines

- 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 a <UID> and a <PID> of up to 20 characters, the CTC-entered users (<UID>, <PID>) are not valid TL1 users. For example, if you issue an ACT-USER command using a 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 user ID, but the new password must meet the new requirements.
 - The <NEWPID> is required when changing the <UID>.
- When <NEWUID> is specified, <NEWPID> (and the <UAP>) become mandatory.
- 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.

Category

Security

Security Superuser

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

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

Input Parameters	<UID>	User identifier. Minimum UID is 6 characters. Maximum UID is 10 characters. UID is a string.
	<NEWUID>	User's new identifier. Minimum NEWUID is 6 characters. Maximum NEWUID is 10 characters. NEWUID is a string.
	<NEWPID>	User's new password. Minimum NEWPID is 6 characters. Maximum NEWPID is 10 characters. NEWPID is a string.
	<UAP>	User's access privilege. The parameter type is PRIVILEGE, which is the security level.
	• MAINT	Maintenance security level. 60 minutes of idle time.
	• PROV	Provisioning security level. 30 minutes of idle time.
	• RTRV	Retrieve security level. Unlimited idle time.
	• SUPER	Superuser security level. 15 minutes of idle time.

11.74 ED-VCG

(Cisco ONS 15454) The Edit Virtual Concatenated Group (ED-VCG) command edits the attributes of a VCG.

Usage Guidelines None

Category VCAT

Security Provisioning

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

Input Example ED-VCG:NODE1:FAC-1-1:1234:::TXCOUNT=7,NAME="VCG2";

Input Parameters	<SRC>	Source access identifier from the “ 26.17 FACILITY ” section on page 26-40.
	<TXCOUNT>	Number of members in the transmit (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. TXCOUNT is an integer.
	<NAME>	Name of the VCAT group. Maximum length is 64 characters. NAME is a string.

11.75 ED-VLAN

(Cisco ONS 15454) The Edit VLAN (ED-VLAN) command modifies a VLAN entry in the VLAN database. The VLAN database is a collection of VLANs used in an NE.

Usage Guidelines A VLAN having the specified AID should be present in the node.

Category Ethernet

Security Provisioning

Input Format ED-VLAN:[<TID>]:<AID>:<CTAG>[:<NAME=<NAME>>],[PROTN=<PROTN>],[MACLEARNING=<MACLEARNING>],[IGMPENABLE=<IGMPENABLE>],[IGMPFASTLEAVE=<IGMPFASTLEAVE>],[IGMPSUPP=<IGMPSUPP>][:];

Input Example ED-VLAN:PETALUMA:VLAN-4096:1::NAME="MYVLAN",PROTN=N,MACLEARNING=Y,IGMPENABLE=Y,IGMPFASTLEAVE=Y,IGMPSUPP=Y;

Input Parameters	<AID>	AID is used to access the VLAN.
	VLAN-ALL	All AIDs for the VLAN.
	VLAN-{0-4096}	Single AID for the VLAN. The value 0 is reserved for untagged VLANs. This identifier is used for customer VLAN IDs and service provider VLAN IDs.
	<NAME>	Indicates the name of the VLAN.
	<PROTN>	Indicates the VLAN protection, enable or disable feature
	<MACLEARNING>	MAC Address Learning Mode. This activates the MAC address learning on interface to avoid packet broadcasting. Default value is - “N”
	• Y	Activate the MAC learning.
	• N	Disable MAC learning.
	<IGMPENABLE>	Internet Group Management Protocol status.

• Y	Enabled
• N	Disabled
<IGMPFASTLEAVE>	Internet Group Management Protocol FastLeave status. When enabled, decreases the delay between receiving a Leave Group packet and disabling forwarding of multicast
• Y	Enabled
• N	Disabled
<IGMPSUPP>	IGMP Report suppression. Indicates multicast registered client hiding. When enabled (default) it prevents duplicate reports from being sent to the multicast devices.
• Y	Enabled
• N	Disabled

11.76 ED-VLAN-ETH

(Cisco 15454)

Edit VLAN ETH attributes command is used to modify the VLAN Profile associated to the L2 Ethernet ports - VLAN.

Usage Guidelines

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

If the AID is invalid, an IIAC (Invalid AID) error message is returned.

The "ALL" AID is invalid for this command.

The L2 ethernet port must be present when this command is sent. The S-VLAN-ID must not be absent otherwise this command will fail.

If BWP is omitted the first time this command is performed, the default BWP-0 is assumed

Use BWP=0 to restore the Default VLAN Profile

Category

ETHERNET

Security

Provisioning

Input Format

ED-VLAN-ETH[:<TID>]:<AID>:<CTAG>::[VLAN_ID=<VLAN_ID>],[VLAN_TYPE=<VLAN_TYPE>],[BWP=<BWP>][:];

Input Example

ED-VLAN-ETH::ETH-1-1-1:1:1010:BWP=34;

Input Parameters	Input Parameters	Description
	<AID>	Ethernet aids are used to access L2 Ethernet ports.
	ALL	The ALL aid is applicable for RTRV-only commands, basically the RTRV-rr type of commands.
	ETH[-{1-30}]-{1-5,12-16}-{1-22}-1	Facility aid for GE-XP card.
	ETH[-{1-30}]-{1-6,12-17}-{1-4}-1	Facility aid for 10GE-XP card.
	<VLAN_ID>	The VLAN identifier. A VLAN ID is a number in the range 1..4096. The value of 0 is reserved to UNTAGged VLAN.
	VLAN_TYPE	Specifies the type of VLAN.
	SVLAN	Service provider VLAN.
	CVLAN	Customer VLAN.
	<BWP>	The BWP identifier. A BWP ID is a number in the range 0..10000. The value of 0 is reserved for the default profile that cannot be edited or delete. Default value is 0.

11.77 ED-VLB-REP

(Cisco ONS 15454) The Edit VLAN Load Balancing Resilient Ethernet Protocol (ED-VLB-REP) command edits the VLAN Load Balancing (VLB) for REP Segment on the ethernet ports.

Usage Guidelines

- VLB can be enabled only on the EDGE Primary ports of the REP Segment.
- If the VLB is not enabled, you cannot edit any other parameters related to STCN.
- Only one VLAN range can be added or removed at a time
- A maximum of 10 VLAN range can be configured on the ethernet edge port.
- This command is applicable only to GE_XP and 10GE_XP cards.

Category

Ethernet

Security

Provisioning

Input Format

```
ED-VLB-REP:[<TID>]:<AID>:<CTAG>:::[VLBENABLED=<VLBENABLED>],[VLBOPERATION=<VLBOPERATION>],[VLANRANGESTART=<VLANRANGESTART>],[VLANRANGEEND=<VLANRANGEEND>],[PREFERRED=<PREFERRED>],[REPPORTID=<REPPORTID>];
```

Input Example

```
ED-VLB-REP::ETH-16-2-1:1::VLBENABLED=Y,VLBOPERATION=ADD,VLANRANGESTART=1000,VLANRANGEEND=1001,PREFERRED=N,REPPORTID=0X0134454345678598;
```

Input Parameters	Input Parameters	Description
	<AID>	Access identifier from the “26.17 FACILITY” section on page 26-40.
	<VLBENABLED>	Enables or disables the segment topology notification on ethernet entity for REP.
	• Y	Enables STCN on the ethernet port.
	• N	Disables STCN on the ethernet port.
	<VLBOperation>	Adds or removes the range for STCN notification.
	• ADD	Adds the range to a list of segment ranges for STCN notification.
	• REMOVE	Removes the range from a list of segment ranges for STCN notification.
	<VLANRANGESTART>	Indicates the VLAN range start value for VLB on REP. The valid range is 0 to 1024.
	<VLANRANGEEND>	Indicates the VLAN range end value for VLB on REP. The valid range is from 0 to 1024.
	<PREFERRED>	Indicates that the port is the preferred alternate port. Or the preferred port for VLAN load balancing.
	• Y	Yes
	• N	No
	<REPPORTID>	Determines the REP port to trigger VLB.

11.78 ED-WDMANS

(Cisco ONS 15454) The Edit Wavelength Division Multiplexing Automatic Node Set Up (ED-WDMANS) command edits the optical node set-up application (AONS) attributes.

Usage Guidelines None

Category DWDM

Security Maintenance

Input Format ED-WDMANS:[<TID>]:<AID>:<CTAG>::[<WLEN>]:[VOAATTN=<VOAATTN>],[POWEROSC=<POWEROSC>],[NTWTYPE=<NTWTYPE>],[CHLOSS=<CHLOSS>],[GAIN=<GAIN>],[TILT=<TILT>],[CHPWR=<CHPWR>],[AMPLMODE=<AMPLMODE>],[RATIO=<RATIO>],[OSCLOSS=<OSCLOSS>],[DITHER=<DITHER>],[TOTALPWR=<TOTALPWR>],[HIGHSLVEXP=<HIGHSLVEXP>],[LOWSLVEXP=<LOWSLVEXP>][:];

Input Example

```
ED-WDMANS:PENNGROVE:WDMSIDE-A:114:::POWERIN=10.0,POWEROUT=10.0,
POWEREXP=10.0;
```

```
ED-WDMANS:PENNGROVE:WDMSIDE-A:114:::POWERIN=10.0,POWEROUT=10.0,
POWEREXP=10.0,POWEROSC=5.0;
```

```
ED-WDMANS::LINE-1-3-1-RX:77:::CHLOSS=-11.00;
```

Input Parameters

<AID>	The AID is used to access the WDM node or a single port of the DWDM node.
• WDMNODE	Indicates the WDM node of an MSTP and accesses the NTWTYPE and DITHER WDMANS node parameters.
• LINE	The optical transport section port.
• BAND	The optical multiplex section port.
• CHAN	The optical channel port.
<WLEN>	(Optional) The parameter type is OPTICAL_WLEN, which indicates the optical wavelength.
• 1310	Wavelength 1310
• 1470	Wavelength 1470
• 1490	Wavelength 1490
• 1510	Wavelength 1510
• 1528.77	Wavelength 1528.77
• 1529.55	Wavelength 1529.55
• 1529.94	Wavelength 1529.94
• 1530	Wavelength 1530
• 1530.33	Wavelength 1530.33
• 1530.73	Wavelength 1530.73
• 1531.12	Wavelength 1531.12
• 1531.51	Wavelength 1531.51
• 1531.90	Wavelength 1531.90
• 1532.29	Wavelength 1532.29
• 1532.68	Wavelength 1532.68
• 1533.07	Wavelength 1533.07
• 1533.47	Wavelength 1533.47
• 1533.86	Wavelength 1533.86
• 1534.25	Wavelength 1534.25
• 1534.64	Wavelength 1534.64
• 1535.04	Wavelength 1535.04
• 1535.43	Wavelength 1535.43
• 1535.82	Wavelength 1535.82
• 1536.22	Wavelength 1536.22
• 1536.61	Wavelength 1536.61
• 1537	Wavelength 1537

• 1537.40	Wavelength 1537.40
• 1537.79	Wavelength 1537.79
• 1538.19	Wavelength 1538.19
• 1538.58	Wavelength 1538.58
• 1538.98	Wavelength 1538.98
• 1539.37	Wavelength 1539.37
• 1539.77	Wavelength 1539.77
• 1540.16	Wavelength 1540.16
• 1540.56	Wavelength 1540.56
• 1540.95	Wavelength 1540.95
• 1541.35	Wavelength 1541.35
• 1541.75	Wavelength 1541.75
• 1542.14	Wavelength 1542.14
• 1542.35	Wavelength 1542.35
• 1542.54	Wavelength 1542.54
• 1542.94	Wavelength 1542.94
• 1543.33	Wavelength 1543.33
• 1543.73	Wavelength 1543.73
• 1544.13	Wavelength 1544.13
• 1544.53	Wavelength 1544.53
• 1544.92	Wavelength 1544.92
• 1545.32	Wavelength 1545.32
• 1545.72	Wavelength 1545.72
• 1546.12	Wavelength 1546.12
• 1546.52	Wavelength 1546.52
• 1546.92	Wavelength 1546.92
• 1547.32	Wavelength 1547.32
• 1547.72	Wavelength 1547.72
• 1548.12	Wavelength 1548.12
• 1548.51	Wavelength 1548.51
• 1548.92	Wavelength 1548.92
• 1549.32	Wavelength 1549.32
• 1549.71	Wavelength 1549.71
• 1550	Wavelength 1500
• 1550.12	Wavelength 1550.12
• 1550.52	Wavelength 1550.52
• 1550.92	Wavelength 1550.92
• 1551.32	Wavelength 1551.32
• 1551.72	Wavelength 1551.72
• 1552.12	Wavelength 1552.12
• 1552.52	Wavelength 1552.52

• 1552.93	Wavelength 1552.93
• 1553.33	Wavelength 1553.33
• 1553.73	Wavelength 1553.73
• 1554.13	Wavelength 1554.13
• 1554.13	Wavelength 1554.13
• 1554.94	Wavelength 1554.94
• 1555.34	Wavelength 1555.34
• 1555.75	Wavelength 1555.75
• 1556.15	Wavelength 1556.15
• 1556.55	Wavelength 1556.55
• 1556.96	Wavelength 1556.96
• 1557.36	Wavelength 1557.36
• 1557.77	Wavelength 1557.77
• 1558.17	Wavelength 1558.17
• 1558.58	Wavelength 1558.58
• 1558.98	Wavelength 1558.98
• 1559.39	Wavelength 1559.39
• 1559.79	Wavelength 1559.79
• 1560.20	Wavelength 1560.20
• 1560.61	Wavelength 1560.61
• 1561.01	Wavelength 1561.01
• 1561.42	Wavelength 1561.42
• 1561.83	Wavelength 1561.83
• 1570	Wavelength 1570
• 1570.83	Wavelength 1570.83
• 1571.24	Wavelength 1571.24
• 1571.65	Wavelength 1571.65
• 1572.06	Wavelength 1572.06
• 1572.48	Wavelength 1572.48
• 1572.89	Wavelength 1572.89
• 1573.30	Wavelength 1573.30
• 1573.71	Wavelength 1573.71
• 1574.13	Wavelength 1574.13
• 1574.54	Wavelength 1574.54
• 1574.95	Wavelength 1574.95
• 1575.37	Wavelength 1575.37
• 1575.78	Wavelength 1575.78
• 1576.20	Wavelength 1576.20
• 1576.61	Wavelength 1576.61
• 1577.03	Wavelength 1577.03
• 1577.44	Wavelength 1577.44

• 1577.86	Wavelength 1577.86
• 1578.27	Wavelength 1578.27
• 1578.69	Wavelength 1578.69
• 1579.10	Wavelength 1579.10
• 1579.52	Wavelength 1579.52
• 1579.93	Wavelength 1579.93
• 1580.35	Wavelength 1580.35
• 1580.77	Wavelength 1580.77
• 1581.18	Wavelength 1581.18
• 1581.60	Wavelength 1581.60
• 1582.02	Wavelength 1582.02
• 1582.44	Wavelength 1582.44
• 1582.85	Wavelength 1582.85
• 1583.27	Wavelength 1583.27
• 1583.69	Wavelength 1583.69
• 1584.11	Wavelength 1584.11
• 1584.53	Wavelength 1584.53
• 1584.95	Wavelength 1584.95
• 1585.36	Wavelength 1585.36
• 1585.78	Wavelength 1585.78
• 1586.20	Wavelength 1586.20
• 1586.62	Wavelength 1586.62
• 1587.04	Wavelength 1587.04
• 1587.46	Wavelength 1587.46
• 1587.88	Wavelength 1587.88
• 1588.30	Wavelength 1588.30
• 1588.73	Wavelength 1588.73
• 1589.15	Wavelength 1589.15
• 1589.57	Wavelength 1589.57
• 1589.99	Wavelength 1589.99
• 1590	Wavelength 1590
• 1590.41	Wavelength 1590.41
• 1590.83	Wavelength 1590.83
• 1591.26	Wavelength 1591.26
• 1591.68	Wavelength 1591.68
• 1592.10	Wavelength 1592.10
• 1592.52	Wavelength 1592.52
• 1592.95	Wavelength 1592.95
• 1593.37	Wavelength 1593.37
• 1593.79	Wavelength 1593.79
• 1594.22	Wavelength 1594.22

• 1594.64	Wavelength 1594.64
• 1595.06	Wavelength 1595.06
• 1595.49	Wavelength 1595.49
• 1596.34	Wavelength 1596.34
• 1596.76	Wavelength 1596.76
• 1597.19	Wavelength 1597.19
• 1597.62	Wavelength 1597.62
• 1598.04	Wavelength 1598.04
• 1598.47	Wavelength 1598.47
• 1598.89	Wavelength 1598.89
• 1599.32	Wavelength 1599.32
• 1599.75	Wavelength 1599.75
• 1600.06	Wavelength 1600.06
• 1601.03	Wavelength 1601.03
• 1601.46	Wavelength 1601.46
• 1601.88	Wavelength 1601.88
• 1602.31	Wavelength 1602.31
• 1602.74	Wavelength 1602.74
• 1603.17	Wavelength 1603.17
• 1603.60	Wavelength 1603.60
• 1604.03	Wavelength 1604.03
• 1610	Wavelength 1610
<VOAATTN>	The value of calibrated attenuation for the VOA expressed in dBm. The range is 0.0 to +30.0. VOAATTN is a float.
<POWEROSC>	WDM-ANS OSC power parameter.
<NTWTYPE>	WDM-ANS network type parameter.
<CHLOSS>	WDM-ANS channel loss parameter.
<GAIN>	WDM-ANS amplifier gain parameter.
<TILT>	WDM-ANS amplifier tilt parameter.
<CHPWR>	WDM-ANS channel power parameter.
<AMPLMODE>	WDM-ANS amplifier mode parameter.
<RATIO>	WDM-ANS Raman amplifier pump ratio parameter.
<OSCLOSS>	WDM-ANS OSC channel loss parameter.
<DITHER>	WDM-ANS WXC dithering parameter.
<TOTALPWR>	WDM-ANS Raman amplifier total power in mW.
<HIGHSLVEXP>	Span loss verification—high value.
<LOWSLVEXP>	Span loss verification—low value.

11.79 ED-WDMSIDE

(Cisco ONS 15454) The Edit Wavelength Division Multiplexing Side (ED-WDMSIDE) command modifies the WDM node side attribute.

Usage Guidelines

- If the AID is invalid, an IIAC (Invalid AID) error message is returned.
- The ALL AID is invalid for this command.

Category

DWDM

Security

Maintenance

Input Format

ED-WDMSIDE:[<TID>]:<AID>:<CTAG>:::[NEWSIDE=<NEWSIDE>][:];

Input Example

ED-WDMSIDE:PENNGROVE:WDMSIDE-A:114:::NEWSIDE=WDMSIDE-B;

Input Parameters

<AID>	The AID is used to access the WDM side of an MSTP node.
• WDMSIDE- { A,B,C,D,E,F,G,H }	MSTP side identifier.
<NEWSIDE>	The AID is used to access the WDM side of an MSTP node.
• WDMSIDE- { A,B,C,D,E,F,G,H }	MSTP side identifier.

