Configure CCE Agent Answers and Call Transcripts with Google Agent Assist

Contents

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 12.6.2
- Cisco Package Contact Center Enterprise (PCCE) Release 12.6.2
- Customer Voice Portal (CVP)
- Cisco Finesse 12.6.2
- Cisco Unified Border Element (CUBE) or Voice Gateway (GW)
- Google Agent Assist
- Control Hub
- CCE Admin Data Server (AW)

- CVP Operations and Management Portal (OAMP)

Components Used

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

- UCCE Release 12.6.2
- CVP 12.6.2 ES15
- Cisco Finesse 12.6.2
- Google Agent Assist
- Control Hub
- VCUBE - Cisco IOS XE Bengaluru 17.12.1a

> ✎ **Note**: For CUBE / VCUBE Cisco IOS version supported, please refer to the latest PCCE/UCCE Features Guide and Compatibility matrix

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 your 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.

Configure

Configuration Requirements

- Ensure that your CCE AW server has 443/8443 ports opened and is able to access these websites:

  - *.wbx2.com

  - *.ciscoccservice.com

- Ensure that CUBE has access to these websites:

  - *.cisco.com

  - *.ciscospark.com

- *.rtmsprod.net

- *.wbx2.com

- Ensure that Packaged CCE AW, OAMP on UCCE, Cloud Connect, CUBE, and Agent Desktop components have access to Webex services to use the Agent Answers.

Google Agent Assist

Agent Assist is a Google Contact Center Artificial Intelligence (CCAI) solution which uses machine learning technology to provide suggestions to your human agents when they are in a conversation with a customer.

Suggestions are based on your own uploaded data and therefore can be tailored to your specific business needs. This uploaded data is part of your own knowledge base.

Note: There is no Dialogflow CX configuration required for Agent Answers and Call Transcripts

Create a Knowledge Base

A *knowledge base* represents a collection of *knowledge documents* that you provide via Agent Assist. Your knowledge documents are provided to the Finesse agents and contain information that can be useful during the agent conversation with customers. This helps to minimize agents training and improves agent response to customer calls.

Step 1. Open a web browser and navigate to https://agentassist.cloud.google.com/
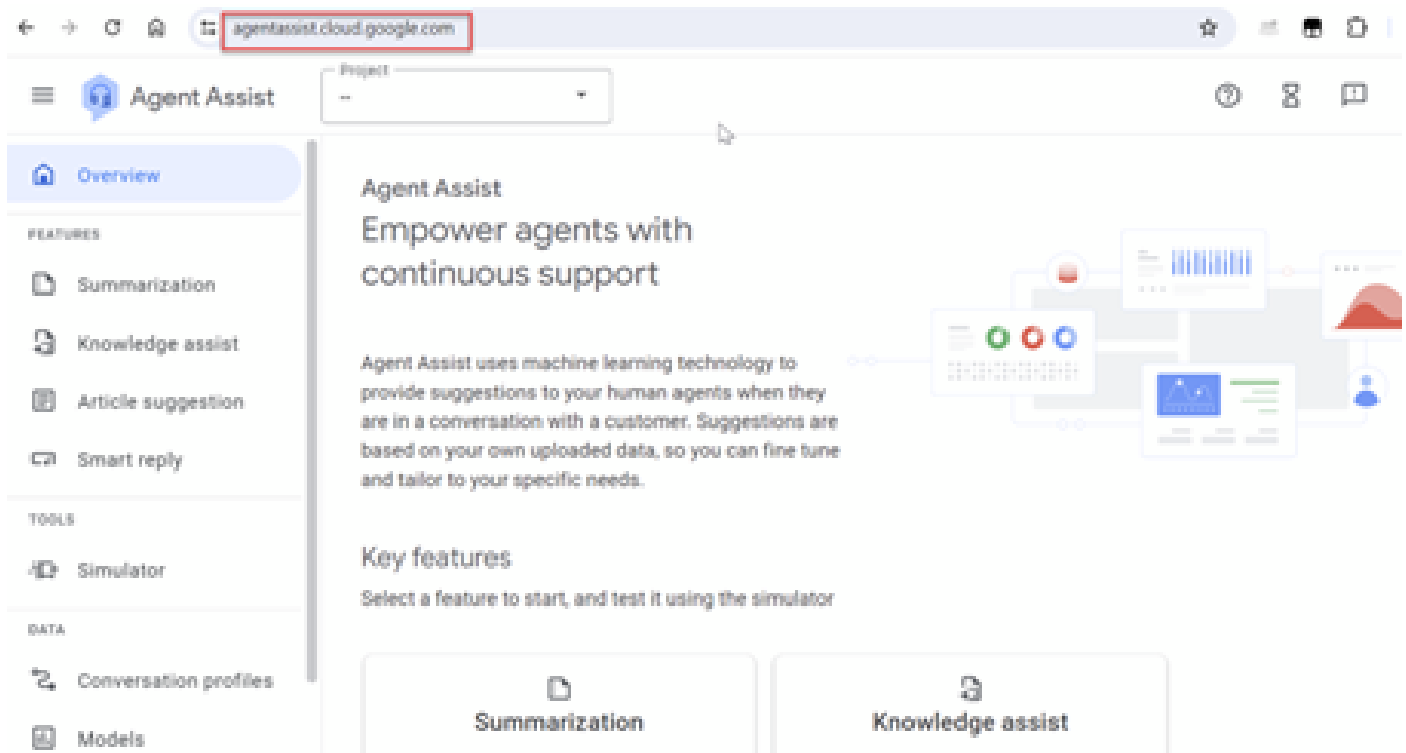
Step 2. Log in with the same account you used to create your Google project. Select the Project and the location.

Step 3. Select Knowledge bases on the left sidebar menu.

Step 4. Click Create under Knowledge bases.
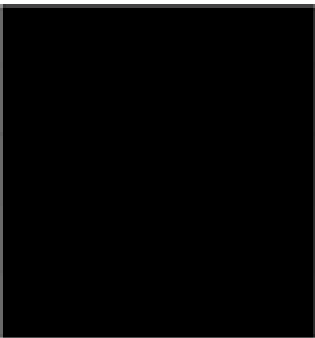
Step 5. Enter a knowledge base name and language and click Create.

Step 6. Add a document to the Knowledge base. Click **Create New** and enter the information.

a. Select the Knowledge Type, in this example you can use FAQ.

b. Select Public URL for File source. In this example you can use the Google FAQ document: https://cloud.google.com/storage/docs/faq.

c. Click **CREATE.**
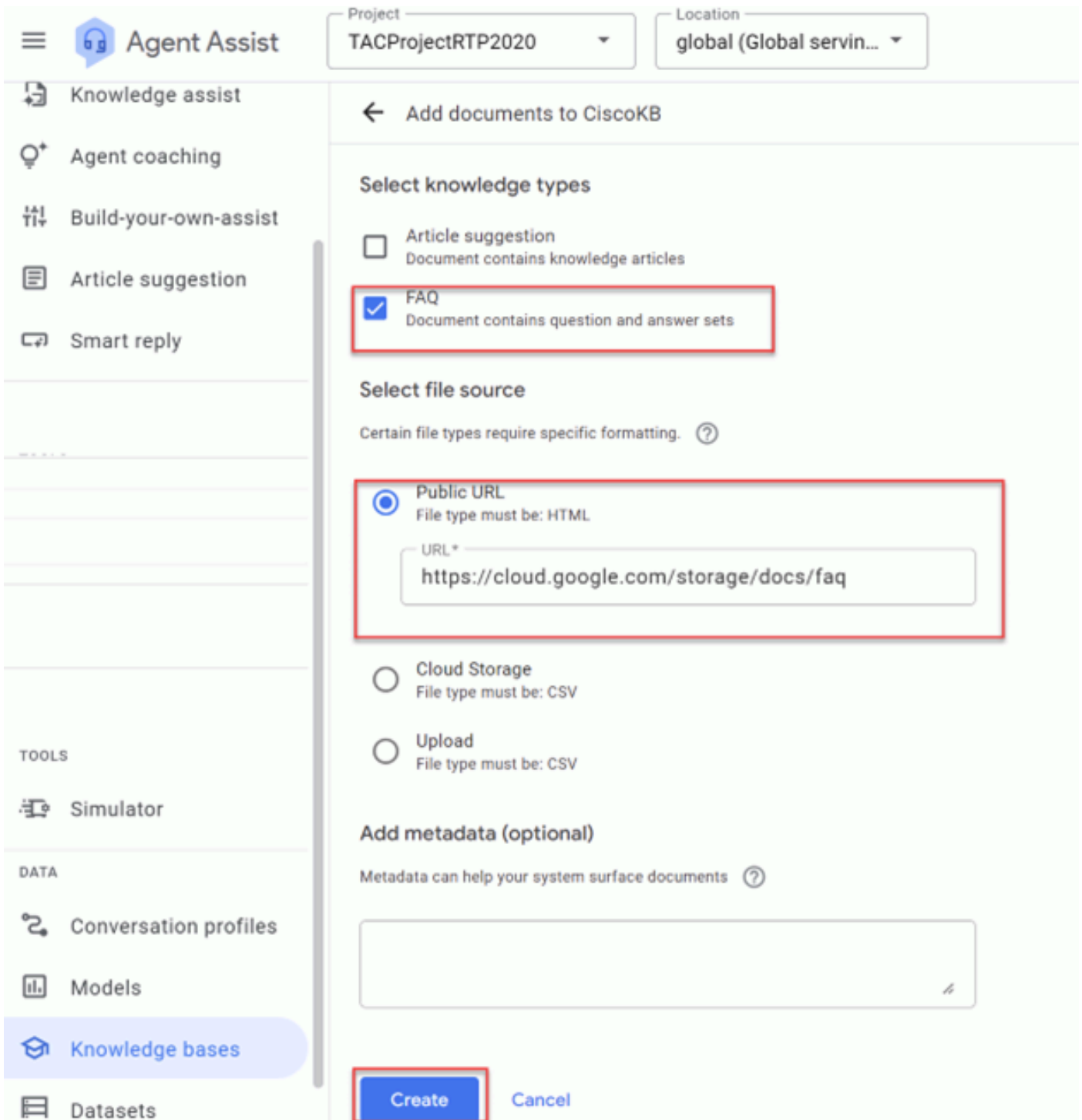
the document is now created. You can add more documents to the knowledge base with the same procedure.

Create a Conversation Profile

A **conversation profile** configures a set of parameters that control the suggestions made to an agent. These parameters control the suggestions that are surfaced during runtime. You must create a conversation profile in order to establish a dialog with an end-user and this a required parameter for the CCAI CCE Features configuration.

Step 1. On the Google Agent Assist, select Conversation profiles from the left sidebar menu.

Step 2. Click +**Create new**, on the top right of the page or +**Create** if you have already created other conversation profiles.

Step 3. In the **Display name** box, enter a unique name for your conversation profile and select the language.

← New conversation profile

Display name

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

Display name
CiscoCP

Language

Specify a language for your conversation profile

Language*
en - English   ▼

Step 4. From the list of available options, for **Suggestion types** select FAQ.

Suggestion types

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

- [ ] **Conversation summarization (generator)**
  Generate a customizable LLM powered summary of a conversation

- [ ] **Conversation summarization (legacy)**
  Generate a summary of a conversation

- [ ] **Conversation summarization (legacy - voice)**
  Generate a summary of a voice conversation

- [ ] **Generative knowledge assist**
  Query your knowledge base and receive LLM-generated answers

- [ ] **Agent coaching**
  Provide realtime best practice suggestions to agents

- [ ] **Build-your-own-assist**
  Use features you built on the Agent Assist generator platform

- [ ] **Smart reply**
  Surface pre-written responses

- [ ] **Article suggestion**
  Surface articles contextual to the conversation

- [ ] **FAQs**
  Auto-surface answers to customer questions

Pub/Sub notifications

Use Pub/Sub to send suggestion notifications as your conversation proceeds and new suggestions are availab

Step 5. When you select the suggestion type, you see the options to enter the **Confidence threshold** and **Maximum suggestions** values. Maximum suggestions are the number of response suggestions or knowledge suggestions returned, and the confidence threshold refers to the model level of confidence that each knowledge suggestion or response suggestion is relevant to the customer request. A higher confidence value increases the likelihood of relevant responses being returned but can result in fewer or no responses returned if no available option meets the high threshold value. For FAQ, Google suggest that you set the confidence threshold to FAQ Assist=0.4. Google also recommends that you start with a maximum suggestions value of 3 in all cases.

FAQs
Auto-surface answers to customer questions

Suggestion model type
Baseline model

A general, pre-trained model provided by Google that requires no transcript data to use.

Knowledge bases*
CiscoKB ✕

Format: projects/<Project ID>/locations/<Location>/knowledgeBases/<Knowledge Base ID>

Confidence threshold *

0.4

It is recommended to set it to 0.4 initially, then change it incrementally until you are satisfied with the suggestions

Max suggestions*
3

Step 6. (Optional) Enable **Sentiment analysis**. This feature analyzes messages from both the agent and end-user to determine emotional intent. For now, leave it disabled.

Step 7. (Optional) Enable handoff to a Dialogflow virtual agent. Virtual agents are automated agents that attempt to resolve customer issues before escalating to a human agent. For this feature there is no need to select the virtual agent, but if you want the customer call to be handled by a Dialogflow CX Virtual agent first before the call is transferred to a real agent, you can enable this option and select the Dialogflow CX virtual agent you created in this project.

Step 8. Click **Create**. It takes several minutes until the conversation profile is ready to use.

✎ **Note**: When you configure Agent Answers in Control Hub, you need to provide the Conversation profile id. Copy the Integration ID. Click **Copy to Clipboard**. This is used later in the Control Hub configuration.
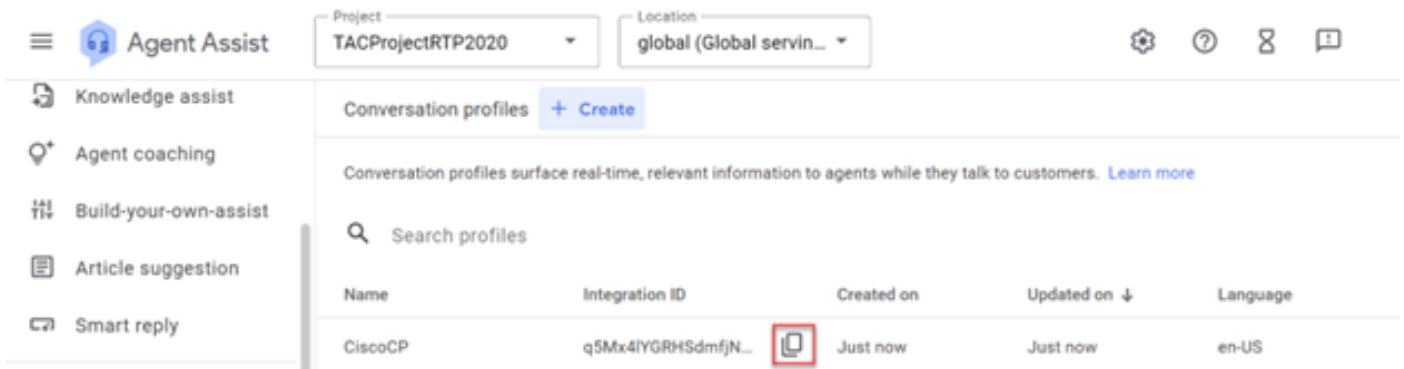

Webex Control Hub Configuration

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**.
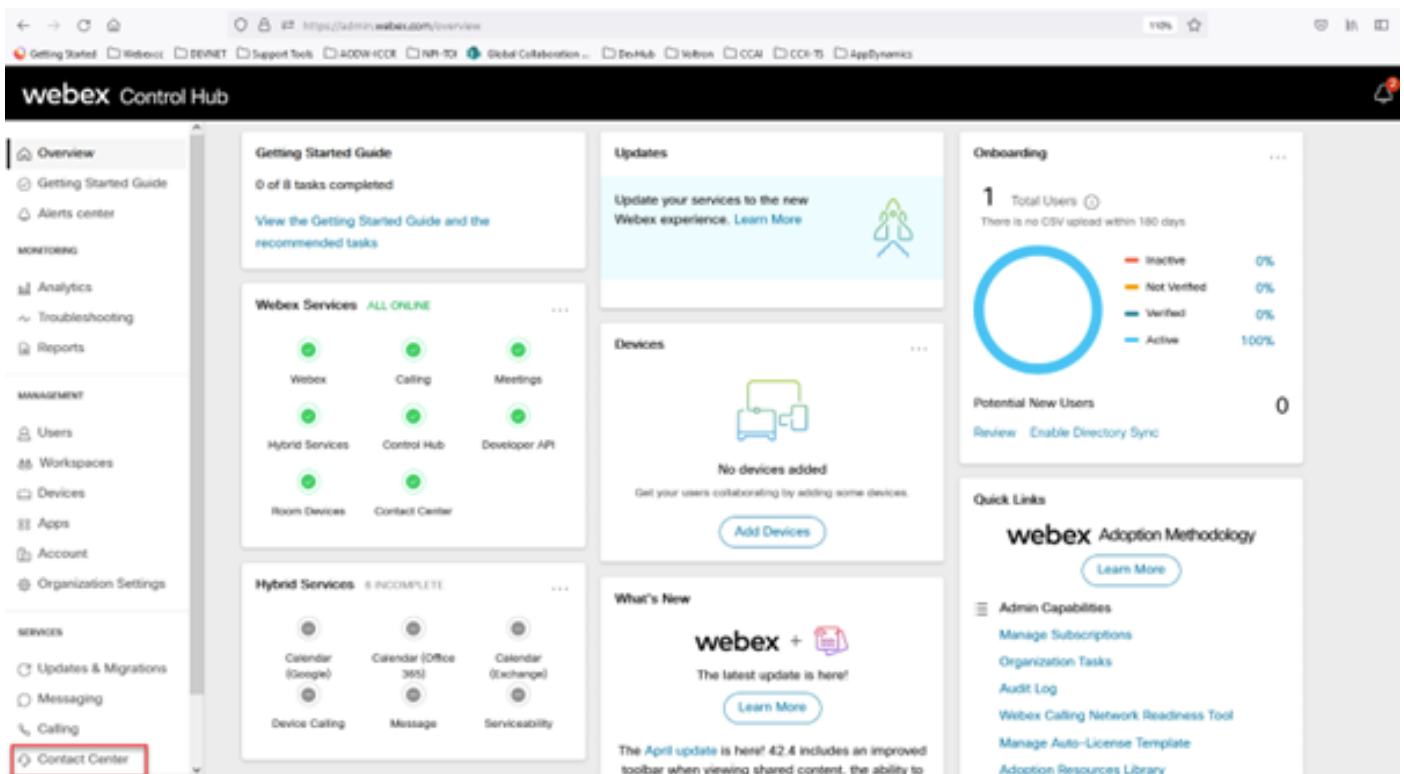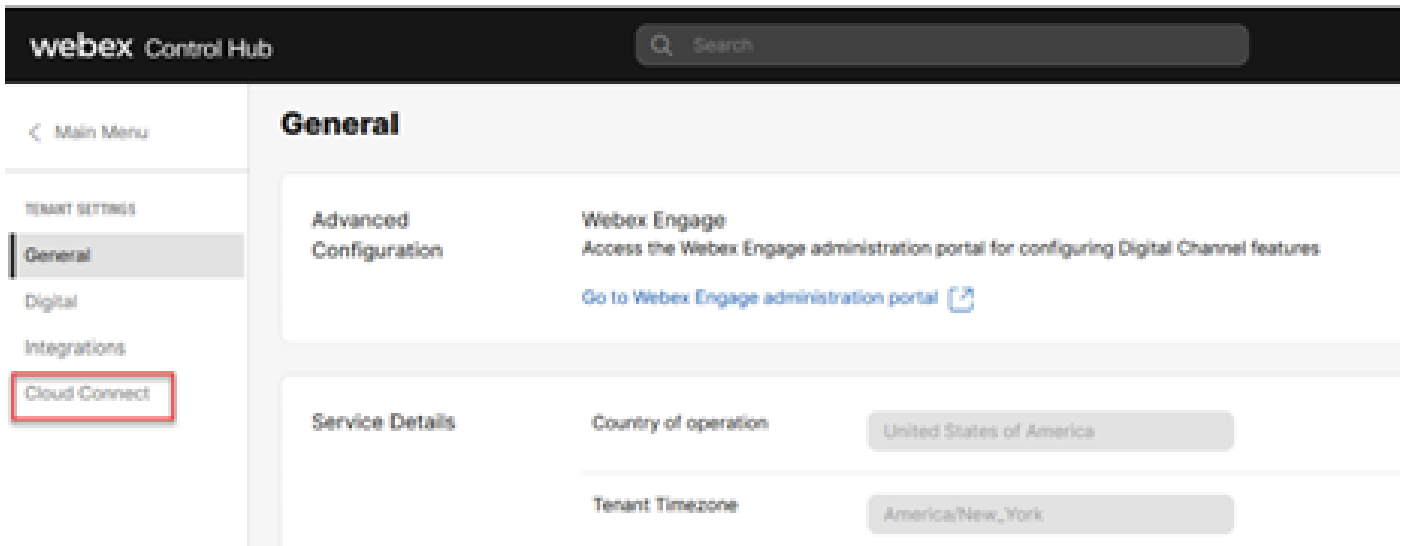
Step 3. On Cloud Connect window enter the name and the Fully Qualified Domain Name (FQDN) of Primary Cloud connect.
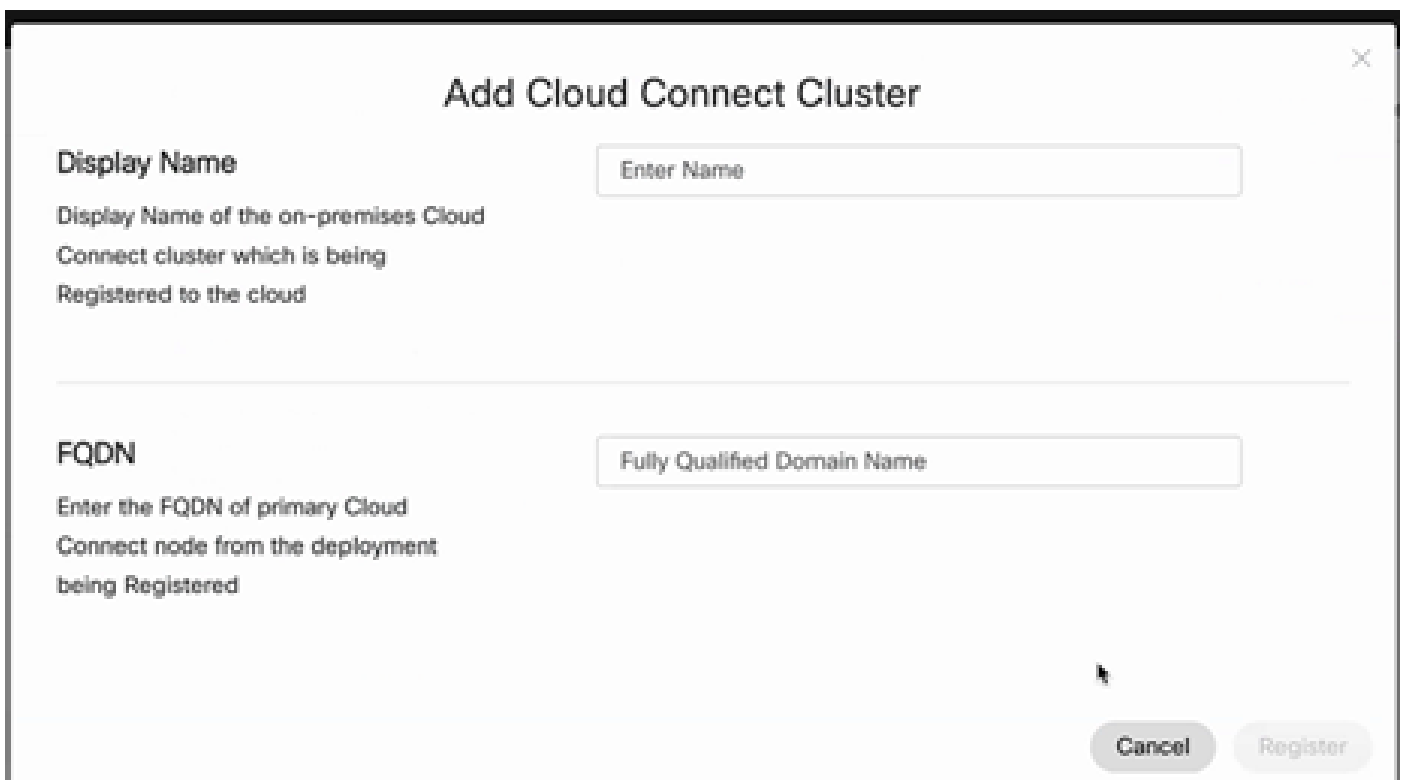
Step 4. On Cloud Connect window enter the name and the FQDN of Primary Cloud connect and click **Register**.

Step 5. On the Allow Access window, check the box **Allow Access to the Cloud Connect Node** and click **Continue**.

Step 6. Add a Connector. On the Contact Center window select Integrations and then Connectors. Click **Add More**.
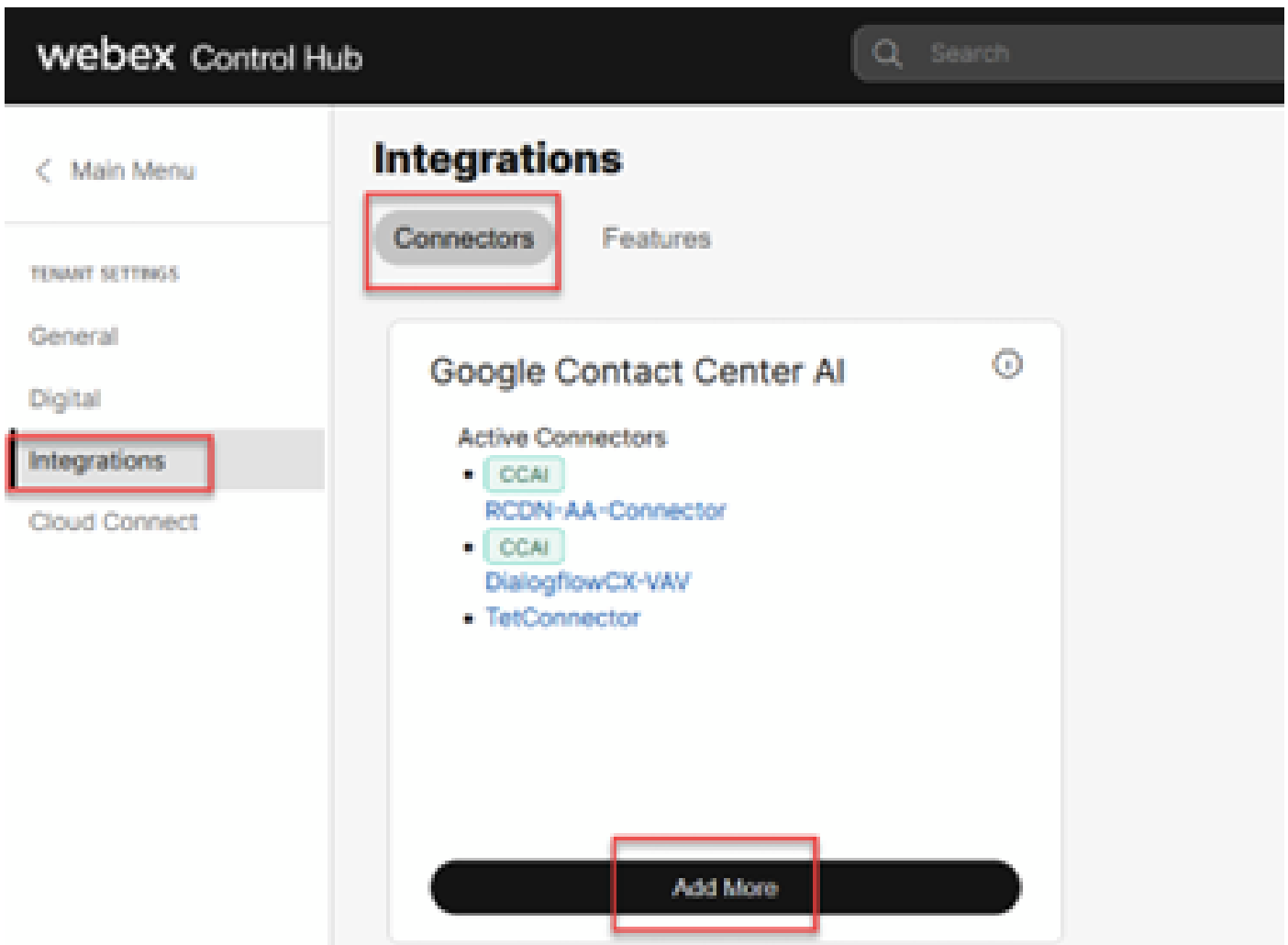
Step 7. If a connector is already added and you need to add one more, click on Add More. Sign in with Google and continue with the instructions.

✎ **Note:** The user account that you sign in with Google must have the owner role of the Google project.
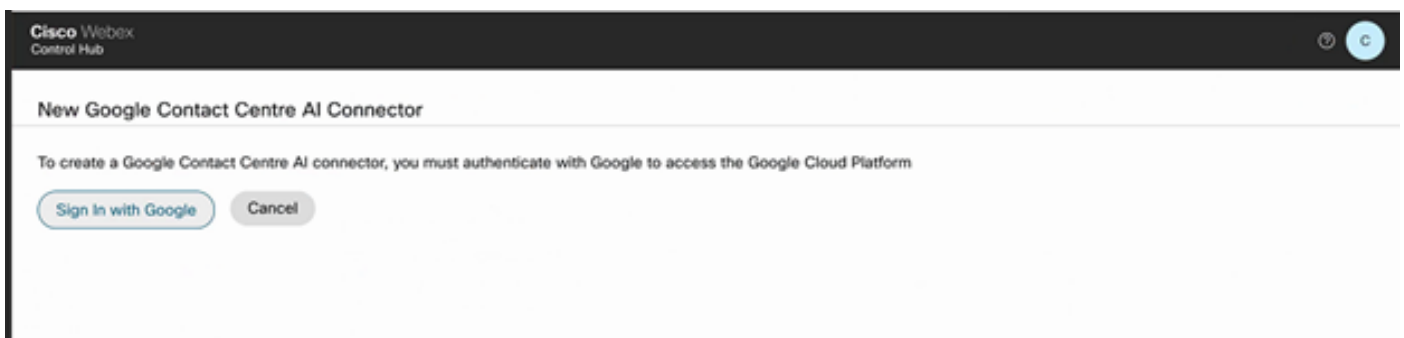
Step 8. On the Connector page provide this information and click **Save**.

Name: Name of the Connector

CCAI Project Name: Name of the Google project you have created

Billable Project Name: Name of the Google project Cisco provided when you provisioned your Google project

**Billable Service Account**: Service account that Cisco provided, and you added to your Google project.

Now the connector is created, and a Jason key is automatically created in the Cisco Google project.

Step 9. Add the features. On the **Contact Center** -> **Integration** page, click **Features** and click **New**.
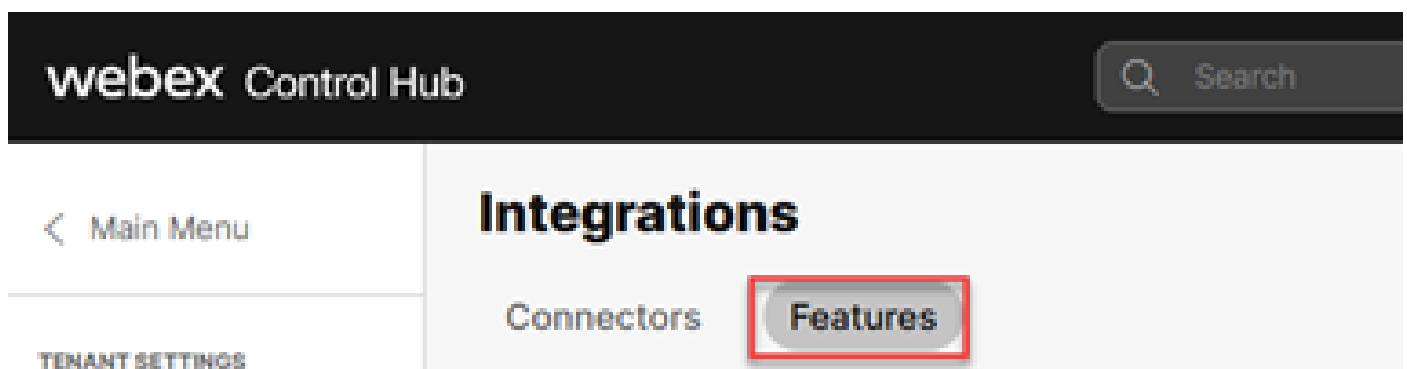
Step 10. You are now in the Create a New Contact Center Feature page. Click **Contact Center AI Config**.

Create a new Contact Centre feature

Contact Centre AI Config

Create configurations that can provide AI capability to your flow.
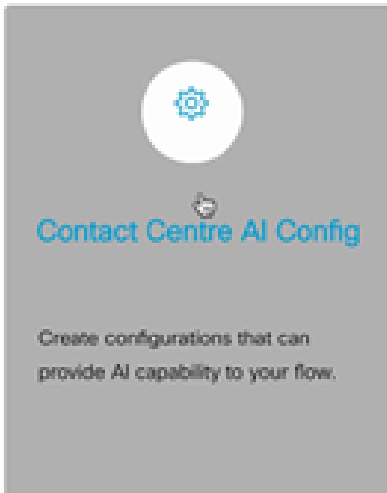
Step 11. Provides the feature information, select the connector already added, and the Google conversation profile created.

Config Name: Any Name you want to call this feature. For example. AA-TACRCDN

Description(Optional): For example: Agent Answers feature for RCDN

Connector: Select the Connector previously created

Google Conversation profile: Copy the Conversation profile form Agent Assist.

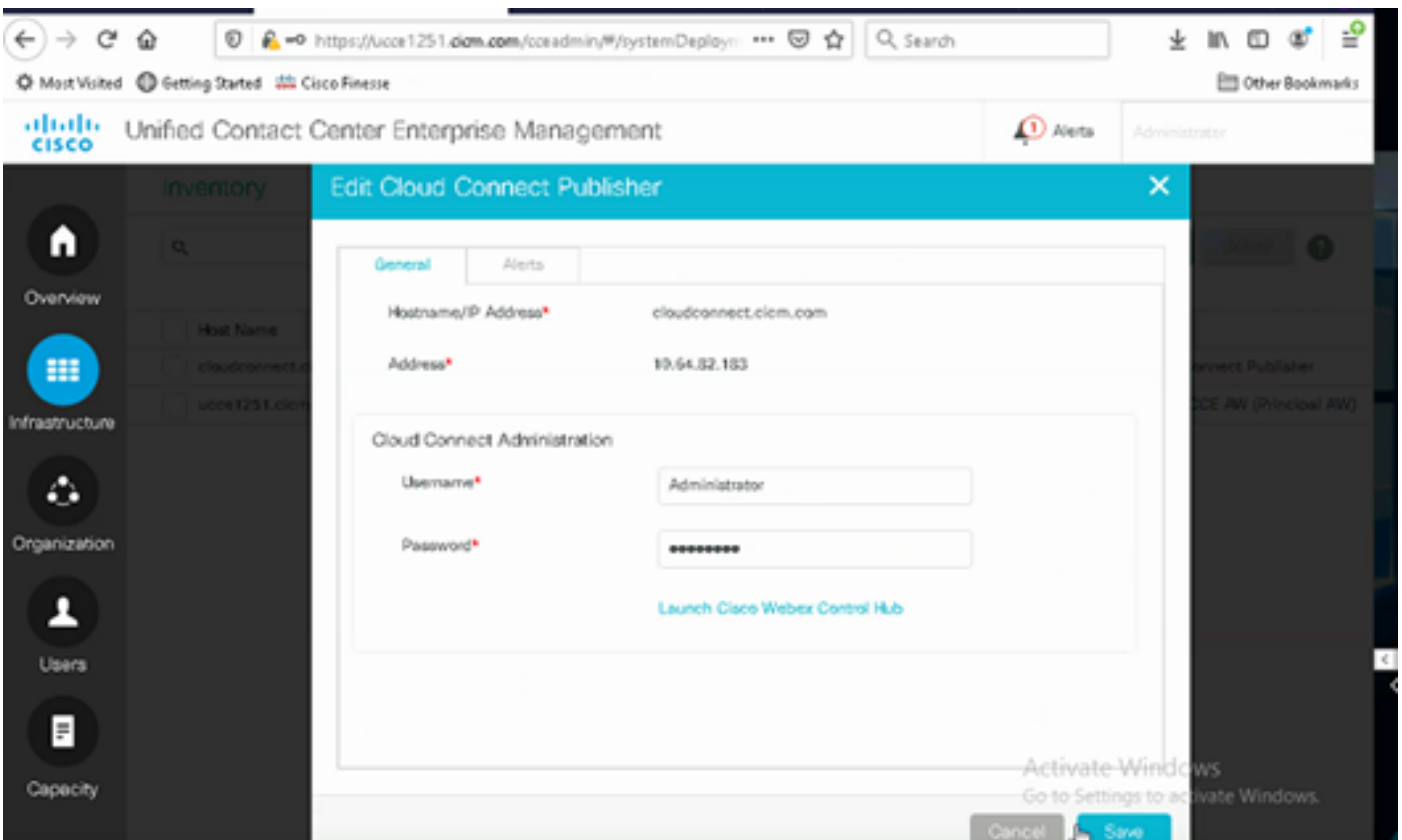> ✏️ **Note:** You can select this feature as the default for Agent Answers and Virtual Agent. In that case you would not need to associate a configured feature with contact Center Call Type.

CCE Configuration

Step 1. On PCCE AW, open Cisco Web Administration tool (SPOG) and navigate to Inventory. Click **New**.
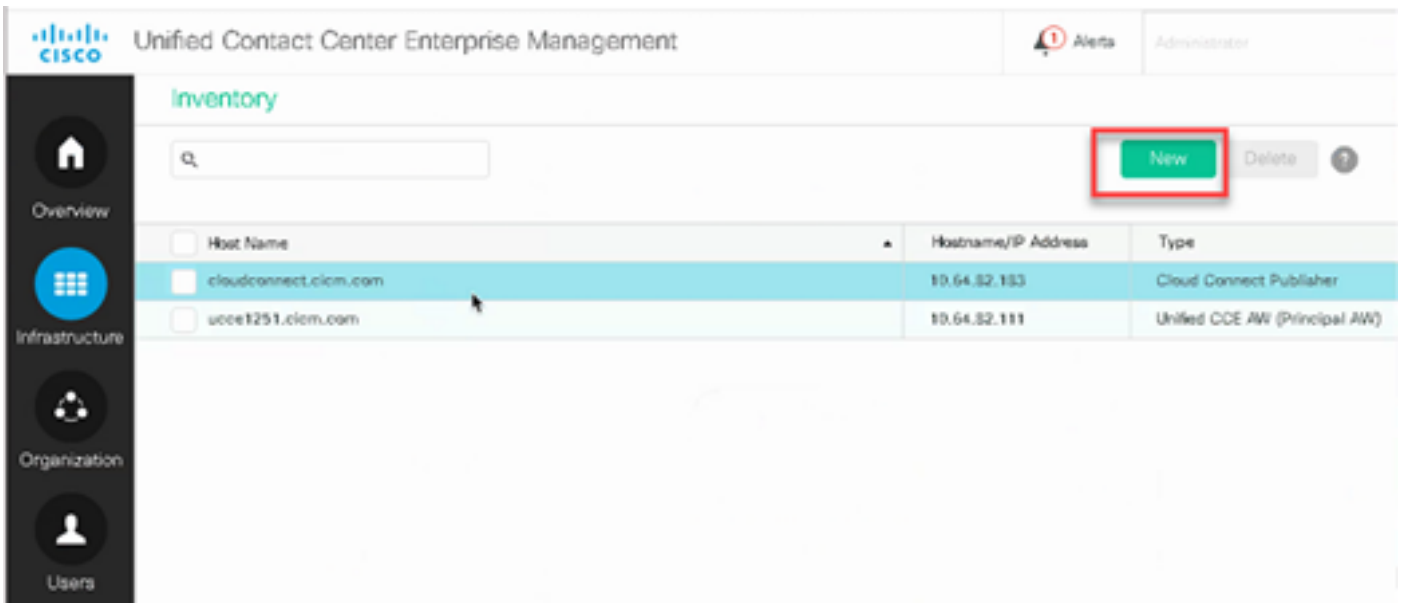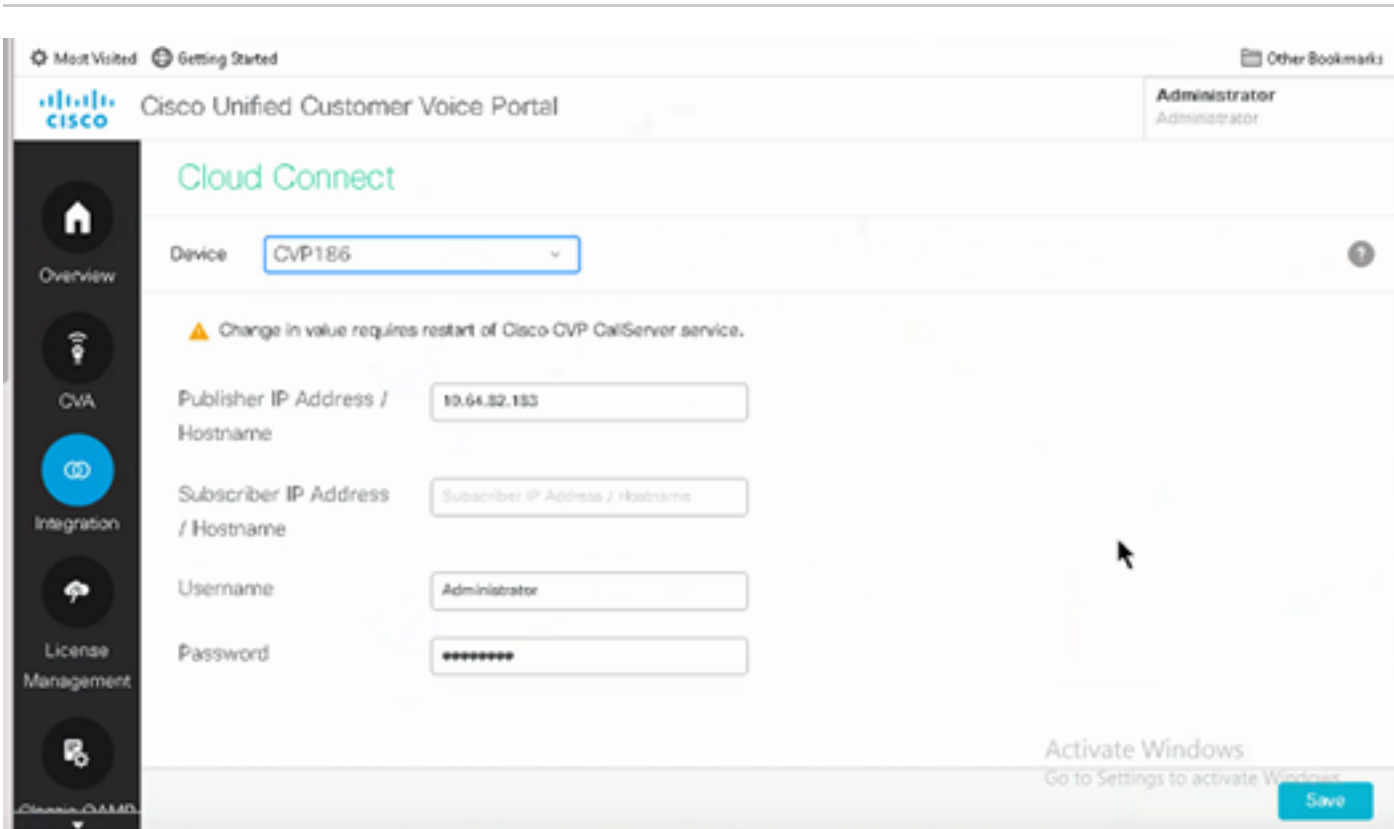
Step 2. Add Cloud Connect and provide the FQDN and credentials.

✎ **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*.

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. To associate the CCAI configuration to all call types, you need to ensure you have selected a default agent answers feature in Control Hub. In the Unified CCE Administration, navigate to Overview > Features > Contact Center AI and select Cisco Bill, then you can see the default agent answers feature selected for all call types.

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 Call settings -> Route Settings and select Call Type.

Overview

Infrastructure Settings
Inventory, Deployment Settings, License Management, Device Configuration

Call Settings
MRD, Call Types, Dial Settings

Call Settings

Route Settings

IVR Settings

Bucket Intervals

Miscellaneous
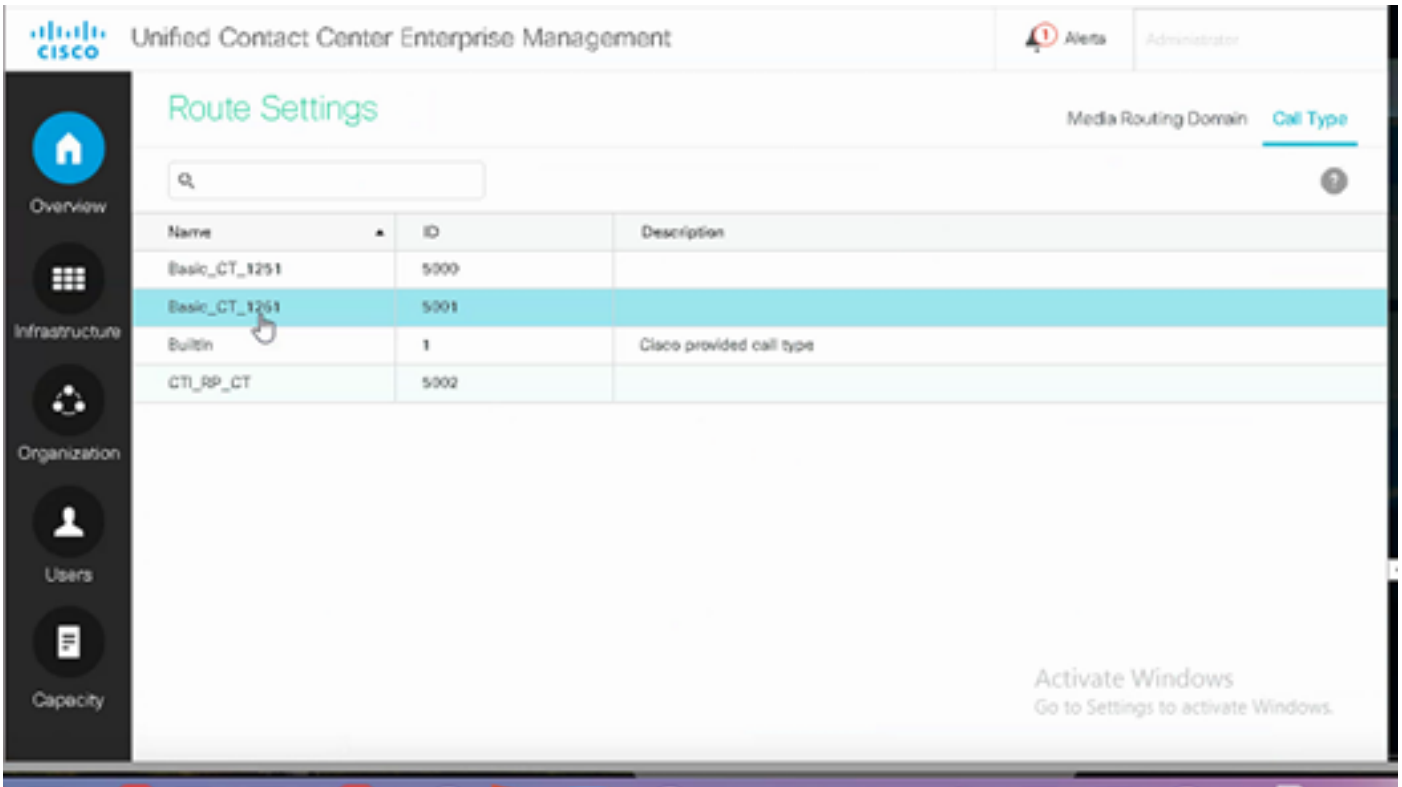
2. Click the **Contact Center AI** tab and select the Contact Center AI configured on the Control Hub and click Save.
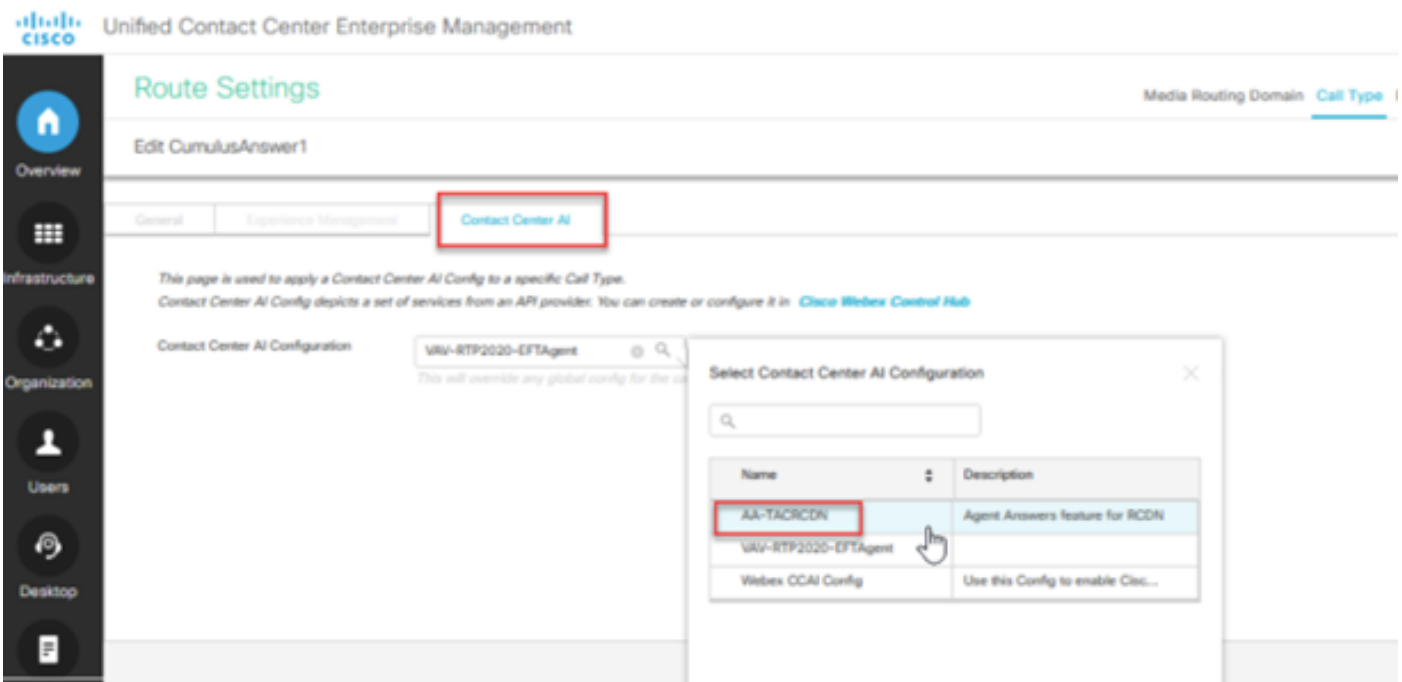
Finesse Configuration

✎ **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.
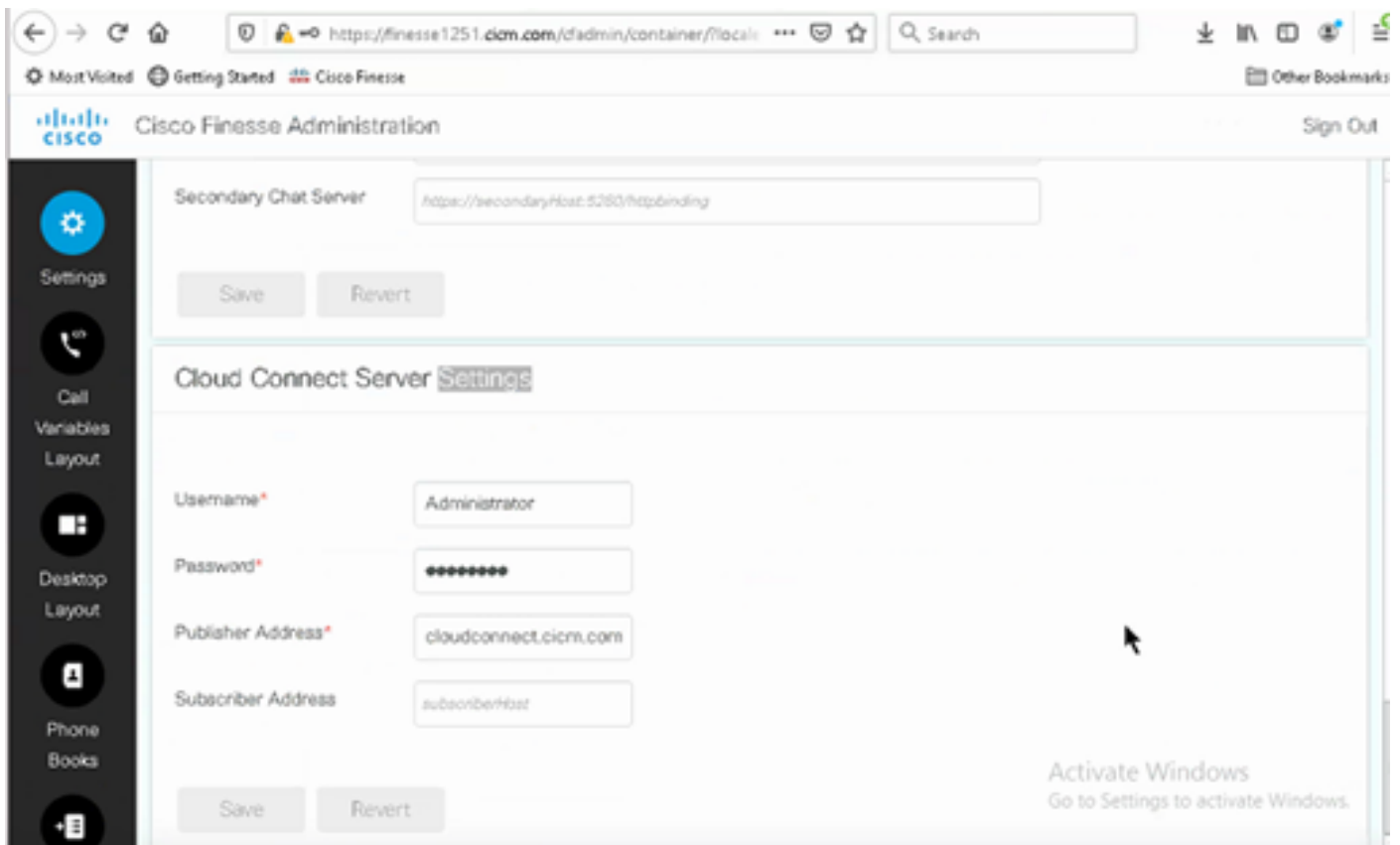
Step 4. Add the Agent Answers gadget on the Finesse Desktop Layout. On the Cisco Finesse Administration Page, click **Desktop Layout** and remove the comment on the gadget information related to Agent Answers.
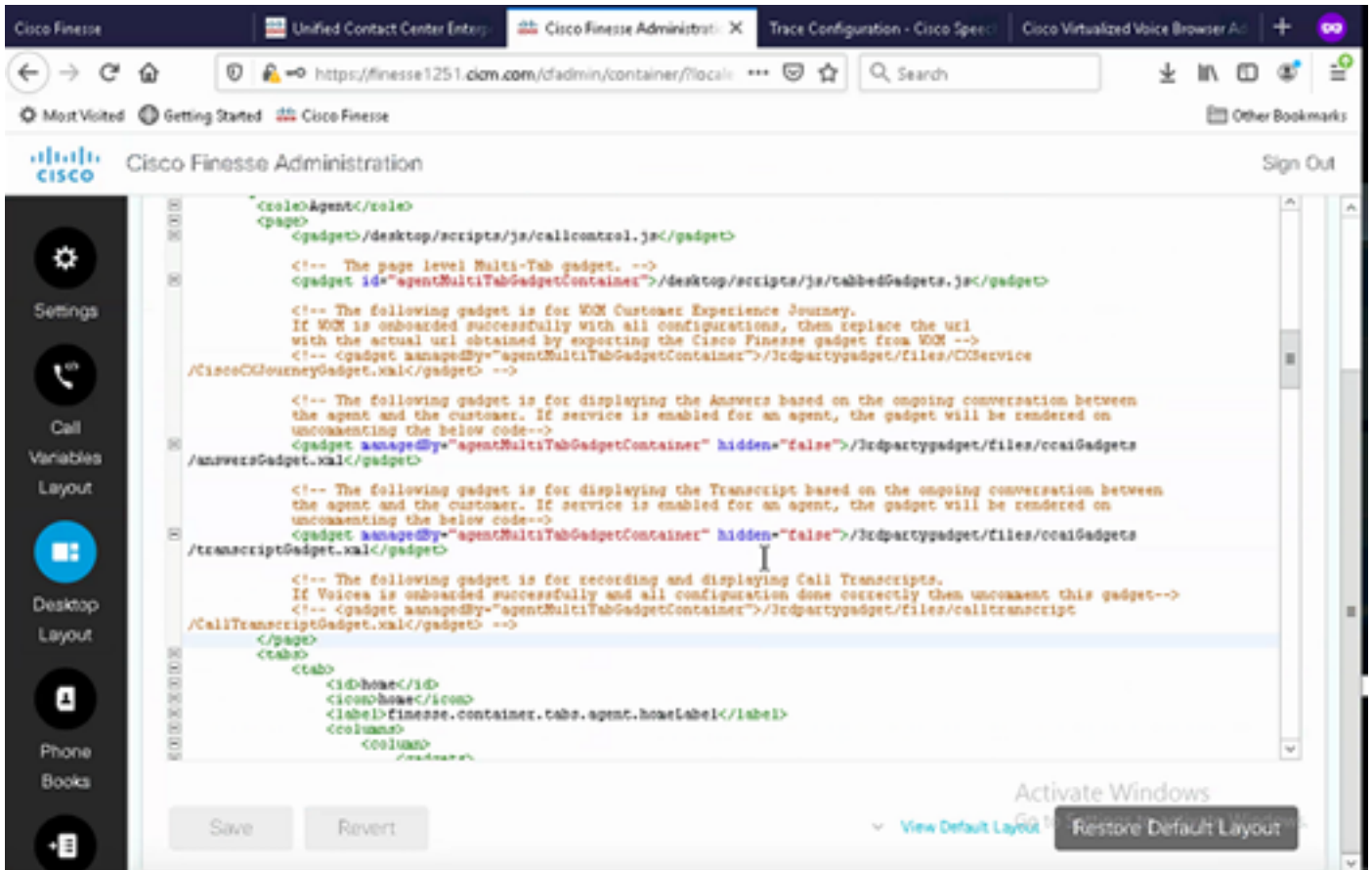
Step 5. On CCE Administration Page select Agents and on Manage Agents enable the CCAI services. Once enabled, the Agent Answers gadget appears on the Home tab and displays relevant articles and suggestions during a call. For details on how to use the gadget, visit the *Contact Center AI Gadgets guide*. 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 Cisco Finesse Administration Guide](#)*.

Unified Contact Center Enterprise Management
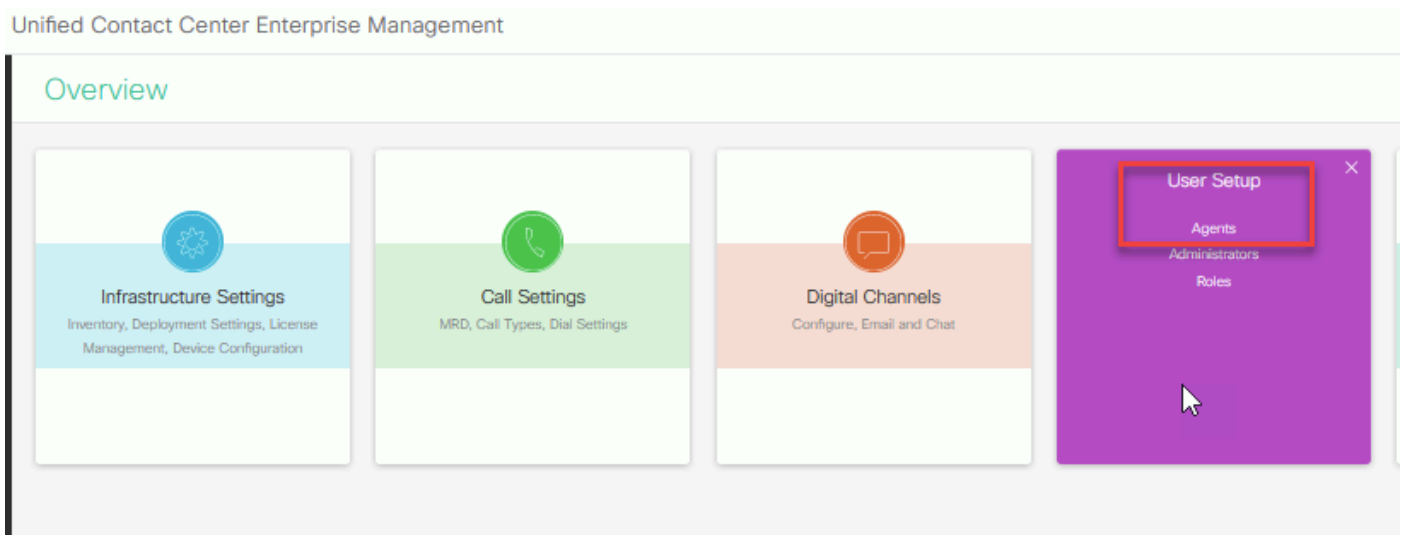
Agents

	Type ▲	Username	Last Name	First Name	Description
☐	Ⓐ	bwayne	Wayne	Bruce	Cumulus – Outbound Simulator Agent
☐	Ⓐ	cgbmargera	Margera	Bam	Cumulus – Call Gen Agent
☐	Ⓐ	cgcpontius	Pontius	Chris	Cumulus – Call Gen Agent
☐	Ⓐ	cgjackson	Jackson	Sammy	Cumulus – Call Gen Agent
☐	Ⓐ	cgjknoxville	Knoxville	Johnny	Cumulus – Call Gen Agent
☐	Ⓐ	cgjolie	Jolie	Angel	Cumulus – Call Gen Agent
☐	Ⓐ	cgmoore	Moore	Demetra	Cumulus – Call Gen Agent
☐	Ⓐ	cgpitt	Pitt	Bradley	Cumulus – Call Gen Agent
☐	Ⓐ	cgsmith	Anniston	Jenna	Cumulus – Call Gen Agent
☐	Ⓐ	cgsteveo	O	Steve	Cumulus – Call Gen Agent
☐	Ⓐ	cgwillis	Willis	Bruce	Cumulus – Call Gen Agent
☐	Ⓐ	dduck	Duck	Donald	Cumulus – Call Gen Agent
☐	Ⓐ	dmarino	Marino	Dan	Cumulus – Call Gen Agent
☐	Ⓐ	efudd	Fudd	Elmer	Cumulus – Call Gen Agent
☐	Ⓐ	hliang	Liang	Helen	Cumulus – UWF Agent
☐	Ⓐ	jelway	Elway	John	Cumulus – Call Gen Agent
☐	Ⓐ	jmontana	Montana	Joe	Cumulus – Call Gen Agent
☐	Ⓐ	jopeters	Peterson	Josh	Cumulus – CRM Agent
☐	Ⓐ	mariaqui	Quinteros	Maria	Cumulus – CallTrack Agent
☐	Ⓐ	mmouse	Mouse	Mickey	Cumulus – Call Gen Agent
☐	Ⓐ	oharvey	Harvey	Owen	Cumulus – Outbound Agent
☐	Ⓐ	pparker	Parker	Peter	Cumulus – Outbound Simulator Agent
☐	Ⓐ	rcunningham	Cunningham	Randall	Cumulus – Call Gen Agent
☐	Ⓐ	sjeffers	Jefferson	Sandra	Cumulus – Main Agent

Sidebar Navigation
- Overview
- Infrastructure
- Organization
- Users
- Desktop
- Capacity

✎ **Note**: If in the Finesse servers you have cors allowed_origin configured, make sure to add the cloud connect servers with this command: **utils finesse cors allowed_origin add https://{Cloudconnect FQDN}.** Restart the Finesse tomcat and the Finesse Notification Service after you add the cloud connect servers.

CUBE and CVP Configuration

Ensure Agent Answers is configured on a supported CUBE platform. For more details on supported CUBE platforms and configuration, see the WebSocket-Based Media Forking for Cloud Speech Services chapter in the *Cisco Unified Border Element Configuration Guide - Cisco IOS XE 17.6 Onwards* at https://www.cisco.com/c/en/us/td/docs/ios-xml/ios/voice/cube/ios-xe/config/ios-xe-book/websocket-forking-for-cube.html.

> **Note**: Agent Answers feature uses the RTMS Data Center Webex Services on CCE 12.6.2 and CVP 12.6.2 ES15 onwards, instead of the WxCC Data Center Webex Services . RTMS Webex Services support only GCM ciphers. Cisco IOS XE 17.12.1a onwards have GCM ciphers enabled. For CUBE / VCUBE Cisco IOS version supported, please refer to the latest PCCE/UCCE Features Guide and Compatibility matrix.

Step 1. On CUBE / 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
```

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
```

Note: These media forkings are not supported: Network-Based Recording, Media Proxy and Extended Media Forking - XCC or XMF

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](#)
- [PCCE Features Guide 12.6.2](#)
- [UCCE Features Guide 12.6.2](#)
- [Websocket Forking For CUBE](#)
- [CCE Compatibility Matrix 12.6.X](#)
- [Technical Support & Documentation - Cisco Systems](#)