



# Release Notes for Cisco ONS 15310-CL Release 7.22

---



## 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.

---

## August 2007

Release notes address closed (maintenance) issues, caveats, and new features for the Cisco ONS 15310-CL. For detailed information regarding features, capabilities, hardware, and software introduced with this release, refer to Release 7.0 of the *Cisco ONS 15310-CL and Cisco ONS 15310-MA Procedure Guide*, *Cisco ONS 15310-CL and Cisco ONS 15310-MA Reference Guide*, and *Cisco ONS 15310-CL and Cisco ONS 15310-MA Troubleshooting Guide* and Release 7.2 of the *Cisco ONS SONET TLI Command Guide*. For the most current version of the Release Notes for Cisco ONS 15310-CL Release 7.22, visit the following URL:

[http://www.cisco.com/en/US/products/hw/optical/ps2001/prod\\_release\\_notes\\_list.html](http://www.cisco.com/en/US/products/hw/optical/ps2001/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://www.cisco.com/cgi-bin/Support/Bugtool/launch\\_bugtool.pl](http://www.cisco.com/cgi-bin/Support/Bugtool/launch_bugtool.pl)

## Contents

[Changes to the Release Notes, page 3](#)

[Caveats, page 3](#)

[Resolved Caveats for Release 7.2, page 6](#)

[New Features and Functionality, page 8](#)

[Related Documentation, page 8](#)



---

### Corporate Headquarters:

**Cisco Systems, Inc., 170 West Tasman Drive, San Jose, CA 95134-1706 USA**

Copyright © 2006 Cisco Systems, Inc. All rights reserved.

- [Obtaining Documentation, page 9](#)
- [Documentation Feedback, page 10](#)
- [Cisco Product Security Overview, page 10](#)
- [Obtaining Technical Assistance, page 11](#)
- [Obtaining Additional Publications and Information, page 13](#)

# Changes to the Release Notes

This section documents supplemental changes that have been added to the *Release Notes for Cisco ONS 15310-CL Release 7.2* since the production of the Cisco ONS 15310-CL System Software CD for Release 7.22.

No changes have been added to the release notes for Release 7.2.

## Caveats

Review the notes listed below before deploying the ONS 15310-CL. Caveats with tracking numbers are known system limitations that are scheduled to be addressed in a subsequent release. Caveats without tracking numbers are provided to point out procedural or situational considerations when deploying the product.

## Maintenance and Administration



### Caution

VxWorks is intended for qualified Cisco personnel only. Customer use of VxWorks is not recommended, nor is it supported by Cisco's Technical Assistance Center. Inappropriate use of VxWorks commands can have a negative and service affecting impact on your network. Please consult the troubleshooting guide for your release and platform for appropriate troubleshooting procedures. To exit without logging in, enter a Control-D (hold down the Control and D keys at the same time) at the Username prompt. To exit after logging in, type "logout" at the VxWorks shell prompt.

### CSCse36337

When a Server Trail is created on a 1+1 Protection Group, the Node's database gets deleted, and the Node goes for continuous reboot. No workaround available. This issue will be resolved in Release 7.22, 8.0.

### CSCse89357

CTC Network view shows up without any Nodes. The initialization of the network view sometimes would get interrupted with exceptions. Workaround is to relaunch CTC. This issue will be resolved in a future release.

CTC Network view shows up without any Nodes. The initialization of the network view sometimes would get interrupted with exceptions. Workaround is to relaunch CTC. This issue will be resolved in a future release.

### CSCse96077

On an IO port with this issue false TCAs that indicate line or traffic problems are raised every 15 min after the 15 min pm report. There are no alarms with the associated ports. Traffic is not affected. In Release 7.2, during a very short period when the defect is present (less than 1 sec), false TCAs might be raised. This can be reproduced by either removing or then reinserting the card, or by a small burst of defects.

The cards affected are:

- ONS 15454 DS1, DS1\_E1\_56, DS3 (including DS3, DS3N, DS3E, DS3NE), DS3\_EC1, DS3XM.
- DWDM, E1, E1\_42, OC3-8, OC12-4, MRC-12, OC192XFP; and ONS 15310-CL and ONS 15310-MA IO ports.

There are two workarounds:

- Place the affected ports in OOS-DSBLD and then back to IS. This clears the problem for the specific port on the card, but the traffic will be down during the period of OOS-DSBLD.
- Soft reset the card with problem ports. This clears the problem on all ports on the card. Soft reset might cause a protection switch if any circuit path on the card or any port on the card or the card itself is in a protection group. Note that the protection switch itself might cause a defect burst, which might introduce false TCAs. Before resetting the card, check if any circuit, port, or card is in a protection group. If there is path protection, BLSR, 1+1 or 1:1/1:N protection on the card, lock the protection using a switch command (for example, LOCKOUT/LOCKON) available to users before you reset the card ensuring that no protection switch occurs during soft reset, and that traffic will not be affected. For a card with no protection type, simply soft reset the card and traffic will not be affected.

This issue will be resolved in a future release.

## CSCse96077

In Release 7.2, when either you remove and then reinsert an I/O card, or a small burst of defects occurs for a very short period (less than 1 sec), false TCAs can be triggered that indicate line or traffic problems on an I/O port. Once triggered, the TCAs will be raised every 15 mins, after the 15 min pm report. There are no alarms for the associated ports. Traffic is not affected.

The cards affected are:

ONS 15454 DS1, DS1\_E1\_56, DS3 (including DS3, DS3N, DS3E, DS3NE), DS3\_EC1, DS3XM, DWDM, E1, E1\_42, OC3-8, OC12-4, MRC-12, OC192XFP; and ONS 15310-CL and ONS 15310-MA IO ports.

There are two workarounds:

1. Place the affected ports in OOS-DSBLD and then back to IS. This clears the problem for the specific port on the card, but the traffic will be down during the period of OOS-DSBLD.
2. Soft reset the card with problem ports. This clears the problem on all ports on the card. Soft reset might cause a protection switch if any port on that card or the card itself is in a protection group.

You can switch all protected ports away from the card that is to be soft-reset. In this case you can do manual switches away from the ports on that card, or in the case of an equipment switch, away from the equipment to be reset.

You can also perform a soft reset without any pre-action. This might result in protection switches of all active protected ports on that card. In the case of an equipment protection group resetting, the active equipment might incur a protection switch. The switch time will not exceed 60 ms.

For unprotected ports or card equipment, traffic will not be affected.

This issue will be resolved in a future release.

## CSCsd52120

Disabling a member circuit other than the first member of a VCAT VCG, does not bring the traffic down. This issue will be resolved in Release 8.0.

## CSCeh84908

A CTC client session can disconnect from an ONS node during simultaneous deletion of large numbers of VT level circuits (3000+). Connectivity to the node will recover without any user action. If the condition persists, restart the CTC session to reconnect. This issue is under investigation.

## CSCsh38022

When IPPM is enabled on a STS circuit, and errors injected, IPPM values do not increment. on CTC. Use TL1 to check the IPPM Values. This will be resolved in a future release.

## Alarms

### CSCse85355,CSCsd52665,CSCsd56328

The NE should report alarms or conditions on ingress port not on any internal ports. Alarm detected at the internal ports (TERM) side will be ingress map to the MON side. So the NE raises the STS-MON/VT-MON and STS-TERM/VT-TERM alarms or conditions on the STS-MON/VT-MON ports, irrespective of the actual detection port (MON or TERM). If the user wants the customized severity to be reflected for a specific STS/VT alarms, the alarm profile entities of both STS-MON and STS-TERM, if available, should be changed to the same severity.

## Common Control Cards

### CSCsb62127

A DCC Link discovered by CTC, can show incorrect bandwidth. When a DCC tunnel is created using two different OC cards, like OC12 and OC48 at its ends, CTC Network view shows incorrect bandwidth. Such a provisioning is a provisioning mistake. No workaround available. This issue will be resolved in a future release.

### CSCsh41379

Create a STS1 circuit on a 310CL node from a DS1 port to any other port/card. Enable IPPM. try the command "RTRV-STS1::<src>:<ctag>;1;" TL1 would return an error message saying STS not provisioned. Similar is the case with the RTRV-PM-STS1 command. This indicates that we are unable to retrieve STS1 connections provisioned on the DS1 port of 310CL-CTX card. And also unable to retrieve performance monitoring counts for the cross-connects. However the Performance Monitors can be seen through CTC. This is expected to be resolved in a future release.

## Path Protection Functionality

### CSCee53579

Traffic hits can occur in an unprotected to path protection topology upgrade in unidirectional routing. If you create an unprotected circuit, then upgrade the unprotected circuit to a path protection circuit using Unprotected to path protection wizard, selecting unidirectional routing in the wizard, the circuit will be upgraded to a path protection circuit. However, during the conversion, traffic hits on the order of 300 ms should be expected. This issue will not be resolved.

## TL1



### Note

---

To be compatible with TL1 and DNS, all nodes must have valid names. Node names should contain alphanumeric characters or hyphens, but no special characters or spaces.

---

## SNMP

### CSCsh46329

On 310CL, create a circuit on DS3, dsx3ValidIntervals is expected to increment by 1 every 15 minutes, but when you check this in simpleTester MIB browser the counter isn't incrementing. Workaround is to check this in CTC. This issue will be fixed in a future release.

## Resolved Caveats for Release 7.2

The following items are resolved in Release 7.2.

## Maintenance and Administration

### CSCsg52340

Automatic Routing of circuits using CTC 7.2 or higher, on nodes older than 7.2 is not possible. A new NE Default introduced in 7.2, causes this problem. Workaround is to toggle the CIRCUIITS\_AUTO\_ROUTE\_DEFAULT\_OVERRIDABLE NE Default. This issue is resolved in Release 7.22, 8.0.

### CSCse92125

Attempt to log-in using CTC. CTC login fails. Workaround is to ensure that the PC is not running a Turkish locale. This issue is fixed in Release 8.0.

## CSCse99104

CTC can incur either repeated failures when you attempt to log in to an NE, and/or a very long time to discover all ENEs behind a GNE (could be over 30 minutes on a medium sized network). This issue affects all ONS 15xxx releases from R4.1 to 7.2. This condition is more likely to happen on Windows XP after an upgrade to Service Pack 2, and when the network is made of a medium to large number of GNEs/ENEs with SOCKS enabled. This condition can also happen in the case of networks with poor connectivity between CTC and the GNEs.

The solution involves an enhancement to the SOCKS discovery protocol by introducing the concept of designated SOCKS servers. A designated SOCKS server is a NE that runs SOCKS, is LAN connected and has been explicitly marked as a potential SOCKS server by the user. CTC allows the user to enter an unlimited number of designated SOCKS servers. When designated SOCKS servers are defined, the automatic SOCKS server discovery protocol is disabled, resulting in substantial performance improvement during CTC login and ENE discovery.

## CSCse53017

Circuit creation when attempted on ML cards between a 7.2 NE and an older NE, the wizard would die. The source should be on 7.2 NE and destination on the older NE. Workaround is to interchange the source and destination. This issue is resolved in Release 7.22, 8.0.

## CSCse53017

Circuit creation when attempted on ML cards between a 7.2 NE and an older NE, the wizard would die. The source should be on 7.2 NE and destination on the older NE. Workaround is to interchange the source and destination. This issue is resolved in Release 7.22, 8.0.

## Common Control Cards

### CSCse01108

When the NE time is changed from CTC (or TL1), the pm bins of the interfaces (OCn/Ds1 on ctx-cl and OCn on 310-MA), which are on the active tcc, does n't get marked as partial. No workaround available. This issue is resolved in Release 7.22 and 8.0.

### CSCse98996

The issue can be reproduced as follow:

- 
- Step 1** On the node Infy12 went to Network view, Edit-->Preferences---->Checked Display events with Node Time Zone
  - Step 2** Changed the time to 11-Mar-2007 01:59:00 PST and let it pass the 02:00:00 am.
  - Step 3** CTC Node view-->Provisioning-->General Tab correctly showed the changed time as 03:00:00 PDT.
  - Step 4** Generated a LOS on a OC3 card. CTC Alarm pane showed the new PDT time.
  - Step 5** Retrieved audit trail. Audit trail showed the correct PDT time.

# New Features and Functionality

This section highlights new features and functionality for Release 7.2. For complete documentation of each of the features of the ONS 15310-CL, consult the user documentation.

## New Software Features and Functionality

### Network Circuit Automatic Routing Overridable NE Default

The Network Circuit Automatic Routing Overridable NE default makes it possible to set by default whether or not a user creating circuits can change (override) the automatic circuit routing setting (also provisionable as a default).

The new NE default supporting this feature is:

```
CTC.circuits.RouteAutomaticallyDefaultOverridable
```

This default works in combination with the existing circuit routing default:

```
CTC.circuits.RouteAutomatically
```

The overridable option enables network administrators to manage how circuits are created on a network-wide basis. For example, if the Automatic Circuit Routing default is set to FALSE (the check box is unchecked by default), then setting the Network Circuit Automatic Routing Overridable default to FALSE ensures that manual circuit routing is enforced for all users creating circuits (the default is not overridable by the user). When the Network Circuit Automatic Routing Overridable default is set to TRUE (the factory configured setting) users can click in the Automatic Routing check box to change the automatic routing setting if they wish.

When the Route Automatically check box is not selectable during circuit creation, the following automatic routing sub-options will also be unavailable:

- Using Required Nodes/Spans
- Review Route Before Creation

Like the Automatic Circuit Routing default, the Network Circuit Automatic Routing Overridable default applies to all nodes in the network. The Route Automatically check box is either overridable or not depending on how the default is set for the node you are logged into through CTC. To ensure correct behavior after setting the default, propagate the chosen default setting to all nodes through which users might log into the network to perform provisioning. For more information on NE defaults and their provisioning consult the user documentation.

## TL1

## Related Documentation

### Release-Specific Documents

- *Release Notes for the Cisco ONS 15310-CL, Release 7.0*
- *Release Notes for the Cisco ONS 15310-MA, Release 7.2*

- *Release Notes for the Cisco ONS 15454 SDH, Release 7.2*
- *Release Notes for the Cisco ONS 15327, Release 7.2*
- *Release Notes for the Cisco ONS 15600, Release 7.2*
- *Release Notes for the Cisco ONS 15454, Release 7.2*

## Platform-Specific Documents

- *Cisco ONS 15310-CL and Cisco ONS 15310-MA Procedure Guide*  
Provides installation, turn up, test, and maintenance procedures
- *Cisco ONS 15310-CL and Cisco ONS 15310-MA Reference Manual*  
Provides technical reference information for SONET/SDH cards, nodes, and networks
- *Cisco ONS 15310-CL and Cisco ONS 15310-MA Troubleshooting Guide*  
Provides a list of SONET alarms and troubleshooting procedures, general troubleshooting information, and hardware replacement procedures
- *Cisco ONS SONET TL1 Command Guide*  
Provides a comprehensive list of TL1 commands

## Obtaining Documentation

Cisco documentation and additional literature are available on Cisco.com. Cisco also provides several ways to obtain technical assistance and other technical resources. These sections explain how to obtain technical information from Cisco Systems.

### Cisco.com

You can access the most current Cisco documentation at this URL:

<http://www.cisco.com/univercd/home/home.htm>

You can access the Cisco website at this URL:

<http://www.cisco.com>

You can access international Cisco websites at this URL:

[http://www.cisco.com/public/countries\\_languages.shtml](http://www.cisco.com/public/countries_languages.shtml)

### Documentation DVD

Cisco documentation and additional literature are available in a Documentation DVD package, which may have shipped with your product. The Documentation DVD is updated regularly and may be more current than printed documentation. The Documentation DVD package is available as a single unit.

Registered Cisco.com users (Cisco direct customers) can order a Cisco Documentation DVD (product number DOC-DOCDVD=) from the Ordering tool or Cisco Marketplace.

Cisco Ordering tool:

<http://www.cisco.com/en/US/partner/ordering/>

Cisco Marketplace:

<http://www.cisco.com/go/marketplace/>

## Ordering Documentation

You can find instructions for ordering documentation at this URL:

[http://www.cisco.com/univercd/cc/td/doc/es\\_inpk/pdi.htm](http://www.cisco.com/univercd/cc/td/doc/es_inpk/pdi.htm)

You can order Cisco documentation in these ways:

- Registered Cisco.com users (Cisco direct customers) can order Cisco product documentation from the Ordering tool:  
<http://www.cisco.com/en/US/partner/ordering/>
- Nonregistered Cisco.com users can order documentation through a local account representative by calling Cisco Systems Corporate Headquarters (California, USA) at 408 526-7208 or, elsewhere in North America, by calling 1 800 553-NETS (6387).

## Documentation Feedback

You can send comments about technical documentation to [bug-doc@cisco.com](mailto:bug-doc@cisco.com).

You can submit comments by using the response card (if present) behind the front cover of your document or by writing to the following address:

Cisco Systems  
Attn: Customer Document Ordering  
170 West Tasman Drive  
San Jose, CA 95134-9883

We appreciate your comments.

## Cisco Product Security Overview

Cisco provides a free online Security Vulnerability Policy portal at this URL:

[http://www.cisco.com/en/US/products/products\\_security\\_vulnerability\\_policy.html](http://www.cisco.com/en/US/products/products_security_vulnerability_policy.html)

From this site, you can perform these tasks:

- Report security vulnerabilities in Cisco products.
- Obtain assistance with security incidents that involve Cisco products.
- Register to receive security information from Cisco.

A current list of security advisories and notices for Cisco products is available at this URL:

<http://www.cisco.com/go/psirt>

If you prefer to see advisories and notices as they are updated in real time, you can access a Product Security Incident Response Team Really Simple Syndication (PSIRT RSS) feed from this URL:

[http://www.cisco.com/en/US/products/products\\_psirt\\_rss\\_feed.html](http://www.cisco.com/en/US/products/products_psirt_rss_feed.html)

## Reporting Security Problems in Cisco Products

Cisco is committed to delivering secure products. We test our products internally before we release them, and we strive to correct all vulnerabilities quickly. If you think that you might have identified a vulnerability in a Cisco product, contact PSIRT:

- Emergencies—[security-alert@cisco.com](mailto:security-alert@cisco.com)
- Nonemergencies—[psirt@cisco.com](mailto:psirt@cisco.com)



**Tip**

We encourage you to use Pretty Good Privacy (PGP) or a compatible product to encrypt any sensitive information that you send to Cisco. PSIRT can work from encrypted information that is compatible with PGP versions 2.x through 8.x.

Never use a revoked or an expired encryption key. The correct public key to use in your correspondence with PSIRT is the one that has the most recent creation date in this public key server list:

<http://pgp.mit.edu:11371/pks/lookup?search=psirt%40cisco.com&op=index&exact=on>

In an emergency, you can also reach PSIRT by telephone:

- 1 877 228-7302
- 1 408 525-6532

## Obtaining Technical Assistance

For all customers, partners, resellers, and distributors who hold valid Cisco service contracts, Cisco Technical Support provides 24-hour-a-day, award-winning technical assistance. The Cisco Technical Support Website on Cisco.com features extensive online support resources. In addition, Cisco Technical Assistance Center (TAC) engineers provide telephone support. If you do not hold a valid Cisco service contract, contact your reseller.

### Cisco Technical Support Website

The Cisco Technical Support Website provides online documents and tools for troubleshooting and resolving technical issues with Cisco products and technologies. The website is available 24 hours a day, 365 days a year, at this URL:

<http://www.cisco.com/techsupport>

Access to all tools on the Cisco Technical Support Website requires a Cisco.com user ID and password. If you have a valid service contract but do not have a user ID or password, you can register at this URL:

<http://tools.cisco.com/RPF/register/register.do>



**Note**

Use the Cisco Product Identification (CPI) tool to locate your product serial number before submitting a web or phone request for service. You can access the CPI tool from the Cisco Technical Support Website by clicking the **Tools & Resources** link under Documentation & Tools. Choose **Cisco Product Identification Tool** from the Alphabetical Index drop-down list, or click the **Cisco Product Identification Tool** link under Alerts & RMAs. The CPI tool offers three search options: by product ID

or model name; by tree view; or for certain products, by copying and pasting **show** command output. Search results show an illustration of your product with the serial number label location highlighted. Locate the serial number label on your product and record the information before placing a service call.

## Submitting a Service Request

Using the online TAC Service Request Tool is the fastest way to open S3 and S4 service requests. (S3 and S4 service requests are those in which your network is minimally impaired or for which you require product information.) After you describe your situation, the TAC Service Request Tool provides recommended solutions. If your issue is not resolved using the recommended resources, your service request is assigned to a Cisco TAC engineer. The TAC Service Request Tool is located at this URL:

<http://www.cisco.com/techsupport/servicerequest>

For S1 or S2 service requests or if you do not have Internet access, contact the Cisco TAC by telephone. (S1 or S2 service requests are those in which your production network is down or severely degraded.) Cisco TAC engineers are assigned immediately to S1 and S2 service requests to help keep your business operations running smoothly.

To open a service request by telephone, use one of the following numbers:

Asia-Pacific: +61 2 8446 7411 (Australia: 1 800 805 227)

EMEA: +32 2 704 55 55

USA: 1 800 553-2447

For a complete list of Cisco TAC contacts, go to this URL:

<http://www.cisco.com/techsupport/contacts>

## Definitions of Service Request Severity

To ensure that all service requests are reported in a standard format, Cisco has established severity definitions.

**Severity 1 (S1)**—Your network is “down,” or there is a critical impact to your business operations. You and Cisco will commit all necessary resources around the clock to resolve the situation.

**Severity 2 (S2)**—Operation of an existing network is severely degraded, or significant aspects of your business operation are negatively affected by inadequate performance of Cisco products. You and Cisco will commit full-time resources during normal business hours to resolve the situation.

**Severity 3 (S3)**—Operational performance of your network is impaired, but most business operations remain functional. You and Cisco will commit resources during normal business hours to restore service to satisfactory levels.

**Severity 4 (S4)**—You require information or assistance with Cisco product capabilities, installation, or configuration. There is little or no effect on your business operations.

# Obtaining Additional Publications and Information

Information about Cisco products, technologies, and network solutions is available from various online and printed sources.

- Cisco Marketplace provides a variety of Cisco books, reference guides, and logo merchandise. Visit Cisco Marketplace, the company store, at this URL:

<http://www.cisco.com/go/marketplace/>

- *Cisco Press* publishes a wide range of general networking, training and certification titles. Both new and experienced users will benefit from these publications. For current Cisco Press titles and other information, go to Cisco Press at this URL:

<http://www.ciscopress.com>

- *Packet* magazine is the Cisco Systems technical user magazine for maximizing Internet and networking investments. Each quarter, Packet delivers coverage of the latest industry trends, technology breakthroughs, and Cisco products and solutions, as well as network deployment and troubleshooting tips, configuration examples, customer case studies, certification and training information, and links to scores of in-depth online resources. You can access Packet magazine at this URL:

<http://www.cisco.com/packet>

- *iQ Magazine* is the quarterly publication from Cisco Systems designed to help growing companies learn how they can use technology to increase revenue, streamline their business, and expand services. The publication identifies the challenges facing these companies and the technologies to help solve them, using real-world case studies and business strategies to help readers make sound technology investment decisions. You can access iQ Magazine at this URL:

<http://www.cisco.com/go/iqmagazine>

- *Internet Protocol Journal* is a quarterly journal published by Cisco Systems for engineering professionals involved in designing, developing, and operating public and private internets and intranets. You can access the Internet Protocol Journal at this URL:

<http://www.cisco.com/ipj>

- World-class networking training is available from Cisco. You can view current offerings at this URL:

<http://www.cisco.com/en/US/learning/index.html>

---

This document is to be used in conjunction with the documents listed in the “Related Documentation” section.