

Cisco IOS Early Deployment Release 12.2(21)SW

Introduction

This Product Bulletin describes the content and delivery information concerning Cisco IOS(TM) software release 12.2(21)SW. The features delivered with this release will ultimately be incorporated into the 12.2S release however 12.2(21)SW represents a release vehicle that provides these features sooner. For more information about the Cisco IOS software release process, please see Product Bulletin #537.

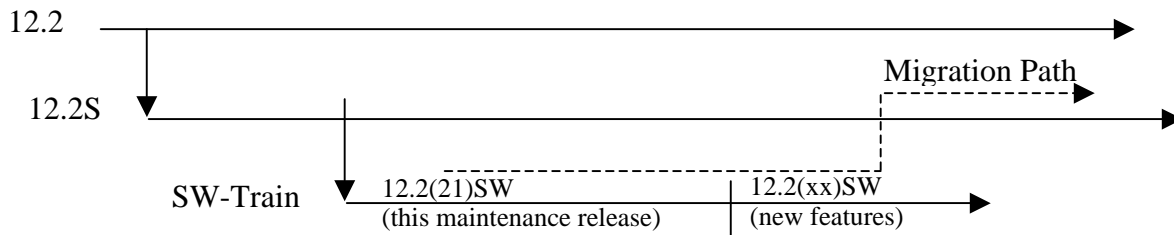
Based upon open industry standards, Cisco's IP Transfer Point (ITP) product is designed for transporting SS7 traffic over IP (SS7oIP) networks. It's design provides significant cost efficiencies and scalability enhancements over legacy SS7 networks.

Using the IETF's M2PA and SCTP protocols, the initial release of the ITP product provided the base functionality to offload SS7 traffic to IP. Subsequent releases provided the full functionality found in typical legacy signaling transfer point (STP) nodes, such as global title translation (GTT), gateway screening and ISUP transport. In addition, support for SS7 high speed links (HSL) was added.

In subsequent releases, support was added for the M3UA and SUA protocols which provide signaling gateway functionality between legacy SS7 network and IP-enabled signaling end points (SEP) nodes. Further releases added the ability to function as a MAP-layer gateway for performing GSM SIM authentication/authorization in conjunction with Cisco's Public WLAN solution architecture as well as advanced SMS routing. Please refer to the product data sheet and white-papers for detailed product features and specifications.

Migration Guide

The diagram below displays Cisco 12.2(21)SW release functionality relative to the 12.2 release. This diagram also identifies the recommended longer term migration path.





New Features in Cisco IOS Release 12.2(21)SW

The release of 12.2(21)SW contains the following new product features:

Table 1. Cisco IOS Release 12.2(21)SW Features

New Feature	Platform 1	Platform 2	Platform 3	Platform 4
ITP Probe added to 2600XM platform	2600XM			
SMS MLR feature for IS-41 networks	2600XM	7200VXR	7301	7500
MLR MIB	2600XM	7200VXR	7301	7500
ITP Probe MIB	2600XM	7200VXR		7500

For additional details regarding the ITP product, please refer to:

<http://www.cisco.com/en/US/products/sw/wirelssw/ps1862/index.html>

Any ED release of software should be utilized first in a test network before being deployed in a production network.

Detailed Information

Operating in a pure TDM mode, the ITP provides compelling cost efficiencies and investment protection as an alternative to adding SS7 capacity via the legacy STP approach. Another option enabled by the ITP is the use of IETF protocols for transporting SS7 over IP. In this case, SS7oIP frees up link capacity on legacy equipment while maintaining stringent levels of reliability and stability that are characteristic of SS7 protocols. SS7oIP will relieve the signaling network from the overwhelming message volume placed on the wireless operators SS7 network in a cost-efficient manner.

The ITP roadmap provides a migration path to converge today's SS7 and IP networks that is comfortable for the most conservative mobile operator. Moreover, mobile data services require a fundamental shift from legacy mobile core networks to high capacity, high-speed IP networks. The transition to SS7oIP will allow for rapid deployment of emerging IP-based intelligent network applications and services.

The strategic value of ITP is to offer a migration path to an all IP-core network. This systematic approach introduces achievable milestones that utilize existing investments while eliminating further capitol expenditures in legacy equipment and facilities.

The Cisco ITP is based on Cisco's native Cisco IOS Software that resides on proven Cisco high-performance router platforms. Three critical differentiating factors include:

- The Cisco ITP offers high-performance routing with state-of-the-art routing protocols, algorithms, and features (for example, quality of service [QoS]). This performance applies to both IP and Signaling System 7 (SS7) packet throughput. This approach enables revenue-generating IP-based applications by deploying Internet Engineering Task Force (IETF) SS7oIP standards.
- The Cisco ITP is a single device that takes advantage of the economies of scale across the breath of IP platforms, a single network management perspective, space occupancy, power demands, and staffing/training.
- The standards (Signaling Transport [Sigtran])-based offering has great synergy with voice-over -IP (VoIP) solutions that require cost-efficient and high-bandwidth transport of signaling of data in mobile or Public Switched Telephone Network (PSTN) VoIP networks.



Support

Cisco IOS software release 12.2(21)SW follows the standard Cisco support policy as indicated in the following link:

http://www.cisco.com/en/US/products/products_end-of-life_policy.html

Product Numbers

Cisco IOS Release 12.2(21)SW Feature Sets, Images, and minimum Memory Recommendations:

Platform	Software Feature Set	Product Code	Image	Flash	DRAM
SS7/SS7oIP Transport					
2600XM	IP Transfer Point	S73ITP-12220SW	c2600-ity-mz	32MB	128MB
7200VXR	IP Transfer Point	S73ITP-12220SW	c7200-ity-mz	128MB	256MB
7301	IP Transfer Point	S73ITP-12220SW	c7301-ity-mz	128MB	256MB
7500	IP Transfer Point	S73ITP-12220SW	rsp-ity-mz	128MB	256MB
Signaling Gateway					
2600XM	IP Transfer Point	S73SG-12220SW	c2600-ity-mz	32MB	128MB
7200VXR	IP Transfer Point	S73SG-12220SW	c7200-ity-mz	128MB	256MB
7301	IP Transfer Point	S73SG-12220SW	c7301-ity-mz	128MB	256MB
7500	IP Transfer Point	S73SG-12220SW	rsp-ity-mz	128MB	256MB
MAP Gateway					
2600XM	IP Transfer Point	S73MG-12220SW	c2600-ity-mz	32MB	128MB
7200VXR	IP Transfer Point	S73MG-12220SW	c7200-ity-mz	128MB	256MB
7301	IP Transfer Point	S73MG-12220SW	c7301-ity-mz	128MB	256MB
7500	IP Transfer Point	S73MG-12220SW	rsp-ity-mz	128MB	256MB

Download Information

Customers can download Cisco IOS Release 12.2(21)SW software from Cisco Connection Online (CCO) in the Software Image Library.

<http://www.cisco.com/public/sw-center/sw-ios.shtml>



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

Cisco Systems has more than 200 offices in the following countries and regions. Addresses, phone numbers, and fax numbers are listed on the

Cisco Web site at www.cisco.com/go/offices

Argentina • Australia • Austria • Belgium • Brazil • Bulgaria • Canada • Chile • China PRC • Colombia • Costa Rica • Croatia
Czech Republic • Denmark • Dubai, UAE • Finland • France • Germany • Greece • Hong Kong SAR • Hungary • India • Indonesia • Ireland
Israel • Italy • Japan • Korea • Luxembourg • Malaysia • Mexico • The Netherlands • New Zealand • Norway • Peru • Philippines • Poland
Portugal • Puerto Rico • Romania • Russia • Saudi Arabia • Scotland • Singapore • Slovakia • Slovenia • South Africa • Spain • Sweden
Switzerland • Taiwan • Thailand • Turkey • Ukraine • United Kingdom • United States • Venezuela • Vietnam • Zimbabwe

All contents are Copyright © 1992–2003 Cisco Systems, Inc. All rights reserved. CCIP, CCSP, the Cisco Arrow logo, the Cisco *Powered* Network mark, Cisco Unity, Follow Me Browsing, FormShare, and StackWise are trademarks of Cisco Systems, Inc.; Changing the Way We Work, Live, Play, and Learn, and iQuick Study are service marks of Cisco Systems, Inc.; and Aironet, ASIST, BPX, Catalyst, CCDA, CCDP, CCIE, CCNA, CCNP, Cisco, the Cisco Certified Internetwork Expert logo, Cisco IOS, the Cisco IOS logo, Cisco Press, Cisco Systems, Cisco Systems Capital, the Cisco Systems logo, Empowering the Internet Generation, Enterprise/Solver, EtherChannel, EtherSwitch, Fast Step, GigaStack, Internet Quotient, IOS, IP/TV, iQ Expertise, the iQ logo, iQ Net Readiness Scorecard, LightStream, MGX, MICA, the Networkers logo, Networking Academy, Network Registrar, *Packet*, PIX, Post-Routing, Pre-Routing, RateMUX, Registrar, ScriptShare, SlideCast, SMARTnet, StrataView Plus, Stratm, SwitchProbe, TeleRouter, The Fastest Way to Increase Your Internet Quotient, TransPath, and VCO are registered trademarks of Cisco Systems, Inc. and/or its affiliates in the U.S. and certain other countries.

All other trademarks mentioned in this document or Web site are the property of their respective owners. The use of the word partner does not imply a partnership relationship between Cisco and any other company. (0304R)