

Cisco IOS Software Release

12.2(8)YL

This product bulletin describes the new features introduced in Cisco IOS[®] Software Release 12.2(8)YL.

New Features

- Software-Based LZ Compression with Hardware Encryption

Description

LZ Compression, the major industry standard for Layer 3 data compression, supported in Cisco IOS Software. Previous to this feature, LZ Compression could be enabled on the Cisco 1700 Series routers, but not when the Cisco VPN Hardware Acceleration Module (part number MOD1700-VPN) was installed in the router. Software-Based LZ Compression with Hardware Encryption enables the Cisco 1700 Series routers to support Layer 3 compression (via the LZ standard) in software with hardware-based IP Security (IPSec) encryption. This combination has not been previously supported.

Benefits

During the Digital Encryption Standard/ Triple Digital Encryption Standard (DES/ 3DES) process, additional bits are added to each packet to support the authentication and Encapsulating Security Protocol (ESP) headers. The benefit of LZ Compression is that through the LZ compression algorithm, DES/3DES packets being transmitted are decreased in size, resulting in reduced WAN bandwidth demands. LZ

Compression allows IPSec VPNs to be supported more effectively in regions of the world that utilize only low-speed WAN links because fewer bits are transmitted.

Because the encryption process is demanding on the supporting processor, the recommended configuration for the Cisco 1700 Series routers to provide encryption services is to install the Cisco VPN Hardware Acceleration Module. This setup assists the router CPU by not inundating it to support encryption tasks. Software-Based LZ Compression with Hardware Encryption allows greater processing power to be used for the encryption while Layer 3 compression is used. Combining LZ Compression with hardware encryption, customers can achieve high-performance VPNs and reduced bandwidth demands.

Supported Cisco 1700 Routers

Cisco 1710, Cisco 1751-V*, Cisco 1720, Cisco 1721, Cisco 1751, and Cisco 1760 routers support Software-Based LZ Compression with Hardware Encryption.

Note: * The Cisco 1751 platform is limited to 16 MB Flash only, whereas Cisco 1751-V supports up to 32 MB Flash. Due to this, Cisco 1751 and Cisco 1751-V are denoted separately.

Software

Maintenance Support

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

Detailed Information

For more detailed information about the platforms and features of Cisco IOS Release 12.2(8)YL, see the following document:
Release Notes for Cisco 1700 Series Platforms for Cisco IOS Release 12.2(8)YL at:

<http://www.cisco.com/univercd/cc/td/doc/product/software/ios122/122relnt/1700/rn1700yj.htm>.

Life Span

Cisco IOS Release 12.2(8)YL will be sold until the sixth maintenance release of Cisco IOS Software 12.2T.

Support

Image product numbers, descriptions, and memory requirements are given in Table 1.

Table 1 Cisco IOS Release 12.2(8)YL Image List

Software Product Description	Image	Product Code	Software-Based LZ Compression with Hardware Encryption	Flash	DRAM
Cisco 1700 IOS IP/ADSL/IPX/AT/IBM/VOICE/FW/IDS PLUS IPSEC 56	c1700-bk8no3r2sv3y7-mz	S17Q7HVK8-12208YL	Yes	16 MB	48 MB
Cisco 1700 IOS IP/ADSL/IPX/AT/IBM/VOX/FW/IDS PLUS IPSEC 56	c1700-bk8no3r2sv8y7-mz	S17Q7V8K8-12208YL	Yes	32 MB	64 MB
Cisco 1700 IOS IP/ADSL/IPX/AT/IBM/FW/IDS PLUS IPSEC 56	c1700-bk8no3r2sy7-mz	S17Q7HK8-12208YL	Yes	16 MB	48 MB
Cisco 1700 IOS IP/ADSL/IPX/AT/IBM/VOICE/FW/IDS PLUS IPSEC 3DES	c1700-bk9no3r2sv3y7-mz	S17Q7HVK9-12208YL	Yes	16 MB	48 MB
Cisco 1700 IOS IP/ADSL/IPX/AT/IBM/VOX/FW/IDS PLUS IPSEC 3DES	c1700-bk9no3r2sv8y7-mz	S17Q7V8K9-12208YL	Yes	32 MB	64 MB
Cisco 1700 IOS IP/ADSL/IPX/AT/IBM/FW/IDS PLUS IPSEC 3DES	c1700-bk9no3r2sy7-mz	S17Q7HK9-12208YL	Yes	16 MB	48 MB
Cisco 1700 IOS IP/ADSL/IPX/AT/IBM PLUS	c1700-bnr2sy7-mz	S17Q7P-12208YL	No	16 MB	48 MB
Cisco 1700 IOS IP/IPX/AT/IBM	c1700-bnr2y-mz	S17Q-12208YL	No	8 MB	32 MB
Cisco 1700 IOS IP/ADSL/VOICE/FW/IDS PLUS IPSEC 56	c1700-k8o3sv3y7-mz	S17C7HVK8-12208YL	Yes	16 MB	48 MB
Cisco 1700 IOS IP/ADSL/VOX/FW/IDS PLUS IPSEC 56	c1700-k8o3sv8y7-mz	S17C7V8K8-12208YL	Yes	16 MB	64 MB
Cisco 1700 IOS IP/ADSL/FW/IDS PLUS IPSEC 56	c1700-k8o3sy7-mz	S17C7HK8-12208YL	Yes	8 MB	48 MB
Cisco 1700 IOS IP/ADSL/VOICE PLUS IPSEC 56	c1700-k8sv3y7-mz	S17C7VK8-12208YL	Yes	16 MB	48 MB
Cisco 1700 IOS IP/ADSL/VOX PLUS IPSEC 56	c1700-k8sv8y7-mz	S17CV8K8-12208YL	Yes	16 MB	64 MB
Cisco 1700 IOS IP/ADSL PLUS IPSEC 56	c1700-k8sy7-mz	S17C7K8-12208YL	Yes	8 MB	32 MB
Cisco 1700 IOS IP/ADSL/VOICE/FW/IDS PLUS IPSEC 3DES	c1700-k9o3sv3y7-mz	S17C7HVK9-12208YL	Yes	16 MB	48 MB
Cisco 1700 IOS IP/ADSL/VOX/FW/IDS PLUS IPSEC 3DES	c1700-k9o3sv8y7-mz	S17C7V8K9-12208YL	Yes	16 MB	64 MB

Table 1 Cisco IOS Release 12.2(8)YL Image List

Software Product Description	Image	Product Code	Software-Based LZ Compression with Hardware Encryption	Flash	DRAM
Cisco 1700 IOS IP/ADSL/FW/IDS PLUS IPSEC 3DES	c1700-k9o3sy7-mz	S17C7HK9-12208YL	Yes	8 MB	48 MB
Cisco 1700 IOS IP/ADSL/VOICE PLUS IPSEC 3DES	c1700-k9sv3y7-mz	S17C7VK9-12208YL	Yes	16 MB	48 MB
Cisco 1700 IOS IP/ADSL/VOX PLUS IPSEC 3DES	c1700-k9sv8y7-mz	S17CV8K9-12208YL	Yes	16 MB	64 MB
Cisco 1700 IOS IP/ADSL PLUS IPSEC 3DES	c1700-k9sy7-mz	S17C7K9-12208YL	Yes	8 MB	48 MB
Cisco 1700 IOS IP/ADSL/IPX/VOICE/FW/IDS PLUS	c1700-no3sv3y7-mz	S17B7HPV-12208YL	No	16 MB	48 MB
Cisco 1700 IOS IP/ADSL/IPX/VOX/FW/IDS PLUS	c1700-no3sv8y7-mz	S17B7HPV8-12208YL	No	16 MB	64 MB
Cisco 1700 IOS IP/ADSL/IPX/FW/IDS PLUS	c1700-no3sy7-mz	S17B7HP-12208YL	No	8 MB	48 MB
Cisco 1700 IOS IP/IPX	c1700-ny-mz	S17B-12208YL	No	8 MB	32 MB
Cisco 1700 IOS IP/ADSL/VOICE/FW/IDS PLUS	c1700-o3sv3y7-mz	S17C7HV-12208YL	No	16 MB	48 MB
Cisco 1700 IOS IP/ADSL/VOX/FW/IDS PLUS	c1700-o3sv8y7-mz	S17C7HV8-12208YL	No	16 MB	64 MB
Cisco 1700 IOS IP/FW/IDS	c1700-o3y-mz	S17CH-12208YL	No	8 MB	32 MB
Cisco 1700 IOS IP/VOICE PLUS	c1700-sv3y-mz	S17CVP-12208YL	No	16 MB	48 MB
Cisco 1700 IOS IP/ADSL/VOICE PLUS	c1700-sv3y7-mz	S17C7VP-12208YL	No	16 MB	48 MB
Cisco 1700 IOS IP/VOX PLUS	c1700-sv8y-mz	S17CV8P-12208YL	No	16 MB	48 MB
Cisco 1700 IOS IP/ADSL/VOX PLUS	c1700-sv8y7-mz	S17C7V8P-12208YL	No	16 MB	64 MB
Cisco 1700 IOS IP/ADSL PLUS	c1700-sy7-mz	S17C7P-12208YL	No	8 MB	48 MB
Cisco 1700 IOS IP	c1700-y-mz	S17C-12208YL	No	8 MB	32 MB
Cisco 1700 IOS IP/ADSL	c1700-y7-mz	S17C7-12208YL	No	8 MB	48 MB
Cisco 1710 IOS IP/IPX/AT/IBM/FW/IDS PLUS IPSEC 3DES	c1710-bk9no3r2sy-mz	S171QHK9-12208YL	Yes	16 MB	48 MB
Cisco 1710 IOS IP/FW/IDS PLUS IPSEC 3DES	c1710-k9o3sy-mz	S171CHK2-12208YL	Yes	8 MB	48 MB



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.
Capital Tower
168 Robinson Road
#22-01 to #29-01
Singapore 068912
www.cisco.com
Tel: +65 6317 7777
Fax: +65 6317 7799

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