

## RELEASE 12.2—GENERAL DEPLOYMENT CERTIFICATION

### RELEASE 12.2

**Q.** What is Cisco IOS Software Major Release 12.2?

**A.** Cisco IOS<sup>®</sup> Software Major Release 12.2 achieved General Deployment certification in February 2004. With this certification, Major Release 12.2 recognizes a new level of maturity to the already robust portfolio of Cisco IOS Software releases. The releases in this portfolio, including Release 12.2, Release 12.3, and Release 12.3T, each address specific customer needs.

Cisco IOS Software Major Release 12.2 (FCS: April 2001) consolidates the features, functionality, and hardware support introduced in Cisco IOS Software Release 12.1T. Now General Deployment-certified, this release reflects the maturity of extensive deployment in diverse customer networks.

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

**A.** Cisco IOS Software Release 12.2 Features and Hardware Support, Product Bulletin No. 1262 details the advanced features and hardware in Release 12.2.

**Note:** No new features or functionality are introduced in Release 12.2 beyond those delivered in Release 12.1T.

**Q.** What are the highlights of Release 12.2?

### QUALITY OF SERVICE: DIFFERENTIATED TRAFFIC

Today's business networks carry more data in the form of bandwidth-intensive, real-time data-voice-and video streams, which extend network capability and resources. Cisco IOS Software provides multiple Quality of Service (QoS) options to manage network congestion and traffic transmission, including class-based packet marking and traffic shaping.

### Network-Based Application Recognition: Traffic Classification

Network-Based Application Recognition (NBAR) ensures that network bandwidth is used efficiently by leveraging QoS features to provide bandwidth guarantees and limits, traffic shaping, and packet marking. This classification engine recognizes a wide variety of applications, including protocols that use dynamic transmission control protocol/user datagram protocol (TCP/UDP) port assignments. NBAR recognition and classification of an application enables the network to invoke services for that application.

### **Multiprotocol Label Switching: Performance and Scalability**

Cisco Multiprotocol Label Switching (MPLS) combines the performance and capabilities of Layer 2 (data link layer) switching with the proven scalability of Layer 3 (network layer) routing. MPLS enables Service Providers to meet the challenges of continuous growth in network usage, while differentiating services and maintaining the current network infrastructure. The MPLS architecture is flexible and can be deployed with any combination of Layer 2 technologies. MPLS support is offered for Layer 3 protocols, and its scalability far exceeds that of typical networks.

### **Multimedia: H.323 Support**

The essential element of a successful data network design is its ability to build redundancy, thus eliminating single points of failure. Cisco IOS Software Release 12.2 offers critical H.323 features that maintain voice, video, and data sessions with excellent redundancy design applicability.

### **Cisco 2600XM Series Router**

The Cisco 2600XM Series Router is a modular-service access router that extends the range of performance options of the widely deployed Cisco 2600 Series Router. These enhanced routers help customers meet the demands of processor-intensive services, such as Converged Voice and Data, Virtual Private Networks (VPN), Security, Content Networking, and QoS features, which are increasingly popular for branch office deployments.



### **GENERAL DEPLOYMENT**

**Q.** What is General Deployment certification?

**A.** A Cisco IOS Software release achieves General Deployment when its quality has been demonstrated by extensive deployment in diverse networks and proven software stability.

General Deployment-certified releases are widely deployable, as proven through extensive system testing, which will continue as part of Cisco's ongoing commitment to improve and increase reliability and quality.

A set of stringent criteria was used to analyze the quality of the release, and is the basis of the General Deployment declaration. These criteria include:

- High customer satisfaction
- Expansive customer deployment
- Demonstrated software reliability
- Rigorous testing

**Q.** Which releases in the Release 12.2 family have achieved General Deployment certification?

**A.** Cisco has certified Major Release 12.2(21a) and all subsequent releases of the Release 12.2 family for General Deployment.

**Q.** Why was Release 12.2(21a) chosen for General Deployment certification?

**A.** Release 12.2(21a) and all subsequent releases of the Release 12.2 family have achieved General Deployment certification based on standard software development tests, assessments of Release 12.2 in various customer networks, and ongoing Cisco IOS Software improvements.

#### DEPLOYMENT RECOMMENDATION

**Q.** Which customers should upgrade to Release 12.2?

**A.** Cisco IOS Software releases gain maturity and stability with cumulative testing and field exposure. Generally, the following customers are likely to benefit from an upgrade to Release 12.2:

- Release 12.1T customers: Major Release 12.2 provides the maintenance for the Release 12.1T family, which has reached its End of Engineering (EoE) milestone.
- Customers who are using the following releases, which have been consolidated into Major Release 12.2:

12.0(4)XH	12.1(1)XB
12.0(7)XR	12.1(1)XH
12.0(7)XK	12.1(1)XE
12.1(1)XA	12.1(2)XF
12.1(1)XC	12.1(3)XI
12.1(1)XD	12.1(3)XK

- Customers who require Release 12.1T advanced networking features or new hardware support, which is now delivered in Release 12.2. These features are described in [Cisco IOS Software Release 12.2 Features and Hardware Support, Product Bulletin No. 1262](#).

**Q.** Why should customers upgrade to Release 12.2?

**A.** Release 12.2 ideal for conservative customers seeking a mature release that provides the functionality and hardware support originally introduced in Release 12.1T.

For example, Major Release 12.2 strengthens Cisco IOS Software architecture for Voice, Video, and Integrated Data (AVVID) capabilities through Network Address Translation (NAT) and QoS enhancements. The NAT and distributed QoS enhancements in Release 12.2 provide a highly scalable VoIP network.

**Q.** Should customers upgrade now to Release 12.2, or should they wait for a later release?

**A.** Release 12.2 is appropriate for customers who have deployed any of the 12.1T releases or 12.1 based X-releases. This will ensure they continue to receive maintenance, defect fixes and improvements from additional testing.

As with all software releases, maturity and stability come with cumulative testing and field exposure; therefore, Major Release 12.2 is more mature than any later releases.

## GENERAL CISCO IOS SOFTWARE QUESTIONS

**Q.** Where can I download Cisco IOS Software?

**A.** Visit the Software Center on Cisco.com to download any Cisco IOS Software release product.

Please log into Cisco.com to download Release 12.2: <http://www.cisco.com/public/sw-center/sw-ios.shtml>

Select "Download Cisco IOS 12.2 Software."

Software Center also provides valuable Cisco IOS Software information, including hardware/software compatibility, Product Bulletins, and ordering procedures.

**Q.** What is a major release?

**A.** A major release consolidates features/functions previously introduced in technology releases. A major release emphasizes stability and reliability. No features or functions are added after First Commercial Shipment (FCS). Major releases, matured through maintenance releases, are designed for areas of the network carrying business-critical applications. For information about the Cisco IOS Software release lifecycle, please refer to Cisco IOS Software Release Product Lifecycle Dates & Milestones, Product Bulletin No. 2214:

[http://www.cisco.com/en/US/products/sw/iosswrel/ps5187/prod\\_bulletin09186a00801a1349.html](http://www.cisco.com/en/US/products/sw/iosswrel/ps5187/prod_bulletin09186a00801a1349.html)

**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.

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 12.2 release notes are available at:

[http://www.cisco.com/en/US/products/sw/iosswrel/ps1835/prod\\_release\\_notes\\_list.html](http://www.cisco.com/en/US/products/sw/iosswrel/ps1835/prod_release_notes_list.html)

**Q.** What are caveats?

**A.** Caveats describe unexpected behavior (ie: software defect) in Cisco IOS Software releases.

Release notes include a list of resolved caveats from the most recent maintenance release as well as a list of open caveats and any existing workaround.

Release 12.2 caveats are available at:

[http://www.cisco.com/en/US/products/sw/iosswrel/ps1835/prod\\_release\\_note09186a00800ab6bb.html](http://www.cisco.com/en/US/products/sw/iosswrel/ps1835/prod_release_note09186a00800ab6bb.html)

## ADDITIONAL INFORMATION

**Q.** Where can I find additional information about Cisco IOS Software Release 12.2?

- Cisco IOS Software Release 12.2

<http://www.cisco.com/go/release122/>

- Cisco IOS Software Release Sales Tools and Collateral

<http://www.cisco.com/warp/public/732/releases/tools/>

- Additional questions or feedback:

<http://www.cisco.com/warp/public/732/feedback/release/>



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