



PRODUCT BULLETIN NO. 2561

# CISCO IOS SOFTWARE RELEASE 12.2(23)SV ON THE CISCO ONS 15500 SERIES

This product bulletin outlines the hardware and software features supported in Cisco IOS® Software Release 12.2(23)SV on the Cisco ONS 15500 Series metro optical platforms. Cisco IOS Software Release 12.2(23)SV is an ED release (XED) that it is optimized for the Cisco ONS 15500 Series.

The Cisco ONS 15500 Series includes the ONS 15530 Multiservice Aggregation Platform, ONS 15540 ESPx Platform, and the ONS 15540 ESP Platform. These platforms are highly scalable, dense wavelength division multiplexing (DWDM), multiservice aggregation and transport platforms. The ONS 15500 Series aggregates storage network, data networking, and legacy applications over an ultra-high, bandwidth intelligent optical infrastructure. The Cisco ONS 15500 Series provides flexible, scalable, and highly available optical networking for current and future high-performance, bandwidth-intensive networking applications.

## FEATURES AT A GLANCE

### Hardware Support

The Cisco IOS 12.2(23)SV release for the ONS 15530 platform supports the following new hardware. No additional new hardware support is provided in the Cisco IOS 12.2(23)SV release for the ONS 15540 platforms.

Product	Product Codes	Description
New ONS 15530 4-pt 1G/2G Fibre Channel Aggregation Module	15530-FC-4P	4-pt 1G/2G Fibre Channel Aggregation Card for the ONS 15530

### Software Support

The Cisco IOS 12.2(23)SV release for the ONS 15530 and ONS 15540 platforms provides the following software feature support.

The Cisco IOS 12.2(23)SV release for the ONS 15530 supports the following features for the ONS 15530 4-port 1-Gbps/2-Gbps FC aggregation card.

Feature	Description
Protocol Support	The Cisco ONS 15530 4-pt 1G/2G Fibre Channel Aggregation Card supports 1-Gbps and 2-Gbps FC (Fibre Channel), FICON (Fibre Connection), and ISC (InterSystem Channel) links traffic.
SFP (small form-factor pluggable) optics support	The Cisco ONS 15530 4-pt 1G/2G Fibre Channel Aggregation Card accepts up to four single-mode or multimode SFP (small form-factor pluggable) optics for client traffic. Each SFP optic supports 1-Gbps or 2 Gbps FC, FICON, or ISC traffic, depending on how the interface is configured in the CLI.

Ability to mix and match ports	<ul style="list-style-type: none"> <li>The Cisco ONS 15530 4-pt 1G/2G Fibre Channel Aggregation Card provides the ability to populate the card with any combination of the supported 1-Gbps and 2-Gbps Fibre Channel / FICON and 1-Gbps Gigabit Ethernet SFPs. For example, you can mix a 1-Gbps GE single-mode SFP optic with a 2-Gbps Fibre Channel multimode SFP optic on the same 4-pt 1G/2G Fibre Channel Aggregation Card.</li> </ul>
Support for 2.5G and 10G ITU trunk cards	<ul style="list-style-type: none"> <li>The Cisco ONS 15530 4-pt 1G/2G Fibre Channel Aggregation Card provides the flexibility to send up to one port over a 2.5-Gbps ITU trunk card or up to four ports over a 10-Gbps ITU trunk card or 10-Gbps uplink card.</li> </ul>
Protection Modes Supported	<ul style="list-style-type: none"> <li>The Cisco ONS 15530 4-pt 1G/2G Fibre Channel Aggregation Card has redundant connections over the backplane to the switch fabric to allow for client protection, 1+1 protection, y-cable protection, trunk protection, and switch fabric protection.</li> </ul>

The Cisco IOS 12.2(23)SV release for the ONS 15530 supports the following features for the ONS 15530 2.5-Gbps Transponder line cards.

Feature	Description
ISC-3 Peer Mode 1-Gbps Support	Support for the IBM ISC-3 (InterSystem Channel) link protocol in 1-Gbps "Peer Mode" on the Cisco ONS 15530 2.5-Gbps Transponder line cards.

The Cisco IOS 12.2(23)SV release for the ONS 15540 supports the following features for the ONS 15540 2.5-Gbps Transponder modules.

Feature	Description
ISC-3 Peer Mode 1-Gbps Support	Support for the IBM ISC-3 (InterSystem Channel) link protocol in 1-Gbps "Peer Mode" on the Cisco ONS 15540 2.5-Gbps Transponder modules.

#### Release Notes can be found at:

ONS 15530:

[http://www.cisco.com/univercd/cc/td/doc/product/mels/15530/12\\_2\\_sv/4891\\_05.htm](http://www.cisco.com/univercd/cc/td/doc/product/mels/15530/12_2_sv/4891_05.htm)

ONS 15540 ESPx:

[http://www.cisco.com/univercd/cc/td/doc/product/mels/15540x/12\\_2\\_sv/4893\\_05.htm](http://www.cisco.com/univercd/cc/td/doc/product/mels/15540x/12_2_sv/4893_05.htm)

ONS 15540 ESP:

[http://www.cisco.com/univercd/cc/td/doc/product/mels/15540/12\\_2\\_sv/4892\\_05.htm](http://www.cisco.com/univercd/cc/td/doc/product/mels/15540/12_2_sv/4892_05.htm)

#### ORDERING INFORMATION

The Cisco IOS 12.2(23)SV release for the ONS 15530 and ONS 15540 platforms supports the following software.

Platform	Product Number	Release
ONS 15530	SO530C-12223SV	12.2(23)SV
ONS 15540 ESPx	SO15C-12223SV	12.2(23)SV
ONS 15540 ESP	SO15C-12223SV	12.2(23)SV

## **SMARTNET CUSTOMERS**

### **Update**

SMARTnet™ customers are entitled to a software update, which is described as a new release version of the customer last-purchased feature set. For customers wanting increased functionality, an upgrade to the new feature set will be required.

### **Upgrade**

Cisco helps SMARTnet customers get upgrades quickly through CCO. If customers are upgrading from one feature set to another, they must place an order for the purchase of the appropriate Technology Use or Feature Licenses before downloading the software

## **NON-SMARTNET CUSTOMERS**

### **Upgrades**

Customers who wish to increase the level of functionality beyond their current feature set must order a software product code along with any appropriate feature licenses.

### **Downloading Cisco IOS 12.2(23)SV Software Release from Cisco**

Registered CCO users may download the Cisco IOS 12.2(23)SV software release for the ONS 15530 and ONS 15540 at <http://cco.cisco.com> when available. This release is scheduled for Q3CY04.

Those customers eligible for software upgrades under warranty that do not have service contracts will need to contact the Technical Assistance Center at 800 553-2447 or [tac-dispatch@cisco.com](mailto:tac-dispatch@cisco.com).

**Corporate Headquarters**

Cisco Systems, Inc.  
170 West Tasman Drive  
San Jose, CA 95134-1706  
USA  
www.cisco.com  
Tel: 408 526-4000  
800 553-NETS (6387)  
Fax: 408 526-4100

**European Headquarters**

Cisco Systems International  
BV  
Haarlerbergpark  
Haarlerbergweg 13-19  
1101 CH Amsterdam  
The Netherlands  
www-europe.cisco.com  
Tel: 31 0 20 357 1000  
Fax: 31 0 20 357 1100

**Americas Headquarters**

Cisco Systems, Inc.  
170 West Tasman Drive  
San Jose, CA 95134-1706  
USA  
www.cisco.com  
Tel: 408 526-7660  
Fax: 408 527-0883

**Asia Pacific Headquarters**

Cisco Systems, Inc.  
168 Robinson Road  
#28-01 Capital Tower  
Singapore 068912  
www.cisco.com  
Tel: +65 6317 7777  
Fax: +65 6317 7799

Cisco Systems has more than 200 offices in the following countries and regions. Addresses, phone numbers, and fax numbers are listed on **the Cisco Web site at [www.cisco.com/go/offices](http://www.cisco.com/go/offices).**

Argentina • Australia • Austria • Belgium • Brazil • Bulgaria • Canada • Chile • China PRC • Colombia • Costa Rica • Croatia • Cyprus  
Czech Republic • Denmark • Dubai, UAE • Finland • France • Germany • Greece • Hong Kong SAR • Hungary • India • Indonesia • Ireland  
Israel • Italy • Japan • Korea • Luxembourg • Malaysia • Mexico • The Netherlands • New Zealand • Norway • Peru • Philippines • Poland  
Portugal • Puerto Rico • Romania • Russia • Saudi Arabia • Scotland • Singapore • Slovakia • Slovenia • South Africa • Spain • Sweden  
Switzerland • Taiwan • Thailand • Turkey • Ukraine • United Kingdom • United States • Venezuela • Vietnam • Zimbabwe

Copyright © 2004 Cisco Systems, Inc. All rights reserved. CCIP, CCSP, the Cisco *Powered* Network mark, Cisco Unity, Follow Me Browsing, FormShare, and StackWise are trademarks of Cisco Systems, Inc.; Changing the Way We Work, Live, Play, and Learn, and iQuick Study are service marks of Cisco Systems, Inc.; and Aironet, ASIST, BPX, Catalyst, CCDA, CCDP, CCIE, CCNA, CCNP, Cisco, the Cisco Certified Internetwork Expert logo, Cisco IOS, the Cisco IOS logo, Cisco Press, Cisco Systems, Cisco Systems Capital, the Cisco Systems logo, Empowering the Internet Generation, Enterprise/Solver, EtherChannel, EtherSwitch, Fast Step, GigaStack, Internet Quotient, IOS, IP/TV, iQ Expertise, the iQ logo, iQ Net Readiness Scorecard, LightStream, Linksys, MGX, MICA, the Networkers logo, Networking Academy, Network Registrar, *Packet*, PIX, Post-Routing, Pre-Routing, RateMUX, Registrar, ScriptShare, SlideCast, SMARTnet, StrataView Plus, Stratm, SwitchProbe, TeleRouter, The Fastest Way to Increase Your Internet Quotient, TransPath, and VCO are registered trademarks of Cisco Systems, Inc. and/or its affiliates in the United States and certain other countries.

All other trademarks mentioned in this document or Web site are the property of their respective owners. The use of the word partner does not imply a partnership relationship between Cisco and any other company. (0402R)