



ED Commands

This chapter provides edit (ED) commands for the Cisco NCS 2002 and Cisco NCS 2006.

13.1 ED-CPS

This command can be used to modify Control Plane Service parameter. The user needs to specify only the source port to identify the CPS. If the CPS is of type ADD 2WAY, both src AIDs have to be specified

Usage Guidelines

- If the AID is invalid, an IIAC (invalid AID) error message is returned. The following AIDs are supported:
 - CLIENT cps type support FAC and VFAC AID type.
 - TRUNK cps type support CHAN AID type.
 - ADD cps type support CHAN, PCHAN and LINEWL AID type.
- The ALL AID is invalid for this command
- In case of 1WAY, unidirectional connection, SRC and DST are single AIDs. In case of 2WAY, bidirectional connection, SRC and DST are double AIDs. However, in case of CLIENT or TRUNK cpstype, src and dst are single AID and the connection is of type 2WAY because of bidirectional ports hence this rule is not applicable.
- If the RESTTYPE is REVERT, it is required to set the REVERTMODE and SOAK parameters.
- If the RESTTYPE is REVERT, it is mandatory to set the REVERTMODE parameter as MANUAL or AUTO.
- SOAK time is mandatory if the REVERTMODE parameter is set to MANUAL or AUTO.

Category

NCS

Security

Provisioning

Input Format

```
ED-CPS[:<TID>]:<SRC>:<CTAG>[::<CKTID=<CKTID>>],[VALMODE=<VALMODE>],[VALZONE=<VALZONE>],[VALMODESEC=<VALMODESEC>],[VALZONESEC=<VALZONESEC>],[CMDMDE=<CMDMDE>],[RESTTYPE=<RESTTYPE>],[REVERTMODE=<REVERTMODE>],[SOAK=<HH-MM-SS>],>],[CKTLABEL=<CKTLABEL>],[CKTPRIORITY=<CKTPRIORITY>],[DSPWROFS=<DSPWROFS>],[USPWROFS=<USPWROFS>][:<PST>[,<SST>]];
```

Input Example

```
ED-CPS::PCHAN-1-1-RX&PCHAN-1-1-TX:8::CKTID=twoway_add-passive,VALMODE=FULL,VALZONE=GREEN;;
```

```
ED-CPS::CHAN-1-2-2:1::RESTTYPE=REVERT,REVERTMODE=MANUAL,SOAK=00-00-10;
```

```
ED-CPS::LINE-1-6-3-RX:1::CKTLABEL="CISCO234", CKTPRIORITY=6, USPWROFS=45.6, DSPWROFS=89.2;
```

Input Parameters

<SRC>	Source access identifier from the “27.1 ALL” section on page 27-1 . Listable.
• 1WAY	A unidirectional connection from a source port to a destination port. In 1WAY wavelength connection only one AID is requested
• 2WAY	A bidirectional connection between the two ports. CLIENT or TRUNK 2WAY is requested together with one AID.
<CKTID>	(Optional) Circuit identification parameter contains the Common Language Circuit ID or other alias of the circuit being provisioned. Does not contain blank spaces. CKTID is a string of ASCII characters. The maximum length of CKTID can be 48.
<VALMODE>	Identifies the validation mode.
• NONE	No Optical validation is performed.
• FULL	The optical validation is performed as indicated in VALZONE parameter.
<VALZONE>	Identifies the validation operate zone.
• UNKNOWN	Not evaluated
• GREEN	Margin > 3 sigma
• YELLOW	1 < margin < 3 sigma
• ORANGE	0 < margin < 1 sigma
• RED	-3 < margin < 0 sigma
• OUT	Margin < -3 sigma
<VALMODESEC>	Identifies the validation mode for secondary circuit.
<VALZONESEC>	Identifies the validation operate zone for secondary circuit.
<RESTTYPE>	Specifies the restoration type on CPS circuit or UNI configuration. Parameter type is RESTTYPE.
• NONE	Restore type is not specified.
• RESTORE	Only restoration is allowed. The circuit is not revertible.
• REVERT	The circuit is revertible, manually or automatically.
<REVERTMODE>	Specifies the revertive mode type. Parameter type is REVERTMODE.
• AUTO	Circuit is automatically revertible after the soak time expires.

• MANUAL	Manually revert the circuit.
• NONE	Not revertible.
<SOAK>	This is the soak time specified in HH-MM-SS format. After the soak time expires, if the revertive mode is AUTO, the circuit reverts automatically. If revertive mode is MANUAL, the soak time is ignored.
<CKTLABEL>	Circuit label.
<CKTPRIORITY>	Circuit Priority.
<DSPWROFS>	Down stream power offset.
<USPWROFS>	Up stream power offset.

13.2 ED-<GIGE_TYPE>

The Edit 10GIGE, 100GIGE, 40GIGE, or GIGE (ED-<GIGE_TYPE>) command edits Ethernet facility attributes. See [Table 29-1 on page 29-1](#) for supported modifiers by platform.

Usage Guidelines

- The SYNCMSG, SENDDUS, ADMSSM, and ESMC parameters are applicable only for AR-MXP and AR-XP cards.
- The following parameters apply only to ED-GIGE; ADMINSTATE, LINKSTATE, MTU, FLOWCTRL, AUTONEG, HIWMRK, LOWMRK, DUPLEX, SPEED, and SOAK.
- The MACADDR parameter is applicable for ED-10GIGE only.
- The ENCAP parameter applies to 10GIGE SFP+ ports on 10x10G-LC only.
- In the CFP-TXP mode, the ED-<GIGE_TYPE> is applicable for SOAK, SYNCMSG, and SENDDUS paramters on the CFP-LC card on the VFAC AID.
- In the CFP-TXP mode, the ED-<GIGE_TYPE> is applicable for MTU and MACADDR paramters on the 100G-LC-C virtual ports on VCFAC AID.
- Autonegotiation parameters such as AUTONEG, DUPLEX, SPEED, ACTDUPLEX, and ACTSPEED are not applicable for 10GIGE on AR-XPE, AR-XP, AR-MXP cards and GIGE on AR-XPE card only.

Category

Ports

Security

Provisioning

Input Format

ED-GIGE:[<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>],[PAUSEFRAME=<PAUSEFRAME>],[CLNTDS

```
T=<CLNTDST>],[SYNCSMSG=<SYNCSMSG>],[SENDDUS=<SENDDUS>],[ADMSSM=<ADMSSM>],[ESMC=<ESMC>],[PAUSEFRAME>],[EXPDUPLICATION=<EXPDUPLICATION>],[EXPSPEED=<EXPSPEED>],[SELECTIVEAUTO=<SELECTIVEAUTO>],[SQUELCHMODE=<SQUELCHMODE>]:[<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;
```

Table 13-1 ED-<GIGE_TYPE> Command - Parameter Support

Input Parameters	Description
<AID>	Access identifier from the 27.15 FACILITY , page 27-23. The AR-MXP, AR-XP, and AR-XPE cards use the VFAC Access Identifier.
<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

Table 13-1 ED-<GIGE_TYPE> Command - Parameter Support

Input Parameters	Description
• 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

Table 13-1 *ED-<GIGE_TYPE> Command - Parameter Support*

Input Parameters	Description
• 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 156.55
• 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
<DUPLEX>	(Optional) The parameter is ETHER_DUPLEX, which indicates duplex mode. Defaults to AUTO.
• AUTO	Auto mode
• FULL	Full mode
• HALF	Half mode
<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

Table 13-1 ED-<GIGE_TYPE> Command - Parameter Support

Input Parameters	Description
• 10_MBPS	10 Megabits per second
• 1_GBPS	1 Gigabit per second
• 40_GBPS	40 Gigabit per second
• AUTO	Automatic
• AUTO_FDX	Enable auto negotiation with full duplex.
<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
• 1529.16	Wavelength 1529.16
• 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

Table 13-1 *ED-<GIGE_TYPE> Command - Parameter Support*

Input Parameters	Description
• 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
• 1545.30	Wavelength 1545.30
• 1545.32	Wavelength 1545.32
• 1545.72	Wavelength 1545.72
• 1546.12	Wavelength 1546.12
• 1546.52	Wavelength 1546.52

Table 13-1 ED-<GIGE_TYPE> Command - Parameter Support

Input Parameters	Description
• 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
• 1553.30	Wavelength 1553.30
• 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

Table 13-1 *ED-<GIGE_TYPE> Command - Parameter Support*

Input Parameters	Description
• 1560.61	Wavelength 1560.61
• 1561.01	Wavelength 1561.01
• 1561.42	Wavelength 1561.42
• 1561.83	Wavelength 1561.83
• 1562.23	Wavelength 1562.23
• 1562.64	Wavelength 1562.64
• 1563.05	Wavelength 1563.05
• 1563.45	Wavelength 1563.45
• 1563.86	Wavelength 1563.86
• 1564.27	Wavelength 1564.27
• 1564.68	Wavelength 1564.68
• 1565.09	Wavelength 1565.09
• 1565.50	Wavelength 1565.50
• 1565.90	Wavelength 1565.90
• 1566.31	Wavelength 1566.31
• 1566.72	Wavelength 1566.72
• 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

Table 13-1 ED-<GIGE_TYPE> Command - Parameter Support

Input Parameters	Description
• 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

Table 13-1 *ED-<GIGE_TYPE> Command - Parameter Support*

Input Parameters	Description
• 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.
• 100GBASE-LR4	100GBASE-LR4
• 100GBASE-SR10	100GBASE-SR10
• 40GBASE-FR	40GBASE-FR
• 40GBASE-LR4	40GBASE-LR4
• 40GBASE-SR4	Reach supported on 40GIGE payload on CFP-LC card.
• 4I1-9D1F	4I1-9D1F
• C4S1-2D1	C4S1-2D1
• FE-BX	FE-BX

Table 13-1 ED-<GIGE_TYPE> Command - Parameter Support

Input Parameters	Description
• FX	FX
• GE-BX	GE-BX
• GE-EX	GE-EX
• LX-10	LX-10
• TEN-GE-LRM	TEN-GE-LRM
• TEN-GE-ZR	TEN-GE-ZR
• VSR2000-3R2	VSR2000-3R2
• 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
• P1I1-2D1	Long haul 10G Ethernet with 1310 nm wavelength
• P1L1-1D2	Longhaul 2.5G Ethernet with 1550 nm wavelength
• P1L1-2D2	Long haul 10G Ethernet with 1550 nm wavelength
• P1S1-1D1	Shorthaul 2.5G Ethernet with 1310 nm wavelength
• P1S1-2D1	Short haul 10G Ethernet in 1310 nm wavelength
• SC	Reach SC
• S1	Reach S1
• S2	Reach S2
• SR	Reach SR
• SR-1	Reach SR-1
• SX	Reach SX
• T	Reach T

Table 13-1 ED-<GIGE_TYPE> Command - Parameter Support

Input Parameters	Description
• 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.
<LITIMER>	(Optional) Link integrity timer duration in the range between 200 ms and 10000 ms in multiples on 100 ms.
• <OSC>	To enable or disable the OSC on the port.
<ENCAP>	(Optional) Frame encapsulation type. The parameter type is ENCAP, which is the frame encapsulation type.
• GFP	GFP frame mode
• HDLC	HDLC frame mode
• WIS	WIS mode
• CBR	CBR mapping mode.
• TRP	Transparent mapping mode.
• GMP	GMP mapping mode. Supported only on 8GFC on 10x10G-LC card.
<PAUSEFRAME>	To Enable or Disable the Pause Frame.
• Y	Enable
• N	Disable
<CLNTDST>	Client distance in kilometers.
• 10KM	10 kilometers.
• 30KM	30 kilometers.
<EXPDUPLX>	(Optional) Ethernet duplex mode. The parameter type is ETHER_DUPLEX, which is the duplex mode.
• AUTO	Auto mode
• FULL	Full mode
• HALF	Half mode

Table 13-1 ED-<GIGE_TYPE> Command - Parameter Support

Input Parameters	Description
<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	Auto
• AUTO_FDX	Enable auto negotiation with full duplex.
<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.
<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.
<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)

Table 13-1 ED-<GIGE_TYPE> Command - Parameter Support

Input Parameters	Description
<ESMC>	By enabling ESMC, Gige port can be enabled as timing reference
• N	Disable
• Y	Enable
<PAUSEFRAME>	To Enable or Disable the Pause Frame.
• N	Disable
• Y	Enable
<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
• MT	Maintenance mode
• OutOfGroup	Out of group
• SoftwareDownload	Software downloading
• Unassigned	Unassigned
• NotInstalled	Unequipped

13.3 ED-<MOD1FCPAYLOAD>

The Edit 1GISC3, 2GISC3, D1VIDEO, DV6000, ESCON, ETRCLO, HDTV or PASSTHRU (ED-<MOD1FCPAYLOAD>) command edits the attributes related with the Fibre Channel facility. The state Locked, AutomaticInService is not supported on the FC port. See [Table 29-1 on page 29-1](#) 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, Maintenance 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>],[ENCAP=<ENCAP>][:<PST>[:<SST>]];
```

Input Example

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

Table 13-2 *ED-<MOD1FCPAYLOAD> Command - Parameter Support*

Input Parameters	Description
<AID>	Access identifier from the “27.15 FACILITY” section on page 27-23 .
<LINKRCVRY>	(Optional) Link recovery. The parameter type is ON_OFF, which disables or enables an attribute.
• N	Disable an attribute.
• Y	Enable an attribute.

Table 13-2 ED-<MOD1FCPAYLOAD> Command - Parameter Support

Input Parameters	Description
<DISTEXTN>	(Optional) Distance extension. It can be set to Buffer-to-Buffer (B2B) Credit Management state or None. The parameter type is DISTANCE_EXTENSION (distance extension). Note B2B and link recovery are mutually exclusive. You cannot turn on both B2B and link recovery at the same time.
• B2B	Buffer to buffer flow control
• NONE	No distance extension
<AUTODETECTION>	(Optional) 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>	(Optional) 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.
<MFS>	(Optional) Maximum frame size. MFS is an integer.
<NAME>	(Optional) NAME is a string. User-assigned port name.
<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.
<SOAK>	(Optional) Locked-AutomaticInService to Unlocked 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.
<FREQ>	(Optional) 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

Table 13-2 ED-<MOD1FCPAYLOAD> Command - Parameter Support

Input Parameters	Description
• 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

Table 13-2 *ED-<MOD1FCPAYLOAD> Command - Parameter Support*

Input Parameters	Description
• 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

Table 13-2 ED-<MOD1FCPAYLOAD> Command - Parameter Support

Input Parameters	Description
• 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

Table 13-2 *ED-<MOD1FCPAYLOAD> Command - Parameter Support*

Input Parameters	Description
• 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

Table 13-2 ED-<MOD1FCPAYLOAD> Command - Parameter Support

Input Parameters	Description
• 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) Parameter type is REACH (reach values).
• 100GBASE-LR4	100GBASE-LR4
• 100GBASE-SR10	100GBASE-SR10
• 40GBASE-FR	40GBASE-FR
• 40GBASE-LR4	40GBASE-LR4
• 40GBASE-SR4	Reach supported on 40GIGE payload on CFP-LC card.
• 4I1-9D1F	4I1-9D1F
• C4S1-2D1	C4S1-2D1
• FE-BX	FE-BX
• FX	FX
• GE-BX	GE-BX
• GE-EX	GE-EX
• LX-10	LX-10
• TEN-GE-LRM	TEN-GE-LRM
• TEN-GE-ZR	TEN-GE-ZR
• VSR2000-3R2	VSR2000-3R2
• AUTOPROV	Autoprovisioning

Table 13-2 *ED-<MOD1FCPAYLOAD> Command - Parameter Support*

Input Parameters	Description
• 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
<ENCAP>	Specifies the mapping mode on the port provisioned. Parameter Type is ENCAP.
• CBR	CBR mapping mode.
• GFP	GFP mapping mode.
• GMP	GMP mapping mode is supported only on 8GFC on 10x10G-LC card.
• TRP	Transparent mapping mode.
<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.

Table 13-2 ED-<MOD1FCPAYLOAD> Command - Parameter Support

Input Parameters	Description
• 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

13.4 ED-<MOD1FICONPAYLOAD>

The Edit 1GFICON, 2GFICON, 4GFICON, or ESCON (ED-<MOD1FICONPAYLOAD>) command edits the attributes related with the FICON payload facility. The state Locked, AutomaticInService is not supported on the FICON port. See [Table 29-1 on page 29-1](#) for supported modifiers by platform.

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-<MOD1FICONPAYLOAD>[:<TID>]:<AID>:<CTAG>[::LINKRCVRY=<LINKRCVRY>],[DIST
EXTN=<DISTANCE_EXTENSION>],[AUTODETECTION=<AUTO_DETECTION>],[LINKCREDI
TS=<CREDITS>],[FASTSWITCH=<FASTSWITCH>],[MFS=<MAXFRMSIZE>],[NAME=<NAME>
],[CMDMDE=<CMDMDE>],[SOAK=<SOAK>],[FREQ=<FREQ>],[LOSSB=<LOSSB>],[SQUELCH
=<SQUELCH>],[SQUELCHMODE=<SQUELCHMODE>],[ENCAP=<ENCAP>][:<PST>[:<SST>]];
```

Input Example

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

Table 13-3 ED-<MOD1FICONPAYLOAD> Command - Parameter Support

Input Parameters	Description
<AID>	Access identifier from the “27.15 FACILITY” section on page 27-23.
<LINKRCVRY>	(Optional) Link recovery. The parameter type is ON_OFF, which disables or enables an attribute.
• N	Disable an attribute.
• Y	Enable an attribute.
<DISTEXTN>	(Optional) Distance extension. It can be set to B2B Credit Management state or None. The parameter type is DISTANCE_EXTENSION.
	Note B2B and link recovery are mutually exclusive. You cannot turn on both B2B and link recovery at the same time.
• B2B	Buffer to buffer flow control
• NONE	No distance extension
<AUTODETECTION>	(Optional) 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>	(Optional) 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>	<TBD>
<MFS>	Maximum frame size. MFS is an integer.
<NAME>	NAME is a string. User-assigned port name.
<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.
<SOAK>	(Optional) Locked-AutomaticInService to Unlocked 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.
<FREQ>	(Optional) Parameter type is OPTICAL_WLEN, which is the optical wavelength.
• 1310	Wavelength 1310

Table 13-3 ED-<MOD1FICONPAYLOAD> Command - Parameter Support

Input Parameters	Description
• 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

Table 13-3 *ED-<MOD1FICONPAYLOAD> Command - Parameter Support*

Input Parameters	Description
• 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

Table 13-3 ED-<MOD1FICONPAYLOAD> Command - Parameter Support

Input Parameters	Description
• 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

Table 13-3 *ED-<MOD1FICONPAYLOAD> Command - Parameter Support*

Input Parameters	Description
• 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

Table 13-3 ED-<MOD1FICONPAYLOAD> Command - Parameter Support

Input Parameters	Description
• 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.
• 100GBASE-LR4	100GBASE-LR4
• 100GBASE-SR10	100GBASE-SR10
• 40GBASE-FR	40GBASE-FR
• 40GBASE-LR4	40GBASE-LR4
• 40GBASE-SR4	Reach supported on 40GIGE payload on CFP-LC card.
• 4I1-9D1F	4I1-9D1F
• C4S1-2D1	C4S1-2D1
• FE-BX	FE-BX
• FX	FX

Table 13-3 *ED-<MOD1FICONPAYLOAD> Command - Parameter Support*

Input Parameters	Description
• GE-BX	GE-BX
• GE-EX	GE-EX
• LX-10	LX-10
• TEN-GE-LRM	TEN-GE-LRM
• TEN-GE-ZR	TEN-GE-ZR
• VSR2000-3R2	VSR2000-3R2
• 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
<ENCAP>	Specifies the mapping mode on the port provisioned. Parameter Type is ENCAP.
• CBR	CBR mapping mode.
• GFP	GFP mapping mode.

Table 13-3 ED-<MOD1FICONPAYLOAD> Command - Parameter Support

Input Parameters	Description
• GMP	GMP mapping mode is supported only on 8GFC on 10x10G-LC card.
• TRP	Transparent mapping mode.
<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

13.5 ED-<MOD2NCSPAYLOAD>

The Edit 10GFC, 10GIGE, 100GIGE, 40GIGE, 1GFC, 1GFICON, 1GISC3, 2GFC, 2GFICON, 2GISC3, 4GFC, 4GFICON, 5GIB, 8GFC, D1VIDEO, DV6000, DVBASI, ESCON, ETRCLO, GIGE, HDTV, ISC1, ISC3, OTU3, OTU4, PASSTHRU, AUTO, 3GVIDEO, SDSDI, HDSDI, OTU1, OTU2, ISC3STP1G, or ISC3STP2G (ED-<MOD2NCSPAYLOAD>) command edits the operating parameters for a NCS client facility. See [Table 29-1 on page 29-1](#) for supported modifiers by platform. This command creates GCC with a given GCCRATE.

Usage Guidelines

The command supports the modifier AUTO, 3GVIDEO, SDSDI, HDSDI, OTU1, ISC3STP1G, and ISC3STP2G.

- Squelchmode applicable for SDSDI, HDSDI, 3GVIDEO, ISC3STG1G, ISC3STP2G, and ESCON are NONE and SQUELCH.
- Squelchmode applicable for 1GFC, 2GFC, 4GFC in NON-TXP mode and 8GFC are NONE, NOS and SQUELCH.
- Squelchmode for 4GFC client in TXP modes are NONE and NOS.
- The only allowed Squelchmode for 4GFC trunk is SQUELCH
- Video RATES - NTSC/PAL can be set based on ANSI/ETSI chassis types respectively for HDSDI and 3GVIDEO.

- Video RATE is not applicable for other video payloads - SDSDI, ESCON, ISC3STP1G, and ISC3STP2G.
- Video RATE is also not applicable for 1G/2G/3G/4G/8G-FC payloads.
- Editing the working port will automatically edit the protect port.
- OVRCLK is the new parameter added and applicable for OTU2 payload on SFP+ ports of 10x10G-LC only.

Category

NCS

Security

Provisioning

Input Format

ED-<MOD2NCSPAYLOAD>[:<TID>]:<AID>:<CTAG>[:::LINKRCVRY=<LINKRCVRY>],[DISTEXTN=<DISTANCE_EXTENSION>],[AUTODETECTION=<AUTO_DETECTION>],[LINKCREDIT S=<CREDITS>],[FASTSWITCH=<FASTSWITCH>],[MFS=<MAXFRMSIZE>],[NAME=<NAME>],[CMDMDE=<CMDMDE>],[SOAK=<SOAK>],[FREQ=<FREQ>],[LOSSB=<LOSSB>],[SQUELCH=<SQUELCH>],[SQUELCHMODE=<SQUELCHMODE>],[ENCAP=<ENCAP>],[<PST>[,<SST>]];

Input Example

ED-SDSDI::VFAC-3-1-1:1:::SQUELCHMODE=SQUELCH;

Table 13-4 ED-<MOD2NCSPAYLOAD> Command - Parameter Support

Input Parameters	Description
<AID>	The AR-MXP, AR-XP, and AR-XPE cards use the VFAC Access Identifier. See access identifier from the “27.1 ALL” section on page 27-1 .
<SQUELCHMODE>	Shuts down the far-end laser in response to certain defects.
• DISABLE	Disable
• AIS	AIS
• G-AIS	Generis AIS
• ODU-AIS	ODU AIS
• SQUELCH	Squelch is enabled
• NONE	Transparent
• NOS	Disable in FC payloads.
<ENCAP>	Specifies the mapping mode on the port provisioned. Parameter Type is ENCAP.
• CBR	CBR mapping mode.
• GFP	GFP mapping mode.

Table 13-4 *ED-<MOD2NCSPAYLOAD> Command - Parameter Support*

Input Parameters	Description
• GMP	GMP mapping mode is supported only on 8GFC on 10x10G-LC card.
• TRP	Transparent mapping mode.

13.6 ED-<MOD_PATH>

The Edit VC3, VC44C, VC464C, VC48C, VC4, VC416C, VC42C, VC43C, VC11, or VC12 (ED-<MOD_PATH>) command edits the attributes associated with VC paths.

Usage Guidelines

The SFBER, SDBER, RVRTV, and RVTM parameters only apply to subnetwork connection protection (SNCP) at the VC path level.

The path trace message is a 64-character string including the terminating carriage return (CR) and line feed (LF) that is transported in the J1 byte of the NCS VC Path overhead.

Both the EXPTRC and TRC string can be provisioned by a user with up to a 62-character string. The EXPTRC parameter indicates that the contents of the expected incoming path trace are provisioned by the user. The TRC parameter indicates the contents of the outgoing path trace message.

The INCTRC parameter 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 set to a previously received string. If there is a mismatch, TIM-P alarm is raised. When the path trace mode is in OFF mode, there is no path trace processing, and all the alarm and state conditions are reset.

The TACC parameter edits an existing single VC or VT and changes it to a test access point. When an editing command on TACC is executed, it assigns the VC or VT for the first two-way connection and VC+1 as the second 2-way connection. For single facility access digroup (FAD) test access, only a single VC/VT is used for the TAP creation.

J1 is implemented on the E1, E3, E4, DS3i-N-12, and STM cards.

E100 and E1000 cards do not support path trace.

The STM1, STM16AS, and STM64 cards only support EXPTRC in the ED-VC-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-<VC_PATH> command to edit the J1 EXPTRC/TRC message, SNCP attributes, and TACC attributes and the command exceeds 255 characters, the command will not be processed. You must use multiple ED-<VC_PATH> commands instead.

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 following actions will return error messages:

- Sending this command to edit SFBER, SDBER, RVRTV or RVTM for the non-SNCP VC path.

- Sending this command to edit the EXPTRC string with the AUTO path trace mode (TRCMODE=AUTO).
- 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-connects will return the “VC in Use” error message.

This command is allowed to edit EXPTRC on STM1, STM16AS, and STM64 cards.

**Note**

- TACC creation will be denied on protect ports and cards in 1:1, 1:N, and 1+1 configurations.
- The VFAC AID is only valid on slots containing an ML-Series card. TACC is not supported for the ML-Series cards.
- After the MS-SPRing 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 MS-SPRing.
- TACC is not supported on G1000, MXP_2.5_10G, TXP_MR_10G, ML1000-2, and ML100T-12 cards.
- HOLDOFFTIMER is not specific to a path. It is applicable to the SNCP 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 cross-connects on the DS3i-N-12 card are VC4 width, but the individual VC1s within the 3C will be accessible. For editing the path attributes, use ED-VC3 with the FAC AID. For test access creation, use ED-VC4 because the test access path width (like the cross-connect) has to be 3C on the DS3i-N-12 card, which creates a new entity (TAP) on the DS3i-N-12 card in 3C width. On the DS3i-N-12 card, the ED-VC command can be used either with VC3 or VC4 modifier depending on the parameter to be modified.

Category

Paths

Security

Provisioning

Input Format

```
ED-<MOD_PATH>:[TID]:<AID>:[CTAG]::[SFBER=<SFBER>],[SDBER=<SDBER>],
[RVRTV=<RVRTV>],[RVTM=<RVTM>],[HOLDOFFTIMER=<HOLDOFFTIMER>],
[EXPTRC=<EXPTRC>],[TRC=<TRC>],[TRCMODE=<TRCMODE>],
[TACC=<TACC>],[TAPTYPE=<TAPTYPE>],[CMDMDE=<CMDMDE>]:[<PST>[,<SST>]];
```

Input Example

```
ED-VC3:FERNDAL:VC3-1-1-1:115:::SFBER=1E-3,SDBER=1E-5,RVRTV=Y,RVTM=1.0,
HOLDOFFTIMER=2000,EXPTRC="EXPTRCSTRING",TRC="TRCSTRING",
TRCMODE=OFF,TACC=8,TAPTYPE=SINGLE,CMDMDE=NORM:UNLOCKED,
AUTOMATICINSERVICE;
```

Table 13-5 *ED-<MOD_PATH> Command - Parameter Support*

Input Parameters	Description
<AID>	Access identifier from the “ 27.11 CrossConnectId1 ” section on page 27-16.
<SFBER>	(Optional) Signal failure threshold. Applies only to SNCP. Applies to VC4-level paths. 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>	(Optional) Signal degrade threshold. Applies only to SNCP. Applies to VC4-level paths (VCn). 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>	(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. Only applies to SNCP. 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>	(Optional) Revertive time. RVTM is not allowed to be set while RVRTV is N. Only applies to SNCP. The parameter type is REVERTIVE_TIME (revertive time).
• 0.5 to 12.0	Revertive time is 0.5 to 12.0 minutes.
• N	Disable an attribute.
• Y	Enable an attribute.
<HOLDOFFTIMER>	(Optional) Hold-off timer for SNCP DRI. Values must be within 0 and 10000 milliseconds (0 to 10 seconds), with increments of 100 milliseconds. HOLDOFFTIMER is an integer.
<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 and LF. Applicable to VC-level paths in NCS (VCn). EXPTRC is a string.
<TRC>	(Optional) The path trace message to be transmitted. The trace byte (J1) continuously transmits a 64-byte, fixed length ASCII string, one byte at a time. A null value defaults to the NE transmitting 62 null characters (hex 00) and CR and LF. A null value defaults to the NE transmitting null characters (Hex 00). Applicable to VC-level paths in NCS (VCn). TRC is a string.
<TRCMODE>	(Optional) Path trace mode. Applicable only to VC-level paths in NCS (VCn). 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.

Table 13-5 *ED-<MOD_PATH> Command - Parameter Support*

Input Parameters	Description
AUTO-NO-AIS	Use the previously received path trace string as the expected string and do not turn on 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.
<TACC>	(Optional) 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>	(Optional) TAP type. the parameter type is TAPTYPE (test access point type).
DUAL	Dual FAD
SINGLE	Single FAD
<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.
<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
MismatchofEquipment Alarm	Mismatch of equipment and attributes
Maintenance	Maintenance mode
OutOfGroup	Out of group
SoftwareDownload	Software downloading
Unassigned	Unassigned
NotInstalled	Unequipped

13.7 ED-<MOD_RING>

The Edit Multiplex Section-Shared Protection Ring (ED-<MOD_RING>) command edits the MS-SPRing attributes.

Usage Guidelines

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

The RVRTV, RVTM, NODEID, and RINGID attributes can be edited for the two-fiber MS-SPRing.

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 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 MS-SPRing does not exist, a SRQN (MSSPR Does Not Exist) error message is returned.
- The SROF (Facility Not Provisioned) or SROF (Cannot Access MSSPR) error message will be returned for an invalid query.
- The SRQN (MSSPR Edition Failed) error message is returned for an invalid edition query.
- Sending this command to modify SRVRTV or SRVTM on a two-fiber MS-SPRing will return an IDNV (Invalid Data For 2F-MS-SPRing) error message.
- Sending this command to modify the node ID with invalid data will return an IIAC (Invalid NodeId) error message.
- Sending this command to change the ring ID into invalid data will return an IIAC (Invalid RingId) error message.
- Changing the MS-SPRing node ID with a duplicated ID will return a SROF (Cannot Set NodeId) error message.
- Changing the MS-SPRing ring ID with a duplicated ID will return a SROF (Cannot Set RingId) error message.



Note

- The ALL AID is invalid for this command.
- The list AID format is supported in Release 4.6 and later.

Category

MS-SPRing

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

Table 13-6 ED-<MOD_RING> Command - Parameter Support

Input Parameters	Description
<AID>	Access identifier from the “ 27.3 AidUnionId1 ” section on page 27-10. Identifies the MS-SPRing of the NE. ALL or MSSPR-ALL AID is not allowed for editing an MS-SPRing.
<RINGID>	The MS-SPRing ID of the NE, up to six characters. Valid characters are A-Z and 0-9. RINGID is a string.
<NODEID>	The MS-SPRing node ID of the NE. NODEID ranges from 0 to 31. NODEID 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 (disable or enable 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 MS-SPRing only. The parameter type is ON_OFF (disable or enable an attribute).
• N	Disable an attribute.
• Y	Enable an attribute.
<SRVTM>	The span revertive time for four-fiber MS-SPRing 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.

13.8 ED-<STM_TYPE>

The Edit STM1, STM4, STM16, or STM64 command edits the attributes (for example, service parameters) and state of an STM facility. Allowable states for a facility are Locked, Locked with Automatic In Service transitioning, Locked for Maintenance, and Unlocked. See [Table 29-1 on page 29-1](#) 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: STM1-8, MRC-12, MRC-12-2.5G, MRC-4-2.5G, STM64-XFP, CTX-2500, CTX, STM64-4, STM16-16, STM64-4-NCS, ASAP-4.

The data communications channel (DCC) transmit is bridged to both working and protect in a 1+1 configuration. On the receive side, the active one is selected for DCC. The DCC is provisioned on the working port only in a 1+1 configuration.

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

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.

You cannot directly transition a facility from IS to Locked-Disabled,DSBLD service state. You can transition a facility to Locked-Disabled, DSBLD service state from any state except Locked-Disabled, Maintenance. To transition a facility from Locked-Disabled, Maintenance to Locked-Disabled, 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 Locked-Disabled, DSBLD transition) with no consideration for orderly interruption.

Category

Ports

Security

Provisioning

Input Format

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

Input Example

```
ED-STM16: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,
MSDCC=N,NAME="STMPORT",CMDMDE=NORM,EXPTRC="AAA",TRC="AAA",
TRCMODE=MAN,TRCFORMAT=16-BYTE,ADMSSM=G811,SENDDUSFF=N,
AISONLPBK=AIS_ON_LPBK_ALL,FREQ=1550,LOSSB=LR-1,FOREIGNFEND=N,
FOREIGNIP="IPADDRESS",OPRNOMINAL=Y:UNLOCKED,AUTOMATICINSERVICE;
```

Table 13-7 ED-STM1 Command - Parameter Support

Input Parameters	Description
<AID>	Access identifier from the “ 27.15 FACILITY ” section on page 27-23.
<DCC>	(Optional) Indicates whether or not the RS-DCC is to be used. Identifies the RS-DCC connection of the port. The parameter type is ON_OFF (disable or enable an attribute).
• N	Disable an attribute.
• Y	Enable an attribute.
<AREA>	(Optional) The area ID shows up only if the DCC is enabled.
<SYNCSMSG>	(Optional) Synchronization status message. 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.
<SENDDUS>	(Optional) Whether the facility will send the Do Not Use for Synchronization (DUS) value as the synchronization status message for that facility. The parameter type is ON_OFF (disable or enable an attribute).
• N	Disable an attribute.
• Y	Enable an attribute.
<PJMON>	(Optional) Identifies an STM port PJMON. Defaults to 0 (zero). PJMON is an integer. Set a valid VC4 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 VC4 number of the optical port.
<SFBER>	(Optional) 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>	(Optional) 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>	(Optional) STM port mode. The parameter type is OPTICAL_MODE, which is the facility’s optical 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.

Table 13-7 ED-STM1 Command - Parameter Support

Input Parameters	Description
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.
<MUX>	(Optional) MS-SPRing extension byte (supported only on the STM16AS card). The parameter type is MUX_TYPE, which is the MS-SPRing extension type.
E2	E2 byte (orderwire)
F1	F1 byte (user)
K3	K3 byte
Z2	Z2 byte
<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.
<OSFP>	(Optional) The Open Shortest Path First discovery. The parameter type is ON_OFF (disable or enable an attribute).
N	Disable an attribute.
Y	Enable an attribute.
<MSDCC>	(Optional) The MS-DCC connection on the port. 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>	(Optional) NAME is a user-specified string to identify the facility.
<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.
<EXPTRC>	(Optional) 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). String data type.
<TRC>	(Optional) 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. Defaults to NULL. TRC is a string.
<TRCMODE>	(Optional) Section trace mode. Applicable only to VC-level paths in NCS (VCn). Defaults to the MAN mode. The parameter type is TRCMODE (trace mode).
AUTO	Use the previously received section trace string as the expected string. Not applicable to MXP/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 TIM-P is detected.
MAN	Use the provisioned expected string as the expected string.

Table 13-7 ED-STM1 Command - Parameter Support

Input Parameters	Description
• 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 section trace capability. Nothing will be reported.
<TRCFORMAT>	(Optional) 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>	(Optional) SSM selectable value. It will only appear when SSM is disabled. The parameter type is SYNC_CLOCK_REF_QUALITY_LEVEL, which is the clock source quality level for NCS.
• DUS_NCS	Do Not Use For Synchronization
• G811	G811 Standard
• RES_NCS	Reserved For Network Synchronization Use
• G812T	G812T Standard
• STU_NCS	Synchronized, Traceability Unknown
• G812TL	G812TL Standard
• SETS	Synchronous Equipment Timing Source
<SENDDUSFF>	(Optional) 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.
<AISONLPBK>	(Optional) The parameter type is AIS_ON_LPBK, which indicates if AIS should be sent on loopback.
• AIS_ONLPBK_FACILITY	AIS is sent on facility loopback.
• AIS_ON_LPBK_ALL	AIS is sent on all loopbacks.
• AIS_ON_LPBK_OFF	AIS is not sent on loopback.
• AIS_ON_LPBK_TERMINAL	AIS is sent on terminal loopback.
<FREQ>	(Optional) 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

Table 13-7 *ED-STM1 Command - Parameter Support*

Input Parameters	Description
• 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

Table 13-7 ED-STM1 Command - Parameter Support

Input Parameters	Description
• 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

Table 13-7 ED-STM1 Command - Parameter Support

Input Parameters	Description
• 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

Table 13-7 ED-STM1 Command - Parameter Support

Input Parameters	Description
• 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

Table 13-7 ED-STM1 Command - Parameter Support

Input Parameters	Description
• 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 is the reach value.
• 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

Table 13-7 ED-STM1 Command - Parameter Support

Input Parameters	Description
• 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
<FOREIGNFEND>	(Optional) Indicates whether the far-end NE on the DCC is a foreign NE. The parameter type is ON_OFF (disable or enabled an attribute).
• N	Disable an attribute.
• Y	Enable an attribute.
<FOREIGNIP>	(Optional) The IP address of the far-end NE on the DCC. Used only if FOREIGNFEND is Y. FOREIGNIP 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
<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. Defaults to AUTOMATICINSERVICE. 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

Table 13-7 ED-STM1 Command - Parameter Support

Input Parameters	Description
SoftwareDownload	Software downloading
Unassigned	Unassigned
NotInstalled	Unequipped

13.9 ED-<OCN_TYPE>

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 29-1 on page 29-1](#) for supported modifiers by platform.

Usage Guidelines

- Squelchmode applicable for OC3/OC12/OC48 payloads are NONE, G-AIS and SQUELCH
- 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>],[SYNCMSG=<SYNCMSG>],[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=<FOREIGNFAREND>],[FOREIGNIP=<FOREIGNIPADDRESS>],[FREQ=<FREQ>],[LOSSB=<LOSSB>],[OPRNOMINAL=<OPRNOMINAL>],[OSISDCC=<OSISDCC>],[OSILDCC=<OSILDCC>],[OSIROUTER=<OSIROUTER>],[PORTMODE=<PORTMODE>],[SQUELCHMODE=<SQUELCHMODE>]:[<PST>][<SST>]]

Input Example

ED-OC48:ROCCIANERA:VFAC-12-1-1:1:::SQUELCHMODE=G-AIS;

Input Parameters

<AID>	Access identifier from the “27.15 FACILITY” section on page 27-23 .
<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.
<SYNCMSG>	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. 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. 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
• 1529.16	Wavelength 1529.16
• 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
• 1562.23	Wavelength 1562.23
• 1562.64	Wavelength 1562.64
• 1563.05	Wavelength 1563.05
• 1563.45	Wavelength 1563.45
• 1563.86	Wavelength 1563.86
• 1564.27	Wavelength 1564.27
• 1564.68	Wavelength 1564.68
• 1565.09	Wavelength 1565.09
• 1565.50	Wavelength 1565.50
• 1565.90	Wavelength 1565.90
• 1566.31	Wavelength 1566.31
• 1566.72	Wavelength 1566.72
• 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)
• 100GBASE-LR4	100GBASE-LR4
• 100GBASE-SR10	100GBASE-SR10

• 40GBASE-FR	40GBASE-FR
• 40GBASE-LR4	40GBASE-LR4
• 40GBASE-SR4	Reach supported on 40GIGE payload on CFP-LC card.
• 4I1-9D1F	4I1-9D1F
• C4S1-2D1	C4S1-2D1
• FE-BX	FE-BX
• FX	FX
• GE-BX	GE-BX
• GE-EX	GE-EX
• LX-10	LX-10
• TEN-GE-LRM	TEN-GE-LRM
• TEN-GE-ZR	TEN-GE-ZR
• VSR2000-3R2	VSR2000-3R2
• 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
• P1I1-2D1	Long haul 10G Ethernet with 1310 nm wavelength
• P1L1-1D2	Longhaul 2.5G Ethernet with 1550 nm wavelength
• P1L1-2D2	Long haul 10G Ethernet with 1550 nm wavelength
• P1S1-1D1	Shorthaul 2.5G Ethernet with 1310 nm wavelength
• P1S1-2D1	Short haul 10G Ethernet in 1310 nm wavelength
• SC	Reach SC
• 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. FOREIGNIP 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.
<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.
<SQUELCHMODE>	Shuts down the far-end laser in response to certain defects
• NONE	Transparent
• SQUELCH	Squelch is enabled
• AIS	Generic AIS
• DISABLE	Squelch is disabled
<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

13.10 ED-ALS

The Edit Automatic Laser Shutdown (ED-ALS) command is used to modify the automatic laser shutdown (ALS) attributes of an STM 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 STM16 and STM64 ports.

Usage Guidelines

The ED-ALS command is applicable for the following:

- For all non-OTU payloads on 100G-LC-C, 10x10G-LC, and CFP-LC cards on the CHAN AID.
- Payload interfaces for OTU enabled ports.

Category

Ports

Security

Provisioning

Input Format

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

Input Example

ED-ALS:CISCO:FAC-4-1-1:1:::ALSMODE=AUTO,ALSRCINT=130,ALSRCPW=80.1;

Table 13-8 ED-ALS Command - Parameter Support

Input Parameters	Description
<SRC>	Access identifier from the “27.2 AidUnionId” section on page 27-7.
<ALSMODE>	(Optional) 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

Table 13-8 ED-ALS Command - Parameter Support

Input Parameters	Description
• MAN-RESTART	Manual restart for test
<ALSRCINT>	(Optional) ALS recovery interval. The range is 60 to 300 seconds. ALSRCINT is an integer.
<ALSRCPW>	(Optional) ALS recovery pulse width. The range is 80.0 to 100.00 seconds, in increments of 100 ms. ALSRCPW is a float.

13.11 ED-APC

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 NCS

Security Provisioning

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

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

Table 13-9 ED-APC Command - Parameter Support

Input Parameters	Description
<WDMSIDE>	The AID is used to access the WDM side of an MSTP node.
• WDMSIDE-{UNKNOWN, A, B, C, D, E, F, G, H}	MSTP side identifier
<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.
<APCENABLE>	(Optional) Enable/disable the APC application. Default is N. The parameter type is ON_OFF (disable or enable an attribute).
• N	Disable an attribute.
• Y	Enable an attribute.

13.12 ED-AUTO

The Edit Auto (ED-AUTO) command is used to retrieve the AUTO port provisioned. Port bandwidth changes to OC3/OC12/OC48/1GE as per the incoming signal when auto sense is enabled. Default is OC48 when auto sense is disabled.

Usage Guidelines	None	
Category	NCS	
Security	Provisioning	
Input Format	ED-AUTO:[<TID>]:<AID>:<CTAG>::: AUTOSENSE=<AUTOSENSE>;	
Input Example	ED-AUTO:CISCO:VFAC-2-1-1:CTAG:::AUTOSENSE=Y;	
Input Parameters	<AID>	The AR-MXP, AR-XP, and AR-XPE cards use the VFAC AID.
	<AUTOSENSE>	Specifies if auto sense must be enabled or disabled.
	Y	Enables auto sense.
	N	Disables auto sense.

13.13 ED-BITS

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. 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

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

Input Example

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

Table 13-10 ED-BITS Command - Parameter Support

Input Parameters	Description
<AID>	Access identifier from the “27.6 BITS” section on page 27-11 .
<LINECDE>	(Optional) Line code. The parameter type is LINE_CODE (line code).
• AMI	Line code value is AMI.
• B3ZS	Binary three-zero substitution.
• B6ZS	Line code value is B6ZS.
• B8ZS	Line code value is B8ZS.
• HDB3	Line code value is HDB3. (Applicable only for NCS platform).
• JBZS	JBZS
• ZBTSI	ZBTSI
<FMT>	(Optional) Digital signal frame format. Defaults to E1-MF. The parameter type is FRAME_FORMAT, which is the frame format for an E1 port.
• AUTOPROV	AUTOPROV
• CBIT	C-BIT line type applies to the DS3XM and DS3E cards.
• D4	Frame format is D4
• DS2 FRAMED	DS2 FRAMED
• E1-CRC	NCS E1 CRC frame format
• E1-CRCMF	NCS E1 CRCMF frame format
• E1-MF	NCS E1 MF frame
• E1-FRAME	NCS E1-frame format
• E1-UNFRAMED	NCS E1 unframed format
• E2 FRAMED	E2 FRAMED
• E3-FRAME	E3-FRAME
• E3-PLCP	E3-PLCP
• ESF	Frame format is ESF
• FRAMENA	FRAMENA
• G-751	G-751
• G-832	G-832
• M13	M13 line type applies to the DS3XM and DS3E cards.
• M23	M23
• SYNTRAN	SYNTRAN

Table 13-10 ED-BITS Command - Parameter Support

Input Parameters	Description
• 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>	(Optional) Line buildout settings. BITS line buildout. Default value is 0 to 133. LBO is an integer. The parameter type is BITS_LineBuildOut (BITS line buildout).
• 0–133	BITS line buildout range is 0–133.
• 134–266	BITS line buildout range is 134–266.
• 267–399	BITS line buildout range is 267–399.
• 400–533	BITS line buildout range is 400–533.
• 534–655	BITS line buildout range is 534–655.
<SYNCSMSG>	(Optional) Indicates whether 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>	(Optional) Alarm indication signal threshold. The parameter type is SYNC_CLOCK_REF_QUALITY_LEVEL, which is the clock source quality level for NCS.
• DUS_NCS	Do Not Use For Synchronization
• G811	G811 Standard
• RES_NCS	Reserved For Network Synchronization Use
• G812T	G812T Standard
• STU_NCS	Synchronized, Traceability Unknown
• G812TL	G812TL Standard
• SETS	Synchronous Equipment Timing Source
<SABIT>	(Optional) 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.
<BITSFAC>	(Optional) BITS facility settings. BITS-2 always inherits the value of BITS-1. The parameter type is BITS_FAC, which is the BITS facility rate.
• 2 M	2 MHz rate
• 64 K	64 K rate

Table 13-10 ED-BITS Command - Parameter Support

Input Parameters	Description
• 6 M	6 MHz rate
• E1	E1 rate
<ADMSSM>	(Optional) 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 NCS.
• DUS_NCS	Do Not Use For Synchronization
• G811	G811 Standard
• RES_NCS	Reserved For Network Synchronization Use
• G812T	G812T Standard
• STU_NCS	Synchronized, Traceability Unknown
• G812TL	G812TL Standard
• SETS	Synchronous Equipment Timing Source
<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

13.14 ED-BULKROLL-<STM_TYPE>

The Edit Bulkroll for STM4, STM64, STM1, and STM16 command edits information about the rolling of traffic from one endpoint to another without interrupting service. This uses the FORCE option to force a valid signal. The only parameters that can be edited are RMODE and FORCE. The time slots cannot be edited. Use ED-ROLL-<MOD_PATH> for single path level rolling. See [Table 29-1 on page 29-1](#) for supported modifiers by platform.

Usage Guidelines None

Category Bridge and Roll

Security Provisioning

Input Format ED-BULKROLL-<STM_TYPE>:[<TID>]:<FROM>:<CTAG>:::
[RFROMSTART=<RFROMSTART>],[RTOSTART=<RTOSTART>],
[RFROMEND=<RFROMEND>],[CMDMDE=<CMDMDE>];

Input Example ED-BULKROLL-STM16:CISCO:FAC-1-1:1:::RFROMSTART=VC3-1-1-1,
RTOSTART=VC3-1-1-1,RFROMEND=VC3-1-1-1,CMDMDE=FRCD;

Table 13-11 ED-ROLL-<MOD_PATH> Command - Parameter Support

Input Parameters	Description
<FROM>	One of the end points. Access identifier from the “27.15 FACILITY” section on page 27-23 for line level rolling and bulk rolling. Must not be null.
<RFROMSTART>	(Optional) The starting time slot in the source roll port. For bulk rolling only. The AID is from the “27.11 CrossConnectId1” section on page 27-16 (VC or VC11).
<RFROMEND>	(Optional) The ending time slot in the source roll port. For bulk rolling only. The AID is from the “27.11 CrossConnectId1” section on page 27-16 (VC or VC11).
<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.

13.15 ED-BULKROLL-<OCN_TYPE>

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 29-1 on page 29-1](#) 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 “27.15 FACILITY” section on page 27-23 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 “27.11 CrossConnectId1” section on page 27-16 (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 “27.11 CrossConnectId1” section on page 27-16 (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.

13.16 ED-BWP-ETH

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**Table 13-12 ED-BWP-ETH Command - Parameter Support**

Input Parameters	Description
<AID>	This AID is used to access BWP.
• BWP-ALL	All aid for BWP.
• BWP-{1-10000}	Single AID for BWP. The valid identifiers ranges from 1 to 10000.
<NAME>	The BWP name. BWP name is a String.
<CIR>	Ingress committed information rate. This is a value between 0.0 and 100.0. Default value is 100.0.
<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
<PBS>	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

Table 13-12 ED-BWP-ETH Command - Parameter Support

Input Parameters	Description
• 4M	4 Mbit bucket size
• 8M	8 Mbit bucket size
• 16M	16 Mbit bucket size
<PIR>	Peak information rate. This is a value between 0.0 and 100.0. Default value is 100.0.
<CFMSTATE>	Link Integrity status
• Y	Enabled
• N	Disabled

13.17 ED-CFM

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 13-13 ED-CFM Command - Parameter Support

Input Parameters	Description
<AID>	Ethernet AIDs are used to access L2 Ethernet ports. Access identifier from the “27.14 ETH” section on page 27-23 .
<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.

13.18 ED-CHGRP

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-12-5-1&ETH-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;
```

Table 13-14 ED-CHGRP Command - Parameter Support

Input Parameters	Description
<AID>	Access identifier from the “27.8 CHGRP” section on page 27-14.
<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.

Table 13-14 ED-CHGRP Command - Parameter Support

Input Parameters	Description
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
40_GBPS	40 Gigabit per second
AUTO_FDX	Enable auto negotiation with full duplex.
<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
AUTO	Auto
<CIR>	Ingress committed information rate. The value ranges from 0.0 to 100.0. The default value is 100.0.
<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

Table 13-14 ED-CHGRP Command - Parameter Support

Input Parameters	Description
• 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.

13.19 ED-CMD-SECU

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;

Table 13-15 ED-CMD-SECU Command - Parameter Support

Input Parameters	Description
<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 could include all commands. Only INIT-REG will be supported. AID is a string. It must not be null.
<CAP>	Command access privilege. It 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.
• ROOT_USER	Root user.
• SEC_SUPER	Security super user.
• SEC_USER	Security user.

13.20 ED-COS-ETH

The Edit Cost of Service Ethernet (ED-COS-ETH) command edits the egress parameter of a CoS 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>:::[QOSENABLED=<QOSENABLED>],[BW0=<BW0>],[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::;

Table 13-16 ED-COS-ETH Command - Parameter Support

Input Parameters	Description
<AID>	Ethernet AIDs are used to access L2 Ethernet ports. Access identifier from the “27.15 FACILITY” section on page 27-23 .
<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.

13.21 ED-CRS-<PATH>

The Edit Cross-Connection for VC3, VC44C, VC38C, VC464C, VC48C, VC4, VC416C, VC42C, VC43C, VC11, or VC12 (ED-CRS-<PATH>) command edits a cross-connect. See [Table 29-1 on page 29-1](#) for supported modifiers by platform.

Usage Guidelines

- 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, SNCP_DROP, SNCP_DC, and SNCP_EN type of cross-connects (one-way only).
- Traditional cross-connections cannot be upgraded to DRI cross-connections using the ED_CRS command.
- CKTID is a string of ASCII characters. The maximum length of CKTID is 48. If the CKTID is EMPTY or NULL, this field will not appear.
- 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.
- You cannot add or drop onto unidirectional connections on MS-SPRing 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-VC4::VC4-1-1-1,VC4-2-1-1:1::ADD=VC4-13-1-1,REMOVE=VC4-2-1-1,CKTID=CKTID
CMDMDE=FRCD:UNLOCKED,AUTOMATICINSERVICE;

Table 13-17 ED-CRS-<PATH> Command- Parameter Support

Input Parameters	Description
<SRC>	Source AID from the “ 27.11 CrossConnectId1 ” section on page 27-16.
<DST>	Destination AID from the “ 27.11 CrossConnectId1 ” section on page 27-16.
<CCT>	(Optional) Type of connection. Used for specifying one or two-way connections. The parameter type is CCT, which is the type of cross-connect to be created.
• 1WAY	A unidirectional connection from a source tributary to a destination tributary
• 1WAYDC	SNCP multicast drop (one-way continue)
• 1WAYEN	SNCP multicast end node (one-way continue)

Table 13-17 ED-CRS-<PATH> Command- Parameter Support

Input Parameters	Description
1WAYMON	A bidirectional connection between the two tributaries Note 1WAYMON is not supported with TL1. However, it is still supported from Cisco Transport Controller (CTC). Using CTC, you can create 1WAYMON cross-connects and can be retrieved through 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 SNCP traditional and integrated DRIs
2WAYPCA	A bidirectional connection between the two tributaries on the extra protection path/fiber
DIAG	Diagnostics cross-connect. Supports BERT (MS-SPRing PCA diagnostics cross-connect).
<ADD>	(Optional) AID from the “ 27.2 AidUnionId ” section on page 27-7.
<REMOVE>	(Optional) AID from the “ 27.2 AidUnionId ” section on page 27-7.
<CKTID>	(Optional) Circuit identification that contains the common language Circuit ID or other alias of the circuit being provisioned. Cannot contain blank spaces. CKTID is a string of ASCII characters. The maximum length of CKTID can be 48.
<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.
<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

13.22 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;

Table 13-18 ED-CRS-ETH Command - Parameter Support

Input Parameters	Description
<SRC>	Ethernet connection identifier AIDs 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.
ETHID[-{1-12}]-{1-5,12-16}-{1-22}-1-{1-20}	Ethernet connection end point aid for GE-XP card.
ETHID[-{1-12}]-{1-6,12-17}-{1-4}-1-{1-20}	Facility AID for 10GE-XP card.
<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.
ETHID[-{1-12}]-{1-5,12-16}-{1-22}-1-{1-20}	Ethernet connection end point aid for GE-XP card.

Table 13-18 ED-CRS-ETH Command - Parameter Support

Input Parameters	Description
ETHID[-{1-12}]{1-6,12-17}-{1-4}-1-{1-20}	Facility aid for 10GE-XP card.
<ADD>	The AID AidUnionId. Default value is - NULL
<REMOVE>	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. Default value is - "NULL"

13.23 ED-DAT

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

Usage Guidelines	None
Category	System
Security	Provisioning
Input Format	ED-DAT:[<TID>]::<CTAG>::[<DATE>],[<TIME>];
Input Example	ED-DAT:CISCO::1234::99-12-21,14-35-15;
Input Parameters	<DATE> (Optional) Date. DATE is a string.
	<TIME> (Optional) Time. TIME is a string.

13.24 ED-DS3I

The Edit DS3I (ED-DS3I) command edits the attributes of a DS3i-N-12 facility.

Usage Guidelines	The following actions will return error messages: Sending this command to edit TACC and any other attribute while the port has a cross-connection or the port/VT has a test access point (TAP or TACC Number) will return the IPNC (Parameters Not Compatible) error message.
------------------	--

- Editing the TACC through the ED-xxx command is only allowed if there are no circuits or cross-connects on the port and the port or VT does not have a test access point (TAP or TACC Number). Otherwise, an error message will be returned.

**Note**

- This command is not allowed if the card is a protect card. TACC creation will be denied on protect ports/cards.
- Automatic application of loopbacks originating from the far end can be inhibited on the ports of a DS3i-N-12 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 obtain the current value.

You cannot directly transition a facility from IS to Locked-Disabled,DSBLD service state. You can transition a facility to Locked-Disabled,DSBLD service state from any state except Locked-Disabled,Maintenance. To transition a facility from Locked-Disabled,Maintenance to Locked-Disabled,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 Locked-Disabled,DSBLD transition) with no consideration for orderly interruption.

Category

Ports

Security

Provisioning

Input Format

```
ED-DS3I:[<TID>]:<AID>:<CTAG>::[FMT=<FMT>],[LINECDE=<LINECDE>],[LBO=<LBO>],
[INHFELPBK=<INHFELPBK>],[TACC=<TACC>],[TAPTYPE=<TAPTYPE>],[SFBER=<SFBER>],
[SDBER=<SDBER>],[SOAK=<SOAK>],[NAME=<NAME>],
[CMDMDE=<CMDMDE>]:[<PST>],[<SST>];
```

Input Example

```
ED-DS3I:CISCO:FAC-1-2:1::FMT=C-BIT,LINECDE=B8ZS,LBO=0-255,INHFELPBK=N,
TACC=8,TAPTYPE=SINGLE,SFBER=1E-4,SDBER=1E-6,SOAK=10,NAME="DS3I PORT",
CMDMDE=NORM:UNLOCKED,AUTOMATICINSERVICE;
```

Table 13-19 ED-DS3I Command - Parameter Support

Input Parameters	Description
<AID>	Access identifier from the “27.15 FACILITY” section on page 27-23.
• C-BIT	C-BIT line type applies to the DS3i-N-12 cards.
• M13	M13 line type applies to the DS3i-N-12 cards.
• UNFRAMED	Line type is unframed.
<LINECODE>	(Optional) Line code. Defaults to B8ZS. The parameter type is DS_LINE_CODE.
• AMI	Line code value is AMI.
• B8ZS	Line code value is B8ZS.
• HDB3	Line code value is HDB3.
<LBO>	(Optional) Line buildout settings. LBO is an integer. Defaults to 0–255. The parameter type is E_LBO, which is the electrical signal line buildout.
• 0–225	Electrical signal line buildout range is 0–225.
• 226–450	Electrical signal line buildout 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. Defaults to Y. The parameter type is ON_OFF (disable or enable an attribute).
• N	Disable an attribute.
• Y	Enable an attribute.
<TACC>	(Optional) 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>	(Optional) TAP type. The parameter type is TAPTYPE, which is the test access point type.
• DUAL	Dual FAD
• SINGLE	Single FAD
<SFBER>	(Optional) 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>	(Optional) 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.
<SOAK>	(Optional) Locked-AutomaticInService to Unlocked transition soak time as measured in 15-minute intervals. Defaults to 32. SOAK is an integer.
<NAME>	(Optional) Maximum length is 32 characters. NAME is a string. Defaults to Null.

Table 13-19 ED-DS3I Command - Parameter Support

Input Parameters	Description
<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.
<PST>	(Optional) Primary state. Defaults to Unlocked. 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. Defaults to AutomaticInService. 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	Not assigned
• NotInstalled	Unequipped

13.25 ED-DSCP-<MOD2>

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 13-20 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 “27.14 ETH” section on page 27-23 .
Channel Group	Access identifier from the “27.8 CHGRP” section on page 27-14 .
<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.

13.26 ED-E1

The Edit E1(ED-E1) command edits the attributes of an E1 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.

Sending this command to edit TACC and any other attribute while the port has a cross-connect or the port/VT has a test access point (TAP or TACC Number), will return the IPNC (Parameters Not Compatible) error message.

**Note**

TACC creation will be denied on the protect ports/cards.

You cannot directly transition a facility from IS to Locked-Disabled,DSBLD service state. You can transition a facility to Locked-Disabled,DSBLD service state from any state except Locked-Disabled,Maintenance. To transition a facility from Locked-Disabled,Maintenance to Locked-Disabled,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 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 (except for IS to Locked-Disabled,DSBLD transition) with no consideration for orderly interruption.

Category

Ports

Security

Provisioning

Input Format

ED-E1[:<TID>]:<AID>:<CTAG>[:<CLKSRC>=<CLKSRC>],[LINECDE=<LINECDE>],[FMT=<FMT>],[TACC=<TACC>],[TAPTYPE=<TAPTYPE>],[SFBER=<SFBER>],[SDBER=<SDBER>],[SOAK=<SOAK>],[NAME=<NAME>],[CMDMDE=<CMDMDE>],[SYNCSMSG=<SYNCSMSG>],[SENDDUS=<SENDDUS>],[ADMSSM=<ADMSSM>],[SABIT=<SABIT>][:<PST>[:<SST>]];

Input Example

ED-E1:CISCO:FAC-2-1:1::LINECDE=HDB3,FMT=E1-MF,TACC=8,TAPTYPE=SINGLE,SFBER=1E-4,SDBER=1E-6,SOAK=10,NAME="E1 PORT",CMDMDE=NORM,SYNCSMSG=N,SENDDUS=N,RETIME=Y,ADMSSM=STU_NCS,SABIT=BYTE-4:UNLOCKED,AUTOMATICINSERVICE;

Table 13-21 ED-E1 Command - Parameter Support

Input Parameters	Description
<AID>	Access identifier from the “27.15 FACILITY” section on page 27-23.
<CLKSRC>	Clock source
• INTERNAL	INTERNAL
• LOOPBACK TIMING	LOOPBACK TIMING
• SYNCE	SYNCE
• ADAPTIVE	ADAPTIVE
<LINECDE>	(Optional) Line code. Defaults to HDB3. The parameter type is LINE_CODE (line code). (Applicable only for NCS platform).
• AMI	Line code value is AMI.
• B3ZS	Binary three-zero substitution.
• B6ZS	Line code value is B6ZS.
• B8ZS	Line code value is B8ZS.
• HDB3	Line code value is HDB3. (Applicable only for NCS platform).

Table 13-21 ED-E1 Command - Parameter Support

Input Parameters	Description
• JBZS	JBZS
• ZBTISI	ZBTISI
<FMT>	(Optional) Digital signal frame format. Defaults to E1-MF. The parameter type is FRAME_FORMAT, which is the frame format for an E1 port.
• AUTOPROV	AUTOPROV
• CBIT	C-BIT line type applies to the DS3XM and DS3E cards.
• D4	Frame format is D4
• DS2 FRAMED	DS2 FRAMED
• E1-CRCMF	NCS E1 CRCMF frame format
• E1-MF	NCS E1 MF frame
• E1-UNFRAMED	NCS E1 unframed format
• E2 FRAMED	E2 FRAMED
• E3-FRAME	E3-FRAME
• E3-PLCP	E3-PLCP
• ESF	Frame format is ESF
• FRAMENA	FRAMENA
• G-751	G-751
• G-832	G-832
• M13	M13 line type applies to the DS3XM and DS3E cards.
• M23	M23
• SYNTRAN	SYNTRAN
• UNFRAMED	Frame format is unframed
<TACC>	(Optional) 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>	(Optional) TAP type. Defaults to DUAL. The parameter type is TAPTYPE, which is the test access point type.
• DUAL	Dual FAD
• SINGLE	Single FAD
• 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.
<SOAK>	(Optional) Locked-AutomaticInService to Unlocked transition soak time as measured in 15-minute intervals. Defaults to 32. SOAK is an integer.
<NAME>	(Optional) NAME is a string. Defaults to NULL. Maximum length is 32 characters.

Table 13-21 ED-E1 Command - Parameter Support

Input Parameters	Description
<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.
<SYNCSMSG>	(Optional) Synchronization status messaging is enabled or disabled on the E1 facility. Defaults to N. The parameter type is ON_OFF (disable or enable an attribute).
• N	Disable an attribute.
• Y	Enable an attribute.
<SENDDUS>	(Optional) The facility will send the DUS value as the synchronization status message for that facility. Defaults to N. The parameter type is ON_OFF (disable or enable an attribute).
• N	Disable an attribute.
• Y	Enable an attribute.
<RETIME>	(Optional) Indicates if retiming is needed. Defaults to N. The parameter type is ON_OFF (disable or enable an attribute).
• N	No
• Y	Yes
<ADMSSM>	(Optional) The administrative synchronization status message. Defaults to STU_NCS. 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
• DUS_NCS	Do Not Use For Synchronization
• G811	G811 Standard
• G812T	G812T Standard
• STU_NCS	Synchronized, Traceability Unknown
• G812TL	G812TL Standard
• SETS	Synchronous Equipment Timing Source
<SABIT>	(Optional) 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.

Table 13-21 ED-E1 Command - Parameter Support

Input Parameters	Description
• BYTE-6	SABIT is BYTE-6.
• BYTE-7	SABIT is BYTE-7.
• BYTE-8	SABIT is BYTE-8.
<PST>	(Optional) Primary state. Defaults to Unlocked. 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. Defaults to AutomaticInService. 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

13.27 ED-E3

The Edit E3 (ED-E3) command edits the attributes of an E3 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.

Sending this command to edit TACC and any other attribute while the port has a cross-connect or the port or VT has a test access point (TAP or TACC Number) will return the IPNC (Parameters Not Compatible) error message.



Note

TACC creation will be denied on the protect ports and cards.

You cannot directly transition a facility from IS to Locked-Disabled,DSBLD service state. You can transition a facility to Locked-Disabled,DSBLD service state from any state except Locked-Disabled,Maintenance. To transition a facility from Locked-Disabled,Maintenance to Locked-Disabled,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 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 (except for IS to Locked-Disabled,DSBLD transition) with no consideration for orderly interruption.

Category

Ports

Security

Provisioning

Input Format

ED-E3[:<TID>]:<AID>:<CTAG>[:<CLKSRC>=<CLKSRC>],[FMT=<FMT>],[LINECDE=<LINECDE>],[TACC=<TACC>],[TAPTYPE=<TAPTYPE>],[SFBER=<SFBER>],[SDBER=<SDBER>],[SOAK=<SOAK>],[NAME=<NAME>],[CMDMDE=<CMDMDE>],[AISONLPBK=<AISONLPBK>][:<PST>[:<SST>]];

Input Example

ED-E3:CISCO:E3-1-2:1:::TACC=8,TAPTYPE=SINGLE,SFBER=1E-4,SDBER=1E-6,SOAK=10,NAME="E3 PORT",CMDMDE=CMDMDE, UNLOCKED,AUTOMATICINSERVICE;

Table 13-22 ED-E3 Command - Parameter Support

Input Parameters	Description
<AID>	Access identifier from the “27.15 FACILITY” section on page 27-23.
• FACILITY	Facility
• TERMINAL	Terminal
• OFF	Off
• ALL	All
<CLKSRC>	Clock Source
• INTERNAL	INTERNAL
• LOOPBACK TIMING	LOOPBACK TIMING
• SYNCE	SYNCE
• ADAPTIVE	ADAPTIVE
<FMT>	(Optional) Digital signal frame format. Defaults to E1-MF. The parameter type is FRAME_FORMAT, which is the frame format for an E1 port.
• AUTOPROV	AUTOPROV
• CBIT	C-BIT line type applies to the DS3XM and DS3E cards.
• DS2 FRAMED	DS2 FRAMED
• E2 FRAMED	E2 FRAMED

Table 13-22 ED-E3 Command - Parameter Support

Input Parameters	Description
• E3-FRAME	E3-FRAME
• E3-PLCP	E3-PLCP
• FRAMENA	FRAMENA
• G-751	G-751
• G-832	G-832
• M13	M13 line type applies to the DS3XM and DS3E cards.
• M23	M23
• SYNTRAN	SYNTRAN
<LINECDE>	(Optional) Line code. Defaults to HDB3. The parameter type is LINE_CODE (line code). (Applicable only for NCS platform).
• B3ZS	Binary three-zero substitution.
• B6ZS	B6ZS
• JBZS	JBZS
• ZBTISI	ZBTISI
<TACC>	(Optional) 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>	(Optional) TAP type. Defaults to DUAL. The parameter type is TAPTYPE, which is the test access point type.
• DUAL	Dual FAD
• SINGLE	Single FAD
<SFBER>	(Optional) 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>	(Optional) 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.
<SOAK>	(Optional) Locked-AutomaticInService to Unlocked transition soak time as measured in 15-minute intervals. Defaults to 32. SOAK is an integer.
<NAME>	(Optional) NAME is a string. Defaults to NULL. Maximum length is 32 characters.

Table 13-22 ED-E3 Command - Parameter Support

Input Parameters	Description
<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.
<PST>	(Optional) Primary state. Defaults to Unlocked. 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. Defaults to AutomaticInService. 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

13.28 ED-E4

The Edit E4 (ED-E4) command edits the attributes of an E4 facility. Currently this is only applicable to STM1E Ports 9 to 12 when they are in E4-FRAMED or E4-UNFRAMED mode.

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-E4:[<TID>]:<AID>:<CTAG>:::[SFBER=<SFBER>],[SDBER=<SDBER>],[SOAK=<SOAK>],[NAME=<NAME>],[CMDMDE=<CMDMDE>]:[<PST>[,<SST>]];

Input Example

ED-E4:CISCO1:FAC-6-1:114:::SFBER=1E-4,SDBER=1E-6,SOAK=10,NAME="E4 PORT",CMDMDE=NORM:UNLOCKED,AUTOMATICINSERVICE;

Table 13-23 ED-E4 Command Parameter Support

Input Parameters	Description
<AID>	Access identifier from the “27.15 FACILITY” section on page 27-23.
<SFBER>	(Optional) 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>	(Optional) 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.
<SOAK>	(Optional) Locked-AutomaticInService to Unlocked transition soak time as measured in 15-minute intervals. Defaults to 32. SOAK is an integer.
<NAME>	(Optional) 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 in which the command would normally be denied.
• NORM	Execute the command normally. Do not override any conditions that could make the command fail.
<PST>	(Optional) Primary state. Defaults to Unlocked. The parameter type is PST, which indicates the current overall service condition of an entity.

Table 13-23 ED-E4 Command Parameter Support

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

13.29 ED-EFM

The Edit Ethernet in the First Mile (ED-EFM) command edits the 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;

Table 13-24 ED-EFM Command - Parameter Support

Input Parameters	Description
<AID>	Access identifier from the “ 27.14 ETH ” section on page 27-23.
<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.
<LFACTION>	Action to be taken for the failure of the link on the port.
• RFIACTION-NONE	No action.
• ERROR-BLOCK	Block the port.
<SESSIONTIMER>	Session expire timer for EFM (in seconds).

13.30 ED-ETH

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.

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



Note

This command is available in Software Release 8.0.1 and later. It is not available in R8.0.0 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=FLOW,EXPDUPLEX=EXPDUPLEX,
SELECTIVEAUTO=SELECTIVEAUTO, EXPSPEED=EXPSPEED,
VLANCOS=VLANCOS,IPTOS=IPTOS,NAME="ETHPORT",CMDMDE=CMDMDE,
SOAK=32,LIENABLE=Y,LITIMER=200:IS,AINS;
```

Table 13-25 ED-ETH Command - Parameter Support

Input Parameters	Description
<AID>	Ethernet AIDs are used to access L2 Ethernet ports. Access identifier from the “ 27.14 ETH ” section on page 27-23.
<FACILITY>	Access identifier from the “ 27.15 FACILITY ” section on page 27-23.
<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	Auto
• AUTO_FDX	Enable auto negotiation with full duplex.
<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.

Table 13-25 ED-ETH Command - Parameter Support

Input Parameters	Description
<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.
<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.
<LITIMER>	(Optional) Link integrity timer duration in the range between 200 ms and 10000 ms in multiples on 100 ms.
<PST>	(Optional) Primary state. Defaults to Unlocked. 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. Defaults to AutomaticInService. 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

13.31 ED-EQPT

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

```
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 will remove Slot 4 from the protection group:

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

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

The following command will remove all the other working cards in the preceding 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.

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 following examples show how to add 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 could 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.

The DS3i-N-12 card’s provisioning is based on the cross-connect type and the DS3i-N-1 card’s location. CARDMODE provisioning is allowed on the DS3i-N-12 and ML-Series cards as follows:

- The DS3i-N-12 card in the lower speed I/O slot with the cross-connect card only allows the DS3i-VC32 CARDMODE. Other cases allow the CARDMODE to be DS3i-VC-4-16.
- There is no card reboot if the CARDMODE is changed on the DS3i-N-12 card.
- The DS3i-N-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.

On 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=<RV
RTV>],[RVTM=<RVTM>],[CARDMODE=<CARDMODE>],[PEERID=<PEERID>],[REGENNAME
=<REGENNAME>],[PEERNAME=<PEERNAME>],[CMDMDE=<CMDMDE>],[RETIME=<RETIM
E>],[SHELFROLE=<SHELFROLE>],[NEWSHELFID=<NEWSHELFID>],[FRPROLE=<FRPROLE>
],[FRPSTATE=<FRPSTATE>],[FRPHOLDOFFTIME=<FRPHOLDOFFTIME>],[ADMINCVLAN=<
ADMINCVLAN>],[ADMINSVLAN=<ADMINSVLAN>],[CFMSTATE=<CFMSTATE>],[CCTIMER
=<CCTIMER>],[PROTOPMODE=<PROTOPMODE>],[SWITCHWITHCRCALARM=<SWITCHWI
THCRCALARM>],[CRCTHR=<CRCTHR>],[CRCPOLLINTRVL=<CRCPOLLINTRVL>],[CRCSOA
KCNT=<CRCSOAKCNT>],[USB=<USB>],[LEDSTATE=<LEDSTATE>],[CLOCKTYPE=<CLOCK
TYPE>][:<PST>[:<SST>]];

Input Example

ED-EQPT::SLOT-15:a::CARDMODE=GEXP-L2ETH,SWITCHWITHCRCALARM=Y;
ED-EQPT::SLOT-15:a::CARDMODE=GEXP-L2ETH,CRCPOLLINTRVL=4;
ED-EQPT::SLOT-3:12::LEDSTATE=Y,CLOCKTYPE=TNC;

Table 13-26 ED-EQPT Command - Parameter Support

Input Parameters	Description
<AID>	Access identifier from the “27.13 EQPT” section on page 27-21 .
<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.

Table 13-26 ED-EQPT Command - Parameter Support

Input Parameters	Description
<CARDMODE>	Defines the card mode.
10GLANWAN-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-ST512	Indicates the DS3XM-12 card in the STS12 back plane rate mode.
DS3XM12-ST548	Indicates the DS3XM-12 card in the STS12 back plane rate mode.
NCS-LINE	Line terminating mode.
NCS-SECTION	Section terminating mode.
NCS-TRANS-AIS	Transparent mode AIS.
NCS-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-FCGEISC	Fiber channel, GIGE, or ISC mode for the Cisco ONS MXP-MR-10DME, MXP-MR-10DMEX card series.
MXPMR10DME-FCGEISC-4GFC	1..4 facilities with fiber channel, GIGE, or ISC traffic mode and facility 5 with 4 Gbps fiber channel traffic mode for the MXP-MR-10DME, MXP-MR-10DMEX card series.
MXPMR10DME-4GFC-FCGEISC	Facility 1 with 4 Gbps fiber channel traffic mode and 5..8 facilities with fiber channel, GIGE, or ISC traffic mode for the MXP-MR-10DME, MXP-MR-10DMEX card series.
MXPMR10DME-4GFC	4 Gbps fiber channel traffic mode for the 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.

Table 13-26 ED-EQPT Command - Parameter Support

Input Parameters	Description
• 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
• CEMR-MANUAL	Manual allocation of back-end channels for CE-MR-10
• 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.

Table 13-26 ED-EQPT Command - Parameter Support

Input Parameters	Description
• 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 “27.13 EQPT” section on page 27-21 .
<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.
• 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.
<SWITCHWITHCRCAL ARM>	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.
<CLOCKTYPE>	The parameter type is CLOCKTYPE. Sets the clock type.
• INTERNAL	Clock type set to INTERNAL.
• TNC	Clock type set to TNC.
<LEDSTATE>	LED state.
<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

Table 13-26 ED-EQPT Command - Parameter Support

Input Parameters	Description
<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

13.32 ED-FAC

The Edit Facility (ED-FAC) command edits the payload (or signal) type of a 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

Ports

Security

Provisioning

Input Format

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

Input Example

ED-FAC:CISCO:FAC-3-9:2222::PAYLOAD=E4-FRAMED,
CMDMDE=NORM:UNLOCKED,AUTOMATICINSERVICE;

Table 13-27 ED-FAC Command - Parameter Support

Input Parameters	Description
<SRC>	Source access identifier from the “ 27.15 FACILITY ” section on page 27-23.
<PAYLOAD>	(Optional) Payload. The parameter type is PAYLOAD, which identifies payload type.
• E4 Framed	E4 Framed facility
• E4 Unframed	E4 Unframed facility
• STM 1E	STM 1E facility
• E3	E3 facility
• T3	T3 facility
• OC3	OC3 facility
• OC12	OC12 facility
• OC48	OC48 facility
<CMDMDE>	Command mode. Defaults to NORM. The parameter type is CMDMDE, which forces the system to execute a given command regardless of any standing conditions. Normal mode is the default behavior for all commands but you can specify FRCD to force the system to override a state in which the command would normally be denied.
• 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.
<PST>	Primary state. Defaults to Unlocked. The parameter type is PST, which indicates the current overall service condition of an entity.
• Unlocked	In service
• Locked	Out of service
<SST>	Secondary state. Defaults to AutomaticInService. The parameter type is SST, which provides additional information pertaining to PST and PSTQ.
• AutomaticInService	Automatic in service
• Disabled	Disabled
• Maintenance	Maintenance mode

13.33 ED-FFP-<MOD2NCSPAYLOAD>

The Edit Facility Protection Group for 10GFC, 10GIGE, 40GIGE, 100GIGE, 1GFC, 1GFICON, 2GFC, 2GFICON, 4GFC, 4GFICON, 8GFC, D1VIDEO, DV6000, DVBASI, ETRCLO, FSTE, GIGE, HDTV, ISC1, OTU3, OTU1, OTU2, OTU4, ISC3STP1G, or ISC3STP2G (ED-FFP-<MOD2NCSPAYLOAD>) command edits the operating parameters for a NCS client facility.

Usage Guidelines

- Y-cable with bidirectional protection is applicable only for ISC3STP1G and ISC3STP2G payloads on the AR-MXP, AR-XP, and AR-XPE cards.
- Y-cable with unidirectional protection is applicable only for payloads other than ISC3STP1G and ISC3STP2G on the AR-MXP, AR-XP, and AR-XPE cards.
- The command does not support 3GVIDEO, SDSDI, HDSDI, and AUTO payloads on AR-MXP, AR-XP, and AR-XPE cards.

Category

NCS

Security

Provisioning

Input Format

ED-FFP-<MOD2NCSPAYLOAD>:[<TID>]:<AID>:<CTAG>:::[PROTID=<PROTID>],
[RVRTV=<RVRTV>],[RVTM=<RVTM>],[PSDIRN=<PSDIRN>][:];

Input Example

ED-FFP-OTU1:CISCO:VFAC-1-1-1:100:::PROTID=DC-METRO,RVRTV=N,RVTM=1.0,PSDIRN=BI
;

Table 13-28 ED-FFP-<MOD2NCSPAYLOAD> Command - Parameter Support

Input Parameters	Description
<AID>	Access identifier from the “27.15 FACILITY” section on page 27-23 . The AR-MXP, AR-XP, and AR-XPE cards use the VFAC AID.
<PROTAID>	(Optional) 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. 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. Only applies to SNCP. The parameter type is ON_OFF (disable or enable an attribute).
• N	Does not revert service to original line after restoration.
• Y	Reverts service to original line after restoration.
<RVTM>	(Optional) Revertive time. RVTM is not allowed to be set while RVRTV is N. Only applies to SNCP. The parameter type is REVERTIVE_TIME (revertive time).
• 0.5 to 9.5	Revertive time is 0.5 to 9.5 minutes.
<PSDIRN>	(Optional) Protection switch operation. Identifies the switching mode. Defaults to UNI. The parameter type is UNI_BI (unidirectional or bidirectional switch operations). Note The MXP_2.5G_10G and TXP_MR_10G cards do not support bidirectional switching.
• BI	Bidirectional protection switching
• UNI	Unidirectional protection switching

13.34 ED-FFP-<STM_TYPE>

The Edit Facility Protection Group for STM1, STM4, STM16, or STM64 (ED-FFP-<STM_TYPE>) command edits the optical facility protection. See [Table 29-1 on page 29-1](#) for supported modifiers by platform.

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.



Note

This command can be used on both protecting and working AIDs.

Category

Protection

Security

Provisioning

Input Format

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

Input Example

ED-FFP-STM1:PETALUMA:FAC-1-1:1:::PROTID=PROT_NAME,RVRTV=Y,RVTM=1.0,PSDIRN=BI;

Table 13-29 ED-FFP-<STM_TYPE> Command - Parameter Support

Input Parameters	Description
<AID>	Access identifier from the “27.15 FACILITY” section on page 27-23.
<PROTAID>	(Optional) The protection group identifier (protection group name). PROTAID can have a maximum length of 32 characters. PROTAID is a string.
• 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.
<PSDIRN>	(Optional) Protection switch operation. Indicates the switch mode. The parameter type is TRANS_MODE, which is the G1000 transponder mode.
• BI	Bidirectional
• NONE	Not in transponder mode
• UNI	Unidirectional
<VRGRDTM>	(Optional) Verification guard timer. Only applicable to optimized 1+1. The parameter type is VERIFICATION_GUARD_TIMER, which is the optimized 1+1 verification guard timer.
• 0.5	500 ms
• 1.0	1 second

Table 13-29 ED-FFP-<STM_TYPE Command - Parameter Support

Input Parameters	Description
<DTGRDTM>	(Optional) Detection guard timer. Only applicable to optimized 1+1. The parameter type is DETECTION_GUARD_TIMER, which is the optimized 1+1 detection guard timer.
• 0.0	0 seconds
• 0.05	50 ms
• 0.1	100 ms
• 0.5	500 ms
• 1.0 to 5.0	1 second to 5 seconds
<RCGRDTM>	(Optional) Recovery guard timer. Only applicable to optimized 1+1. The parameter type is RECOVERY_GUARD_TIMER, which is the optimized 1+1 recovery guard timer.
• 0.0	0 seconds
• 0.05	50 ms
• 0.1	100 ms
• 0.5	500 ms
• 1.0 to 10.0	1 second to 10 seconds

13.35 ED-FFP-<OCN_TYPE>

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 29-1 on page 29-1](#) for supported modifiers by platform.



Note

- This command can be used on both protecting and working AIDs. Optimized 1+1 and related attributes.
- 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 “ 27.15 FACILITY ” section on page 27-23 .
<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

13.36 ED-FFP-OCH

The Edit Facility Protection Group Optical Channel (ED-FFP-OCH) command changes the provisioning for the default protection group on the NCS port of a TXP_MR_2.5G or TXPP_MR_2.5G 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

NCS

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="FIXED PROTECTION",RVRTV=N,
RVTM=1.0,PSDIRN=BI;

Table 13-30 ED-FFP-OCH Command - Parameter Support

Input Parameters	Description
<AID>	Access identifier from the “27.7 CHANNEL” section on page 27-12.
<PROTAID>	(Optional) 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	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.
<PSDIRN>	(Optional) Protection switch operation. The parameter type is TRANS_MODE, which is the G1000 transponder mode.
• BI	Bidirectional
• NONE	Not in transponder mode
• UNI	Unidirectional

13.37 ED-FFP-OTS

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

NCS

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 13-31 Parameter Support

Parameter	Description
<AID>	Access identifier from the “27.7 CHANNEL” section on page 27-12 .
<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	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.
<PSDIRN>	(Optional) Protection switch operation. The parameter type is TRANS_MODE, which is the G1000 transponder mode.
• BI	Bidirectional
• NONE	Not in transponder mode
• UNI	Unidirectional

13.38 ED-FOG

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>],[QUEUEMODE=<QUEUEMODE>],[PBNAME=<PBNAME>];
Input Examples	ED-FOG::FOG-1-36:1:::ATTACH=FAC-2-2-1;

Input Parameters	<table> <tr> <td><AID></td><td>Access identifier from the “27.13 EQPT” section on page 27-21.</td></tr> <tr> <td><ATTACH></td><td>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.</td></tr> <tr> <td><DETACH></td><td>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.</td></tr> <tr> <td><QUEUEMODE> ></td><td>QUEUEMODE</td></tr> <tr> <td>• NOPRI</td><td>NOPRI</td></tr> <tr> <td>• STRICT</td><td>STRICT</td></tr> <tr> <td><PBNAME></td><td>PBNAME</td></tr> </table>	<AID>	Access identifier from the “27.13 EQPT” section on page 27-21 .	<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.	<QUEUEMODE> >	QUEUEMODE	• NOPRI	NOPRI	• STRICT	STRICT	<PBNAME>	PBNAME
<AID>	Access identifier from the “27.13 EQPT” section on page 27-21 .														
<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.														
<QUEUEMODE> >	QUEUEMODE														
• NOPRI	NOPRI														
• STRICT	STRICT														
<PBNAME>	PBNAME														

13.39 ED-FSTE

The Edit Fast Ethernet (ED-FSTE) command edits the front end port information of the Fast Ethernet (10/100 Mbps) 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. SELECTIVEAUTO parameter is applicable only when EXPSPEED and EXPDUPLEX is not set to AUTO mode. Squelch can either be enabled or set to transparent on FE.
------------------	--

**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>],[EXPDUPLICATE=<EXPDUPLICATE>],[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>],[
AUTONEG=<AUTONEG>],[MTU=<MTU>],[SQUELCHMODE=<SQUELCH>]:[<PST>[,<SST>]];

Input Example

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

Table 13-32 ED-FSTE Command- Parameter Support

Input Parameter s	Description
<AID>	Access identifier from the “27.15 FACILITY” section on page 27-23. The AR-MXP, AR-XP, and AR-XPE cards use the VFAC Access Identifier.
<FLOW>	(Optional) Flow control. The parameter type is ON_OFF (disable or enable an attribute).
• N	Disable an attribute.
• Y	Enable an attribute.
<EXPDUPLICATE>	(Optional) Ethernet duplex mode. The parameter type is ETHER_DUPLEX, which is the duplex mode.
• AUTO	Auto mode
• FULL	Full mode
• HALF	Half mode
<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
• 40_GBPS	40 Gigabits per second
• AUTO_FDX	Enable auto negotiation with full duplex.
<SELECTIVEAUTO>	Auto-negotiation.
• Y	Enable selective auto-negotiation.

Table 13-32 ED-FSTE Command- Parameter Support

Input Parameter s	Description
• N	Disable selective auto-negotiation.
<VLANCOS>	(Optional) Priority queuing threshold based on VLAN class of service of incoming Ethernet packets. Default value is 1175. VLANCOS is an integer.
<IPTOS>	(Optional) Priority queuing threshold based on IP type of service of incoming Ethernet packets. Default value is 368. IPTOS is an integer.
<NAME>	(Optional) Name. NAME is a string.
<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.
<SUPPRESS>	Pre-service alarm flag for data ports.
• ON	Enable suppress.
• OFF	Disable suppress. Default is Off.
<SOAK>	(Optional) Locked-AutomaticInService to Unlocked 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.
<LITIMER>	(Optional) Link integrity timer duration in the range between 200 ms and 10000 ms in multiples on 100 ms.
<FREQ>	(Optional) The parameter type is OPTICAL_WLEN, which indicates the optical wavelength.
• 1310	Wavelength 1310.
• 1529.16	Wavelength 1529.16
• 1562.23	Wavelength 1562.23
• 1562.64	Wavelength 1562.64
• 1563.05	Wavelength 1563.05
• 1563.45	Wavelength 1563.45
• 1563.86	Wavelength 1563.86
• 1564.27	Wavelength 1564.27
• 1564.68	Wavelength 1564.68
• 1565.09	Wavelength 1565.09

Table 13-32 ED-FSTE Command- Parameter Support

Input Parameter s	Description
• 1565.50	Wavelength 1565.50
• 1565.90	Wavelength 1565.90
• 1566.31	Wavelength 1566.31
• 1566.72	Wavelength 1566.72
<LOSSB>	(Optional) The parameter type is REACH, which indicates the reach values.
• 100GBASE-LR4	100GBASE-LR4
• 100GBASE-SR10	100GBASE-SR10
• 40GBASE-FR	40GBASE-FR
• 40GBASE-LR4	40GBASE-LR4
• 40GBASE-SR4	Reach supported on 40GIGE payload on CFP-LC card.
• 4I1-9D1F	4I1-9D1F
• C4S1-2D1	C4S1-2D1
• FE-BX	FE-BX
• FX	FX
• GE-BX	GE-BX
• GE-EX	GE-EX
• LX-10	LX-10
• TEN-GE-LRM	TEN-GE-LRM
• TEN-GE-ZR	TEN-GE-ZR
• VSR2000-3R2	VSR2000-3R2
• AUTOPROV	Auto provisioning
• CWDM	Coarse wavelength division multiplexing (CWDM)
• CWDM-40KM	CWDM 40 kilometers.
• CX1	Reach CX1
• LR	Reach LR
• LR-2	Reach LR-2
• LX	Reach LX
• P1I1-2D1	Long haul 10G Ethernet with 1310 nm wavelength
• P1L1-1D2	Longhaul 2.5G Ethernet with 1550 nm wavelength
• P1L1-2D2	Long haul 10G Ethernet with 1550 nm wavelength
• P1S1-1D1	Shorthaul 2.5G Ethernet with 1310 nm wavelength
• P1S1-2D1	Short haul 10G Ethernet in 1310 nm wavelength
• SC	Reach SC
• SR	Reach SR
• TEN-GE-ER	10 GE extended range
• TEN-GE-LR	10 GE long range

Table 13-32 ED-FSTE Command- Parameter Support

Input Parameter s	Description
• TEN-GE-SR	10 GE short range
• ULH	Reach ULH
• VSR	Reach VSR
<CIR>	Ingress committed information rate. This is a value between 0.0 and 100.0. Default value is 100.0.
<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	2 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.
<AUTONEG>	Automatic negotiation. Defaults to Y. The parameter type is ON_OFF, which disables or enables an attribute.
<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.
<SQUELCHMODE>	Shuts down the far-end laser in response to certain defects
• NONE	Transparent
• SQUELCH	Squelch is enabled
<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>	Secondary state. The parameter type is SST, which provides additional information pertaining to PST and PSTQ.
• AINS	Automatic in service
• DSBLD	Disabled
• LPBK	Loopback

Table 13-32 ED-FSTE Command- Parameter Support

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

13.40 ED-FTPSERVER

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;

Table 13-33 ED-FTPSERVER- Parameter Support

Input Parameters	Description
<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.

13.41 ED-G1000

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:CISCO: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:UNLOCKED,DSBLD;

Table 13-34 ED-G1000 Command - Parameter Support

Input Parameters	Description
<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.
<LITIMER>	(Optional) Link integrity timer duration in the range between 200 ms and 10000 ms in multiples on 100 ms.
<ENCAP>	Specifies the mapping mode on the port provisioned. Parameter Type is ENCAP.
• CBR	CBR mapping mode.
• GFP	GFP mapping mode.
• GMP	GMP mapping mode is supported only on 8GFC on 10x10G-LC card.
• TRP	Transparent mapping mode.
<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.

Table 13-34 ED-G1000 Command - Parameter Support

Input Parameters	Description
• 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

13.42 ED-GFP

The Edit Generic Framing Protocol (ED-GFP) command edits GFP parameters on FC_MR-4 and CE-1000-4 cards

Usage Guidelines On the FC_MR-4 card, the parameters AUTOTHGFPBUF, GFPBUF, and FILTER can be edited only if distance extension is enabled (set to B2B).

Category Ports

Security Provisioning

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

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

Table 13-35 ED-GFP Command - Parameter Support

Input Parameters	Description
<AID>	Access identifier from the “27.15 FACILITY” section on page 27-23.
<FCS>	(Optional) Payload frame check sequence. The parameter type is FCS (frame check sequence).

Table 13-35 ED-GFP Command - Parameter Support

Input Parameters	Description
• FCS-16	Frame check sequencing using 16 bits.
• FCS-32	Frame check sequencing using 32 bits.
• NONE	No frame check sequence.
<AUTOTHGFPBUF>	(Optional) Autothreshold GFP Buffer. The parameter type is ON_OFF (disable or enable an attribute).
• N	Disable an attribute.
• Y	Enable an attribute.
<GFPBUF>	(Optional) GFP buffer size. GFPBUF is an integer.
<FILTER>	(Optional) Parameter type is GFP_FILTER, which provides the filter feature in GFP.
• INGRESS	Active filter feature on the Ingress port.
• NONE	Turn off filter feature.

13.43 ED-HDLC

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

Usage Guidelines

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

Input Example

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

Table 13-36 ED-HDLC Command - Parameter Support

Input Parameters	Description
<SRC>	Access identifier from the “27.15 FACILITY” section on page 27-23.
<FCS>	Payload frame check sequence. The parameter type is FCS (frame check sequence).

Table 13-36 ED-HDLC Command - Parameter Support

Input Parameters	Description
• 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.

13.44 ED-L2-ETH

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>],[INHMALMACADDR=<INH_MAC
_ADDR>],[BPDU=<BPDU>],[BRIDGESTATE=<BRIDGE_STATE>],[QNQMODE=<QNQMODE>],
[TRNSPSVLAN=<TRNSP_SVLAN>],[NAME=<NAME>],[IGMPROUTER=<IGMPROUTER>],[AI
SACTION=<AISACTION>],[PROTACTION=<PROTACTION>],[CMDMD=<CMDMD>],[IGMPO
NCVLAN=<IGMPONCVLAN>],[IGMPCVLAN=<IGMPCVLAN>],[DLF=<DLF>],[DLFTHRES=<
DLFTHRES>],[MCAST=<MCAST>],[MCASTTHRES=<MCASTTHRES>],[BCAST=<BCAST>],[B
CASTTHRES=<BCASTTHRES>],[CLRCRCALM=<CLRCRCALM>][:];
```

Input Example

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

Table 13-37 ED-L2-ETH Command - Parameter Support

Input Parameters	Description
<AID>	Ethernet AIDs are used to access L2 Ethernet ports. Access identifier from the “27.14 ETH” section on page 27-23 .
<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
• 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)
<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

Table 13-37 ED-L2-ETH Command - Parameter Support

Input Parameters	Description
• 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 TRNPSVLAN parameter are allowed.
<TRNPSVLAN>	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.
<IGMPROUTER>	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.
• PROT-SQUELCH	The port is squelched.
• PROT-NONE	Ethernet traffic is blocked.
<IGMPCVLAN>	Indicates the customer VLAN value for IGMP on CVLAN.
<IGMPONCVLAN>	Indicates IGMP on customer VLAN.
<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.
<CLRCRCALM>	Clears the DATA-CRC alarm.

13.45 ED-LM-EFM

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;

Table 13-38 ED-EFM Command - Parameter Support

Input Parameters	Description
<AID>	Access identifier from the “27.14 ETH” section on page 27-23 .
<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.

13.46 ED-LMP

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

Usage Guidelines

This command is only available on platforms which 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;

Table 13-39 ED-LMP Command - Parameter Support

Input Parameters	Description
<ENABLED>	LMP Protocol Status.
• Y	The protocol is enabled.
• N	The protocol is disabled.
<WDM>	Determines if the LMP 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.
• 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.

13.47 ED-LMP-CTRL

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>],
[RE MOTENE=<RE MOTENE>],[RE MOT EIP=<RE MOT EIP>],[HELLO=<HELLO>],
[HELLO MIN=<HELLO MIN>],[HELLO MAX=<HELLO MAX>],[DEAD=<DEAD>],
[DEAD MIN=<DEAD MIN>],[DEAD MAX=<DEAD MAX>]:[<PST>][,<SST>];
```

Input Example

```
ED-LMP-CTRL:PETALUMA:CTRL-123:704:::LOCALPORT=FAC-1-1-1,
RE MOTENE=15.15.15.115,RE MOT EIP=126.0.0.1,HELLO=500,HELLO MIN=300,
HELLO MAX=5000,DEAD=12000,DEAD MIN=2000,DEAD MAX=20000:OOS,DSBLD;
```

Table 13-40 ED-LMP-CTRL Command - Parameter Support

Input Parameters	Description
<SRC>	The LMP control channel AID values
CTRL-ALL	Specifies all the control channels.
CTRL-{1-4}	Specifies an individual control channel.
<LOCALPORT>	Local port is the pathway that the LMP control channel will use to send and receive messages.
<RE MOTENE>	Remote IP address used by the far-end LMP control channel.
<RE MOT EIP>	Remote IP address with which the LMP control channel sends and receives messages.
<HELLO>	The time interval in which the LMP protocol sends HELLO messages.
<HELLO MIN>	Minimum hello time the LMP control channels can send out HELLO messages to the remote node.
<HELLO MAX>	The maximum amount of time 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.
<DEAD MIN>	The minimum amount of time that an LMP control channel can wait before listing the control channel status as down.
<DEAD MAX>	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	In service
OOS	Out of service
<SST>	Secondary State. This parameter provides additional information pertaining to PST and PSTQ.
AINS	Automatic in service
DSBLD	Disabled
LPBK	Loopback
MEA	Mismatch of equipment and attributes
MT	Maintenance mode

Table 13-40 ED-LMP-CTRL Command - Parameter Support

Input Parameters	Description
• OOG	Out of group
• SWDL	Software downloading
• UAS	Unassigned
• UEQ	Unequipped

13.48 ED-LMP-TLINK

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;

Table 13-41 ED-LMP-TLINK Command - Parameter Support

Input Parameters	Description
<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.

Table 13-41 ED-LMP-TLINK Command - Parameter Support

Input Parameters	Description
• LAYER2	Layer 2 switching.
• TDM	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. This parameter 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

13.49 ED-LMP-DLINK

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

Usage Guidelines

This command is only applicable on a node that supports the LMP protocol; the node must have the LMP protocol 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;

Table 13-42 ED-LMP-DLINK Command - Parameter Support

Input Parameters	Description
<SRC>	Access identifier from the “27.15 FACILITY” section on page 27-23 .
<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.

13.50 ED-LNK

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.

Category

NCS

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=NORM:UNLOCKED,AUTOMATICINSERVICE;

Table 13-43 ED-LNK Command - Parameter Support

Input Parameters	Description
<FROM>	Identifier at one end of the optical link from the “27.4 BAND” section on page 27-10.
<TO>	Identifier at the other end of the optical link from the “27.4 BAND” section on page 27-10.
<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.
<PST>	(Optional) Primary state. The parameter type is PST, which indicates the current overall service condition of an entity. Note PST is not supported for OCH provisioning.
• 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. Note SST is not supported for OCH provisioning.
• 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

13.51 ED-LNKTERM

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, 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 the above restriction will return an error message.
- If the provisionable patchcord termination does not exist, an error message will be returned.
- 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;

Table 13-44 ED-LNKTERM Command - Parameter Support

Input Parameters	Description
<AID>	Access identifier from the “27.20 LNKTERM” section on page 27-31. Indicates a link (provisionable patchcord) termination on the local node.
<REMOTENODE>	(Optional) 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>	(Optional) 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 existing value.

13.52 ED-MA-CFM

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;

Table 13-45 ED-MA-CFM Command - Parameter Support

Input Parameters	Description
<AID>	Access identifier from the “27.13 EQPT” section on page 27-21 .
<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.

13.53 ED-MCAST

The Edit Multicast attributes (ED-MCAST) 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

Security Provisioning

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

Table 13-46 ED-MCAST Command - Parameter Support

Input Parameters	Description
<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[-{1-50}]-{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.

13.54 ED-MIP-CFM

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 “27.14 ETH” section on page 27-23 .
<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.

13.55 ED-NE-GEN

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 Node Name Too Long (IPNV) 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 value is the mask of local IP address.
- 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 IIOP Port will cause a reset of the TCC2/TCC2P/TCC3.



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>],[DEFRTR=<DEFRTR>],[IPV6ADDR=<IPV6ADDR>],[IPV6PREFLEN=<IPV6PREFLEN>],[IPV6DEFRTR=<IPV6DEFRTR>],[IPV6ENABLE=<IPV6ENABLE>],[IIOPPORT=<IIOPPORT>],[NTP=<NTP>],[SUPPRESSIP=<SUPPRESSIP>],[MODE=<MODE>],[MSPUBVLANID=<MSPUBVLANID>],[MSINTLVLANID=<MSINTLVLANID>],[SERIALPORTECHO=<SERIALPORTECHO>],[OSIROUTINGMODE=<OSIROUTINGMODE>],[OSIL1BUFSIZE=<OSIL1BUFSIZE>],[OSIL2BUFSIZE=<OSIL2BUFSIZE>],[BKUPNTP=<BKUPNTP>],[SYSTEMMODE=<SYSTEMMODE>],[FORCEENABLE=<FORCEENABLE>];

Input Example

ED-NE-GEN:CISCO::123:::NAME=NODENAME,IPADDR=192.168.100.52,IPMASK=255.255.255.0,DEFRTR=192.168.100.1,IPV6ADDR="[3ffe:0501:0008:0000:0260:97ff:efab]",IPV6PREFLEN=112,IPV6DEFRTR="[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,OSIROUTINGMODE=ES,OSIL1BUFSIZE=512,OSIL2BUFSIZE=512,BKUPNTP=10.1.1.2,FORCEENABLE=YES;;

Table 13-47 ED-NE-GEN Command - Parameter Support

Input Parameters	Description
<NAME>	(Optional) Node name. NAME is a string. Defaults to Null.
<IPADDR>	(Optional) Node IP address. IPADDR is a string.
<IPMASK>	(Optional) Node IP mask. IPMASK is a string.
<DEFRTR>	(Optional) 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>	(Optional) 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>	(Optional) Node IIOP port. IIOPPORT is an integer. Defaults to 57790.

Table 13-47 ED-NE-GEN Command - Parameter Support

Input Parameters	Description
<NTP>	(Optional) Node Network Time Protocol (NTP) timing origin address. NTP is a string. Defaults to 0.0.0.0.
<SUPPRESSIP>	(Optional) The parameter type is YES_NO, which signifies whether the user's password is about to expire, the user is logged into the NE, or the user is locked out of the NE.
• NO	No
• YES	Yes
<MODE>	(Optional) Indicates the AID mode to access shelf identifier objects. Defaults to SINGLESHELF. This field is always set to MULTISHELF for NCS nodes with more than one shelf managed. The 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 the with 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. TheNCS 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. TheNCS node performs all IS functions including routing data between ISs and ESs, between networks, and between parts of a network.

Table 13-47 ED-NE-GEN Command - Parameter Support

Input Parameters	Description
IS2	The NCS 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.
<SYSTEMMODE>	Indicates the system mode
SONET	SONET
NCS	NCS
<FORCEENABLE>	(Optional) Indicates whether the command should proceed even if there are Database Out of Sync alarms.
YES	Yes
NO	No

13.56 ED-NE-PATH

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

Usage Guidelines

The default values for optional parameters are NE default values.

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;

Table 13-48 ED-NE-PATH Command - Parameter Support

Input Parameters	Description
<PDIP>	(Optional) Flag used to indicate whether PDI-P should be generated on the outgoing VT structured VCs. The parameter type is ON_OFF (disable or enable an attribute).
• N	Disable an attribute.
• Y	Enable an attribute.
<XCMODE>	(Optional) Cross-connect mode. The parameter type is XCMODE, which is applicable only to a node with cross-connect cards (XC-VXL-10G, XC-VXL-2.5G, or XC-VXC-10G) that support cross-connect mode change.
• MIXED	Both VC11 and VC12 cross-connects can be provisioned on the node.
• VC11	Only VC11 cross-connects can be provisioned on the node.
• VC12	Only VC12 cross-connects can be provisioned on the node.

13.57 ED-NE-SYNCN

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

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.
- Although mixed-mode timing is supported in this release, it is not recommended.
- The NCS mode functionality is:
 - External mode: The node derives its timing from the BITS inputs.
 - Line mode: The node derives its timing from the NCS line(s).
 - Mixed mode: The node derives its timing from the BITS input or NCS lines.



Note

You cannot edit or retrieve the SSMGEN and QRES parameters on the NCS platform.

Category

Synchronization

Security

Provisioning

Input Format

ED-NE-SYNCN:[<TID>]:[<AID>]:<CTAG>:::[TMMD=<TMMD>],[RVRTV=<RVRTV>],[RVTM=<RVTM>]

;

Input Example

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

Table 13-49 ED-NE-SYCN Command - Parameter Support

Input Parameters	Description
<AID>	The node or shelf access identifier from the “ 27.26 SHELF ” section on page 27-33 . If omitted, it addresses the node or first shelf of the node. Must not be null.
<TMMD>	(Optional) Timing mode. Defaults to EXTERNAL. The parameter type is TIMING_MODE, which is the timing mode for the current node.
• EXTERNAL	The node derives its clock from the BITS input.
• LINE	The node derives its clock from the NCS lines.
• MIXED	The node derives its clock from the mixed timing mode.
<SSMGEN>	(Optional) Synchronization status message (SSM) set. Defaults to GEN1. The parameter type is SYNC_GENERATION, which is the generation of the synchronization status message set.
• GEN1	First generation SSM set
• GEN2	Second generation SSM set
<QRES>	(Optional) Quality of the RES. Defaults to DUS. The parameter type is SYNC_QUALITY_LEVEL, which is the network synchronization quality level.
• ABOVE-G811	Better than G811
• ABOVE-STU_NCS	Between STU_NCS and G811 (default setting)
• ABOVE-G812T	Between G812T and STU_NCS
• ABOVE-G812L	Between G812L and G812T
• ABOVE-SETS	Between SETS and G812L
• BELOW-SETS	Below SETS but still usable
• SAME-AS-DUS_NCS	Disable the RES message by equating to DUS_NCS
<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. A null value is equivalent to ALL. The parameter type is ON_OFF (disable or enable an attribute).
• N	Does not revert service to original line after restoration.
• Y	Reverts service to original line after restoration.
<RVTM>	(Optional) 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 only) Identifies the system timing standard used by the node.

Table 13-49 ED-NE-SYNCN Command - Parameter Support

Input Parameters	Description
• SONET	SONET timing standard
• NCS	NCS timing standard

13.58 ED-OCH

The Edit Optical Channel (ED-OCH) command edits the attributes (service parameters) and state of an OCH facility.

Usage Guidelines

Refer to the Provisioning Procedures chapter for specific card provisioning rules.



Note

Primary=Locked and secondary=AutomaticInService status do not apply to Ethernet mode.

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.

- Disable all the ports, before you change the card mode from LAN to WAN mode.
- The SQUELCHMODE parameter is added to OCH interfaces of 100G-LC-C, 10x10G-LC, and CFP-LC cards.
- CDLOW and CDHIGH parameters are interdependant. You must set both the parameters to edit either of them.
- CDLOW is always less than or equal CDHIGH in the range of -70000 to +70000.

Category

NCS

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>],[PEER
ID=<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>],
[SQUELCHMODE=<SQUELCHMODE>],[FECALMSUPPRESS=<FECALMSUPPRESS>],[SYNCMS
G=<SYNCMSG>],[SENDDUS=<SENDDUS>],[ADMSSM=<ADMSSM>],[CDLOW=<CDLOW>],[C
DHIGH=<CDHIGH>],[VOATXPOWER=<VOATXPOWER>],[TXLASERSHUTDN=<TXLASERSH
UTDN>][:<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;
```

```
ED-OCH::CHAN-2-2:1:::CDLOW=-6000,CDHIGH=8000,VOATXPOWER=-9.08,TXLASERSHUTD
N=Y;
```

Table 13-50 ED-OCH Command - Parameter Support

Input Parameters	Description
<AID>	Access identifier from the “27.7 CHANNEL” section on page 27-12.
<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
• 1529.16	Wavelength 1529.16
• 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

Table 13-50 ED-OCH Command - Parameter Support

Input Parameters	Description
• 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

Table 13-50 ED-OCH Command - Parameter Support

Input Parameters	Description
• 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
• 1562.23	Wavelength 1562.23
• 1562.64	Wavelength 1562.64
• 1563.05	Wavelength 1563.05
• 1563.45	Wavelength 1563.45
• 1563.86	Wavelength 1563.86
• 1564.27	Wavelength 1564.27
• 1564.68	Wavelength 1564.68

Table 13-50 ED-OCH Command - Parameter Support

Input Parameters	Description
• 1565.09	Wavelength 1565.09
• 1565.50	Wavelength 1565.50
• 1565.90	Wavelength 1565.90
• 1566.31	Wavelength 1566.31
• 1566.72	Wavelength 1566.72
• 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

Table 13-50 ED-OCH Command - Parameter Support

Input Parameters	Description
• 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

Table 13-50 ED-OCH Command - Parameter Support

Input Parameters	Description
• 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

Table 13-50 ED-OCH Command - Parameter Support

Input Parameters	Description
<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 NCS port. The parameter type is GCCRATE, which is the data rate of the GCC traffic.
• 192K	192 Kbps
• 400K	400 Kbps
• 576K	576 Kbps
• 1200K	1200 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 NCS 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 NCS 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 NCS port, the FEC should be turned to off, there should be no overhead circuit created on the NCS 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-20	20 % Enhanced FEC supported on fixed trunk port of 100G-LC-C card.
• ENH-I4	Enhanced FEC 1.4 is enabled.
• ENH-I7	Enhanced FEC 1.7 is enabled.
• HG-7	High Gain 7% FEC.
• OFF	FEC is disabled.
• STD	Standard FEC is enabled.
<PRE-FEC-PSM>	The parameter type is PROACTIVE_PROT.
• N	Proactive protection is disabled.
• Y	Proactive protection 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.

Table 13-50 ED-OCH Command - Parameter Support

Input Parameters	Description
• Y	Enable an attribute.
• NOOPU2FIXEDS TUFF	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.
• 100GBASE-LR4	100GBASE-LR4
• 100GBASE-SR10	100GBASE-SR10
• 40GBASE-FR	40GBASE-FR
• 40GBASE-LR4	40GBASE-LR4
• 40GBASE-SR4	Reach supported on 40GIGE payload on CFP-LC card.
• 4I1-9D1F	4I1-9D1F
• AUTOPROV	Autoprovisioning
• C4S1-2D1	C4S1-2D1
• CWDM-40KM	CWDM 40 kilometers.
• CX	Reach CX
• CX1	Reach CX1
• DX	Reach DX
• FE-BX	FE-BX
• FX	FX
• GE-BX	GE-BX
• GE-EX	GE-EX
• 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
• LX-10	LX-10
• P1I1-2D1	Long haul 10G Ethernet with 1310 nm wavelength

Table 13-50 ED-OCH Command - Parameter Support

Input Parameters	Description
• P1L1-1D2	Longhaul 2.5G Ethernet with 1550 nm wavelength
• P1L1-2D2	Long haul 10G Ethernet with 1550 nm wavelength
• P1S1-1D1	Shorthaul 2.5G Ethernet with 1310 nm wavelength
• P1S1-2D1	Short haul 10G Ethernet in 1310 nm wavelength
• SC	Reach SC
• 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-LRM	TEN-GE-LRM
• TEN-GE-SR	10 GE short range
• TEN-GE-ZR	TEN-GE-ZR
• ULH	Reach ULH
• VSR	Reach VSR
• VSR2000-3R2	VSR2000-3R2
• 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 NCS 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.
• NCS-LINE	Line terminating mode.
• NCS-SECTION	Section terminating mode.

Table 13-50 ED-OCH Command - Parameter Support

Input Parameters	Description
• NCS-TRANS-AIS	Transparent mode AIS.
• NCS-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-2	Trigger threshold is 1E-2.
• 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-2	Trigger threshold is 2E-2.
• 2E-3	Trigger threshold is 2E-3.
• 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-2	Trigger threshold is 3E-2.
• 3E-3	Trigger threshold is 3E-3.
• 3E-4	Trigger threshold is 3E-4.
• 3E-5	Trigger threshold is 3E-5.

Table 13-50 ED-OCH Command - Parameter Support

Input Parameters	Description
• 3E-6	Trigger threshold is 3E-6.
• 3E-7	Trigger threshold is 4E-7.
• 4E-2	Trigger threshold is 4E-2.
• 4E-3	Trigger threshold is 4E-3.
• 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-2	Trigger threshold is 5E-2.
• 5E-3	Trigger threshold is 5E-3.
• 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-2	Trigger threshold is 6E-2.
• 6E-3	Trigger threshold is 6E-3.
• 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-2	Trigger threshold is 7E-2.
• 7E-3	Trigger threshold is 7E-3.
• 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-2	Trigger threshold is 8E-2.
• 8E-3	Trigger threshold is 8E-3.
• 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-2	Trigger threshold is 9E-2.
• 9E-3	Trigger threshold is 9E-3.
• 9E-4	Trigger threshold is 9E-4.
• 9E-5	Trigger threshold is 9E-5.

Table 13-50 ED-OCH Command - Parameter Support

Input Parameters	Description
• 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 RVRTTH.
• 1E-3	Revert threshold is 1E-3.
• 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-3	Revert threshold is 2E-3.
• 2E-4	Revert threshold is 2E-4.
• 2E-5	Revert threshold is 2E-5.
• 2E-6	Revert threshold is 2E-6.
• 2E-7	Revert threshold is 2E-7.
• 3E-3	Revert threshold is 3E-3.
• 3E-4	Revert threshold is 3E-4.
• 3E-6	Revert threshold is 3E-6.
• 4E-3	Revert threshold is 4E-4.
• 4E-4	Revert threshold is 4E-4.
• 4E-5	Revert threshold is 4E-5.
• 4E-6	Revert threshold is 4E-6.
• 4E-7	Revert threshold is 4E-7.
• 5E-3	Revert threshold is 5E-3.
• 5E-4	Revert threshold is 5E-4.
• 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-3	Revert threshold is 6E-3.
• 6E-4	Revert threshold is 6E-4.
• 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-3	Revert threshold is 7E-3.
• 7E-4	Revert threshold is 7E-4.

Table 13-50 ED-OCH Command - Parameter Support

Input Parameters	Description
• 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-3	Revert threshold is 8E-3.
• 8E-4	Revert threshold is 8E-4.
• 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-3	Revert threshold is 9E-3.
• 9E-4	Revert threshold is 9E-4.
• 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.
• Y	Yes
• N	No
<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 NCS wavelength value. The default value is USE-TWL1.
<CDLOW>	(Optional) Lower limit of CD working range.
<CDHIGH>	(Optional) Upper limit of CD working range.
<VOATXPOWER>	(Optional) VOA Transmit Power. The parameter type is VOATXPOWER, indicates the VOA transmit power on a fixed trunk.
<TXLASERSHUTDN>	(Optional) Transmit Laser Shut down. The parameter type is TXLASERSHUTDN indicates the transmit laser shut down status as Y or N.
<PST>	(Optional) Primary state. The parameter type is PST, which indicates the current overall service condition of an entity.

Table 13-50 ED-OCH Command - Parameter Support

Input Parameters	Description
• 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

13.59 ED-OCHCC

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

NCS

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:LOCKED,DISABLED;
```


Table 13-51 ED-OCHCC Command - Parameter Support

Input Parameters	Description
<AID>	Access identifier from the “27.15 FACILITY” section on page 27-23.
<CKTID>	(Optional) Circuit identification that contains the common language Circuit ID or other alias of the circuit being provisioned. Cannot contain blank spaces. CKTID is a string of ASCII characters. The maximum length of CKTID can be 48.
<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 might make the command fail.
<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

13.60 ED-OCHNC

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

NCS

Security

Provisioning

Input Format

(For legacy package)

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

(For flex package)

```
ED-CHNC:[<TID>]:<SRC>,<DST>:<CTAG>:::[CKTID=<CKTID>],[CMDMDE=<CMDMDE>],[
WLOPWR=<WLOPWR>],[VOAATTN=<VOAATTN>],[FREQ=<FREQ>],[WIDTH=<WIDTH>],[DS
PWROFS=<DSPWROFS>],[USPWROFS=<USPWROFS>]:[<PST>][,<SST>];
```

Input Example

```
ED-CHNC: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 “27.7 CHANNEL” section on page 27-12. In two-way wavelength connection sources, both directions need to be indicated.
<DST>	Destination access identifier from the “27.19 LINEWL” section on page 27-29. In two-way wavelength connection sources, both directions need to be indicated.
<CKTID>	(Optional) Circuit identification that contains the common language Circuit ID or other alias of the circuit being provisioned. Cannot contain blank spaces. CKTID is a string of ASCII characters. The maximum length of CKTID can be 48.
<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 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.
<FREQ>	Optical wavelength
<WIDTH>	Width
<DSPWROFS>	Down stream power offset.
<USPWROFS>	Up stream power offset.
<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

13.61 ED-OMS

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

NCS

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 “27.4 BAND” section on page 27-10 .
<EXPBAND>	(Optional) The expected value of 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 has not yet been configured or retrieved from unit.
<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.
<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. NAME is a string.
<SOAK>	(Optional) Locked-AutomaticInService to Unlocked transition soak time as measured in 15-minute intervals. Defaults to 32. 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.
• 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.

<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

13.62 ED-OPMODE

The Edit Operating Mode (ED-OPMODE) command adds or deletes the client ports from MXP-MR and MXPP-MR modes on the AR_MXP or AR_XP card, and adds or deletes a client-peer pair from the CFP-TXP mode on the CFP-LC card.

Usage Guidelines

- CLIENTPORTS, PEERSLOTS, ACTION, and OPMODE are the mandatory parameters for the ED-OPMODE command on the CFP-LC card.
- ED-OPMODE command can be executed only on the CFP-LC card, which is part of the CFP-TXP mode.
- ED-OPMODE command adds or deletes a client-peer pair from the CFP-TXP mode.
- On an existing client1-peer1 pair mode, if a client2-peer2 pair is added using the ED-OPMODE command, either client1-peer1 or client2-peer2 can be deleted using the ED-OPMODE command. However, the same does not work for client1-peer2 or client2-peer1 pair.
- ACTION, CLIENTPORTS, and TRUNKPORT are mandatory parameters for the AR-MXP, AR-XP, and AR-XPE cards.
- OPMODE, CLIENTPORTS, PEERSLOTS, and ACTION are mandatory parameters for the 100G-LC-C, 10x10G-LC, and CFP-LC cards.
- The TRUNKPORT parameter is not used in the ED-OPMODE command on the CFP-LC card.

Category

NCS

Security

Provisioning

Input Format

ED-OPMODE:[<TID>]:<AID>:<CTAG>:::[TRUNKPORT=<TRUNKPORT>],CLIENTPORTS=<CLIENTPORTS>,[PEERSLOTS=<PEERSLOTS>],[ACTION=<ACTION>],[OPMODE=<OPMODE>];

Input Example

ED-OPMODE::SLOT-1-3:21:::OPMODE=CFP-TXP,CLIENTPORTS=2,PEERSLOTS=SLOT-1-2,ACTION=ADD.

Input Parameters

<AID>	SLOT Access Identifier
<OPMODE>	Existing operating mode which is being edited.
• CFP-TXP	Transponder mode between one CFP-LC and one or two 100G-LC-C cards.
• MXPP-MR-S	Operating mode on AR-MXP, AR-XP, or AR-XPE card.
• MXP-MR-S	Operating mode on AR-MXP, AR-XP, or AR-XPE card.
• MXP-2x40G	Operating mode on AR-MXP, AR-XP, or AR-XPE card.
<ACTION>	The ADD or DELETE action required while editing the operating mode.
• ADD	Add client ports to the existing MXP-MR mode or add client-peer pair on 100G-LC-C, 10x10G-LC, and CFP-LC cards.
• DELETE	Delete client ports from the existing MXP-MR mode or Delete client-peer pair on 100G-LC-C, 10x10G-LC, and CFP-LC cards.
• LOW-LATENCY	Low latency opmode is supported only on 10x10G-LC card.
<TRUNKPORT>	The trunk port number in MXP-MR mode on which the edit operation is being performed
<CLIENTPORTS>	The client port numbers that are being added or deleted to the operating mode.
<PEERSLOTS>	The slot number of the peer card (100G-LC-C) of the CFP-LC card, which is part of the CFP-TXP and CFP-MXP modes, specified by the SLOT<SLOTNO>.

13.63 ED-OTS

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

NCS

Security

Provisioning

Input Format

ED-OTS[:<TID>]:<AID>:<CTAG>[:VOAATTN=<VOAATTN>],[VOAPWR=<VOAPWR>],[OFFSE
T=<OFFSET>],[CALTILT=<CALTILT>],[OSRI=<OSRI>],[NAME=<NAME>],[SOAK=<SOAK>],[<
FG>],[<CG>],[CMDMDE=<CMDMDE>],[SWSTATE=<SWSTATE>][:<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="OTSPORT",SOAK=8,CMDMDE=NORM,SWSTATE=AUTO:UNL
OCKED,AUTOMATICINSERVICE;

Input Parameters.

<AID>	Access identifier from the “27.18 LINE” section on page 27-26 .
<RDIRN>	(Optional) 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>	(Optional) The value of calibrated attenuation for the VOA expressed in dBm. The range is 0.0 to +30.0. VOAATTN is a float.
<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.
<OFFSET>	(Optional) 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) 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.
<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
<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.
<SWSTATE>	Software switch state.
• AUTO	Auto
• LOGO	Logo
<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

13.64 ED-OTU

The Edit Optical Transport Unit Level 1/2/3 command edits the attributes (service parameters) and state of an OTU1, OTU2, OTU3, and OTU4 facilities respectively. 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

- Squelchmode is applicable for OTU1, OTU2, OTU3, and OTU4 modifiers.
- Squelchmode for OTU1 clients are NONE or ODU-AIS.
- Squelchmode for OTU1/OTU2 trunk in RGN and TXP modes is ODU-AIS.
- Squelchmode for OTU1/OTU2 trunk in non-TXP mode is NONE.
- OVRCLK parameter is supported on OTU2 on SFP+ ports on 10x10G-LC.
- In the CFP-TXP mode, the ED-OTU is applicable for FREQ, LOSSB, SOAK, and SQUELCHMODE parameters on the CFP-LC card on the VFAC AID.
- In the CFP-TXP mode, the ED-OTU is applicable for FEC, OSFBER, and OSDBER parameters on the 100G-LC-C virtual ports on the VCFAC AID.

Category

NCS

Security

Provisioning

Input Format

```
ED-<OTU>[:<TID>]:<AID>:<CTAG>[::OSDBER=<SDBER>],[GCC=<GCC>],[DWRAP=
<DRWAP>],[FEC=<FEC>],[PAYLOADMAP=<PAYLOADMAP>],[PMMODE=<PMMODE>],[FREQ
=<FREQ>],[LOSSB=<LOSSB>],[NAME=<PORTNAME>],[SOAK=<SOAK>],[GCCRATE=<GCCR
ATE>],[SQUELCHMODE=<SQUELCHMODE>],[OTNTRMAP=<OTNTRMAP>],[SYNCSMSG=<SY
NCSMSG>],[SENDDUS=<SENDDUS>],[ADMSSM=<ADMSSM>],[ODUTRANSMODE=<ODUTRA
NSMODE>],[PORTMODE=<PORTMODE>],[CMDMDE=<CMDMDE>],[PPR=<PPR>],[TRIGTH=<
TRIGTH>],[RVRTTH=<RVRTTH>],[TRIGWINDOW=<TRIGWINDOW>],[RVRTWINDOW=<RVR
TWINDOW>],[OVRCLK=<OVRCLK>],[EGRESSFRR=<EGRESSFRR>][:<PST>[:<SST>]];
```

Input Example

```
ED-OTU1::VFAC-3-5-1:1::GCC=Y,GCCRATE=400K,SENDDUS=N;
```

ED-OTU2::VFAC-6-9-1:1::PPR=Y,TRIGTH=6E-4,TRIGWINDOW=1000,RVRTTH=1E-5,RVRTWINDOW=2000,EGRESSFRR=Y;

Input Parameters

AID>	The AR-MXP, AR-XP, and AR-XPE cards use the VFAC Access Identifier. OTU2 uses VFAC and VLINE AID on 10x10G-LC card. OTU3 and OTU4 use VFAC on CFP-LC cards.
<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 NCS 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 NCS 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 NCS port, the FEC should be turned off, there should be no overhead circuit created on the NCS 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-I4	Enhanced FEC 1.4 is enabled
• ENH-I7	Enhanced FEC 1.7 is enabled
• HG-20	20% High Gain FEC.
• HG-7	High Gain 7% FEC.
• OFF	FEC is disabled.
• STD	Standard FEC is enabled.

<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 NCS port. The parameter type is GCCRATE, which is the data rate of the GCC traffic.
• 192K	192 Kbps
• 400K	400 Kbps (only on M2 and M6 chassis)
• 1200K	1200 Kbps
< 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
<FREQ>	The parameter type is OPTICAL_WLEN (optical wavelength).
• 850 nm	Wavelength 850 nm
• 1310 nm	Wavelength 1310 nm
• 1550 nm	Wavelength 1550 nm
• 1470 nm	Wavelength 1470 nm
• 1490 nm	Wavelength 1490 nm
• 1510 nm	Wavelength 1510 nm
• 1530 nm	Wavelength 1530 nm
• 1570 nm	Wavelength 1570 nm
• 1590 nm	Wavelength 1590 nm
• 1610 nm	Wavelength 1610 nm
• 1528.77 nm	Wavelength 1528.77 nm
• 1529.16	Wavelength 1529.16
• 1529.55 nm	Wavelength 1529.55 nm
• 1529.94 nm	Wavelength 1529.94 nm
• 1530.33 nm	Wavelength 1530.33 nm
• 1530.72 nm	Wavelength 1530.72 nm
• 1531.12 nm	Wavelength 1531.12 nm
• 1531.51 nm	Wavelength 1531.51 nm
• 1531.90 nm	Wavelength 1531.90 nm
• 1532.29 nm	Wavelength 1532.29 nm
• 1532.68 nm	Wavelength 1532.68 nm
• 1533.07 nm	Wavelength 1533.07 nm
• 1533.47 nm	Wavelength 1533.47 nm
• 1533.86 nm	Wavelength 1533.86 nm
• 1534.25 nm	Wavelength 1534.25 nm

• 1534.64 nm	Wavelength 1534.64 nm
• 1535.04 nm	Wavelength 1535.04 nm
• 1535.43 nm	Wavelength 1535.43 nm
• 1535.82 nm	Wavelength 1535.82 nm
• 1536.22 nm	Wavelength 1536.22 nm
• 1536.61 nm	Wavelength 1536.61 nm
• 1537.00 nm	Wavelength 1537.00 nm
• 1537.40 nm	Wavelength 1537.40 nm
• 1537.79 nm	Wavelength 1537.79 nm
• 1538.19 nm	Wavelength 1538.19 nm
• 1538.58 nm	Wavelength 1538.58 nm
• 1538.98 nm	Wavelength 1538.98 nm
• 1539.37 nm	Wavelength 1539.37 nm
• 1539.77 nm	Wavelength 1539.77 nm
• 1540.16 nm	Wavelength 1540.16 nm
• 1540.56 nm	Wavelength 1540.56 nm
• 1540.95 nm	Wavelength 1540.95 nm
• 1541.35 nm	Wavelength 1541.35 nm
• 1541.75 nm	Wavelength 1541.75 nm
• 1542.14 nm	Wavelength 1542.14 nm
• 1542.54 nm	Wavelength 1542.54 nm
• 1542.94 nm	Wavelength 1542.94 nm
• 1543.33 nm	Wavelength 1543.33 nm
• 1543.73 nm	Wavelength 1543.73 nm
• 1544.13 nm	Wavelength 1544.13 nm
• 1544.53 nm	Wavelength 1544.53 nm
• 1544.92 nm	Wavelength 1544.92 nm
• 1545.32 nm	Wavelength 1545.32 nm
• 1545.72 nm	Wavelength 1545.72 nm
• 1546.12 nm	Wavelength 1546.12 nm
• 1546.52 nm	Wavelength 1546.52 nm
• 1546.92 nm	Wavelength 1546.92 nm
• 1547.32 nm	Wavelength 1547.32 nm
• 1547.72 nm	Wavelength 1547.72 nm
• 1548.11 nm	Wavelength 1548.11 nm
• 1548.51 nm	Wavelength 1548.51 nm
• 1548.91 nm	Wavelength 1548.91 nm
• 1549.32 nm	Wavelength 1549.32 nm
• 1549.72 nm	Wavelength 1549.72 nm
• 1550.12 nm	Wavelength 1550.12 nm
• 1550.52 nm	Wavelength 1550.52 nm

• 1550.92 nm	Wavelength 1550.92 nm
• 1551.32 nm	Wavelength 1551.32 nm
• 1551.72 nm	Wavelength 1551.72 nm
• 1552.12 nm	Wavelength 1552.12 nm
• 1552.52 nm	Wavelength 1552.52 nm
• 1552.92 nm	Wavelength 1552.92 nm
• 1553.33 nm	Wavelength 1553.33 nm
• 1553.73 nm	Wavelength 1553.73 nm
• 1554.13 nm	Wavelength 1554.13 nm
• 1554.54 nm	Wavelength 1554.54 nm
• 1554.94 nm	Wavelength 1554.94 nm
• 1555.34 nm	Wavelength 1555.34 nm
• 1555.75 nm	Wavelength 1555.75 nm
• 1556.15 nm	Wavelength 1556.15 nm
• 1556.55 nm	Wavelength 1556.55 nm
• 1556.96 nm	Wavelength 1556.96 nm
• 1557.36 nm	Wavelength 1557.36 nm
• 1557.77 nm	Wavelength 1557.77 nm
• 1558.17 nm	Wavelength 1558.17 nm
• 1558.58 nm	Wavelength 1558.58 nm
• 1558.98 nm	Wavelength 1558.98 nm
• 1559.39 nm	Wavelength 1559.39 nm
• 1559.79 nm	Wavelength 1559.79 nm
• 1560.20 nm	Wavelength 1560.20 nm
• 1560.61 nm	Wavelength 1560.61 nm
• 1561.01 nm	Wavelength 1561.01 nm
• 1561.42 nm	Wavelength 1561.42 nm
• 1561.83 nm	Wavelength 1561.83 nm
• 1562.23	Wavelength 1562.23
• 1562.64	Wavelength 1562.64
• 1563.05	Wavelength 1563.05
• 1563.45	Wavelength 1563.45
• 1563.86	Wavelength 1563.86
• 1564.27	Wavelength 1564.27
• 1564.68	Wavelength 1564.68
• 1565.09	Wavelength 1565.09
• 1565.50	Wavelength 1565.50
• 1565.90	Wavelength 1565.90
• 1566.31	Wavelength 1566.31
• 1566.72	Wavelength 1566.72
• 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.

• 100GBASE-LR4	100GBASE-LR4
• 100GBASE-SR10	100GBASE-SR10
• 40GBASE-FR	40GBASE-FR
• 40GBASE-LR4	40GBASE-LR4
• 40GBASE-SR4	Reach supported on 40GIGE payload on CFP-LC card.
• 4I1-9D1F	4I1-9D1F
• AUTOPROV	Autoprovisioning
• C4S1-2D1	C4S1-2D1
• CX	Reach CX
• CX1	Reach CX1
• DX	Reach DX
• FE-BX	FE-BX
• FX	FX
• GE-BX	GE-BX
• GE-EX	GE-EX
• 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
• LX-10	LX-10
• P1L1-2D1	10G Ethernet with 850 nm wavelength
• P1S1-2D1	Short haul 10G Ethernet in 1310 nm wavelength
• P1L1-2D2	Long haul 10G Ethernet with 1550 nm wavelength
• 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-LRM	TEN-GE-LRM
• TEN-GE-SR	10 GE short range
• TEN-GE-ZR	TEN-GE-ZR

• VSR2000-3R2	VSR2000-3R2
• VX	Reach VX
• ZX	Reach ZX
• P1S1-1D1	Shorthaul 2.5G Ethernet with 1310 nm wavelength
• P1L1-1D2	Longhaul 2.5G Ethernet with 1550 nm wavelength
• CWDM	Coarse Wavelength Division Multiplexing with
• NCS	Dense Wavelength Division Multiplexing with wavelength between 1525–1565 nm
<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.
<OTNTRMAP>	OTN Traffic Mapping
• TRMAP-NONE	No traffic mapping
• CBR10G	Constant Bit Rate 10G
• ODU2E	10.399 Gbit/s
• ODU1MUX	ODU1 Multiplexer
• ODU1	2.498 Gbits/s
<NAME>	(Optional) Port name. NAME is a string. Defaults to NULL. Maximum length is 32 characters.
<SYNCMSG>	Synchronization status messaging is enabled or disabled on the facility.
• N	Disable an attribute.
• Y	Enable an attribute.
<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-2	Trigger threshold is 1E-2.
• 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-2	Trigger threshold is 2E-2.
• 2E-3	Trigger threshold is 2E-3.
• 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-2	Trigger threshold is 3E-2.
• 3E-3	Trigger threshold is 3E-3.
• 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-2	Trigger threshold is 4E-2.
• 4E-3	Trigger threshold is 4E-3.
• 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-2	Trigger threshold is 5E-2.
• 5E-3	Trigger threshold is 5E-3.
• 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-2	Trigger threshold is 6E-2.
• 6E-3	Trigger threshold is 6E-3.
• 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-2	Trigger threshold is 7E-2.
• 7E-3	Trigger threshold is 7E-3.
• 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-2	Trigger threshold is 8E-2.
• 8E-3	Trigger threshold is 8E-3.
• 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-2	Trigger threshold is 9E-2.
• 9E-3	Trigger threshold is 9E-3.
• 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 RVRTTH.
• 1E-3	Revert threshold is 1E-3.
• 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-3	Revert threshold is 2E-3.
• 2E-4	Revert threshold is 2E-4.
• 2E-5	Revert threshold is 2E-5.
• 2E-6	Revert threshold is 2E-6.
• 2E-7	Revert threshold is 2E-7.
• 3E-3	Revert threshold is 3E-3.
• 3E-4	Revert threshold is 3E-4.
• 3E-6	Revert threshold is 3E-6.
• 4E-3	Revert threshold is 4E-4.
• 4E-4	Revert threshold is 4E-4.
• 4E-5	Revert threshold is 4E-5.
• 4E-6	Revert threshold is 4E-6.
• 4E-7	Revert threshold is 4E-7.
• 5E-3	Revert threshold is 5E-3.
• 5E-4	Revert threshold is 5E-4.
• 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-3	Revert threshold is 6E-3.
• 6E-4	Revert threshold is 6E-4.
• 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-3	Revert threshold is 7E-3.
• 7E-4	Revert threshold is 7E-4.
• 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-3	Revert threshold is 8E-3.
• 8E-4	Revert threshold is 8E-4.
• 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-3	Revert threshold is 9E-3.
• 9E-4	Revert threshold is 9E-4.
• 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.
<SENDDUS>	The facility will send the DUS value as the SSM for that facility.
• N	Disable an attribute.
• Y	Enable an attribute.
<ADMSSM>	The administrative synchronization status message. . Defaults to STU. The parameter type is SYNC_CLOCK_REF_QUALITY_LEVEL, which is the clock source quality level.
• DUS	DoNot Use
• 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)
<ODUTRANSMODE>	To configure the "ODUk OH" transparency on the OTU2-XP card.
• 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.
• 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.

<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.
<PORTMODE>	Describes the termination mode of each interface on the card.
• NCS-LINE	Line terminating mode.
• NCS-SECTION	Section terminating mode.
• NCS-TRANS-AIS	Transparent mode AIS.
• NCS-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.
<SQUELCHMODE>	Shuts down the far-end laser in response to certain defects.
• ODU-AIS	ODU AIS
• AIS	Generis AIS
• NONE	Transparent
• SQUELCH	Squelch is enabled
• DISABLE	Squelch is disabled
<OVRCLK>	Indicates whether the optical trunk is over-clocked or not. It can be Y or N. The default is N.
• Y	Yes
• N	No
<PRE-FEC-PSM>	The parameter type is PROACTIVE_PROT.
• N	Proactive protection is disabled.
• Y	Proactive protection is enabled.
<EGRESSFRR>	Egress FRR protection.
• Y	Egress FRR protection is enabled.
• N	Egress FRR protection is disabled.
<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

• 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.
• DSBLD	Disabled
• MT	Maintenance mode
• AINS	Automatically IN Service

13.65 ED-PID

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

Usage Guidelines

- The password must be null.
- Passwords are masked for the following security commands: ACT-USER, ED-PID, ENT-USER-SECU and ED-USER-SECU. Access to a TL1 session by any means will have the password masked. The CTC Request History and Message Log will also show the masked commands. When a password-masked command is reissued by double-clicking the command from CTC Request History, the password will still be masked in the CTC Request History and Message Log. The actual password that was previously issued will be sent to the NE. To use a former command as a template only, single-click the command in CTC Request History. The command will be placed in the Command Request text box, where you can edit the appropriate fields prior to reissuing it.
- The password will not appear in the TL1 log on the NE.
- For the ED-PID command:
ED-PID:[TID]:<UID>:[CTAG]:<OLDPID>,<NEWPID>;
The syntax of OLDPID is not checked. The NEWPID should follow Telcordia standards set by SET-ATTR-SECUDFLT command for minimum password length, maximum password length, and password character rule.
- You must use the ED-USER-SECU command to change the default password (empty) 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:CISCO:UID:123::OLDPWD,NEWPWD;

Table 13-52 ED-PID Command - Parameter Support

Input Parameter	Description
<UID>	User Identifier. Any combination of up to 20 alphanumeric characters. The minimum UID size is 2. UID is a string.
<OLDPID>	The user's old password. Minimum length of the PID depends on the PWDMINLEN, the type of characters to be entered depends on the PWDCHRULE, and maximum length depends on PWDMAXLEN set by SET-ATTR-SECUDFLT command. Passwords are encrypted and appear as asterisks (*). OLDPID is a string.
<NEWPID>	The user's new password. Minimum length of the PID depends on the PWDMINLEN, the type of characters to be entered depends on the PWDCHRULE, and maximum length depends on PWDMAXLEN set by SET-ATTR-SECUDFLT command. Passwords are encrypted and appear as asterisks (*). NEWPID is a string.

13.66 ED-POS

The Edit Packet Over NCS (ED-POS) command edits the back-end port information for the Ethernet card when the back-end port is working in packet-over-NCS (POS) mode.

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. ED-POS cannot set ENCAP and PST/SST.

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:CISCO:VFAC-2-0:123:::ENCAP=HDLC,NAME=NAME,CMDMDE=NORM,
SOAK=32:UNLOCKED,AUTOMATICINSERVICE;
```

Table 13-53 ED-POS Command - Parameter Support

Input Parameters	Description
<AID>	Access identifier from the “ 27.15 FACILITY ” section on page 27-23.
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.
<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.
<ENCAP>	Specifies the mapping mode on the port provisioned. Parameter Type is ENCAP.
CBR	CBR mapping mode.
GFP	GFP mapping mode.
GMP	GMP mapping mode is supported only on 8GFC on 10x10G-LC card.
TRP	Transparent mapping mode.
<PST>	(Optional) Primary state. Defaults to Unlocked. 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. Defaults to AutomaticInService. 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

13.67 ED-PROTOCOL

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), element management system (EMS), TL1, and SNMP.

Usage Guidelines

- If the PROTOCOLAID 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;

Table 13-54 ED-PROTOCOL Command - Parameter Support

Input Parameters	Description
<AID>	The protocol/service to which the command pertains. The parameter type is PROTOCOLAID, which is the AID for 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 communications using the protocol are secure, for example, through SSH.
• UNSECURE	The protocol is enabled but communication is not secure, for example, through Telnet.

13.68 ED-PRBS

(Cisco NCS 2002 and Cisco NCS 2006) The Edit PseudoRandom Binary Sequence (ED-PRBS) is used to edit the PRBS Generator sequence.

- Usage Guidelines
- 100G-LC-C and 100G-CK-C trunk supports the PRBS generation.
 - PRBS can be configured at the port level.
 - PRBS is not dependent on the card operating mode.
 - Enabling or disabling PRBS is possible when the port is in OOS-DSBLD state.
 - After the PRBS is set to ON or OFF, the port states can be moved to other states without any issues.

Category

Ports

Security

Maintenance

Input Format

ED-PRBS:[<TID>]:<aid>:<CTAG>:::[PRBSGENPATTERN=<prbsgenpattern>],[.];

Input Example

ED-PRBS::CHAN-7-2-1:1:::PRBSGENPATTERN=PRBS-31;

Table 13-55 ED-PRBS Command - Parameter Support

Input Parameters	Description
<AID>	PRBSGENPATTERN. The PRBS generator pattern. It can be any of the following: - NONE - PRBS-11 - PRBS-23 - PRBS-31

13.69 ED-QNQ-CHGRP

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 uniport 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;

Table 13-56 ED-QNQ-CHGRP Command - Parameter Support

Parameter	Description
<AID>	Access identifier from the “27.8 CHGRP” section on page 27-14 .
<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)

13.70 ED-QNQ-ETH

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;

Table 13-57 ED-QNQ-ETH Command - Parameter Support

Parameter	Description
<AID>	Ethernet AIDs are used to access the L2 Ethernet ports. Access identifier from the “27.14 ETH” section on page 27-23 .
<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)

13.71 ED-REP

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 “27.14 ETH” section on page 27-23 .
<PREEMPTDELAY>	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.

13.72 ED-ROLL-<MOD_PATH>

The Edit Roll for VC3, VC44C, VC464C, VC48C, VC4, VC416C, VC42C, VC43C, VC11, or VC12 (ED-ROLL-<MOD_PATH>) command forces a rolling operation. Force attempts to force a valid signal to complete the rolling operation.

Usage Guidelines

None

Category

Bridge and Roll

Security

Provisioning

Input Format ED-ROLL-<MOD_PATH>:[<TID>]:<FROM>,<TO>:<CTAG>:::[CMDMDE=<CMDMDE>];

Input Example ED-ROLL-VC4:CISCO:VC4-1-1-1,VC4-2-1-1:1:::CMDMDE=FRCD;

Table 13-58 ED-ROLL-<MOS_PATH> - Parameter Support

Input Parameters	Description
<FROM>	Source access identifier from the “ 27.32 VC ” section on page 27-35. It is one of the termination points (legs) of the existing cross-connection. If the existing cross-connection is one-way, the 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 the RTRV-CRS command, and use the response for FROM and TO parameters.
<TO>	Destination access identifier from the “ 27.32 VC ” section on page 27-35. It is one of the termination points (legs) of the existing cross-connection. If the existing cross-connection is one-way, the 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 the RTRV-CRS command, and use the response for FROM and TO parameters.
<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. Note CMDMDE can only go from NORM to FRCD. (It cannot go from FRCD to NORM.)
• 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.

13.73 ED-SLV-WDMANS

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

Usage Guidelines None

Category NCS

Security Provisioning

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 “27.33 WDMANS” section on page 27-37 .
	<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.

13.74 ED-STCN-REP

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;

Table 13-59 ED-STCN-REP Command - Parameter Support

Input Parameters	Description
<AID>	Access identifier from the “27.15 FACILITY” section on page 27-23 .
<STCNENABLED>	To enable or disable the Segment Topology Notification on ethernet entity for REP.
• Y	Enables STCN on the ethernet port.
• N	Disables STCN on the ethernet port.
<STCNOOPERATION>	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 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.

13.75 ED-STM1E

The Edit STM1E (ED-STM1E) command edits the attributes and the state of the STM1E port 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

Ports

Security

Provisioning

Input Format

```
ED-STM1E:[<TID>]:<SRC>:<CTAG>:::[SYNCSMSG=<SYNCSMSG>],[SENDDUS=<SENDDUS>],
[PJMON=<PJMON>],[SFBER=<SFBER>],[SDBER=<SDBER>],[SOAK=<SOAK>],
[NAME=<NAME>],[CMDMDE=<CMDMDE>]:[<PST>[,<SST>]];
```

Input Example

```
ED-STM1E:CISCO1:FAC-6-1:114:::SYNCSMSG=Y,SENDDUS=N,PJMON=48,SFBER=1E-4,
SDBER=1E-6,SOAK=10,NAME="STM1EPORT",CMDMDE=NORM:UNLOCKED,
AUTOMATICINSERVICE;
```


Input Parameters

<SRC>	Source access identifier from the “27.15 FACILITY” section on page 27-23.
<SYNCMSG>	Indicates if Synchronization messaging is enabled or disabled on the facility. Defaults to N. The parameter type is ON_OFF (disable or enable an attribute).
• N	Disable an attribute.
• Y	Enable an attribute.
<SENDDUS>	The facility sends out a Do not Use (DUS) for Synchronization message. Defaults to N. The parameter type is ON_OFF (disable or enable an attribute).
• N	Disable an attribute.
• Y	Enable an attribute.
<PJMON>	(Optional) Identifies an STM port PJMON. PJMON is an integer. Set a valid VC4 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 VC4 number of the optical port.
<SFBER>	The port 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>	Port signal degrade threshold. Defaults on 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.
<SOAK>	Locked-AutomaticInService to Unlocked transition soak time as measured in 15-minute intervals. Defaults to 32.
<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 in which the command would normally be denied.

• NORM	Execute the command normally. Do not override any conditions that could make the command fail.
<PST>	Primary state. Defaults to Unlocked. The parameter type is PST, which indicates the current overall service condition of an entity.
• Unlocked	In service
• Locked	Out of service
<SST>	Secondary state. Defaults to AutomaticInService. 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

13.76 ED-SYCN

The Edit Synchronization (ED-SYCN) 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 can be specified (such as PRIMARY, SECOND, and THIRD). To view or edit the system timing mode, use the RTRV-NE-SYCN or ED-NE-SYCN commands.

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.



Note

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

Category

Synchronization

Security

Provisioning

Input Format

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

Input Example

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

Table 13-60 **Parameter Support**

Parameter	Description
<AID>	Access identifier from the “ 27.29 SYNC_REF ” section on page 27-34.
<PRI>	(Optional) Primary reference of the synchronization from the “ 27.28 SYN_SRC ” section on page 27-34.
<SEC>	(Optional) Secondary reference of the synchronization from the “ 27.28 SYN_SRC ” section on page 27-34.
<THIRD>	(Optional) Third reference of the synchronization from the “ 27.28 SYN_SRC ” section on page 27-34.

13.77 ED-TRAPTABLE

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

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

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",TRAPPORT=162,TRAPVER=SNMPV1;

Table 13-61 **ED-TRAPTABLE Command - Parameter Support**

Input Parameters	Description
<AID>	Access identifier from the “ 27.17 IPADDR ” section on page 27-26. IP address identifying the trap destination.
<COMMUNITY>	Community name associated to the trap destination. Maximum of 32 characters. COMMUNITY is a string.
<TRAPPORT>	(Optional) UDP port number associated with the trap destination. Default to 162. TRAPPORT is an integer.

Table 13-61 ED-TRAPTABLE Command - Parameter Support

Input Parameters	Description
<TRAPVER>	(Optional) SNMP version number. Defaults to SNMPv1. The parameter type is SNMP_VERSION (SNMP version).
• SNMPV1	SNMP version 1 (default)
• SNMPV2	SNMP version 2

13.78 ED-TRC-OCH

The Edit Trace (ED-TRC-OCH) command edits trace-related optical channel facilities.

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

NCS

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: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 “27.7 CHANNEL” section on page 27-12 .
<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>	The trace level to be managed. TRCLEVEL is a string. Note This command is mandatory when editing the TRC parameters.
• J0	Identifies the NCS J0 section trace level.
• TTI-PM	Identifies the TTI path monitoring point.
• TTI-SM	Identifies the TTI section monitoring point.
<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

13.79 ED-TRC-OTU

The Edit Trace Optical Transport Unit Level 1, Level 2, Level 3, and Level 4 (ED-TRC-OTU1, ED-TRC-OTU2, ED-TRC-OTU3, and ED-TRC-OTU4) command edits trace-related attributes of an OTU1, OTU2, OTU3, OTU4 facility respectively.

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.
- In the CFP-TXP mode, trace is supported on the 100G-LC-C virtual ports (VCFAC) and not on the CFP-LC card.

Category

NCS

Security

Provisioning

Input Format

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

Input Example

ED-TRC-OTU1:CISCO:VFAC-1-6-1:10::EXPTRC="AAA",TRC="AAA",TRCMODE=MAN,TRCLEVEL=TTI-PM,TRCFORMAT=64-BYTE;

Input Parameters	<SRC>	Source access identifier from the “27.15 FACILITY” section on page 27-23 .
	<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>	The trace level to be managed. TRCLEVEL is a string.
		Note This command is mandatory when editing the TRC parameters.
	• J0	Identifies the NCS J0 section trace level.
	• TTI-PM	Identifies the TTI path monitoring point.
	• TTI-SM	Identifies the TTI section monitoring point.
	<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

13.80 ED-T3

The Edit DS3 Facility (ED-T3) command edits the attributes related to a DS3/T3 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-T3[:<TID>]:<AID>:<CTAG>[::<CLKSRC>=<CLKSRC>],[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:T3-1-2:123:::FMT=C-BIT,LINECDE=B3ZS,LBO=0-225,TACC=8,TAPTYPE=SINGLE,SOAK=10,SFBER=1E-4,SDBER=1E-6,NAME="T3PORT",AISONLPBK=ALL,CMDMDE=CMDMDE,AINS;

Table 13-62 Parameter Support

Input Parameters	Description
<AID>	Access identifier from the “27.15 FACILITY” section on page 27-23 .
<CLKSRC>	<CLKSRC>
• INTERNAL	INTERNAL
• LOOPBACK TIMING	LOOPBACK TIMING
• SYNCE	SYNCE
• ADAPTIVE	ADAPTIVE
<FMT>	(Optional) Digital signal frame format. Defaults to E1-MF. The parameter type is FRAME_FORMAT, which is the frame format for an E1 port.
• AUTOPROV	AUTOPROV
• CBIT	C-BIT line type applies to the DS3XM and DS3E cards.
• DS2 FRAMED	DS2 FRAMED
• E2 FRAMED	E2 FRAMED
• E3-FRAME	E3-FRAME
• E3-PLCP	E3-PLCP
• FRAMENA	FRAMENA
• G-751	G-751
• G-832	G-832
• M13	M13 line type applies to the DS3XM and DS3E cards.
• M23	M23
• SYNTRAN	SYNTRAN
• UNFRAMED	Line type is unframed. The old DS3 (L3M) and DS3CR cards can only run in unframed mode.
<LINECDE>	(Optional) Line code. The parameter type is DS_LINE_CODE, which is the DS123 line code.
• B3ZS	Binary three-zero substitution.
• B6ZS	B6ZS
• JBZS	JBZS
• ZBTSI	ZBTSI

Table 13-62 **Parameter Support**

Input Parameters	Description
<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 (disable or enable an attribute).
• N	Disable an attribute.
• Y	Enable an attribute.
<TAP>	(Optional) Defines the STS as a test access port with a selected unique TAP number. The TAP number is within a range of 0, 1 to 999. When TACC is 0 (zero), the TAP is deleted. Default is N.
<TAPTYPE>	(Optional) TAP type. The parameter type is TAPTYPE, which is the test access point type.
• DUAL	Dual FAD
• SINGLE	Single FAD
<SOAK>	(Optional) OOS-AINS to IS transition soak time as measured in 15-minute intervals. SOAK is an integer.
<SOAKLEFT>	(Optional) Time remaining for the transition from OOS-AINS to IS measured in 1 minute intervals. The format is HH-MM where HH ranges from 00 to 48 and MM ranges from 00 to 59. SOAKLEFT is a string. Rules for <SOAKLEFT> are as follows: • When the port is in OOS, OOS_MT, or IS state, the parameter will not appear. • When the port is in OOS_AINS but the countdown has not started due to fault signal, the value will be SOAKLEFT=NOT-STARTED. • When the port is in OOS_AINS state and the countdown has started, the value will be shown in HH-MM format.
<SFBER>	(Optional) The port 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>	(Optional) Port 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>	(Optional) Port name. NAME is a string.
<AISONLPBK>	(Optional) AutomaticInService (AIS) on loopback. The parameter type is AIS_ON_LPBK, which indicates if AIS is sent on a loopback.

Table 13-62 **Parameter Support**

Input Parameters	Description
AIS_ONLPBK_FACILITY	AutomaticInService is sent on facility loopbacks.
AIS_ON_LPBK_ALL	AutomaticInService is sent on all loopbacks.
AIS_ON_LPBK_OFF	AutomaticInService is not sent on loopbacks.
AIS_ON_LPBK_TERMINAL	AutomaticInService is sent on terminal loopbacks.
Y	BERT synchronization status is up.
N	BERT synchronization status is down.
<PST>	(Optional) Primary state. Defaults to Unlocked. 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. Defaults to AutomaticInService. 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

13.81 ED-UNICFG

The Edit User Network Interface Configuration command edits the attributes and service parameters of UNI configuration created.

Usage Guidelines

- With the VALMODE parameter value as NONE, the VALZONE parameter is not applicable.
- RESTTYPE as REVERT is not applicable for UNICFG.

Category

NCS

Security

Provisioning

Input Format

ED-UNICFG:[<TID>]:<SRC>:<CTAG>:::[VALMODE=<OPTVAL>],[VALZONE=<OPRZONE>],[DESCR=<DESCR>],[ADMINSTATE=<ADMINSTATE>],[RESTTYPE=<RESTTYPE>],[CKTPRIORITY=<CKTPRIORITY>],[DSPWROFS=<DSPWROFS>],[USPWROFS=<USPWROFS>];

Input Example

ED-UNICFG::LINE-2-3:1::DESCR="CISCO",ADMINSTATE=DOWN;

Table 13-63 **Parameter Support**

Parameter	Description
<SRC>	Source AID from the “27.1 ALL” section on page 27-1.
<VALMODE>	Identifies the validation mode.
• NONE	No optical validation is performed.
• FULL	The optical validation is performed as indicated in VALZONE parameter.
<VALZONE>	Identifies the validation operate zone.
• UNKNOWN	Not evaluated.
• GREEN	Margin > 3 sigma.
• YELLOW	1 < margin < 3 sigma.
• ORANGE	0 < margin < 1 sigma.
• RED	-3 < margin < 0 sigma.
• OUT	Margin < -3 sigma.
<DESC>	Description parameter. DECSR is a STRING.
<ADMINSTATE>	Identifies the adminstate is UP or DOWN.
• UP	Indicates Adminstate is UP and UNI Services can be activated.
• DOWN	Indicates Adminstate is DOWN and UNI Services cannot be activated.
<RESTTYPE>	Identifies the restoration type on UNI configuration.
• NONE	None restoration type for UNICFG.
• RESTORE	Restore restoration type for UNICFG.
<CKTLABEL>	Circuit label.
<CKTPRIORITY>	Circuit Priority.
<DSPWROFS>	Down stream power offset.
<USPWROFS>	Up stream power offset.

13.82 ED-USER-SECU

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.

- <NEWUID> can be set to a minimum length of 2 characters up to 20 characters long.
- <NEWPID> depends on the minimum password length, maximum password length, and password character rule that is set by SET-ATTR-SECUDFLT command.
- 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 <USERID>.
- When <NEWUID> is specified, the <NEWPID> (and the <UAP>) become mandatory.
- In this release, when <NEWUID> is specified, <NEWPID> (and the <UAP>) become mandatory, but it is possible to change a USERID without changing the password by providing the same password. A user cannot keep his old password if the old password does not meet the new syntax requirements. For example:
 - <USERID> = CISCO2345
 <PASSWORD>=CISCO#234 /*PASSWORD ALREADY MEETS REQUIREMENTS*/
 ED-USER-SECU::CISCO2345:1::CISCO3456,CISCO#234,PROV;
 TCCP 1970-01-02 13:15:35 M 1 COMPLD;
 - <NEWUSERID> = CISCO60
 <USERID> = CISCO40 <PASSWORD>=CISCO40 /*PASSWORD DOES NOT MEET REQUIREMENTS*/
 ED-USER-SECU::CISCO40:1::CISCO60,CISCO40,PROV;
 BRONCOS4 1970-01-02 13:14:24 M 1 DENY IIFM /* INVALID PASSWORD */;
- The ED-USER-SECU command should be used to change the default password (empty) 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;

Table 13-64 ED-USER-SECU Command - Parameter Support

Input Parameters	Description
<UID>	User's identifier. Minimum UID is 6 characters. Maximum UID is 10 characters. UID is a string.
<NEWUID>	(Optional) User's new Identifier. Minimum UID is 2 characters . Maximum UID is 20 characters. NEWUID is a string.
<NEWPID>	(Optional) User's new password. Minimum length depends on PWDMINLEN, maximum length depends on PWDMAXLEN, and password character rule depends on PWDCHRULE set by command SET-ATTR-SECUDFLT.
<UAP>	(Optional) User's access privilege. The parameter type is PRIVILEGE, which is the security level.
• MAINT	Maintenance security level. 60 minutes of idle time.
• PROV	Provision security level. 30 minutes of idle time.
• RTRV	Retrieve security level. Unlimited idle time.
• SUPER	Superuser security level. 15 minutes of idle time.
• ROOT_USER	Root user.
• SEC_SUPER	Security super user.
• SEC_USER	Security user.

13.83 ED-VCG

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 “27.15 FACILITY” section on page 27-23.
	<TXCOUNT>	(Optional) Number of members in the transmit 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>	(Optional) Name of the VCAT group. Maximum length is 64 characters. NAME is a string.

13.84 ED-VLAN

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

13.85 ED-VLAN-ETH

The Edit VLAN Ethernet attributes (ED_VLAN_ETH) command is used to modify the VLAN Profile associated to the L2 Ethernet port - 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 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 be present.

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

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

Table 13-65 ED-VLAN-ETH Command - Parameter Support

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[-{1-50}]-{1-5,12-16}-{1-22}-1	Facility aid for GE-XP card.
ETH[-{1-50}]-{1-6,12-17}-{1-42}-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.

13.86 ED-VLB-REP

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;

Table 13-66 ED-VLB-REP Command - Parameter Support

Input Parameters	Description
<AID>	Access identifier from the “27.15 FACILITY” section on page 27-23 .
<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.

13.87 ED-WDMANS

The Edit Wavelength Division Multiplexing Automatic Node Set Up (ED-WDMANS) command edits the optical node setup application (ANS) attributes.

Usage Guidelines

None

Category

NCS

Security

Provisioning

Input Format

(For legacy package)

```
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>],>],[TOTALPWRMILLIW=<TOTALPWRMILLIW>],[HIGHSLVEXP=<HIGHSLVEXP>],[LOWSLVEXP=<LOWSLVEXP>],>],[TOTALPWRDBM=<TOTALPWRDBM>][:];
```

(For flex package)

```
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>],[TOTALPWRMILLIW=<TOTALPWRMILLIW>],[HIGHSLVEXP=<HIGHSLVEXP>],[LOWSLVEXP=<LOWSLVEXP>],[TOTALPWRDBM=<TOTALPWRDBM>],[ENABLELOGO=<ENABLELOGO>][:];
```

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;
```

```
ED-WDMANS::LINE-1-6-5-TX:5:::TOTALPWRMILLIW=100,TOTALPWRDBM=450.1;
```

Input Parameters

<AID>	The AID is used to access the WDM node or a single port of the NCS node.
• WDMNODE	Indicates the WDM node of an MSTP and accesses the NWTWTYPE and DITHERWDMANS 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
• 1529.16	Wavelength 1529.16
• 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
• 1562.23	Wavelength 1562.23
• 1562.64	Wavelength 1562.64
• 1563.05	Wavelength 1563.05
• 1563.45	Wavelength 1563.45
• 1563.86	Wavelength 1563.86
• 1564.27	Wavelength 1564.27
• 1564.68	Wavelength 1564.68
• 1565.09	Wavelength 1565.09
• 1565.50	Wavelength 1565.50
• 1565.90	Wavelength 1565.90
• 1566.31	Wavelength 1566.31
• 1566.72	Wavelength 1566.72
• 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>	(Optional) The optical amplification control mode. The parameter type is AMPL_MODE, which defines amplifier control mode.
• GAIN	The amplifier always maintain a fixed gain.
• POWER	The amplifier maintains the output power to a fixed value.
<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.
<TOTALPWRMILLIW>	Optical power setting in mW.
<HIGHSLVEXP>	Span loss verification—high value.
<LOWSLVEXP>	Span loss verification—low value.
<TOTALPWRDBM>	Optical power setting in dBm.
<ENABLELOGO>	Enable logo.

13.88 ED-WDMSIDE

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 NCS

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.

