

## Cisco Survivable Remote Site Telephony Version 7.0

Cisco® Unified Communications solutions unify voice, video, data, and mobile applications on fixed and mobile networks, enabling easy collaboration every time from any workspace.

As the enterprise extends its IP telephony deployments from central sites to remote branches and teleworkers, a critical factor in achieving a successful deployment is the capability to support backup call control at these remote locations. Cisco Unified Survivable Remote Site Telephony (SRST) provides a cost-effective solution for supporting redundant call control in remote branch offices and the homes of teleworkers.

### Benefits of Centralized Call-Processing Architecture

Cisco Unified SRST is a critical component of a centralized call-processing architecture in which a Cisco Unified Communications Manager cluster, located at a central site, provides telephony services for all sites of an organization. The architecture provides numerous benefits for enterprises, including centralized and simplified management. Table 1 lists the benefits of a centralized call-processing architecture.

**Table 1.** Benefits of Centralized Call-Processing Architecture

| Centralized Call Processing   | Features and Benefits      |
|---|----------------------------|
| Delivery of full feature set to remote locations, next-generation call centers, unified messaging services, embedded directory services, and mobility | Improved productivity      |
| Centralized configuration and management  | Reduced operating expenses |
| Simplified maintenance and troubleshooting  | Reduced operating expenses |
| Converged voice and data network  | Reduced operating expenses |
| Reduced installation cost (shared Cisco Unified Communications Manager resource)  | Reduced initial expense    |

However, a centralized call-processing architecture must include a strategy for survivability of telephony service at the remote locations (that is, at branch offices and the homes of teleworkers) when access to the centralized call-processing services is interrupted because of a WAN outage or other factors. Call-processing redundancy in the remote location is particularly critical during an emergency (which may be the actual cause of the WAN outage).

### Components of Centralized Call-Processing Architecture

The Cisco Unified Communications solution uses Cisco Unified Communications Manager in combination with Cisco Unified SRST, which is embedded in the Cisco IOS® Software, to help provide high-availability IP telephony to remote locations. When access to Cisco Unified Communications Manager from a remote location is impeded, for example, as a result of a WAN link failure, Cisco Unified SRST provides telephony backup services to help ensure that the remote location has continuous telephony service over the Cisco network infrastructure deployed in the remote location. The enhanced reliability provided by Cisco Unified SRST makes Cisco Unified

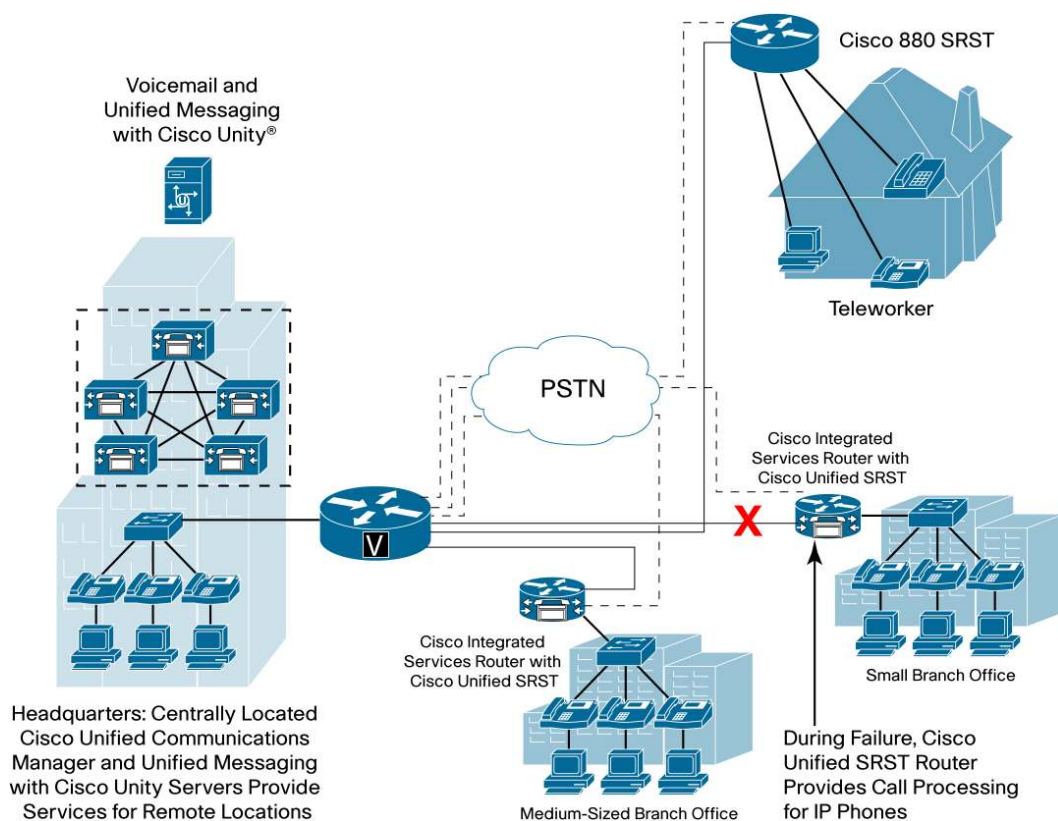
Communications a cost-effective solution to help ensure telephony operation for all users in an organization, whether they are located in the headquarters or in a remote location.

Furthermore, in certain environments, the security of telephony communication is a critical requirement. The Cisco Unified Communications solution supports secure telephony communication between any two phones in the network, whether those phones are in the headquarters facility or at a remote location. Cisco Unified SRST contributes to this secure telephony communication solution by supporting the same secure telephony protocols in a remote location when that location loses communication with the centralized Cisco Unified Communications Manager.

### How It Works

Cisco developed Cisco Unified SRST technology for all Cisco IOS Software platforms that support call processing (refer to Table 2 for a complete list of supported platforms). Cisco Unified SRST integrates network intelligence into Cisco IOS Software, which acts as the call-processing engine for IP phones located in the remote locations during a WAN outage (Figure 1).

**Figure 1.** Centralized Cisco Unified Communications Manager Deployment with Remote Site Experiencing a WAN Failure and Cisco Integrated Services Router Using Cisco Unified SRST



Cisco Unified SRST functions in the remote location router to automatically detect a failure in the network and initiate a process to autoconfigure the router, providing call-processing backup redundancy for the IP phones in that location and helping ensure that the telephony capabilities stay operational. Upon restoration of WAN connectivity, the system intelligently and automatically shifts call processing back to the primary Cisco Unified Communications Manager cluster. The Cisco Unified SRST configuration needs to be completed only once, during the initial installation,

simplifying deployment, administration, and maintenance. No IT staff is required at the remote sites to manage the Cisco Unified SRST application.

Cisco routers running Cisco Unified SRST also offer a secure voice mode with Cisco Unified SRST 3.3 and later. If you deploy secure voice with Cisco Unified Communications Manager at your central site, secure Cisco Unified SRST allows you to keep calls secure during Cisco Unified SRST mode with Transport Layer Security (TLS) and Secure Real-Time Transport Protocol (SRTP) for signaling and media encryption, respectively. When the WAN link or Cisco Unified Communications Manager service is restored, Cisco Unified Communications Manager resumes secure call-handling capabilities.

Cisco Unified SRST 3.4 and later supports Session Initiation Protocol (SIP) for Cisco Unified IP Phones, which provides basic telephony functions when the network SIP proxy or Cisco Unified Communications Manager is no longer available. The Cisco Unified SRST router with SIP enabled provides SIP registrar services during the outage and supports a back-to-back user agent, allowing for supplementary features such as call transfer and forwarding. Cisco Unified IP Phones register using SIP to the Cisco Unified SRST-enabled router when the WAN link is out of service.

Cisco Unified SRST offers fault monitoring using Simple Network Management Protocol (SNMP) with the SRST MIB, which allows you to remotely monitor the Cisco Unified SRST site using existing SNMP tools or CiscoWorks. The Cisco SRST MIB provides the network operations center details about Cisco Unified SRST activity, including duration of Cisco Unified SRST use, IP phones registered or registration failure, and calls processed during SRST mode. A backup WAN link connection is required to receive Cisco SRST MIB data at the central site in SRST mode.

Table 2 lists the platforms that support Cisco Unified SRST.

**Table 2.** Cisco Unified SRST Platform Density and Feature License Part Numbers

| Platform  | Number of Phones Supported*** | Part Number | Part Number (Spare) |
|---|-------------------------------|-------------|---------------------|
| Cisco 880 SRST Series Integrated Services Router              | Up to 4 phones                | Included    | NA                  |
| Cisco 1861 Integrated Services Router                         | Up to 8 phones                | Included    | NA                  |
| Cisco 2801 Integrated Services Router                         | Up to 25 phones               | FL-SRST-25  | FL-SRST-25=         |
| Cisco 2811 Integrated Services Router                         | Up to 35 phones               | FL-SRST-35  | FL-SRST-35=         |
| Cisco 2821 Integrated Services Router                         | Up to 50 phones               | FL-SRST-50  | FL-SRST-50=         |
| Cisco 2851 Integrated Services Router                         | Up to 100 phones              | FL-SRST-100 | FL-SRST-100=        |
| Cisco 3825 Integrated Services Router                         | Up to 350 phones              | _***        | _***                |
| Cisco Catalyst® 6500 Series Communications Media Module (CMM) | Up to 480 phones              | FL-SRST-480 | FL-SRST-480         |
| Cisco 3845 Integrated Services Router                         | Up to 730 phones              | _***        | _***                |

\*The number of phones supported by SRST have been changed to multiples of 5 starting with Cisco IOS Software Release 12.4(15)T3.

\*\*The Cisco Catalyst 6500 Series CMM supports Cisco Unified SRST 4.0 with Cisco IOS Software Release 12.4, and Cisco Unified SRST 2.1 with Cisco IOS Software Release 12.2(13)ZC.

\*\*\*There are no corresponding part numbers, but you can purchase multiple parts to reach the desired phone count.

## Cisco Unified SRST Platform Information

Cisco platforms with Cisco Unified SRST support from 4 to 730 phones. Details about currently supported platforms and the number of phones per platform are provided in the Cisco Unified SRST specifications sheet for each version, which you can view online at

[http://www.cisco.com/en/US/products/sw/voicesw/ps2169/products\\_device\\_support\\_tables\\_list.html](http://www.cisco.com/en/US/products/sw/voicesw/ps2169/products_device_support_tables_list.html).

Cisco offers integrated services router bundles with Cisco Unified SRST at a discount when compared to separate purchase of bundle components. These bundles are listed in Table 3.

**Table 3.** Cisco Unified SRST Bundles

| Bundle Part Number       | Includes  |
|--------------------------|---|
| <b>CISCO3845-SRST/K9</b> | Cisco 3845 voice bundle with packet voice digital signal processor (DSP) module (PVDM2-64), Cisco Unified SRST license for 250 phones, and Cisco IOS SP Services feature set  |
| <b>CISCO3825-SRST/K9</b> | Cisco 3825 voice bundle with packet voice DSP module (PVDM2-64), Cisco Unified SRST license for 175 phones, and Cisco IOS Software SP Services feature set  |
| <b>CISCO2851-SRST/K9</b> | Cisco 2851 voice bundle with packet voice DSP module (PVDM2-48), Cisco Unified SRST license for 100 phones, and Cisco IOS Software SP Services feature set  |
| <b>CISCO2821-SRST/K9</b> | Cisco 2821 voice bundle with packet voice DSP module (PVDM2-32), Cisco Unified SRST license for 50 phones, and Cisco IOS Software SP Services feature set   |
| <b>CISCO2811-SRST/K9</b> | Cisco 2811 voice bundle with packet voice DSP module (PVDM2-16), Cisco Unified SRST license for 35 phones, and Cisco IOS Software SP Services feature set   |
| <b>CISCO2801-SRST/K9</b> | Cisco 2801 voice bundle with packet voice DSP module (PVDM2-8), Cisco Unified SRST license for 25 users, and Cisco IOS Software SP Services feature set   |
| <b>C1861-SRST-C-F/K9</b> | Cisco 1861 voice bundle with 8 Power over Ethernet (PoE) ports, 4 Foreign Exchange Subscriber (FXS) ports, 4 Foreign Exchange Office (FXO) ports, Cisco Unity Express, Cisco Unified SRST license for 8 users, and Cisco IOS Software SP Services feature set |
| <b>C1861-SRST-C-B/K9</b> | Cisco 1861 voice bundle with 8 PoE ports, 4 FXS ports, 2 Basic Rate Interface (BRI) ports, Cisco Unity Express, Cisco Unified SRST license for 8 users, and Cisco IOS Software SP Services feature set  |
| <b>C1861-SRST-F/K9,</b>  | Cisco 1861 voice bundle with 8 PoE ports, 4 FXS ports, 4 FXO ports, Cisco Unified SRST license for 8 users, and Cisco IOS Software SP Services feature set  |
| <b>C1861-SRST-B/K9</b>   | Cisco 1861 voice bundle with 8 PoE ports, 4 FXS ports, 2 BRI ports, Cisco Unified SRST license for 8 users, and Cisco IOS Software SP Services feature set  |
| <b>C881SRST-K9</b>       | Cisco 881SRST Ethernet Security Router with 4 FXS ports, 1 FXO port, Cisco Unified SRST license for 4 users, and Cisco IOS Software Advanced IP Services feature set  |
| <b>C881SRSTW-GN-A-K9</b> | Cisco 881SRST Ethernet Security Router with 4 FXS ports, 1 FXO port, Cisco Unified SRST license for 4 users, Cisco IOS Software Advanced IP Services feature set, and wireless IEEE 802.11n FCC compliance  |
| <b>C881SRSTW-GN-E-K9</b> | Cisco 881SRST Ethernet Security Router with 4 FXS ports, 1 FXO port, Cisco Unified SRST license for 4 users, Cisco IOS Software Advanced IP Services feature set, and wireless IEEE 802.11n ETSI compliance   |
| <b>C888SRST-K9</b>       | Cisco 888SRST G.SHDSL Router with 4 FXS ports, 1 BRI port, Cisco Unified SRST license for 4 users, and Cisco IOS Software Advanced IP Services feature set  |
| <b>C888SRSTW-GN-A-K9</b> | Cisco 888SRST G.SHDSL Router with 4 FXS ports, 1 BRI port, Cisco Unified SRST license for 4 users, Cisco IOS Software Advanced IP Services feature set, and IEEE 802.11n FCC compliance   |
| <b>C888SRSTW-GN-E-K9</b> | Cisco 888SRST G.SHDSL Router with 4 FXS ports, 1 BRI port, Cisco Unified SRST license for 4 users, Cisco IOS Software Advanced IP Services feature set, and IEEE 802.11n ETSI compliance  |

### Cisco Unified IP Phone Support

Cisco Unified SRST is supported with Cisco Unified CallManager Version 3.01 and later. Cisco Unified SRST is not dependent on Cisco Unified Communications Manager versions but on IP phone loads. (Beginning with Version 4.3, Cisco Unified CallManager is called Cisco Unified Communications Manager.)

Table 4 lists the Cisco Unified IP Phones supported by Cisco Unified SRST with Skinny Call Control Protocol (SCCP) phone loads.

**Table 4.** Cisco Unified IP Phone Support Using SCCP

| Phone  | Cisco Unified SRST 3.3 | Cisco Unified SRST 3.4 | Cisco Unified SRST 4.0 | Cisco Unified SRST 4.1 | Cisco Unified SRST 4.2 | Cisco Unified SRST 4.3 | Cisco Unified SRST 7.0 |
|--|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|
| Cisco Unified IP Phone 7937G                                       | –                      | –                      | –                      | –                      | –                      | X                      | X                      |
| Cisco Unified IP Phone 7975, 7965, 7962, 7945, and 7942 models     | –                      | –                      | –                      | X                      | X                      | X                      | X                      |
| Cisco Unified IP Phone 7970G and 7971G-GE models                   | X                      | X                      | X                      | X                      | X                      | X                      | X                      |
| Cisco Unified IP Phone 7960G and 7940G models                      | X                      | X                      | X                      | X                      | X                      | X                      | X                      |
| Cisco Unified IP Phone 7961G, 7941G, 7961G-GE, and 7941G-GE models | X                      | X                      | X                      | X                      | X                      | X                      | X                      |
| Cisco Unified IP Phone 7931G                                       | –                      | –                      | –                      | X                      | X                      | X                      | X                      |
| Cisco Unified IP Conference Station 7935                           | X                      | X                      | X                      | X                      | X                      | X                      | X                      |
| Cisco Unified IP Conference Station 7936                           | X                      | X                      | X                      | X                      | X                      | X                      | X                      |
| Cisco Unified IP Phone 7912G                                       | X                      | X                      | X                      | X                      | X                      | X                      | X                      |
| Cisco Unified IP Phone 7911G                                       | –                      | –                      | X                      | X                      | X                      | X                      | X                      |
| Cisco Unified IP Phone 7905G                                       | X                      | X                      | X                      | X                      | X                      | X                      | X                      |
| Cisco Unified IP Phone 7906G                                       | –                      | –                      | –                      | X                      | X                      | X                      | X                      |
| Cisco Unified IP Phone 7902G                                       | X                      | X                      | X                      | X                      | X                      | X                      | X                      |
| Cisco Unified Wireless IP Phone 7920                               | X                      | X                      | X                      | X                      | X                      | X                      | X                      |
| Cisco Unified Wireless IP Phone 7921G                              | –                      | –                      | –                      | X                      | X                      | X                      | X                      |
| <a href="#">Cisco Unified IP Phone 7985G</a>                       | –                      | –                      | Audio Calls Only       | Audio Calls Only       | Audio & Video Calls    | Audio & Video Calls    | Audio & Video Calls    |
| Cisco Unified IP Phone Expansion Module 7914                       | X                      | X                      | X                      | X                      | X                      | X                      | X                      |
| Cisco VG248 48-Port Analog Phone Gateway                           | X                      | X                      | X                      | X                      | X                      | X                      | X                      |
| Cisco ATA 180 Series Analog Telephone Adaptors                     | –                      | –                      | X                      | X                      | X                      | X                      | X                      |
| Cisco IP Communicator  | –                      | –                      | X                      | X                      | X                      | X                      | X                      |
| Cisco Unified Video Advantage                                      | –                      | –                      | X                      | X                      | X                      | X                      | X                      |

Table 5 lists the Cisco Unified IP Phones supported by Cisco Unified SRST with SIP phone loads.

**Table 5.** Cisco Unified IP Phone Support Using SIP

| Phone  | Cisco Unified SRST 4.0 | Cisco Unified SRST 4.1 | Cisco Unified SRST 4.2 | Cisco Unified SRST 4.3 | Cisco Unified SRST 7.0 |
|--|------------------------|------------------------|------------------------|------------------------|------------------------|
| Cisco Unified IP Phone 7975, 7965, 7962, 7945, and 7942 models     | –                      | X                      | X                      | X                      | X                      |
| Cisco Unified IP Phone 7970G and 7971G-GE models                   | X                      | X                      | X                      | X                      | X                      |
| Cisco Unified IP Phone 7960G and 7940G models                      | X                      | X                      | X                      | X                      | X                      |
| Cisco Unified IP Phone 7961G, 7941G, 7961G-GE, and 7941G-GE models | X                      | X                      | X                      | X                      | X                      |
| Cisco Unified IP Conference Station 7935                           | –                      | –                      | –                      | –                      | –                      |
| Cisco Unified IP Conference Station 7936                           | –                      | –                      | –                      | –                      | –                      |
| Cisco Unified IP Phone 7912G                                       | X                      | X                      | X                      | X                      | X                      |
| Cisco Unified IP Phone 7906G                                       | –                      | X                      | X                      | X                      | X                      |
| Cisco Unified IP Phone 7911G                                       | X                      | X                      | X                      | X                      | X                      |
| Cisco Unified IP Phone 7905G                                       | X                      | X                      | X                      | X                      | X                      |
| Cisco Unified IP Phone 7902G                                       | –                      | –                      | –                      | –                      | –                      |
| Cisco Unified Wireless IP Phone 7920 and 7921G models              | –                      | –                      | –                      | –                      | –                      |
| Cisco Unified IP Phone Expansion Module 7914                       | –                      | –                      | –                      | –                      | –                      |
| Cisco ATA 180 Series Analog Telephone Adaptors                     | –                      | –                      | –                      | –                      | –                      |

## Cisco IOS Software Image Support

Table 6 summarizes the correlation between the Cisco Unified SRST version and Cisco IOS Software.

Secure Cisco Unified SRST is available with Cisco Unified SRST 3.3 and later for Cisco Unified IP Phones using SCCP; it requires Cisco Unified CallManager 4.1(2) and later. (Beginning with Version 4.3, Cisco Unified CallManager is called Cisco Unified Communications Manager.)

Cisco Unified SRST for SIP phones is supported by Cisco Unified SRST 3.4 and later and only with Cisco Unified IP Phones.

For the latest Cisco IOS Software release and features, consult the Feature Navigator at <http://www.cisco.com/go/fn>.

**Table 6.** Cisco IOS Software Release

| Cisco Unified SRST Version              | Cisco IOS Software Release(s)                           |
|---|---|
| Cisco Unified SRST 2.0                  | Cisco IOS Software Release 12.2(13)T                    |
| Cisco Unified SRST 2.1                  | Cisco IOS Software Releases 12.2(15)T and 12.3 Mainline |
| Cisco Unified SRST 3.0                  | Cisco IOS Software Release 12.3(4)T                     |
| Cisco Unified SRST 3.1                  | Cisco IOS Software Release 12.3(8)T                     |
| Cisco Unified SRST 3.2                  | Cisco IOS Software Release 12.3(11)T                    |
| Cisco Unified SRST 3.3 Plus Secure SRST | Cisco IOS Software Releases 12.3(14)T and 12.4 Mainline |
| Cisco Unified SRST 3.4                  | Cisco IOS Software Release 12.4(4)T                     |
| Cisco Unified SRST 4.0                  | Cisco IOS Software Release 12.4(9)T                     |
| Cisco Unified SRST 4.1                  | Cisco IOS Software Release 12.4(14)T                    |
| Cisco Unified SRST 4.2                  | Cisco IOS Software Release 12.4(11)XW2                  |
| Cisco Unified SRST 4.3                  | Cisco IOS Software Release 12.4(11)XZ                   |
| Cisco Unified SRST 7.0                  | Cisco IOS Software Release 12.4(20)T                    |

## Supported Features

Cisco Unified SRST provides robust support for many IP phone features through the duration of a WAN failure, a feature that is not available from other traditional telephony solutions. Table 7 lists the features supported during failure.

**Table 7.** Cisco Unified SRST Features Supported During WAN Failure

| Cisco Unified SRST Version    | Feature Set   |
|-------------------------------|---|
| <b>Cisco Unified SRST 2.0</b> | <ul style="list-style-type: none"> <li>• Support for IP and analog phones</li> <li>• Rehomeing of IP phones upon failure to branch router for call processing</li> <li>• Maintenance of local extension-to-extension calls upon failure*</li> <li>• Maintenance of extension-to-public switched telephone network (PSTN) calls upon failure</li> <li>• Up to 6 lines per phone</li> <li>• Call hold and pick up</li> <li>• Speed and last-number redial</li> <li>• Up to 24 line appearances per system</li> <li>• Primary line support</li> <li>• Maintenance of existing calls upon recovery</li> <li>• Analog FXO and FXS</li> <li>• Calling-party name</li> <li>• Caller ID and asynchronous-network-interface (ANI) support</li> <li>• WAN link support: Frame Relay, ATM, Multilink Point-to-Point Protocol (MLPPP), serial, ATM Adaption Layer 2 (AAL2), and DSL</li> <li>• Class of restriction</li> <li>• Music on hold (MOH), tone on hold, and music and tone on transfer (MOH for endpoint PSTN only)</li> <li>• Distinctive ringing</li> <li>• Direct inward dialing (DID) and direct outward dialing (DOD)</li> <li>• PSTN T1 and E1 channel-associated-signaling (CAS) trunks support</li> <li>• ISDN BRI and Primary Rate Interface (PRI) support</li> <li>• Call-detail recording and RADIUS server</li> <li>• Interworking with Cisco Gatekeeper</li> <li>• Transfer to voicemail pilot number using PSTN</li> <li>• Alias lists for unregistered phones</li> <li>• Translation rules support</li> <li>• Tool Command Language (TCL)-based simple automated attendant and interactive voice response (IVR) on local gateways</li> <li>• Transfer across H.323 network of Cisco endpoints</li> </ul> |
| <b>Cisco Unified SRST 2.1</b> | <ul style="list-style-type: none"> <li>• Cisco Unified CallManager or Communications Manager phone language support</li> <li>• Global-call-forwarding enhancement</li> <li>• In-band dual tone multifrequency (DTMF) voicemail integration</li> <li>• Enhanced dial-plan pattern</li> </ul>   |
| <b>Cisco Unified SRST 3.0</b> | <ul style="list-style-type: none"> <li>• E1-R2 signaling support</li> <li>• Secondary dial tone</li> <li>• Dual-line appearance per button</li> <li>• Three-party G711 temporary conferencing</li> <li>• Call transfer with consult</li> <li>• MOH multicast from flash .au file in Cisco Unified CallManager or Communications Manager mode</li> <li>• Support for Cisco Unified IP Phone 7905</li> <li>• European date formats</li> <li>• Enhanced dialplan-pattern command</li> <li>• Increased directory-number maximums</li> <li>• Additional language options for IP phone</li> <li>• Configurable system message</li> <li>• Improved debugging for phones</li> <li>• Symmetric SIP gateway-to-gateway DTMF relay</li> <li>• Ringing timeout for phones</li> <li>• Cisco SIP phone support of basic calls only</li> </ul>   |

|  |   |
|--|---|
| <b>Cisco Unified SRST 3.1</b>  | <ul style="list-style-type: none"> <li>• Support for Cisco Unified Wireless IP Phone 7920</li> <li>• Support for Cisco Unified IP Conference Station 7935 or Cisco Unified IP Conference Station 7936</li> </ul>  |
| <b>Cisco Unified SRST 3.2</b>  | <ul style="list-style-type: none"> <li>• Enhancement to the alias command</li> <li>• Enhancement to the cor command</li> <li>• Enhancement to the pickup command</li> <li>• Enhancement to the user-locale command</li> <li>• Increased number of phones supported on the Cisco 3745 Multiservice Access Router</li> <li>• MOH multicast from live feed in Cisco Unified CallManager or Communications Manager mode</li> <li>• No timeout for call preservation*</li> <li>• RFC 2833 DTMF relay support</li> <li>• Translation profile support</li> </ul>   |
| <b>Cisco Unified SRST 3.3</b>  | <ul style="list-style-type: none"> <li>• Support for Cisco Unified IP Phone 7970G, 7971G-GE, 7961G, 7941G, 7961G-GE, 7941G-GE, and 7911G models</li> <li>• Enhancement to the show ephone command (new Cisco Unified IP Phone model keywords)</li> </ul>  |
| <b>Secure Cisco Unified SRST 3.3 with Cisco Unified CallManager 4.1(2)</b> | <ul style="list-style-type: none"> <li>• Basic call</li> <li>• Call transfer (consult and blind)</li> <li>• Call forwarding (busy, no answer, and all)</li> <li>• Shared line (IP phones)</li> <li>• Hold and resume</li> <li>• Hold and pickup</li> <li>• Only secure calls between IP phones or Cisco Unified SRST routers</li> </ul>   |
| <b>Cisco Unified SRST 3.4</b>  | <ul style="list-style-type: none"> <li>• Fault monitoring with SNMP Cisco SRST MIB, including: <ul style="list-style-type: none"> <li>• Cisco Unified SRST state and duration</li> <li>• Phone registration and failure</li> <li>• Threshold unregistration</li> <li>• Total calls handled in Cisco Unified SRST mode</li> </ul> </li> <li>• Cisco Unified SRST support for Cisco Unified IP Phones using SIP loads</li> <li>• SIP proxy and registrar services during Cisco Unified SRST mode plus back-to-back user agent for support of supplementary features</li> <li>• SIP features: call forwarding, call hold, call transfer (blind and consult), distinctive ringing, time-based call blocking, and SIP phone-load features</li> </ul> |
| <b>Cisco Unified SRST 4.0</b>  | <ul style="list-style-type: none"> <li>• Support for video calls with Cisco Unified Video Advantage Client</li> <li>• Support for Cisco IP Communicator</li> <li>• Fax pass-through using SCCP with Cisco ATA 180 Series Analog Telephone Adaptors</li> <li>• Call preservation enhancements between IP phones and H.323-controlled voice gateways</li> </ul>   |
| <b>Cisco Unified SRST 4.1</b>  | <ul style="list-style-type: none"> <li>• SIP line-side feature enhancements, including SIP line-side support for Cisco Unified IP Phone 7971G-GE, 7970G, 7941G, 7961G, 7911G, and 7906G models</li> <li>• Dial-plan pattern and Keypad Markup Language (KPML) for faster dialing for SIP phones</li> <li>• MOH for SIP phones</li> <li>• SIP caller ID update, status line update, and SRST status prompt with customizable message</li> <li>• E-911 support</li> </ul>   |
| <b>Cisco Unified SRST 4.2</b>  | <ul style="list-style-type: none"> <li>• Support for Cisco 1861 Integrated Services Router</li> </ul>   |
| <b>Cisco Unified SRST 4.3</b>  | <ul style="list-style-type: none"> <li>• Support for up to 8 active calls per line</li> <li>• Support for Cisco 880 Series routers</li> </ul>   |
| <b>Cisco Unified SRST 7.0</b>  | <ul style="list-style-type: none"> <li>• Cisco IOS Software Release 12.4(20)T</li> </ul>  |

\*Prior to Cisco Unified SRST 3.2, active calls to the PSTN from Cisco Unified SRST IP Phones are maintained for most calls and dropped after approximately 3 minutes. Active calls between users on the same LAN are not affected by WAN failure, and security is maintained for the duration of the call.

Cisco Unified SRST 3.2 and later can preserve existing H.323 calls at the branch location if an outage occurs; disable the H.225 keepalive timer by entering the **no h225 timeout keepalive** command.

## Cisco Unified Communications Services and Support

Cisco Unified Communications Services allows you to accelerate cost savings and productivity gains associated with deploying a secure, resilient Cisco Unified Communications solution. Delivered by Cisco and Cisco's certified partners, the Cisco portfolio of services is based on proven methodologies for unifying voice, video, data, and mobile applications on fixed and mobile networks. Cisco's unique lifecycle approach to services can enhance your technology experience and offer true business advantage.

## Conclusion

Cisco Unified SRST, in combination with Cisco Unified Communications Manager, offers a simple, cost-effective solution for customers who want the benefits of a centralized call-processing architecture with redundancy at remote branch offices and the homes of teleworkers.

## For More Information

For more information about the Cisco Unified Communications solution, visit the following:

- Cisco Unified SRST product and technical information: <http://www.cisco.com/go/srst>
- Cisco Unified Communications products, including Cisco Unified Communications Manager: <http://www.cisco.com/go/unifiedcommunications>



**Americas Headquarters**  
Cisco Systems, Inc.  
San Jose, CA

**Asia Pacific Headquarters**  
Cisco Systems (USA) Pte. Ltd.  
Singapore

**Europe Headquarters**  
Cisco Systems International BV  
Amsterdam, The Netherlands

Cisco has more than 200 offices worldwide. Addresses, phone numbers, and fax numbers are listed on the Cisco Website at [www.cisco.com/go/offices](http://www.cisco.com/go/offices).

CCDE, CCENT, Cisco Eos, Cisco Lumin, Cisco Nexus, Cisco StadiumVision, Cisco TelePresence, Cisco WebEx, the Cisco logo, DCE, and Welcome to the Human Network are trademarks; Changing the Way We Work, Live, Play, and Learn and Cisco Store are service marks; and Access Registrar, Aironet, AsyncOS, Bringing the Meeting To You, Catalyst, CCDA, CCDP, CCIE, CCIP, CCNA, CCNP, CCSP, CCVP, Cisco, the Cisco Certified Internetwork Expert logo, Cisco IOS, Cisco Press, Cisco Systems, Cisco Systems Capital, the Cisco Systems logo, Cisco Unity, Collaboration Without Limitation, EtherFast, EtherSwitch, Event Center, Fast Step, Follow Me Browsing, FormShare, GigaDrive, HomeLink, Internet Quotient, IOS, iPhone, iQuick Study, IronPort, the IronPort logo, LightStream, Linksys, MediaTone, MeetingPlace, MeetingPlace Chime Sound, MGX, Networkers, Networking Academy, Network Registrar, PCNow, PIX, PowerPanels, ProConnect, ScriptShare, SenderBase, SMARTnet, Spectrum Expert, StackWise, The Fastest Way to Increase Your Internet Quotient, TransPath, WebEx, and the WebEx logo are registered trademarks of Cisco Systems, Inc. and/or its affiliates in the United States and certain other countries.

All other trademarks mentioned in this document or website 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. (0809R)