Adding Cisco Unified Communications Manager Express to a Cisco Unified Communications Manager Integration

Cisco Unity Connection can integrate a Cisco Unified Communications Manager phone system integration that has a port group of Cisco Unified CM servers and a Cisco Unified Communications Manager Express server. This configuration is typically used to ensure call processing functionality at a branch office when the WAN link is down.

There are, however, the following considerations:

- The version of Cisco Unified CM Express and the version of the Cisco Unity Connection must be a supported combination in the Compatibility Matrix for Cisco Unity Connection at http://www.cisco.com/c/en/us/support/unified-communications/unity-connection/products-device-support-tables-list.html.

- The Cisco Unified CM phone system integration is typically already created before adding the Cisco Unified CM Express server.

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Adding a Cisco Unified CM Express Server to a Cisco Unified CM Phone System Integration

Step 1   In Cisco Unity Connection Administration, expand **Telephony Integrations**, then select **Port Group**.

Step 2   On the Search Port Groups page, select the name of the port group for the Cisco Unified CM servers.

Step 3   On the Port Group Basics page, on the Edit menu, select **Servers**.

Step 4   On the Edit Servers page, under Cisco Unified Communications Manager, select **Add**.

Step 5   In the new row, enter the following settings.

Table 1: Settings for the Cisco Unified CM Express Server

Field	Setting
Order	Enter a number that is higher than the Cisco Unified CM servers. The lowest number is the primary Cisco Unified CM server, the higher numbers are the secondary servers.
IPv4 Address or Host Name)	Enter the IPv4 address (or host name) of the Cisco Unified CM Express server that you are adding to the Cisco Unified CM port group.
IPv6 Address or Host Name)	Do not use this field for Cisco Unified CM Express integrations. IPv6 is not supported between Cisco Unity Connection and Cisco Unified CM Express.
IP Address or Host Name)	Enter the IP address (or host name) of the Cisco Unified CM Express server that you are adding to the Cisco Unified CM port group.
Port	Enter the TCP port of the Cisco Unified CM Express server that you are adding to the Cisco Unified CM port group. We recommend that you use the default setting.
TLS Port	Enter the TLS port of the Cisco Unified CM Express server that you are adding to the Cisco Unified CM port group. We recommend that you use the default setting.

Step 6   Select **Save**.

Step 7   On the Edit menu, select **Advanced Settings**.

Step 8   On the Edit Advanced Settings page, in the Delay After Answer field, enter **1000** and select **Save**.

Step 9   On the Edit menu, select **Port Group Basics**.

Step 10   On the Port Group Basics page, select **Reset**.

Step 11   When prompted that resetting terminates all call traffic, select **OK**.

Step 12   In the Related Links drop-down list, select **Test Port Group** and select **Go** to confirm the Cisco Unified CM Express port group settings.

Step 13   When prompted that the test terminates call in progress, select **OK**.

If the test is not successful, the Task Execution Results displays one or more messages with troubleshooting steps. After correcting the problems, test the connection again.

Step 14   In the Task Execution Results window, select **Close**.

Step 15   Sign out of Cisco Unity Connection Administration.

Use of Cisco Unified Survivable Remote Site Telephony (SRST) Router

When a Cisco Unified Survivable Remote Site Telephony (SRST) router is part of the network and the Cisco Unified SRST router takes over call processing functions from Cisco Unified CM (for example, because the WAN link is down), phones at a branch office can continue to function. In this situation, however, the integration features have the following limitations:

- **Call forward to busy greeting**—When the Cisco Unified SRST router uses FXO/FXS connections to the PSTN and a call is forwarded from a branch office to Cisco Unity Connection, the busy greeting cannot play.

- **Call forward to internal greeting**—When the Cisco Unified SRST router uses FXO/FXS connections to the PSTN and a call is forwarded from a branch office to Cisco Unity Connection, the internal greeting cannot play. Because the PSTN provides the calling number of the FXO line, the caller is not identified as a user.

- **Call transfers**—Because an access code is needed to reach the PSTN, call transfers from Unity Connection to a branch office fails.

- **Identified user messaging**—When the Cisco Unified SRST router uses FXO/FXS connections to the PSTN and a user at a branch office leaves a message or forwards a call, the user is not identified. The caller appears as an unidentified caller.

- **Message waiting indication**—MWIs are not updated on branch office phones, so MWIs do not correctly reflect when new messages arrive or when all messages have been listened to. We recommend resynchronizing MWIs after the WAN link is reestablished.

- **Routing rules**—When the Cisco Unified SRST router uses FXO/FXS connections to the PSTN and a call arrives from a branch office to Unity Connection (either a direct or forwarded call), routing rules fail.

When the Cisco Unified SRST router uses PRI/BRI connections, the caller ID for calls from a branch office to Unity Connection may be the full number (exchange plus extension) provided by the PSTN and therefore may not match the extension of the Unity Connection user. If this is the case, you can let Unity Connection recognize the caller ID using alternate extensions.

Redirected Dialed Number Information Service (RDNIS) needs to be supported when using SRST.

For information on setting up Cisco Unified SRST routers, see the "Integrating Voice Mail with Cisco Unified SRST" chapter of the applicable *Cisco Unified SRST System Administrator Guide* at http://www.cisco.com/c/en/us/support/unified-communications/unified-survivable-remote-site-telephony/products-installation-and-configuration-guides-list.html.

Impact of Non-Delivery of RDNIS on Voice Mail Calls Routed via AAR

RDNIS needs to be supported when using Automated Alternate Routing (AAR).

- AAR can route calls over the PSTN when the WAN is oversubscribed. However, when calls are rerouted over the PSTN, RDNIS can be affected. Incorrect RDNIS information can affect voicemail calls that are rerouted over the PSTN by AAR when Cisco Unity Connection is remote from its messaging clients. If

the RDNIS information is not correct, the call does not reach the voicemail box of the dialed user but instead receives the automated attendant prompt, and the caller might be asked to reenter the extension number of the party they wish to reach. This behavior is primarily an issue when the telephone carrier is unable to ensure RDNIS across the network. There are numerous reasons why the carrier might not be able to ensure that RDNIS is properly sent. Check with your carrier to determine whether it provides guaranteed RDNIS delivery end-to-end for your circuits. The alternative to using AAR for oversubscribed WANs is simply to let callers hear reorder tone in an oversubscribed condition.