CHAPTER 1

Overview of Cisco Unity Connection SRSV in Unity Connection 9.1(1) and Later

Cisco Unity Connection Survivable Remote Site Voicemail (Unity Connection SRSV) is a backup voicemail solution that allows you to receive voice messages during WAN outages. It works in conjunction with Cisco Unified Survivable Remote Site Telephony (SRST) for providing voicemail service to a branch when the connectivity with the central Unity Connection voicemail service is lost.

Unity Connection SRSV is used in the centralized Cisco Unified Communications Manager and Cisco Unity Connection environment with multiple branch offices or small sites. It provides limited voicemail and auto-attendant features that remain in synchronization with the central Unity Connection voicemail service so that when the WAN outage or failure occurs, the Unity Connection SRSV solution can provide voicemail service to the subscribers at the branch. However, as soon as the network is restored, all the voicemails received by the branch subscribers are automatically uploaded to the central Unity Connection voicemail server.

Unity Connection SRSV solution requires the following two components:

- Cisco Unity Connection: It is deployed at the central site alongside with Cisco Unified CM to deliver powerful integrated messaging and voicemail services.
- Unity Connection SRSV: The SRSV component is natively a part of Unity Connection which is deployed at the branch site alongside with Cisco Unified CM Express or Cisco Unified Survivable Remote Site Telephony (SRST). Unity Connection SRSV is hosted on Cisco Integrated Service Routers Generation 2 (ISR G2) platform by using Services Ready Engine Virtualization.

See the following sections:

- Working with Unity Connection SRSV, page 1-1
- Workflow in Cisco Unity Connection SRSV, page 1-4

Working with Unity Connection SRSV

Unity Connection SRSV becomes active during WAN outages and acts as a backup of voice messaging system at the branch sites. It allows the users at branch offices to receive the voice messages during WAN outages.

In Unity Connection 9.1(1), Unity Connection SRSV involves provisioning of Unity Connection through the command line interface (CLI) to run it in SRSV mode, SRST/E-SRST references Cisco Unified Communications Manager, and all the SRSV related functionalities, such as user(s) provisioning and voicemail upload, are managed by the central Unity Connection server. Once the entire Unity Connection SRSV system is deployed and provisioned, it remains in the idle state at the branch site and

is ready to receive calls from the SRST system (either SRST or CUCME-as-SRST). The SRST component also remains idle and wait for IP phones to register with it. When the WAN outage occurs, the branch office IP phones that are registered to the central Cisco Unified Communications Manager detect the loss of connectivity and re-home to the SRST. Now, all the incoming calls to the branch are handled by the SRST. For calls that are either no-answer or reach a busy line, SRST forwards the call to the CUC-SRSV voicemail server that allows the caller to leave a voice message for the branch user. As a result, the branch office voicemail is supported during WAN outages when the central office voicemail system is unreachable.

However, when the WAN connection is restored, the IP phones automatically re-home to the central Cisco Unified Communications Manager. All the calls are then managed by Cisco Unified Communications Manager and the no-answer / busy calls are forwarded to the central Unity Connection voicemail system and all the voicemails stored on the branch get automatically synchronized with the central Unity Connection voicemail.

Supported SRSV Topologies

Unity Connection SRSV supports several topologies based on the configuration of the router. You can deploy either original SRST or CUCME-as-SRST (also known as SRST Fallback Mode) at branch.

Note If you are running SRST at the branch site, you cannot also deploy the E-SRST feature.

Following figures show three topolgies supported by Unity Connection SRSV:

Figure 1-1: Shows a topology in which SRST is deployed at the branch site. If the WAN outage occurs or PSTN goes down, Unity Connection SRSV at the branch site provides limited voicemail support in the failover mode.

Figure 1-2: Shows a topology where CUCME-as-SRST (also known as SRST Fallback Mode) is providing call control at the branch site.

Figure 1-3: Shows a topology where multiple CUCME-as-SRST and SRSV-CUE devices are paired for load balancing at the survivable branch site. In this scenario, the administrator uses Cisco Unified Communications Manager to divide the branch users between CUCME-SRST-1 and CUCME-SRST-2. The central Unity Connection server detects that and then sends the appropriate configuration to SRSV-1 and SRSV-2 at the branch site. In the event of WAN failure, each SRSV device will handle calls directed to it from the paired CUCME-as-SRST device.

Figure 1-1 Topology 1

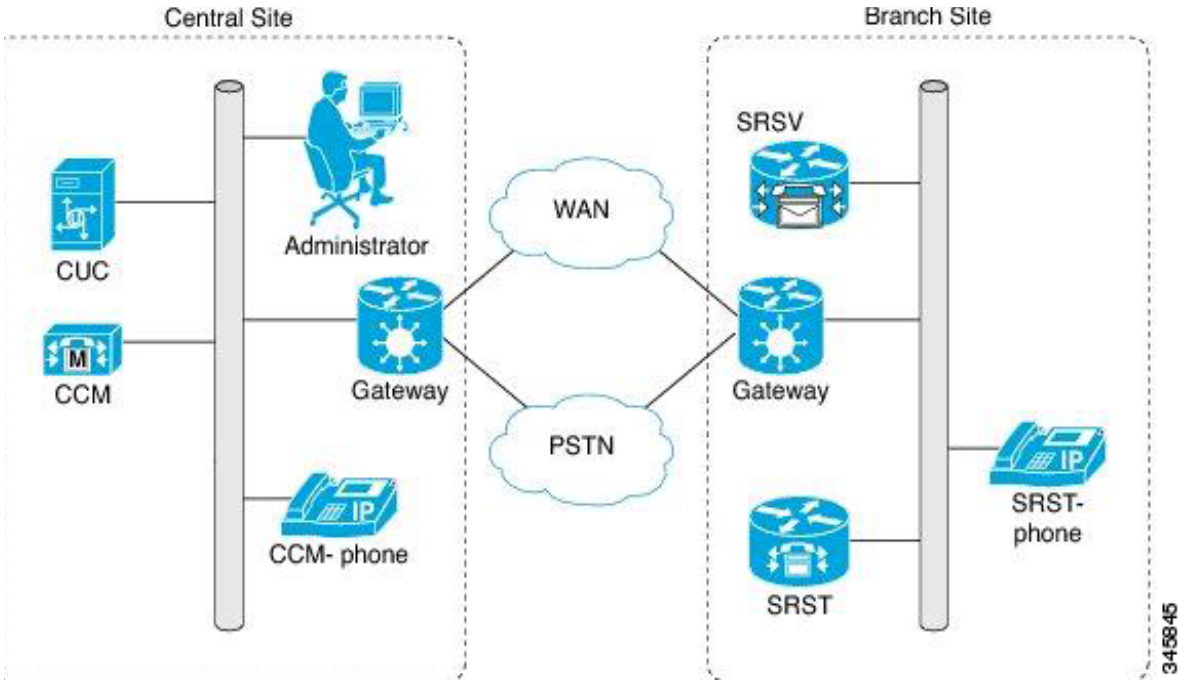


Figure 1-2 Topology 2

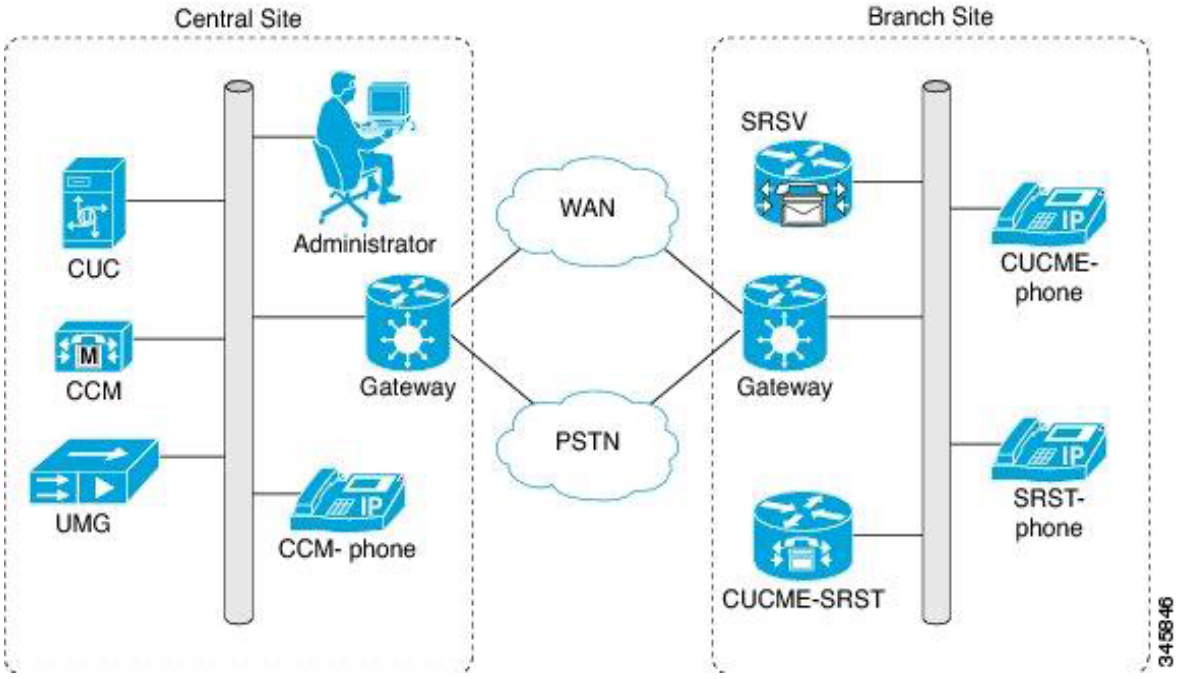
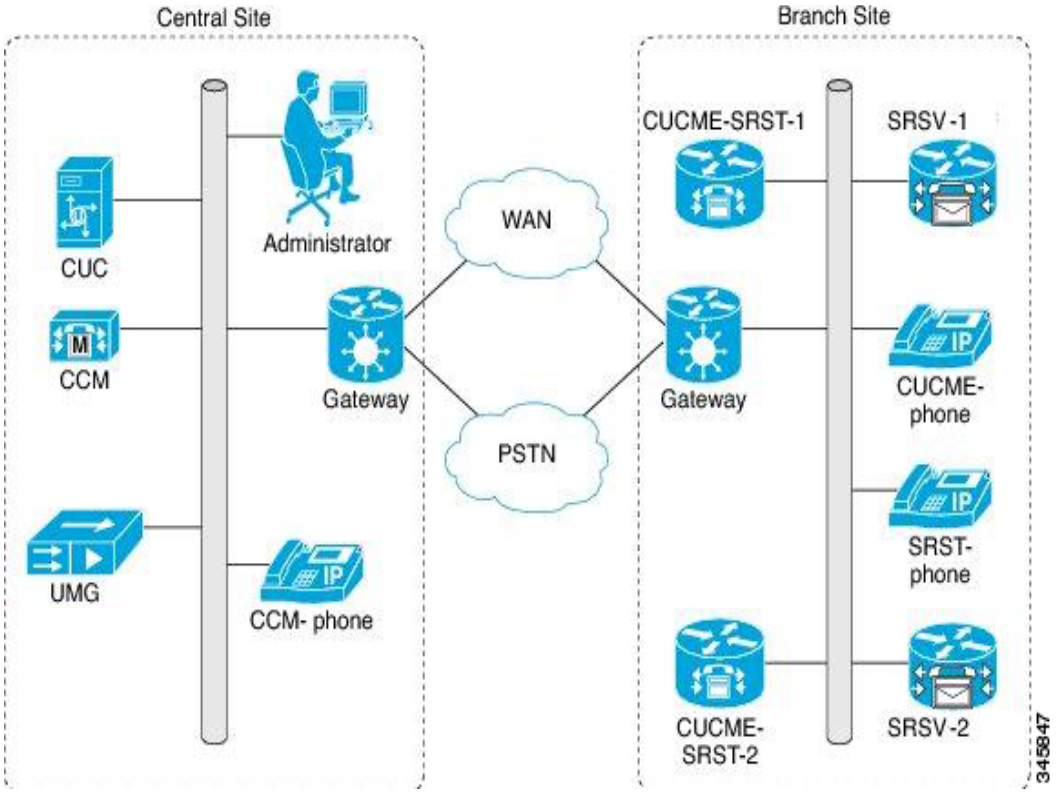


Figure 1-3 Topology 3



Workflow in Cisco Unity Connection SRSV

1. The administrator installs Cisco Unity Connection on SRE-900/SRE-910 series blade or MCS 7845/MCS 7825. For more information refer to http://www.cisco.com/en/US/docs/voice_ip_comm/connection/9x/installation/guide/9xcucigx.html .
2. Unity Connection starts in the Demo mode. Run the CLI command **utils cuc activate CUSRSV** to convert standalone Unity Connection server to Unity Connection SRSV server. For more information on installation of Unity Connection SRSV, refer to the "Overview of Mandatory Tasks for Installing a Cisco Unity Connection SRSV System"chapter of this guide.
3. The Unity Connection SRSV server disables some of the Unity Connection components and displays only the following Unity Connection components within the Connection SRSV Administration:
   - Users, with the list of administrators and subscribers of the branch. For more information on the user settings of Unity Connection SRSV, refer to the "Cisco Unity Connection SRSV Administration - User Settings Interface" chapter of this guide.
   - Templates, with only the Call Handler templates. For more information on the template settings of Unity Connection SRSV, refer to the "Cisco Unity Connection SRSV Administration - Template Settings Interface" chapter of this guide.

- Distribution Lists, with only System Distribution Lists. For more information on the distribution lists, refer to the "Cisco Unity Connection SRSV Administration - Template Settings Interface" chapter of this guide.
- Call Management, with only System Call Handlers and Directory Handlers. For more information on call management for Unity Connection SRSV, refer to the "Cisco Unity Connection SRSV Administration - Call Management Settings Interface" chapter of this guide.
- Networking, with central server configuration. For more information on the user settings of Unity Connection SRSV, refer to the "Cisco Unity Connection SRSV Administration - Networking Settings Interface" chapter of this guide.
- System Settings, with only Schedules, Conversations, Enterprise Parameters, Plugins. For more information on the user settings of Unity Connection SRSV, refer to the "Cisco Unity Connection SRSV Administration - System Settings Interface" chapter of this guide.
- Telephony Integrations, with only Phone System, Port Group, Port, Security. For more information on telephony integrations, refer to the "Cisco Unity Connection SRSV Administration - Telephony Integration Settings Interface" chapter of this guide.
- Tools, with only Custom Keypad Mapping. For more information on the user settings of Unity Connection SRSV, refer to the "Cisco Unity Connection SRSV Tool Settings" chapter of this guide.

4. The administrator logs into the Connection Administration page and navigates to the Branch Management page. For more information on how to configure the central Unity Connection server for Unity Connection SRSV, refer to the "Configuring Cisco Unity Connection SRSV Settings in Cisco Unity Connection 9.1(1) and Later" chapter of this guide.
5. The administrator enters the Fully Qualified Domain Name (FQDN), administrator username, and password for the branch connection node. Unity Connection and Unity Connection SRSV verifies registration and associates the branch to the Unity Connection server. For more information on how to configure the central Unity Connection server for Unity Connection SRSV, refer to the "Configuring Cisco Unity Connection SRSV Settings in Cisco Unity Connection 9.1(1) and Later" chapter of this guide.
6. You must set a method to provision the users from the central Unity Connection server to the branch system. For more information refer to the "Configuring Cisco Unity Connection SRSV Settings in Cisco Unity Connection 9.1(1) and Later" chapter of this guide.
7. The administrator imports the subscribers by searching on users details, such as extension/phone number, already existing in Unity Connection and selects those users. For more information on how to configure the central Unity Connection server for Unity Connection SRSV, refer to the "Configuring Cisco Unity Connection SRSV Settings in Cisco Unity Connection 9.1(1) and Later" chapter of this guide.
8. The administrator selects the "Sync Provisioning" button to push the subscribers to Unity Connection SRSV. The provisioned status is displayed on the Connection SRSV Administration page. For more information on how to configure the central Unity Connection server for Unity Connection SRSV, refer to the "Configuring Cisco Unity Connection SRSV Settings in Cisco Unity Connection 9.1(1) and Later" chapter of this guide.