

Cisco IOS X-Release 12.1(3)XI

Introduction

This Product Bulletin describes the content and delivery information concerning Cisco IOS(TM) software release 12.1(3)XI. The 12.1(3)XI is a Early Deployment (ED) release parented to 12.1(3)T and supporting Cisco 2600, 3620, 3640, 3660, mc3810, AS5300, AS5800, ICS 7700 and Catalyst 4000 platforms. This release contains all new features delivered in 12.1(1)T up to 12.1(3)T.

The features delivered with this release will be incorporated into the 12.1(5)T release, but 12.1(3)XI represents a release vehicle that provides these features both sooner, and based off the 12.1T IOS train. **It is important to note that there have been follow on maintenance releases for this ED release. Customers should migrate to the 12.2(1) release for future maintenance.**

New Features in Cisco IOS Release 12.1(3)XI

The following features will be delivered in the release of 12.1(3)XI.

Table 1: Cisco IOS Release 12.1(3)XI New Features

New Feature	Cisco 2600	Cisco 36xx	Cisco 3810	Cisco 4000	Cisco AS5300	Cisco AS5800	Cisco 7200	Cisco ICS 7700
Catalyst 4000 Access Gateway Module				X				
Interworking Signaling Enhancements for H.323 VOIP	X	3620, 3640, 3660	X		X	X	X	
AIM-VPN/BP, AIM-VPN/HP, NM-VPN/MP	X	3620, 3640, 3660						
T.37/T.38 Fax Gateway					X			

New Feature	Cisco 2600	Cisco 36xx	Cisco 3810	Cisco 4000	Cisco AS5300	Cisco AS5800	Cisco 7200	Cisco ICS 7700
VIC-2BRI-NT/TE, MC3810-BVM4-N T/TE	X	3640, 3660	X					
Multimedia Conference Manager with Voice Gateway image with RSVP to ATM SVC	X	3620, 3640, 3660	X					
Integrated Communication s System								X

Please see the next section for documents that address details on these new features. Any ED release of software should be utilized first in a test network before being deployed in a production network.

Detailed Information

Cisco ICS 7700

The Cisco Integrated Communications System (ICS) 7700 is an IP telephony system that provides managed Web-based communications applications for transforming branch-office and mid-sized business environments into Internet e-businesses. The system is built on the open and scalable Cisco AVVID (Architecture for Voice, Video and Integrated Data).

The Cisco ICS 7700 integrates the functionality of the following voice and data network components:

- o Internet Protocol (IP) routing
- o Switched Ethernet local area network (LAN) interface
- o IP telephony
- o Call processing and computer telephony applications

The Cisco ICS 7700 incorporates all of the following elements needed to deliver converged data, voice and video:

- o Multiservice router and voice gateways based on Cisco IOS technology
- o Application servers running core voice applications
- o CallManager software
- o Integrated web-based system management in the Cisco ICS System Manager
- o A data switching interface for seamless connectivity to recommended Cisco Catalyst quality of service (QoS)-enabled switches

The Cisco ICS 7700 is a six-slot system, which houses any combination of Cisco IOS-based MRPs and/or SPEs. Various combinations of MRP and SPE cards allow a network administrator to customize the configuration to meet voice and data processing needs, such as telephony, in one integrated system. The SAP card provides fault management and events-driven alarms through electronic mail or paging and the SSP card provides Ethernet switching.

The MRP supports both digital and analog voice-trunk gateways and WAN interfaces. The MRP enables businesses to use virtual private network (VPN), firewall, IP Security (IPSec), and QoS for voice and data transmission. The Cisco ICS 7700 system uses the MRP to link to the Public Switched Telephone Network (PSTN) and existing private branch exchanges (PBXs), as well as other common analog devices, such as fax machines and teleconferencing stations. Each MRP card has two slots that accept existing Cisco Voice interface cards (VICs) and WAN interface cards (WICs). Refer to Table 5 for a complete list.

The SPE is a single-board computer that can run Cisco CallManager for intelligent call processing and other core voice applications such as voice mail and auto-attendant, as well as interactive voice response (IVR), unified messaging, automated call distributor (ACD), and Web-based contact center applications.

Catalyst 4000 Access Gateway Module

- Can be configured as a Router or Router/VoIP Gateway
- As a router, it provides WAN interfaces and supports basic (simple) router protocols including:IP, RIP, OSPF, IGRP, EIGRP, Inter-VLAN routing
- As a VoIP Gateway, it supports Voice Interfaces, and DSP Farm Services to the Cat4k switch in order to enable it to become an integrated voice and data solution.
- Interfaces: Console port, management ethernet port, 2 VIC/WIC slots, 1 VIC (only) slot, 1 High Density Analog slot, connection to the switching ASIC within the Cat4k.
- The Access Gateway Module will initially support H.323 for the Telephony Gateway functions and the Skinny Client Control Protocol for the DSP Farm services. It will either work as a peer device in Toll Bypass applications or controlled by the Cisco Call Manager when operating as a slave device in the Cisco AVVID IP Telephony environment.

Interworking Signaling Enhancements for H.323 VOIP

- Provides major fixes to provide proper signaling when signaling is passed between ISDN (Q.931) and H.323 CAS interfaces.
- This feature is needed urgently to address widespread CAP issues in critical accounts globally.

AIM-VPN/BP, AIM-VPN/HP, NM-VPN/MP

A hardware Layer 3 (IPSec) encryption hardware processor on AIM and NM form-factors, for use in 26xx and 36xx routers. Encryption is based on the IRE CryptIC chip currently in development, and provides DES(56-bit) and Triple-DES (3DES 168-bit) encryption algorithms.

T.37/T.38 Fax Gateway

The primary objective is to offer voice, fax relay, and fax store and forward on the same voice port. This initiative is also meant to achieve a closer integration of the voice and fax applications - providing the ability to dynamically switch from one application to another in the same call (IVR, voice, fax relay, fax store and forward). This level of flexibility is required to support the Unified Communications requirements expressed by our customers.

VIC-2BRI-NT/TE, MC3810-BVM4-NT/TE

- Provides Network Side Basic Rate Interface (BRI) ISDN Voice for the 2600, 3600 & 3810
- Provides true PSTN tie & trunk line replacement using IP, Frame Relay or ATM as a transport mechanism for voice and fax
 - Eliminates the need to reconfigure connected PABX's BRI interfaces, purchase new PBX/PABX BRI interfaces or purchase completely new PBX/PABXs
 - Allows enterprises to seamlessly migrate towards a single infrastructure Architecture for Voice, Video and Data
- Allows penetration into small and medium sized offices which are currently using small and mid-sized PABXs
 - Toll bypass and Packet Voice become easier to implement

- Does not require users of inexpensive legacy PABXs to forklift upgrade to New World Telephony immediately
- Meets one of the primary needs/requests to date from EMEA and Asia-Pacific

Multimedia Conference Manager with Voice Gateway image with RSVP to ATM SVC

An IOS software image that will integrate H.323 Cisco MCM (Multimedia Conference Manager - H.323 gatekeeper and H.323 proxy), H.323 VoIP gateway and routing. Saguaro will be supported on the MC3810, 2600, 3600 and 7200 Series. Saguaro will allow enterprise customers to reduce costs by incorporating these features into a single chassis. Installed chassis can be easily upgraded via a software download to obtain this functionality. This image will also incorporate the mapping of H.323 RSVP requests to ATM VBR SVCs as well, a very important feature for customers utilizing an ATM backbone.

For more detailed information about the platforms and features being delivered in 12.1(3)XI, please reference the following documents:

- <http://www.cisco.com/univercd/cc/td/doc/product/software/ios121/121relnt/index.htm>

Support

Cisco IOS software release 12.1(3)XI follows the standard Cisco support policy as indicated in the following link.

<http://www.cisco.com/warp/customer/437/27.html>

Product Numbers

Table 3: Cisco IOS Release 12.1(3)XI Feature Sets, Images, and Memory Recommendations

Platform	Software Feature Set	Product Code	Image	Flash	DRAM
2600	Cisco 2600 Series IOS IP PLUS	S26CP-12103 XI	c2600-is-mz	16MB	40 MB
2600	Cisco 2600 Series IOS IP PLUS IPSEC 56	S26CL-12103 XI	c2600-is56i-mz	16MB	40 MB
2600	Cisco 2600 Series IOS IP/H323	S26CU-12103 XI	c2600-ix-mz	8MB	32 MB
2600	Cisco 2600 Series IOS ENTERPRISE PLUS IPSEC 3DES	S26AK2-12103 XI	c2600-jk2s-mz	16MB	48 MB
2600	Cisco 2600 Series IOS ENTERPRISE PLUS	S26AP-12103 XI	c2600-js-mz	16MB	48MB

Platform	Software Feature Set	Product Code	Image	Flash	DRAM
2600	Cisco 2600 Series IOS ENTERPRISE PLUS/H323	S26APU-1210 3XI	c2600-jsx-mz	16MB	64MB
3620	Cisco 3620 Series IOS IP PLUS	S362CP-1210 3XI	c3620-is-mz	16MB	48MB
3620	Cisco 3620 Series IOS IP PLUS IPSEC 56	S362CL-1210 3XI	c3620-is56i-mz	16MB	48MB
3620	Cisco 3620 Series IOS IP/H323	S362CU-1210 3XI	c3620-ix-mz	8MB	48MB
3620	Cisco 3620 Series IOS ENTERPRISE PLUS IPSEC 3DES	S362AK2-1210 03XI	c3620-jk2s-mz	16MB	64MB
3620	Cisco 3620 Series IOS ENTERPRISE PLUS	S362AP-1210 3XI	c3620-js-mz	16MB	64MB
3620	Cisco 3620 Series IOS ENTERPRISE PLUS/H323	S362APU-1210 03XI	c3620-jsx-mz	16MB	64MB
3640	Cisco 3640 Series IOS IP PLUS	S364CP-1210 3XI	c3640-is-mz	16MB	48MB
3640	Cisco 3640 Series IOS IP PLUS IPSEC 56	S364CL-1210 3XI	c3640-is56i-mz	16MB	48MB
3640	Cisco 3640 Series IOS IP/H323	S364CU-1210 3XI	c3640-ix-mz	8MB	48MB
3640	Cisco 3640 Series IOS ENTERPRISE PLUS IPSEC 3DES	S364AK2-1210 03XI	c3640-jk2s-mz	16MB	64MB

Platform	Software Feature Set	Product Code	Image	Flash	DRAM
3640	Cisco 3640 Series IOS ENTERPRISE PLUS	S364AP-1210 3XI	c3640-js-mz	16MB	64MB
3640	Cisco 3640 Series IOS ENTERPRISE PLUS/H323	S364APU-12103XI	c3640-jsx-mz	16MB	64MB
3660	Cisco 3660 Series IOS IP PLUS	S366CP-1210 3XI	c3660-is-mz	16MB	64MB
3660	Cisco 3660 Series IOS IP PLUS IPSEC 56	S366CL-1210 3XI	c3660-is56i-mz	16MB	64MB
3660	Cisco 3660 Series IOS IP/H323	S366CU-1210 3XI	c3660-ix-mz	8MB	64MB
3660	Cisco 3660 Series IOS ENTERPRISE PLUS IPSEC 3DES	S366AK2-12103XI	c3660-jk2s-mz	16MB	64MB
3660	Cisco 3660 Series IOS ENTERPRISE PLUS	S366AP-1210 3XI	c3660-js-mz	16MB	64MB
3660	Cisco 3660 Series IOS ENTERPRISE PLUS/H323	S366APU-12103XI	c3660-jsx-mz	16MB	64MB
3810	Cisco 3800 Series IOS IP/ATM PLUS	S38CM3P-12103XI	mc3810-a2is-mz	8MB	32MB
3810	Cisco 3800 Series IOS IP PLUS VOIP/VOATM	S38CM2PV-12103XI	mc3810-a2isv5-mz	16MB	64MB
3810	Cisco 3800 Series IOS ENTERPRISE /ATM PLUS	S38AM3P-12103XI	mc3810-a2js-mz	8MB	32MB

Platform	Software Feature Set	Product Code	Image	Flash	DRAM
3810	Cisco 3800 Series IOS ENTERPRISE PLUS VOIP/VOATM	S38AM2PV-12103XI	mc3810-a2jsv5-mz	16MB	64MB
3810	Cisco 3800 Series IOS ENTERPRISE PLUS/H323	S38AM2PVU-12103XI	mc3810-a2jsv5x-mz	16MB	64MB
3810	Cisco 3800 Series IOS ENTERPRISE PLUS ATM MCM H323	S38AM3PU-12103XI	mc3810-a2jsx-mz	8MB	32MB
3810	Cisco 3800 Series IOS IP PLUS	S38CP-12103XI	mc3810-is-mz	16MB	64MB
3810	Cisco 3800 Series IOS ENTERPRISE PLUS	S38AP-12103XI	mc3810-js-mz	16MB	64MB
c4gwy	Cisco 4000 Series IOS IP/FIREWALL FEATURE SET	S4KAGMCH-12103XI	c4gwy-io3s-mz	32MB	64MB
c4gwy	Cisco 4000 Series IOS IP/FIREWALL/DSP FEATURE SET	S4KAGMCU-12103XI	c4gwy-io3sx3-mz	32MB	64MB
AS5300	Cisco AS5300 Series IOS IP/VOICE PLUS	S53CVP-12103XI	c5300-is-mz	16MB	128MB
AS5300	Cisco AS5300 Series IOS ENTERPRISE VOICE PLUS	S53AVP-12103XI	c5300-js-mz	16MB	128MB
AS5800	Cisco AS5800 Series IOS IP PLUS	S58CP-12103XI	c5800-p4-mz	16MB	128MB

Platform	Software Feature Set	Product Code	Image	Flash	DRAM
AS5800	Cisco AS5800 Series IOS DIAL SHELF CONTROLLE R	S58Q3-12103 XI	dsc-c5800-mz	8MB	32MB
7200	Cisco 7200 Series IOS IP	S72C-12103X I	c7200-is-mz	16MB	64MB
7200	Cisco 7200 Series IOS ENTERPRISE	S72A-12103X I	c7200-js-mz	16MB	64MB
ICS 7700	Cisco 7700 Series IOS IP/ IPX/AT/IBM/ FW/VOICE PLUS IPSEC 3DES	S77QHVK2-1 2103XI	ics7700-bk2no 3r2sv3y-mz	16MB	64MB
ICS 7700	Cisco 7700 Series IOS IP/ IPX/AT/IBM/ FW/VOICE PLUS IPSEC 56	S77QHVL-12 103XI	ics7700-bno3r2sv3y56 i-mz	16MB	64MB
ICS 7700	Cisco 7700 Series IOS IP/ IPX/AT/IBM/ VOICE PLUS	S77QVP-1210 3XI	ics7700-bnr2sv3y-mz	16MB	64MB
ICS 7700	Cisco 7700 Series IOS IP/ FW/VOICE PLUS IPSEC 3DES	S77CHVK2-1 2103XI	ics7700-k2o3sv3y-mz	16MB	64MB
ICS 7700	Cisco 7700 Series IOS IP/ FW/VOICE PLUS IPSEC 56	S77CHVL-12 103XI	ics7700-o3sv3y56i-mz	16MB	64MB
ICS 7700	Cisco 7700 Series IOS IP/ VOICE PLUS	S77CVP-1210 3XI	ics7700-sv3y-mz	16MB	64MB

Download Information

Customers can download Cisco IOS Release 12.1(3)XI software from Cisco Connection Online (CCO) in the Software Image Library.



– <http://www.cisco.com/cgi-bin/Software/Iosplanner/Planner-tool/iosplanner.cgi?majorRel=12.1>