

# Cisco IOS Software

## Release 12.1(5)YB

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### Introduction

This product bulletin describes the new features introduced in Cisco IOS™ Software Release 12.1(5)YB.

#### New Features

PPPoE Client enhancement—IP TCP MSS adjustment  
LFI—Link Fragmentation and Interleaving  
LLQ—Low Latency Queuing  
PIM—Protocol Independent Multicast (Cisco 805)  
TX Ring Adjustment

#### Detailed Information

12.1(5)YB is an early deployment (ED) release. This release delivers new feature enhancements to the Cisco 826, Cisco 827, Cisco 827-4V, and to the Cisco SOHO 77 routers. Also see Cisco IOS 12.1(5)YB release notes at: <http://www.cisco.com/univercd/cc/td/doc/product/software/ios121/121relnt/800/rn800yb.htm> for Cisco 800 series and <http://www.cisco.com/univercd/cc/td/doc/product/software/ios121/121relnt/70series/rn70yb.htm> for the Cisco SOHO 77.

#### PPPoE Client Enhancement—IP TCP Maximum Segment Size Adjustment

Ability to adjust IP tcp-mss size to eliminate the need to manually adjust the MTU size on clients to allow the adjusted Ethernet frames to fit inside a PPPoE packets. At this point only supported over NAT connections. This feature is supported on all images of the Cisco 827.

#### LFI

Link fragmentation and interleaving. This will fragment larger packets into smaller segments over a multi-link interface done over one link. Supported over Multilink PPP interfaces. This feature is supported in the Plus feature sets and on the voice models for all feature sets of the Cisco 827 and the Cisco 827-4V.

## **LLQ**

Low Latency Queuing, also known as Priority Queued Class Based Weighted Fair Queuing, PQCBWFQ, but the acronym just was too lengthy. This feature provides classification between applications and sends them into different queues defining a guaranteed bandwidth for that class of traffic. Certain classes of traffic are priority queued directly and thus a low latency is accomplished. Supported over RFC 1483 and Multi-link PPP interfaces. This feature is supported on the Plus feature sets, and on the voice models for all images.

## **PIM – Protocol Independent Multicast**

Support for PIM sparse mode on Cisco 805. This allows for multicast traffic to be supported with client on the LAN with handling IGMP on the Cisco 805. Requires the Plus feature sets.

## **TX Ring adjustment**

Support for transmit-ring buffer depth adjustments on Cisco 820. The feature allows for optimization of delay characteristics to tune the transmit ring buffer on the ATM interface to a smaller size to better suite voice. This feature is supported on the Plus feature sets.

The features delivered with this ED release will be immediately incorporated into the 12.2(2)T release. As such, maintenance for these features should be obtained from the 12.2T release.

For more detailed information about the platforms and features being delivered in 12.1(1)XB, please reference the following documents:

- Release Notes for Cisco 820 series for Cisco IOS Release 12.1(5)YB
- Release Notes for Cisco 805 for Cisco IOS Release 12.1(5)YB
- Release Notes for Cisco SOHO series for Cisco IOS Release 12.1(5)YB

## **Life Span**

12.1(5)YB will be sold until Cisco IOS Software 12.2(2)T is released.

## **Support**

Cisco IOS Software 12.1(5)YB is supported by the Cisco Systems Product Support Policy. Please see the following URL:  
<http://www.cisco.com/warp/public/437/27.html>



## Supported Hardware Platforms

Cisco IOS Software Release 12.1(5)YB supports the following platforms:

- Cisco 805 - (PIM feature only)
- Cisco 826
- Cisco 827 and Cisco 827-4V
- Cisco SOHO 77

## Product Numbers and Descriptions

Cisco IOS Software Release 12.1(5)YB can be ordered using the following product numbers.

Software Product Description	Image	Product Name	Flash	DRAM	Price
Cisco 805 IP/IPX/FW PLUS IPSEC 3DES	c805-k2nosy6-mw	S805BHK2-12105YB	8MB	12MB	\$350
		S805BHK2-12105YB=			\$350
Cisco 805 IP/FW PLUS IPSEC 3DES	c805-k2osy6-mw	S805CHK2-12105YB	8MB	12MB	\$250
		S805CHK2-12105YB=			\$250
Cisco 805 IP/IPX/FW PLUS IPSEC 56	c805-nosy656i-mw	S805BHL-12105YB	8MB	12MB	\$350
		S805BHL-12105YB=			\$350
Cisco 805 IP/IPX PLUS	c805-nsy6-mw	S805BP-12105YB	8MB	8MB	\$200
		S805BP-12105YB=			\$200
Cisco 805 IP/FW PLUS IPSEC 56	c805-osy656i-mw	S805CHL-12105YB	8MB	12MB	\$250
		S805CHL-12105YB=			\$250
Cisco 805 IP/FW	c805-oy6-mw	S805CH-12105YB	4MB	8MB	\$100
		S805CH-12105YB=			\$100
Cisco 805 IP PLUS	c805-sy6-mw	S805CP-12105YB	4MB	8MB	\$100
		S805CP-12105YB=			\$100
Cisco 805 IP	c805-y6-mw	S805C-12105YB	4MB	8MB	\$0
		S805C-12105YB=			\$15
Cisco 820 IP/FW/VOICE PLUS IPSEC 3DES	c820-k2nosv6y6-me	S820CHVK2-12105YB	8MB	24MB	\$250
		S820CHVK2-12105YB=			\$250
Cisco 820 IP/IPX/FW PLUS IPSEC 3DES	c820-k2nosy6-me	S820BHK2-12105YB	8MB	24MB	\$350
		S820BHK2-12105YB=			\$350
Cisco 820 IP/FW PLUS IPSEC 3DES	c820-k2osy6-me	S820CHK2-12105YB	8MB	24MB	\$250
		S820CHK2-12105YB=			\$250
Cisco 820 IP/IPX/VOICE PLUS	c820-nsv6y6-me	S820BVP-12105YB	8MB	24MB	\$200
		S820BVP-12105YB=			\$200
Cisco 820 IP/FW/VOICE PLUS IPSEC 56	c820-osv6y656i-me	S820CHVL-12105YB	8MB	24MB	\$250
		S820CHVL-12105YB=			\$250
Cisco 820 IP/FW PLUS IPSEC 56	c820-osy656i-me	S820CHL-12105YB	8MB	16MB	\$250
		S820CHL-12105YB=			\$250
Cisco 820 IP/VOICE	c820-v6y6-me	S820CV-12105YB	8MB	24MB	\$0
		S820CV-12105YB=			\$15
Cisco 820 IP	c820-y6-me	S820C-12105YB	8MB	16MB	\$0
		S820C-12105YB=			\$15

Software Product Description	Image	Product Name	Flash	DRAM	Price
Cisco SOHO Series IP	soho70-y1-me	SSOHO70C-12105YB	8MB	16MB	\$0
		SSOHO70C-12105YB=			\$15

Product names ending with = denotes spare part. IP is included in the price of the platforms.

Cisco 820 images supports the Cisco 826, Cisco 827, and Cisco 827-4V platforms.



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