

Configure CCE Agent Answers and Call Transcripts

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Introduction

This document describes how to configure Contact Center Enterprise (CCE) Agent Answers and Transcripts integrated with Google Contact Center Artificial Intelligence (CCAI).

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Prerequisites

Requirements

Cisco recommends that you have knowledge of these topics:

- Cisco Unified Contact Center Enterprise (UCCE) Release 12.6
- Cisco Package Contact Center Enterprise (PCCE) Release 12.6
- Customer Voice Portal (CVP)
- Cisco Finesse 12.6
- Cisco Unified Border Element (CUBE) or Voice Gateway (GW)
- Google Dialogflow
- Control Hub

Components Used

The information in this document is based on these software versions:

- UCCE Release 12.6
- CVP 12.6 ES6
- Cisco Finesse 12.6 ES 1
- Google Dialogflow
- Control Hub
- VCUBE - Cisco IOS XE Bengaluru 17.4

The information in this document was created from the devices in a specific lab environment. All of the devices used in this document started with a cleared (default) configuration. If your network is live, ensure that you understand the potential impact of any command.

Background

CCE 12.6 introduces the Agent Answers feature, in which an agent is provided with relevant suggestions and recommendations in real time for the agent to consider. The suggestions and recommendations are based on the conversation between the caller and the agent.

More often, agents lack the depth of knowledge about the products and services of the business they serve. Agent Answers enhances the customer experience because the timely suggestions improve the ability of the agent to respond. Businesses can cut down on training costs and time.

In addition CCE 12.6 also introduces Call Transcripts services that assist the agents by the use of Artificial Intelligence (AI) and Natural Language Understanding (NLU). These services are available for the agents in the Cisco Finesse desktop gadgets. The Call Transcript gadget dynamically converts the ongoing conversation to text and presents the text to an agent for real-time viewing and reference.

Note: In this release only Google Natural Language Processing (NLP) is supported.

Note: This feature is only supported in VCUBE, and CVP 12.6 ES6 is required in order to support of Agent Answers conference and Transfer.

Configure

Dialogflow Project

Google Dialogflow agent needs to be created and the Knowledge base needs to be added before you start Agent Answers configuration. You require a Google service account, a Google project and a Dialogflow virtual agent. Then, you can add the knowledge base to the Dialogflow virtual agent.

What is a Dialogflow?

Google Dialogflow, is a conversational User Experience (UX) platform which enables brand-unique, natural language interactions for devices, applications, and services. In other words, Dialogflow is a framework which provides NLP / NLU (Natural Language Understanding) services.

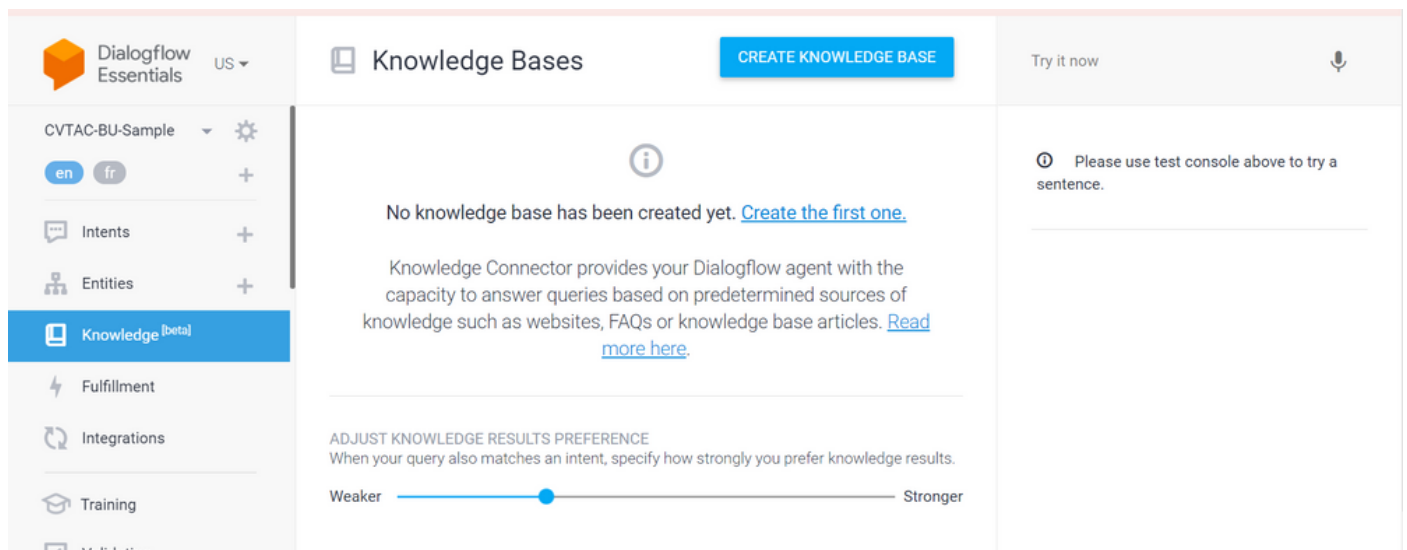
Cisco integrates with Google Dialogflow for Cisco Virtual Agent and for Agent Answers and Transcript .

What does this mean for you? Well, it means you can basically create a virtual agent on Dialogflow and then integrate it with Cisco Contact Center Enterprise.

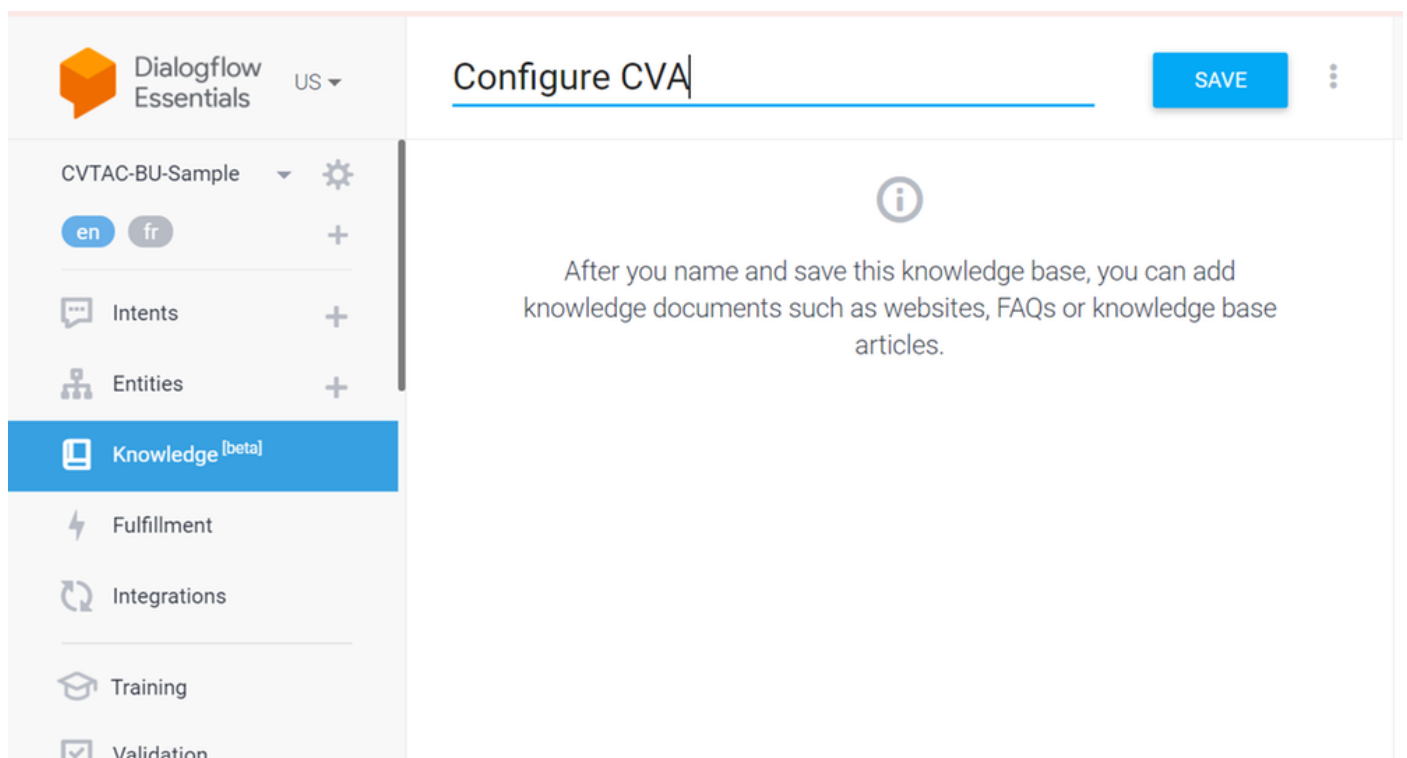
if you need information on how to create a virtual agent or Dialogflow project, visit: [Configure CVP CVA](#)

Follow these steps to add the Knowledge base to the Virtual Assistant Voice (VAV) known also as Cisco Virtual Agent (CVA).

Step 1. Log in to Dialogflow Console, select the agent and click **Knowledge**: [Dialogflow Console](#)



Step 2. On the Knowledge Bases page, click **CREATE KNOWLEDGE BASE**, name the Knowledge base and click **Save**.



Step 3. Add a document or link to the knowledge base just created. Click **Create the first one**.

Dialogflow Essentials US ▾

CVTAC-BU-Sample ▾ ⚙️

en fr +

Intents +

Entities +

Knowledge [beta]

Fulfillment

Integrations

Training

Validation

Configure CVA

SAVE

ⓘ

No knowledge document has been created yet. [Create the first one.](#)

Knowledge documents are articles or FAQs that your Dialogflow agent can use to generate responses to user queries. [Read more here.](#)

Responses ⓘ

Execute and respond to the user

Respond to your users with a simple

Step 4. On the Creation page, type the document name, select the Knowledge type, the Mime type and the Data Source.

Document Name *

CVA Config doc 1

Knowledge Type *

FAQ

Mime Type *

text/html

DATA SOURCE

☐ File on Cloud Storage

gs://bucket-name/object-name

☒ URL

http://www.example.com/faq *

☐ Upload file from your computer

SELECT FILE

☒ Enable Automatic Reload ⓘ

Step 5. Click **CREATE**.

Knowledge Type *

FAQ ▼

Mime Type *

text/html ▼

DATA SOURCE

☐ File on Cloud Storage

gs://bucket-name/object-name

☒ URL

http://www.example.com/faq *

https://www.cisco.com/c/en/us/support/docs/contact-center/unified-customer

☐ Upload file from your computer

SELECT FILE

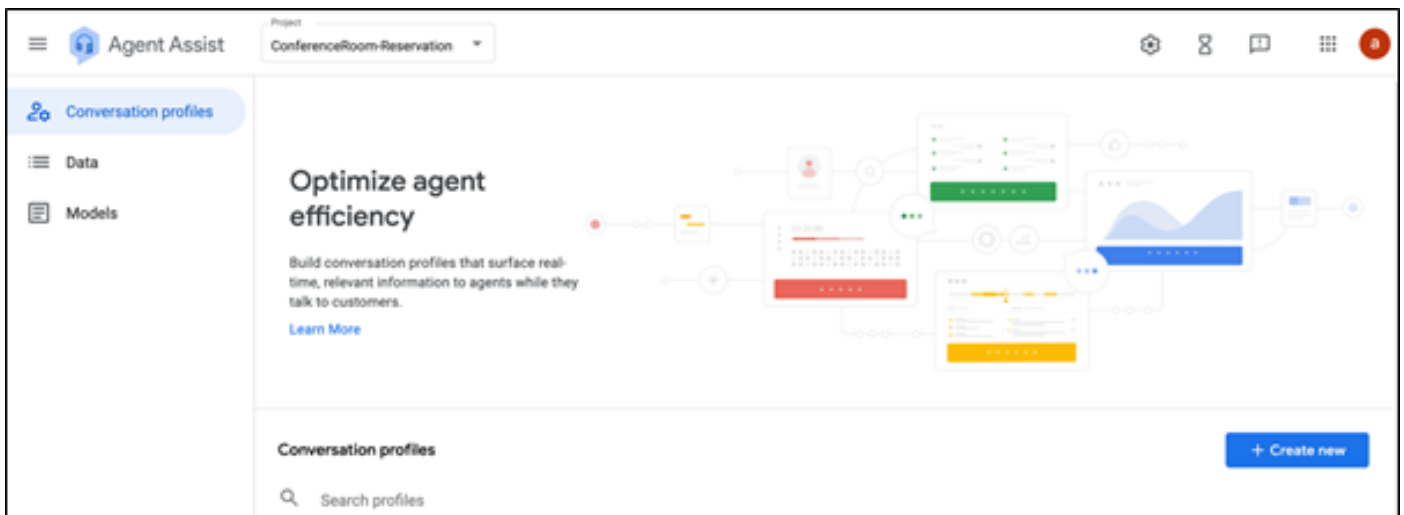
☒ Enable Automatic Reload ?

CREATE

Step 6. Create a Google AI Profile.

1. Once the KB or FAQs are updated for Dialogflow agent, log in to [Google Agent Assist](#) and choose the project which is used for the KB/FAQs.

2. Select the **Conversation profiles** and click **Create new** as shown in the image.



3. Update these details while you create the conversation profile and click **create**.

- Display name – Give any name to identify the profile.
- Suggestion types – Based on what you have selected in the Knowledge Bases (KB) tab in Dialogflow User Interface (DF UI), click on that. It should be either FAQ or Articles.
- Once you do this, all the KBs created in DF UI page, will appear here automatically. Select the correct one.
- Updated some of the other mandatory fields like **Sentiment Analysis** or update the default values based on the requirement like **confidence threshold** or **maximum suggestions**, etc.

Agent Assist

Project
ConferenceRoom-Reservation

Conversation profiles

Data

Models

New conversation profile

Display name

This will help you find this profile in the conversation profiles list

TestConverstaionProfile

23/1024

Suggestion types

Select all of the kinds of assistance you would like this profile to surface to agents

☐ Smart reply

Surface pre-written responses

☐ Articles

Surface articles contextual to the conversation

☒ FAQs

Auto-surface answers to customer questions

Knowledge bases *

MytestKB

Confidence threshold *

0.01

It is recommended to set it to 0.01 initially, then increase it incrementally until you are satisfied with your suggestions

Maximum suggestions *

3

Retrieval method
Select how suggestions should be surfaced

☒ Inline suggestions (API response)

☐ Pub/Sub messages

Sentiment analysis
Inspect messages from the agent and end customer and identify the prevailing emotional opinion within the text

☐ Enable sentiment analysis

Choose to use Dialogflow
You can leverage models created in Agent Assist to create a Dialogflow virtual agent

☐ Enable virtual agent

[Create](#) [Cancel](#)

- Now the conversation profile appears on Agent Assist url.
- Copy the Integration ID. Click **Copy to Clipboard**. This is used later in the Control Hub configuration.

Agent Assist

Project: ConferenceRoomReservation

Conversation profiles

Data

Models

Optimize agent efficiency
Build conversation profiles that surface real-time, relevant information to agents while they talk to customers.
[Learn More](#)

Conversation profiles [+ Create new](#)

Search profiles

Name	Integration ID	Created on	Last updated
TestConversationProfile	d0MaJt8pRtD-XnI0utVUQ	Just now	Just now

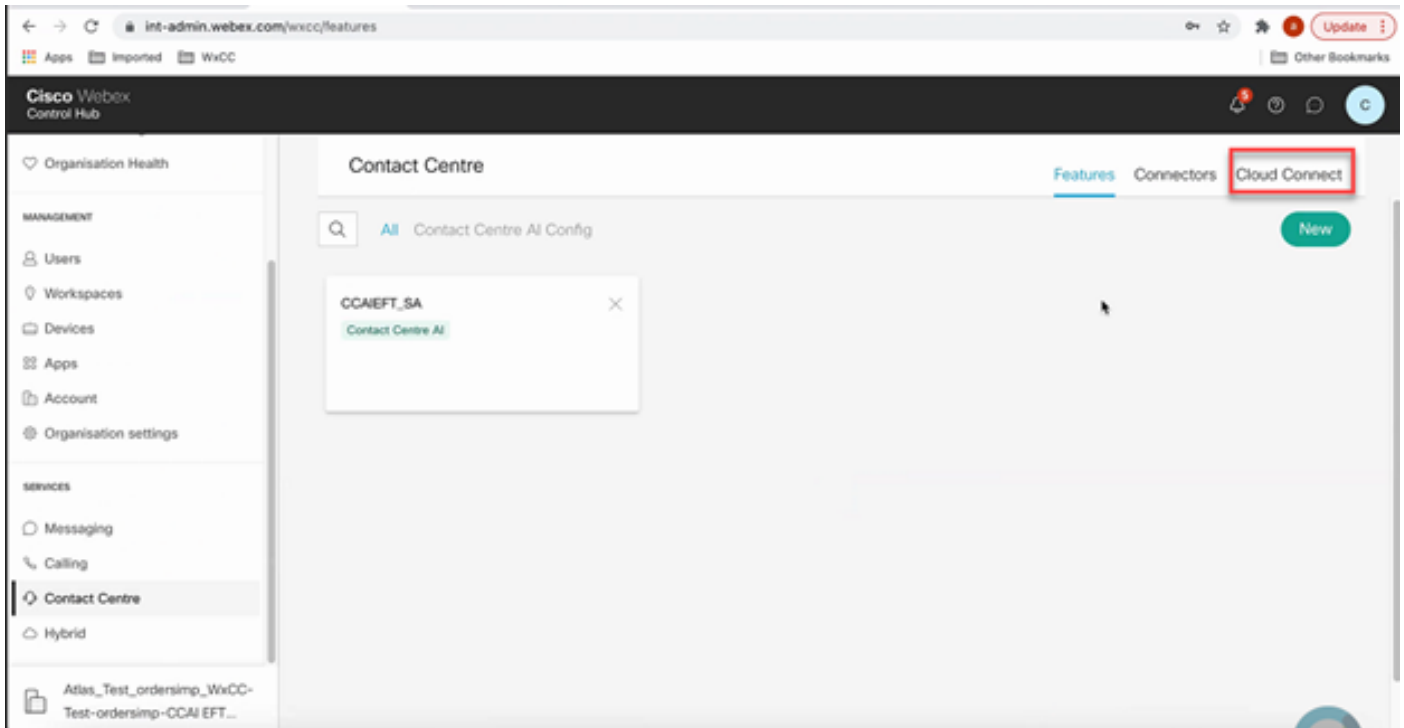
Note: There is no Dialogflow configuration required for Call Transcripts

Webex Control Hub Configuration

Create a CCAI configuration in Cisco Webex Control Hub at [Control Hub](#) . A CCAI configuration leverages CCAI Connectors to invoke the CCAI services. For details, visit the *Configure Contact Center AI* article at [Webex Help Center](#)

Step 1. Ensure that the Cloud Connect publisher and subscriber are installed. For more information, visit the *Install Cloud Connect* section in [Cisco Unified Contact Center Enterprise Installation and Upgrade Guide](#).

Step 2. Log in to Webex Control Hub. Navigate to Contact Center and click **Cloud Connect**.

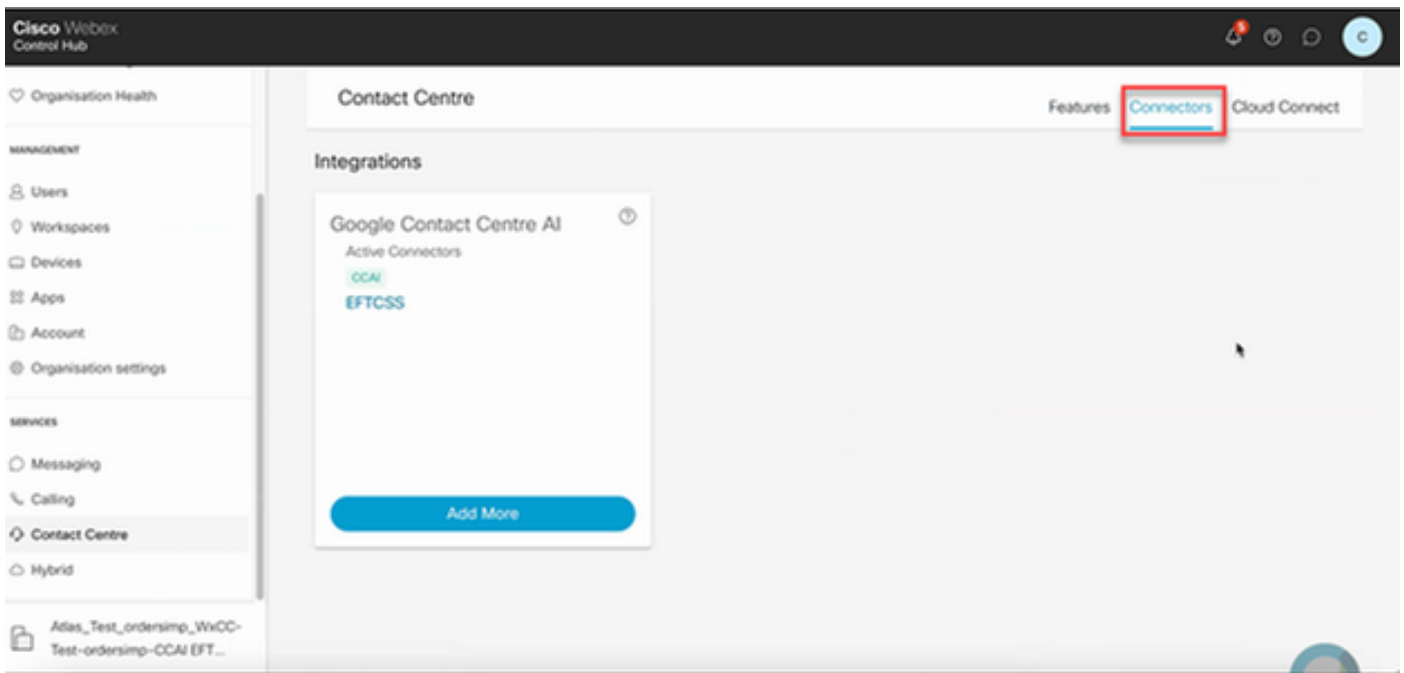


Step 3. On Cloud Connect window enter the name and the Fully Qualified Domain Name (FQDN) of Primary Cloud connect.

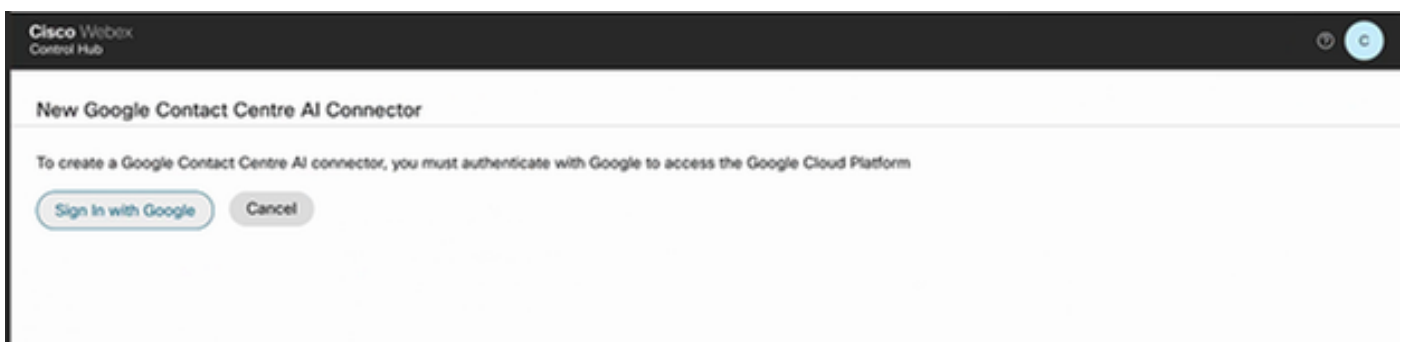
A screenshot of the 'Add Cloud Connect Cluster' dialog box. The title is 'Add Cloud Connect Cluster'. It has two main sections. The first section is 'Display Name' with a text input field containing 'Enter Name'. Below the input field, it says 'Display Name of the on-premises Cloud Connect cluster which is being Registered to the cloud'. The second section is 'FQDN' with a text input field containing 'Fully Qualified Domain Name'. Below the input field, it says 'Enter the FQDN of primary Cloud Connect node from the deployment being Registered'. At the bottom right, there are two buttons: 'Cancel' and 'Register'.

Step 4. On Cloud Connect window enter the name and the FQDN of Primary Cloud connect and click **Register**.

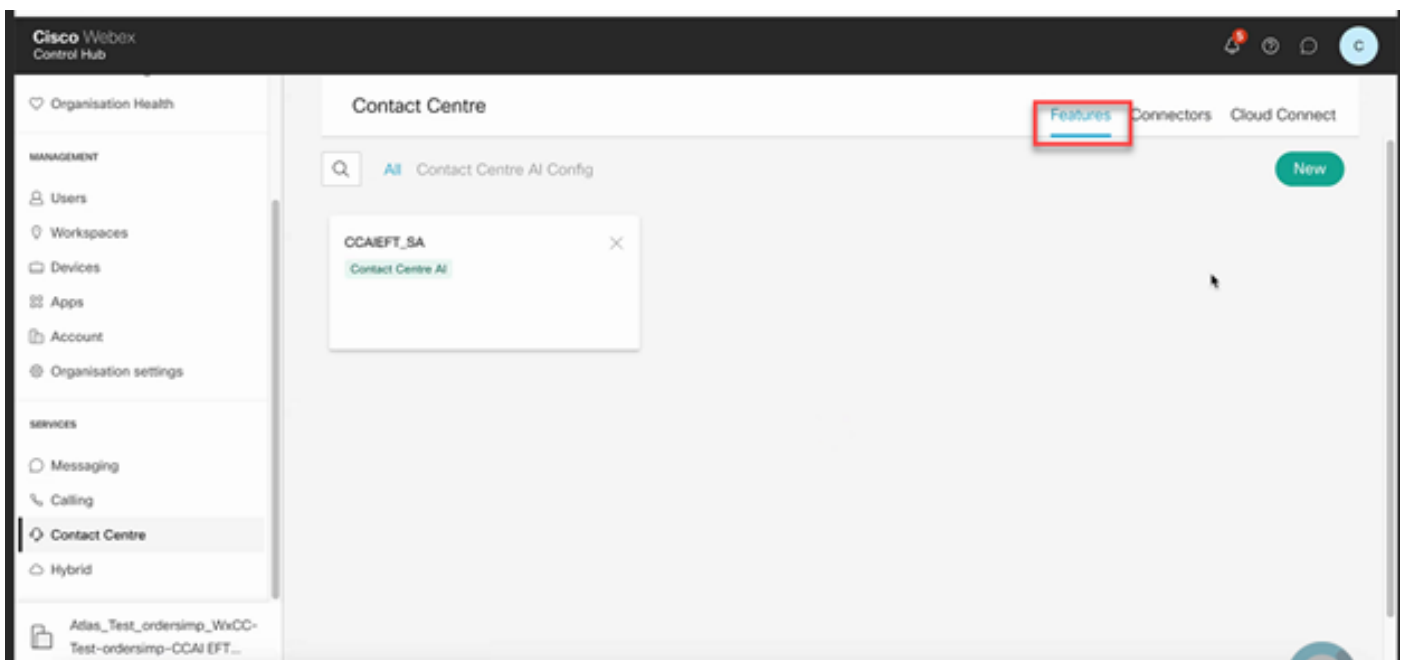
Step 5. Add a Connector. On the Contact Center window select the **Connectors** tab.



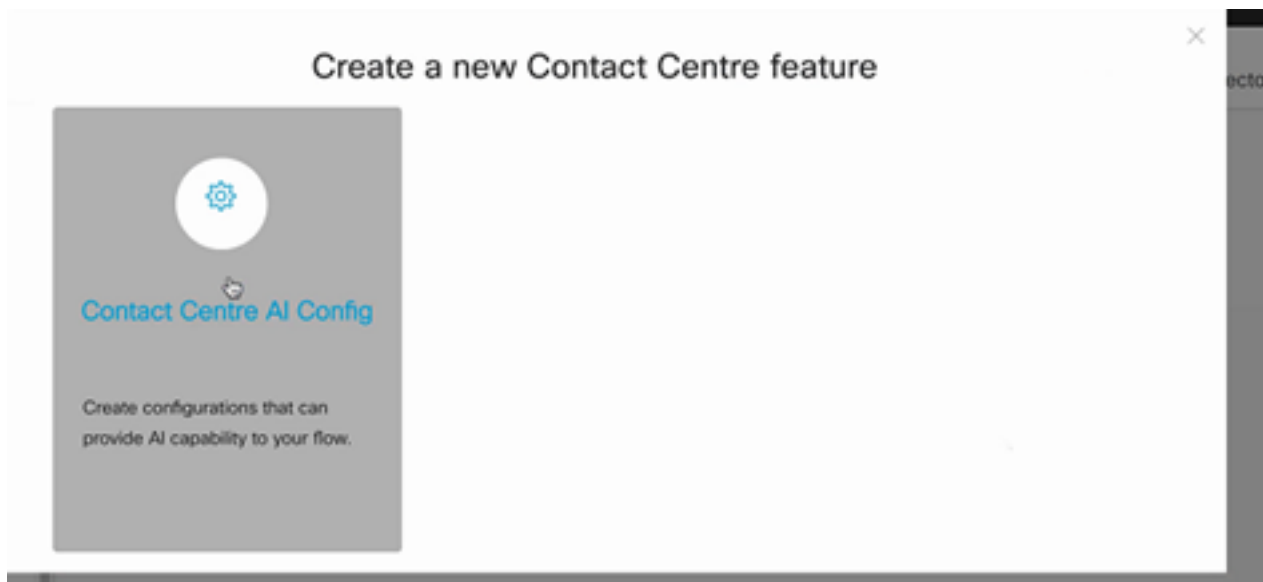
Step 6. If a connector is already added and you need to add one more, click on Add More. Sign in with Google and follow the instructions.



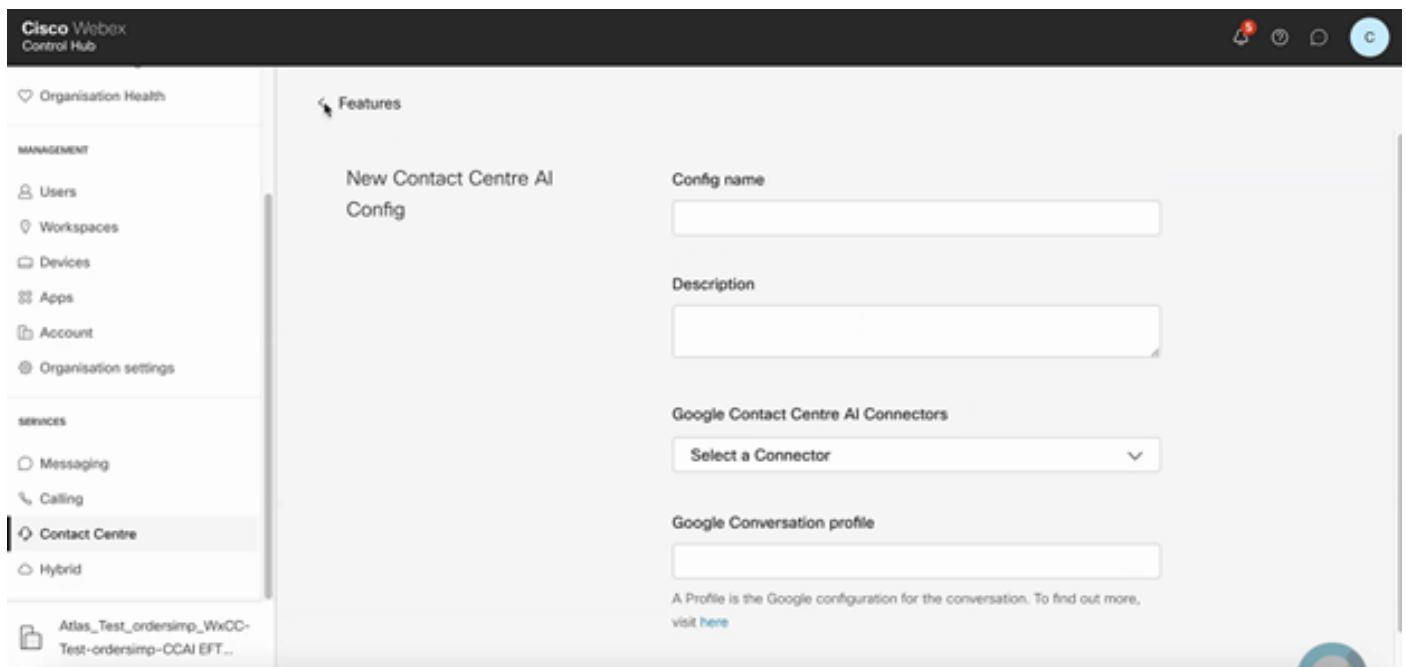
Step 7. Now add the features. On the **Contact Center** page, click **Features** and click **New**.



Step 8. You are now in the Create a New Contact Center Feature page. Click **Contact Center AI Config**.

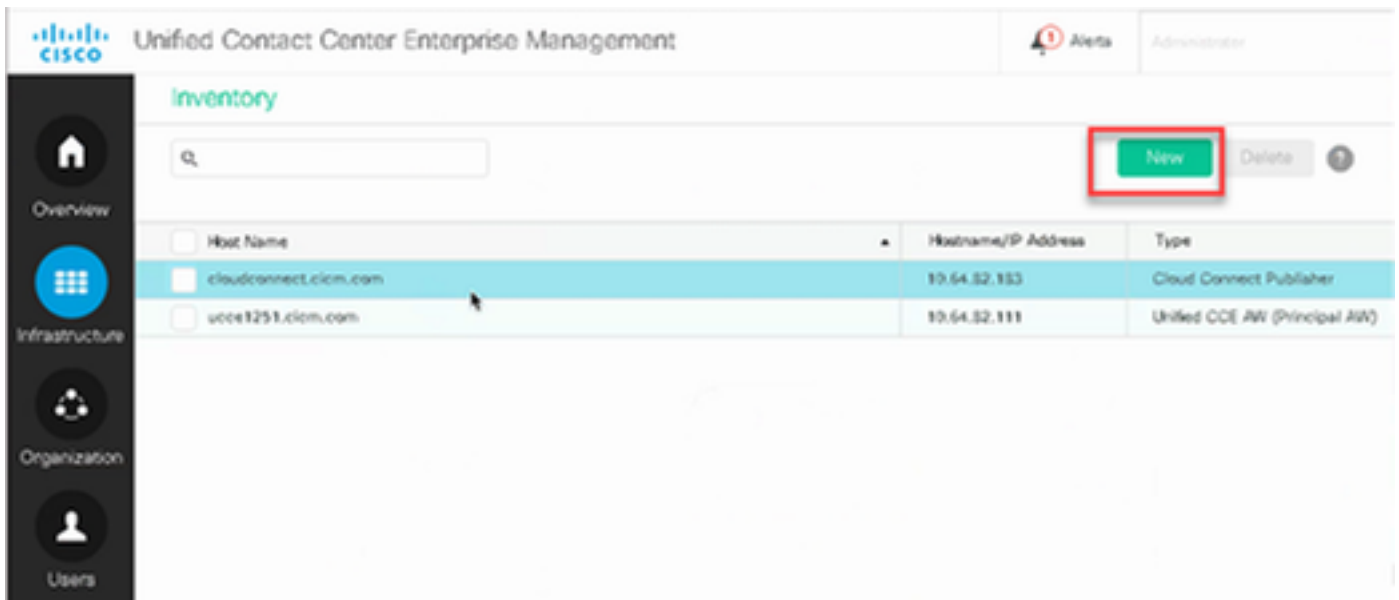


Step 9. Provides the feature information, select the connector already added and the Google Profile created.

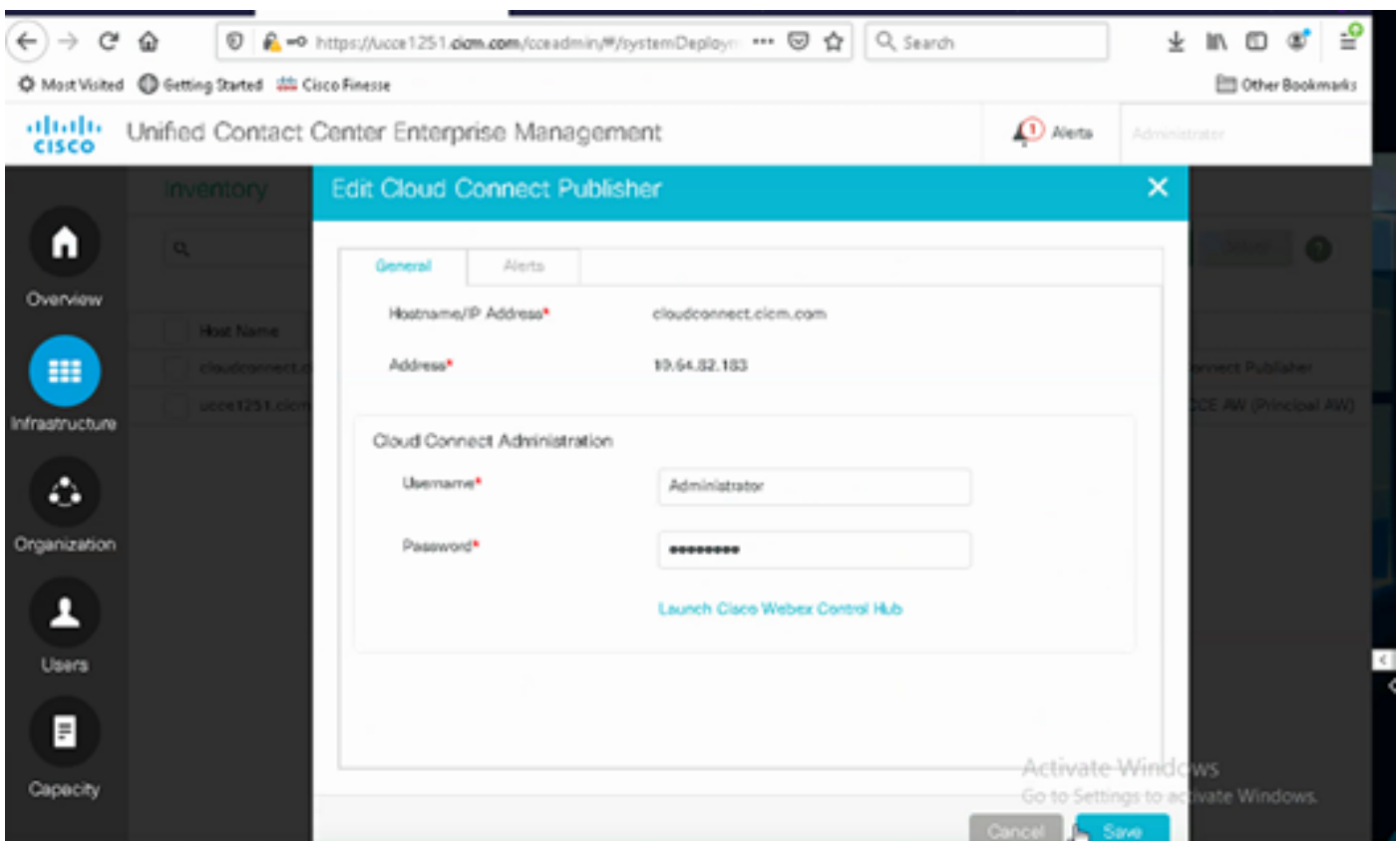


CCE Configuration

Step 1. On UCCE AW, open Cisco Web Administration tool and navigate to Inventory. Click **New**.



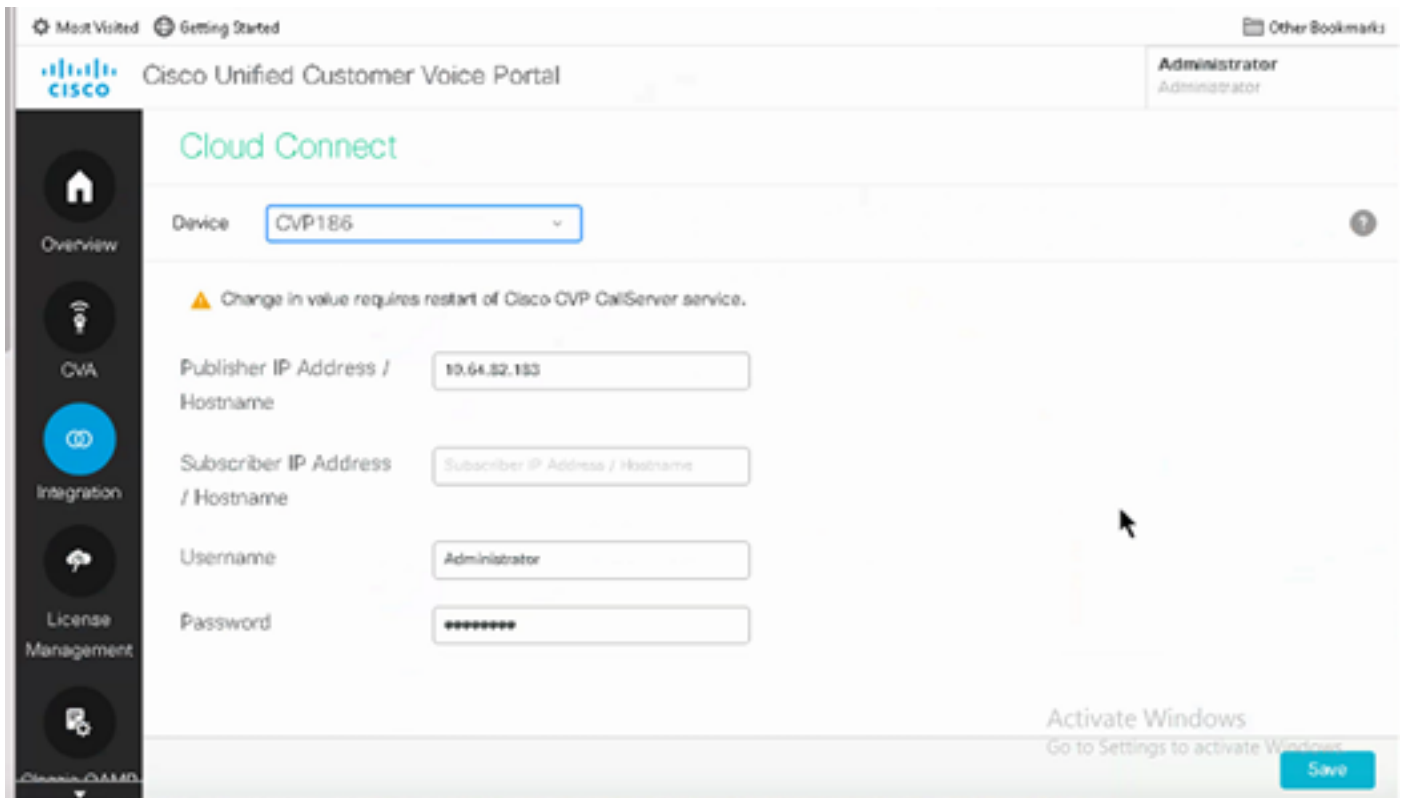
Step 2. Add Cloud Connect and provide the FQDN and credentials.



Note: Refer to these documents for PCCE certificate exchange: [Self-Signed Certificates in a PCCE Solutions](#) and [Manage PCCE Components Certificate for SPOG](#). For UCCE refer to [Self-Signed Certificate Exchanged on UCCE](#).

Step 3. Configure Cloud Connect in the CVP Operations Console (OAMP). For details visit the section *Configure CVP Devices for Cloud Connect* in the [Administration Guide for Cisco Unified Customer Voice Portal](#).

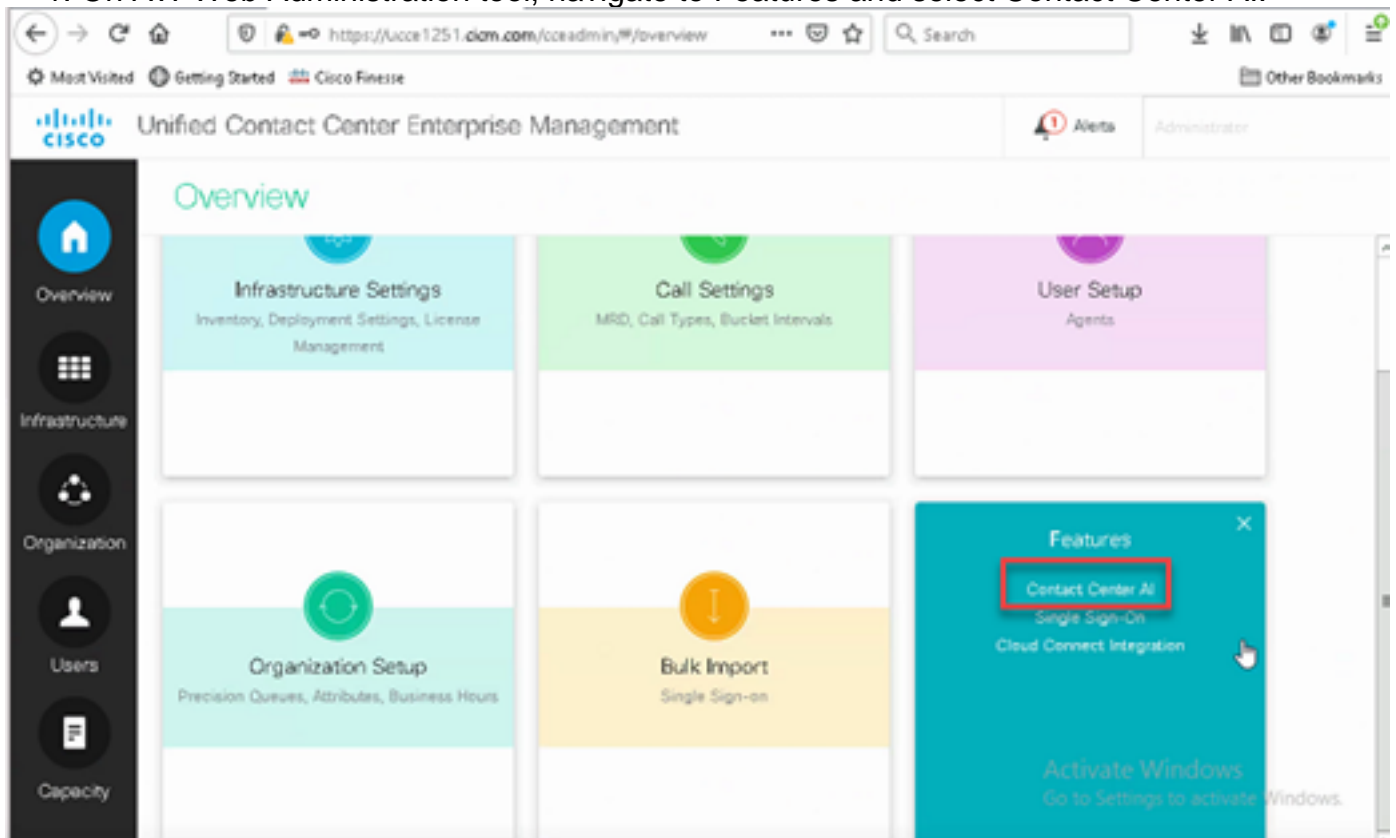
Note: This is for UCCE only. This step is not required for PCCE.



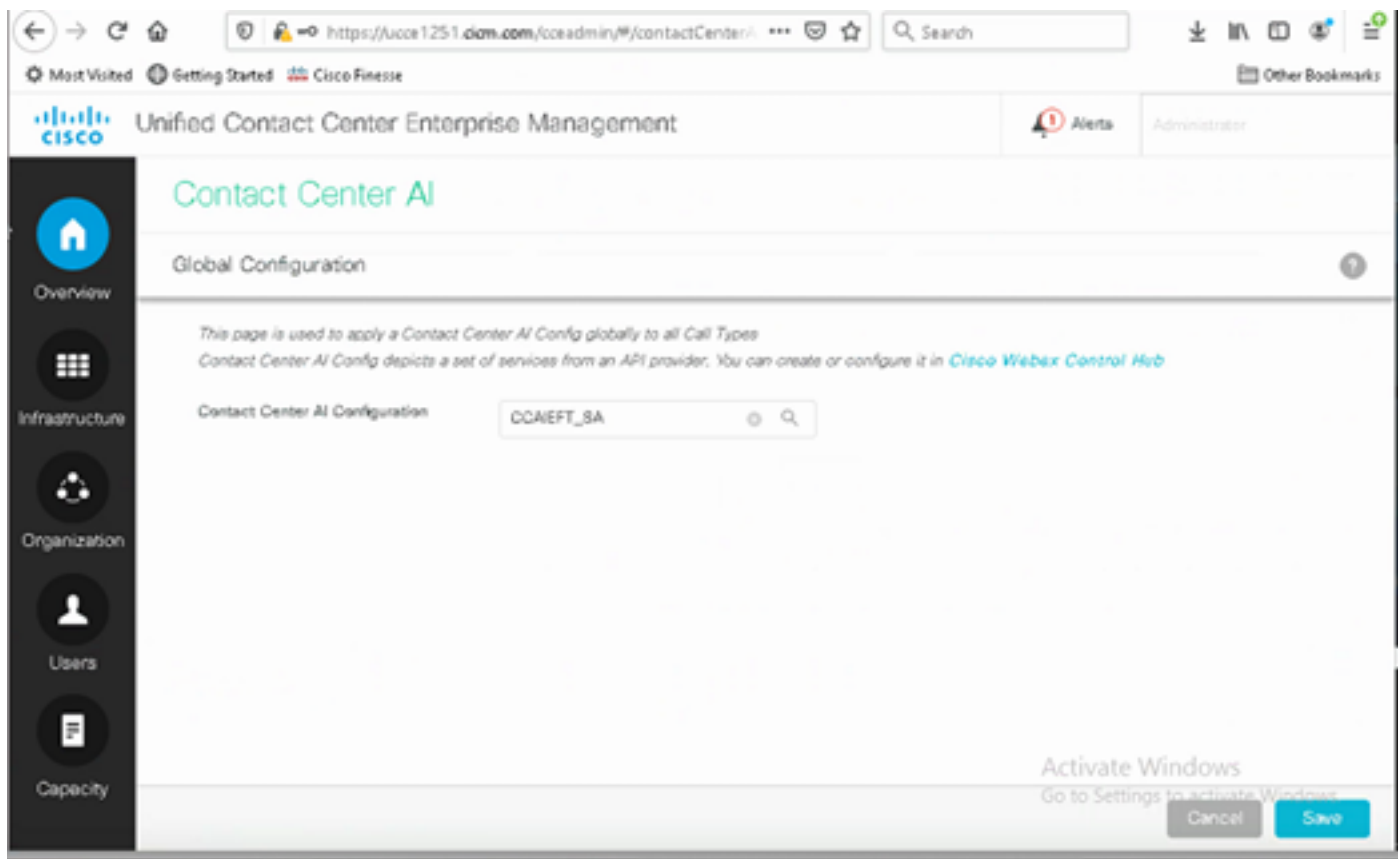
Step 4. Import the Cloud Connect certificate to the CVP server. For details, visit the section *Import Cloud Connect Certificate to Unified CVP Keystore* in the [Configuration Guide for Cisco Unified Customer Voice Portal](#).

Step 5. In the Unified CCE Administration console, do the this to associate the CCAI configuration all call types:

1. On AW Web Administration tool, navigate to Features and select Contact Center AI.

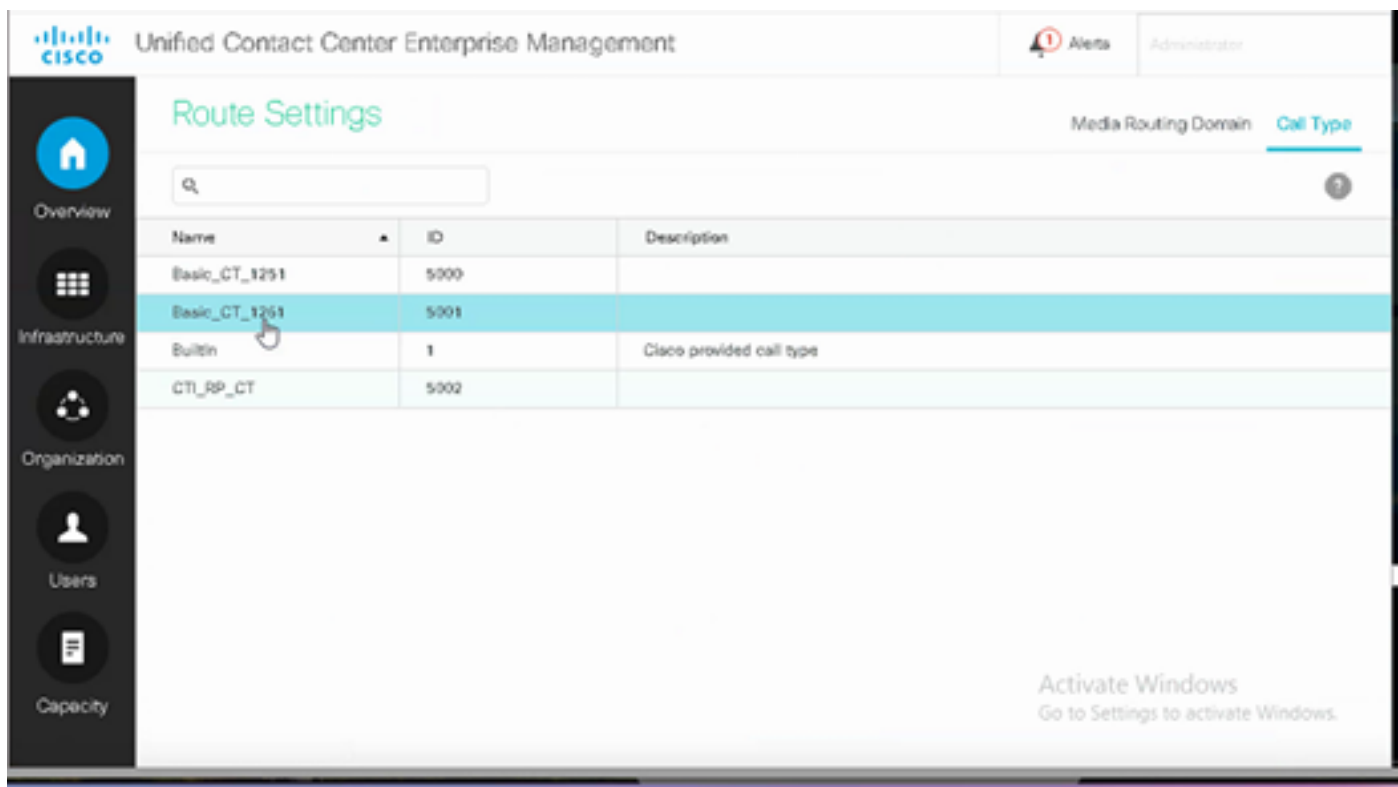


2. On the Contact Center AI page select the CCAI configured before in Control Hub.

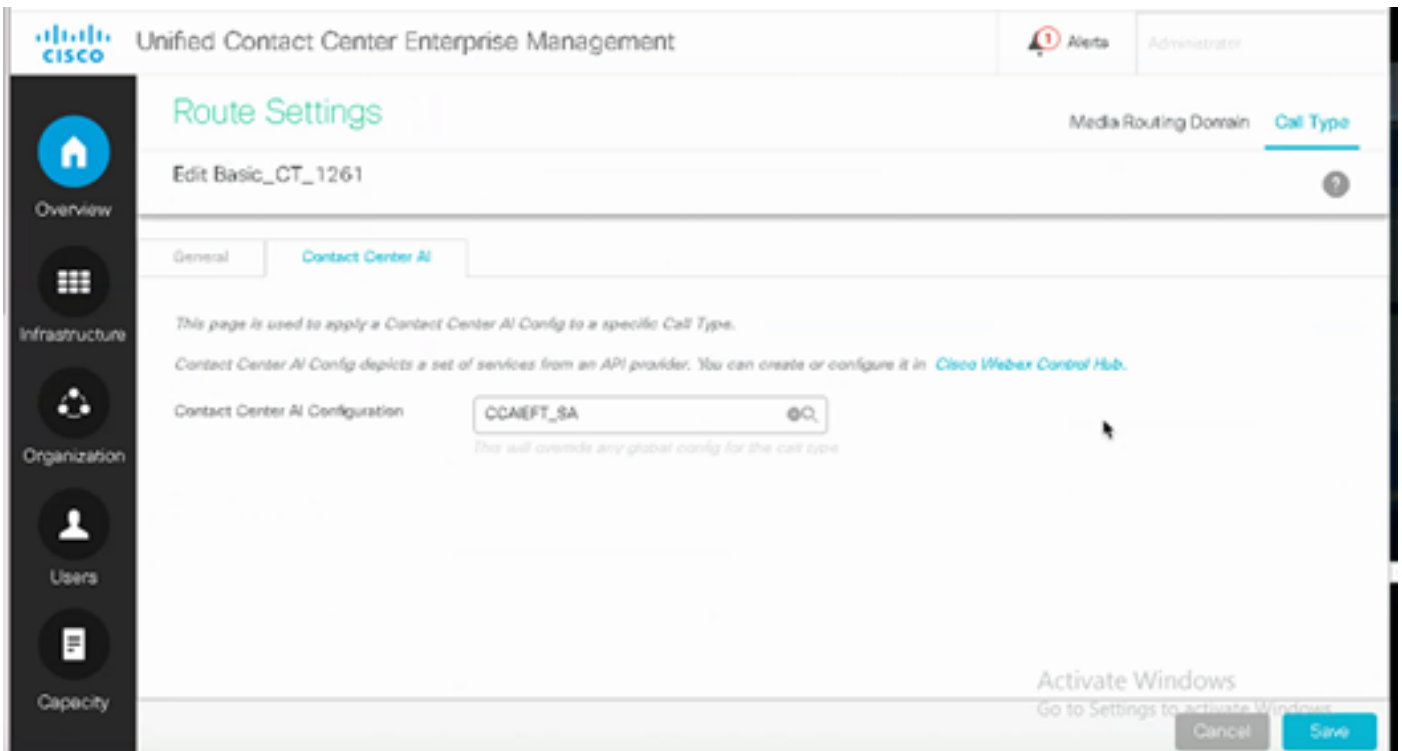


Step 6. To apply the CCAI configuration to only a subset of the call types or to override the global configuration for specific call types do this:

1. In Web Administration tool, navigate to Route Settings and select Call Type.



2. Click the **Contact Center AI** tab and select the Contact Center AI configured on the Control Hub.



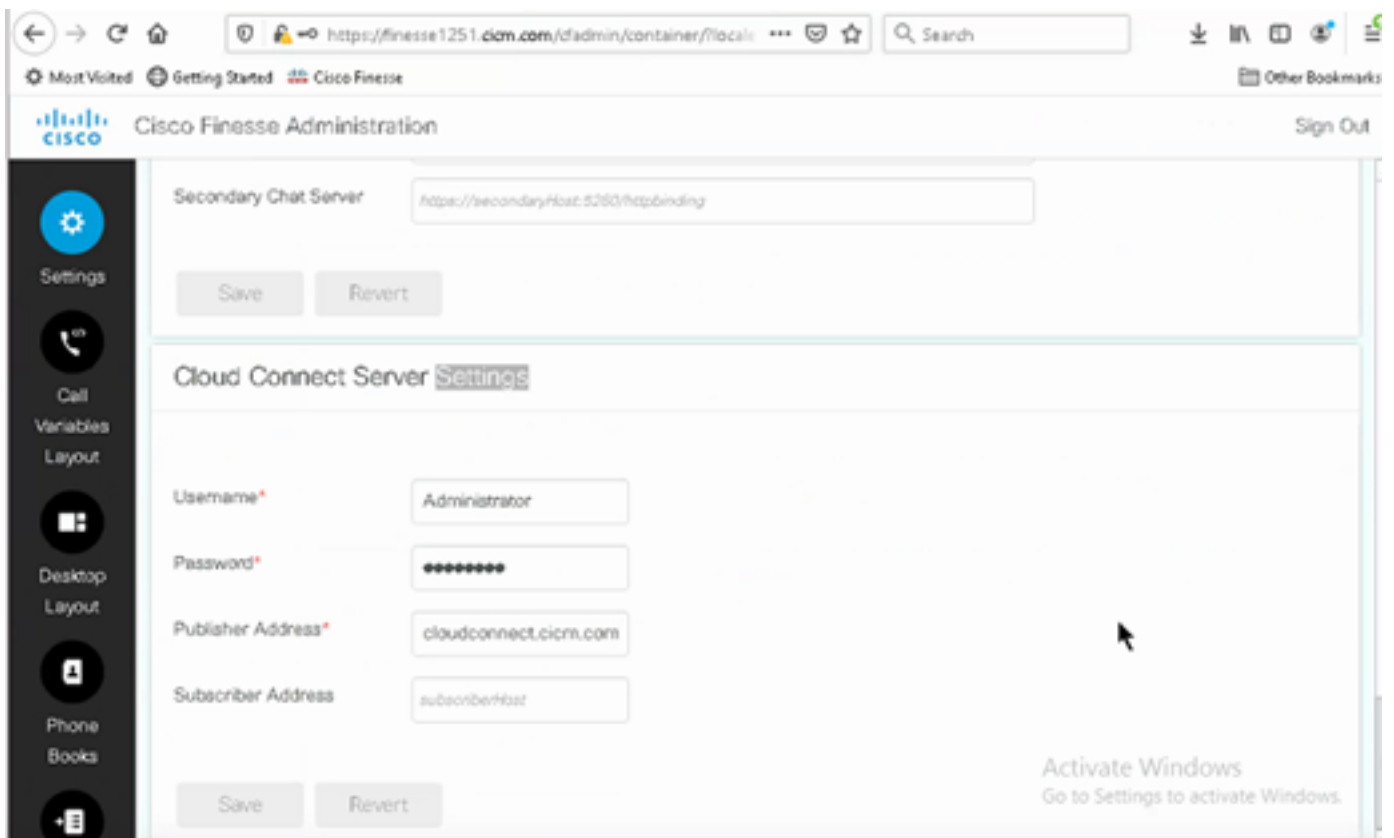
Finesse Configuration

Note: Steps 1 to 3 are for UCCE only. For PCCE start with Step 4.

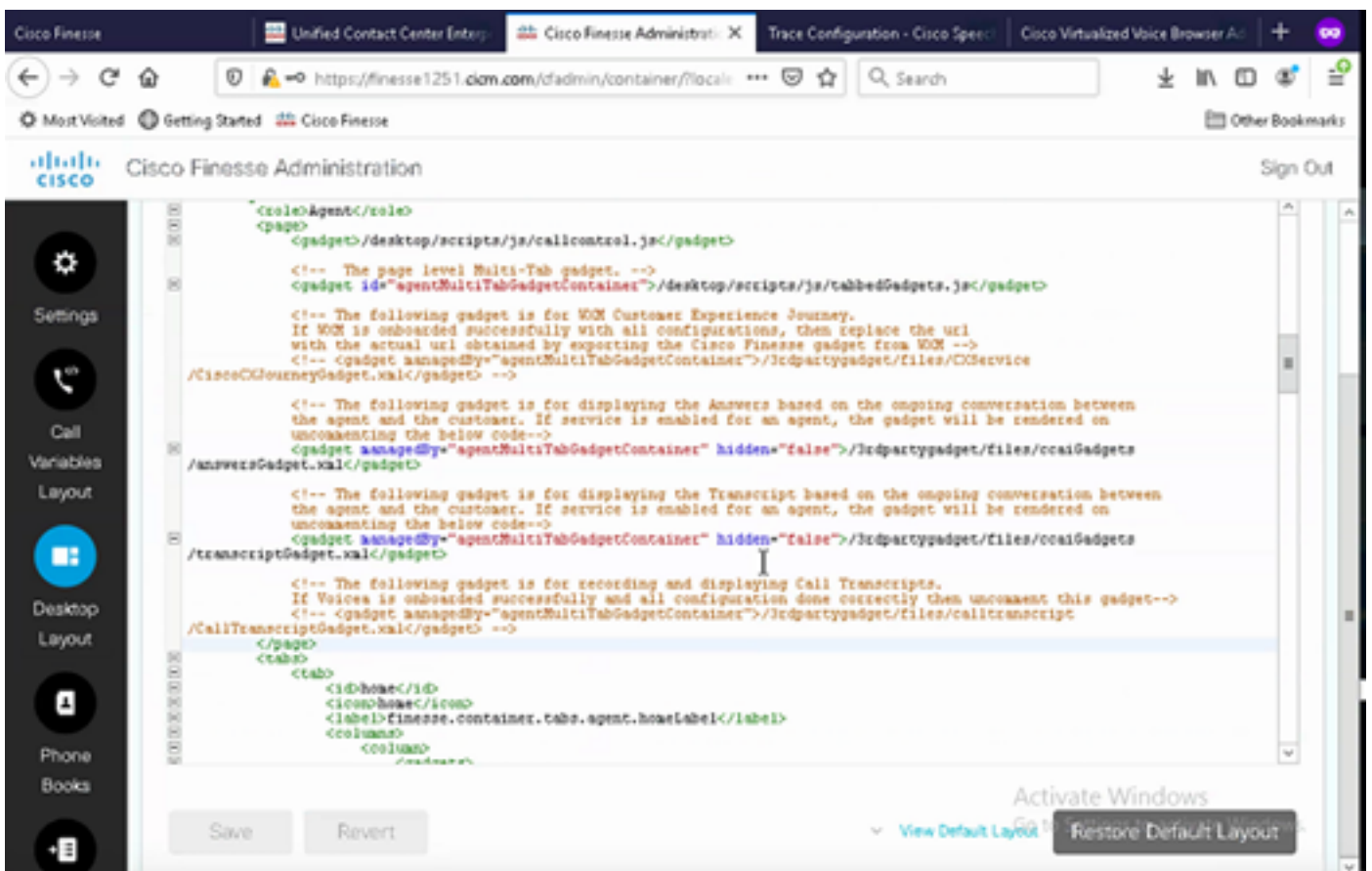
Step 1. Provision Cloud Connect on Cisco Finesse. For more information, visit the *Cloud Connect Server Settings* topic in the [Cisco Finesse Administration Guide](#).

Step 2. Open Finesse Admin page, and navigate to settings and to Cloud Connect.

Step 3. On the Cloud Connect Server Settings provide the credentials and the FQDN of the publisher and the subscriber.



Step 4. Add the Agent Answers gadget on the Finesse Desktop Layout. On the Cisco Finesse Administration Page, click **Desktop Layout** and remove the comment on the gadget information related to Agent Answers.



Step 5. On CCE Administration Page select Agents and on Manage Agents enable the CCAI services. Once enabled, the Agent Answers gadget appears on the Home tab and displays relevant articles and suggestions during a call. For details on how to use the gadget, visit the

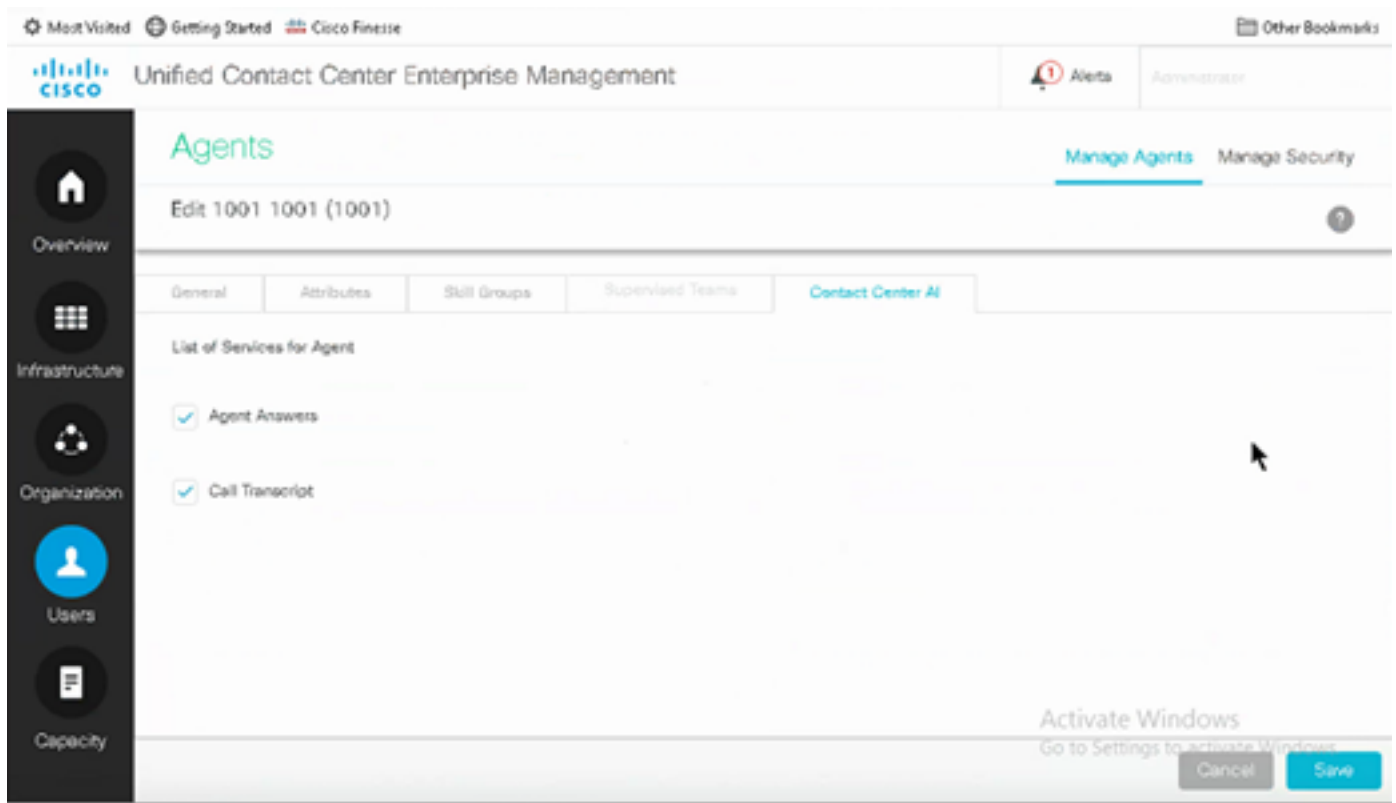
Contact Center AI Gadgets guide. Gadget auto-hide/un-hide and notifications capability is available only if the gadget is configured as a multi-tab gadget in Cisco Finesse. For more details, visit [Agent Answers Gadget](#) in the [Cisco Finesse Administration Guide](#).

The screenshot shows the 'Agents' page in the Cisco Unified Contact Center Enterprise Management interface. The page has a sidebar with navigation links: Overview, Infrastructure, Organization, Users, and Capacity. The main content area displays a table of agents with columns for Username, Peripheral, Last Name, and First Name. The table contains five rows of agent data. At the top right, there are links for 'Manage Agents' and 'Manage Security'. A search bar is located above the table. The URL in the browser is <https://ucce1251.cicm.com/ccadmin/#/agents>.

Username	Peripheral	Last Name	First Name
1001	CUCM_PG_1	1001	1001
2001	CUCM_PG_1	2001	2001
30015	CUCM_PG_2	3001	3001
test@cicm.com	CUCM_PG_1	udupa	adithya
test@cicm.com	CUCM_PG_2	udupa	adithya

The screenshot shows the 'Edit 1001 1001 (1001)' page in the Cisco Unified Contact Center Enterprise Management interface. The page has a sidebar with navigation links: Overview, Infrastructure, Organization, Users, and Capacity. The main content area displays a form for editing agent details. The 'Contact Center AI' tab is highlighted and circled in red. The form includes fields for Username, First Name, Last Name, Agent ID, Description, and Site. There are also checkboxes for 'Login Enabled' and 'Password'. The URL in the browser is <https://ucce1251.cicm.com/gadgets/vfr?container=default&mid=50&ocache=1&country=ALL&lang=en...&default&url=http://localhost:8000/ccadmin/gadgets/agents.jsp#agentServices-tab-content>.

General	Attributes	Skill Groups	Supervised Teams	Contact Center AI
Username	1001			
First Name	1001	SSD		<input checked="" type="checkbox"/> Login Enabled
Last Name	1001			
Agent ID	1001			
Description		word		
Site	Main			



VCUBE and CVP Configuration

Step 1. On VCUBE, enter to config mode.

Config t

Step 2. Create a Voice Class Sip profile to add Call-Info SIP header in INVITE message for CVP to send forking request.

```
voice class sip-profiles 100
request INVITE sip-header Call-Info add "X-Cisco-Forking: supported"
```

Step 3. Create a media stream service profile.

```
media profile stream-service 99
connection idle-timeout 45          ! default 30 mins
connection calls-threshold 5       ! default 3 calls per websocket connection
proxy host proxy.dk.org            ! optional, http proxy server IP or DNS if used
source-ip A.B.C.D                  ! VCUBE source IP for websocket sessions
secure-ciphersuite aes-128-cbc-sha ! optional, VCUBE advertises all cipher suites if not
specified.
```

Step 4. Associate media stream service profile to a media class.

```
media class 9
stream-service profile 99
```

Step 5. Add the sip and media profile to the outgoing dial-peer towards CVP.

```
dial-peer voice 802 voip
description CVP SIP Comprehensive dial-peer
destination-pattern 802.
```

```
session protocol sipv2
session target ipv4:X.X.X.X
voice-class codec 1
voice-class sip profiles 100
media-class 9
dtmf-relay rtp-nte
no vad
```

Step 6. In CVP Server sip.properties file set the **SIP.UseSIPINFOForking** to **true**.

SIP.UseSIPINFOForking= true

Verify

There is currently no verification procedure available for this configuration.

Troubleshoot

There is currently no specific information to troubleshoot available for this configuration.

Related Information

- [Cisco Contact Center Solutions and Design Guide 12.6](#)
- [Cisco Contact Center Features Guide 12.6](#)
- [Technical Support & Documentation - Cisco Systems](#)