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Migrate CCE Servers to the New Domain

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Associate Virtual Machine with New Domain

Complete the following procedure to associate the virtual machine with the new domain.

Procedure

- Step 1** Login to the machine using the local Administrator account.
- Step 2** Launch **Server Manger** and click **Change System Properties**.
- Step 3** Remove the machine from the old domain and reboot.
- Step 4** Login to the machine again using the local Administrator account.
- Step 5** Launch **Server Manger** and click **Change System Properties**.
- Step 6** Enter the **Fully Qualified Domain Name** and click **OK**.

- Step 7** Enter the domain administrator username and password.
- Step 8** Reboot the server and log in to the domain with the domain credentials.
-

Associate Unified CCE with New Domain

Complete the following steps to associate the Unified CCE with the new domain.

Procedure

- Step 1** Open the **Domain Manager** application from the **Cisco Unified CCE Tools** folder.
- Step 2** Choose **All Programs > Cisco Unified CCE Tools > Domain Manager**.
- Step 3** Choose the Domain Name.
- Step 4** Add the Cisco Root organizational unit (OU), a Facility organizational unit (OU), and an Instance organizational unit (OU).
- Step 5** Configure the following to change the domain for Unified CCE applications:
- Run Web Setup.
 - Choose **Instance Management**.
 - Select the Instance to be modified, then click **Change Domain**.
The **Change Domain** page appears, displaying the currently configured domain and the new domain name.
 - Click **Save**.
A query is sent to confirm that you want to change the domain.
 - Click **Yes**.
The **Instance List** page appears.

Note Ensure that the domain user is created in the new domain to perform the service operation of Loggers and Administration & Data Servers component.

Caution Use the same domain user account for all the distributor and logger services. If you want to use different domain accounts for the logger and the distributor, ensure that the distributor service user account is added to the local logger `UcceService` groups on Side A and Side B.

Add CUCM SUBSCRIBER Mobile Agent Call flow

In this example, the adjacency is created for one of the sub-customer, that is SUBCUST1-CUCM-SUB-MOBILE-AGENT. For mobile agent login.

```
config
```

```

sbcs
signaling
adjacency sip SUBCUST1-CUCM-SUB-MOBILE-AGENT
description "Trunk SUBCUSTOMER 1 CUCM subscriber for Mobile Agent call flow"
account cust1
interop
preferred-transport tcp
message-manipulation
edit-profiles inbound he-dtmf
force-signaling-peer all-requests
adjacency-type preset-core
service-address SA-cust1
# service-network 1
# signaling-local-address ipv4 20.20.20.2
signaling-local-port 5078
signaling-peer 20.20.20.130
signaling-peer-port 5060
statistics-setting summary
activate

```

Supported Gadgets for HCS for CC

To access the gadget, on the Administration and Data server, click **Start** and navigate to **All Programs > Cisco Unified CCE Tools->Administration Tools** and open Unified CCE Web administration. The following table shows the CRUD operations supported by the HCS for CC gadgets.

Gadget	Create	Read	Update	Delete
Agent		x	x (only attribute assignment)	
Agent State Trace		x	x	
Attribute	x	x	x	x
Bucket Interval	x	x	x	x
Bulk Jobs	x	x	x	x
Context Service		x	x	
Deployment	x	x	x	x
Media Routing Domain	x	x	x	x
Network VRU Script	x	x	x	x
Precision Queue	x	x	x	x
Reason Code	x	x	x	x
Settings (Congestion Control)		x	x	
Single Sign-On		x	x	

x- Stands for supported

Supported API for HCS for CC



Note Agents can only perform attribute update.

API filters are built to look at the URL and the deployment model to determine if the API is accessible. It also supports read-write (GET/PUT/POST/DELETE) or read-only access to each API.

The following tables show the supported API for the HCS for CC deployment model.

Table 1: Supported API for HCS for CC

API	Create	Read	Update	Delete
Active Directory Domain		x		
Administrator	x	x	x	x
Agent		x	x (only attribute assignment)	
Agent State Trace		x	x	
Agent Team		x		
Attribute	x	x	x	x
Bucket Interval	x	x	x	x
Bulk Jobs	x	x	x	x
Congestion Control		x	x	
Context Service Configuration		x	x	
Context Service Registration		x	x	
Deployment Type Info		x	x	
Dialed Number		x		
Machine Inventory	x	x	x	x
Media Routing Domain	x	x	x	x
Network VRU Script	x	x	x	x
Operation	x	x	x	x
Outbound API: Outbound Campaign	x	x	x	x

API	Create	Read	Update	Delete
Outbound API: Campaign Status		x		
Outbound API: Do Not Call	x	x	x	x
Outbound API: Import	x	x		x
Outbound API: Personal Callback	x	x	x	x
Outbound API: Time Zone		x		
Peripheral Gateway		x		
Precision Queue	x	x	x	x
Reason Code	x	x	x	x
Scan			x	
Serviceability		x		
Single Sign-On Global State		x	x	
Single Sign-On Registration		x	x	
Single Sign-On Status		x	x	
Skill Group		x	x	
Status		x		

x- Stands for supported

Administrator API

An administrator is an Active Directory user who has been provided access to the system.

Use the Administrator API to list the administrators currently defined in the database, define new administrators, and view, edit, and delete existing administrators.

URL

`https://<server>:<serverport>/unifiedconfig/config/administrator`

For more details on Administrator API, see the *Cisco Packaged Contact Center Enterprise Developer Reference Guide* at <https://developer.cisco.com/site/packaged-contact-center/documentation/index.gsp>.

Cisco Unified Communications Manager Configurations

- [Provision Cisco Unified Communications Manager, on page 6](#)

- [Provision Cisco Unified Communications Manager for Core Component Integrated Options](#), on page 16

Provision Cisco Unified Communications Manager

Complete the following procedures to provision Cisco Unified Communications Manager.



Note This section is only for reference. You must configure Unified CM using Unified Communications Domain Manager.

- [Set Up Device Pool](#) , on page 6
- [Set Up Unified Communications Manager Groups](#) , on page 7
- [Set Up CTI Route Point](#) , on page 7
- [Set Up Trunk](#) , on page 8
- [Set Up SIP Options](#), on page 9
- [Set Up Application User](#) , on page 8
- [Set Up Route Pattern](#) , on page 9
- [Set Up Conference Bridge](#) , on page 10
- [Set Up Media Termination Point](#) , on page 10
- [Set Up Transcoder](#) , on page 10
- [Set Up Media Resource Group](#) , on page 10
- [Set Up Enterprise Parameters](#) , on page 12
- [Set Up Service Parameters](#), on page 12
- [Set up Music on Hold Server Audio Source](#), on page 14
- [Set up Service Parameters for Music on Hold](#), on page 14
- [Set up Phone Configuration for Music on Hold](#), on page 14

Set Up Device Pool

Complete the following procedure to configure a device pool.

Procedure

- Step 1** Choose **System** > **device pool**.
- Step 2** Click **Add new**.
- Step 3** Provide an appropriate device pool name in **Device Pool Name**.
- Step 4** Select a corresponding Call manager group in **Cisco Unified Communications Manager group**.

- Step 5** Select appropriate **Date/Time Group** and **Region**.
 - Step 6** Select an appropriate Media resource group list in **Media Resource Group List**.
 - Step 7** Click **Save**.
-

Set Up Unified Communications Manager Groups

Complete the following procedure to add a Unified Communications Manager to the Unified Communications Manager Group.

Before you configure a Unified Communications Manager Group, you must configure the Unified Communications Managers that you want to assign as members to that group.

Procedure

- Step 1** Login to the **Cisco Unified Communication Manager Administration** page, choose **System > Server**.
 - Step 2** Make sure that you configure both the Publisher and Subscriber.
 - a) Click **Add New**.
 - b) Select appropriate Server Type Eg: CUCM Voice/Video Select **Next**.
 - c) Enter the **Host Name/IP Address**.
 - d) Click **Save**.
 - Step 3** Choose **System > Cisco Unified CM**.
 - Step 4** Click **Find**.
 - Step 5** Make sure that you configured both the Publisher and Subscriber.
 - Step 6** Choose **System > Cisco Unified CM Group**.
 - Step 7** Add both Cisco Unified Communications Managers to the Default Unified Communications Manager Group. Select **Default** and from the Available Cisco unified communication managers select both Publisher and Subscriber to Selected Cisco Unified Communications Managers
 - Step 8** Click **Save**.
-

Set Up CTI Route Point

Complete the following procedure to add a computer telephony integration (CTI) route point for agents to use for transfer and conference.

Procedure

- Step 1** Choose **Device > CTI Route Point**.
- Step 2** Click **Add New**.
- Step 3** Use the wildcard string **XXXXX** to represent the digits of the dialed number configured on Unified CCE.
 - Note** For example, the preconfigured dialed number in the Unified CCE for an agent phone is 10112.
- Step 4** Select the appropriate device pool.

Step 5 Click **Save**.

Set Up Trunk

Complete the following procedure to configure a trunk for the Unified CVP Servers.

Procedure

- Step 1** Choose **Device > Trunk**.
- Step 2** Click **Add New**.
- Step 3** From the Trunk Type drop-down list, choose **SIP Trunk**, and then click **Next**.
- Step 4** In the Device Name field, enter a name for the SIP trunk.
- Step 5** In the Description field, enter a description for the SIP trunk.
- Enter the SIP Trunk name in the Device Name field.
 - Select the appropriate Device Pool.
- Step 6** Click **Next**.
- Step 7** In the Trunk Configuration window, enter the appropriate settings:
- Uncheck the **Media Termination Point** Required check box.
 - Enter the **Destination Address**.
 - Select the appropriate SIP Trunk Security Profile
 - From the **SIP Profile** drop-down list, choose **Standard SIP Profile**.
 - From the DTMF Signaling Method drop-down list, choose **RFC 2833**.
- Step 8** Click **Save**.
-

Set Up Application User

Procedure

- Step 1** Choose **User Management > Application User**.
- Step 2** In the Application User Configuration window, click **Add New**.
- Step 3** Enter the User ID that you entered in [Set Up Enterprise Parameters](#) , on page 12. Unified CCE defines the user ID as puser.
- Step 4** Enter a **cisco** in the Password field of your choice.
- Note** If you change this user ID or password in Unified CCE, you must also change the Unified Communications Manager application user configuration.
- Step 5** Add the application user to the Standard CTI Enabled Group and Role:
- Click **Add to Access Control Group**.
 - Select the **Standard CTI Enabled** group.
 - Select the **Standard CTI Allow Control of Phones supporting Connected Xfer and conf** group.

- d) Select the **Standard CTI Allow Control of Phones supporting Rollover Mode** group.
- e) Click **Add Selected**.
- f) Click **Save**.

Step 6 Associate the CTI route points and the phones with the application user.

Step 7 Click **Save**.

Set Up SIP Options

Procedure

Step 1 Login to CUCM administration page.

Step 2 Navigate to **Device > Device Settings > SIP Profile**.

Step 3 Click **Add New**.

Step 4 Enter **Name**.

Step 5 Check **Enable OPTIONS Ping to monitor destination status for Trunks with Service Type "None (Default)"** check box, in **SIP OPTIONS Ping** panel.

Step 6 Click **Save**.

Note Once SIP profile is created, map newly added SIP profile to agent phones.

Set Up Route Pattern

Procedure

Step 1 Choose **Call Routing > Route Hunt > Route Pattern**.

Step 2 Add a route pattern for the Unified CVP routing clients as follows:

- a) Click **Add New**.
- b) In the **Route Pattern** field, enter **7777777777!**
- c) In the **Gateway/Route List** field, choose **SIPTRK_to_CVP_1**.
- d) Click **Save**.

Step 3 Add a route pattern for the Cisco Unified Communications Manager routing client.

- a) Click **Add New**.
- b) In the **Route Pattern** field, enter **8881111!**
- c) In the **Gateway/Route List** field, choose **SIPTRK_to_CVP_1**.
- d) Click **Save**.

Note These route patterns must match the network VRU label defined in Unified CCE.

Set Up Conference Bridge

Procedure

- Step 1** Choose **Media Resources > Conference bridge**.
 - Step 2** Add a conference bridge for each ingress/VXML combination gateway in the deployment.
 - Step 3** In the Conference Bridge name field, enter a unique identifier for the conference bridge name that coincides with the configuration on the gateway.
 - Step 4** Click **Save**.
 - Step 5** Click **Apply Config**.
-

Set Up Media Termination Point

Procedure

- Step 1** Choose **Media Resources > Media Termination Point**.
 - Step 2** Add a media termination point for each ingress/VXML combo gateway in the deployment.
 - Step 3** In the Media Termination Point Name field, enter a media termination point name for each ingress/VXML combo gateway in the deployment.
 - Step 4** Click **Save**.
 - Step 5** Click **Apply Config**.
-

Set Up Transcoder

Procedure

- Step 1** Choose **Media Resources > Transcoder**.
 - Step 2** Add a transcoder for each ingress/VXML combo gateway in the deployment.
 - Step 3** In the Device Name field, enter a unique identifier for the transcoder that coincides with the configuration on the gateway.
 - Step 4** Click **Save**.
 - Step 5** Click **Apply Config**.
-

Set Up Media Resource Group

Complete the following procedure to configure a media resource group for conference bridge, media termination point, and transcoder.

Procedure

- Step 1** Choose **Media Resources > Media Resource Group**.
 - Step 2** Add a Media Resource Group for Conference Bridges.
 - Step 3** Select all the hardware conference bridge resources configured for each ingress/VXML combination gateway in the deployment and add them to the group.
 - Step 4** Click **Save**.
 - Step 5** Choose **Media Resources > Media Resource Group**.
 - Step 6** Add a Media Resource Group for Media Termination Point.
 - Step 7** Select all the hardware media termination points configured for each ingress/VXML combination gateway in the deployment and add them to the group.
 - Step 8** Click **Save**.
 - Step 9** Choose **Media Resources > Media Resource Group**.
 - Step 10** Add a Media Resource Group for Transcoder.
 - Step 11** Select all the transcoders configured for each ingress/VXML combination gateway in the deployment and add them to the group.
 - Step 12** Click **Save**.
-

Set Up and Associate Media Resource Group List

Complete the following procedure to configure and associate a media resource group list. Add the media resource group list to the following devices and device pool.

Procedure

- Step 1** Choose **Media Resources > Media Resource Group List**.
- Step 2** Add a Media Resource Group list and associate all of the media resource groups.
- Step 3** Click **Save**.
- Step 4** Choose **System > Device Pool**.
- Step 5** Click **Default**.
- Step 6** From the Media Resource Group List drop-down list, choose the media resource group added in Step 2.
- Step 7** Click **Save**.
- Step 8** Click **Reset**.
- Step 9** Choose **Device > CTI Route Point**.
- Step 10** Click the configured CTI Route Point. For more information, see [Set Up CTI Route Point , on page 7](#).
- Step 11** From the Media Resource Group List drop-down list, choose the media resource group added in Step 2.
- Step 12** Click **Save**.
- Step 13** Click **Reset**.
- Step 14** Choose **Device > SIP Trunk**.
- Step 15** Click the configured SIP Trunk for. For more information, see [Set Up Trunk , on page 8](#).
- Step 16** From the Media Resource Group List drop-down list, choose the media resource group added in Step 2.

Step 17 Click **Save**.

Step 18 Click **Reset**.

Set Up Enterprise Parameters

Procedure

Step 1 Choose **System > Enterprise Parameter**.

Step 2 Configure the Cluster Fully Qualified Domain Name.

Example:

ccm.cce.icm

Note The Cluster Fully Qualified Domain Name is the name of the Unified Communications Manager Server Group defined in Unified CVP.

Set Up Service Parameters

Complete the following procedure to modify the maximum number of conference participants that the conference bridge support and maximum total number of call parties that the media termination point will support. This parameter change is required only for SCC deployment model.

Procedure

Step 1 Login to the CUCM Administration page.

Step 2 Under the System tab, Select **Service Parameter**.

Step 3 Select the CUCM server from the drop-down list.

Step 4 Select the service 'Cisco IP Voice Media Streaming App'.

Step 5 Under 'Conference Bridge (CFB) Parameters' modify the default value of 'Call Count' parameter(0-256).

Step 6 Under 'Media Termination Point (MTP) Parameters' modify the default value of 'Call Count' parameter(0-512).

Set up Recording Profile

Procedure

Step 1 Login to CUCM Administration page.

Step 2 Select **Device > Device Settings > Recording Profile**.

- Step 3** Configure the recording profile name, and the recording destination address (enter the route pattern number you configured), and click **Save**.
-

Configuring Device

Procedure

- Step 1** Choose the audio forking phone.
- Step 2** Select the **Built In Bridge** configuration for this device and change the setting to **ON**.
- Step 3** Access the **Directory Number Configuration** page for the line to be recorded.
- Step 4** If you are using a recording partner, select either **Automatic Call Recording Enabled** or **Application Invoked Call Recording Enabled** from the **Recording Option** drop-down list, according to the recording partner recommendations. If you are not using a recording partner, select **Automatic Call Recording Enabled**.
- Step 5** Select the recording profile created earlier in this procedure.
-

Disable iLBC, iSAC and g.722 for Recording Device

Cisco MediaSense recording sessions using the following supported Codecs:

- Audio recordings: g.711 (aLaw or μ Law) or g.729(a or b) codecs
- Video recordings: h.264 baseline (48k Hz sampling rate only) codecs

Procedure

- Step 1** Login to CUCM administration page.
- Step 2** Navigate to **System > Service parameters**
- Step 3** Choose **Server** from the drop-down list.
- Step 4** Choose **Service** from the drop-down list.
Displays **Service Parameter Configuration** page.
- Step 5** In **Cluster-wide parameters (System - Location and Region)** panel, choose **Enable for All Devices Except Recording-Enabled Devices** for the below drop-down lists:
- **iLBC Codec Enabled**
 - **iSAC Codec Enabled**
 - **G.722 Codec Enabled**
- Step 6** Click **Save**.
-

Set up Music on Hold Server Audio Source

Procedure

- Step 1** Navigate to **Media Resources > Music On Hold Audio Source**.
- Step 2** Select the default Sample Audio Source.
- Step 3** Select **Initial Announcement** from drop-down list, it is optional.
- Step 4** Click **Save**.

Note If you have to create new Audio Source then follow the below steps:

- a) Click **Add New**.
 - b) Select **MOH Audio Stream Number** from drop-down list.
 - c) Choose **MOH Audio Source File** from the drop-down list.
 - d) Enter **MOH Source Name**.
 - e) Choose **Initial Announcement** from the drop-down list.
 - f) Click **Save**.
-

Set up Service Parameters for Music on Hold

Procedure

- Step 1** Navigate to **System > Service Parameters**.
 - Step 2** Select **MOH Server**.
 - Step 3** Select the **Cisco IP Voice Media Streaming App** service.
 - Step 4** In **Supported MOH Codecs** field, select the required **Codec** and Click **Ok** in the pop-up window.
 - Step 5** Click **Save**.
-

Set up Phone Configuration for Music on Hold

Procedure

- Step 1** Navigate to **Device > Phone**.
 - Step 2** Select the phone for which you want to configure MOH.
 - Step 3** For **User Hold MOH Audio Source** select the **Audio Source** that is added in the section **Add Music on Hold Server Audio Source**.
 - Step 4** For **Network Hold MOH Audio Source** select the **Audio Source** that is added in the section **Add Music on Hold Server Audio Source**.
 - Step 5** Click **Save and Apply Config** and reset the phone.
-

Setup Partition

Follow the below procedure for each sub customer.

Procedure

- Step 1** Log in to **Cisco Unified Communications Administration Page**.
 - Step 2** Select **Call Routing > Class Of Control > Partition**.
 - Step 3** Click **Add New**.
 - Step 4** In **Name** field, enter the partition name.
 - Step 5** Click **Save**.
-

Setup Calling Search Space

Follow the below procedure for each sub customer.

Procedure

- Step 1** Log in to **CUCM Administration Page**.
 - Step 2** Select **Call Routing > Class Of Control > Calling Space Search**
 - Step 3** Click **Add New**.
 - Step 4** In **Name** field, enter the calling search space name.
 - Step 5** Move the required partitions from **Available Partitions** to **Selected Partitions**.
 - Step 6** Click **Save**.
-

Associate CSS and Partition with Phones and Lines

Follow the below procedure for each sub customer.

Procedure

- Step 1** Log in to **CUCM Administration page**.
- Step 2** Select **Device > Phone > Find**.
- Step 3** Select the phone from the list that you want to associate the partition and CSS.
- Step 4** Select the required **Calling Search Space** from the drop-down list.
- Step 5** From **SUBSCRIBE Calling Search Space** drop-down list, select the required Calling Search Space.
- Step 6** Select the **Directory Number Line** from the list that you want to associate partition and CSS.
- Step 7** Select the required **Route Partition** from the drop-down list.
- Step 8** Select the required **Calling Search Space** from the drop-down list.
- Step 9** Click **Apply Config**.

Step 10 Click **Reset** and click **Close**.

What to do next

Associate the required sub customer partitions with CSS, see [Setup Calling Search Space, on page 15](#).

Associate CSS with Trunk

Procedure

Step 1 Log in to **CUCM Administration Page**.

Step 2 Select **Device > Trunk**.

Step 3 Select the trunk to which you want associate CSS.

Step 4 From **Calling Search Space** drop-down list, select the required CSS.

Note Select the CSS where all the sub customer partitions are associated.

Step 5 Click **Save**.

Step 6 Click **Reset** and click **Close**.

Note The route pattern which associated with trunk must be in default partition.

Provision Cisco Unified Communications Manager for Core Component Integrated Options

- [Configure Agent Greeting, on page 16](#)
- [Configure Mobile Agent, on page 17](#)
- [Configure Local Trunk, on page 18](#)
- [Configure Outbound Dialer, on page 19](#)
- [Configure A-Law Codec, on page 19](#)
- [Create SIP Trunk between CUCM and CUBE \(SP\), on page 19](#)

Configure Agent Greeting

Procedure

Step 1 Enable **Built-in-Bridge** for the local agent phones to support Agent Greeting.

Step 2 Click **System > Service parameters**.

Step 3 Select a Unified Communications Manager server from the **Server** drop-down list.

- Step 4** Select Cisco CallManager(Active) from the **Service** drop-down list.
- Step 5** Under Clusterwide Parameters (Device-Phone), select **On** for Built-in-Bridge Enable.
- Step 6** Click **Save**.
-

Configure Mobile Agent

Complete the following procedure to configure CTI ports for Unified Mobile Agent.

Procedure

- Step 1** In Unified Communications Manager Administration, choose **Device > Phone**.
- Step 2** Click **Add a New Phone**.
- Step 3** Select **CTI Port** from the **Phone Type** drop-down list.
- Step 4** Click **Next**.
- Step 5** In Device Name, enter a unique name for the local CTI Port pool name; click **OK** when finished.
- Using the example naming convention format LCPxxxxFyyyy:
- a) LCP identifies the CTI Port as a local device.
 - b) xxxx is the peripheral ID for the Unified Communications Manager PIM.
 - c) yyyy is the local CTI Port.
- The name LCP5000F0000 would represent CTI Port: 0 in a local CTI Port pool for the Unified Communications Manager PIM with the peripheral ID 5000.
- Step 6** In Description, enter text identifying the local CTI Port pool.
- Step 7** Use the **Device Pool** drop-down list to choose the device pool to which you want network CTIPort pool assigned. (The device pool defines sets of common characteristics for devices.)
- Step 8** Click **Save**.
- Step 9** Highlight a record and select Add a New DN.
- Step 10** Add a unique directory number for the CTI port you just created.
- Step 11** When finished, click **Save** and **Close**.
- Step 12** Repeat the preceding steps to configure the network CTI Port pool.
- Step 13** In Device Name, enter a unique name for the local CTI Port pool name; click **OK** when finished.
- Use the example naming convention format RCPxxxxFyyyy, where:
- a) RCP identifies the CTI Port as a network device.
 - b) xxxx is the peripheral ID for the Unified Communications Manager PIM.
 - c) yyyy is the network CTI Port.
- The name RCP5000F0000 would represent CTI Port: 0 in a network CTI Port pool for the Unified Communications Manager PIM with the peripheral ID 5000.
- Step 14** In Description, enter text identifying the network CTI Port pool.
- Step 15** Use the **Device Pool** drop-down list to choose the device pool to which you want network CTI Port pool assigned. (The device pool defines sets of common characteristics for devices.)

- Step 16** Click **Save**.
 - Step 17** Highlight a record and select **Add a New DN**.
 - Step 18** Add a unique directory number for the CTI port you just created.
 - Step 19** When finished, click **Save** and **Close**.
-

Configure Local Trunk

Complete the following procedure to configure Unified Communications Manager for Local Trunk.

Procedure

- Step 1** From Unified Communications Manager Administration choose **System > Location info > Location**.
 - Step 2** Click **Find** to list the locations and add new ones with appropriate bandwidth (8000).
 - Step 3** For the branch phones, configure each phone so that it is assigned the branch location for that phone.
 - a) Choose **Device > Phone**.
 - b) Click **Find** to list the phones.
 - c) Select a phone and set the Location field.
 - Step 4** Verify that the Cisco AXL Web Service is started and that an Application User is defined and has a role of Standard AXL API Access.
 - a) Select **Cisco Unified Serviceability** from the **Navigation** drop-down list and click **Go**.
 - b) Navigate to **Tools > Control Center > Feature Services**.
 - c) Start the Cisco AXL Web Service, if it is not started.
 - d) From Unified Communications Manager Administration, choose **User Management > Application User**. Verify you have a user with the role of Standard AXL API Access, or create a new one and add that user to a group that has the role of Standard AXL API Access.
-

Deploy SIP Trunk

Complete the following procedure to deploy the SIP trunk for local trunk:

Procedure

- Step 1** Using Unified Communications Manager, create a SIP trunk toward the SIP proxy server and select the Phantom location.
- Step 2** Create a SIP trunk for each ingress gateway and make the location of these ingress TDM-IP gateways the actual branch location.
- Step 3** Create a route pattern pointing the Network VRU Label of the Unified Communications Manager routing client to the SIP trunk toward the SIP proxy.

The SIP proxy should route the Network VRU label of the Unified Communications Manager routing client to the Unified CVP Servers.
- Step 4** For any IP-originated calls, associate the Unified Communications Manager route pattern with the SIP trunk.

- Step 5** Using the Unified Communications Manager Administration, choose **Device > Device Settings > SIP Profile > Trunk Specific Configuration > Reroute Incoming Request to new Trunk based on > Call-Info header with the purpose equal to x-cisco-origIP**.
- Step 6** Associate the new SIP profile with the SIP trunk and each ingress gateway.
-

Configure Outbound Dialer

Complete the following procedure to configure Unified Communications Manager:

Procedure

- Step 1** Log in to the Unified Communications Manager administration page.
- Step 2** Select **Devices > Trunk**.
- Step 3** Create a SIP trunk to Outbound gateway.
-

Configure A-Law Codec

Complete the following procedure to configure Unified Communications Manager.

Procedure

- Step 1** Click the **System**.
- Step 2** Select **Service Parameters**.
- Step 3** Select a Server.
- Step 4** Select the service as **Cisco Call Manager(Active)**.
- Step 5** Under Clusterwide Parameters (system-location and region), ensure the following:
- **G.711 A-law Codec Enabled** is **Enabled**.
 - **G7.11 mu-law Codec Enabled** to **Disabled**.
- Step 6** Click **Save**.
-

Create SIP Trunk between CUCM and CUBE (SP)

- [Create SIP Trunk Security Profile, on page 20](#)
- [Create SIP Trunk, on page 20](#)

Create SIP Trunk Security Profile

Procedure

- Step 1** Log In to CUCM Admin Portal.
- Step 2** Navigate to **System->Security->Sip Trunk Security Profile**.
- Step 3** Click on **Add New**.
- Step 4** Provide the name for Sip Trunk Security Profile.
- Step 5** In Incoming Transport Type field Select "TCP+UDP" from the drop down list.
- Step 6** In Incoming Port Field Provide the Port number other than 5060 and 5090.
- Note**
- The port configured in step 6 should match with the "signaling peer port" that you configure in the CUBE(SP) for CUCM PUBLISHER adjacency
 - A unique sip trunk security profile is required for mobile agent call flow for the each sub customer in SCC model
- Step 7** Click On **Save**.
-

Create SIP Trunk

Procedure

- Step 1** Log in to CUCM Admin Portal.
- Step 2** Select **Device > Trunk**.
- Step 3** Click **Add New**.
- Step 4** In **Trunk Type** field, select the SIP trunk from the drop-down list, then click **Next**.
- Step 5** Provide the name for Sip Trunk, select the device pool from the drop-down list and select **Media Resource Group List** from the drop-down list.
- Step 6** In Sip Profile field, select the **Standard Sip Profile** from the drop down list. Check **Run On All Active Unified CM Nodes** check-box.
- Step 7** Under SIP Information, provide the signaling-address and signaling-port details of the CUBE(SP) adjacency for the CUCM publisher for mobile agent call flow. See [Add CUCM SUBSCRIBER Mobile Agent Call flow, on page 2](#).
- Step 8** In **SIP Trunk Security Profile** field, select the profile which is created in the above procedure from the drop-down list.
- Step 9** Retain rest all default value.
- Step 10** Click **Save**.
-

Configure Music on Hold

Configure Unified Communication Manager

A Unified Communications Manager MoH server can generate a MoH stream from two types of sources, audio file and fixed source, either of which can be transmitted as unicast or multicast. There are two deployment modes:

1. An MoH server is deployed along with Unified CM on the same server for HCS for CC deployments with less than 1250 users in a CM Cluster
2. An MoH server is deployed as standalone node (TFTP/MoH Server) for HCS for CC deployments with more than 1250 users in a CM Cluster
 - [Configure Music on Hold Server Audio Source, on page 21](#)
 - [Configure Service Parameters for Music on Hold , on page 21](#)
 - [Modify Phone configuration for Music On Hold , on page 22](#)

Configure Music on Hold Server Audio Source

Hold Server Audio Source is also known as MOH Track in UCDM.

Procedure

- Step 1** In **Track Name** field, Enter the name for MOH Track.
- Step 2** Enter the **Track ID**.
- Step 3** Choose **MOH Server** from the drop down list.
- Step 4** Click **Submit**.
-

Configure Service Parameters for Music on Hold

Procedure

- Step 1** Navigate to **Network > PBX Devices**.
- Step 2** Select **CUCM Cluster** and click on **Attributes** and search with the **Parameter Codec**.
- Step 3** Set the value to **1** for the below listed parameters.
- **DefaultMOHCodec**
 - **G711ALawCodecEnabled**
 - **G711ULawCodecEnabled**
- Step 4** Click **Modify**.
-

*Modify Phone configuration for Music On Hold***Procedure**

-
- Step 1** Navigate to Location **Administration > Phone Management** and select the appropriate provider, reseller, customer, division and location.
- Step 2** Click **Device Name**(Phone) that is added.
- Step 3** In **Music On Hold** field, select the MOH Track that was configured in the above configuration.
- Step 4** Click **Modify**
-

Base Configuration Parameters

Base Configuration Parameters for 2000 Agent Deployment

Unified CCE Instance Explorer

Name	Type	Network VRU
HCS for CC	Standard	CVP_Network_VRU

Agent Desk Settings List

Name	Ring No Answer Time	Logout Non-activity Time	Maximum Wrap Up Time
Default_Agent_Desk_Settings	null	null	7200

PG Explorer

Peripheral Gateway	Type of PIM	Routing Client Name
Unified Communication Manager PG1	CUCM	CUCMPG1
Unified Voice Response (VRU) PG	VRU	CVPPG1A
	VRU	CVPPG1B
MR PG	MediaRouting	Multichannel
	MediaRouting	Outbound
	MediaRouting	Socialminer

Network VRU Explorer

Name	Type	Network VRU Label	Routing Client Name
CVP_Network_VRU	Type10	7777777777	CVPPG1A
		7777777777	CVPPG1B
		8881111000	CUCMPG1
		6661111000	Outbound
MR_Network_VRU	Type 2		

Network VRU Mapping

- All Unified CVP routing clients are mapped to **CVP_Network_VRU** of **Type10**. This is displayed in the **Advanced** tab of the PG Explorer.
- All Media Routing clients are mapped to **MR_Network_VRU** of **Type2**. This is displayed in the **Advanced** tab of the PG Explorer.

Network VRU Script List

Name	Network VRU	VRU Script Name	Time out (Sec)	Configuration Parameter	Customer	Interruptible	Override
VXML_Server	Type 10 CVP VRU	GS, Server, V	180	—	HCS for CC	Unchecked	Unchecked
VXML_Server_Interruptible	Type 10 CVP VRU	GS, Server, V, interrupt	9000	—	HCS for CC	Checked	Unchecked
VXML_Server_Noninterruptible	Type 10 CVP VRU	GS, Server, V, nointerrupt	9000	—	HCS for CC	Unchecked	Unchecked
AgentGreeting	Type 10 CVP VRU	PM, -a	180	none	HCS for CC	Unchecked	Unchecked
GreetingMenu_1_to_9	Type 10 CVP VRU	M, press_1_thru_9_greeting, A	180	1-9	HCS for CC	Checked	Unchecked
GreetingSubMenu	Type 10 CVP VRU	M, press1-press2-press3,A	180	1-3	HCS for CC	Checked	Unchecked

Name	Network VRU	VRU Script Name	Time out (Sec)	Configuration Parameter	Customer	Interruptible	Override
Greeting_Not_Found	Type10 CVP VRU	PM, no_greeting_recorded, A	180	Y	HCS for CC	Checked	Unchecked
GreetingReview	Type10 CVP VRU	PM,-a,A	180	Y	HCS for CC	Checked	Unchecked
T10_GS_AUDIUM	Type 10 CVP VRU	GS,Server,V, FTP	180	,,,,,,,,,,Y	HCS for CC	Checked	Unchecked
CIMExternalApplicationScript	Type 2 MR VRU	CIMExternalApplicationScript	180	-	HCS for CC	Unchecked	Unchecked

Application Instance List

Application Instance	Name	Application Type	Permission Level	Application Key
Multichannel	MultiChannel	Other	Full read/write	cisco123
CCDM	CCDM	Cisco Voice	Full read/write	cisco123

Application Path

Application Instance	Name	Peripheral Gateway	Application Path members	
UQ.Desktop	5000.UQ.Desktop	CUCM_PG	Peripheral	Media Routing Domain
			CUCM_PG_1	SocialMiner_Task

Media Class for Multi-Channel

Name	Description	Life	Start Timeout	Max Duration
Cisco_Chat	System provided media class for Cisco chat	1200	30	28800
Cisco_Facebook	System provided media class for Cisco Facebook	1200	30	28800
Cisco_Push	System provided media class for Cisco Push	1200	30	28800

Name	Description	Life	Start Timeout	Max Duration
Cisco_RSS	System provided media class for Cisco RSS	1200	30	28800
Cisco_Task	System provided media class for Cisco Task	1200	30	28800
Cisco_Twitter	System provided media class for Cisco Twitter	1200	30	28800
Cisco_Voice	Default value for Cisco Voice	0	0	0
ECE_Chat	-	300	30	28800
ECE_Email	-	300	30	28800
ECE_Outbound	-	300	30	28800

Media Routing Domain

	Interruptible	Calls in Queue (Max)	Max per call type	Max time in queue
Cisco_BC	Unchecked	5000	-	-
ECE_Email	Checked	15000	-	-
ECE_Outbound	Checked	5000	-	-
ECE_Chat	Unchecked	5000	-	-
SocialMiner_Task	Unchecked	-	-	-
Cisco_Voice	Unchecked	As per your requirement	-	-



Note Set the **Max Per Call Type** and **Max Time in Queue** values as per your requirement.

Expanded Call Variable List



Note ECC variables will not be enabled by default. Use Unified CCE Configuration manager tool to enable the required ECC variables under the **Expanded Call Variable List**.

Name	Enabled	Persistent	Maximum Length	Description
user.CourtesyCallbackEnabled	FALSE	FALSE	1	Determines if Courtesy Callback is offered to a caller.

Name	Enabled	Persistent	Maximum Length	Description
user.cvp_server_info	FALSE	FALSE	15	Used by Unified CVP to send the IP address of the Call Server sending the request to Unified CCE.
user.microapp.app_media_lib	FALSE	FALSE	210	Directory for all application-specific media files and grammar files. The .. bypasses the user. When writing a URL path, microapp.app_media_lib and user.microapp.locale are the ECC variables.
user.microapp.caller_input	FALSE	FALSE	210	Storage area for an ASR input that is collected from Get Speech. Note Get Speech results are written to the ECC variable. Results from Get Digits or Menu microapplications are written to the CED.
user.microapp.currency	FALSE	FALSE	6	Currency type.
user.microapp.error_code	FALSE	FALSE	2	Error status code returned from Unified CVP to Unified CCE when the Run Script Result is False.
user.microapp.FromExtVXML	FALSE	FALSE	60	This variable array returns information from the external VoiceXML file. Must be configured as array variables, not Scalar Variables, and array length set to 4.
user.microapp.input_type	FALSE	FALSE	1	Specifies the type of input that is allowed. Valid contents are: D(DTMF) and B (Both DTMF and Voice). B is the default. If you are not using an ASR, set this variable to D. If you are using an ASR, you can set this variable to either D or B.
user.microapp.locale	FALSE	FALSE	5	Combination of language and country that defines the grammar and prompt set to use.
user.microapp.metadata	FALSE	FALSE	62	Following the Menu (M), Get Data (GD) and Get Speech (GS) micro-applications, Unified CVP now returns information about the execution of that micro-application.

Name	Enabled	Persistent	Maximum Length	Description
user.microapp.play_data	FALSE	FALSE	40	Default storage area for data for Play Data micro-applications.
user.microapp.sys_media_lib	FALSE	FALSE	10	Directory for all systems media files, such as individual digits, months, default error messages, and so forth.
user.microapp.ToExtVXML	FALSE	FALSE	60	This variable array sends information to the external VoiceXML file. Must be configured as Array variables, not Scalar Variables and array length set to 4.
user.microapp.UseVXMLParams	FALSE	FALSE	1	Specifies the manner in which you pass the information to the external VoiceXML.
user.microapp.isPostCallSurvey	FALSE	FALSE	1	Used to determine if post call survey should be offered to a caller after the agent disconnects the call.
user.ece.activity.id	FALSE	FALSE	30	Needed for all types of WIM and EIM activities.
user.ece.customer.name	FALSE	FALSE	30	Needed for chat, callback, and delayed callback activities.
user.media.id	FALSE	FALSE	36	A number identifying a call to the Unified CCE Service, optionally, the H.323 Service.
user.microapp.grammar_choices	FALSE	FALSE	210	Specifies the ASR choices that a caller can input for the Get Speech micro-application.
user.microapp.inline_tts	FALSE	FALSE	210	Specifies the text for inline Text To Speech (TTS).
user.microapp.media_server	FALSE	FALSE	60	Root of the URL for all media files and external grammar files used in the script.
user.microapp.override_cli	FALSE	FALSE	200	Used by the system to override the CLI field on outgoing transfers.
user.microapp.pd_tts	FALSE	FALSE	1	Specifies whether Unifies Text To Speech or media files must be played to the caller.

System Information

- Expanded Call Context: Enabled
- Minimum Correlation number: 1001

- Maximum Correlation number: 9999
- Retain script versions:5

Agent Targeting Rule

Attribute	
Name	AgentExtensions
Peripheral	CUCM_PG_1
Rule Type	Agent Extension
Routing Client	All routing clients
Extension Range	000 - 999 0000 - 9999 00000 - 99999 000000 - 999999 0000000 - 9999999 00000000 - 99999999 000000000 - 999999999 0000000000 - 9999999999

Outbound Dialer

SIP Dialer Name	Enable	Unified CCE Pheripheral Name	Hangup Delay (1 - 10)	Port Throttle
SIP_DIALER1	Yes	CUCM_PG_1	1 sec	10.0
SIP_DIALER2	Yes	CUCM_PG_2	1 sec	10.0
SIP_DIALER3	Yes	CUCM_PG_3	1 sec	10.0
SIP_DIALER4	Yes	CUCM_PG_4	1 sec	10.0
SIP_DIALER5	Yes	CUCM_PG_5	1 sec	10.0
SIP_DIALER6	Yes	CUCM_PG_6	1 sec	10.0

Base Configuration Parameters for 4000 Agent Deployment

Unified CCE Instance Explorer

Name	Type	Network VRU
HCS for CC	Standard	CVP_Network_VRU

Agent Desk Settings List

Name	Ring No Answer Time	Logout Non-activity Time	Maximum Wrap Up Time
Default_Agent_Desk_Settings	null	null	7200

PG Explorer

Peripheral Gateway	Type of PIM	Routing Client Name
Unified Communication Manager PG1	CUCM	CUCMPG1
Unified Communication Manager PG2	CUCM	CUCMPG2
Unified Voice Response (VRU) PG1	VRU	CVPRC01 and CVPRC02
Unified Voice Response (VRU) PG2	VRU	CVPRC03 and CVPRC04
Media Routing (MR) PG 1	MediaRouting	Multichannel1
	MediaRouting	Outbound1
	MediaRouting	SocialMiner1
Media Routing (MR) PG 2	MediaRouting	Multichannel2
	MediaRouting	Outbound2
	MediaRouting	SocialMiner2

Network VRU Explorer

Name	Type	Network VRU Label	Routing Client Name
CVP_Network_VRU	Type10	7777777777	CVPRC01
		7777777777	CVPRC02
		7777777777	CVPRC03
		7777777777	CVPRC04
		8881111000	CUCMPG1
		8881111000	CUCMPG2
		6661111000	Outbound1
		6661111000	Outbound2
MR_Network_VRU_Type2	Type 2	-	-

Network VRU Mapping

- All Unified CVP routing clients are mapped to **CVP_Network_VRU** of **Type10**. This is displayed in the **Advanced** tab of the PG Explorer.
- All Media Routing clients are mapped to **MR_Network_VRU_Type2** of **Type2**. This is displayed in the **Advanced** tab of the PG Explorer.

Network VRU Script List

Name	Network VRU	VRU Script Name	Time out (Sec)	Configuration Parameter	Customer	Interruptible	Override
VXML_Server	Type 10 CVP VRU	GS, Server, V	180	___	HCS for CC	Unchecked	Unchecked
VXML_Server_Interruptible	Type 10 CVP VRU	GS, Server, V, interrupt	9000	___	HCS for CC	Checked	Unchecked
VXML_Server_Noninterruptible	Type 10 CVP VRU	GS, Server, V, nointerrupt	9000	___	HCS for CC	Unchecked	Unchecked
AgentGreeting	Type 10 CVP VRU	PM, -a	180	none	HCS for CC	Unchecked	Unchecked
GreetingMenu_1_to_9	Type 10 CVP VRU	M, press_1_thru_9_greeting, A	180	1-9	HCS for CC	Checked	Unchecked
GreetingSubMenu	Type 10 CVP VRU	M, press1-press2-press3,A	180	1-3	HCS for CC	Checked	Unchecked
Greeting_Not_Found	Type10 CVP VRU	PM, no_greeting_recorded, A	180	Y	HCS for CC	Checked	Unchecked
GreetingReview	Type10 CVP VRU	PM,-a,A	180	Y	HCS for CC	Checked	Unchecked
T10_GS_AUDIUM	Type 10 CVP VRU	GS,Server,V, FTP	180	,,,,,,,,,Y	HCS for CC	Checked	Unchecked
CIMExternalApplicationScript	Type 2 MR VRU	CIMExternalApplicationScript	180	-	HCS for CC	Unchecked	Unchecked

Application Instance List

Application Instance	Name	Application Type	Permission Level	Application Key
Multichannel	MultiChannel	Other	Full read/write	cisco123
CCDM	CCDM	Cisco Voice	Full read/write	cisco123

Application Path

Application Instance	Name	Peripheral Gateway	Application Path	
			Peripheral	Media Routing Domain
UQ.Desktop	5000.UQ.Desktop	CUCM_PG1	CUCM_PG_1	SocialMiner_Task
UQ.Desktop	5001.UQ.Desktop	CUCM_PG2	CUCM_PG_2	SocialMiner_Task

Media Class for Multi-Channel

Name	Description	Life	Start Timeout	Max Duration
Cisco_Chat	System provided media class for Cisco chat	1200	30	28800
Cisco_Facebook	System provided media class for Cisco Facebook	1200	30	28800
Cisco_Push	System provided media class for Cisco Push	1200	30	28800
Cisco_RSS	System provided media class for Cisco RSS	1200	30	28800
Cisco_Task	System provided media class for Cisco Task	1200	30	28800
Cisco_Twitter	System provided media class for Cisco Twitter	1200	30	28800
Cisco_Voice	Default value for Cisco Voice	0	0	0
ECE_Chat	-	300	30	28800
ECE_Email	-	300	30	28800
ECE_Outbound	-	300	30	28800

Media Routing Domain

	Interruptible	Calls in Queue (Max)	Max per call type	Max time in queue
Cisco_BC	Unchecked	5000	-	-
ECE_Email	Checked	15000	-	-
ECE_Outbound	Checked	5000	-	-
ECE_Chat	Unchecked	5000	-	-
SocialMiner_Task	Unchecked	-	-	-
Cisco_Voice	Unchecked	As per your requirement	-	-



Note Set the **Max Per Call Type** and **Max Time in Queue** values as per your requirement.

Expanded Call Variable List



Note ECC variables will not be enabled by default. Use Unified CCE Configuration manager tool to enable the required ECC variables under the **Expanded Call Variable List**.

Name	Enabled	Persistent	Maximum Length	Description
user.CourtesyCallbackEnabled	FALSE	FALSE	1	Determines if Courtesy Callback is offered to a caller.
user.cvp_server_info	FALSE	FALSE	15	Used by Unified CVP to send the IP address of the Call Server sending the request to Unified CCE.
user.microapp.app_media_lib	FALSE	FALSE	210	Directory for all application-specific media files and grammar files. The .. bypasses the user. When writing a URL path, microapp.app_media_lib and user.microapp.locale are the ECC variables.

Name	Enabled	Persistent	Maximum Length	Description
user.microapp.caller_input	FALSE	FALSE	210	Storage area for an ASR input that is collected from Get Speech. Note Get Speech results are written to the ECC variable. Results from Get Digits or Menu microapplications are written to the CED.
user.microapp.currency	FALSE	FALSE	6	Currency type.
user.microapp.error_code	FALSE	FALSE	2	Error status code returned from Unified CVP to Unified CCE when the Run Script Result is False.
user.microapp.FromExtVXML	FALSE	FALSE	60	This variable array returns information from the external VoiceXML file. Must be configured as array variables, not Scalar Variables, and array length set to 4.
user.microapp.input_type	FALSE	FALSE	1	Specifies the type of input that is allowed. Valid contents are: D(DTMF) and B (Both DTMF and Voice). B is the default. If you are not using an ASR, set this variable to D. If you are using an ASR, you can set this variable to either D or B.
user.microapp.locale	FALSE	FALSE	5	Combination of language and country that defines the grammar and prompt set to use.
user.microapp.metadata	FALSE	FALSE	62	Following the Menu (M), Get Data (GD) and Get Speech (GS) micro-applications, Unified CVP now returns information about the execution of that micro-application.
user.microapp.play_data	FALSE	FALSE	40	Default storage area for data for Play Data micro-applications.
user.microapp.sys_media_lib	FALSE	FALSE	10	Directory for all systems media files, such as individual digits, months, default error messages, and so forth.
user.microapp.ToExtVXML	FALSE	FALSE	60	This variable array sends information to the external VoiceXML file. Must be configured as Array variables, not Scalar Variables and array length set to 4.

Name	Enabled	Persistent	Maximum Length	Description
user.microapp.UseVXMLParams	FALSE	FALSE	1	Specifies the manner in which you pass the information to the external VoiceXML.
user.microapp.isPostCallSurvey	FALSE	FALSE	1	Used to determine if post call survey should be offered to a caller after the agent disconnects the call.
user.ece.activity.id	FALSE	FALSE	30	Needed for all types of WIM and EIM activities.
user.ece.customer.name	FALSE	FALSE	30	Needed for chat, callback, and delayed callback activities.
user.media.id	FALSE	FALSE	36	A number identifying a call to the Unified CCE Service, optionally, the H.323 Service.
user.microapp.grammar_choices	FALSE	FALSE	210	Specifies the ASR choices that a caller can input for the Get Speech micro-application.
user.microapp.inline_tts	FALSE	FALSE	210	Specifies the text for inline Text To Speech (TTS).
user.microapp.media_server	FALSE	FALSE	60	Root of the URL for all media files and external grammar files used in the script.
user.microapp.override_cli	FALSE	FALSE	200	Used by the system to override the CLI field on outgoing transfers.
user.microapp.pd_tts	FALSE	FALSE	1	Specifies whether Unifies Text To Speech or media files must be played to the caller.

System Information

- Expanded Call Context: Enabled
- Minimum Correlation number: 1001
- Maximum Correlation number: 9999
- Retain script versions:5

Agent Targeting Rule

Attribute		
Name	AgentExtension1	AgentExtension2
Peripheral	CUCM_PG_1	CUCM_PG_2

Attribute		
Rule Type Agent Extension	Agent Extension	Agent Extension
Routing Client	All routing clients	All routing clients
Extension Range	000 - 999	000 - 999
	0000 - 9999	0000 - 9999
	00000 - 99999	00000 - 99999
	000000 - 999999	000000 - 999999
	0000000 - 9999999	0000000 - 9999999
	00000000 - 99999999	00000000 - 99999999
	000000000 - 999999999	000000000 - 999999999
	0000000000 - 9999999999	0000000000 - 9999999999

Outbound Dialer

SIP Dialer Name	Enable	Unified CCE Peripheral Name	Hangup Delay (1 - 10)	Port Throttle
SIP_DIALER1	Yes	CUCM_PG_1	1 sec	10.0
SIP_DIALER2	Yes	CUCM_PG_2	1 sec	10.0

Base Configuration Parameters for 12000 Agent Deployment

Unified CCE Instance Explorer

Name	Type	Network VRU
HCS for CC	Standard	CVP_Network_VRU

Agent Desk Settings List

Name	Ring No Answer Time	Logout Non-activity Time	Maximum Wrap Up Time
Default_Agent_Desk_Settings	null	null	7200

PG Explorer

Peripheral Gateway	Type of PIM	Routing Client Names
Unified CommunicationManager PG1	CUCM	CUCMPG1
Unified CommunicationManager PG2	CUCM	CUCMPG2

Peripheral Gateway	Type of PIM	Routing Client Names
Unified CommunicationManager PG3	CUCM	CUCMPG3
Unified CommunicationManager PG4	CUCM	CUCMPG4
Unified CommunicationManager PG5	CUCM	CUCMPG5
Unified CommunicationManager PG6	CUCM	CUCMPG6
Unified Voice Response (VRU) PG1	VRU	CVPRC01 and CVPRC02
Unified Voice Response (VRU) PG2	VRU	CVPRC03 and CVPRC04
Unified Voice Response (VRU) PG3	VRU	CVPRC05 and CVPRC06
Unified Voice Response (VRU) PG4	VRU	CVPRC07 and CVPRC08
Unified Voice Response (VRU) PG5	VRU	CVPRC09 and CVPRC10
Unified Voice Response (VRU) PG6	VRU	CVPRC11 and CVPRC12
Media Routing (MR) PG 1	MediaRouting	Multichannel1
	MediaRouting	Outbound1
	MediaRouting	SocialMiner1
Media Routing (MR) PG 2	MediaRouting	Multichannel2
	MediaRouting	Outbound2
	MediaRouting	SocialMiner2
Media Routing (MR) PG 3	MediaRouting	Multichannel3
	MediaRouting	Outbound3
	MediaRouting	SocialMiner3
Media Routing (MR) PG 4	MediaRouting	Multichannel4
	MediaRouting	Outbound4
	MediaRouting	SocialMiner4

Peripheral Gateway	Type of PIM	Routing Client Names
Media Routing (MR) PG 5	MediaRouting	Multichannel5
	MediaRouting	Outbound5
	MediaRouting	SocialMiner5
Media Routing (MR) PG 6	MediaRouting	Multichannel6
	MediaRouting	Outbound6
	MediaRouting	SocialMiner6

Network VRU Explorer

Name	Type	Network VRU Label	Routing Client Name
CVP Network VRU	Type 10	7777777777	CVPRC01, CVPRC02 ... CVPRC12
		8881111000	CUCMPG1, CUCMPG2 ... CUCMPG6
		6661111000	Outbound1, Outbound2 ... Outbound6
MR_Network_VRU_Type2	Type 2	-	-

Network VRU Mapping

- All Unified CVP routing clients are mapped to **CVP_Network_VRU** of **Type10**. This is displayed in the **Advanced** tab of the PG Explorer.
- All Media Routing clients are mapped to **MR_Network_VRU_Type2** of **Type2**. This is displayed in the **Advanced** tab of the PG Explorer.

Network VRU Script List

Name	Network VRU	VRU Script Name	Time out (Sec)	Configuration Parameter	Customer	Interruptible	Override
VXML_Server	Type 10 CVP VRU	GS, Server, V	180	—	HCS for CC	Unchecked	Unchecked
VXML_Server_Interruptible	Type 10 CVP VRU	GS, Server, V, interrupt	9000	—	HCS for CC	Checked	Unchecked

Application Instance List

Name	Network VRU	VRU Script Name	Time out (Sec)	Configuration Parameter	Customer	Interruptible	Override
VXML_Server_Noninterruptible	Type 10 CVP VRU	GS, Server, V , nointerrupt	9000	—	HCS for CC	Unchecked	Unchecked
AgentGreeting	Type 10 CVP VRU	PM, -a	180	none	HCS for CC	Unchecked	Unchecked
GreetingMenu_1_to_9	Type 10 CVP VRU	M, press _1_thru_9_greeting, A	180	1-9	HCS for CC	Checked	Unchecked
GreetingSubMenu	Type 10 CVP VRU	M, press1-press2-press3,A	180	1-3	HCS for CC	Checked	Unchecked
Greeting_Not_Found	Type10 CVP VRU	PM, no _greeting _recorded, A	180	Y	HCS for CC	Checked	Unchecked
GreetingReview	Type10 CVP VRU	PM,-a,A	180	Y	HCS for CC	Checked	Unchecked
T10_GS_AUDIUM	Type 10 CVP VRU	GS,Server,V, FTP	180	,,,,,,,,,,Y	HCS for CC	Checked	Unchecked
CIMExternalApplicationScript	Type 2 MR VRU	CIMExternalApplicationScript	180	-	HCS for CC	Unchecked	Unchecked

Application Instance List

Application Instance	Name	Application Type	Permission Level	Application Key
Multichannel	MultiChannel	Other	Full read/write	cisco123
CCDM	CCDM	Cisco Voice	Full read/write	cisco123

Application Path 12K

Application Instance	Name	Peripheral Gateway	Application Path	
			Peripheral	Media Routing Domain
UQ.Desktop	5000.UQ.Desktop	CUCM_PG1	CUCM_PG_1	SocialMiner_Task
UQ.Desktop	5001.UQ.Desktop	CUCM_PG2	CUCM_PG_2	SocialMiner_Task
UQ.Desktop	5002.UQ.Desktop	CUCM_PG3	CUCM_PG_3	SocialMiner_Task
UQ.Desktop	5003.UQ.Desktop	CUCM_PG4	CUCM_PG_4	SocialMiner_Task
UQ.Desktop	5004.UQ.Desktop	CUCM_PG5	CUCM_PG_5	SocialMiner_Task
UQ.Desktop	5005.UQ.Desktop	CUCM_PG6	CUCM_PG_6	SocialMiner_Task

Media Class for Multi-Channel

Name	Description	Life	Start Timeout	Max Duration
Cisco_Chat	System provided media class for Cisco chat	1200	30	28800
Cisco_Facebook	System provided media class for Cisco Facebook	1200	30	28800
Cisco_Push	System provided media class for Cisco Push	1200	30	28800
Cisco_RSS	System provided media class for Cisco RSS	1200	30	28800
Cisco_Task	System provided media class for Cisco Task	1200	30	28800
Cisco_Twitter	System provided media class for Cisco Twitter	1200	30	28800
Cisco_Voice	Default value for Cisco Voice	0	0	0
ECE_Chat	-	300	30	28800
ECE_Email	-	300	30	28800
ECE_Outbound	-	300	30	28800

Media Routing Domain

	Interruptible	Calls in Queue (Max)	Max per call type	Max time in queue
Cisco_BC	Unchecked	5000	-	-
ECE_Email	Checked	15000	-	-
ECE_Outbound	Checked	5000	-	-
ECE_Chat	Unchecked	5000	-	-
SocialMiner_Task	Unchecked	-	-	-
Cisco_Voice	Unchecked	As per your requirement	-	-



Note Set the **Max Per Call Type** and **Max Time in Queue** values as per your requirement.

Expanded Call Variable List



Note ECC variables will not be enabled by default. Use Unified CCE Configuration manager tool to enable the required ECC variables under the **Expanded Call Variable List**.

Name	Enabled	Persistent	Maximum Length	Description
user.CourtesyCallbackEnabled	FALSE	FALSE	1	Determines if Courtesy Callback is offered to a caller.
user.cvp_server_info	FALSE	FALSE	15	Used by Unified CVP to send the IP address of the Call Server sending the request to Unified CCE.
user.microapp.app_media_lib	FALSE	FALSE	210	Directory for all application-specific media files and grammar files. The .. bypasses the user. When writing a URL path, microapp.app_media_lib and user.microapp.locale are the ECC variables.

Name	Enabled	Persistent	Maximum Length	Description
user.microapp.caller_input	FALSE	FALSE	210	Storage area for an ASR input that is collected from Get Speech. Note Get Speech results are written to the ECC variable. Results from Get Digits or Menu microapplications are written to the CED.
user.microapp.currency	FALSE	FALSE	6	Currency type.
user.microapp.error_code	FALSE	FALSE	2	Error status code returned from Unified CVP to Unified CCE when the Run Script Result is False.
user.microapp.FromExtVXML	FALSE	FALSE	60	This variable array returns information from the external VoiceXML file. Must be configured as array variables, not Scalar Variables, and array length set to 4.
user.microapp.input_type	FALSE	FALSE	1	Specifies the type of input that is allowed. Valid contents are: D(DTMF) and B (Both DTMF and Voice). B is the default. If you are not using an ASR, set this variable to D. If you are using an ASR, you can set this variable to either D or B.
user.microapp.locale	FALSE	FALSE	5	Combination of language and country that defines the grammar and prompt set to use.
user.microapp.metadata	FALSE	FALSE	62	Following the Menu (M), Get Data (GD) and Get Speech (GS) micro-applications, Unified CVP now returns information about the execution of that micro-application.
user.microapp.play_data	FALSE	FALSE	40	Default storage area for data for Play Data micro-applications.
user.microapp.sys_media_lib	FALSE	FALSE	10	Directory for all systems media files, such as individual digits, months, default error messages, and so forth.
user.microapp.ToExtVXML	FALSE	FALSE	60	This variable array sends information to the external VoiceXML file. Must be configured as Array variables, not Scalar Variables and array length set to 4.

Name	Enabled	Persistent	Maximum Length	Description
user.microapp.UseVXMLParams	FALSE	FALSE	1	Specifies the manner in which you pass the information to the external VoiceXML.
user.microapp.isPostCallSurvey	FALSE	FALSE	1	Used to determine if post call survey should be offered to a caller after the agent disconnects the call.
user.ece.activity.id	FALSE	FALSE	30	Needed for all types of WIM and EIM activities.
user.ece.customer.name	FALSE	FALSE	30	Needed for chat, callback, and delayed callback activities.
user.media.id	FALSE	FALSE	36	A number identifying a call to the Unified CCE Service, optionally, the H.323 Service.
user.microapp.grammar_choices	FALSE	FALSE	210	Specifies the ASR choices that a caller can input for the Get Speech micro-application.
user.microapp.inline_tts	FALSE	FALSE	210	Specifies the text for inline Text To Speech (TTS).
user.microapp.media_server	FALSE	FALSE	60	Root of the URL for all media files and external grammar files used in the script.
user.microapp.override_cli	FALSE	FALSE	200	Used by the system to override the CLI field on outgoing transfers.
user.microapp.pd_tts	FALSE	FALSE	1	Specifies whether Unifies Text To Speech or media files must be played to the caller.

System Information

- Expanded Call Context: Enabled
- Minimum Correlation number: 1001
- Maximum Correlation number: 9999
- Retain script versions:5

Agent Targeting Rule

Attribute	
Name	AgentExtension1, AgentExtension2 ... AgentExtension6
Peripheral	CUCM_PG_1, CUCM_PG_2 ... CUCM_PG_6

Attribute	
Rule Type Agent Extension	Agent Extension
Routing Client	All routing clients
Extension Range	000 - 999 0000 - 9999 00000 - 99999 000000 - 999999 0000000 - 9999999 00000000 - 99999999 000000000 - 999999999 0000000000 - 9999999999

Outbound Dialer

SIP Dialer Name	Enable	Unified CCE Peripheral Name	Hangup Delay (1 - 10)	Port Throttle
SIP_DIALER1	Yes	CUCM_PG_1	1 sec	10.0
SIP_DIALER2	Yes	CUCM_PG_2	1 sec	10.0
SIP_DIALER3	Yes	CUCM_PG_3	1 sec	10.0
SIP_DIALER4	Yes	CUCM_PG_4	1 sec	10.0
SIP_DIALER5	Yes	CUCM_PG_5	1 sec	10.0
SIP_DIALER6	Yes	CUCM_PG_6	1 sec	10.0

Base Configuration Parameters for 24000 Agent Deployment

Unified CCE Instance Explorer

Name	Type	Network VRU
HCS for CC	Standard	CVP_Network_VRU

Agent Desk Settings List

Name	Ring No Answer Time	Logout Non-activity Time	Maximum Wrap Up Time
Default_Agent_Desk_Settings	null	null	7200

PG Explorer

Peripheral Gateway	Type of PIM	Routing Client Names
Unified CommunicationManager PG1	CUCM	CUCMPG1
Unified CommunicationManager PG2	CUCM	CUCMPG2
Unified CommunicationManager PG3	CUCM	CUCMPG3
Unified CommunicationManager PG4	CUCM	CUCMPG4
Unified CommunicationManager PG5	CUCM	CUCMPG5
Unified CommunicationManager PG6	CUCM	CUCMPG6
Unified CommunicationManager PG7	CUCM	CUCMPG7
Unified CommunicationManager PG8	CUCM	CUCMPG8
Unified CommunicationManager PG9	CUCM	CUCMPG9
Unified CommunicationManager PG10	CUCM	CUCMPG10
Unified CommunicationManager PG11	CUCM	CUCMPG11
Unified CommunicationManager PG12	CUCM	CUCMPG12
Unified Voice Response (VRU) PG1	VRU	CVPRC01 and CVPRC02
Unified Voice Response (VRU) PG2	VRU	CVPRC03 and CVPRC04
Unified Voice Response (VRU) PG3	VRU	CVPRC05 and CVPRC06
Unified Voice Response (VRU) PG4	VRU	CVPRC07 and CVPRC08
Unified Voice Response (VRU) PG5	VRU	CVPRC09 and CVPRC10

Peripheral Gateway	Type of PIM	Routing Client Names
Unified Voice Response (VRU) PG6	VRU	CVPRC11 and CVPRC12
Unified Voice Response (VRU) PG7	VRU	CVPRC13 and CVPRC15
Unified Voice Response (VRU) PG8	VRU	CVPRC15 and CVPRC16
Unified Voice Response (VRU) PG9	VRU	CVPRC17 and CVPRC18
Unified Voice Response (VRU) PG10	VRU	CVPRC19 and CVPRC20
Unified Voice Response (VRU) PG11	VRU	CVPRC21 and CVPRC22
Unified Voice Response (VRU) PG12	VRU	CVPRC23 and CVPRC24
Media Routing (MR) PG 1	MediaRouting	Multichannel1
	MediaRouting	Outbound1
	MediaRouting	SocialMiner1
Media Routing (MR) PG 2	MediaRouting	Multichannel2
	MediaRouting	Outbound2
	MediaRouting	SocialMiner2
Media Routing (MR) PG 3	MediaRouting	Multichannel3
	MediaRouting	Outbound3
	MediaRouting	SocialMiner3
Media Routing (MR) PG 4	MediaRouting	Multichannel4
	MediaRouting	Outbound4
	MediaRouting	SocialMiner4
Media Routing (MR) PG 5	MediaRouting	Multichannel5
	MediaRouting	Outbound5
	MediaRouting	SocialMiner5

Peripheral Gateway	Type of PIM	Routing Client Names
Media Routing (MR) PG 6	MediaRouting	Multichannel6
	MediaRouting	Outbound6
	MediaRouting	SocialMiner6
Media Routing (MR) PG 7	MediaRouting	Multichannel7
	MediaRouting	Outbound7
	MediaRouting	SocialMiner7
Media Routing (MR) PG 8	MediaRouting	Multichannel8
	MediaRouting	Outbound8
	MediaRouting	SocialMiner8
Media Routing (MR) PG 9	MediaRouting	Multichannel9
	MediaRouting	SocialMiner9
	MediaRouting	Outbound9
Media Routing (MR) PG 10	MediaRouting	Multichannel10
	MediaRouting	Outbound10
	MediaRouting	SocialMiner10
Media Routing (MR) PG 11	MediaRouting	Multichannel11
	MediaRouting	Outbound11
	MediaRouting	SocialMiner11
Media Routing (MR) PG 12	MediaRouting	Multichannel12
	MediaRouting	Outbound12
	MediaRouting	SocialMiner12

Network VRU Explorer

Name	Type	Network VRU Label	Routing Client Name
CVP Network VRU	Type 10	7777777777	CVPRC01, CVPRC02 ... CVPRC24
		8881111000	CUCMPG1, CUCMPG2 ... CUCMPG12

Name	Type	Network VRU Label	Routing Client Name
		6661111000	Outbound1, Outbound2 ... Outbound12
MR_Network_VRU_Type2	Type 2	-	-

Network VRU Mapping

- All Unified CVP routing clients are mapped to **CVP_Network_VRU** of **Type10**. This is displayed in the **Advanced** tab of the PG Explorer.
- All Media Routing clients are mapped to **MR_Network_VRU_Type2** of **Type2**. This is displayed in the **Advanced** tab of the PG Explorer.

Network VRU Script List

Name	Network VRU	VRU Script Name	Time out (Sec)	Configuration Parameter	Customer	Interruptible	Override
Name	Network VRU	VRU Script Name	Time out (Sec)	Configuration Parameter	Customer	Interruptible	Override
Greeting SubMenu	Type 10 CVP VRU	M, press1- press2-press3,A	180	1-3	HCS for CC	Checked	Unchecked
Greeting_Not_Found	Type10 CVP VRU	PM, no_greeting_recorded, A	180	Y	HCS for CC	Checked	Unchecked
GreetingReview	Type10 CVP VRU	PM,-a,A	180	Y	HCS for CC	Checked	Unchecked
T10_GS_AUDIUM	Type 10 CVP VRU	GS,Server,V, FTP	180	,,,,,,,,,Y	HCS for CC	Checked	Unchecked
CIMExternal ApplicationScript	Type 2 MR VRU	CIMExternal ApplicationScript	180	-	HCS for CC	Unchecked	Unchecked
VXML_Server	Type 10 CVP VRU	GS, Server, V	180	__	HCS for CC	Unchecked	Unchecked
VXML_Server_Interruptible	Type 10 CVP VRU	GS, Server, V, interrupt	9000	__	HCS for CC	Checked	Unchecked
VXML_Server_Noninterruptible	Type 10 CVP VRU	GS, Server, V , nointerrupt	9000	__	HCS for CC	Unchecked	Unchecked
AgentGreeting	Type 10 CVP VRU	PM, -a	180	none	HCS for CC	Unchecked	Unchecked

Name	Network VRU	VRU Script Name	Time out (Sec)	Configuration Parameter	Customer	Interruptible	Override
GreetingMenu_1_to_9	Type 10 CVP VRU	M, press _1_thru_9_greeting, A	180	1-9	HCS for CC	Checked	Unchecked

Application Instance List

Application Instance	Name	Application Type	Permission Level	Application Key
Multichannel	MultiChannel	Other	Full read/write	cisco123
CCDM	CCDM	Cisco Voice	Full read/write	cisco123

Application Path 24K

Application Instance	Name	Peripheral Gateway	Application Path	
			Peripheral	Media Routing Domain
UQ.Desktop	5000.UQ.Desktop	CUCM_PG1	CUCM_PG_1	SocialMiner_Task
UQ.Desktop	5001.UQ.Desktop	CUCM_PG2	CUCM_PG_2	SocialMiner_Task
UQ.Desktop	5002.UQ.Desktop	CUCM_PG3	CUCM_PG_3	SocialMiner_Task
UQ.Desktop	5003.UQ.Desktop	CUCM_PG4	CUCM_PG_4	SocialMiner_Task
UQ.Desktop	5004.UQ.Desktop	CUCM_PG5	CUCM_PG_5	SocialMiner_Task
UQ.Desktop	5005.UQ.Desktop	CUCM_PG6	CUCM_PG_6	SocialMiner_Task
UQ.Desktop	5006.UQ.Desktop	CUCM_PG7	CUCM_PG_7	SocialMiner_Task
UQ.Desktop	5007.UQ.Desktop	CUCM_PG8	CUCM_PG_8	SocialMiner_Task
UQ.Desktop	5008.UQ.Desktop	CUCM_PG9	CUCM_PG_9	SocialMiner_Task
UQ.Desktop	5009.UQ.Desktop	CUCM_PG10	CUCM_PG_10	SocialMiner_Task
UQ.Desktop	5010.UQ.Desktop	CUCM_PG11	CUCM_PG_11	SocialMiner_Task
UQ.Desktop	5011.UQ.Desktop	CUCM_PG12	CUCM_PG_12	SocialMiner_Task

Expanded Call Variable List



Note ECC variables will not be enabled by default. Use Unified CCE Configuration manager tool to enable the required ECC variables under the **Expanded Call Variable List**.

Name	Enabled	Persistent	Maximum Length	Description
user.CourtesyCallbackEnabled	FALSE	FALSE	1	Determines if Courtesy Callback is offered to a caller.
user.cvp_server_info	FALSE	FALSE	15	Used by Unified CVP to send the IP address of the Call Server sending the request to Unified CCE.
user.microapp.app_media_lib	FALSE	FALSE	210	Directory for all application-specific media files and grammar files. The .. bypasses the user. When writing a URL path, microapp.app_media_lib and user.microapp.locale are the ECC variables.
user.microapp.caller_input	FALSE	FALSE	210	Storage area for an ASR input that is collected from Get Speech. Note Get Speech results are written to the ECC variable. Results from Get Digits or Menu microapplications are written to the CED.
user.microapp.currency	FALSE	FALSE	6	Currency type.
user.microapp.error_code	FALSE	FALSE	2	Error status code returned from Unified CVP to Unified CCE when the Run Script Result is False.
user.microapp.FromExtVXML	FALSE	FALSE	60	This variable array returns information from the external VoiceXML file. Must be configured as array variables, not Scalar Variables, and array length set to 4.
user.microapp.input_type	FALSE	FALSE	1	Specifies the type of input that is allowed. Valid contents are: D(DTMF) and B (Both DTMF and Voice). B is the default. If you are not using an ASR, set this variable to D. If you are using an ASR, you can set this variable to either D or B.

Name	Enabled	Persistent	Maximum Length	Description
user.microapp.locale	FALSE	FALSE	5	Combination of language and country that defines the grammar and prompt set to use.
user.microapp.metadata	FALSE	FALSE	62	Following the Menu (M), Get Data (GD) and Get Speech (GS) micro-applications, Unified CVP now returns information about the execution of that micro-application.
user.microapp.play_data	FALSE	FALSE	40	Default storage area for data for Play Data micro-applications.
user.microapp.inline_tts	FALSE	FALSE	210	Specifies the text for inline Text To Speech (TTS).
user.microapp.media_server	FALSE	FALSE	60	Root of the URL for all media files and external grammar files used in the script.
user.microapp.override_cli	FALSE	FALSE	200	Used by the system to override the CLI field on outgoing transfers.
user.microapp.pd_tts	FALSE	FALSE	1	Specifies whether Unifies Text To Speech or media files must be played to the caller.
user.ece.activity.id	FALSE	FALSE	30	Needed for all types of WIM and EIM activities.
user.ece.customer.name	FALSE	FALSE	30	Needed for chat, callback, and delayed callback activities.
user.media.id	FALSE	FALSE	36	A number identifying a call to the Unified CCE Service, optionally, the H.323 Service.
user.microapp.grammar_choices	FALSE	FALSE	210	Specifies the ASR choices that a caller can input for the Get Speech micro-application.

Media Class for Multi-Channel

Name	Description	Life	Start Timeout	Max Duration
Cisco_Chat	System provided media class for Cisco chat	1200	30	28800
Cisco_Facebook	System provided media class for Cisco Facebook	1200	30	28800
Cisco_Push	System provided media class for Cisco Push	1200	30	28800

Name	Description	Life	Start Timeout	Max Duration
Cisco_RSS	System provided media class for Cisco RSS	1200	30	28800
Cisco_Task	System provided media class for Cisco Task	1200	30	28800
Cisco_Twitter	System provided media class for Cisco Twitter	1200	30	28800
Cisco_Voice	Default value for Cisco Voice	0	0	0
ECE_Chat	-	300	30	28800
ECE_Email	-	300	30	28800
ECE_Outbound	-	300	30	28800

Media Routing Domain

	Interruptible	Calls in Queue (Max)	Max per call type	Max time in queue
Cisco_BC	Unchecked	5000	-	-
ECE_Email	Checked	15000	-	-
ECE_Outbound	Checked	5000	-	-
ECE_Chat	Unchecked	5000	-	-
SocialMiner_Task	Unchecked	-	-	-
Cisco_Voice	Unchecked	As per your requirement	-	-



Note Set the **Max Per Call Type** and **Max Time in Queue** values as per your requirement.

System Information

- Expanded Call Context: Enabled
- Minimum Correlation number: 1001
- Maximum Correlation number: 9999
- Retain script versions:5

Agent Targeting Rule

Attribute	
Name	AgentExtension1, AgentExtension2 ... AgentExtension6
Peripheral	CUCM_PG_1, CUCM_PG_2 ... CUCM_PG_12
Rule Type Agent Extension	Agent Extension
Routing Client	All routing clients
Extension Range	000 - 999 0000 - 9999 00000 - 99999 000000 - 999999 0000000 - 9999999 00000000 - 99999999 000000000 - 999999999 0000000000 - 9999999999

Outbound Dialer

SIP Dialer Name	Enable	Unified CCE Peripheral Name	Hangup Delay (1 - 10)	Port Throttle
SIP_DIALER1	Yes	CUCM_PG_1	1 sec	15.0
SIP_DIALER2	Yes	CUCM_PG_2	1 sec	15.0
SIP_DIALER3	Yes	CUCM_PG_3	1 sec	15.0
SIP_DIALER4	Yes	CUCM_PG_4	1 sec	15.0
SIP_DIALER5	Yes	CUCM_PG_5	1 sec	15.0
SIP_DIALER6	Yes	CUCM_PG_6	1 sec	15.0

Base Configuration Parameters for Small Contact Center Agent Deployment

Unified CCE Instance Explorer

Name	Type	Network VRU
HCS for CC	Standard	CVP_Network_VRU

Agent Desk Settings List

Name	Ring No Answer Time	Logout Non-activity Time	Maximum Wrap Up Time
Default_Agent_Desk_Settings	null	null	7200

PG Explorer

Peripheral Gateway	Type of PIM	Routing client Name
Unified Communication Manager PG1	CUCM	CUCMPG1
Unified Voice Response (VRU) PG	VRU	CVPRC01
	VRU	CVPRC02
	VRU	CVPRC03
	VRU	CVPRC04

Network VRU Explorer

Name	Type	Network VRU Label	Routing Client Name
CVP Network VRU	Type 10	777777777	CVPRC01
		777777777	CVPRC02
		777777777	CVPRC03
		777777777	CVPRC04
		8881111000	CUCMPG1
MR_Network_VRU	Type 2	-	-

Network VRU Mapping

All Unified CVP routing clients are mapped to **CVP_Network_VRU** of **Type10**. This is displayed in the **Advanced** tab of the PG Explorer.

Network VRU Script List

Name	Network VRU	VRU Script Name	Time out (Sec)	Configuration Parameter	Customer	Interruptible	Override
VXML_Server	Type 10 CVP VRU	GS, Server, V	180	—	HCS for CC	Unchecked	Unchecked
VXML_Server_Interruptible	Type 10 CVP VRU	GS, Server, V, interrupt	9000	—	HCS for CC	Checked	Unchecked

Application Instance List

Name	Network VRU	VRU Script Name	Time out (Sec)	Configuration Parameter	Customer	Interruptible	Override
VXML_Server_Noninterruptible	Type 10 CVP VRU	GS, Server, V , nointerrupt	9000	—	HCS for CC	Unchecked	Unchecked
AgentGreeting	Type 10 CVP VRU	PM, -a	180	none	HCS for CC	Unchecked	Unchecked
GreetingMenu_1_to_9	Type 10 CVP VRU	M, press _1_thru_9_greeting, A	180	1-9	HCS for CC	Checked	Unchecked
GreetingSubMenu	Type 10 CVP VRU	M, press1-press2-press3,A	180	1-3	HCS for CC	Checked	Unchecked
Greeting_Not_Found	Type10 CVP VRU	PM, no _greeting _recorded, A	180	Y	HCS for CC	Checked	Unchecked
GreetingReview	Type10 CVP VRU	PM,-a,A	180	Y	HCS for CC	Checked	Unchecked
T10_GS_AUDIUM	Type 10 CVP VRU	GS,Server,V, FTP	180	,,,,,,,,,,Y	HCS for CC	Checked	Unchecked
CIMExternalApplicationScript	Type 2 MR VRU	CIMExternalApplicationScript	180	-	HCS for CC	Unchecked	Unchecked

Application Instance List

Application Instance	Name	Application Type	Permission Level	Application Key
Multichannel	MultiChannel	Other	Full read/write	cisco123
CCDM	CCDM	Cisco Voice	Full read/write	cisco123

Application Path

Application Instance	Name	Peripheral Gateway	Application Path members	
UQ.Desktop	5000.UQ.Desktop	CUCM_PG	Peripheral	Media Routing Domain
			CUCM_PG_1	SocialMiner_Task

Media Class for Multi-Channel

Name	Description	Life	Start Timeout	Max Duration
Cisco_Chat	System provided media class for Cisco chat	1200	30	28800
Cisco_Facebook	System provided media class for Cisco Facebook	1200	30	28800
Cisco_Push	System provided media class for Cisco Push	1200	30	28800
Cisco_RSS	System provided media class for Cisco RSS	1200	30	28800
Cisco_Task	System provided media class for Cisco Task	1200	30	28800
Cisco_Twitter	System provided media class for Cisco Twitter	1200	30	28800
Cisco_Voice	Default value for Cisco Voice	0	0	0
ECE_Chat	-	300	30	28800
ECE_Email	-	300	30	28800
ECE_Outbound	-	300	30	28800

Media Routing Domain

	Interruptible	Calls in Queue (Max)	Max per call type	Max time in queue
Cisco_BC	Unchecked	5000	-	-
ECE_Email	Checked	15000	-	-
ECE_Outbound	Checked	5000	-	-
ECE_Chat	Unchecked	5000	-	-
SocialMiner_Task	Unchecked	-	-	-

	Interruptible	Calls in Queue (Max)	Max per call type	Max time in queue
Cisco_Voice	Unchecked	As per your requirement	-	-



Note Set the **Max Per Call Type** and **Max Time in Queue** values as per your requirement.

Expanded Call Variable List



Note ECC variables will not be enabled by default. Use Unified CCE Configuration manager tool to enable the required ECC variables under the **Expanded Call Variable List**.

Name	Enabled	Persistent	Maximum Length	Description
user.CourtesyCallbackEnabled	FALSE	FALSE	1	Determines if Courtesy Callback is offered to a caller.
user.cvp_server_info	FALSE	FALSE	15	Used by Unified CVP to send the IP address of the Call Server sending the request to Unified CCE.
user.microapp.app_media_lib	FALSE	FALSE	210	Directory for all application-specific media files and grammar files. The .. bypasses the user. When writing a URL path, microapp.app_media_lib and user.microapp.locale are the ECC variables.
user.microapp.caller_input	FALSE	FALSE	210	Storage area for an ASR input that is collected from Get Speech. Note Get Speech results are written to the ECC variable. Results from Get Digits or Menu microapplications are written to the CED.
user.microapp.currency	FALSE	FALSE	6	Currency type.
user.microapp.error_code	FALSE	FALSE	2	Error status code returned from Unified CVP to Unified CCE when the Run Script Result is False.

Name	Enabled	Persistent	Maximum Length	Description
user.microapp.FromExtVXML	FALSE	FALSE	60	This variable array returns information from the external VoiceXML file. Must be configured as array variables, not Scalar Variables, and array length set to 4.
user.microapp.input_type	FALSE	FALSE	1	Specifies the type of input that is allowed. Valid contents are: D(DTMF) and B (Both DTMF and Voice). B is the default. If you are not using an ASR, set this variable to D. If you are using an ASR, you can set this variable to either D or B.
user.microapp.locale	FALSE	FALSE	5	Combination of language and country that defines the grammar and prompt set to use.
user.microapp.metadata	FALSE	FALSE	62	Following the Menu (M), Get Data (GD) and Get Speech (GS) micro-applications, Unified CVP now returns information about the execution of that micro-application.
user.microapp.play_data	FALSE	FALSE	40	Default storage area for data for Play Data micro-applications.
user.microapp.sys_media_lib	FALSE	FALSE	10	Directory for all systems media files, such as individual digits, months, default error messages, and so forth.
user.microapp.ToExtVXML	FALSE	FALSE	60	This variable array sends information to the external VoiceXML file. Must be configured as Array variables, not Scalar Variables and array length set to 4.
user.microapp.UseVXMLParams	FALSE	FALSE	1	Specifies the manner in which you pass the information to the external VoiceXML.
user.microapp.isPostCallSurvey	FALSE	FALSE	1	Used to determine if post call survey should be offered to a caller after the agent disconnects the call.
user.ece.activity.id	FALSE	FALSE	30	Needed for all types of WIM and EIM activities.
user.ece.customer.name	FALSE	FALSE	30	Needed for chat, callback, and delayed callback activities.

Name	Enabled	Persistent	Maximum Length	Description
user.media.id	FALSE	FALSE	36	A number identifying a call to the Unified CCE Service, optionally, the H.323 Service.
user.microapp.grammar_choices	FALSE	FALSE	210	Specifies the ASR choices that a caller can input for the Get Speech micro-application.
user.microapp.inline_tts	FALSE	FALSE	210	Specifies the text for inline Text To Speech (TTS).
user.microapp.media_server	FALSE	FALSE	60	Root of the URL for all media files and external grammar files used in the script.
user.microapp.override_cli	FALSE	FALSE	200	Used by the system to override the CLI field on outgoing transfers.
user.microapp.pd_tts	FALSE	FALSE	1	Specifies whether Unifies Text To Speech or media files must be played to the caller.

System Information

- Expanded Call Context: Enabled
- Minimum Correlation number: 1001
- Maximum Correlation number: 9999
- Retain script versions:5

Agent Targeting Rule

Attribute	
Name	AgentExtensions
Peripheral	CUCM_PG_1
Rule Type	Agent Extension
Routing Client	All routing clients

Attribute	
Extension Range	000 - 999
	0000 - 9999
	00000 - 99999
	000000 - 999999
	0000000 - 9999999
	00000000 - 99999999
	000000000 - 999999999
	0000000000 - 9999999999

IOPS values for Unified Communication Manager

The IOPS values for Unified Communication Manager are based on the BHCA values. These values may differ for the following scenarios:

- Software upgrades during business hours generate 800 to 1200 IOPS in addition to steady state IOPS.
- CDR/CMR using CDR Analysis and Reporting (CAR):
 - A Unified Communications Manager that sends CDR/CMR to the external billing server does not incur any additional IOPS.
 - CAR continuous loading results in around 300 IOPS average on the system.
 - Scheduled uploads are around 250 IOPS for Publisher VM only.
- Trace collection is 100 IOPS (occurs on all VMs for which tracing is enabled).
- Nightly backup (usually Publisher VM only) is 50 IOPS.

Mount ISO Files

Upload ISO image to data store:

1. Select the host in the vSphere client and click **Configuration**. Then click **Storage** in the left panel.
2. Select the datastore that will hold the ISO file.
3. Right click and select **Browse datastore**.
4. Click the **Upload** icon and select **Upload file**.
5. Browse to the location on your local drive where you saved the ISO file, and upload the ISO to the datastore.

Mount the ISO image:

1. Right-click the VM in the vSphere client and select **Edit virtual machine settings**.

2. Click **Hardware** and select **CD|DVD Drive 1**.
3. Check **Connect at power on** (Device status panel upper right).
4. Click the **Datastore ISO File** radio button and then click **Browse**.
5. Navigate to the data store where you uploaded the file.
6. Select the ISO file and click **OK**.

Set Up NTP and Time Configuration at the Customer Site

Any domain controllers at the customer site must be configured to use NTP servers. The two ESXi host servers must point to the same NTP servers as the domain controllers. Additionally, you must review time configuration settings on the ESXi servers.

Procedure

- Step 1** To add an NTP server to the domain controller:
- a) Locate the Microsoft instructions on how to configure an authoritative time server in Windows Server.
Public NTP servers are available on the Internet if you do not have one.
 - b) Note down the IP address or domain name of the NTP server that you add.
- Step 2** To point the ESXi core servers to the domain controller NTP servers:
- a) For each core server, click the **Configuration** tab.
 - b) Choose **Time Configuration > Properties... > Options**.
This opens a panel with two sections: General and NTP Settings.
 - c) Click NTP Settings. Then click **Add**.
 - d) Enter the IP address of the primary domain controller. Click **OK**. Click **Restart**.
- Step 3** To set the startup policy for the NTP server(s):
- a) Navigate to **Time Configuration**. Then select **Properties**.
 - b) Check NTP Client Enabled.
 - c) Click **Options**.
 - d) Select **Start**. Click **OK**.
- Step 4** To review the time settings for the host servers:
- a) Click the **Configuration** tab.
 - b) In the Software panel, select **Time Configuration**, which shows the Date & Time and the NTP Servers.
- Step 5** To adjust the Date & Time if they are incorrect:
- a) Click **Properties...**
This opens the Time Configuration dialog box.
 - b) Change the Time and Date fields. Then click **OK**.
-

CCDM Logging and MaxSizeRollBackups

This section refers to the CCDM Logging and MaxSizeRollBackups:

- [Logging, on page 61](#)
- [MaxSizeRollBackups , on page 61](#)

Logging

Unified CCDM provides an extensive logging framework for each of the components of the system to aid troubleshooting in the event of a problem.

Logging trace levels are stored in the registry for each separate component and may be set to one of the four following values:

Logging Level	Name	Description
0	ERROR	This is the lowest level of logging. It will only log information relating to exceptions that occurred in the application.
1	WARN	Warn provides ERROR level logging plus warnings raised for potential system issues.
2	INFO	Info is the default logging level. It provides ERROR and WARN as well as standard diagnostic information.
3	DEBUG	Debug is the highest level of logging. It provides detailed information of every operation that is performed. Debug logging has an adverse effect on performance, its usage should be kept to a minimum.

Set Logging Level Using the Unified System CLI in the CCDM Server

Complete the following procedure to set logging level using the Unified System CLI in the CCDM server.

Procedure

-
- Step 1** Navigate to **Start > All Programs > Domain Manager > Unified System CLI**.
 - Step 2** Enter the username (wsmadmin) and password for the wsmadmin user
 - Step 3** Enter the instance name (optional) and click **Enter**.
 - Step 4** Enter a debug level , for example debug level 0.

Note The value can be any logging level given in the table above.

MaxSizeRollBackups

MaxSizeRollBackups setting defines the number of log files per day to store before deleting them and creating a new one. This feature protects against a high volume of exceptions filling the disk in a short period of time.

MaxSizeRollBackups parameter is present in the configuration file for Application Server, Web, Data, Import Server services. Partitioning service, Provisioning service

Install and Configure Jabber for Windows

- [Install and Configure Jabber Client, on page 62](#)
- [Configure Jabber Using UCDM, on page 62](#)

Install and Configure Jabber Client

You can run the installation program manually to install a single instance of the client and specify connection settings in the **Manual setup and sign-in** window.

Procedure

- Step 1** Launch CiscoJabberSetup.msi.
The installation program opens a window to guide you through the installation process.
 - Step 2** Select **Accept and Install** to begin the installation.
 - Step 3** Check **Launch Cisco Jabber** and select **Finish**.
 - Step 4** Select **Manual setup and sign-in**.
 - Step 5** In **Select your Account Type** window check **Cisco Communication Manager (Phone capabilities only)**.
 - Step 6** In the Login server select: use the following servers and enter the details of **TFTP server, CTI server** and **CUCM server** . Click **Save**
 - Step 7** Enter the **User Name**(the end user created in CUCM for jabber phone) and **Password** and sign in.
-

Configure Jabber Using UCDM

Add End User

Procedure

- Step 1** Log in as Provider / Customer Admin.
- Step 2** Navigate to **Location Administration > End Users**.
- Step 3** Choose a **Location** from the drop-down list.
- Step 4** Click **Add**.
- Step 5** Enter **Username, Password, Lastname** and then, choose a **Role** from drop-down list.
- Step 6** Fill rest of the form with **User Details** and click **Next**.
- Step 7** Enter **Phone Pin** for the user.
- Step 8** Select **Feature Group**.
- Step 9** Select **Access Profile, Security Profile, and Feature Display Policy**.

Step 10 Click Add.

Migrate Agents and Supervisors to Single Sign-On Accounts



Important Be aware that this release does not provide support for disabling SSO once it is enabled.

Customers electing global hybrid mode to incrementally add SSO-enabled users may subsequently move to global enablement, or global enablement may be configured directly. However, the transition of hybrid mode to global off, of per-agent disablement while in hybrid mode, or of switching global on to global off is not supported at this time.

Customers who attempt to disable SSO after enabling it may experience user account inconsistencies, such as cleared (pre-SSO) passwords, invalid passwords, and Cisco Unified Intelligence Center reporting issues for supervisor accounts introduced after SSO was enabled. For this reason, be sure to back up Logger databases using the Microsoft SQL Server Backup and Restore utility.

Contact the Cisco TAC for questions or assistance.

If you are enabling SSO in an existing deployment, you can set the SSO state to hybrid to support a mix of SSO and non-SSO users. In hybrid mode, you can enable agents and supervisors selectively for SSO making it possible for you to transition your system to SSO in phases.

Use the procedures in this section to migrate groups of agents and supervisors to SSO accounts using the SSO Migration content file in the Unified CCE Administration Bulk Jobs tool. You use the Administration Bulk Jobs tool to download a content file containing records for agents and supervisors who have not migrated to SSO accounts. You modify the content file locally to specify SSO usernames for the existing agents and supervisors. Using the Administration Bulk Jobs tool again, you upload the content file to update the agents and supervisors usernames; the users are also automatically enabled for SSO.

The content file returns the first 12,000 agents and supervisors who have not been migrated to SSO accounts. After you run the bulk job to update users from that group of records, you can download the SSO Migration content file again to update additional agent and supervisor records.

If you do not want to migrate a user, delete the row for that user.

For instructions on how to setup SSO for Agent or Supervisor login, see the [Configure the Cisco Identity Service](#).



Important While the Finesse agent is logged in, changing the login name prevents the agent from answering or placing calls. In this situation, the agent can still change between *ready* and *not_ready* state. This affects all active agents, independent of whether SSO is enabled or disabled. Should you need to modify a login name, do so only after the corresponding agent is logged out. Note too that SSO migration (moving a non-SSO agent to be SSO-enabled, by either hybrid mode or global SSO mode) should not be done when the agent is logged in.

Procedure

Step 1 In Unified CCE Administration, navigate to **Manage > Bulk Jobs**.

Step 2 Download the SSO Migration bulk job content file.

a) Click **Templates**.

The **Download Templates** popup window opens.

b) Click the **Download** icon for the SSO Migration template.

c) Click **OK** to close the **Download Templates** popup window.

Step 3 Enter the SSO usernames in the SSO Migration content file.

a) Open the template in Microsoft Excel. Update the **newUserName** field for the agents and supervisors whom you want to migrate to SSO accounts.

The content file for the SSO migration bulk job contains these fields:

Field	Required?	Description
userName	Yes	The user's non-SSO username.
firstName	No	The user's first name.
lastName	No	The user's last name.
newUserName	No	The user's new SSO username. Enter up to 255 ASCII characters. If you want to enable a user for SSO, but keep the current username, leave newUserName blank, or copy the value of userName into newUserName .

b) Save the populated file locally.

Step 4 Create a bulk job to update the usernames in the database.

a) Click **New** to open the **New Bulk Job** window.

b) Enter an optional **Description** for the job.

c) In the **Content File** field, browse to the SSO Migration content file you completed.

The content file is validated before the bulk job is created.

d) Click **Save**.

The new bulk job appears in the list of bulk jobs. Optionally, click the bulk job to review the details and status for the bulk job. You can also download the log file for a bulk job.

When the bulk job completes, the agents and supervisors are enabled for SSO and their usernames are updated. You can open an individual user's record to see the changes.

Step 5 Repeat this procedure, if needed, to migrate additional agents and supervisors to SSO usernames.

What to do next

After all of the agents and supervisors in your deployment are migrated to SSO accounts, you can enable SSO globally in your deployment.

Globally Disable Single Sign-On

Follow these steps if you need to globally disable single sign-on from either SSO or Hybrid mode.



Important If you later want to migrate agents or supervisors from SSO-enabled to non-SSO:

- If you change a Cisco Unified Intelligence Center supervisor who was created as SSO-enabled to non-SSO, a new, non-SSO user account is created for the supervisor after the next user synchronization. The older, SSO-enabled supervisor account (in the format SSO\<loginname>) still exists in Cisco Unified Intelligence Center, however, and you must delete it. You must reconfigure the new, non-SSO supervisor user account (that matches the supervisor's SAM account name in Active Directory) in Cisco Unified Intelligence Center Administration Console to set up the supervisor's reports and permissions.
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Procedure

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- Step 1** If the system is in **SSO** mode, change the SSO mode to **Hybrid** in the Unified CCE Administration **Single Sign-On** tool.
- Step 2** Disable agents for SSO, and assign the agents new passwords. This step allows the agents to sign into Finesse.
- Step 3** Disable supervisors for SSO. This step allows the supervisors to sign in to Unified CCE Administration to reskill agents.
- Step 4** After you have updated all of the agent and supervisor records, change the SSO mode to **Non-SSO**.
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