



# Release Notes for Cisco ONS 15600 SDH Release 9.1

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**Revised: October 2009, OL-18470-01**

Release notes contain the new features and enhancements for the Cisco ONS 15600 SDH platform. For detailed information regarding features, capabilities, hardware, and software introduced with this release, refer to the “Release 9.1” version of the Cisco ONS 15600 Installation and Operations Guide; *Cisco ONS 15600 SDH Procedure Guide*; *Cisco ONS 15600 SDH Reference Manual*; *Cisco ONS 15600 SDH Troubleshooting Guide*; and *Cisco ONS 15600 SDH SONET TLI Command Guide*. For the latest version of the Release Notes for Cisco ONS 15600 SDH Release 9.1, visit the following URL:

[http://www.cisco.com/en/US/products/hw/optical/ps2006/prod\\_release\\_notes\\_list.html](http://www.cisco.com/en/US/products/hw/optical/ps2006/prod_release_notes_list.html)

Cisco also provides Bug Toolkit, a web resource for tracking defects. To access Bug Toolkit, visit the following URL:

<http://tools.cisco.com/Support/BugToolKit/action.do?hdnAction=searchBugs>

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## Changes to the Release Notes

This section documents supplemental changes that have been added to the *Release Notes for Cisco ONS 15600 SDH Release 9.1* since the production of the Cisco ONS 15600 SDH System Software CD for Release 9.1.



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# Using the Bug ToolKit

In Cisco ONS 15600 SDH Software Release 9.1 and later, use the Bug ToolKit to view the list of outstanding and resolved bugs in a release. This section explains how to use the Bug ToolKit.

## Search Bugs

This section explains how to use the Bug ToolKit to search for a specific bug or to search for all the bugs in a specified release.

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- Step 1** Go to <http://tools.cisco.com/Support/BugToolkit/action.do?hdnAction=searchBugs>.  
You will be prompted to log into Cisco.com. After you login, the Bug Toolkit page opens.
- Step 2** Click **Launch Bug Toolkit**.
- Step 3** To search for a specific bug, enter the bug ID in the **Search for Bug ID** field and click **Go** in the **Search Bugs** tab.

To search for all the bugs in a specified release, enter the following search criteria in the **Search Bugs** tab:

- Select Product Category—Select **Optical Networking**.
- Select Products—Select **Cisco ONS 15600 Series** from the list.
- Software Version—Select **9.10** to view the list of outstanding and resolved bugs in Cisco ONS 15600 SDH Software Release 9.1.
- Search for Keyword(s)—Separate search phrases with boolean expressions (AND, NOT, OR) to search within the bug title and details.
- Advanced Options—You can either perform a search using the default search criteria or define custom criteria for an advanced search. To customize the advanced search, select **Use custom settings for severity, status, and others** and provide the following information:
  - Severity—Select the severity level.
  - Status—Select **Open**, **Fixed**, or **Terminated**.

Select **Open** to view all the open bugs. To filter the open bugs, clear the Open check box and select the appropriate sub-options that appear below the Open check box. The sub-options are New, Held, More, Open, Waiting, Assigned, Forwarded, Postponed, Submitted, and Information Required. For example, if you want to view only new bugs in Cisco ONS 15600 SDH Software Release 9.1, only select **New**.

Select **Fixed** to view fixed bugs. To filter fixed bugs, clear the Fixed check box and select the appropriate sub-options that appear below the fixed check box. The sub-options are **Resolved** or **Verified**.

Select **Terminated** to view terminated bugs. To filter terminated bugs, clear the Terminated check box and select the appropriate sub-options that appear below the terminated check box. The sub-options are **Closed**, **Junked**, and **Unreproducible**. Select multiple options as required.

- Advanced—Select the **Show only bugs containing bug details** check box to view only those bugs that contain detailed information, such as symptoms and workarounds.
- Modified Date—Select this option if you want filter bugs based on the date on which the bugs were last modified.

- Results Displayed Per Page—Select the appropriate option from the list to restrict the number of results that appear per page.

**Step 4** Click **Search**. The Bug Toolkit displays the list of bugs based on the specified search criteria.

## Export to Spreadsheet

The Bug ToolKit provides the following options to export bugs to a spreadsheet:

- Click **Export All to Spreadsheet** link in the Search Results page under the Search Bugs tab. Specify file name and folder name to save the spreadsheet. All the bugs retrieved by the search will be exported.
- Click **Export All to Spreadsheet** link in the My Notifications tab. Specify file name and folder name to save the spreadsheet. All the saved bugs in all the groups will be exported.

If you are unable to export the spreadsheet, log into the Technical Support Website at <http://www.cisco.com/cisco/web/support/index.html> for more information or call Cisco TAC (1-800-553-2447).

## New Features and Functionality

This section highlights new features and functionality for Release 9.1. For detailed documentation of each of these features, consult the user documentation.

### New Software Features and Functionality

The following new software features are added for Release 9.1:

- [Backup NTP/SNTP Server, page 3](#)
- [Shelf Voltage and Temperature, page 3](#)

#### Backup NTP/SNTP Server

CTC/TL1 allows you to specify a backup NTP/SNTP server along with the primary NTP/SNTP server. When the primary NTP/SNTP server fails, the node uses the secondary NTP/SNTP server to synchronize its date and time. If both the primary and secondary NTP/SNTP servers fail, an SNTP-FAIL alarm is raised. The node checks for the availability of the primary or secondary NTP/SNTP server at regular intervals until it can fetch the time from any one of the NTP/SNTP servers.

#### Shelf Voltage and Temperature

The shelf (input) voltage and temperature are displayed on the ONS 15600 chassis. The voltage supplied to the shelf (in millivolts) is displayed in the voltage area of the pane. The temperature of the shelf (in degrees Celsius) is displayed in the temperature area of the pane. You can view the temperature using the CTC/TL1.

The temperature measured by the TCC2/TCC2P sensors appear on the LCD screen in the ONS 15600 chassis.

**Note**

The input voltage is displayed in CTC/TL1 only when the customer access panel (CAP2) card is installed in the ONS 15600 chassis.

## TL1

### TL1 Command Changes

#### New Commands

The RTRV-SHELFSTAT command is added in Release 9.1.

#### Command Syntax Changes

The syntax of the following commands have changed:

- ED-EQPT syntax changed from:

```
ED-EQPT[:<TID>]:<aid>:<CTAG>[::PROTID=<protid>],[PRTYPE=<prtype>],[RVRTV=<rvrtv>],[RVTM=<rvtm>],[CARDMODE=<cardmode>],[PEERID=<peerid>],[REGENNAME=<regname>],[PEERNAME=<peername>],[CMDMDE=<cmdmde>],[RETIME=<retime>],[SHELFROLE=<shelfrole>],[NEWSHELFID=<newshelfid>],[FRPROLE=<frprole>],[FRPSTATE=<frpstate>][:<pst>[,<sst>]];
```

To:

```
ED-EQPT[:<TID>]:<aid>:<CTAG>[::PROTID=<protid>],[PRTYPE=<prtype>],[RVRTV=<rvrtv>],[RVTM=<rvtm>],[CARDMODE=<cardmode>],[PEERID=<peerid>],[REGENNAME=<regname>],[PEERNAME=<peername>],[CMDMDE=<cmdmde>],[RETIME=<retime>],[SHELFROLE=<shelfrole>],[NEWSHELFID=<newshelfid>],[FRPROLE=<frprole>],[FRPSTATE=<frpstate>],[FRPHOLDOFFTIME=<frpholdofftime>][:<pst>[,<sst>]];
```

- ED-NE-GEN syntax changed from:

```
ED-NE-GEN[:<TID>]:<CTAG>[::NAME=<name>],[IPADDR=<ipaddr>],[IPMASK=<ipmask>],[DEFRTR=<defrtr>],[IPV6ADDR=<ipv6addr>],[IPV6PREFLEN=<ipv6preflen>],[IPV6DEFRT R=<ipv6defrtr>],[IPV6ENABLE=<ipv6enable>],[IIOPPORT=<iiopport>],[NTP=<ntp>],[SUPPRESSIP=<suppressip>],[MODE=<mode>],[SERIALPORTECHO=<serialportecho>],[OSIROUTINGMODE=<osiroutingmode>],[OSIL1BUFSIZE=<osil1bufsize>],[OSIL2BUFSIZE=<osil2bufsize>];
```

To:

```
ED-NE-GEN[:<TID>]:<CTAG>[::NAME=<name>],[IPADDR=<ipaddr>],[IPMASK=<ipmask>],[DEFRTR=<defrtr>],[IPV6ADDR=<ipv6addr>],[IPV6PREFLEN=<ipv6preflen>],[IPV6DEFRT R=<ipv6defrtr>],[IPV6ENABLE=<ipv6enable>],[IIOPPORT=<iiopport>],[NTP=<ntp>],[SUPPRESSIP=<suppressip>],[MODE=<mode>],[MSPUBVLANID=<msspubvlanid>],[MSINTLVLANID=<msintlvlanid>],[SERIALPORTECHO=<serialportecho>],[OSIROUTINGMODE=<osiroutingmode>],[OSIL1BUFSIZE=<osil1bufsize>],[OSIL2BUFSIZE=<osil2bufsize>],[BKUPNTP=<bkupntp>];
```

- ENT-EQPT syntax changed from:

ENT-EQPT[:<TID>]:<aid>:<CTAG>::<aidtype>[:PROTID=<protid>],[PRTYPE=<prtype>],[RVRTV=<rvertv>],[RVTM=<rvtm>],[CARDMODE=<cardmode>],[PEERID=<protid>],[REGENNAME=<regenname>],[CMDMDE=<cmdmde>],[TRANSMODE=<transmode>],[RETIME=<retime>],[SHELFROLE=<shelfrole>],[FRPROLE=<frprole>],[FRPSTATE=<frpstate>][:];

To:

ENT-EQPT[:<TID>]:<aid>:<CTAG>::<aidtype>[:PROTID=<protid>],[PRTYPE=<prtype>],[RVRTV=<rvertv>],[RVTM=<rvtm>],[CARDMODE=<cardmode>],[PEERID=<protid>],[REGENNAME=<regenname>],[CMDMDE=<cmdmde>],[TRANSMODE=<transmode>],[RETIME=<retime>],[SHELFROLE=<shelfrole>],[FRPROLE=<frprole>],[FRPSTATE=<frpstate>],[FRPHOLDOFFTIME=<frpholdofftime>][:];



**Note**

In Software Release 9.1, the OSI TL1 commands are not supported.

## Command Response Changes

The following TL1 command responses have changed:

- RTRV-ALM-BITS response changes:

<aid>,[<condtype>]:<condeff>,,,[<locn>],[<dirn>],,;

To:

<aid>,[<aidtype>]:<ntfncde>,<condtype>,<srveff>,<ocrdat>,<ocrtm>,<location>,<direction>]:<desc>],

- RTRV-ALM-UCP response changes:

<aid>:<ntfncde>,<condtype>,<srveff>,,,:<desc>],

To:

<aid>:<ntfncde>,<condtype>,<srveff>,<ocrdat>,<ocrtm>,,,:<desc>],

- RTRV-ALS response changes:

<slot>,<[rslt]>:[<diagtype>],[<peer>],[<aid>],[<aidtype>]

To:

<aid>,[<aidtype>]:<[alsmode]>,<[alsrcint]>,<[alsrcpw]>,<[lsrstat]>

- RTRV-BLSR response changes:

[<UID>]:<[aid]>:<[ntfncde]>,<[secualmtype]>,<[time]>,<[date]>,<[source]>,<[userid]>,<[dbchgseq]>,<[command]>,<[aid]>,,

To:

[<aid>]:<[ringid]>,<[nodeid]>,<[mode]>,<[rvertv]>,<[rvtm]>,<[srvrtv]>,<[srvtm]>,<[eastwork]>,<[westwork]>,<[eastprot]>,<[westprot]>

- RTRV-EQPT response changes:

<aid>:<[aidtype]>,<[equip]>,<[role]>,<[status]>:[<[protid]>],[<[prtype]>],[<[rvertv]>],[<[rvtm]>],[<[cardname]>],[<[ioscfg]>],[<[cardmode]>],[<[peerid]>],[<[regenname]>],[<[peername]>],[<[transmode]>],[<[retime]>],[<[shelfrole]>],[<[frprole]>],[<[frpstate]>]:<[pst]>,<[sst]>

To:

<aid>:<[aidtype]>,<[equip]>,<[role]>,<[status]>:[<[protid]>],[<[prtype]>],[<[rvertv]>],[<[rvtm]>],[<[cardname]>],[<[ioscfg]>],[<[cardmode]>],[<[peerid]>],[<[regenname]>],[<[peername]>],[<[transmode]>],[<[retime]>],[<[shelfrole]>],[<[frprole]>],[<[frpstate]>],[<[frpholdofftime]>]:<[pst]>,<[sst]>

- RTRV-NE-GEN response changes:

[<ipaddr>],[<ipmask>],[<defrtr>],[<ipv6addr>],[<ipv6preflen>],[<ipv6defrtr>],[<ipv6enable>],[<iioport>],[<ntp>],[<name>],[<swver>],[<load>],[<protswver>],[<protload>],[<defdesc>],[<platform>],[<secumode>],[<suppressip>],[<mode>],[<autopm>],[<serialportecho>],[<osiroutingmode>],[<osil1bufsize>],[<osil2bufsize>]

To:

[<ipaddr>],[<ipmask>],[<defrtr>],[<ipv6addr>],[<ipv6preflen>],[<ipv6defrtr>],[<ipv6enable>],[<iioport>],[<ntp>],[<name>],[<swver>],[<load>],[<protswver>],[<protload>],[<defdesc>],[<platform>],[<secumode>],[<suppressip>],[<mode>],[<mssubvlanid>],[<msintlvlanid>],[<autopm>],[<serialportecho>],[<osiroutingmode>],[<osil1bufsize>],[<osil2bufsize>],[<net>],[<bkupntp>]

## TL1 ENUM Changes

### ALM\_THR

The following ALM\_THR enum items are added:

- ALM\_THR\_ADD\_HDEG => "ADD-HDEG"
- ALM\_THR\_ADD\_HFAIL => "ADD-HFAIL"
- ALM\_THR\_ADD\_LDEG => "ADD-LDEG"
- ALM\_THR\_ADD\_LFAIL => "ADD-LFAIL"

ALM\_THR is used in the following commands:

- RTRV-ALMTH-MOD2O
- SET-ALMTH-MOD2O

### FRPHOLDOFFTIME

The following FRPHOLDOFFTIME enum items are added:

- FRPHOLDOFF\_100MSEC => "100-MSEC"
- FRPHOLDOFF\_1MSEC => "1-MSEC"
- FRPHOLDOFF\_200MSEC => "200-MSEC"
- FRPHOLDOFF\_2MSEC => "2-MSEC"
- FRPHOLDOFF\_500MSEC => "500-MSEC"
- FRPHOLDOFF\_50MSEC => "50-MSEC"
- FRPHOLDOFF\_5MSEC => "5-MSEC"
- FRPHOLDOFF\_DISABLED => "DISABLED"

FRPHOLDOFFTIME is used in the following commands:

- ED-EQPT
- ENT-EQPT
- RTRV-EQPT

## Related Documentation

### Release-Specific Documents

- Release Notes for the Cisco ONS 15454, Release 9.1
- Release Notes for the Cisco ONS 15454 SDH, Release 9.1
- Release Notes for the Cisco ONS 15310-CL, Release 9.1
- Release Notes for the Cisco ONS 15310-MA, Release 9.1
- Release Notes for the Cisco ONS 15310-MA SDH, Release 9.1
- Release Notes for the Cisco ONS 15600, Release 9.1
- Cisco ONS 15600 SDH Software Upgrade Guide, Release 9.1

### Platform-Specific Documents

- *Cisco ONS 15600 SDH Procedure Guide*  
Provides installation, turn up, test, and maintenance procedures
- *Cisco ONS 15600 SDH Reference Manual*  
Provides technical reference information for SONET/SDH cards, nodes, and networks
- *Cisco ONS 15600 SDH Troubleshooting Guide*  
Provides a list of SDH alarms and troubleshooting procedures, general troubleshooting information, and hardware replacement procedures
- *Cisco ONS 15454 SDH and Cisco ONS 15600 SDH TL1 Command Guide*  
Provides a comprehensive list of TL1 commands

## Obtaining Documentation and Submitting a Service Request

For information on obtaining documentation, submitting a service request, and gathering additional information, see the monthly *What's New in Cisco Product Documentation*, which also lists all new and revised Cisco technical documentation, at:

<http://www.cisco.com/en/US/docs/general/whatsnew/whatsnew.html>

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