

CISCO IOS SOFTWARE RELEASE 12.2(18)SXD

CISCO IOS SOFTWARE RELEASE 12.2S

Q. What is Cisco IOS Software Release 12.2S?

A. Cisco IOS[®] Software Release 12.2S is designed for Enterprise campus and Service Provider edge networks that require world-class IP and Multiprotocol Label Switching (MPLS) services. The Cisco Catalyst[®] Switches and high-end routers in Release 12.2S provide secure, converged network services in the most demanding Enterprise and Service Provider environments, from the wiring closet and data center to the WAN edge.

Release 12.2S incorporates a series of Cisco IOS Software releases that integrate the proven, mature code base of Major Release 12.2 with critical software features and hardware support from Releases 12.1E and 12.0S.

For more information about Release 12.2S, please visit:

<http://www.cisco.com/go/release122s/>

Q. What features and hardware support are delivered in Release 12.2S?

A. The infrastructure innovation and technology leadership in Release 12.2S enable advanced Ethernet LAN switching, Metro Ethernet, and Broadband Aggregation services through enhancements in High Availability, Security, MPLS, VPNs, and IP Routing and Services.

High-end hardware support in the Release 12.2S family initially includes the Cisco 7200, 7300, 7400, 7500, and 7600 Series Routers, and the Cisco Catalyst[®] 2970, 3560, 3750, 4500, and 6500 Series Switches. Support is also planned for the Cisco 10000 Series Internet Router.

Q. Which releases of Release 12.2S are currently available?

A. You can currently download Releases 12.2(22)S, 12.2(20)S, 12.2(18)S, and 12.2(14)S from Software Center:

<http://www.cisco.com/public/sw-center/sw-ios.shtml>

For detailed information about the new hardware and features supported in each of these releases, refer to the Release 12.2S Release Notes:

http://www.cisco.com/en/US/partner/products/sw/iosswrel/ps1838/prod_release_notes_list.html

CISCO IOS SOFTWARE RELEASE 12.2SX

Q. What is Cisco IOS Software Release 12.2SX?

A. Derived from Release 12.2(14)S, Release 12.2SX provides Release 12.2S functionality and new features and hardware support for the Cisco Catalyst 6500 Series Switch and Cisco 7600 Series Router.

Q. What features and hardware support are delivered in Release 12.2SX?

A. All new features and hardware support for the Cisco Catalyst 6500 Series Switch and Cisco 7600 Series Router are delivered in Release 12.2SX.

Cisco IOS Software Release 12.1E is in maintenance mode and will not receive new features or hardware support; therefore, Release 12.2SX is the migration path for Release 12.1E customers who run the Cisco Catalyst 6500 Series Switch and Cisco 7600 Series Router.

Q. Which releases of Release 12.2SX are currently available?

A. Customers can currently download Releases 12.2(18)SXD, 12.2(17d)SXB, 12.2(17b)SXA, 12.2(17a)SX, and 12.2(14)SX from Software Center:

<http://www.cisco.com/public/sw-center/sw-ios.shtml>

For detailed information about the new features and hardware supported in each of these releases, refer to:

Release 12.2SX Release Notes:

http://www.cisco.com/en/US/products/hw/switches/ps708/prod_release_note09186a00801c8339.html

http://www.cisco.com/en/US/products/hw/switches/ps708/prod_release_note09186a008019e1e9.html

Release 12.2SX Product Bulletins:

http://www.cisco.com/en/US/products/sw/iosswrel/ps5012/prod_bulletins_list.html

http://www.cisco.com/en/US/products/hw/switches/ps708/prod_bulletins_list.html

NUMBERING

Q. Why does Release 12.2SX numbering differ from Release 12.2S numbering?

A. Release 12.2SX is derived from, and bases its numbering on, the Release 12.2S code base. Release 12.2S bases its numbering on the mature code base of Major Release 12.2.

Because of these code base dependencies, as well as other factors, Release 12.2SX numbering differs from Release 12.2S numbering.

Q. How will Cisco number subsequent releases of Release 12.2SX?

A. Given that Release 12.2SX numbering depends on Release 12.2S numbering, Release 12.2SX numbering is announced immediately prior to release introduction.

RELEASE 12.2(18)SXD

Q. What is Release 12.2(18)SXD?

A. Release 12.2(18)SXD extends the benefits of Cisco IOS High Availability to Enterprise campus, data center, and WAN aggregation networks, and Service Provider edge aggregation networks that run the Cisco Catalyst 6500 Series Switch and Cisco 7600 Series Router. These enhancements provide nonstop application availability for

Enterprise business-critical services, including supply-chain management, secure transactions, IP communications, and e-business. They also provide the network resiliency that Service Providers need to extend revenue through robust Service Level Agreements. This increased availability and resiliency reduces the total cost of ownership for Enterprise and Service Provider networks while also improving their overall productivity and efficiency.

Q. What new features and hardware support are delivered in Release 12.2(18)SXD?

A. Cisco Nonstop Forwarding (NSF) with Stateful Switchover (SSO) delivers seamless Supervisor Engine switchover and nonstop application availability for business-critical services on the Cisco Catalyst 6500 Series Switch and Cisco 7600 Series Router. During a switchover, Cisco SSO provides zero interruption of Layer 2 connections, while Cisco NSF forwards Layer 3 packets continuously with minimal or no packet loss. The continuous packet forwarding enables peering relationships to re-establish without the need for network-wide routing protocol reconvergence.

Gateway Load Balancing Protocol (GLBP) uses network bandwidth more effectively by load-sharing packets over all available paths while protecting the first hop router. Previously, if there was a failure in the primary router or path, first hop redundancy features could only forward packets over the backup WAN paths. GLBP makes it possible for any router in a group to serve as a backup, and simplifies configuration.

MPLS Traffic Engineering Fast Reroute¹ provides carrier-class traffic protection and restoration, similar to SONET/SDH. Service Providers can now reroute MPLS label switched paths around any link or node failure with full traffic recovery rates as fast as 50 milliseconds.

Control Plane Policing¹ protects the control and management planes of a networking device against malicious Denial of Service attacks, allowing businesses to maintain productivity without interruption. It does so by employing user-defined Quality of Service policies that limit the number of packets destined for both planes.

The Cisco Catalyst 6500 Series Wireless LAN Services Module, part of the Cisco Catalyst 6500 Series of multilayer switches and a key component of the Cisco Structured Wireless-Aware Network framework, is the industry's only enterprise class wireless and wireline switching system, enabling secure, highly available, and easily managed unified networking deployments for Enterprises, midsize businesses, universities, and Service Providers.

GENERAL CISCO IOS SOFTWARE QUESTIONS

Q. Where can I download Release 12.2S?

A. You can download Release 12.2S from Software Center:

<http://www.cisco.com/public/sw-center/sw-ios.shtml>

You will need an active SMARTnet contract or purchased feature license in order to access and download the release. Software Center also provides valuable Cisco IOS Software information, including hardware/software compatibility and ordering procedures.

Q. What are release notes?

A. Release notes describe memory requirements, hardware support, software image deferrals, caveats, and changes to the microcode or modem code, and related information. It is highly recommended that customers read the release notes prior to deploying a new Cisco IOS Software release.

1. Support is planned for a future update of Release 12.2(18)SXD

Release notes include a list of software image deferrals, which refer to those Cisco IOS Software images not available to customers due to existing software or hardware issues.

Release 12.2SX release notes:

http://www.cisco.com/en/US/products/hw/switches/ps708/prod_release_note09186a00801c8339.html

http://www.cisco.com/en/US/products/hw/switches/ps708/prod_release_note09186a008019e1e9.html

Q. What are caveats?

A. Caveats describe unexpected behavior (ie: software defects) in Cisco IOS Software releases. The Release 12.2S and Release 12.2SX release notes include a list of resolved caveats from the most recent maintenance release, as well as a list of open caveats and any applicable workarounds.

ADDITIONAL INFORMATION

Q. Where can I find detailed descriptions of the features and hardware support in each release of the Release 12.2S family?

A. Release 12.2S New Features and Hardware Support, Product Bulletin No. 2216

http://www.cisco.com/en/US/products/sw/iosswrel/ps1838/prod_bulletin09186a0080212b1b.html

Release 12.2SX Product Bulletins:

http://www.cisco.com/en/US/products/sw/iosswrel/ps5012/prod_bulletins_list.html

http://www.cisco.com/en/US/products/hw/switches/ps708/prod_bulletins_list.html

Q. Where can I find additional information and collateral about the Release 12.2S family?

A. <http://www.cisco.com/go/release122s/>



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

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

All contents are Copyright © 1992-2004 Cisco Systems, Inc. All rights reserved. Cisco, Cisco IOS, Cisco Systems, and the Cisco Systems logo 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 Website 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.
(0403R) 204068_ETMG_SH_07.04