This chapter provides release (RLS) commands for the Cisco ONS 15454 SDH and Cisco ONS 15600 SDH.

Contents

RLS-EXT-CONT

(Cisco ONS 15454 SDH) The Release External Control (RLS-EXT-CONT) command releases a forced contact state and returns the control of the contact to an AUTOMATIC control state.

Usage Guidelines

- In AUTOMATIC control state, the contact can be opened or closed depending on triggers that might or might not be provisioned in the NE. Therefore, issuing a RLS might not produce any contact state change.
- The NE defaults to having no triggers provisioned for external controls, which consequently produces default open contacts. An NE with this default provisioning will always produce an open contact with a RLS-EXT-CONT command.
- The duration is not supported; it defaults to CONTS.
- In an automatic state, the contact could be opened or closed depending on the provisioned trigger. Therefore, issuing an OPR-EXT-CONT command followed by an RLS-EXT-CONT command might not produce any contact state change.
- The RLS-EXT-CONT is not allowed during the MNTRY duration. The command is allowed for the CONTS duration. The length of MNTRY duration is set to be 2 seconds.
- RLS-EXT-CONT cannot change the contact state to Automatic if the existing state is Manual Open.

Category

Environment

Security

Maintenance

Input Format

RLS-EXT-CONT:[<TID>]:<AID>:<CTAG>[::,];

Input Example

RLS-EXT-CONT:CISCO:ENV-OUT-2:123;

Input Parameters

<AID>	Access identifier from the ENV. Identifies the external control being released.

RLS-LPBK-<MOD2>

(Cisco ONS 15454 SDH) The Release Loopback for 10GFC, 10GIGE, 1GFC, 1GFICON, 2GFC, 2GFICON, CLNT, D1VIDEO, DS3I, DV6000, E1, E3, E4, ESCON, ETRCLO, ETH, FSTE, G1000, GFPOS, GIGE, HDTV, ISC1, ISCCOMPAT, ISC3PEER2R, ISC3PEER1G, ISC3PEER2G, STM4, STM64, STM1, STM16, OCH, OMS, OTS, POS, and STM1E (RLS-LPBK-<MOD2>) command releases a signal loopback on an I/O card or a cross-connect. See Table 27-1 for supported modifiers by platform.

Usage Guidelines

- The value CRS for the LPBKTYPE parameter is applicable only for the VC modifier. The FACILITY and TERMINAL values for LPBKTYPE parameter are applicable to the ports.
- The optional [<LPBKTYPE>] field defaults to the current existing loopback type.
- FEAC loopbacks can be released by specifying LINE as the loopback type and FEND as the location.

Category

Troubleshooting and Test Access

Security

Maintenance

Input Format

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

Input Example

RLS-LPBK-STM4:PTREYES:FAC-4-1:203::NEND,,,FACILITY;

Input Parameters

<SRC>	Source access identifier from the <u>ALL</u>. The valid values for AID are FACILITY, and VC.
<LOCATION>	(Optional) The location where the operation is to be carried out. LOCATION defaults to NEND. The parameter type is LOCATION, which is the location where the action is to take place.
• FEND	Action occurs on the far end of the facility.
• NEND	Action occurs on the near end of the facility.
<LPBKTYPE>	(Optional) Type of loopback signal. The parameter type is LPBK_TYPE, which indicates the type of loopback that is to be operated or released.
• CRS	Path level loopback that is established at the cross-connect matrix level. An VC level cross-connect loopback causes an AIS-P to be sent on the outgoing direction of transmission.
• FACILITY	Type of loopback that connects the incoming received signal immediately following the optical-to-electrical conversion (after descrambling) to the associated transmitter in the return direction.
• TERMINAL	A loopback that connects the signal that is about to be transmitted (after scrambling but before the electrical-to-optical conversion) and is connected to the associated, incoming receiver.

RLS-PROTNSW-<MOD2DWDMPAYLOAD>

(Cisco ONS 15454 SDH) The Release Protection Switch for 10GFC, 10GIGE, 1GFC, 1GFICON, 2GFC, 2GFICON, D1VIDEO, DV6000, ETRCLO, GIGE, HDTV, ISC1, ISC3, or PASSTHRU (RLS-PROTNSW-<MOD2DWDMPAYLOAD>) command releases a Y-cable protection switch on client

facilities.

Usage Guidelines

None

Category

DWDM

Security

Maintenance

Input Format

RLS-PROTNSW-<MOD2DWDMPAYLOAD>:[<TID>]:<SRC>:<CTAG>[::];

Input Example

RLS-PROTNSW-HDTV:CISCO:FAC-1-1-1:100;

Input Parameters

<SRC>	Source access identifier from the FACILITY.

RLS-PROTNSW-<PATH>

(Cisco ONS 15454 SDH) The Release Protection Switch for VC3, VC44C, VC464C, VC48C, VC4, VC412C, VC46C, VC416C, VC42C, VC43C, or VC11 (RLS-PROTNSW-<PATH>) command releases an SDH path protection switch request that was established with the OPR-PROTNSW-<PATH> command. This command assumes that only one user-initiated switch is active per AID. See Table 27-1 for supported modifiers by platform

Usage Guidelines

- This command applies to subnetwork connection protection (SNCP) configurations only.
- The VTAID should be working or protect AID only.
- Sending this command on the Drop AID will return a DENY (Invalid AID, should use working/protect AID) message.
- Use the RTRV-COND-ALL or RTRV-ALM-ALL command to retrieve the protection switching state (manual, lockout, forced).

Category

Protection

Security

Maintenance

Input Format

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

Input Example

RLS-PROTNSW-VC3:CISCO:VC4-2-1-1:123;

Input Parameters

<SRC>	Source access identifier from the CrossConnectId.

RLS-PROTNSW-<STM_TYPE>

(Cisco ONS 15454 SDH) The Release Protection Switch (STM1, STM4, STM16, STM64) command releases a protection switch request. See Table 27-1 for supported modifiers by platform.

Usage Guidelines

- The release of a protection switch request is applicable only to the OPR-PROTNSW protection switch commands, the user-initiated switch protection commands.
- Use the RTRV-COND-ALL or RTRV-ALM-ALL command to retrieve the protection switching state (manual, lockout, forced).
- DIRN is an optional parameter. A NULL value defaults to BTH for a MS-SPRing protection, BTH for 1+1 bidirectional protection group, and RCV for 1+1 unidirectional protection group.

  DIRN follows these rules: TRMT will always fail for any kind of protection groups. For two-fiber and four-fiber MS-SPRing protection groups, both the RCV and TRMT directions will fail.

- DIRN is applicable for both 1+1 and MS-SPRing protection groups. OPR-PROTNSW applies to a MS-SPRing span/ring as shown by the following command:

  RLS-PROTNSW-STM16::FAC-5-1:A::BTH;
  This command instructs the NE to release a line protection switch request between a working line and a protection line.

The following actions will return error messages:

- This command is not used for the common control (TCC2, TCC2P, XC-VXL-10G, XC-VXL-2.5G, or XC-VXC-10G) cards. Sending a command on a common control card will return an Input, Invalid Access Identifier (IIAC) error message. To switch common control cards, use the SW-DX-EQPT and ALW-SWDX-EQPT commands.
- Sending this command to non-SDH (STM) cards will return an Input, Invalid Access Identifier (IIAC) error message. To switch a non-SDH card, use the ALW-SWTOPROTN-EQPT, ALS-SWTOWKG-EQPT, INH-SWTOPROTN-EQPT, and INH-SWTOWKG-EQPT commands.
- Sending this command to query on a card that is not in a protection group will return the Status, Not in Valid State (SNVS) error message.
- Sending this command to a working card that is failed or missing will return the Status, Working Unit Failed (SWFA) error message.
- Sending this command to a protect card that is failed or missing will return the Status, Protection Unit Failed (SPFA) error message.
- Sending this command to a card that is not in protection will return the Status, Not in Protection State (SNPR) error message.

- Sending this command to an STM line that is already in clear mode will return an Already in Clear Maintenance State (SAMS) error message.

Category

Protection

Security

Maintenance

Input Format

RLS-PROTNSW-<STM_TYPE>:[<TID>]:<AID>:<CTAG>[::<DIRECTION>];

Input Example

RLS-PROTNSW-STM16:PETALUMA:FAC-6-1:209::BTH;

Input Parameters

<AID>	Access identifier from the <u>FACILITY</u>. Identifies the facility in the NE to which the switch request is directed.
<DIRECTION>	(Optional) Direction. Defaults to RCV. The parameter type is DIRECTION (transmit and receive direction).
• BTH	Both transmit and receive directions
• RCV	Receive direction only
• TRMT	Transmit direction only

RLS-PROTNSW-OCH

(Cisco ONS 15454 SDH) The Release Protection Switch Optical Channel (RLS-PROTNSW-OCH) command releases the protection switch on a TXPP_MR_2.5G card.

Usage Guidelines

None

Category

DWDM

Security

Maintenance

Input Format

RLS-PROTNSW-OCH:[<TID>]:<AID>:<CTAG>;

Input Example

RLS-PROTNSW-OCH:VA454-22:CHAN-2-2:1;

Input Parameters

<AID>	Access identifier from the <u>CHANNEL</u>.

RLS-SYNCNSW

(Cisco ONS 15454 SDH) The Release Synchronization Switch (RLS-SYNCHSW) command releases the previous synchronization reference provided by the OPR-SYNCNSW command.

Usage Guidelines

In a nonrevertive system, the use of the RLS-SYNCNSW command might not be appropriate. All the switching between synchronization references should be initiated with the OPR-SYNCNSW command.

After a switch is released, a minor alarm, Manual Switch to Primary Reference or Secondary (MANSWTOPRI) or Forced Switch to Primary Reference or Secondary (FRDCSWTOPRI), will be cleared.

Category

Synchronization

Security

Maintenance

Input Format

RLS-SYNCNSW:[<TID>]:[<AID>]:<CTAG>;

Input Example

RLS-SYNCNSW:CISCO:SYNC-NE:3;

Input Parameters

<AID>	(Optional) Access identifier from the <u>SYNC_REF</u> Defaults to SYNC-NE.