CHAPTER 16

OPR 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 operate (OPR) commands for the Cisco ONS 15454, Cisco ONS 15310-CL, Cisco ONS 15310-MA, and Cisco ONS 15600.

16.1 OPR-ACO-ALL

(Cisco ONS 15454, ONS 15327, ONS 15310-CL, ONS 15310-MA, ONS 15600) The Operate Alarm Cutoff All (OPR-ACO-ALL) command cuts off the office audible alarm indication without changing the local alarm indications.

Usage Guidelines

This command does not have any effect on future alarms at the network element (NE); it directs the NE to provide conditioning only on those alarms that are currently active.

The ACO retires the Central Office (CO) alarm audible indicators without clearing the indicators that show that the trouble still exists. There is no need for a RLS-ACO command.

Category

Environment

Security

Maintenance

Input Format

OPR-ACO-ALL:[<TID>]:[<AID>]:<CTAG>;

Input Example

OPR-ACO-ALL:CISCO:SHELF-1:123;

OPR-ACO-ALL:CISCO::123;

Input Parameters		
	<AID>	The node or shelf access identifier from the "25.24 SHELF" section on page 25-44. If this parameter is omitted, the node or the first shelf of the node becomes the AID.

16.2 OPR-ALS

(Cisco ONS 15454, ONS 15310-CL, ONS 15310-MA) The Operate Automatic Laser Shutdown (OPR-ALS) command is used to restart the laser of an OC-N facility and for all of the facilities that support the ALS feature.

Usage Guidelines None

Category Ports

Security Maintenance

Input Format OPR-ALS:[<TID>]:<AID>:<CTAG>[::::];

Input Example OPR-ALS:CISCO:FAC-1-1:100;

Input Parameters		
	<AID>	Access identifier from the "25.2 AidUnionId" section on page 25-12.

16.3 OPR-APC

(Cisco ONS 15454) The Operate Amplification Power Control (OPR-APC) command permits the APC application inside the NE to force regulation of the optical power to the entire dense wavelength division multiplexing (DWDM) ring.

Usage Guidelines None

Category DWDM

Security Maintenance

Input Format OPR-APC:[<TID>]:<AID>:<CTAG>[::::];

Input Example OPR-APC:15454:WDMSIDE-A:123::;

Input Parameters

<AID>	Access identifier from the "25.32 WDMANS" section on page 25-54. The AID must not be null.

16.4 OPR-EXT-CONT

(Cisco ONS 15454, ONS 15327, ONS 15310-CL, ONS 15310-MA, ONS 15600) The Operate External Control (OPR-EXT-CONT) command operates an external control and closes the external control contact. The control can be operated momentarily or continuously.

Usage Guidelines

- The duration has two values:
  - MNTRY: Momentary duration
  - CONTS: Continuous duration
- In an automatic state, the contact could be opened or closed depending on the provisioned trigger.
- RLS-EXT-CONT changes the state to automatic. Therefore, issuing an OPR-EXT-CONT command when the control is manually open and then issuing a RLS-EXT-CONT command will not revert the state back to Manual Open.
- A NULL value for the duration parameter defaults to MNTRY in this release.
- RLS-EXT-CONT is not allowed during the MNTRY duration. It is allowed for the CONTS duration. The length of the MNTRY duration is 2 seconds on the Cisco ONS 15454.
- RLS-EXT-CONT cannot change the state to automatic if the existing state is Manual Open.

Caution Do not turn on external controls that activate a potential danger, such as sprinklers or other controls connected to possibly hazardous systems or equipment.

Category Environment

Security Maintenance

Input Format OPR-EXT-CONT:[<TID>]:<AID>:<CTAG>::[<CONTTYPE>],[<DURATION>];

Input Example OPR-EXT-CONT:CISCO:ENV-OUT-2:123::AIRCOND,CONTS;

Input Parameters

<AID>	Access identifier from the "25.13 ENV" section on page 25-32. The AID must not be null.
<CONTTYPE>	Environmental control type. A null value is equivalent to ALL. The parameter type is CONTTYPE (the environmental control types).
• AIRCOND	Air conditioning
• AUDIBLE	Audible (ONS 15310-MA only)
• ENGINE	Engine
• FAN	Fan
• GEN	Generator
• HEAT	Heat
• LIGHT	Light
• MISC	Miscellaneous
• SPKLR	Sprinkler
<DURATION>	Identifies the duration. A NULL value for the duration parameter defaults to CONTS(Continuous).
• CONTS	Continuous duration

16.5 OPR-LNK

(Cisco ONS 15454) The Operate Link (OPR-LNK) command operates the optical link (OLNK) application inside the NE to calculate all the automatic optical links between endpoints that can be univocally identified by the NE.

Usage Guidelines

None

Category

DWDM

Security

Maintenance

Input Format

OPR-LNK:[<TID>]::<CTAG>;

Input Example

OPR-LNK:PENNGROVE::114;

Input Parameters

None

16.6 OPR-LPBK-<MOD2>

(Cisco ONS 15454, ONS 15327, ONS 15310-CL, ONS 15310-MA, ONS 15600) The Operate Loopback for 10GFC, 10GIGE, 1GFC, 1GFICON, 2GFC, 2GFICON, CLNT, D1VIDEO, DS1, DS3I, DV6000, E1, E3, E4, EC1, ESCON, ETRCLO, ETH, FSTE, G1000, GFPOS, GIGE, HDTV, ISC1, OC12, OC192, OC3, OC48, OCH, OMS, OTS, POS, STS1, STS12C, STS18C, STS192C, STS24C, STS36C, STS3C, STS48C, STS6C, STS9C, T1, T3, VC12, VC3, VT1, or VT2 (OPR-LPBK-MMOD2>) command operates a signal loopback on a traffic or a cross-connect card.

Usage Guidelines

- See Table 27-1 on page 27-1 for supported modifiers by platform.
- The optional LPBKTYPE parameter defaults to FACILITY in this command if it is given to a port entity. It defaults to CRS if given to a synchronous transport signal (STS) entity.
- The value CRS for the LPBKTYPE parameter is applicable only for the STS modifier. The FACILITY and TERMINAL values are applicable to the ports.
- The TERMINAL loopback type is not supported for the DS1 line of a DS3XM card.
- Loopbacks are only allowed to be set up if the port/interface/STS_PATH is in the OOS-MT or OOS-AINS state.
- Cross-connect loopbacks cannot be applied to the destination end of any 1WAY cross-connect.
- A cross-connect loopback can be applied only on one STS path of a cross-connect.
- FEAC loopbacks can be applied by using the LINE value for the LPBKTYPE parameter and specifying the LOCN as FEND. The FEAC loopbacks are supported only on the DS3(T3) and DS1 interfaces on the DS3XM-12 and DS3XM-6 card.
- FEAC loopbacks can be applied only if the DS3 is in C-bit framing format. FEAC loopbacks will override existing loopbacks at the near end on the entity and vice versa. This means that if a facility loopback has been applied on a port and the FEAC loopback is also applied, then the facility loopback is released first and the far-end loopback is applied.
- The LINE value is supported only with the FEND value of the LOCN parameter. FACILITY, TERMINAL, and CRS values are not compatible with the FEND value for the LOCN parameter.
- A lockout of the protection command is required before putting the span of either a two-fiber or four-fiber bidirectional line switched ring (BLSR) line in loopback.
  - A span lockout on one side (for example, the east side) of the two-fiber BLSR is required before operating a facility (or terminal) line loopback on the same side (that is, the east side) of the ring.
  - A span lockout on one protection side (for example, the east side) of the four-fiber BLSR is required before operating a facility (or terminal) line loopback on the same side working line (that is, the east side) of the ring.
- FEAC loopbacks on the DS-1 interface of a DS3XM card can be applied only if a Virtual Tributary (VT) connection has been created on the DS-1. An attempt to operate or release FEAC loopbacks in the absence of a VT connection will cause an error message.
- The FEAC line is supported only with the FEND value of the LOCN parameter on DS-1/ T3 of the DS3XM-12 card.

- Only the following MOD2 fields are supported in this release: DS1 EC1, G1000, FSTE, OC12, OC192, OC3, OC48, OCH, T1, T3, STS1, STS12C, STS192C, STS24C, STS3C, STS36C, STS48C, STS6C, STS9C, E1, 1GFC, 2GFC, 4GFC, 10GFC, 1GFICON, 2GFICON, 4GFICON, GIGE, 10GIGE, ESCON, STS18C, DV6000, ETRCLO, ISCCOMPAT, ISC3PEER1G, ISC3PEER2R, PASSTHRU, ISC3PEER2G.

Note LINE and PAYLOAD values are applicable only with the FEND location value. PAYLOAD loopback can be applied by specifying the loopback type as PAYLOAD and the location as FEND.

Category Troubleshooting and Test Access

Security Maintenance

Input Format OPR-LPBK-<MOD2>:[<TID>]:<AID>:<CTAG>::[<LOCATION>],,,[<LPBKTYPE>];

Input Example OPR-LPBK-DS1:PTREYES:DS1-4-1-2-13:203::NEND,,,FACILITY;

Input Parameters

<AID>	Access identifier from the "25.1 ALL" section on page 25-1. The valid values for AID are BAND, CHANNEL, DS1, FACILITY, LINE, STS, and VT.
<LOCATION>	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>	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 (the XCVT/XC10G card). An STS-level cross-connect loopback causes a path alarm indication signal (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.
• LINE	Line-level loopback for a far-end DS1 path loopback of the DS3XM. The DS3XM cards only support the DS1 path far-end FEAC loopback in this release.
• 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.

16.7 OPR-PROTNSW-<MOD2DWDMPAYLOAD>

(Cisco ONS 15454) The Operate Protection Switch for 10GFC, 10GIGE, 1GFC, 1GFICON, 2GFC, 2GFICON, D1VIDEO, DV6000, ETRCLO, GIGE, HDTV, ISC1, ISC3, or PASSTHRU (OPR-PROTNSW-<MOD2DWDMPAYLOAD>) command initiates a Y-cable protection switch request. User switch requests initiated with this command remain active until they are released through the RLS-PROTNSW-<MOD2DWDMPAYLOAD> command or are overridden by a higher priority protection switch request.

Usage Guidelines

See Table 27-1 on page 27-1 for supported modifiers by platform.

The switch commands MAN (Manual Switch), FRCD (Forced Switch), and LOCKOUT (Lockout) are supported by the ONS 15454.

- Manual Switch of Protection Line (to Working Line). If the AID identifies the protection line in a 1+1 protection group, then service will be transferred from the protection line to the working line, unless a request of equal or higher priority is in effect.
- Manual Switch of Working Line (to Protection Line). If the AID identifies a working line, service will be switched from the working line to the protection line unless a request of equal or higher priority is in effect.
- Force Switch of Protection Line (to Working Line). If the AID identifies the protection line, service will be transferred from the protection line to the working line unless a request of equal or higher priority is in effect.
- Force Switch of Working Line (to Protection Line). If the AID identifies a working line, service will be transferred from the working line to the protection line unless a request of equal or higher priority is in effect. A lockout of protection and a signal fail of protection have higher priority than a Force switch command.
- Lockout of Protection Line. If the AID identifies the protection line, this switch command will prevent the working line from switching to protection line. If the working line is already in protection, then the protection line will be switched back to its original working line.
- Lockout of Working Line. If the AID identifies the working line, this switch command will prevent the working line from switching to protection line. If the working line is already in protection, then the working line will be switched back from the protection line to its original working line.

If the command is used against preprovisioned cards, the SROF (Protection Switching Failed) error is returned.

Category

DWDM

Security

Maintenance

Input Format

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

Input Example

OPR-PROTNSW-HDTV:CISCO:FAC-1-1-1:100::FRCD;

Input Parameters

<SRC>	Access identifier from the "25.15 FACILITY" section on page 25-35.
<SC>	Switch command that is to be initiated on the paths. The parameter type is SW.
• APS-CLEAR	APS-CLEAR switch state. It is a read-only switch state and is not allowed in the OPR-PROTNSW-xxx commands.
• CLEAR	CLEAR switch state. CLEAR switch state is not allowed in the OPR-PROTNSW-xxx commands.
• EXERCISE	EXERCISE switch state. EXERCISE switch state is not allowed in the OPR-PROTNSW-xxx commands.
• FRCD	Forces a switch unless another FRCD or LOCKOUT is in effect.
• LOCKOUT	Locks the facility out of switching. The system cannot switch to this facility to carry service.
• MAN	Requests a manual switch of the facility.

16.8 OPR-PROTNSW-<OCN_TYPE>

(Cisco ONS 15454, ONS 15327, ONS 15310-CL, ONS 15310-MA, ONS 15600) The Operate Protection Switch for OC3, OC12, OC48, or OC192 (OPR-PROTNSW-<OCN_TYPE>) command initiates a SONET line protection switch request. User switch requests initiated with this command remain active until they are released via the RLS-PROTNSW-OCN command or are overridden by a higher priority protection switch request.

Usage Guidelines

See Table 27-1 on page 27-1 for supported modifiers by platform.

The switch commands; MAN (Manual Switch), FRCD (Forced Switch), and LOCKOUT (Lockout) are supported by the ONS 15454.

- Manual Switch of Protection Line (to Working Line). If the AID identifies the protection line in a 1+1 protection group, then service will be transferred from the protection line to the working line, unless a request of equal or higher priority is in effect.
- Manual Switch of Working Line (to Protection Line). If the AID identifies a working line, then service will be switched from the working line to the protection line unless a request of equal or higher priority is in effect.
- Force Switch of Protection Line (to Working Line). If the AID identifies the protection line, then (only in the 1+1 architecture) service will be transferred from the protection line to the working line unless a request of equal or higher priority is in effect.
- Force Switch of Working Line (to Protection Line). If the AID identifies a working line, then service will be transferred from the working line to the protection line unless a request of equal or higher priority is in effect. A lockout of protection and a signal fail of protection have higher priority than a Force switch command.
- Lockout of Protection Line. If the AID identifies the protection line, this switch command will prevent the working line from switching to protection line. If the working line is already in protection, then the protection line will be switched back to its original working line.
- Lockout of Working Line. If the AID identifies the working line, this switch command will prevent the working line from switching to the protection line. If the working line is already in protection, then the working line will be switched back from protection line to its original working line.

The following actions will return error messages:

- This command cannot be used for the common control cards (TCC2/TCC2P or XCVT/XC10G). A query on a common control card will generate an IIAC (Input, Invalid Access Identifier) error message. For common control card switching, use the SW-DX-EQPT and ALW-SWDX-EQPT commands.
- Sending this command to electrical cards will return an IIAC error message. For electrical card switching, use the ALW-SWTOPROTN/SWTOWKG-EQPT and INH-SWTOPROTN/SWTOWKG-EQPT commands.
- Sending this command to query on a card that is not in a protection group will return the SNVS (Status, Not in Valid State) error message.
- Sending this command to a working card that is failed or missing will return the SROF error message.
- Sending this command to a protect card that is failed or missing will return the SROF error message.
- Protection for preprovisioned cards will not succeed.
- Sending this command to a card that is already in protection with a higher priority will return the SSRD (Status, Switch Request Denied) error message.
- Sending this command to an OCN line with a switching mode that is already in process will return a SAMS (Already in the Maintenance State) error message.
- Sending this command with the EXERCISE or APS_CLEAR switch operations will return an error SROF (Invalid Protection Switch Operation) because these operations are not valid according to Telcordia GR-833-CORE. The EX-SW-<OCN_BLSR> is the correct command to perform the EXERCISE switch over the BLSR line.
- Protection switch will be denied if signal degrade/signal fail (SD/SF) is already present on the switching path. If SD/SF is generated on the switching path after the switch is performed, the switch will be overwritten by the APS_CLEAR state. The switch will not be overwritten despite an SD or SF condition if the switch is a Lockout of Protection or a Force switch, because these switches have a higher priority than SD and SF.

Note

- To get the protection switching state (Manual, Force, and lockout), use the RTRV-COND-ALL or RTRV-ALM-ALL commands.
- If the far end of the same span has a higher protection switching state (for example, the near end is in the Manual protection state and the far end is in the Force protection state) the near-end protection switching state will be preemptive and will have an APS_CLEAR switching state. The RTRV-PROTNSW-OCN command is used to retrieve the current switching state of a SONET line.
- Sending the following Manual ring switch requests on both east and west sides/spans of a two-fiber or four-fiber BLSR in less than 30 to 45 seconds will cause the system to execute only one (WEST) side BLSR query and preempt the other (EAST) side query.
  - A single TL1 command with both side/span AIDs (in the list AID format) of the same two-fiber or four-fiber ring.
  - The separated (via TL1, CTC, or TL1 and CTC user interfaces) queries on both sides/spans of the same two-fiber or four-fiber ring.

  There will be no event messages for the preempted side, whose switching state will be in the APS-CLEAR state.
- DIRN is an optional parameter. A NULL value defaults to BTH for BLSR protection, BTH for 1+1 bidirectional protection, and RCV for 1+1 unidirectional protection.

DIRN follows these rules: TRMT will always fail for all protection groups. For two-fiber and four-fiber BLSR protection groups, both the RCV and TRMT directions will fail.

- DIRN is applicable for both 1+1 and BLSR protection groups. For example, OPR-PROTNSW can be performed on a BLSR span/ring as follows:

  OPR-PROTNSW-OC48::FAC-5-1:A::LOCKOUT,SPAN:BTH;

- A Lockout of Protection command is required before putting the span of either a two-fiber or four-fiber BLSR line in loopback.
  - A span lockout on one side (for example, the east side) of the two-fiber BLSR is required before operating a facility (or terminal) line loopback on the same side (for example, the east side) of the ring.
  - A span lockout on one protection side (for example, the east side) of the four-fiber BLSR is required before operating a facility (or terminal) line loopback on the same side Working line (for example, the east side) of the ring.
- A span lockout on the working port is not supported in ONS 15454 and ONS 15600.

Category

Protection

Security

Maintenance

Input Format

OPR-PROTNSW-<OCN_TYPE>:[<TID>]:<AID>:<CTAG>::<SC>,[<SWITCHTYPE>][:<DIRN>];

Input Example

OPR-PROTNSW-OC48:CHICKALUMA:FAC-6-1:204::LOCKOUT,SPAN:BTH;

Input Parameters

<AID>	Access identifier from the "25.15 FACILITY" section on page 25-35. Identifies the facility in the NE to which the switch request is directed.
<SC>	Switch command that is to be initiated on the paths. The parameter type is SW.
• APS-CLEAR	APS-CLEAR switch state. It is a read-only switch state and is not allowed in the OPR-PROTNSW-xxx commands.
• CLEAR	CLEAR switch state. The CLEAR switch state is not allowed in the OPR-PROTNSW-xxx commands.
• EXERCISE	EXERCISE switch state. The EXERCISE switch state is not allowed in the OPR-PROTNSW-xxx commands.
• FRCD	Forces a switch unless another FRCD or LOCKOUT is in effect.
• LOCKOUT	Locks the facility out of switching. The system cannot switch to this facility to carry service.
• MAN	Requests a manual switch of the facility.

<SWITCHTYPE>	BLSR switch type. The parameter type is SWITCH_TYPE (switch type).
• RING	BLSR ring switch type
• SPAN	BLSR span switch type
<DIRN>	The direction relative to the entity defined in the AID field. The direction of the switching. DIRN defaults to RCV. The parameter type is DIRECTION (transmit and receive directions).
• BTH	Both transmit and receive directions
• RCV	Receive direction only
• TRMT	Transmit direction only

16.9 OPR-PROTNSW-<PATH>

(Cisco ONS 15454, ONS 15327, ONS 15310-CL, ONS 15310-MA, ONS 15600) The Operate Protection Switch for STS1, STS12C, STS18C, STS192C, STS24C, STS36C, STS3C, STS48C, STS6C, STS9C, VT1, or VT2 (OPR-PROTNSW-<PATH>) command initiates a path protection switch request. User switch requests initiated with this command (forced switch, lockout, and manual switch) remain active until they are released through the RLS-PROTNSW-<PATH> command or overridden by a higher priority protection switch request.

Usage Guidelines

See Table 27-1 on page 27-1 for supported modifiers by platform.

Note

- This command applies to path protection configurations only.
- The VTAID should be the working or protect AID only.
- If you send this command on the drop AID, a DENY (Invalid AID, should use working/protect AID) message will be returned.
- To retrieve the protection switching state (Manual, Force, lockout), use the RTRV-COND-ALL or RTRV-ALM-ALL commands.
- Telcordia GR-1400 does not allow the LOCKOUT_OF_WORKING command on the path protection WORKING path/AID. When sending this command on the path protection WORKING path, a SROF (Invalid Protection Switch Operation) is returned.
- If sending this command with EXERCISE or APS_CLEAR switch operations, an SROF error will be returned because these operations are not valid according to Telcordia GR-833-CORE.
- A protection switch will be denied if an SD or SF condition is already present on the switching path. If an SD or SF is generated on the switching path after the switch is performed, the switch will be overwritten by the APS_CLEAR state. The switch is not overwritten if it is a lockout of protection or a Force switch, because these switch types have a higher priority than SD/SF conditions.

Category

Protection

Security Maintenance

Input Format OPR-PROTNSW-<PATH>:[<TID>]:<SRC>:<CTAG>::<SC>[:];

Input Example OPR-PROTNSW-STS1:CISCO:STS-2-1-1:123::MAN;

Input Parameters

<SRC>	Source access identifier from the "25.10 CrossConnectId" section on page 25-22.
<SC>	The switch command that is to be initiated on the paths. The parameter type is SW, which is the type of switch.
• APS-CLEAR	APS-CLEAR switch state. It is a read-only switch state and is not allowed in the OPR-PROTNSW-xxx commands.
• CLEAR	CLEAR switch state. The CLEAR switch state is not allowed in the OPR-PROTNSW-xxx commands.
• EXERCISE	EXERCISE switch state. The EXERCISE switch state is not allowed in the OPR-PROTNSW-xxx commands.
• FRCD	Forces a switch unless another FRCD or LOCKOUT is in effect.
• LOCKOUT	Locks the facility out of switching. The system cannot switch to this facility to carry service.
• MAN	Requests a manual switch of the facility.

16.10 OPR-PROTNSW-OCH

(Cisco ONS 15454) The Operate Protection Switch Optical Channel (OPR-PROTNSW-OCH) command performs a protection switch on the trunk port of a card that has splitter protection.

Usage Guidelines None

Category DWDM

Security Maintenance

Input Format OPR-PROTNSW-OCH:[<TID>]:<AID>:<CTAG>::<SW>;

Input Example OPR-PROTNSW-OCH:VA454-22:CHAN-2-2:100::FRCD;

Input Parameters

<AID>	Access identifier from the "25.8 CHANNEL" section on page 25-20. Indicates the trunk port.
<SW>	Switch operation. The parameter type is SW, which is the type of switch.
• APS-CLEAR	APS-CLEAR switch state. It is a read-only switch state and is not allowed in the OPR-PROTNSW-xxx commands.
• CLEAR	CLEAR switch state. The CLEAR switch state is not allowed in the OPR-PROTNSW-xxx commands.
• EXERCISE	EXERCISE switch state. The EXERCISE switch state is not allowed in the OPR-PROTNSW-xxx commands.
• FRCD	Forces a switch unless another FRCD or LOCKOUT is in effect.
• LOCKOUT	Locks the facility out of switching. The system cannot switch to this facility to carry service.
• MAN	Requests a manual switch of the facility.

16.11 OPR-SLV-WDMANS

(Cisco ONS 15454) The Operate Span Loss Verification Wavelength Division Multiplexing Automatic Node Set-Up (OPR-SLV-WDMANS) command performs the calculation of the expected span loss verification.

Usage Guidelines None

Category DWDM

Security Maintenance

Input Format OPR-SLV-WDMANS:[<TID>]:<AID>:<CTAG>;

Input Example OPR-SLV-WDMANS:VA454-22:WDMSIDE-E:116;

Input Parameters

<AID>	Access identifier from the "25.32 WDMANS" section on page 25-54.

16.12 OPR-SYNCNSW

(Cisco ONS 15454, ONS 15327, ONS 15310-CL, ONS 15310-MA, ONS 15600) The Operate Synchronization Switch (OPR-SYNCNSW) command initiates a switch to the reference specified by the synchronization reference number if the reference supplied is valid and of the same quality.

Usage Guidelines For manual types of switches, the reference where you want to switch should be of the same quality as the active reference source; otherwise, the command will fail.

If you want to switch to a reference of lower quality, use the Force switch option.

The Operate Synchronization Switches are released by the RLS-SYNCNSW command or are overridden by a synchronization reference failure.

After the switch is effective, the MANSWTOPRI (Manual Switch to Primary or Secondary Reference) minor alarm will be raised.

Category Synchronization

Security Maintenance

Input Format OPR-SYNCNSW:[<TID>]:[<AID>]:<CTAG>::<SWITCHTO>,[<SC>];

Input Example OPR-SYNCNSW:CISCO:SYNC-NE:3::PRI,MAN;

Input Parameters

<AID>	Access identifier from the "25.28 SYNC_REF" section on page 25-50. The default is SYNC-NE.
<SWITCHTO>	Access identifier from the "25.29 SYNCSW" section on page 25-51. Identifies the new synchronization reference that will be used.
<SC>	Switch command to be initiated on the paths. Only MAN and FRCD switches are allowed for this command. The parameter type is SW, which is the type of switch.
• FRCD	Forces a switch unless another FRCD or LOCKOUT is in effect.
• MAN	Requests a manual switch of the facility.

16.13 OPR-WDMANS

(Cisco ONS 15454) The Operate Wavelength Division Multiplexing Automatic Node Set Up (OPR-WDMANS) command initiates the Automatic Optical Node Set Up (AONS) application inside the NE to force a recompute of the value assigned to all variable optical attenuators (VOAs) representing the optical path inside the node.

Usage Guidelines

None

Category

DWDM

Security

Maintenance

Input Format

OPR-WDMANS:[<TID>]::<CTAG>[:::MODE=<MODE>],[AGINGMARGIN=<AGINGMARGIN>][:];

Input Example

OPR-WDMANS:PENNGROVE::114;

OPR-WDMANS:PENNGROVE::114:::MODE=CALC,AGINMARGIN=-1.0;

Input Parameters

<MODE>	Indicates which mode should operate the WDMANS command.
<AGINMARGIN>	(Optional) Indicates the Agin margin optimal value to be used to calculate the WDMANS parameter without MetroPlanner. It is a float value expressed in dBm.