

Survivable Remote Site Telephony for Cisco 1700 Series Modular Access Routers

Cisco 1700 Series Now Offers SMBs and Enterprise Small Branch Offices Enhanced IP Telephony Functionality to Further e-Business Implementations

Dear Colleagues,

On December 3rd, Access Technology Group, MMABU (Mid Market Access Business Unit), will begin shipping the Survivable Remote Site Telephony (SRST) feature-set on the Cisco 175x with Cisco IOS 12.2(4)XW.

The latest enhancement to the Cisco 1700 series provides redundant call-processing capabilities at remote sites for businesses using a centralized Cisco Call Manager architecture, adding another layer of reliability to IP telephony deployments.

If a branch office using a Cisco 175x router equipped with SRST experiences a Wide Area Network (WAN) outage that prevents the centralized Call Manager from processing remote IP Phone telephony requests; the router will temporarily perform basic-call processing functions ensuring that the office is able to use the phone system with minimal business impact until the WAN outage is resolved. By providing SRST features on the Cisco 175x routers, Cisco is reducing the likelihood of voice service disruption, giving its customers the confidence to deploy multiservice e-business applications that will enhance employee productivity and reduce costs.

The SRST provides the following benefits and features on the Cisco 175x:

Redundant Call Processing in event of WAN failure:

- Re-homing of IP phone to a local router
- Local Extension-to-Extension calls
- Extension-to-PSTN calls
- No service disruption when WAN link is restored

Calling Services during WAN Failure:

- Speed dial and last-number redial
- Direct Outward Dial (DOD) calling
- Direct Inward Dial (DID) calling
- Caller ID and Automatic Number Identification (ANI) support
- Calling Party Name
- Distinctive Ringing
- Transfer (without consult)



- Call hold and pickup
- Call park and retrieve
- Call waiting

Number of lines/phones supported:

- Up to six lines per phone
- Up to 24 phones and 48 line appearances per system

IT Staff not required at remote site

- SRS Telephony feature automatically detects failure and assumes call processing functionality. Similarly SRS Telephony detects when the CallManager has been restored and automatically transfers the call processing function back to the CallManager
- Centralized configuration and management
- Access at every remote site to all Cisco CallManger features such as next-generation call centers, unified messaging services, embedded directory services, mobility, and soft phones during normal operations
- Remote maintenance and trouble shooting

Product Pricing, Ordering, and Availability Information

Part Number	List Price (US)	Phones Supported
FL-SRST-SMALL	\$750	Up to 24
FL-SRST-SMALL=	\$750	Up to 24

Products Orderable: November 19, 2001

Products FCS: December 3, 2001

Cisco IOS Release—Cisco IOS version 12.2(4)XW IOS. IOS 12.2(4)XW will be incorporated into the fourth release of IOS 12.2(T).

Key Features and Benefits of the Cisco 175x

Flexibility -- The Cisco 1700 Series Routers are modular allowing customers to implement new technologies as business requirements evolve. WICs and VICs shared across the Cisco 1700, Cisco 2600 and Cisco 3600 series offer a wide range of WAN access technologies including business-class DSL. Analog and digital voice capabilities enable connectivity to the public switched telephone network (PSTN) and the PBX, and VICs support telephony features such as direct inward dial (DID) and caller-ID (CLID).

Business-Class DSL -- Business-class DSL is delivered through the optional asymmetric digital subscriber line (ADSL) or symmetrical high-bit rate digital subscriber line (G.shdsl) WICs. (G.shdsl WIC will be available first quarter of calendar year 2002). The Cisco 1700 series business-class DSL solution combines the cost benefits of DSL service with the advanced routing capability required for business use of the Internet. The Cisco 1700 Series business class DSL solution combines strong security features including wire-speed 3DES VPN, intrusion detection system (IDS) and fire-wall to protect intellectual property; and reliability of the 1700 platform. Through enhanced DSL quality-of-service (QoS) features, performance levels for mission-critical applications and toll-quality voice/data integration are guaranteed.



Multiservice -- The Cisco 1751 support both analog and digital voice communications, providing an ideal migration path to a multiservice network. Customers can gradually shift voice traffic from traditional circuit-switched networks to a single infrastructure carrying data, voice and video over packet networks. This can be done without replacing legacy PBX and key communication system equipment. In addition, the Cisco 1751 provides easy deployment of IP telephony solutions. By including support for digital voice, the Cisco 1751 delivers connectivity support for many of the world's traditional circuit-switched PBXs and PSTNs. As a result SMBs and small enterprise branch offices around the world can implement integrated applications immediately. Recently announced VICs deliver DID and Caller ID capability to the platform (For more information visit http://www.cisco.com/en/US/customer/products/hw/routers/ps221/prod_bulletin09186a00800920e1.html)

Security -- The Cisco 1700 Series supports hardware-assisted wire speed 3DES IPsec VPN encryption (using optional VPN module), dynamic stateful inspection firewall and intrusion detection system (IDS) that allows customers to keep their data safe.

Manageability -- The Cisco 1700 Series Routers are based on Cisco IOS software, the de-facto standard for Internet operations. Cisco IOS software allows traffic prioritization by user or application ensuring that the most strategic e-business applications and time sensitive applications like voice perform as expected. CiscoWorks allows remote monitoring.

Questions and Answers

Q. Should new customers purchase the Cisco 1750 or the Cisco 1751?

A. New customers should always be advised to purchase the Cisco 1751; it offers more features and better customer value than the Cisco 1750. SRST is only supported on one IOS image for the Cisco 1750, it is supported on multiple images for the Cisco 1751. Are there any features that are not supported on the Cisco 1750?

Due to the memory limitation on the Cisco 1750, SRST is only supported in one IOS image: IP/VOX PLUS on the Cisco 1750. This means the SRST cannot run with other feature sets such as ADSL, IPX/AT/IBM, FW, IDS, IPsec on the Cisco 1750.

Q. Which IOS images for the Cisco 1700 support the SRST?

A. SRST for the 175x series routers is supported beginning with IOS release 12.2(4)XW. The following IOS images support the SRST:

Platform	Image Names	Software Product Description
1750-1751	c1700-sv8y-mz	Cisco 1700 IOS IP/VOX Plus
1751	c1700-sv8y7-mz	Cisco 1700 IOS IP/ADSL/VOX Plus
1751	c1700-o3sv8y7-mz	Cisco 1700 IOS IP/ADSL/VOX/FW/IDS Plus
1751	c1700-no3sv8y7-mz	Cisco 1700 IOS IP/ADSL/IPX/VOX/FW/IDS Plus
1751	c1700-k8sv8y7-mz	Cisco 1700 IOS IP/ADSL/VOX Plus IPsec 56
1751	c1700-bk8no3r2sv8y7-mz	Cisco 1700 IOS IP/ADSL/IPX/AT/IBM/VOX/FW/IDS Plus IPsec 56
1751	c1700-k8o3sv8y7-mz	Cisco 1700 IOS IP/ADSL/VOX/FW/IDS Plus IPsec 56
1751	c1700-bk9no3r2sv8y7-mz	Cisco 1700 IOS IP/ADSL/IPX/AT/IBM/VOX/FW/IDS Plus IPsec 3DES
1751	c1700-k9o3sv8y7-mz	Cisco 1700 IOS IP/ADSL/VOX/FW/IDS Plus IPsec 3DES
1751	c1700-k9sv8y7-mz	Cisco 1700 IOS IP/ADSL/VOX Plus IPsec 3DES



Q. What is the difference between VOX (v8) images and previous VOICE (v3) images?

A. VOX images are being introduced onto the Cisco 175x platforms with IOS 12.2(4) XW release. They are super sets of the previous VOICE images and having the SRST support. VOX images will not replace VOICE images until the service support for VOICE images ends.

Q. What are the memory requirements for IOS 12.2(4)XW?

A. The memory requirements vary for different IOS images. Please refer to the Cisco IOS release notes for 12.2(4) XW for the details:

<http://www.cisco.com/univercd/cc/td/doc/product/software/ios122/122relnt/1700/rn1700xw.htm>

Q. What is the target customer for SRST?

A. SRST is designed for the customers with a centralized Cisco CallManager deployed and at the remote sites with Cisco 175x routers connected to the Cisco CallManager through a WAN link. If the WAN link to the Cisco CallManager fails, the Cisco 175x with the SRST feature will provide call-processing functionality to the local IP phones which connects to the Cisco 175x through a LAN.

Q. How do customers order the SRST feature license on the Cisco 1700 series?

A. The SRST on the Cisco 175x requires the feature license (FL-SRST-SMALL or FL-SRST-SMALL=) plus IOS image 12.2(4)XW or later. In some cases additional memory may also be required.

Q. For customers with existing Cisco 175x routers, how can they implement the new SRST features?

A. Customers with currently installed Cisco 175x routers who wish to implement SRST need to upgrade to IOS Image 12.2(4)XW and purchase the SRST software license. Customers upgrading existing Cisco 175x routers should confirm that they have enough memory to support the new software. For more information on memory requirements please visit:

<http://www.cisco.com/univercd/cc/td/doc/product/software/ios122/122relnt/1700/rn1700xw.htm>

Q. How many phones/lines does the SRST feature on the Cisco 175x support?

A. Up to 24 IP phones and 48 lines.

Q. Is this functionality currently supported on other Cisco Platforms?

A. The SRST feature is currently supported on the Cisco 2600, Cisco 3600, Cisco IAD 2400, and Catalyst 4224.

Q. Is the SRST features in the Cisco IOS 12.2(4)XW equivalent to the SRST version 1 features on the Cisco 2600 and 3600?

A. Yes.

Q. Does the Cisco IOS 12.2(4) XW support SRST with PRI?

A. No. Because the Cisco 1700 doesn't support PRI today.

Contact Information:

Lingling Zhang: Product Manager, e-mail: llzhang@cisco.com, phone: 408 902-8850

Sun-Min Tao: Product Manager, email stao@cisco.com, phone 408-902-8649

Paul Lysander: Technical Marketing Engineer, e-mail: lysander@cisco.com, phone: 408 902-8990

Dawn Slusher: Product Marketing Manager, e-mail: dslusher@cisco.com, phone: 408 902-8619

Melissa Renda: Product Marketing Manager APAC, LAT, EMEA, e-mail: mrenda@cisco.com, phone: +44 7764 906 844

Mike Stallone: Product Line Manager, e-mail: stallone@cisco.com, phone: 408 902-8935

Joe Ammirato: Director of Marketing, e-mail: jammirat@cisco, phone: 408 902-8924



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 Europe
11, Rue Camille Desmoulins
92782 Issy-les-Moulineaux
Cedex 9
France
www-europe.cisco.com
Tel: 33 1 58 04 60 00
Fax: 33 1 58 04 61 00

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: +65 317 7777
Fax: +65 317 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

Copyright © 2001, Cisco Systems, Inc. All rights reserved. AccessPath, AtmDirector, Browse with Me, CCIP, CCSI, CD-PAC, *CiscoLink*, the Cisco *Powered* Network logo, Cisco Systems Networking Academy, the Cisco Systems Networking Academy logo, Cisco Unity, Fast Step, Follow Me Browsing, FormShare, FrameShare, IGX, Internet Quotient, IP/VC, iQ Breakthrough, iQ Expertise, iQ FastTrack, the iQ logo, iQ Net Readiness Scorecard, MGX, the Networkers logo, ScriptBuilder, ScriptShare, SMARTnet, TransPath, Voice LAN, Wavelength Router, and WebViewer are trademarks of Cisco Systems, Inc.; Changing the Way We Work, Live, Play, and Learn and Discover All That's Possible 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, FastHub, FastSwitch, GigaStack, IOS, IP/TV, LightStream, MICA, Network Registrar, *Packet*, PIX, Post-Routing, Pre-Routing, RateMUX, Registrar, SlideCast, StrataView Plus, Stratm, SwitchProbe, TeleRouter, 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. (0110R)

LW2809 11/01