Cisco Remote Expert Mobile Configuration

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Introduction

Cisco Remote Expert Mobile (Remote Expert Mobile) is a software solution that enables personal and actionable customer interactions within mobile and web applications. These interactions range from simple click-to call to a complete voice, video, and Expert Assist customer engagement session interconnected to a full contact center environment.

This page provides configuration information for Remote Expert Mobile configuration in a Cisco Unified Contact Center Enterprise (Unified CCE) environment.

The intended audience should be familiar with Cisco Collaboration products and be able to perform system-level configuration of Cisco Collaboration components and deployments.

The configuration information is based primarily on system testing performed on Unified CCE during Cisco Collaboration Systems Release 11.0(1).

This topic does not contain detailed step-by-step procedures. For detailed information about installing, configuring, and administering Cisco Unified Communications Manager (Unified Communications Manager), Unified CCE, or Cisco Unified Border Element (CUBE) refer to respective product documentation.

Design

For information on design considerations and guidelines for deploying Remote Expert Mobile:

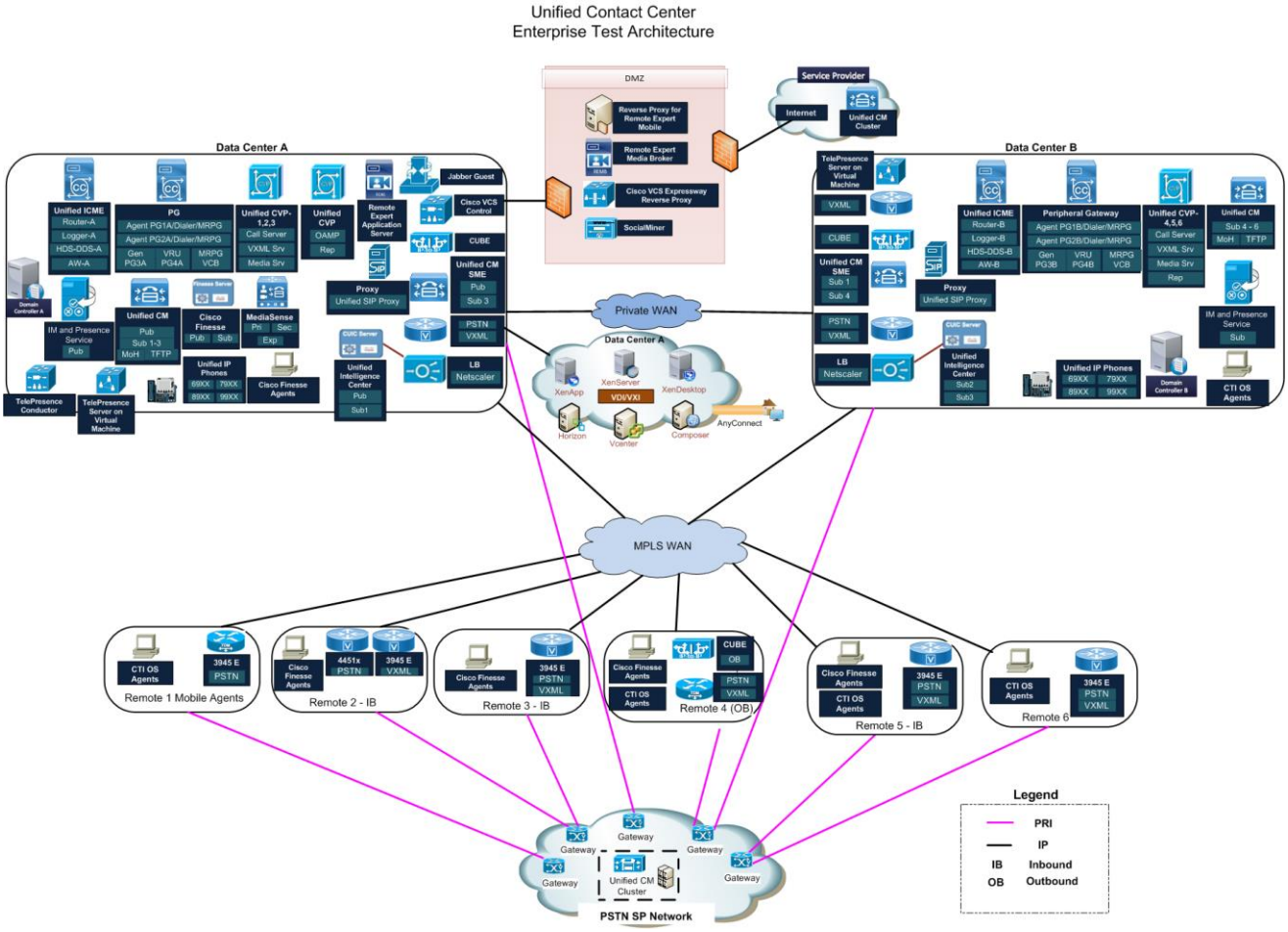
Cisco Remote Expert Mobile Design Guide

Topologies

This section provides information about Remote Expert Mobile in a Unified CCE environment.

For information on specific deployments and sites where Remote Expert Mobile testing was performed, see Cisco Unified Contact Center Enterprise Test Bed for Collaboration Systems Release 11.0(1).

Figure 1. Collaboration Systems Release 11.0(1): Unified CCE Test Architecture



Component Deployment

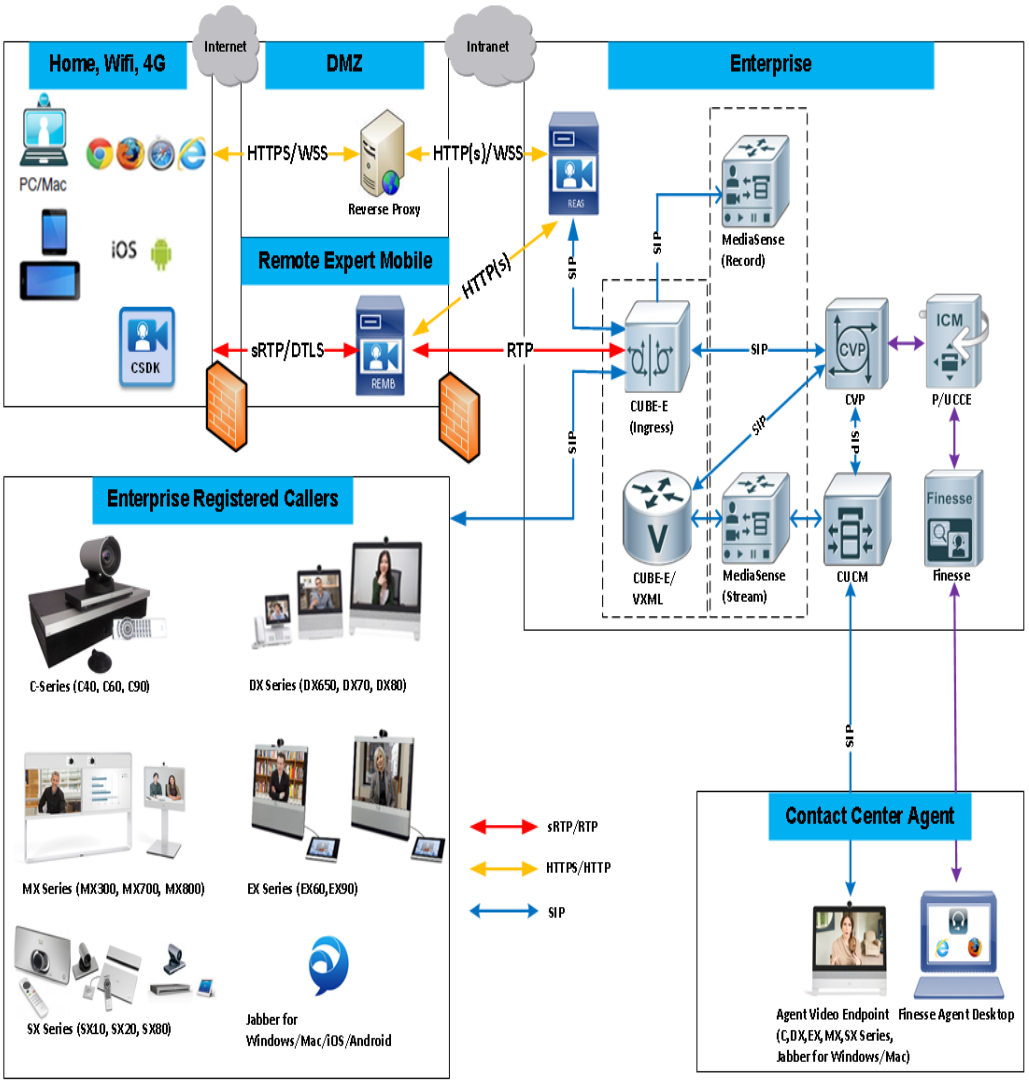
During Cisco Collaboration Systems Release 11.0 testing, various components were installed and tested.

- Remote Expert Mobile: 10.6.1.10000-8
- Cisco Unified Communications Manager (Unified Communications Manager): 11.0(1)
- Unified CCE: 11.0(1)
- Cisco Finesse: 11.0(1)
- Cisco Unified Customer Voice Portal (Unified CVP): 11.0(1)
- OS: Win 7 Ent Sp1, Win 8.1
- Opera 30.0.1835.88, Chrome 43.0.2357.124m, Mozilla Firefox Firefox 37.0.2/38, IE 11.0.9600.17843
- Cisco IOS: 15.5(2.25)M0.5

Call Flow Diagram

The following is a graphical representation of Remote Expert Mobile call flow in a Unified CCE environment.

Figure 2. Remote Expert Mobile Call Flow



Configuration

This section provides the high-level tasks and related information for configuring Remote Expert Mobile in a Unified CCE environment.

The following table provides this information:

- **Configuration Tasks**: List of high-level configuration tasks
- **System Test Specifics**: System test variations from procedures and settings documented in the product documentation.
- **More Information**: Links to product documentation for detailed configuration information related to the high-level tasks.

Note: Default and recommended values specified in the product documentation were used during system testing, unless otherwise noted in the System Test Specifics column.

Table 1. Remote Expert Mobile Configuration

Configuration Tasks	System Test Specifics	More Information
Prerequisites: Before installation: • Configure NTP for the ESXi hosts where Remote Expert Mobile VMs reside. • Ensure that all Remote Expert Mobile nodes are in the same subnet. • Add the VMs in the DNS for resolution and create a cluster address that resolves to the IP addresses of both the Remote Expert Application Server (REAS) nodes.		
1. Install and configure REAS Master node.		See Cisco Remote Expert Mobile Install and Configuration Guide
2. Install and configure REAS Slave node.		See Cisco Remote Expert Mobile Install and Configuration Guide
3. Install Remote Expert Mobile Broker (REMB) nodes.		See Cisco Remote Expert Mobile Install and Configuration Guide
4. Configure reverse proxy and Cisco Adaptive Security Appliance (ASA).		See: Cisco Remote Expert Mobile Install and Configuration Guide
5. Configure and license Cisco Finesse gadget.		See: Cisco Remote Expert Mobile Install and Configuration Guide
6. Configure REAS web controller.		See: Cisco Remote Expert Mobile Install and Configuration Guide
7. Configure CUBE.		See topic, "CUBE Configuration"
8. Configure MediaSense for video recording. (Optional based on requirements)		See topic, "MediaSense for Video Recording Configuration"

Configuration Tasks	System Test Specifics	More Information
9. Configure for sharing of contextual information. (Optional based on requirements)	If you assign Call.SIPHeader to an Agent Peripheral Variable, only the hexadecimal value displays in the Cisco Finesse UI while validating Contextual Information passed from Customer in Agent UI. For more detail, see CSCuv42170.	See topic, "Sharing of Contextual Information Configuration"
10. Install Sample Assist Application in iPad. (Optional based on requirements)		See topic, "iPad Sample Assist Application Installation"
11. Configure URL and document push. (Optional based on requirements)		See topic "URL and Document Push Configuration" and Cisco Remote Expert Mobile Expert Assist Web Agent & Supervisor Consoles – User Guide
12. Test Remote Expert Mobile Configuration.	Co-browse does not work with IE 11 though it was found to be working in other test labs. See CSCuv04851. If the Cisco Finesse gadget does not connect and says **Checking for connectivity**, wait for few minutes. If no certificate appears, then one of the REAS nodes may be down. Bring up both the nodes and sign in to Cisco Finesse. This problem is a known issue under discussion. If the Cisco Finesse gadget says, **There were issues rendering this gadget… peer not authenticated**, then the HTTPS certificate has not been imported into Cisco Finesse properly and Cisco Finesse has not been restarted. If the Cisco Finesse gadget says, **Unexpected response '401' to GET request to**, then it usually means that the Cisco Finesse port mentioned in the web controller page is incorrect. The Cisco Finesse URL should have port 8445. If no video appears during the call, make sure the **video screening** and **asymmetric payload full** commands in the SIP section are present in the CUBE.	See topic, "Test Remote Expert Mobile Configuration"

CUBE Configuration

This configuration is for a basic audio or video call through CUBE with audio and video recording using MediaSense. In this configuration, all the dial-peers are bound to the internal network. The bold lines are specific to Remote Expert Mobile in the SIP section.

```
voice service voip
 no ip address trusted authenticate
 rtp-port range 16384 32000
 address-hiding
 mode border-element
 media-address range 10.8.2.12 10.8.2.12
  port-range 16384 32000
 allow-connections sip to sip
 no supplementary-service sip refer
 no supplementary-service sip handle-replaces
 supplementary-service media-renegotiate
 signaling forward unconditional
 fax protocol pass-through g711ulaw
 sip
  session refresh
  header-passing
  asymmetric payload full
  no anat
  midcall-signaling passthru
  g729 annexb-all
  pass-thru headers unsupp
  no call service stop
  video screening
!
voice class codec 264
 codec preference 1 g729r8
 codec preference 2 mp4a-latm
 codec preference 3 g711ulaw
 codec preference 4 g722-64
 video codec h264
!
media class 4
 recorder parameter
  media-recording 4000
!
dial-peer voice 3021100 voip
 description "DP for Incoming call for RE"
 session protocol sipv2
 incoming called-number 533021100[2,3]
 voice-class codec 264
 voice-class sip asserted-id pai
 voice-class sip bind control source-interface GigabitEthernet0/0
 voice-class sip bind media source-interface GigabitEthernet0/0
 media-class 4
 dtmf-relay rtp-nte
 no vad
!
dial-peer voice 4000 voip
 description This is the forking dialpeer for RE Video & Audio recording
 destination-pattern 4000
 signaling forward none
 session protocol sipv2
 session target ipv4:10.8.2.41
 no voice-class sip midcall-signaling block
 session transport tcp
 voice-class codec 264
 voice-class sip options-keepalive
 voice-class sip bind control source-interface GigabitEthernet0/0
```

```
 voice-class sip bind media source-interface GigabitEthernet0/0
!
dial-peer voice 30211002 voip
 description "SIT RE Dial Peer-1 to CVP 2"
 translation-profile outgoing strip-digit
 destination-pattern 5330211002
 session protocol sipv2
 session target ipv4:10.8.2.16
 voice-class codec 264
 voice-class sip rel1xx disable
 no voice-class sip asserted-id
 voice-class sip bind control source-interface GigabitEthernet0/0
 voice-class sip bind media source-interface GigabitEthernet0/0
 dtmf-relay rtp-nte
!
```

MediaSense for Video Recording Configuration

1. Sign in to the MediaSense administrator page.
2. To configure MediaSense for video recording, choose **Administration** > **Incoming call configuration** > **Add**.
3. In the **Address** field, enter **4000** (the media-recording parameter from the CUBE configuration).
4. From the **Action** drop-down list, choose **Record audio and video**.

Sharing of Contextual Information Configuration

1. On the iPad, under **Settings** > **Remote Expert Mobile** > **User To User Information** > **Platinum Member**, configure the information to be passed.
2. On the Expert Assist Web Console, set the **Anonymous Consumer Access** > **Trusted** and save the changes.
3. On the CUBE-E, enable **pass-thru headers unsupp** in SIP Section.
4. On Unified CVP Call Server in OAMP, configure the SIP header as **User-to-User** and deploy the Unified CVP Server.
5. In Unified CCE Routing Script, write a custom function to change the Hexadecimal to a string and pass the Call.SIPHeader to that custom function. Assign the same to an agent call variable (for example, Call.PeripheralVariable1).

Note: If you assign Call.SIPHeader to an Agent Peripheral Variable, only the Hexadecimal Value displays in the Cisco Finesse UI while validating Contextual Information passed from Customer in Agent UI. Case in progress.

iPad Sample Assist Application Installation

Follow these steps to download and install Sample Assist Application in iPad.

1. In Chrome Browser, download and install Remote Expert Mobile.
2. Press **Remote Expert Mobile Application**.
3. From the **Untrusted Application Developer** dialog box, press **Trust**.

URL and Document Push Configuration

1. Sign in as Expert Assist supervisor using the URL: https://<REAScluseraddress>:8443/expertassist/supervisor/
2. For URL push:
    a. Add a new URL category.

b. Add a new URL with type **Link**.

c. Enter **Description** and the HTTP or HTTPS URL.

Note: This URL must be accessible from the laptop.

3. For document push:

a. In the supervisor console, enter the URL: https://REAS_FQDN:8443/assist-cisco-resourcemanager/documents/example-abstract.pdf

b. From the **Type of URL** drop-down list, choose **Document**.

Test Remote Expert Mobile Configuration

1. For an external call, register the customer laptop to the internet network (for example, 192.168.194.x) and then open the assist sample page, using the URL: https://<RevProxyInternetIP>/assistsample/?agent=sip:<DN>@<CUBEIP>
2. For an internal call, register the customer laptop to the data center network (for example, 10.14.0.x) and then open the assist sample page, using the URL: https://<REASclusteraddress>:8443/assistsample/?agent=sip:<DN>@<CUBEIP>
3. To call, click the **assistsample** button and answer the call from Cisco Finesse Agent Desktop.
4. To co-browse, click **Expert Assist** and **Start Co-browse**.

Related Documentation

- Cisco Remote Expert Mobile Design Guide
- Cisco Remote Expert Mobile Installation and Configuration Guide
- Cisco Contact Center Solutions and Unified Communications Manager Solution Configuration Guide for Remote Expert Mobile
- Troubleshooting Remote Expert Mobile
- FCSDK With Nginx
- System Release Notes for Contact Center: Cisco Collaboration Systems Release 11.0(1)
- For information on the IOS commands used to configure infrastructure components, see Configuration Command Files for Unified CCE.

Obtaining Documentation and Submitting a Service Request

For information on obtaining documentation, using the Cisco Bug Search Tool (BST), submitting a service request, and gathering additional information, see *What's New in Cisco Product Documentation* at: http://www.cisco.com/c/en/us/td/docs/general/whatsnew/whatsnew.html.

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