

CISCO IOS SOFTWARE RELEASE 12.3(4)XQ

This product bulletin describes the content and delivery information for Cisco IOS® Software Release 12.3(4)XQ. This bulletin should be used in conjunction with the Cisco IOS Software Release 12.3T product bulletin. Cisco IOS Software Release 12.3(4)XQ is a short-lived, early deployment release that will be supported in the sixth release of Cisco IOS Software Release 12.3T. It supports the Cisco® 1700 Series routers (Cisco 1701, Cisco 1710, Cisco 1711, Cisco 1712, Cisco 1720, Cisco 1721, Cisco 1751, Cisco 1751-V, Cisco 1760 and Cisco 7204 VXR). Cisco IOS Software Release 12.3(4)XQ is a maintenance release for Cisco SOHO, 800 Series Routers, Cisco ICS 7750 and Cisco 3200 Series Mobile Access Routers. There are no new features in this release for these platforms.

The platform and features delivered with this early deployment release will be immediately incorporated into the sixth release of Cisco IOS Software Release 12.3T. The timeframe for the availability of the sixth release of the Cisco IOS Software Release 12.3T train is the first quarter of CY2005 (target release date on Cisco.com is February 2005). Please note that this timeframe is subject to change.

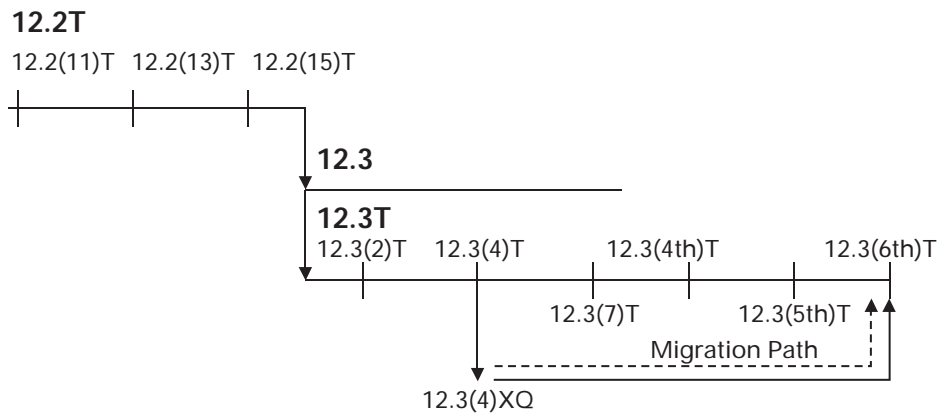
Future early deployment releases will be provided for maintenance support until Cisco IOS Software Release 12.3(4)XQ becomes available in the sixth release of Cisco IOS Software Release 12.3T.

In addition to the supported features described in this product bulletin, more information is available in the release notes for Cisco IOS Software Release 12.3(4)XQ.

Customers should prepare to upgrade using the migration path shown in Figure 1. Table 1 lists the features delivered in the Cisco IOS Software Release 12.3(4)XQ.

Note: This 12.3(4)XQ release only lists features which are new to the respective platforms.

Figure 1
 Cisco IOS Software Release 12.3(4)XQ Release Train and Migration Guide



NEW FEATURES IN CISCO IOS SOFTWARE RELEASE 12.3(4)XQ

Table 1 lists the features delivered in the Cisco IOS Software Release 12.3(4)XQ.

Table 1 Features Delivered in the Cisco IOS Software Release 12.3(4)XQ

New Software Features	Cisco 1701 ADSL Security Access Router	Cisco 1710 Security Access Router	Cisco 1711 Security Access Router	Cisco 1712 Security Access Router	Cisco 1720 Modular Access Router	Cisco 1721 Modular Access Router	Cisco 1751/1751-V Modular Access Router	Cisco 1760 Modular Access Router	Cisco 7204VXR Router
Hookflash and DTMF Relay transfer over FXO, T1 CAS and E1 R2	No	No	No	No	No	No	Yes	Yes	Yes
Media Gateway Control Protocol (MGCP) Controlled Backhaul of Basic Rate Interface (BRI) Signaling in conjunction with Cisco CallManager	No	No	No	No	No	No	Yes	Yes	No
Warm Reload	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No
Cisco CallManager Express 3.1 ¹	No	No	No	No	No	No	Yes	Yes	No
Survivable Remote Site Telephony 3.1 ¹	No	No	No	No	No	No	Yes	Yes	No

1. Cisco CallManager Express 3.1(CCME 3.1) and Survivable Remote Site Telephony 3.1 (SRST 3.1) is available in Cisco IOS 12.3(7) T in addition to Cisco IOS 12.3(4) XQ. Cisco 12.3(7) T is the recommendation to use CCME 3.1 or SRST 3.2 on the Cisco 1751, 1751-V and 1760 routers.

DETAILED INFORMATION

New Software Features

Hookflash and DTMF Relay Transfer over FXO, T1 CAS and E1 R2

Supported platforms: Cisco 1751, 1751-V, 1760 and 7204VXR routers; supported in Cisco 1700 Series classic images IP/ADSL/VOX PLUS and above and cross platform images IP VOICE and above; and Cisco 7200 IP Plus image.

Hookflash and DTMF Relay transfer over FXO, T1 CAS and E1 R2 is a feature that allows employees to transfer a call to another location. It is a cost-effective way to transfer calls in that it releases your circuit immediately after transfer. In this release, Hookflash and DTMF Relay transfer over FXO, T1 CAS and E1 R2 feature is supported on the Cisco 1700 Series Voice Gateways and the Cisco 7204 VXR Router through Tool Command Language (TCL) Interactive Voice Response (IVR) infrastructure enhancement which allows hookflash or dialing digits being transmitted to the remote end, and the incoming trunk line will be released immediately after the digit being transmitted. Hookflash transferring and H.323 or Session Initiation Protocol (SIP) out-of-band dual tone multifrequency (DTMF) relay transferring on T1 CAS, E1 R2 trunk and Foreign Exchange Office (FXO) trunk are supported in this release.

Note: rtp-nte (RFC2833) DTMF relay is not supported in this release. And the release of this feature on the Cisco 7204 platform is in a controlled matter. Please contact the Cisco Systems® product management team before using this feature on the Cisco 7204 platform.

MGCP Controlled Backhaul of BRI Signaling in Conjunction with Cisco CallManager

Supported platforms: Cisco 1751, 1751-V and 1760 modular access routers; supported in Cisco 1700 Series classic images IP/ADSL/VOX PLUS and above and cross-platform images IP VOICE and above.

This feature provides MGCP service to remote-office media gateways that connect by means of ISDN BRI trunks to a centralized Cisco CallManager media-gateway controller for the purpose of call processing. D-channel signal information is backhauled to the Cisco CallManager system through a Transmission Control Protocol (TCP) session.

If connection to the primary Cisco CallManager system fails, call processing reverts to a backup Cisco CallManager until the connection to the primary is restored. Should connections to the primary and all backups fail, call processing reverts to H.323 on the media gateway. When a connection is restored, call processing reverts to the primary or other available Cisco CallManager system and to MGCP. Cisco 1700 IOS supports the option to disable switchback for MGCP controlled backhaul of BRI signaling in the situation that the switchback is not desirable.

Feature benefits include the following:

- Centralized call-management architecture, enabling a high degree of network control
- Short voice cut-through times
- Graceful evolution to new technology and to Cisco AVVID (Architecture for Voice, Video and Integrated Data) platform

The European Telecommunication Standard Institute (ETSI) BRI basic-net3 switch is supported in this release.

Warm Reload

Supported platforms: Cisco 1701, 1710, 1711, 1712, 1720, 1721, 1751, 1751-V and 1760 routers; in all Cisco 1700 Series classic and cross platform images.

The Warm Reload feature allows users to reload their routers without reading images from storage. That is, the Cisco IOS Software image reboots without ROM monitor mode (ROMMON) intervention by restoring the read-write data from a previously saved copy in the RAM and by starting execution without either copying the image from flash to RAM or self-decompression of the image. This improves the overall availability of your system by significantly reducing the amount of time required to reboot your router.

Cisco CallManager Express 3.1

Supported platforms: Cisco 1751, 1751-V and 1760 modular access routers; supported in Cisco 1700 Series classic images IP/ADSL/VOX PLUS and above and cross-platform images IP VOICE and above.

- Basic call handling, call transfer, and call forwarding-Enhancements for VoIP networks containing a mix of platforms that support H.450.2 and H.450.3 standards, such as Cisco CME 3.1, Cisco CME 3.0, and Cisco ITSV2.1, and platforms that do not support H.450.2 and H.450.3 standards, such as Cisco CallManager, Cisco BTS Softswitch (BTS), and Cisco PSTN Gateway (PGW).
 - Support for H.450.12 standards.
 - Automatic detection of Cisco CallManager endpoints.
 - Hairpin VoIP-to-VoIP call routing and routing to an H.450 tandem gateway.
- Call park allows calls to be commonly held and retrieved by anyone.
- Automatic line selection enhancement specifies a particular button as the line automatically used for outgoing calls.
- CFwdAll soft key restriction control restricts the number of digits that can be entered using the CFwdAll soft key.
- Ephone-hunt group enhancements allow secondary numbers for pilot numbers.

- Language display localization and directory search are supported on Cisco IP Phone 7905 and Cisco IP Phone 7912. Call progress tone localization is supported on Cisco IP Phone 7902, Cisco IP Phone 7905, and Cisco IP Phone 7912.
- The Cisco Wireless IP Phone 7920 and Cisco IP Conference Station 7936 are fully supported in the Cisco IOS command-line interface (CLI) and Cisco CME GUI. The Cisco Wireless IP Phone 7920 internally supports display translation to French and German from English.

For detailed information about this feature, refer to the following document:

http://www.cisco.com/univercd/cc/td/doc/product/access/ip_ph/ip_ks/cme31/index.htm

Survivable Remote Site Telephony 3.1

Supported platforms: Cisco 1751, 1751-V and 1760 modular access routers; supported in Cisco 1700 Series classic images IP/ADSL/VOX PLUS and above and cross-platform images IP VOICE and above.

Cisco IP Phone 7920 Support

The Cisco Wireless IP Phone 7920 is an easy-to-use IEEE 802.11b wireless IP phone that provides comprehensive voice communications in conjunction with Cisco CallManager and Cisco Aironet® 1200, 1100, 350, and 340 Series of Wi-Fi (IEEE 802.11b) access points. As a key part of the Cisco AVVID Wireless Solution, the Cisco Wireless IP Phone 7920 delivers seamless intelligent services, such as security, mobility, quality of service (QoS), and management, across an end-to-end Cisco network.

No configuration is necessary.

Cisco IP Phone 7936 Support

The Cisco IP Conference Station 7936 is an IP-based, hands-free conference room station that uses Voice over IP (VoIP) technology. The IP Conference Station replaces a traditional analog conferencing unit by providing business conferencing features—such as Call Hold, Call Resume, Call Transfer, Call Release, Redial, Mute, and Conference-over an IP network.

No configuration is necessary.

For detailed information about this feature, refer to the following document:

http://www.cisco.com/univercd/cc/td/doc/product/access/ip_ph/srs/srst31/index.htm

PRODUCT NUMBERS

Table 2 provides the feature sets, images, and memory recommendations for Cisco IOS Software Release 12.3(4)XQ.

Please note:

1. The Cisco 1710 Security Access Router is limited to 16 MB Flash memory.
2. All Cisco 1700 Series Platforms with the exception of Cisco 1710 that are listed in Table 2 support Security Device Manager (SDM). Please note that SDM requires an additional 2.3 MB of Flash memory.
3. Security Device Manager (SDM) is NOT supported on the Cisco 1710 Security Access Router.
4. Please see product bulletin “Cisco IOS Software Release 12.3 Mainline and 12.3T Feature Sets for Cisco 1700 Series Routers”
http://www.cisco.com/en/US/partner/products/hw/routers/ps221/prod_bulletin09186a008016122f.html

Table 2 Cisco IOS Software Release 12.3(4)XQ Cisco 1700 Legacy and Cross-Platform Feature Sets, Images, and Memory Recommendations

Platform	Image Name	Feature Set	Image File Name	Flash Memory	DRAM Memory
Cisco 1700 Series Legacy Images				Recommended Memory	
Cisco 1710 (1)	Cisco 1700 IOS IP/FW/IDS PLUS IP Security (IPSec) Triple Data Encryption Standard (3DES)	IP/FW/IDS PLUS IPSec 3DES	c1710-k9o3sy-mz	16 MB	64 MB
Cisco 1710 (1)	Cisco 1700 IOS IP/IPX/AT/IBM/FW/IDS PLUS IPSec 3DES	IP/IPX/AT/IBM/FW/IDS PLUS IPSec 3DES	c1710-bk9no3r2sy-mz	16 MB	96 MB
Cisco 1751/1751-V/1760	Cisco 1700 IOS IP/ADSL/VOX PLUS	IP/ADSL/VOX PLUS	c1700-sv8y7-mz	32 MB	96 MB
Cisco 1751/1751-V/1760	Cisco 1700 IOS IP/ADSL/VOX/FW/IDS PLUS IPSec 3DES	IP/ADSL/VOX/FW/IDS PLUS IPSec 3DES	c1700-k9o3sv8y7-mz	32 MB	96 MB
Cisco 1751/1751-V/1760	Cisco 1700 IOS IP ADSL/IPX/AT/IBM/VOX/FW/IDS PLUS IPSec 3DES	IP ADSL/IPX/AT/IBM/VOX/FW/IDS PLUS IPSec 3DES	c1700-bk9no3r2sv8y7-mz	32 MB	128 MB
Cisco 1701/1721/1751/1751-V/1760	Cisco 1700 IOS IP ADSL PLUS	IP ADSL/PLUS	c1700-sy7-mz	16 MB	64 MB
Cisco 1720/1721/1751/1751-V/1760	Cisco 1700 IOS IP	IP	c1700-y-mz	16 MB	48 MB
Cisco 1701/1721/1751/1751-V/1760	Cisco 1700 IOS IP ADSL/IPX/AT/IBM PLUS	IP ADSL/IPX/AT/IBM PLUS	c1700-bnr2sy7-mz	16 MB	64 MB
Cisco 1701/1711/1712/1721/1751/1751-V/1760	Cisco 1700 IOS IP ADSL/IPX/AT/IBM/FW/IDS PLUS IPSec 3DES	IP ADSL/IPX/AT/IBM/FW/IDS PLUS IPSec 3DES	c1700-bk9no3r2sy7-mz	32 MB	96 MB
Cisco 1701/1720/1721/1751/1751-V/1760	Cisco 1700 IOS IP/ADSL	IP/ADSL	c1700-y7-mz	16 MB	48 MB
Cisco 1701/1711/1712/1721/1751/1751-V/1760	Cisco 1700 IOS IP/ADSL/FW/IDS PLUS IPSec 3DES	IP/ADSL/FW/IDS PLUS IPSec 3DES	c1700-k9o3sy7-mz	16 MB	96 MB
Cisco Cross-Platform Images				Recommended Memory	
Cisco 1751/1751-V/1760	Cisco 1700 IP VOICE	IP VOICE	c1700-ipvoice-mz	32 MB	96 MB
Cisco 1701/1721/1751/1751-V/1760	Cisco 1700 IOS ADVANCED IP SERVICES	ADVANCED IP SERVICES	c1700-advipservicesk9-mz	32 MB	96 MB
Cisco 1701/1721/1751/1751-V/1760	Cisco 1700 IOS SP SERVICES	SP SERVICES	c1700-spservicesk9-mz	32 MB	96 MB
Cisco 1701/1721/1751/1751-V/1760	Cisco 1700 IOS ENTERPRISE SERVICES	ENTERPRISE SERVICES	c1700-entservicesk9-mz	32 MB	96 MB
Cisco 1701/1711/1712/1721/1751/1751-V/1760	Cisco 1700 IOS ADVANCED ENTERPRISE SERVICES	ADVANCED ENTERPRISE SERVICES	c1700-adventerprisek9-mz	32 MB	128 MB

Table 2 Cisco IOS Software Release 12.3(4)XQ Cisco 1700 Legacy and Cross-Platform Feature Sets, Images, and Memory Recommendations (Continued)

Platform	Image Name	Feature Set	Image File Name	Flash Memory	DRAM Memory
Cisco 1701/1721/1751/1751-V/1760	Cisco 1700 IP BASE	IP BASE	c1700-ipbase-mz	16 MB	64 MB
Cisco 1701/1721/1751/1751-V/1760	Cisco 1700 ENTERPRISE BASE	ENTERPRISE BASE	c1700-entbase-mz	16 MB	64 MB
Cisco 1701/1711/1712/1721/1751/1751-V/1760	Cisco 1700 ADVANCED SECURITY	ADVANCED SECURITY	c1700-advsecurityk9-mz	16 MB	64 MB

DOWNLOAD INFORMATION

Customers can download Cisco IOS Software Release 12.3(4)XQ Software from the Cisco.com software image library.



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