

# Cisco IOS Software Release 12.0(7)XR

## Introduction

This Product Bulletin describes the new features introduced in Cisco IOS(TM) software release 12.0(7)XR. This bulletin should be used in conjunction with Product Bulletin #537, Cisco IOS Software Release Process.

## New Features

12.0(7)XR is an Early Deployment (ED) release. This release is focused on enhanced services for Cable and VoIP applications for the Cisco AS5300, Cisco 2600, Cisco uBR7200, and Cisco uBR920 Series products. 12.0(7)XR also delivers a new technology offering - a wireless line card for the uBR7200 series. Any ED release of software should be utilized first in a test network before being deployed in a production network.

The features delivered with this ED release will be immediately incorporated into the 12.1(1)T release. As such, maintenance for these features should be obtained from the 12.1T release. For more information about the Cisco IOS software release process, please see Product Bulletin #537.

## Detailed Information

12.0(7)XR delivers support for the following features.

### Cable Interface Bundling

With cable interface bundling, multiple cable interfaces can share a single IP subnet. Cable interface bundling will eliminate the requirement for an IP subnet on each cable interface. Instead, an IP subnet will only be required for each cable interface bundle. All cable interfaces in a uBR7200 can be added to a single bundle. With this feature, only one IP subnet will be required for all cable interfaces if configured into a single bundle.

### MC16 Modem Card for uBR7200

Support for MC16 Modem Card in uBR7200. Automatic spectrum management, with dedicated spectrum management HW to provide dedicated FFT and FIR HW implemented in FPGAs to cover all 6 upstream ports. This HW will be used to make decision on what is the cleanest RF channel, and will make freq hop decision.

### DOCSIS 1.0+

Quality of Service for Voice over Cable. Software that support QoS for voice transmission over TV CABLE.

## **Broadband Wireless -Point to Point**

This is a point to point wireless line card for the uBr7246. Point-to-Point wireless is defined as a fixed dedicated wireless link from one site to another. The initial product delivers 44 Mbps full-duplex Point-To-Point (P2P) fixed-site data in a 12 MHz RF channel in the MMDS band (2.554 to 2.686 GHz). The P2P Wireless Router is an integrated solution, consisting of a base router (uBR 7246), a Wireless Modem Line Card, a RF head unit, patchPower-Feed panel, cables, and antenna subsystems. This P2P Wireless Router will be deployed in a Service Provider's "network cloud" environment, as well as in Enterprise campus locations. Thus, the target customers for the P2P Wireless Router will be both the Service Provider channel and the Enterprise end user..

## **Media Gateway Control Protocol (MGCP)**

MGCP is an interface protocol used for controlling VoIP Gateways from external call control elements. The MGCP architecture assumes call control intelligence resides outside of the gateways and is handled by external call control elements

This feature includes the followings on IOS:

1. Implementation of MGCP IETF draft version 0.1 dated Nov 9th.
2. SNMP support of MGCP will be provided via XGCP-MIB.  
This provides network management function and MIB implementation for external media gateway control protocols.
3. TDM hairpinning feature controlled via MGCP will be provided.  
A trunking/access gateway needs to be able to hairpin a call locally between two different timeslots of any MGCP controlled trunk. The hairpinning needs to be at the TDM level, not using RTP. This feature may be used to route a call back out to the PSTN/PBX when the IP network is congested.
4. MGCP controlled internal Announcement server

## **SS7 support for H.323 voice calls via SC2200**

This feature is targeted at IXC's, CLECs and ITSP's who require SS7 interconnection for scalability, arbitrage, and regulatory reasons. These operators may have existing switching elements in place and are looking for a more effective way of routing packet voice traffic.

## **Cisco Signaling Link Terminal (SLT)**

SLT enables service providers to reliably transport Signaling System 7 (SS7) protocols across an IP network. The Cisco SLT uses the Cisco IOS SS7 Signaling Link Terminal feature set, providing reliable interoperability with the Cisco Media Gateway Controller. The Cisco SLT is responsible for terminating the Message Transfer Part (MTP) 1 and MTP 2 layers of the SS7 protocol stack. Using Cisco's Reliable User Datagram Protocol (RUDP), the Cisco SLT backhauls, or transports, upper-layer SS7 protocols across an IP network to the Cisco SC or Cisco VSC.

For more detailed information about the platforms and features being delivered in 12.0(7)XR, please reference the following document:

- Release Notes for Cisco AS5300 for Cisco IOS Release 12.0(7)XR
- Release Notes for Cisco 2600 Series for Cisco IOS Release 12.0(7)XR
- Release Notes for Cisco urb7200 Series for Cisco IOS Release 12.0(7)XR
- Release Notes for Cisco urb920 Series for Cisco IOS Release 12.0(7)XR

## **Life span**

12.0(7)XR will be sold until Cisco IOS Software 12.1(1)T is released.

## **Support**

Cisco IOS Software 12.0(7)XR is supported by the Cisco Systems Product Support Policy.

## **Supported Hardware Platforms**

Cisco IOS Software release 12.0(7)XR supports the following platforms:

- Cisco ubr7246 Universal Broadband Router

- Cisco ubr7223 Universal Broadband Router
- Cisco AS5300 Universal Access Server
- Cisco 2600 Series Modular Access Router

## Product Numbers and Descriptions

Cisco IOS Software Release 12.0(7)XR can be ordered using the following product numbers.

Image	Software Product Description	Product Code	Flash	DRAM
c5300-is-mz	Cisco AS5300 Series IOS IP PLUS	S53CP-12.0.7XR	16MB	64MB
c5300-is-mz	Cisco AS5300 Series IOS IP VOICE PLUS	S53CVP-12.0.7XR	16MB	64MB
c5300-js-mz	Cisco AS5300 Series IOS ENTERPRISE PLUS	S53AP-12.0.7XR	16MB	64MB
c5300-js-mz	Cisco AS5300 Series IOS ENTERPRISE VOICE PLUS	S53AVP-12.0.7XR	16MB	64MB
c5300-js56i-mz	Cisco AS5300 Series IOS ENTERPRISE PLUS IPSEC 56	S53AL-12.0.7XR	16MB	64MB
ubr7200-ik1s-mz	Cisco ubr7200 Ser IOS MCNS 2-WAY IP+ W/BPI	SU7M3K4P-12.0.7XR	16MB	64MB
ubr7200-ik1st-mz	Cisco ubr7200 Ser IOS DOCSIS 2-WAY IP+ TELCO-RETURN W/BPI	SU7M3K4T2-12.0.7XR	16MB	64MB
ubr7200-is-mz	Cisco ubr7200 Ser IOS DOCSIS 2-WAY IP PLUS	SU7M3P-12.0.7XR	16MB	64MB
ubr7200-ist-mz	Cisco ubr7200 Ser IOS DOCSIS 2-WAY IP+ TELCO-RETURN	SU7M3PT2-12.0.7XR	16MB	64MB
ubr7200-k1p-mz	Cisco ubr7200 Ser IOS DOCSIS 2-WAY BPI	SU7M3K4-12.0.7XR	16MB	64MB
ubr7200-p-mz	Cisco ubr7200 Ser IOS DOCSIS 2-WAY	SU7M3-12.0.7XR	16MB	64MB
ubr920-k1-mz	Cisco ubr920 Ser IOS BASE IP BRIDGING	S92C9-12.0.7XR	4MB	16MB
ubr920-k1k2sv4y5-mz	Cisco ubr920 Ser IOS TELECOMMUTER+/VOICE/IPSE	S92C7-12.0.7XR	4MB	16MB
ubr920-k1k2sy5-mz	Cisco ubr920 Ser IOS TELECOMMUTER+/IPSEC 3DES	S92C7-12.0.7XR	4MB	16MB
ubr920-k1o3v4y5-mz	Cisco ubr920 Ser IOS	S92C8-12.0.7XR	4MB	16MB
ubr920-k1o3y5-mz	Cisco ubr920 Ser IOS	S92C8-12.0.7XR	4MB	16MB
ubr920-k1v4-mz	Cisco ubr920 Ser IOS BASE IP BRIDGING VOICE	S92C9-12.0.7XR	4MB	16MB
ubr920-k1v4y5-mz	Cisco ubr920 Ser IOS HOME OFFICE VOICE	S92C6V-12.0.7XR	4MB	16MB
ubr920-k1y5-mz	Cisco ubr920 Ser IOS HOME OFFICE	S92C6-12.0.7XR	4MB	16MB
ubr920-k1y5-mz	Cisco ubr920 Ser IOS BASE IP BRIDGING	S92C6K4-12.0.7XR	4MB	16MB



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