



CHG Commands

This chapter provides CHG (change) commands for the Cisco ONS 15454 SDH.

5.1 CHG-ACCMD-<MOD_TACC>

Change Test Access Mode (DS3I, E1, E3, VC3, VC44C, VC38C, VC464C, VC48C, VC36C, VC4, VC416C, VC42C, VC43C, VC11, VC12)

Usage Guidelines

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

This command changes the test access (TACC) mode for the circuit being tested. This can be a change from monitoring the data to inserting data into the VC. For more information on TACC, refer to the [Cisco ONS SONET TL1 Reference Guide](#).

For this command to be applicable, you must first create the TAP using the ED-<VC_PATH> or ED-VC12 command. Intrusive test access modes are traffic-affecting. If a facility/path is connected to a TAP in an intrusive test access mode, it is forced to go into the Locked-Maintenance state. The forced transition could be traffic-affecting. The present state of the facility/path is stored by the NE and is restored when the TAP connection is brought down. Test access connections are dropped automatically if the TL1 session is terminated or is timed out.

The following actions will return error messages:

- No TAP connection will return a DENY error message.
- If a requested condition already exists a SRCN error message is returned.
- If a requested access configuration is invalid a SRAC error message is returned.
- If a requested TAP does not exist a RTEN error message is returned.

Category

Troubleshooting and Test Access

Security

Maintenance

Input Format

CHG-ACCMD-<MOD_TACC>:[<TID>]:<TAP>: <CTAG>::<MD>;

Input Example

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CHG-ACCMD-VC3:CISCO:8:123::MONE;
```

Input Parameters**Table 5-1** CHG-ACCMD-<MOD_TACC> Input Parameters

| Parameter and Values | Description |
|---|--|
| TAP | The Test Access Path number. TAP number must be an integer with a range of 1 to 999. String Note This command only supports changing the mode for a single TAP number at a time. |
| MD | The test access mode. (SPLTE, SPLTF, LOOPE and LOOPF require an external QRS input signal.) Single FAD Test Access does not support MONEF, SPLTEF & SPLTAB modes Parameter type is TACC_MODE—test access mode |
| <ul style="list-style-type: none"> • LOOPE | Indicates to split both the A and B paths. Connect the line incoming from E direction to the line outgoing in the E direction, and connect this looped configuration to the FAD. The line outgoing in the F direction shall have a QRS connected, and the line incoming from the F direction shall be terminated by the nominal characteristic impedance of the line. Intrusive test access mode |
| <ul style="list-style-type: none"> • LOOPF | Indicates to split both the A and B paths. Connect the line incoming from F direction to the line outgoing in the F direction, and connect this looped configuration to the FAD. The line outgoing in the E direction shall have a QRS connected, and the line incoming from the E direction shall be terminated by the nominal characteristic impedance of the line. Intrusive test access mode |
| <ul style="list-style-type: none"> • MONE | Indicates that a monitor connection is to be provided from the FAD to the A transmission path of the accessed circuit |
| <ul style="list-style-type: none"> • MONEF | Indicates that a monitor connection is to be provided from the FAD1 to a DFAD, or the odd pair of a FAP, to the A transmission path and from FAD2 of the same DFAD, or the even pair of a FAP, to the B transmission path of the accessed circuit. |
| <ul style="list-style-type: none"> • MONF | Indicates that a monitor connection is to be provided from the FAD to the B transmission path of the accessed circuit. |
| <ul style="list-style-type: none"> • SPLTA | Indicates that a connection is to be provided from both the E and F sides of the A transmission path of the circuit under test to the FAD and split the A transmission path. Intrusive test access mode |
| <ul style="list-style-type: none"> • SPLTB | Indicates that a connection is to be provided from both the E and F sides of the B transmission path of the circuit under test to the FAD and split the B transmission path. Intrusive test access mode |
| <ul style="list-style-type: none"> • SPLTE | Indicates to split both the A and B paths and connect the E side of the accessed circuit to the FAD. The line outgoing in the F direction shall have a QRS connected, and the line incoming from the F direction shall have a QRS connected, and the line incoming from the E direction shall be terminated by the nominal characteristic impedance of the line. Intrusive test access mode |

Table 5-1 CHG-ACCMD-<MOD_TACC> Input Parameters (continued)

| Parameter and Values | Description |
|----------------------|--|
| • SPLTEF | Indicates to split both the A and B paths, and connect the E side of the accessed circuit to FAD1 and the F side to FAD2. Intrusive test access mode |
| • SPLTF | Indicates to split both the A and B paths, and connect the F side of the accessed circuit to the FAD. The line outgoing in the E direction shall have a QRS connected, and the line incoming in the E direction shall have a QRS connected, and the line incoming from the E direction shall be terminated by the nominal characteristic impedance of the line. Intrusive test access mode |

5.2 CHG-EQPT

The Change Equipment (CHG-EQPT) command performs an in-service optical card upgrade or downgrade.

Usage Guidelines

- Optical (STM) card upgrades and downgrades are supported with the limitations of the MRC-12 card.
- Provisioning rules for card upgrade:
 - Two upgradable cards provisioned in a 1:1 protection group cannot be upgraded.

Category

Equipment

Security

Maintenance

Input Format

CHG-EQPT:[<TID>]:<SRC>:<CTAG>::<EQPTTYPE>;

Input Example

CHG-EQPT::SLOT-1:1::MRC-12;

Input Parameters

| | |
|------------|---|
| <SRC> | The source access identifier from the “25.1.11 EQPT” section on page 25-16. |
| <EQPTTYPE> | The equipment type to be upgraded. The parameter type is EQUIPMENT_TYPE. |
| • 10DME-C | 10DME-C card |
| • 10DME-L | 10DME-L card |
| • 32DMX | 32 channel demultiplexer |
| • 32DMX-L | 32 channel demultiplexer unit for L-band |
| • 32DMX-O | 32 channel unidirectional optical demultiplexer |
| • 32MUX-O | 32 channel unidirectional optical multiplexer |

| | |
|------------------|---|
| • 32WSS | 32 channel optical wavelength selective switch |
| • 32WSS-L | 32 channel wavelength switch selector unit for L-band |
| • 4MD-xx.x | Optical multiplexer/demultiplexer with 4 channels |
| • AD-1B-xx.x | Optical add/drop multiplexed (OADM) 1 band filter |
| • AD-1C-xx.x | Optical add/drop multiplexed (OADM) 1 channel filter |
| • AD-2C-xx.x | Optical add/drop multiplexed (OADM) 2 channel filter |
| • AD-4B-xx.x | Optical add/drop multiplexed (OADM) 4 band filter |
| • AD-4C-xx.x | Optical add/drop multiplexed (OADM) 4 channel filter |
| • AIC-I | AIC-I card |
| • CE-1000-4 | CE-1000-4 card |
| • CE-100T-8 | Eight port 100T card |
| • DS3i-N-12 | DS3i-N-12 card |
| • E1-42 | E1-42 card |
| • E1-N-14 | E1-N-14 card |
| • E1000-2-G | E1000-2-G |
| • E100T-G | E100T-G card |
| • E3-12 | E3-12 card |
| • FC_MR-4 | FC_MR-4 card |
| • FILLER-CARD | Blank Filler card |
| • G1K-4 | Four port G1000 card |
| • MIC-A/P | MIC-A/P card |
| • MIC-C/T/P | MIC-C/T/P card |
| • ML1000-2 | ML-Series two port gigabit Ethernet card |
| • ML100T-12 | ML-Series 12 port FSTE card |
| • ML100X-8 | Eight port 100T card with optical interface |
| • MMU | Multiring/mesh upgrade unit |
| • MRC-12 | 12 port multirate optical card |
| • MXP_2.5G_10E | 2.5-Gbps-10-Gbps Muxponder-100 GHz-Tunable xx.xx-xx.xx card |
| • MXP_2.5G_10E_L | 2.5-Gbps-10-Gbps Muxponder-100 GHz-Tunable xx.xx-xx.xx card for L-band |
| • MXP_2.5G_10E_C | 2.5-Gbps-10-Gbps Muxponder-100 GHz-Tunable xx.xx-xx.xx card for C-band |
| • MXP_2.5G_10G | 2.5-Gbps-10-Gbps muxponder-100 GHz-tunable xx.xx-xx.xx card |
| • MXP_MR_2.5G | 2.5-Gbps multirate muxponder-100 GHz-tunable 15xx.xx-15yy.yy card |
| • MXPP_2.5G_10G | 2.5-Gbps-10-Gbps muxponder-protected-100 GHz-tunable xx.xx-xx.xx card |
| • MXPP_MR_2.5G | 2.5-Gbps multirate muxponder-protected-100 GHz-tunable 15xx.xx-15yy.yy card |
| • OPT-AMP-L | Optical preamplifier unit for L-Band |
| • OPT-BST | Optical booster amplifier |
| • OPT-BST-L | Optical booster unit for L-Band |
| • OPT-PRE | Optical preamplifier |

| | |
|-----------------|---|
| • OSC-CSM | Optical service channel (OSC) with combiner/separator Module (SCM) |
| • OSCM | Optical service channel module |
| • PPM-1 | Pluggable port module with one SFP port |
| • SHELF | Shelf entity |
| • STM1 | STM1 card |
| • STM1-8 | Eight port STM1 card |
| • STM1E-12 | STM1E-12 |
| • STM4 | STM4 card |
| • STM4-4 | Four port STM4 card |
| • STM16 | STM16 card |
| • STM64 | STM64 card |
| • STM64-XFP | One port STM64 XFP |
| • TCC2 | TCC2 card |
| • TCC2P | TCC2P card |
| • TXP_MR_10E | 10-Gbps multirate transponder-100-GHz-tunable xx.xx-xx.xx card |
| • TXP_MR_10E_C | 10-Gbps multirate transponder-100-GHz-tunable xx.xx-xx.xx card for C-band |
| • TXP_MR_10E-L | 10-Gbps multirate transponder-100-GHz-tunable xx.xx-xx.xx card for L-band |
| • TXP_MR_10G | 10-Gbps multirate transponder-100-GHz-tunable xx.xx-xx.xx card |
| • TXP_MR_2.5G | 2.5-Gbps multirate transponder-100-GHz-tunable xx.xx-xx.xx card |
| • TXPP_MR_2.5G | 2.5-Gbps multirate transponder-protected-100-GHz-tunable xx.xx-xx.xx card |
| • UNKNOWN | Unknown equipment type |
| • UNPROVISIONED | Unprovisioned type |
| • XC-VXC-10G | XC-VXC-10G card |
| • XC-VXL-2.5G | XC-VXL-2.5G card |
| • XC-VXL-10G | XC-VXL-10G card |

