



INH Commands



Note

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

This chapter provides inhibit (INH) commands for the Cisco ONS 15454, ONS 15327, ONS 15310-CL, ONS 15310-MA, and ONS 15600.

14.1 INH-CONSOLE-PORT

(Cisco ONS 15454, ONS 15310-CL, ONS 15310-MA) The Inhibit Console Port (INH-CONSOLE-PORT) command is used to turn off the console port for the ML-Series cards.

Usage Guidelines None

Category Security

Security Superuser

Input Format INH-CONSOLE-PORT:[<TID>]:<AID>:<CTAG>;

Input Example INH-CONSOLE-PORT:CISCONODE:SLOT-2:123;

Input Parameters <AID> Access identifier from the [“25.14 EQPT”](#) section on page 25-31.

14.2 INH-MSG-ALL

(Cisco ONS 15454, ONS 15327, ONS 15310-CL, ONS 15310-MA, ONS 15600) The Inhibit Message All (INH-MSG-ALL) command inhibits all REPT ALM and REPT EVT autonomous messages from being transmitted. See the ALW-MSG-ALL to resume these autonomous messages. When a TL1 session starts, the REPT ALM and REPT EVT messages are allowed by default.

Usage Guidelines

If this command is used twice in the same session, the SAIN (Already Inhibited) error message is reported.

Category

System

Security

Retrieve

Input Format

INH-MSG-ALL:[<TID>]:[<AID>]:<CTAG>[::,];

Input Example

INH-MSG-ALL:PETALUMA:ALL:550;

Input Parameters

<code><AID></code>	Access identifier from the “25.1 ALL” section on page 25-1 .
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14.3 INH-MSG-DBCHG

(Cisco ONS 15454, ONS 15327, ONS 15310-CL, ONS 15310-MA, ONS 15600) The Inhibit Database Change Message (INH-MSG-DGCHG) command disables REPT DBCHG autonomous message.

Usage Guidelines

None

Category

Log

Security

Retrieve

Input Format

INH-MSG-DBCHG:[<TID>]::<CTAG>[::,];

Input Example

INH-MSG-DBCHG:CISCO::123;

Input Parameters None

14.4 INH-MSG-SECU

(Cisco ONS 15454, ONS 15327, ONS 15310-CL, ONS 15310-MA, ONS 15600) The Inhibit Message Security (INH-MSG-SECU) command inhibits the REPT EVT SECU and REPT ALM SECU autonomous messages.

Usage Guidelines None

Category Security

Security Superuser

Input Format INH-MSG-SECU:[<TID>]::<CTAG>[:,,];

Input Example INH-MSG-SECU:PETALUMA::123;

Input Parameters None

14.5 INH-PMREPT-ALL

(Cisco ONS 15454, ONS 15327, ONS 15310-CL, ONS 15310-MA, ONS 15600) The Inhibit Performance Report All (INH-PMREPT-ALL) command inhibits all scheduled performance monitoring (PM) reporting. Inhibiting PM reporting is session-based, which means the command is only effective to the TL1 session that issues this command. By default, the scheduled PM reporting is inhibited by a TL1 session.

A TL1 session for which PM reports are inhibited will include an INHMSG-PMREPT condition when issuing TL1 command RTRV-COND-ALL.

Usage Guidelines None

Category Performance

Security Retrieve

Input Format INH-PMREPT-ALL:[<TID>]::<CTAG>;

Input Example INH-PMREPT-ALL:NE-NAME::123;

Input Parameters None

14.6 INH-SWDX-EQPT

(Cisco ONS 15454) The Inhibit Switch Duplex Equipment (INH-SWDX-EQPT) command inhibits automatic or manual switching on a system containing duplex equipment. Use the ALW-SWDX command to release the inhibit. This command is not used for SONET line protection switching. For SONET line/path protection switching commands, use the OPR-PROTNSW and RLS-PROTNSW commands. This command is not used for 1:1 and 1:N equipment protection switching. Instead, use the ALW-SWTOPROTN, ALW-SWTOWKG, INH-SWTOPROTN, and INH-SWTOWKG commands.

Usage Guidelines

- This command applies to XCVT, XC10G, XC-VXC-10G equipment units only in this release.
- When sending this command to a TCC2/TCC2P card, an error message will occur because the network element (NE) treats the TCC2/TCC2P as a nonrevertive protection group without user control.

Category Equipment

Security Maintenance

Input Format INH-SWDX-EQPT:[<TID>]:<AID>:<CTAG>[::];

Input Example INH-SWDX-EQPT:CISCO:SLOT-8:1234;

Input Parameters <AID> Access identifier from the “25.14 EQPT” section on page 25-31. XCVT/XC10G equipment AID (Slot 8 or Slot 10).

14.7 INH-SWTOPROTN-EQPT

(Cisco ONS 15454, ONS 15310-MA) The Inhibit Switch to Protection Equipment (INH-SWTOPROTN-EQPT) command inhibits automatic or manual switching of an equipment unit to protection. Use the ALW-SWTOPROTN-EQPT command to release the inhibit.

Usage Guidelines

INH-SWTOPROTN-EQPT is used for electrical cards that could participate in an electrical protection group (for example, DS1, DS3, DS3XM, and EC1 cards). DS1 and DS3 cards have 1:1 and 1:N equipment protection. DS3XM and EC1 cards have only 1:1 equipment protection. When performing a lockout with this command, the traffic will be switched from the unit specified by the AID, unless the working unit being protected has failed or is missing. When performing a lock-on with this command and the working unit specified in the AID is in standby, sending this command will also initiate a traffic switch. When traffic is locked on a working unit or locked out of the protection unit with this command, the protection unit will not carry traffic, even if the working unit is pulled from the system.

Sending this command to a working unit in a 1:N protection group does not prevent a protection switch from another working unit in the same protection group. All the working units must be sent this command to prevent a protection switch. If the command is sent only to a subset of the working units, only those working units will have traffic locked on.

The inhibit state is persistent over TCC2/TCC2P side switches and removal/reboot of all the units in the protection group. The inhibit state can, but does not have to be, persistent over a complete power cycle of the NE.

The unit specified by the AID will raise the condition of INHSWPR when this command is sent.

The following actions will produce errors:

- This command only supports the BTH value of the DIRN parameter. A command with any other value is considered an incorrect use of the command and will return an IDNV (Input, Data Not Valid) error message.
- This command is not used for the common control (TCC2/TCC2P or XCVT/XC10G) cards. A command on a common control card will return an IIAC (Input, Invalid Access Identifier) error message. For common control card switching, use the SW-DX-EQPT and ALW-SWDX-EQPT commands.
- This command is not used for SONET (OC-N) cards. A command on a SONET card will return an IIAC (Input, Invalid Access Identifier) error message. For SONET card switching, use the OPR-PROTNSW and RLS-PROTNSW commands.
- Using this command on a card that is not in a protection group will return the SNVS (Status, Not in Valid State) error message.
- Using this command on a card that is already in the inhibit state will return the SAIN (Status, Already Inhibited) error message.
- Sending the inhibit switch to protection command to a working card when the protect card in the same protection group has already raised the condition of INHSWWKG will return the SPLD (Status, Protection unit Locked) error message.
- Sending the inhibit switch to protection command to the protect card when a working card in the same protection group has already raised the condition of INHSWWKG will return the SWLD (Status, Working unit Locked) error message.
- Sending the inhibit switch to protection command to an active protect card when the peer working card is failed or missing will return the SWFA (Status, Working unit Failed) error message.
- As long as none of the previous error conditions apply, sending this command to missing cards is allowed and will not generate any error response.

Category

Equipment

Security

Maintenance

Input Format

INH-SWTOPROTN-EQPT:[<TID>]:<AID>:<CTAG>[:<DIRN>];

Input Example

INH-SWTOPROTN-EQPT:CISCO:SLOT-2:123::BTH;

Input Parameters

<AID>	Access identifier from the “25.14 EQPT” section on page 25-31. This AID can either be the working unit for which switching to protection is inhibited (lock-on) or the protection unit for which carrying traffic is to be inhibited (lockout).
<DIRN>	The direction relative to the entity defined in the AID field. The direction of the switching. This command only supports the BTH value of this parameter. DIRN defaults to BTH. The parameter type is DIRECTION (transmit and receive directions).
<ul style="list-style-type: none"> • BTH 	Both transmit and receive directions

14.8 INH-SWTOWKG-EQPT

(Cisco ONS 15454, ONS 15310-MA) The Inhibit Switch to Working Equipment (INH-SWTOWKG-EQPT) command inhibits automatic or manual switching of an equipment unit back to the working unit. Use the ALW-SWTOWKG-EQPT command to release the inhibit.

Usage Guidelines

INH-SWTOWKG-EQPT is used for electrical cards that could participate in an electrical protection group (for example, DS1, DS3, DS3XM, and EC1 cards). DS1 and DS3 cards have 1:1 and 1:N equipment protection. DS3XM and EC1 cards have only 1:1 equipment protection. When performing a lockout with this command, the traffic will be switched from the unit specified by the AID, unless the protection unit has failed or is missing. When performing a lock-on with this command and the protection unit specified in the AID is in standby, sending this command will initiate a traffic switch only when there is one working card in the protection group. In the case where there is more than one working card in the protection group, an error will be generated (see the error conditions that follow). When traffic is locked on the protection unit or locked out of a working unit with this command, the working unit will not carry traffic, even if the protection unit is pulled from the system.

The inhibit state is persistent over TCC2/TCC2P side switches and removal/reboot of all the units in the protection group. The inhibit state can but does not have to be persistent over a complete power cycle of the NE.

The unit specified by the AID will raise the condition of INH-SWTOWKG when this command is sent.

The following actions will return error messages:

- The command only supports the BTH value of the DIRN parameter. A command with any other value is considered an incorrect use of the command and will return An IDNV (Input, Data Not Valid) error message.

- This command is not used for the common control (TCC2/TCC2P or XCVT/XC10G) cards. A command on a common control card will return an IIAC (Input, Invalid Access Identifier) error message. For common control card switching, use the SW-DX-EQPT and ALW-SWDX-EQPT commands.
- This command is not used for SONET (OC-N) cards. A command on a SONET card will return an IIAC (Input, Invalid Access Identifier) error message. For SONET card switching, use the OPR-PROTNSW and RLS-PROTNSW commands.
- Using this command on a card that is not in a protection group will return the SNVS (Status, Not in Valid State) error message.
- Using this command on a card that is already in the inhibit state will return the SAIN (Status, Already Inhibited) error message.
- Sending this command to a working card when the protect card in the same protection group has already raised the condition of INHSWPR will return the SPLD (Status, Protection unit Locked) error message.
- Sending the INH-SWTOWKG command to a protect card when a working card in the same protection group has already raised the condition of INHSWPR will return the SWLD (Status, Working unit Locked) error message.
- Sending the INH-SWTOWKG command to an active working card when the protect card has failed or is missing will return the SPFA (Status, Protection unit Failed) error message.
- Sending the INH-SWTOWKG command to an active working card when the protect card is already carrying traffic (this only occurs in a 1:N protection group with N greater than one) will return the SPAC (Status, Protection unit Active) error message.
- As long as none of the previous error conditions apply, sending this command to missing cards is allowed and will not generate any error response.

Category	Equipment
Security	Maintenance
Input Format	INH-SWTOWKG-EQPT:[<TID>]:<AID>:<CTAG>[:<DIRN>];
Input Example	INH-SWTOWKG-EQPT:CISCO:SLOT-2:123::BTH;
Input Parameters	<p><AID> Access identifier from the “25.14 EQPT” section on page 25-31. This AID can either be the working unit for which switching to protection is inhibited (lock-on) or the protection unit for which carrying traffic is to be inhibited (lockout).</p>

<DIRN>	The direction relative to the entity defined in the AID field. The direction of the switching. This command only supports the BTH value of this parameter. DIRN defaults to BTH. The parameter type is DIRECTION (transmit and receive directions).
• BTH	Both transmit and receive directions

14.9 INH-USER-SECU

(Cisco ONS 15454, ONS 15327, ONS 15310-CL, ONS 15310-MA, ONS 15600) The Inhibit User Security (INH-USER-SECU) command disables (without deleting) a user account, so the user is denied access to the NE. The user is disabled until reenabled by the ALW-USER-SECU command.

Usage Guidelines

- This command does not forcibly log a user off. If the user is logged in, changes do not apply until after the user has logged off.
- The user is disabled until enabled using the corresponding ALW command.

Category

Security

Security

Superuser

Input Format

INH-USER-SECU:[<TID>]::<CTAG>::<UID>;

Input Example

INH-USER-SECU:PETALUMA::123::CISCO100;

Input Parameters

<UID>	User identifier. UID is a string.
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