

Cisco IOS Software Release 12.2(4)XL

A stylized globe graphic in blue and white, showing latitude and longitude lines, positioned on the left side of the page.

Introduction

This product bulletin describes the new features introduced in Cisco IOS[®] Software Release 12.2(4)XL.

New Features

Symmetric High-Bit-Rate Digital-Subscriber-Line (G.shdsl)
WAN-Interface-Card Support

Based on the International Telecommunications Union (ITU) G.991.2 global industry standard, the Cisco 1700 G.shdsl solution delivers symmetrical business-class digital subscriber line (DSL) with data rates from 192 kbps up to 2.3 Mbps. The G.shdsl WAN interface card (WIC) functions in a voice/WAN-interface-card (VIC/WIC) slot. Multiple G.shdsl WICs can be configured per chassis to enable a second line for WAN backup. The key features of the Cisco 1700 G.shdsl solution are listed below:

- Enables symmetric WAN speeds of up to 2.3 Mbps
- Operates at distances up to 22,000 feet
- Supports voice over IP (VoIP) over DSL with IP quality-of-service (QoS) map to ATM class of service (CoS)
- Sustains up to 23 virtual circuits per WIC
- Interoperates with Cisco 6130 and 6260 DSL access multiplexers (DSLAMs)

“Squeeze” Command Support

The “squeeze” command is used to erase files marked “deleted” or “error.” In the Cisco IOS Software Release 12.2(4)XL, the squeeze command is introduced onto Cisco 1700 Series routers.

When Flash memory is full, you might need to rearrange the files so that the space used by the files marked *deleted* can be reclaimed. When you enter the squeeze command, the router copies all valid files to the beginning of Flash memory and erases all files marked *deleted*. At this point, you cannot recover deleted files and you can write to the reclaimed Flash memory space.

In addition to removing deleted files, the squeeze command removes any files that the system has marked as “error.” An error file is created when a file write fails (for example, the device is full). To remove error files, you must use the squeeze command.



Cisco 1710 Bug Resolution

Cisco IOS Software Version 12.2(4)XL includes the resolution to the bug associated with supporting Point-to-Point Tunneling Protocol (PPTP) on the Cisco 1710 platform. The Cisco 1710 Software feature sets that contain this fix follow:

S171CHK9-12204XL

S171CHK9-12204XL=

S171QHK9-12204XL

S171QHK9-12204XL=

Maintenance Support

Maintenance for these features will be available on future 12.2X special releases until the code is incorporated into the third maintenance software release of 12.2T.

Detailed Information

For more detailed information about the platforms and features of Cisco IOS Software Release 12.2(4)XL, reference the following document:

Release Notes for Cisco 1700 Series platforms for Cisco IOS Release 12.2(4) XL at:

<http://www.cisco.com/univercd/cc/td/doc/product/software/ios122/122relnt/1700/rn1700xl.pdf>

Life Span

Cisco IOS Software Release 12.2(4) XL will be sold until the third maintenance release of Cisco IOS Software Release 12.2T.

Supported Hardware Platforms

In general, Cisco IOS Software Release 12.2(4)XL supports all Cisco 1720, 1750, and 1751 modular access routers.

Product numbers and descriptions are given in Table 1.

Images are available for downloading from Cisco.com as of November 19, 2001. First Customer Ship for the image with the G.shdsl WIC is currently scheduled for December 10, 2001.

Table 1 Product Numbers and Descriptions

Product Number	Image Name	Product Code	G.shdsl WIC	Squeeze Command Support	Flash	DRAM
S17C-12204XL S17C-12204XL=	c1700-y-mz	Cisco 1700 Cisco IOS IP	No	Yes	8 MB	32 MB
S17C7-12204XL S17C7-12204XL=	c1700-y7-mz	Cisco 1700 Cisco IOS IP/DSL	Yes	Yes	8 MB	32 MB
S17C7P-12204XL S17C7P-12204XL=	c1700-sy7-mz	Cisco 1700 Cisco IOS IP/DSL Plus	Yes	Yes	8 MB	32 MB
S17C7K8-12204XL S17C7K8-12204XL=	c1700-k8sy7-mz	Cisco 1700 Cisco IOS IP/DSL Plus IPSec 56	Yes	Yes	8 MB	32 MB



Table 1 Product Numbers and Descriptions (Continued)

Product Number	Image Name	Product Code	G.shdsl WIC	Squeeze Command Support	Flash	DRAM
S17C7K9-12204XL S17C7K9-12204XL=	c1700-k9sy7-mz	Cisco 1700 Cisco IOS IP/DSL Plus IPSec 3DES	Yes	Yes	16 MB	48 MB
S17CH-12204XL S17CH-12204XL=	c1700-o3y-mz	Cisco 1700 Cisco IOS IP/FW/IDS	No	Yes	8 MB	32 MB
S17C7HK8-12204XL S17C7HK8-12204XL=	c1700-k8o3sy7-mz	Cisco 1700 Cisco IOS IP/DSL/FW/IDS Plus IPSec 56	Yes	Yes	8 MB	32 MB
S17B-12204XL S17B-12204XL=	c1700-ny-mz	Cisco 1700 Cisco IOS IP/IPX	No	Yes	8 MB	32 MB
S17B7HP-12204XL S17B7HP-12204XL=	c1700-no3sy7-mz	Cisco 1700 Cisco IOS IP/DSL/IPX/FW/IDS Plus	Yes	Yes	16 MB	48 MB
S17Q-12204XL S17Q-12204XL=	c1700-bnr2y-mz	Cisco 1700 Cisco IOS IP/IPX/AT/IBM	No	Yes	8 MB	32 MB
S17Q7P-12204XL S17Q7P-12204XL=	c1700-bnr2sy7-mz	Cisco 1700 Cisco IOS IP/DSL/IPX/AT/IBM Plus	Yes	Yes	16 MB	48 MB
S17Q7HK8-12204XL S17Q7HK8-12204XL=	c1700-bk8no3r2sy7-mz	Cisco 1700 Cisco IOS IP/DSL/IPX/AT/IBM/FW/ IDS Plus IPSec 56	Yes	Yes	16 MB	48 MB
S17Q7HK9-12204XL S17Q7HK9-12204XL=	c1700-bk9no3r2sy7-mz	Cisco 1700 Cisco IOS IP/DSL/IPX/AT/IBM/FW/ IDS Plus IPSec 3DES	Yes	Yes	16 MB	48 MB
S17C7HK9-12204XL S17C7HK9-12204XL=	c1700-k9o3sy7-mz	Cisco 1700 Cisco IOS IP/DSL/FW/IDS Plus IPSec 3DES	Yes	Yes	16 MB	48 MB
S17CVP-12204XL S17CVP-12204XL=	c1700-sv3y-mz	Cisco 1700 Cisco IOS IP/Voice Plus	No	Yes	16 MB	48 MB
S17C7VP-12204XL S17C7VP-12204XL=	c1700-sv3y7-mz	Cisco 1700 Cisco IOS IP/DSL/Voice Plus	Yes	Yes	16 MB	48 MB
S17C7HV-12204XL S17C7HV-12204XL=	c1700-o3sv3y7-mz	Cisco 1700 Cisco IOS IP/DSL/VOICE/FW/IDS Plus	Yes	Yes	16 MB	48 MB
S17B7HPV-12204XL S17B7HPV-12204XL=	c1700-no3sv3y7-mz	Cisco 1700 Cisco IOS IP/DSL/IPX/Voice/FW/ IDS Plus	Yes	Yes	16 MB	48 MB
S17C7VK8-12204XL S17C7VK8-12204XL=	c1700-k8sv3y7-mz	Cisco 1700 Cisco IOS IP/DSL/Voice Plus IPSec 56	Yes	Yes	16 MB	48 MB
S17C7VK9-12204XL S17C7VK9-12204XL=	c1700-k9sv3y7-mz	Cisco 1700 Cisco IOS IP/DSL/Voice Plus IPSec 3DES	Yes	Yes	16 MB	48 MB

Table 1 Product Numbers and Descriptions (Continued)

Product Number	Image Name	Product Code	G.shdsl WIC	Squeeze Command Support	Flash	DRAM
S17C7HVK8-12204X S17C7HVK8-12204XL=	c1700-k8o3sv3y7-mz	Cisco 1700 Cisco IOS IP/DSL/Voice/FW/IDS Plus IPSec 56	Yes	Yes	16 MB	48 MB
S17C7HVK9-12204XL S17C7HVK9-12204XL=	c1700-k9o3sv3y7-mz	Cisco 1700 Cisco IOS IP/DSL/Voice/FW/IDS Plus IPSec 3DES	Yes	Yes	16 MB	48 MB
S17Q7HVK8-12204XL S17Q7HVK8-12204XL=	c1700-bk8no3r2sv3y7-mz	Cisco 1700 Cisco IOS IP/DSL/IPX/AT/IBM/ Voice/FW/IDS Plus IPSec 56	Yes	Yes	32 MB	64 MB
S17Q7HVK9-12204XL S17Q7HVK9-12204XL=	c1700-bk9no3r2sv3y7-mz	Cisco 1700 Cisco IOS IP/DSL/IPX/AT/IBM/ Voice/FW/IDS Plus IPSec 3DES	Yes	Yes	32 MB	64 MB



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Printed in the USA