

CISCO IOS SOFTWARE RELEASE 12.3(7)XI1 FOR CISCO 10000 SERIES ROUTER

This product bulletin provides information about Cisco IOS® Software Release 12.3(7)XI1, which provides Cisco® Service Selection Gateway features for Cisco 10000 Series routers.

These product bulletins are updated as needed to describe new features, memory requirements, hardware support, software platform deferrals, and changes to microcode and related documents.

Cisco IOS Software Release 12.3(7)XI1 is based on the previous release, 12.2(16)BX. Cisco IOS Software Release 12.3(7)XI1 will run only on the Cisco 10000 Series Performance Routing Engine 2 (PRE-2). There will be no support for PRE or PRE-1 routing engines.

NEW FEATURES—CISCO IOS SOFTWARE RELEASE 12.3(7)XI1

Following are new features and improvements in Cisco IOS Release 12.3(7)XI1 that are supported on Cisco 10000 Series routers:

- Three-color policer
- Three-level hierarchical quality of service (QoS) policies
- Border Gateway Protocol (BGP) multipath load sharing for both eBGP and iBGP in a Multiprotocol Label Switching (MPLS) VPN
- Extended network attached storage (NAS)-Port-Type and NAS-Port Support
- Half-duplex VPN routing and forwarding (VRF)
- Hierarchical shaping of an ATM virtual circuit into a virtual path tunnel
- IEEE 802.1Q-in-Q VLAN tag termination
- IP receive access control lists (ACLs)
- IP unnumbered on VLAN
- Lawful intercept
- MIB enhancements
- MPLS QoS
- MPLS traffic engineering—Differentiated Services (DiffServ)-aware
- Multirouter automatic protection switching (APS)
- Percent-based policing
- Pre precedence Weighted Random Early Detection (WRED) statistics
- Scaling enhancements
- Serial interface oversubscription
- Strict priority queuing
- Support for local authentication, authorization, and accounting (AAA) server, user database, subscriber profiles, and local templates

- Time-based ACLs
- Variable bit rate, non-real time (VBR-nrt) oversubscription
- Virtual circuit weighting
- WRED with queue limit

For detailed descriptions of each new feature or feature improvement, see the Cisco IOS Software Release 12.3(7)X11 release notes at:

<http://www.cisco.com/univercd/cc/td/doc/product/aggr/10000/10km/123xi/1237xi1.htm>

PRODUCT NUMBERS

Table 1 provides the product part numbers associated with this product bulletin.

Note: The PRE-2 ships with 1 GB of SDRAM, 64 MB of Boot Flash, and a 64-MB PCMCIA Flash disk (with an option to upgrade to 128 MB).

Table 1. Cisco IOS Software Release 12.3(17)X11 Feature Sets, Images, and Memory Recommendations

Standard Licenses					
Platform	Product Description	Product Code	Image	Flash	DRAM
Cisco 10000	Cisco 10000 Series IOS Broadband Router 8K subscribers	S10KZ11A-12307X11	c10k2-p11-mz	64 MB	1 GB
Cisco 10000	Cisco 10000 Series IOS Edge Services Router	S10KZ-12307X11	c10k2-p11-mz	64 MB	1 GB
Cisco 10000	Cisco 10000 Series IOS Service Provider/Secure Shell 3DES	S10KK5Z-12307X11	c10k2-k9p11-mz	64 MB	1 GB
Cisco 10000	Cisco 10000 Series IOS Lawful Intercept/Secured Shell 3DES	S10KK9ZU-12307X11	c10k2-k9u2p11-mz	64 MB	1 GB
Feature License-Broadband Subscriber Upgrades					
Cisco 10000	Cisco 10000 Series Broadband User Services Upgrade 8K-16K	FL-ESR-BUS-8-16			
Cisco 10000	Cisco 10000 Series Broadband User Services Upgrade 8K-32K	FL-ESR-BUS-8-32			
Cisco 10000	Cisco 10000 Series Broadband User Services Upgrade 8K-48K	FL-ESR-BUS-8-48			
Cisco 10000	Cisco 10000 Series Broadband User Services Upgrade 8K-61.5K	FL-ESR-BUS-8-62			
Cisco 10000	Cisco 10000 Series Broadband User Services Upgrade 16K-32K	FL-ESR-BUS-16-32			
Cisco 10000	Cisco 10000 Series Broadband User Services Upgrade 16K-48K	FL-ESR-BUS-16-48			
Cisco 10000	Cisco 10000 Series Broadband User Services Upgrade 16K-61.5K	FL-ESR-BUS-16-62			
Cisco 10000	Cisco 10000 Series Broadband User Services Upgrade 32K-48K	FL-ESR-BUS-32-48			
Cisco 10000	Cisco 10000 Series Broadband User Services Upgrade 32K-61.5K	FL-ESR-BUS-32-62			
Cisco 10000	Cisco 10000 Series Broadband User Services Upgrade 48K-61.5K	FL-ESR-BUS-48-62			

ADDITIONAL SOURCES

Cisco 10000 Series Broadband Aggregation and Leased-Line Configuration Guide:

<http://www.cisco.com/univercd/cc/td/doc/product/aggr/10000/config/10kbba/index.htm>

Release notes for the Cisco 10000 Series Router for Cisco IOS Release 12.3(7)XI1:

<http://www.cisco.com/univercd/cc/td/doc/product/aggr/10000/10krn/123xi/1237xi1.htm>

Cisco 10000 Series Broadband MIB Specifications Guide:

http://www.cisco.com/en/US/products/hw/routers/ps133/products_mib_quick_reference_book09186a00804c932f.html



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