



Webex WFO and Webex Contact Center Integration Guide

For Deployments with New WFM

First Published: July 20, 2021

Last Updated: November 11, 2025

Americas Headquarters

Cisco Systems, Inc.
170 West Tasman Drive
San Jose, CA 95134-1706
USA
<http://www.cisco.com>
Tel: 408 526-4000
800 553-NETS (6387)
Fax: 408 527-0882

|

THE SPECIFICATIONS AND INFORMATION REGARDING THE PRODUCTS IN THIS MANUAL ARE SUBJECT TO CHANGE WITHOUT NOTICE. ALL STATEMENTS, INFORMATION, AND RECOMMENDATIONS IN THIS MANUAL ARE BELIEVED TO BE ACCURATE BUT ARE PRESENTED WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED. USERS MUST TAKE FULL RESPONSIBILITY FOR THEIR APPLICATION OF ANY PRODUCTS. THE SOFTWARE LICENSE AND LIMITED WARRANTY FOR THE ACCOMPANYING PRODUCT ARE SET FORTH IN THE INFORMATION PACKET THAT SHIPPED WITH THE PRODUCT AND ARE INCORPORATED HEREIN BY THIS REFERENCE. IF YOU ARE UNABLE TO LOCATE THE SOFTWARE LICENSE OR LIMITED WARRANTY, CONTACT YOUR CISCO REPRESENTATIVE FOR A COPY.

The Cisco implementation of TCP header compression is an adaptation of a program developed by the University of California, Berkeley (UCB) as part of UCB's public domain version of the UNIX operating system. All rights reserved. Copyright © 1981, Regents of the University of California.

NOTWITHSTANDING ANY OTHER WARRANTY HEREIN, ALL DOCUMENT FILES AND SOFTWARE OF THESE SUPPLIERS ARE PROVIDED "AS IS" WITH ALL FAULTS. CISCO AND THE ABOVE-NAMED SUPPLIERS DISCLAIM ALL WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING, WITHOUT LIMITATION, THOSE OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT OR ARISING FROM A COURSE OF DEALING, USAGE, OR TRADE PRACTICE.

IN NO EVENT SHALL CISCO OR ITS SUPPLIERS BE LIABLE FOR ANY INDIRECT, SPECIAL, CONSEQUENTIAL, OR INCIDENTAL DAMAGES, INCLUDING, WITHOUT LIMITATION, LOST PROFITS OR LOSS OR DAMAGE TO DATA ARISING OUT OF THE USE OR INABILITY TO USE THIS MANUAL, EVEN IF CISCO OR ITS SUPPLIERS HAVE BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.

Any Internet Protocol (IP) addresses and phone numbers used in this document are not intended to be actual addresses and phone numbers. Any examples, command display output, network topology diagrams, and other figures included in the document are shown for illustrative purposes only. Any use of actual IP addresses or phone numbers in illustrative content is unintentional and coincidental.

All printed copies and duplicate soft copies of this document are considered uncontrolled. See the current online version for the latest version.

Cisco has more than 200 offices worldwide. Addresses and phone numbers are listed on the Cisco website at www.cisco.com/go/offices.

Cisco and the Cisco logo are trademarks or registered trademarks of Cisco and/or its affiliates in the U.S. and other countries. To view a list of Cisco trademarks, go to this URL: www.cisco.com/go/trademarks. Third-party trademarks mentioned are the property of their respective owners. The use of the word partner does not imply a partnership relationship between Cisco and any other company. (1721R)

© 2021-2025 Cisco Systems, Inc. All rights reserved.

Audience

- The integration's available and unavailable features
- The integration's supported and unsupported features
- High-level architecture overview
- Configuration procedures
- Specific integration details

This integration guide is primarily designed for customers as well as official Cisco partners who typically install and configure Webex WFO for customers. Additionally, Cisco implementation engineers, support engineers, sales engineers, development, and marketing can find helpful information in this guide.

Cisco Webex Contact Center 1.0 and 2.0 Overview

There are two versions of the integration between Webex WFO and Cisco Webex Contact Center (CWCC). Those versions are CWCC version 1.0 and CWCC version 2.0. These versions are compatible with different sets of APIs that are called 1.0 (legacy) APIs, CMSv2 APIs (transitional APIs that are used to transition CWCC 1.0 deployments to CWCC 2.0), and 2.0 (programmable APIs).

See [Configuration Procedures](#) for more information on which procedure to follow based on which APIs your deployment uses.

IMPORTANT CWCC 1.0 appears in the Webex WFO product as Cisco Customer Journey Platform.

Version and feature availability

Version and feature	CWCC 1.0 with legacy CMSv1 APIs	CWCC 1.0 to 2.0 with CMSv2 APIs	CWCC 2.0 with legacy CMSv1 APIs	CWCC 2.0 with Programmable APIs
Stereo recording	N/A	Available	Available	Available
Audio pause and resume (manual only)**	Available	Available	Available	Available
Screen recording pause and resume (manual only)**	Available	Available	N/A	Available

NOTE For pauses (hold events) Webex WFO inserts silence for audio recordings and inserts a blank screen for screen recordings.

**Cisco Webex Contact Center (CWCC) has two options for pause and resume. One option is for manual pause and resume, which uses Cisco Agent Desktop. The second option is for automated pause and resume, which requires Cisco APIs. For the API-based option, the API commands have to be sent to the Cisco Smart

Desktop software for it to redact audio. Redacted audio from the pause and resume data is synced from CWCC to Webex WFO. Once Webex WFO ingests the redacted audio, if screen recording is involved, Webex WFO auto-redacts the screen based off of the redacted audio prior to the contact being presented in Webex WFO. Both manual and automated pause and resume options require the user to have Cisco Agent Desktop software installed. The Webex WFO manual and automated pause and resume options are not applicable to the CWCC integration. Webex WFO automatic pause and resume is not available because the RTP signal, which is required for Webex WFO initiated automated events, is not going through Webex WFO.

IMPORTANT Pause and resume must be enabled by Cisco. Please contact your Cisco Account Manager to request access.

Introduction

Webex WFO is a unified workforce optimization (WFO) software suite that integrates with Cisco Webex Contact Center to provide call recording, quality management, workforce management, voice-of-the-customer (VoC) analytics, and data management. The details around the supported integrations are listed below.

NOTE Supported features are available in both Webex Contact Center version 1.0 and Webex Contact Center version 2.0 unless otherwise stated.

Quality Management (QM)

Quality Management is the heart of the Workforce Optimization suite. It is the beginning of the data trail which leads to the voice of the customer. Take serving your customer to the next level with a focus on quality and engage your agents to drive retention.

Available Features

Feature	Supported	Currently Unsupported
Webex WFO records audio		X
Webex WFO imports audio recording from Cisco Webex Contact Center	X Version 1.0: There is an import delay of two to three hours. Version 2.0: Contact import occurs when the recording is made available to Webex WFO from Webex Contact Center. Imports take up to fifteen minutes.	
Webex WFO screen recording	X	
Webex WFO storage required for storing audio in the cloud	X	
Cloud-to-cloud integration for data transfer	X	

Feature	Supported	Currently Unsupported
	Data transfer via APIs is built into the integration	
Webex WFO ingests audio recording pause and resume (manual and automatic)	See Cisco Webex Contact Center 1.0 and 2.0 Overview for information on the current availability of audio recording pause and resume, screen recording pause and resume, and stereo recording.	
Webex WFO ingests screen recording pause and resume (manual and automatic)		
Stereo recording		
Custom metadata	X	
	2.0 only	
Recordings encrypted	X	
Speech energy events	X***	
	Silence and talk over events only	Hold and pause events are not supported
Live voice monitoring	X	
	Available via Webex Contact Center Call Monitoring	
Live screen monitoring	X	
	via Webex WFO Smart Desktop client	
Sync supported	X	
Contact metadata import	X	
CRM integration	X*	
Agent web recording controls and		X**

Feature	Supported	Currently Unsupported
recording controls API		
Supports multichannel integration	X	
Voice channels	X	
Digital channel - Chat	X	
	See About Webex WFO Digital Channel Support	
Digital channel - SMS	X	
	See About Webex WFO Digital Channel Support	
Digital channel - Email	X	
	See About Webex WFO Digital Channel Support	

**Open product integration review.*

*** Start/stop API controls are available for screen only recording. Additional Cisco Technical Support may be required to implement any API driven screen only recording.*

****You can configure the amount of time that talk over or silence must pass to register as events. See "Talk Over Events" and "Silence Events" in [Configure QM global settings](#).*

NOTE Tagging calls with Webex WFO custom metadata in chunk recording scenarios is not supported.

NOTE Screen recordings are recorded in 10 minute chunks for the duration that the agent is logged in. Screen recordings matching the times of audio received from CWCC are assembled by the desktop client from these chunks and uploaded.

Edge Components

Component	Required	Not Required
Data Server for sync, capture, real-time events, and media import		X
Smart Desktop for screen recording, live screen monitoring, and desktop analytics features	X	
Smart Desktop on Windows OS	(available)	
Smart Desktop on Mac OS		(unavailable)

*If you are migrating from a data server to a serverless integration, please contact Cisco Technical Support. See [Introduction](#).

You need to have **Segment recording**, **Consult leg recording**, and **Complex calls** enabled. See [Complex call events](#) for more information.

Workforce Management (New WFM)

WFM is a unified, user-focused software with a modern approach. Hone forecasting, streamline scheduling and administration, and free managers to focus on adding value. Put the right people in the right places. Empower them to work smarter and deliver a consistent and outstanding customer experience.

WFM synchronizes data for configuration purposes and historical data association. Webex WFO WFM synchronizes historical and real-time data for use with scheduling and forecasting of the workforce.

Available Features

Feature	Supported	Currently Unsupported
Real-time adherence data feed	X	
Real-time adherence data feed (omni-channel)		X
Historical data feed - queue statistics	X	

Feature	Supported	Currently Unsupported
Historical data feed - agent statistics	X	
Historical data feed - agent queue statistics	X	
Forecasting (voice)	X	
Forecasting (chat)	X	
Forecasting (email)	X	

Analytics

Analytics features a repository of ready-made advanced analytics applications to help you create a big impact without the learning curve. Unlock the goldmine of intelligence buried in your contact center and transform every customer and agent contact into actionable insights.

Available Features

Feature	Supported	Currently Unsupported
Speech Analytics (Speech-to-Text)	X**	
Desktop Analytics	X*	
	Not synced with recordings	
Text Analytics	X	
	Hold events (pauses) are reflected as blank white space with no transcription.	
Dashboards with drill-down	X	
Predictive Evaluation Score	X	
Predictive NPS	X	

Feature	Supported	Currently Unsupported
Sentiment Analysis	X	
Agent Smart Benchmarking	X	
Advanced Speech Search	X	
Omni Agent Intelligence	X	

An engagement with Cisco
Professional Services is
required.***

**Desktop Analytics data is available in Analytics dashboards and Data Explorer. However, because of how desktop data is processed, it is unavailable in the Media Player's Desktop panel.*

*** In CWCC version 1.0 stereo recording is currently unavailable; therefore transcriptions are not divided by speaker.*

****Omni Agent Intelligence relies on custom metadata. See [Sync Metadata to Webex WFO](#) for more information.*

Insights

Insights is an AI-powered BI solution that is a core part of the Webex WFO suite. Insights provides blended, non-siloed reporting that enables you to seamlessly combine all of your workforce engagement management and customer interaction data from across Webex WFO. Insights empowers you to visualize your Webex WFO data through actionable reports and dashboards. You need an Insights license for access to the listed features. See [How licenses work](#) and [Manage roles and permissions](#) for more information.

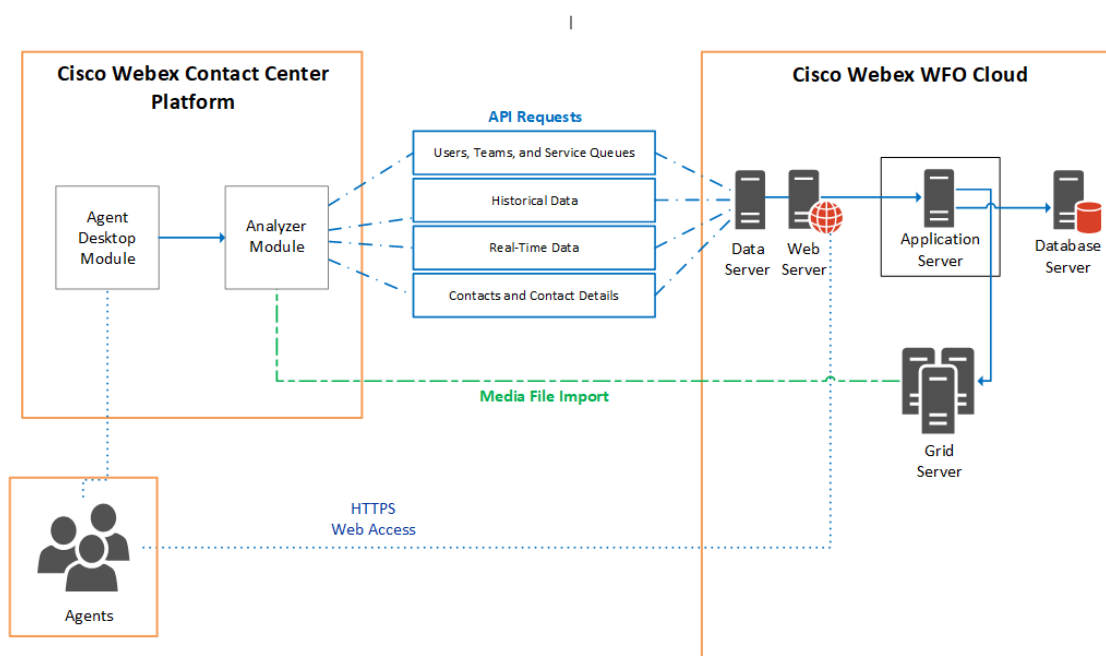
Available Features

Feature	Supported	Currently Unsupported
Pre-built dashboards	X	
Machine learning powered analysis	X	
Custom themes	X	

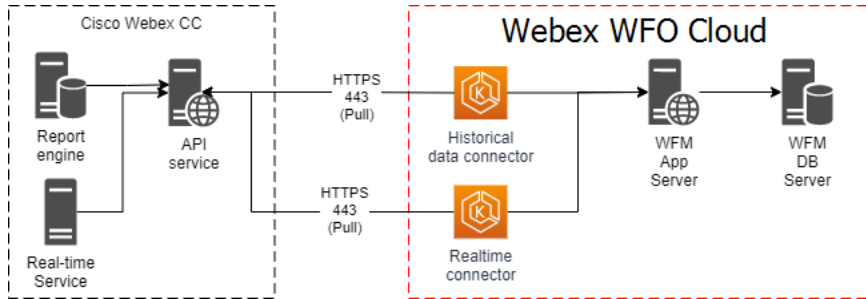
Feature	Supported	Currently Unsupported
Autograph (automated data visualization)	X	
Visual options (custom data visualization)	X	
Dashboard sharing	X	

Webex WFO and Cisco Webex Contact Center Architecture

The architecture diagram below shows the connection between Cisco Webex Contact Center and the Webex WFO suite. Note that the diagram includes Classic WFM.



The architecture diagram below shows the connection between Cisco Webex Contact Center and Webex WFO WFM only.



Configuration Procedures

This section explains how to configure the Cisco Webex Contact Center integration with Webex WFO, including Webex WFO WFM. The configuration procedures you need to follow vary depending on which Webex WFO products your organization has purchased and which Cisco APIs are used.

- [Configure Cisco Webex Contact Center](#)
- [Connect to Cisco Webex Contact Center 2.0](#)
- [Connect WFM to Cisco Webex Contact Center 2.0](#)
- [Connect to Cisco Webex Contact Center 1.0](#)

Cisco Webex Contact Center 2.0 Configuration Overview

The CWCC 2.0 integration uses 2.0 (programmatic) APIs. A data server is not required.

2.0 (programmatic) APIs

- Compatible with Webex WFO QM, Analytics, Classic WFM, and WFM
- If your deployment includes WFM follow the [Connect to Cisco Webex Contact Center 2.0](#) procedure and [Connect WFM to Cisco Webex Contact Center 2.0](#) procedure

Configure Cisco Webex Contact Center

You need to perform the procedures listed in this topic within your Webex Control Hub prior to setting up the CWCC 2.0 connection in Webex WFO.

IMPORTANT Set your Webex admin account username and password credentials to never expire. This is be a service-type account. It should not be a personal email account. Cisco revokes access tokens when user credentials expire. Therefore, if your Cisco account username and password credentials expire, then the ACD in Webex WFO needs to be reauthenticated. Reauthentication requires Cisco Technical Support engagement. Supply Cisco Technical Support with the following information.

- Webex Contact Center admin credentials (username and password)
- Webex WFO Tenant ID
- Webex WFO ACD ID
- Webex WFO tenant admin credentials (username and password)
- Webex WFO domain URL (e.g. the "us3" portion in www.us3.calabriocloud.com)

Prerequisites

- The username is in FQDN format.
- The user has access to the Webex CC 2.0 API and Webex CC 2.0 Media API.
- The username cannot be a personal email address.
- The username must be an email address created using Active Directory sync to Cisco or created manually in the Cisco admin portal.

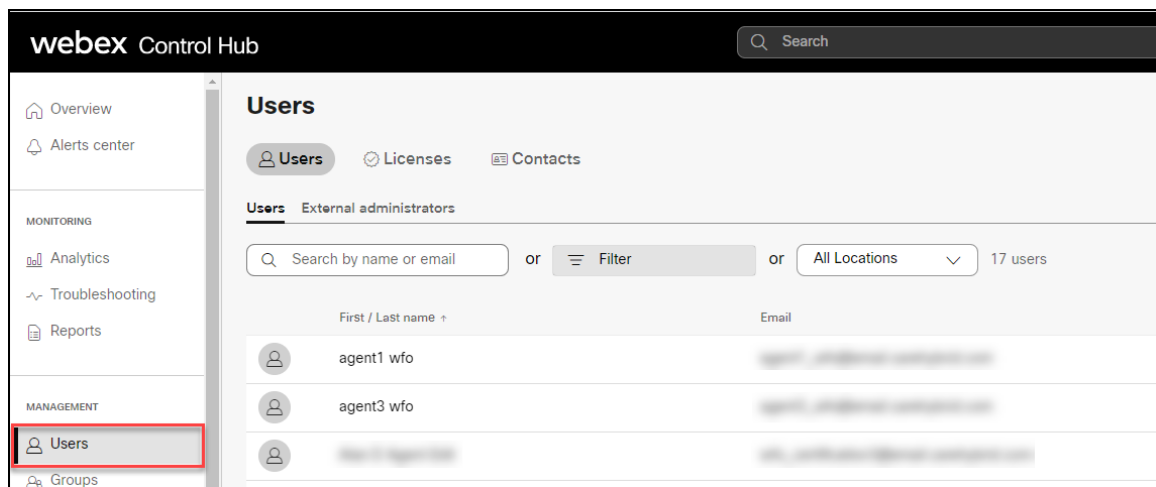
NOTE If Active Directory sync is enabled later and the email address does not exist in Active Directory, then the set up in Cisco will be erased. There will be duplicate teams and users caused by synchronization issues with a new email address.

Configuration Procedures

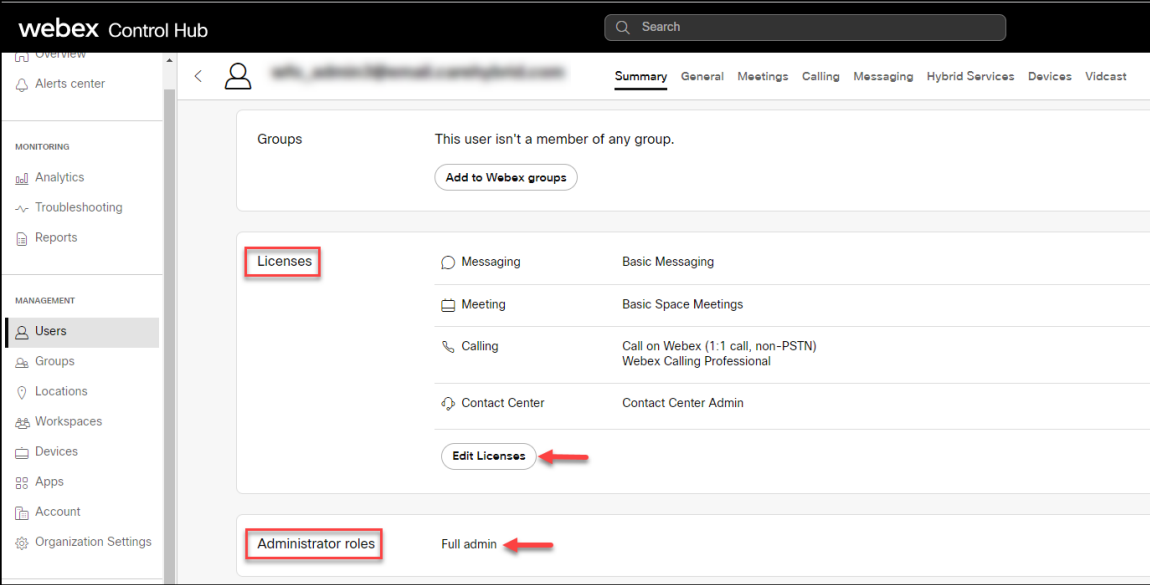
Assign roles and permissions

The user account used in this procedure is later used to complete the oauth process needed to integrate with Webex WFO.

1. Access the **Webex Control Hub** for administrators by navigating to admin.webex.com and entering your credentials.
2. Click **Users** under **Management** within the left navigation bar.



3. From the **Users** page, select the desired user from the table.
4. Ensure the user has, at a minimum, the licenses and role listed in the table below.



- If the proper licenses are not assigned to the user, click **Edit Licenses** within the **Licenses** section and then click **Edit Licenses** again from the license summary page.
- Modify the licenses as necessary, then click **Save**.
- If the proper roles are not assigned, select the currently assigned role within the **Administrator roles** section on the user's page.
- Modify the roles as necessary, then click **Save**.

Licenses	
Messaging	Basic Messaging
	Advanced Messaging
Meeting	Basic Space Meetings
	Advanced Space Meetings
	Webex Meetings Suite
Calling	Call on Webex (1:1 call, non-PSTN)

Licenses

Contact Center

Contact Center Admin

Licensed Agent > Premium Agent

Role

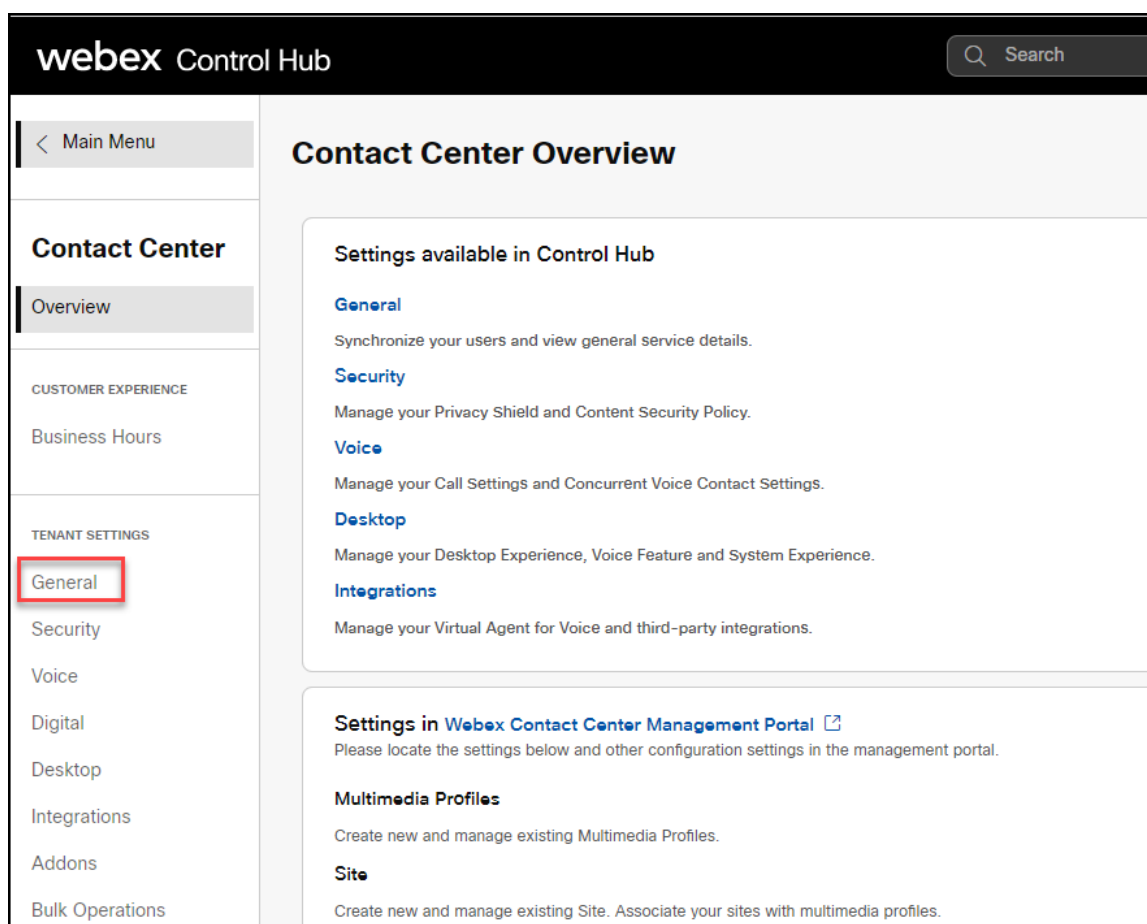
Services

Contact center service admin

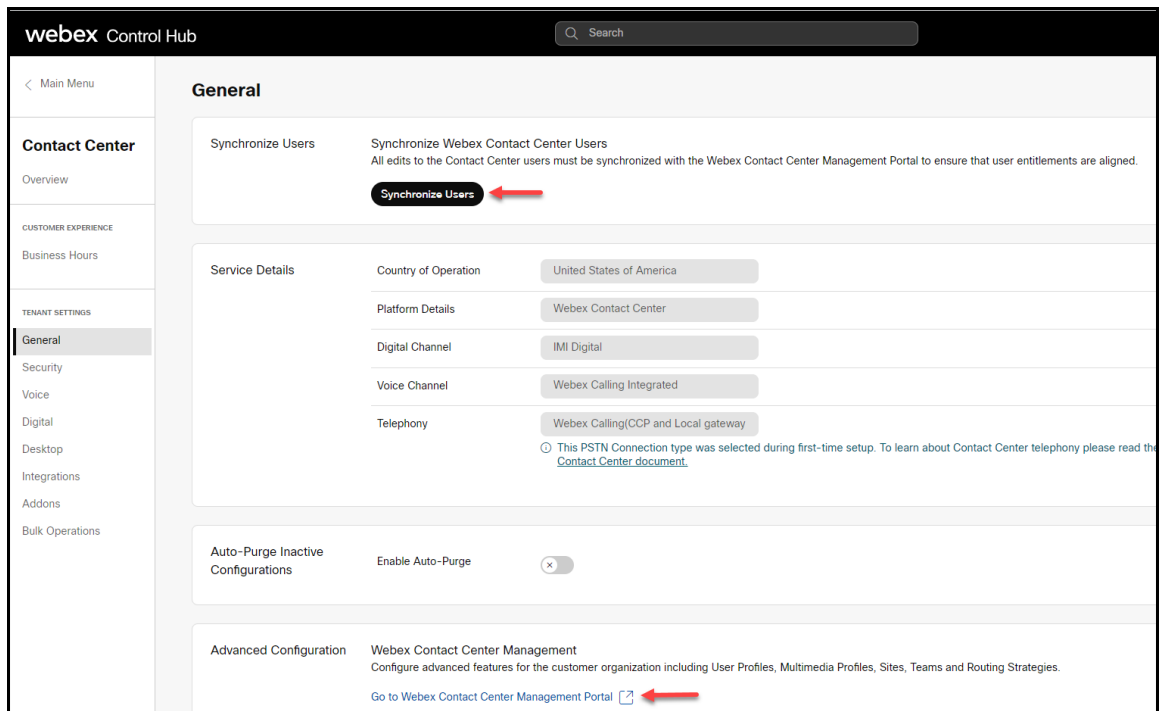
NOTE If you experience sync issues, then select the **Organizational admin** check box and assign the **Full admin** role.

Configure Contact Center settings

1. Navigate to the **Contact Center** page within the left navigation bar **Services** section.
2. Click **General** under **Tenant Settings** in the Contact Center left navigation menu.

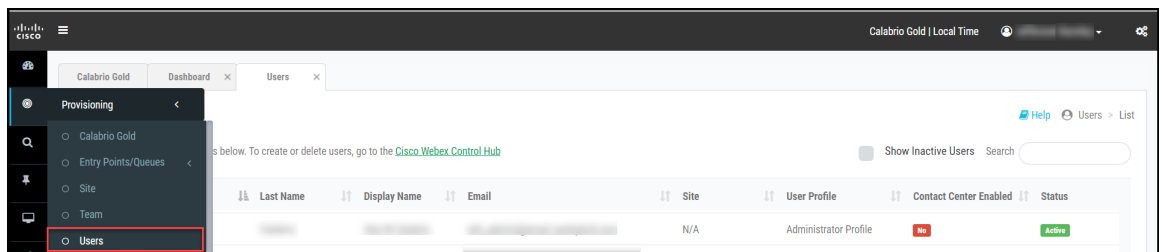


3. Click **Synchronize Users**.

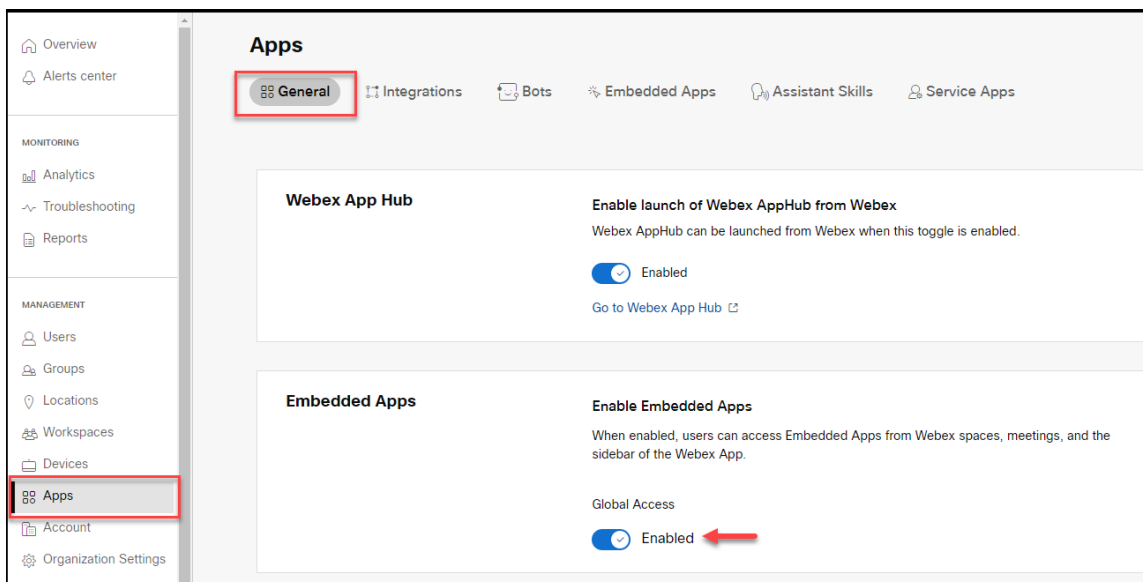


4. Click the **Go to Webex Contact Center Management Portal** link. The Management Portal opens in a separate window.
5. From the Management Portal, ensure that your API account is synced by navigating to **Provisioning** > **Users** from the left navigation bar.

NOTE The **Contact Center Enabled** status is **No** for this account.

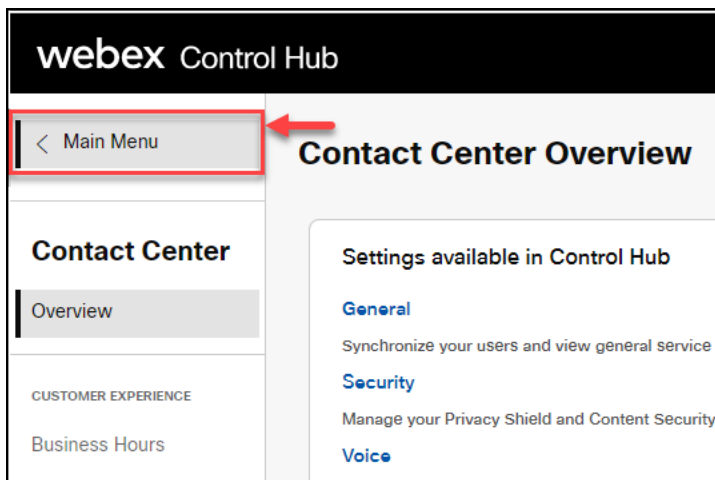


Configure Apps settings



1. Click **Apps** in the **Management** section of the left navigation bar.

NOTE If you are on any of the **Contact Center** pages, then you need to click **Main Menu**

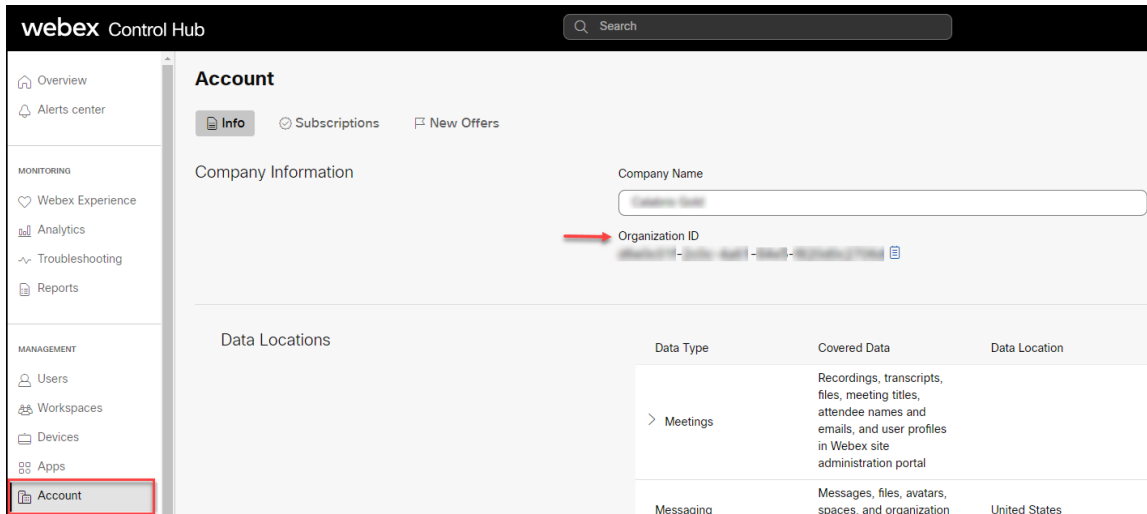


to access the **Apps** page.

2. From the **General** tab of the **Apps** page, switch the **Global Access Enabled** toggle on.

Locate your Organization ID

1. Navigate to the **Account** page from the left navigation bar.
2. Save your **Organization ID** in an easy-to-access location. Your Cisco Organization ID is required when you set up the connection to CWCC 2.0 in Webex WFO. Your Organization ID is also known as Tenant ID in Webex WFO.



Map API endpoints

Refer to <https://developer.webex-cx.com/faq/#discoveryAvailability> for the latest definitive list of APIs currently available.

Region	Developer Portal	API
US	https://developer.webex-cx.com/	https://api.wxcc-us1.cisco.com
ANZ	https://devportal.wxcc-anz1.cisco.com/	https://api.wxcc-anz1.cisco.com
UK	https://devportal.wxcc-eu1.cisco.com/	https://api.wxcc-eu1.cisco.com
EU (Frankfurt)	https://devportal.wxcc-eu2.cisco.com/	https://api.wxcc-eu2.cisco.com
Japan	—	https://api.wxcc-jp1.cisco.com

Validate the configuration

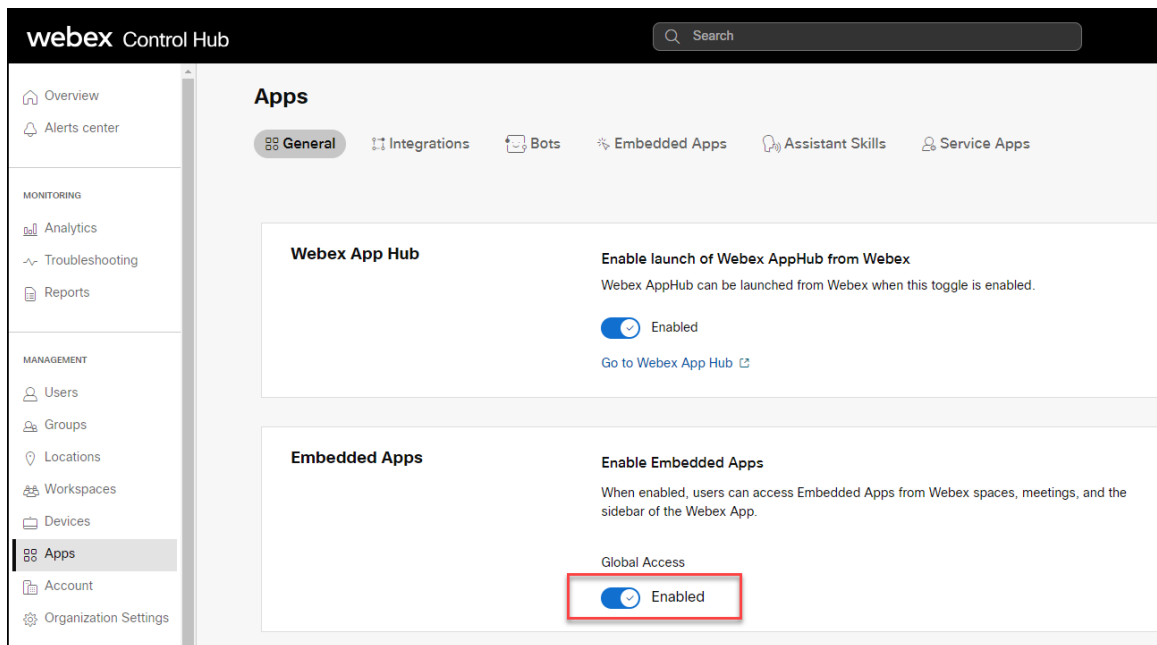
1. Attempt to log into <https://developer.webex-cx.com/> using a private browser window such as Incognito for Chrome or InPrivate for Edge browsers.
2. If your log in attempt fails, open a support ticket with Cisco or your organization's certified partner.

3. Attempt to log into <https://web.webex.com/> using a private browser window such as Incognito for Chrome or InPrivate for Edge browsers.
4. If your log in attempt fails, open a support ticket with Cisco or your organization's certified partner.

Enable the integration with Pro Pack

IMPORTANT Only conduct this procedure if you have Pro Pack.

1. Log into Webex Control Hub at <https://admin.webex.com/>.
2. Click **Apps** under **Management** in the left navigation bar.
3. Under **Embedded Apps**, toggle **Global Access** to **Enabled**.



4. Click **Integrations**.
5. Allow access to the Webex WFO integration by clicking on the integration in the list or by searching for the integration by its App ID. The integration's properties window opens.

Calabrio App ID —

Y21zY29zcGFyazovL3VzL0FQUExJQ0FUSU90L0M5Y2FmZmM3ZGVjZWI3NzkwMGM4OTY3MmM4MT
VmYjNmYWJjZGI4OGNhYmIYNzNhZj1hNjB1ZTg0YTJjYjQ4NT1m

6. In **Overview**, toggle **Access for Future Users** to **On**.

7. Click **All users**.
8. Click **Save**.

Connect to Cisco Webex Contact Center 2.0

This section explains how to set up the connection between Cisco Webex Contact Center 2.0 and Webex WFO. The Organization ID is appended to the admin access token when you log in.

- IMPORTANT** 1) Exercise extra caution before you make any changes to the account you use to configure your Cisco Webex Contact Center 2.0 ACD. If you must change the administrator password periodically, then you should follow the [Configure reauthorization](#) procedure immediately after you change the administrator password to ensure the integration's connection does not break.
- 2) If you are an existing customer migrating from using a configured data server, you need to contact your account manager.

Prerequisites

Copy the following information from your Webex Contact Center provider and save it in an easy-to-access location. Follow the procedures detailed in [Configure Cisco Webex Contact Center](#).

- Your Webex Administrator user must have the required permissions and role(s) in Webex Control Hub for your Webex Contact Center system. See the "Assign roles and permissions" procedure in the [Configure Cisco Webex Contact Center](#) topic for more.
- Username — This is a user email address associated with administrative credentials in Cisco Webex Contact Center.

BEST PRACTICE If you are using WFM, ensure that the Webex Contact Center **Username** field is distinct from your **Calabrio ONE API Username** field.

- API URL — The complete base URL of the Webex Contact Center API, including the protocol.
- Tenant ID — This is your Cisco Webex Contact Center Organization ID.
- The Calabrio ONE API Username field must meet the following criteria.
 - In Webex WFO, this user must also have the **Record Screen** and **Record Voice** permissions assigned to their role. In **Application Management**, use the **Roles** page to assign permissions to roles, and use the **Users** page to assign roles to users.
 - This user must be assigned to the **Default Team** from the **Team** drop-down list on the **Users** page in **Application Management**.

- This user must be given full scope by selecting all the groups and teams under **Associated Groups and Teams** on the **Users** page in **Application Management**.

Configuration Procedures

BEST PRACTICE Cisco recommends that you configure CWCC 2.0 in a private browser session such as incognito mode in a Google Chrome or Microsoft Edge browser.

- [Connect to Cisco Webex Contact Center 2.0](#)— Follow this procedure if you are an existing customer transitioning from CWCC 1.0 to 2.0 and you have QM, Analytics, or Classic WFM.
- [Configure CWCC 2.0 using 2.0 programmatic APIs](#)— Follow this procedure if your deployment includes QM, Analytics, Classic WFM, or WFM and you are not transitioning from CWCC 1.0 to 2.0.

If you have WFM, you must conduct the [Connect WFM to Cisco Webex Contact Center 2.0](#) procedure after completing the Configure CWCC 2.0 using 2.0 programmatic APIs procedure.

- After you configure an ACD, you must [Configure reauthorization](#).

Configure CWCC 2.0 using 2.0 programmatic APIs

1. In Webex WFO, navigate to **Application Management>System Configuration>ACD Configuration**.
2. Under Select ACD, click **Add**.
3. Select **Cisco Webex Contact Center 2.0** from the **Select ACD** drop-down list.
4. Configure the fields as follows.

Field	Configuration
ACD Name	Enter a unique name for the ACD.
Username	Enter your CWCC username. This is a user email address associated with administrative credentials in CWCC.
IMPORTANT This should be a service-type account that should never be changed. Changing your account can cause duplicate users and teams in the system.	

Field	Configuration
API URL	Enter the complete base URL of the Cisco Webex Contact Center API, including the protocol identifier.
Tenant ID	Enter the Organization ID of the CWCC tenant account.
Calabrio ONE API Username	Your Webex WFO service account username. This service account is also referred to as your tenant administrator account or API user account. This is required for uploading data to the correct tenant. This account needs to be created by a system administrator and the account resides in your tenant system. This tenant administrator account also needs to be given the correct permissions to upload data. Contact Cisco Support for assistance with creating this tenant administrator account. See Create an API user and Manage roles and permissions for more information. ■ In Webex WFO, this user must also have the Record Screen and Record Voice permissions assigned to their role. In Application Management, use the Roles page to assign permissions to roles, and use the Users page to assign roles to users. ■ This user must be assigned to the Default Team from the Team drop-down list on the Users page in Application Management. ■ This user must be given full scope by selecting all the groups and teams under Associated Groups and Teams on the Users page in Application Management.
Calabrio API User Password	Your Webex WFO service account password.
Products Enabled - Quality	Quality Management — Select if your organization has purchased

Field	Configuration
Management	Quality Management. Select the Voice check box if your organization only wants Webex WFO to ingest voice contacts only. Select the Digital (Chat, SMS, Email, Social) check box if your organization wants Webex WFO to ingest chats and SMS messages, and emails.
Metadata Mapping	(Optional) Allows you to map CWCC metadata to custom metadata labels in Webex WFO. See Sync Metadata to Webex WFO for more details. CWCC metadata values are synced with CWCC contacts into Webex WFO. The CWCC metadata values are mapped to metadata labels created in Metadata Manager (located at Application Management > QM > QM Configuration > Metadata Manager). After successfully mapped, metadata can be used to add a variety of trackable information to a contact in Webex WFO. Metadata fields can be found in the Details panel on the Media Player page (Interactions page > open a contact). You can view, edit, or delete a metadata field from your system.
Synchronization Interval (Minutes)	Indicates how often (in minutes) you want to sync users, teams, and service queues in Webex WFO with their equivalents in Cisco Webex Contact Center.
Capture Delay (minutes)	Sets the amount of time you want WFM to wait before it imports ACD statistics after an interval ends.
Enable RTE Messaging for Screen Recording	(Optional) Allows you to record the screens of CWCC agents who are configured for screen recording in Webex WFO. For more information, see Screen Recording .
Enable Data Recapture	(Optional) Select this check box if you want to recapture data from the entire previous day.

Field	Configuration
Media Import	Enable the import of media and recording files into Webex WFO from Webex Contact Center.
User Sync	Enables the synchronization of user data into Webex WFO from Webex Contact Center.
Metadata Language Mapping	This section appears when you select Digital in the Products Enabled section. Here, you can set the custom metadata that assigns a language to a text-based contact like an email or a chat message. The metadata options available come from the Metadata Mapping section. Webex WFO uses a text contact's language to find results when you use the Text Search filter on the Interactions page. Webex WFO assigns a language to a text-based contact using the following information, in this order: - A language that is already assigned to the contact when it is imported into Webex WFO. - A language assigned to a custom metadata field that you configure here (the Metadata Language Mapping section). - The fallback language that you configure in the Fallback text language section below. - The default language (English).
Fallback text language	This section appears when you select Digital in the Products Enabled section. Select the language to assign to text contacts if they do not have an associated language when they are imported into Webex WFO and do not have a metadata value as defined in the Metadata Language Mapping section above. Webex WFO uses a text contact's language to find results when you use the Text Search filter on the Interactions page. Webex WFO assigns a language to a text-based contact using the

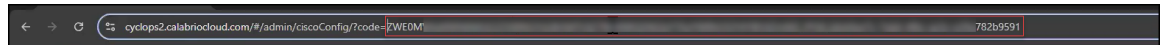
Field	Configuration
	following information, in this order: - A language that is already assigned to the contact when it is imported into Webex WFO. - A language assigned to a custom metadata field that you configure in the Metadata Language Mapping section above. - The fallback language that you configure here (the Fallback text language section). - The default language (English).
Authorization URL	NOTE This section only appears when you edit an existing ACD. It does not appear when you create a new ACD. If a token refresh failure occurs then the OAuth process breaks. Configuring this setting allows your system to reestablish the OAuth authentication in the event of a token refresh failure for a maximum of sixty days. A token refresh failure can occur for several reasons such as the following. - Changing the email address of the administrator account. - Deactivating the account in Active Directory. - Changing the password in Active Directory. - Switching from Active Directory sync to single sign-on in your Cisco account. - Changing domains. - Click Save. You are redirected to your Cisco Webex Contact Center login page. - Enter your Cisco username and password. - After successfully entering your Cisco username and password, you are directed back to Webex WFO.

NOTE If you have New WFM, you must conduct the [Connect WFM to Cisco Webex Contact Center 2.0](#) procedure after completing this one.

Configure reauthorization

1. Ensure you are logged out of Cisco Webex Contact Center.
2. In Webex WFO, navigate to **Application Management>System Configuration>ACD Configuration**.
3. Under **Select ACD**, select your Webex Contact Center 2.0 ACD from the **ACD Servers** list and click **Edit**. The Cisco Webex Contact Center 2.0 ACD page opens.
4. Go to the **Authorization URL** section and click the copy icon to copy the URL.
5. Open a private browser such as incognito mode in Google Chrome.
6. Paste the URL in the private browser. You are then routed to the Cisco Webex login page.
7. Enter the login credentials of the administrator account linked to this ACD and sign in. Then, the Webex WFO login page opens.
8. Copy the code string in the address bar. The section you need to copy starts after the equal sign and continues to the end of the URL.

EXAMPLE



In the example above, the code portion is in the red outlined box starting with Z and ending with 1. Note, part of the code string is blurred out for security purposes.

9. Navigate back to the ACD page for your Webex Contact Center 2.0 ACD.
10. Enter the code in the second text box under **Authorization URL**.
11. Click **Authorize**.
12. Click **Save**.

Connect WFM to Cisco Webex Contact Center 2.0

The Integrations page enables you to configure, modify, and deploy Webex WFO WFM integrations for historical and real-time adherence to your CWCC 2.0 platform. This topic explains in detail, the procedure for configuring Webex WFO WFM if you are using 2.0 (programmatic APIs).

NOTE If you experience issues contact Calabrio Support for assistance. Send a **Calabrio technical support request** here: calabrio.com/support-request/

Prerequisites

- You have the *Super administrator* role within WFM.
- Cisco Webex Contact Center 2.0 must be configured on the **Application Management > ACD Configuration** page. See [Connect to Cisco Webex Contact Center 2.0](#) for more information.
- Gather the following information on your Webex Contact Center ACD from the **ACD Configuration** page (**Application Management > System Configuration > ACD Configuration**).

API URL — This is your Cisco Webex CC Base URL.

Webex WFO Server ID — This is a Webex WFO ACD ID designated to uniquely identify CWCC.

Tenant ID — This is the unique alphanumeric identifier of your Webex WFO tenant account.

- The **ds-call-leg-state-api** feature flag must be enabled in Webex Control Hub.

Page Locations

WFM > WFM settings > Integrations > Cisco WebEx CC (Prog. API 2.0) - Historical

WFM > WFM settings > Integrations > Cisco WebEx CC (Prog. API 2.0) - RTA

Procedure

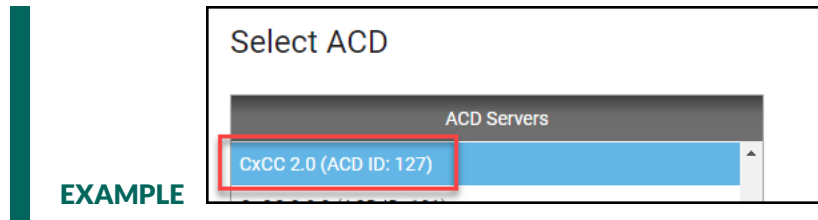
NOTE You must configure the historical data integration before you can configure the real-time integration. This is because the agent sync process from the contact center platform relies on historical data collection. All other types of integrations, such as the user import, can be configured in any order.

Configure a new or update an existing integration

1. Navigate to **WFM > WFM settings > Integrations > Cisco WebEx CC (Prog. API 2.0) - Historical**.
2. Click  to configure a new integration, or click  to update an existing integration.

3. Enter the required information in the available fields. Hover over the information icon next to each field and read the description carefully. Default values are, when applicable, shown in the **Settings** field.

- **Cisco Webex CC Base URL** — Enter the complete base URL of the Webex Contact Center API, including the protocol identifier. This is the **API URL** value for your ACD.
- **Server ID in Webex WFO** — This is a unique ACD ID for CWCC. After configuring your CWCC ACD on the **Application Management > System Configuration > ACD Configuration** page, locate your Server ID (also known as ACD ID) value in the **ACD Servers** list.



- **Tenant ID in Webex WFO** — Enter your specific Webex WFO Tenant ID value. This is your Webex WFO Tenant ID. It is not the CWCC Tenant ID value you entered on the **ACD Configuration** page.
 - To identify your Webex WFO Tenant ID, navigate to **Application Management > User Configuration > Users**.
 - In the **User Information** section, select any user from the **Select User** drop-down list.
 - Find the **Associated Groups and Teams** section and note the first line that appears in the list. This is your Tenant ID. Return to the Cisco Webex Contact Center (Prog. API 2.0) Integrations page. [Contact Cisco Support](#) if you cannot locate the Tenant ID.



4. Click **Save** to save your changes.

5. Once saved, the **Deploy** button is enabled. Click **Deploy** to apply the saved changes and start the integration.
6. After configuring the historical data connector, navigate to **WFM > WFM settings > Integrations > Cisco WebEx CC (Prog. API 2.0) - RTA** and repeat these steps to configure the real-time adherence connector.

NOTE The deployment process might take up to 5 minutes. Once complete, a green check mark and a message are shown. Hover the mouse pointer over the check mark to show the date and time for the most recent deployment. If a red X is shown instead of a green check mark, contact Cisco Support Services.

Version 2.0 Limitations

In/out direct contact count and duration are not available for agent performance statistics.

"Overflow" is not available as a metric.

Sync Metadata to Webex WFO

You can define which Cisco Webex Contact Center (CWCC) metadata values are synced with CWCC contacts into Webex WFO. Metadata can be collected from CWCC's global variable fields or standard fields returned in API endpoint responses. From there, the metadata must be correctly formatted before it can be added to Webex WFO. Configuration is complete once the CWCC metadata is added to Webex WFO and mapped to a Webex WFO metadata label.

This topic details the procedures for collecting and formatting metadata from CWCC API responses, the Webex WFO mapping procedure, and examples. After successfully mapped, metadata can be used to add a variety of trackable information to a contact in Webex WFO. Metadata fields can be found in the Details panel on the Media Player page (Interactions page > open a contact). You can view, edit, or delete a metadata field from your system.

Global variables are custom fields created by Cisco. More information on global variables is available within your CWCC Administrator page. Standard custom metadata fields stem from /search endpoints in CWCC. See Cisco documentation for more information, <https://developer.webex.com/documentation/search/v1/search-tasks>. The following code is a sample /search API response.

Global variables are supported as custom metadata for voice channels and all digital channels.

```
1 | {
```

```

2  "data": {
3    "task": {
4      "tasks": [
5        {
6          "endTime": 1630380960406,
7          "captureRequested": true,
8          "isActive": false,
9          "queue": [
10         {
11           "id": "e434a654-df4c-42dc-908b-3d9d0206a616",
12           "name": "cb_outdial_queue"
13         }
14       ],
15       "status": "ended",
16       "owner": {
17         "name": "callbackorg2user1 callbackorg2user1",
18         "id": "74ab6507-a32a-479c-bda7-15ff0b6c6c3c"
19       },
20       "createdTime": 1629450000000,
21       "id": "fb53f6d1-5535-4ac8-b081-53834e17d6f5",
22       "channelType": "telephony"
23     }
24   ]
25 }
26 }
27 }

```

Prerequisites

- Cisco Webex Contact Center 2.0 must be configured as an ACD in Webex WFO.
- A metadata label must first be created in Metadata Manager in Webex WFO (located at Application Management > QM > QM Configuration > [Metadata Manager](#)) for each CWCC metadata field you want to map to a Webex WFO metadata label.

You must select **Text** from the **Metadata Type** drop-down list on the Metadata Manager page for the metadata to map.

Ensure the **ACD Data** drop-down list is blank on the Metadata Manager page. All other fields on the Metadata Manager page can be configured as desired.

Page Location

Application Management > Global > System Configuration > ACD Configuration > Cisco Webex Contact Center 2.0

Procedures

These procedures details how to collect and format appropriate metadata from CWCC API response endpoints. All metadata must conform to these formats. There are two available formats depending on if standard fields or global variable fields are used. Fields are case sensitive, and do not include any spaces between text.

You can reference to the sample API request below when formatting metadata.

```

1  {
2      taskDetails (
3          from: 1631192040000
4          to: 1654515806364
5          filter: {
6              and: [
7                  { channelType: { equals: telephony } }
8              ]
9          }
10     ) {
11         tasks {
12             id
13             stringGlobalVariables(name: "Global_VoiceName") {
14                 name
15                 value
16             }
17         }
18     }
19 }
```

- Standard metadata fields must be formatted as
<task or taskDetails>.<fieldName>
- Global variable metadata fields must be formatted as
<task or taskDetails>.<GlobalVariableName>:<Data Type>

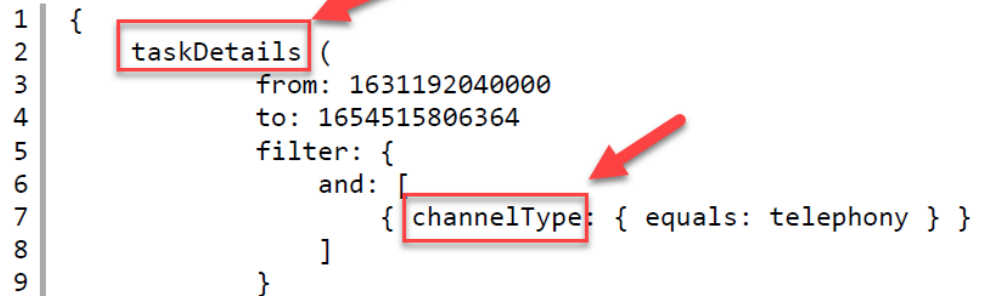
Collect and format CWCC standard metadata fields

1. Select the appropriate prefix based on the CWCC API response. The endpoints fall into two categories; they are **<taskDetails>** and **<task>**.

Use the text, **taskDetails** , as a prefix for all taskDetails responses.

Use the text, **task**, as a prefix for all task responses.

EXAMPLE You decide you want to collect metadata on "channelType". In the sample API request, "channelType" falls in the taskDetails category. Therefore you use the text **taskDetails**



```

1 {
2   taskDetails (
3     from: 1631192040000
4     to: 1654515806364
5     filter: {
6       and: [
7         { channelType: { equals: telephony } }
8       ]
9     }

```

2. Add a period. Do not add any spacing.

EXAMPLE **taskDetails.**

3. If there are no hierarchy levels in the metadata you are collecting, add the field name and format the metadata value as follows. Fields are case sensitive, and do not include any spaces between text.

<task or taskDetails>.<fieldName>

EXAMPLE **taskDetails.channelType**

4. If there are hierarchy levels in the metadata you are collecting, format the metadata value as follows, with no spaces between the text. Your CWCC 2.0 metadata is now ready to be mapped to Webex WFO metadata labels.

<task or taskDetails>.<level-one-fieldName>.<level-two-fieldName>

Collect and format CWCC global variable metadata fields

Global variables contain the text **GlobalVariables** in the API response.

1. Select the appropriate prefix based on the CWCC API response. The endpoint prefixes fall into two categories; they are <taskDetails> and <task>.

Use the text, **taskDetails** , as a prefix for all taskDetails responses.

Use the text, **task**, as a prefix for all task responses.

EXAMPLE You decide you want to collect metadata on "Global_VoiceName". In the sample API request, "Global_VoiceName" name falls in the tasks category. Therefore you use the text **task**

```

 9      }
10    ) {
11      tasks {
12        id
13        stringGlobalVariables(name: "Global_VoiceName") {
14          name
15          value
16        }
17      }
18    }
19  }
```

2. Add a period after the prefix.

EXAMPLE **task.**

3. Find and copy the global variable name as it appears in the API response and then add it to your formatted text.

EXAMPLE **task.Global_VoiceName**

4. Add a colon.

EXAMPLE **task.Global_VoiceName:**

5. Find the data type located in the same line as the global variable name. Capitalize the first letter of the data type.

Below, is a list of all supported Cisco global variables and data types.

- **integerGlobalVariables**— where <Integer> is the data type.
- **stringGlobalVariables**— where <String> is the data type.
- **longGlobalVariables**— where <Long> is the data type.
- **doubleGlobalVariables**— where <Double> is the data type.
- **booleanGlobalVariables**— where <Boolean> is the data type.

EXAMPLE

```

9      }
10     ) {
11         tasks {
12             id
13             stringGlobalVariables(name: "Global_VoiceName") {
14                 name
15                 value
16             }
17         }
18     }
19 }

```



The data type in this example is string. The first letter of the data type must be capitalized.

Therefore, use **String** and add it to your formatted text.

task.Global_VoiceName:String

6. Ensure your formatted text is in the following format. Fields are case sensitive, and do not include any spaces between text. Your CWCC 2.0 metadata is now ready to be mapped to Webex WFO metadata labels.

<task or taskDetails>.<GlobalVariableName>:<Data Type>

Map CWCC metadata in Webex WFO

1. Navigate to the **Cisco Webex Contact Center 2.0** ACD configuration page.
2. Within the **Metadata Mapping** section, click **Add Mapping**.
3. In the text box under **ACD Metadata Name**, enter a CWCC metadata value that is properly formatted.
4. Click the drop-down list under the **Metadata Label** column, and select a metadata label from the list of options.
5. Click the check icon to save the metadata mapping.

EXAMPLE

Metadata Mapping

Complete the following fields to map the ACD metadata fields to Calabrio ONE metadata labels.

ACD Metadata Name	Metadata Label
taskDetails.channelTy	Channel Type

6. (Optional) Click **Add Mapping** to add additional metadata mappings and repeat as desired.
7. Click **Save** in the top-right corner of the page.

Metadata options from sample requests

The following shows the available metadata options for task.

task metadata options in a sample request

```

1  {
2    task(
3      from: 1631111190000
4      to: 1634123120000
5      filter: {
6        and: [
7          { channelType: { equals: telephony } }
8        ]
9      }
10   ) {
11     tasks {
12       id
13       status
14       channelType
15       createdTime
16       endedTime
17       origin
18       destination
19       contactReason
20       direction
21       owner { id name }
22       entryPoint { id name }
23       terminationType
24       channelSubType
25       customer { name phoneNumber email }
26       isActive
27       isCallback
28       channelMetaData { email { subject metaData } }

```

```

29         callbackData {
30             callbackRequestTime
31             callbackConnectTime
32             callbackNumber
33             callbackStatus
34             callbackOrigin
35             callbackType
36         }
37         recordingLocation
38         lastWrapupCodeName
39         lastQueue { id name }
40         lastSite { id name }
41         lastTeam { id name }
42         lastEntryPoint { id name }
43         totalDuration
44         csatScore
45         blindTransferCount
46         conferenceCount
47         conferenceDuration
48         consultCount
49         consultDuration
50         holdCount
51         holdDuration
52         selfserviceCount
53         selfserviceDuration
54         connectedCount
55         connectedDuration
56         consultToQueueCount
57         consultToQueueDuration
58         transferCount
59         wrapupDuration
60         ringingDuration
61         queueDuration
62         queueCount
63         captureRequested
64     }
65 }
66 }

```

The following shows the available metadata options for taskDetails.

taskDetails metadata options in a sample request

```

1  {
2      taskDetails(
3          from: 1631192040000
4          to: 1634648040000
5          filter: {
6              and: [
7                  { channelType: { equals: telephony } }
8              ]
9          }
10     ) {
11         tasks {

```

```

12         id
13         status
14         channelType
15         createdTime
16         endedTime
17         origin
18         destination
19         contactReason
20         direction
21         owner { id name }
22         entryPoint { id name }
23         terminationType
24         channelSubType
25         customer { name phoneNumber email }
26         isActive
27         isCallback
28         channelMetaData { email { subject metaData } }
29         callbackData {
30             callbackRequestTime
31             callbackConnectTime
32             callbackNumber
33             callbackStatus
34             callbackOrigin
35             callbackType
36         }
37         recordingLocation
38         lastWrapupCodeName
39         lastQueue { id name }
40         lastSite { id name }
41         lastTeam { id name }
42         lastEntryPoint { id name }
43         totalDuration
44         csatScore
45         blindTransferCount
46         conferenceCount
47         conferenceDuration
48         consultCount
49         consultDuration
50         holdCount
51         holdDuration
52         selfserviceCount
53         selfserviceDuration
54         connectedCount
55         connectedDuration
56         consultToQueueCount
57         consultToQueueDuration
58         transferCount
59         wrapupDuration
60         ringingDuration
61         queueDuration
62         queueCount
63         captureRequested
64     }
65 }
66 }

```

Unsupported arrays

Lists and arrays are not supported for custom metadata. The following table specifies which arrays are not supported .

Unsupported arrays	Description
queues	Queue Information.
sites	ID, name of the physical contact center location to which the task was distributed.
teams	ID, name of the team to which the call was distributed.
contributors	Agents who have handled the task.
entryPoints	ID, name of the initial landing place of a contact in CWCC.

Integration Details for Cisco Webex Contact Center

This section explains how data from Cisco Webex Contact Center integrates with Webex WFO once the two systems are connected.

About Webex WFO Digital Channel Support

Webex WFO provides digital channel support for your CWCC multichannel or omnichannel system. With Webex WFO digital channel support, the audio recordings, chat transcripts, and SMS transcripts from your CWCC system are ingested by Webex WFO, visualized, and accessible on the **Interactions** page. Digital channel support ensures a comprehensive view of interactions and a seamless user experience within Webex WFO across channels. Double-click on any interaction on the **Interactions** page to access the interaction's data.

The terms multichannel and omnichannel contact centers are not synonymous. They have distinct differences in how they are defined. Multichannel contact centers support various communication channels. The supported channels can include phone calls, emails, web chat, social media, and more. Each channel operates independently, with its own queue and agents specialized in handling that particular channel. However, each channel is siloed, which can result in fractured communications. This means, when a customer moves from one channel to another, the customer interaction loses continuity and context during the journey.

Whereas omnichannel contact centers provide a seamless and integrated experience across all communication channels. Channels are interconnected, allowing customers to start a conversation on one channel and continue it on another without repeating information. Omnichannel solutions allow agents to know each customer's history and handle customer requests quickly in all communication channels.

EXAMPLE An example of an omnichannel experience is when an interaction starts as a chat, then the agent and customer continue the interaction with a phone call. Information from the chat channel and voice channel are connected using an integrated omnichannel solution.

Supported contact scenarios

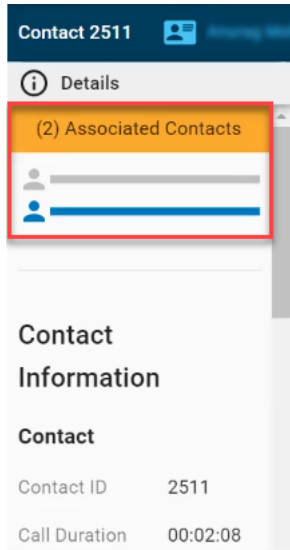
The following scenarios are supported.

- Inbound/outbound messaging
- Transfers

- Conferences

NOTE Conferences are not supported for email channels.

EXAMPLE The interaction depicted in this image includes a transfer, which is why two legs of the chat are available within the Associated Contacts section. Within the Associated Contacts section, you can select different agents in the chat or SMS transcript. Blue depicts the selected agent. The full chat or SMS transcript displays no matter which agent is selected; however, the selected agent appears in blue speech boxes on the right side of a transcript log.



Procedures

Enable digital channels

1. In Webex WFO, navigate to **Application Management > ACD Configuration**.
2. Click **Add** in the **Select ACD** section. The **ACD Details** window opens.
3. Select **Cisco Webex Contact Center 2.0** from the **Select ACD** drop-down list to access the ACD configuration page.
4. Within the **Products Enabled** section, click **Quality Management**.
5. Click **Digital (Chat, SMS, Email, Social)**.
6. Click **Save**.

Filter for chat, SMS, email, or social media transcripts on the Interactions page

1. In Webex WFO, navigate to **Interactions**.
2. Within the **Filters** pane, click the **Contact Type** drop-down list within the Filters column.
3. Select **Chat** for chat transcripts, **SMS** for SMS transcripts, or **Email** for email transcripts.
4. Click **Apply**.

Digital channel limitations

The Start Screen and Stop Screen Recording Controls commands apply to screen-only interactions without an audio contact associated with them. This can be used to capture the behavior on the screen while an agent handles a digital interaction, but it does not connect the digital interaction transcript with the interaction details.

Chat Support

When your customer uses chat to contact an agent configured on CWCC, the chat and data associated with the chat are ingested into Webex WFO. Each agent involved in the chat has full chat transcript of the entire interaction not just their individual leg of the interaction.

Each leg of an interaction has a **contact ID**, which is the chat's unique ID. An **associated contact ID** is the identifier that connects an original contact with all derivative legs of the contact that are ingested into Webex WFO. A chat can have multiple legs if it has transfers or conferences.

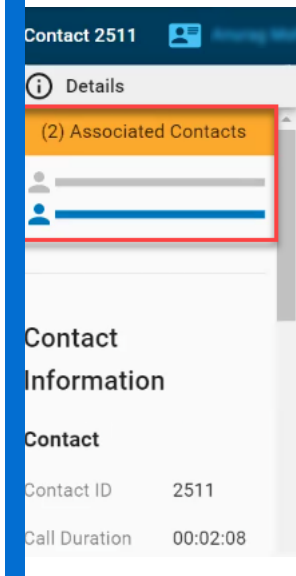
This means each leg of a chat has a unique contact ID, and all derivative legs of a chat have the same shared associated contact ID. After selecting a chat, you can view all associated chats in the chat transcript displayed on the Interactions page. See [View data associated with a contact](#) for more information.

Prerequisites

- You have Cisco Contact Center Desktop (Agent dashboard).
- You have a Cisco chat widget configured for Cisco Contact Center Desktop.

NOTE If there are additional agents associated with the chat you selected due to transfers or conferences, view the additional agents' chat transcripts by clicking on the agent in the Associated

contacts section of the Details pane.



Chat limitations

- Chat transcripts are only available within your organization where the CWCC ACD is configured. Chats that occur with third party organizations are not available. If a chat is transferred to a third party, Webex WFO only provides data for the agent's portion of the chat prior to the transfer.
- Associated contact IDs remain consistent for all legs of a text chat (including transfers and conferences). While associated contact IDs remain consistent for all legs of a voice call (including transfers and conferences). However, associated contact IDs differ between the text chats and voice calls from a single customer journey.

SMS Support

When your customer and an agent exchange SMS messages, also known as text messages, the SMS messages and the data associated with those SMS messages are ingested into Webex WFO. Each agent involved in the conversation has a full SMS transcript of the entire interaction, not just their individual leg of the interaction. Each leg of an interaction has a contact ID, which is the SMS interaction's unique ID. An associated contact ID is the identifier that connects an original contact with all derivative legs of the contact that are ingested into Webex WFO. A SMS conversation can have multiple legs if it includes transfers or conferences.

This means each leg of a SMS has a unique contact ID, and all derivative legs of a SMS have the same shared associated contact ID. After selecting a SMS contact on the Interactions page, you can view all associated SMS messages in the Media Player (**Interactions** > Double-click a contact to view its SMS transcript). See [View data associated with a contact](#) for more information.

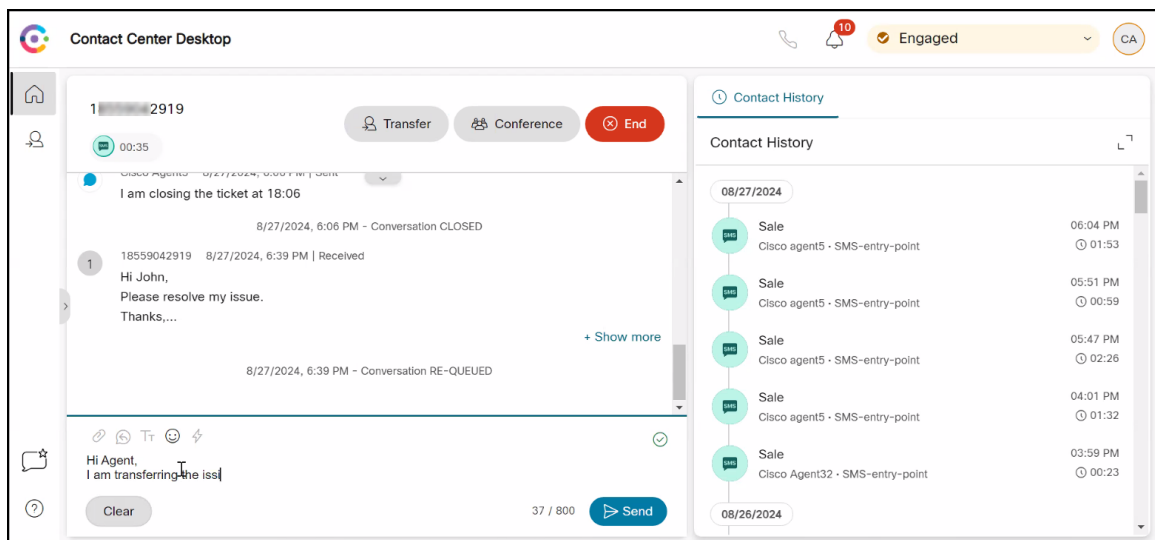
Prerequisites

- You have Cisco Contact Center Desktop (Agent dashboard).
- You have a valid phone number configured as a SMS queue.

Example flow

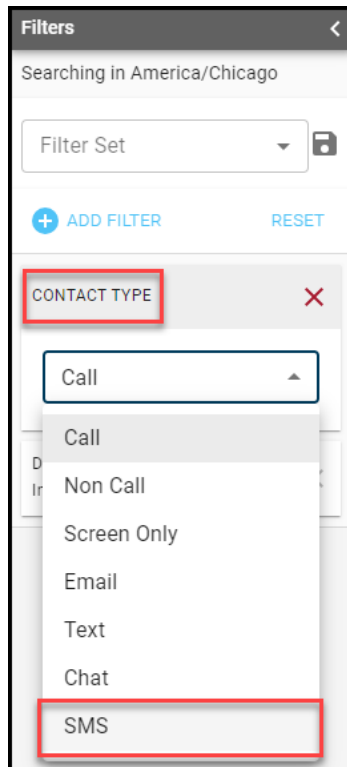
This example illustrates a typical SMS conversation between a customer and Webex Contact Center agent.

1. A customer uses a cell phone to contact an agent.
2. The customer contact appears in the Contact Center Desktop queue, and the agent accepts.
3. The customer and agent exchange SMS messages for a few minutes, and then the agent ends the chat.



4. Agents must end the conversation by clicking the **End** button in their Contact Center Desktop system before Webex WFO can ingest SMS transcripts and SMS data.
6. In Webex WFO, locate your SMS transcripts by navigating to the **Interactions** page. Ensure **Contact Type** has been selected as a filter, filter for **SMS** messages, and select a SMS from the list

of interactions.



7. (The Contact Type filter drop-down list on the Interactions page)

SMS limitations

- SMS transcripts are only available within your organization where the CWCC 2.0 ACD is configured. SMS messaging that occurs with third-party organizations are not available. If a SMS conversation is transferred from your organization's contact center to another third-party organization, then the transcript for that portion of the SMS conversation will not be available in Webex WFO.
- Associated contact IDs remain consistent for all legs of a SMS conversation (including transfers and conferences). While associated contact IDs remain consistent for all legs of a voice call (including transfers and conferences). However, associated contact IDs differ between the SMS conversations and voice calls from a single customer journey.

EXAMPLE A customer interaction includes a SMS conversation with one agent, then the SMS conversation is transferred to a second agent, and finally the second agent and the customer have a five-minute phone call before ending the interaction. Within Webex WFO, both the initial SMS conversation with the customer and the first agent and the continued

MS conversation that was transferred to the second agent, have the same associated contact ID. The five-minute phone call between the customer and the second agent has a different associated contact ID.

- Webex WFO only ingests chat and SMS interactions if **Quality Management** is enabled and the **Digital (Chat, SMS)** check box is selected on the **Cisco Webex Contact Center 2.0 ACD Configuration** page. If you are making configuration changes on this page, double-check to make sure you do not accidentally disable chat and SMS.

Email Support

Prerequisites

- You have Cisco Contact Center Desktop (Agent dashboard).
- You have a valid phone number configured as an email queue.

Example flow

This example illustrates a typical email interaction between a customer and agent that is ingested into Webex WFO.

1. A customer sends an email.
2. The email message appears in a Cisco Contact Center Desktop (Agent dashboard) queue and is picked up by an agent.
3. The customer and agent exchange email messages for a few minutes.

NOTE Agents must end the conversation before Webex WFO can ingest digital channel data.

4. In Webex WFO, locate email transcripts by navigating to the **Interactions** page and select an email interaction from the list.

Complex call events

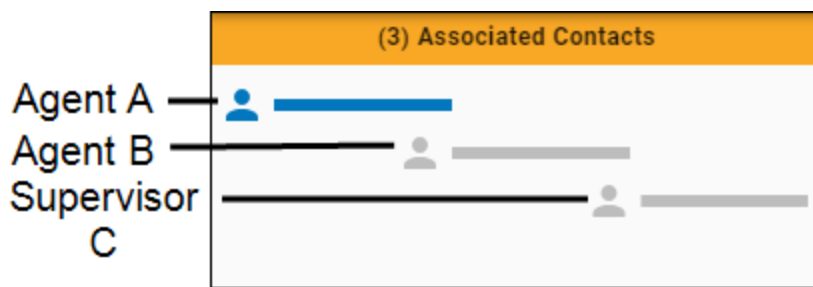
This topic describes how Webex WFO handles complex call scenarios. Complex call scenarios are various actions that can take place during a call. They include transfers, conferences, holds, and parked calls. In Cisco Webex Contact Center 2.0, a segment is formed when there's a participant change, such as, when an agent joins a call for a consult.

In Webex WFO an audio call and all of its associated data, such as screen recordings and metadata, is referred to as a contact. Associated contact ID is the identifier that connects an original call with all derivative legs of the call that are recorded in Webex WFO. This means each resulting contact shares the same Associated contact ID as the original call. You can view associated contacts in the Media Player (Interactions > Double-click a contact).

When multiple agents handle the same customer call (for example, when one agent transfers the call to another agent), Webex WFO creates a separate contact for each agent involved and gives these contacts the same associated contact ID. The Associated Contacts section displays such contacts, allowing you to see all segments of a call, from when it enters the contact center to when it ends.

EXAMPLE

A customer calls Agent A. Agent A transfers the customer to Agent B, and Agent B transfers the customer to Supervisor C. Webex WFO creates three separate contacts and gives them the same associated contact ID.



In the media player the inbound audio stream is blue, and the outbound stream is red. One agent is depicted on one channel, and all other parties involved in the call are on a separate channel. See [Listen to an audio contact](#) and [About silence and talk over events](#) for more information on the audio panel in the media player.

Prerequisites

- The following settings need to be enabled for your organization's tenant.
 - **Segment recording** - Please contact your Cisco technical representative to enable this setting.
 - **Consult leg recording** - Please contact your Cisco technical representative to enable this setting.
 - **Complex calls** - Please contact Cisco Technical Support to enable this setting.

- **IMPORTANT** Your Cisco technical representative must enable **segment recording** and **consult leg recording** first within your Cisco Webex Contact Center system. Afterwards, Cisco Technical Support must enable **complex calls** within Webex WFO.
- You need to have Webex Contact Center version 2.0 configured. See [Connect to Cisco Webex Contact Center 2.0](#) for more information.
- A metadata label must first be created in Metadata Manager in Webex WFO (located at Application Management > QM > QM Configuration > [Metadata Manager](#)) for each CWCC metadata field you want to map to a Webex WFO metadata label.
 - You must select **Text** from the **Metadata Type** drop-down list on the Metadata Manager page for the metadata from CWCC to map to a metadata label.
- **BEST PRACTICE** Enter "call type" as the **Text** from the **Metadata Type** drop-down list.
- Ensure the **ACD Data** drop-down list is blank on the Metadata Manager page. All other fields on the Metadata Manager page can be configured as desired.

Page location

Application Management > System Configuration > ACD Configuration

Procedure

Map metadata in Webex WFO

You need to map custom metadata with the values, "Customer segment" and "Consult".

1. Navigate to the **Cisco Webex Contact Center 2.0** ACD configuration page.
2. Within the **Metadata Mapping** section, click **Add Mapping**.
3. In the text box under **ACD Metadata Name**, enter "Customer segment".
4. Click the drop-down list under the **Metadata Label** column, and select the call type metadata label you created as a prerequisite from the list of options.
5. Click the check icon to save the metadata mapping.

EXAMPLE

Metadata Mapping

Complete the following fields to map the ACD metadata fields to Calabrio ONE metadata labels.

ACD Metadata Name	Metadata Label
taskDetails.channelTy	Channel Type

+ ADD MAPPING

Save Mapping

6. Click **Add Mapping** to add an additional metadata mapping.
7. In the text box under **ACD Metadata Name**, enter "Consult".
8. Click the drop-down list under the **Metadata Label** column, and select the call type metadata label you created as a prerequisite from the list of options.
9. Click the check icon to save the metadata mapping.
10. Click **Save** in the top-right corner of the page.

Enable complex calls

1. Navigate to the **Cisco Webex Contact Center 2.0** ACD configuration page.
2. Within the **Enable Complex Calls** section, select the **Enable Complex Calls** toggle.
3. Click **Save** in the top-right corner of the page.

Complex call event types

- **Transfers** — Webex WFO segments the call by the number of times that it was transferred. For each transfer, Webex WFO creates a separate contact, and it associates each contact with the agent who handled that segment of the transferred call.
- **Conferences** — Webex WFO segments the original call into two contacts. The first contact in Webex WFO is associated with the agent who answered the customer's call. The second contact is associated with the agent who was brought into the call. The recording for the first agent's contact spans the entire time the agent is involved on the call. The recording for the second contact only spans the time that the second agent joined the call.

- Cold (blind) — Webex WFO uses "cold (blind)" to describe both transfer and conference scenarios. This descriptor involves routing an existing call directly to an additional agent without any communication between the two agents before the transfer or conference takes place.
- Warm — Webex WFO uses "warm" to describe both transfer and conference scenarios. This descriptor means the first agent speaks to the second agent to provide relevant context and background information before the transfer or conference takes place. The consultation portion of a warm transfer or conference is included in contact recordings.
- Parks — In parked scenarios Webex WFO segments the call into two contacts. The recording for the first contact spans the time before the call was parked. The recording for the second contact spans the time after the call was retrieved from park. Meaning, parking a call ends a contact, and retrieving a parked call creates a new contact.
- Consults — The first contact is associated with the agent who answered the customer's call, and the second contact is associated with the agent who was brought into the call for a consultation. The recording for the first contact spans the entire length of the customer's call. The recording for the second contact spans only the length of time that the agents were consulting.

The following table details different call event types and if Webex WFO supports them.

Type	Supported	Description
Call accepted/ended	Yes	An agent accepts a customer call, and the call ends without any call events, such as holds or transfers, taking place.
Hold/Resume	Yes	A customer is put on hold. Hold music is played on the customer's leg of the call.
Pause and resume (manual)	Yes	A call is paused. Pause and resume adheres to PCI compliance standards. Unlike hold/resume, no hold music is played on the customer's leg of the call; only silence is heard. A user must manually trigger pause and resume within their Cisco Webex CC system, and Webex WFO recognizes the manual trigger.
Cold (blind) transfer	Yes	A call is transferred from one agent to another agent.
Warm transfer		

Type	Supported	Description
Cold conference	Yes	A call interaction with two or more agents.
Warm conference		
Park	No	A call is put on hold (parked), and the call can be picked up (retrieved) by the same agent.

NOTE Screen recording is supported for the first agent in a call. Screen recording is not supported for transferred call legs.

Screen Recording

Screen recording is captured through Webex WFO Smart Desktop, not Cisco Webex CC.

Prerequisites

For screen recording to function, you must ensure that the following features and components are correctly configured.

Feature	Configuration
Smart Desktop	Webex WFO Smart Desktop must be installed and operating on the PCs where agents log on to Webex CC, and each Smart Desktop must be configured to use RTE messaging. RTE messaging is configured by selecting the Enable RTE Messaging for Screen Recording check box on the ACD Configuration page for Webex CC. RTE messaging enables connected Smart Desktop clients to record screen recordings in ten-minute segments when a correctly-configured user logs on to Webex CC.
Webex WFO Users	When Webex WFO syncs with Webex CC, it imports and syncs agents as Webex WFO users who have Webex CC user profiles. Only users with Webex CC user profiles can be screen recorded. These users must have the following additional configurations on the Users page:

Feature	Configuration
	■ Activate this user — Must be selected. ■ Roles — Must be assigned to a role that is associated with the Capture Contacts and Record Screen permissions. ■ Windows Login — Must be the same as the Windows login that the Webex CC agents use to log on to the PC.

Capturing screen recordings

The following list provides an overview of how Webex WFO captures screen recordings for Webex CC agents.

1. Agent logs on to a PC with Smart Desktop.

When a user who is correctly configured in Webex WFO logs on to a PC where Smart Desktop is operating and configured to use RTE messaging, Smart Desktop begins to capture screen recordings in ten-minute segments that it saves locally. It does not yet upload any screen recordings to Webex WFO.

The screen recording segments are encrypted on the desktop. Calabrio uses a two-factor encryption process using Symmetric AES-CBC-256 and Asymmetric RSA-CBC-2048 to handle authentication and encryption of screen recording files.

Smart Desktop stores these segments in the following location:

C:\Program Files (x86)\Common Files\Calabrio ONE\Desktop\recordings

2. Agent handles the contact in Webex CC.
3. Webex WFO imports the contact's audio recording and metadata.
4. Webex WFO extracts and uploads the screen recording from the agent's PC.

Once Webex WFO uploads contacts from Webex CC, it begins the process of extracting and uploading matching screen recordings. Webex WFO does this by relaying timestamps for each contact to the appropriate agent PC.

When Smart Desktop receives these timestamps, it crops and splices the screen recording segments into a single screen recording that matches the duration of the contact. Then, it uploads the screen recording to Webex WFO.

Screen recording segments that are not associated with any contact are analyzed to verify that no discrepancies have occurred, then deleted. If Smart Desktop loses its connection to Webex WFO, it executes a recovery process when it reconnects to ensure that it creates screen recordings for all contacts handled by the agent in the meantime.

EXAMPLE An agent handles a contact at the end of the day, then shuts down the PC before Webex CC makes the contact available to Webex WFO. When the agent turns on the PC the next day, Smart Desktop reconnects to Webex WFO, and Webex WFO extracts and uploads the screen recording then.

5. Agent logs out.

When the agent logs out, Smart Desktop stops recording new screen segments.

About serverless configurations

The Webex WFO Data Server processes requests and delivers data. Specifically, user sync and data import are data server processes. These processes are now native to the integration itself; therefore, a data server is no longer required.

Process details

If your organization is conducting a net new implementation of the QM integration for Cisco Webex Contact Center 2.0, then you can follow the procedures detailed in [Connect to Cisco Webex Contact Center 2.0](#) exactly as they are written.

However, if your organization is migrating from a data server integration to a serverless integration, then please note the following considerations.

1. This is a controlled rollout, meaning a professional services engagement is required. An engineer must enable the cisco 2.0 serverless feature on your organization's behalf before you can proceed with the next steps in this process.
2. You must deactivate your data server using the Data Server configuration page located in **Application Management > System Configuration > Data Server Configuration**.
 - Remove all settings and unmark all checkboxes for a single data server one at a time, and then click **Save**.

- Wait ten minutes before continuing to the next step.
 - Click **Remove** to remove the data server connection to your ACD.
3. Ensure your ACD configuration settings (**Application Management > System Configuration > ACD Configuration**) are up to date.
- Click the **Media Import** toggle and the **User Sync** toggle on the **Cisco Webex Contact Center 2.0 ACD** configuration page to enable serverless media import and user sync capabilities.
 - **Webex WFO API Username** — You must use an email address associated with administrative credentials in Cisco Webex Contact Center for this field.
 - In Webex WFO, this user must also have the **Record Screen** and **Record Voice** permissions assigned to their role. In **Application Management**, use the **Roles** page to assign permissions to roles, and use the **Users** page to assign roles to users.
 - This user must be assigned to the **Default Team** from the **Team** drop-down list on the **Users** page in **Application Management**.
 - This user must be given full scope by selecting all the groups and teams under **Associated Groups and Teams** on the **Users** page in **Application Management**.

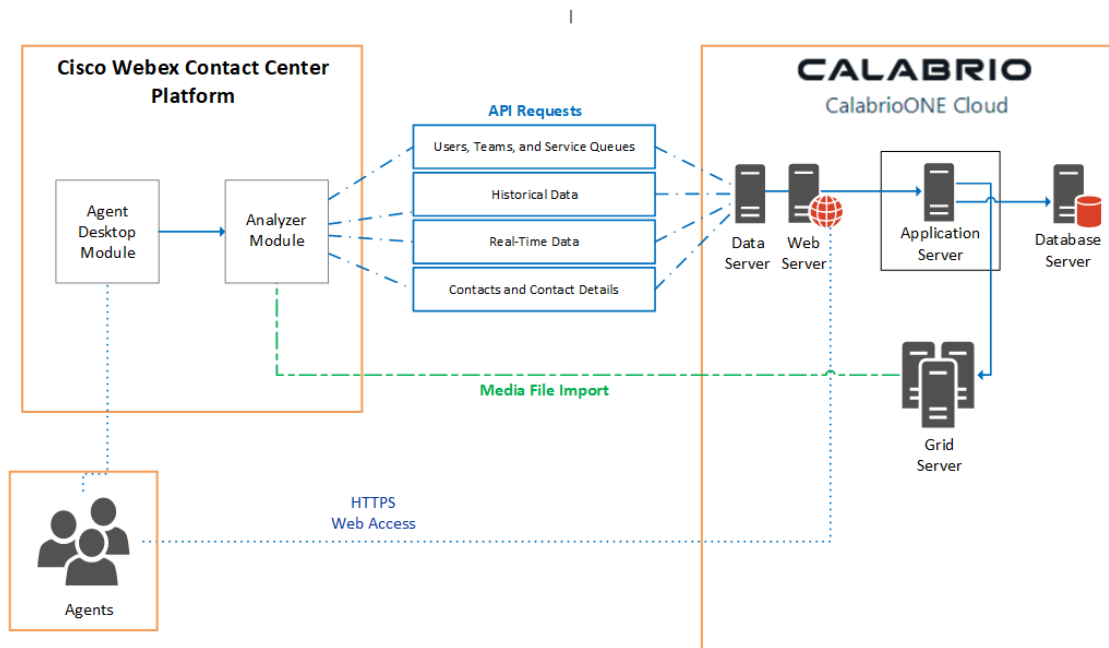
Appendix

Refer to the appendix for content pertaining to version 1.0 of the Cisco Webex Contact Center integration.

Core Configuration Data for 1.0

Webex WFO syncs the following core configuration data with equivalents from Cisco Webex Contact Center through three API requests.

The architecture diagram below shows the connection between Cisco Webex Contact Center and the Webex WFO suite. Note that the diagram includes Classic WFM.



Users

When Webex WFO imports a new user from Webex Contact Center, it creates a new Webex WFO user who has a Webex Contact Center user profile.

When someone changes user data in Webex Contact Center, the sync service detects it and makes several changes in Webex WFO. The following table summarizes these changes.

NOTE Users with a Not Active status in Webex Contact Center are not imported unless they are restored.

Change in Webex CC	Resulting Change in Webex WFO
New user is added.	New user is added. Specifically, the sync service: ■ Applies the Webex Contact Center user's first and last name to the Webex WFO user's first and last name. ■ Applies the Webex Contact Center user's TID to the Webex WFO user's ACD ID. ■ Sets the Webex WFO start dates for the company and department to the date that the sync occurred. ■ Assigns the Webex WFO user to the default team. NOTE Webex WFO does not preserve the relationship between Webex Contact Center users and teams. See Teams. ■ If the Webex Contact Center user is contact-center enabled, assigns the default agent role to the Webex WFO user. No other Webex WFO roles are synced with Webex Contact Center. NOTE If you remove the agent role from a Webex WFO user who is synced with a Webex Contact Center user who is contact-center enabled, the agent role will be reassigned the next time Webex WFO syncs with Webex Contact Center.
User's first or last name is changed.	User's first or last name is changed.
User is deleted.	User is deactivated.

Teams

Webex WFO syncs with Webex Contact Center teams of any type (Capacity Based or Agent Based), as long as they are active. It does not preserve the relationship between Webex Contact Center users and Webex Contact Center teams.

When team data is changed in Webex Contact Center, the sync service detects it and makes several changes in Webex WFO. The following table summarizes these changes.

Change in Webex CC	Resulting Change in Webex WFO
New team is added	New team is added with the same name. This name is read-only.
Team name is changed	Team name is changed.
New user is added to a team	No change. Webex WFO does not preserve the relationship between Webex Contact Center users and Webex Contact Center teams.
User is removed from a team	No change. Webex WFO does not preserve the relationship between Webex Contact Center users and Webex Contact Center teams.
Team is deleted.	No change.

You can create new teams in Webex WFO and assign users to them, but these new teams are not added to Webex Contact Center.

A Webex WFO user can belong to only one team.

About serverless configurations

The Webex WFO Data Server processes requests and delivers data. Specifically, user sync and data import are data server processes. These processes are now native to the integration itself; therefore, a data server is no longer required.

Process details

If your organization is conducting a net new implementation of the QM integration for Cisco Webex Contact Center 2.0, then you can follow the procedures detailed in [Connect to Cisco Webex Contact Center 2.0](#) exactly as they are written.

However, if your organization is migrating from a data server integration to a serverless integration, then please note the following considerations.

1. This is a controlled rollout, meaning a professional services engagement is required. An engineer must enable the cisco 2.0 serverless feature on your organization's behalf before you can proceed with the next steps in this process.
2. You must deactivate your data server using the Data Server configuration page located in **Application Management > System Configuration > Data Server Configuration**.

- Remove all settings and unmark all checkboxes for a single data server one at a time, and then click **Save**.
 - Wait ten minutes before continuing to the next step.
 - Click **Remove** to remove the data server connection to your ACD.
3. Ensure your ACD configuration settings (**Application Management > System Configuration > ACD Configuration**) are up to date.
- Click the **Media Import** toggle and the **User Sync** toggle on the **Cisco Webex Contact Center 2.0 ACD** configuration page to enable serverless media import and user sync capabilities.
 - **Webex WFO API Username** — You must use an email address associated with administrative credentials in Cisco Webex Contact Center for this field.
 - In Webex WFO, this user must also have the **Record Screen** and **Record Voice** permissions assigned to their role. In **Application Management**, use the **Roles** page to assign permissions to roles, and use the **Users** page to assign roles to users.
 - This user must be assigned to the **Default Team** from the **Team** drop-down list on the **Users** page in **Application Management**.
 - This user must be given full scope by selecting all the groups and teams under **Associated Groups and Teams** on the **Users** page in **Application Management**.

Connect to Cisco Webex Contact Center 1.0

This section explains how to set up the connection between Cisco Webex Contact Center 1.0 and Webex WFO.

Step 1: Gather Information from Your Webex Contact Center Provider

Gather the following API information from your Webex Contact Center provider and save it in an easy-to-access location:

- Complete base URL of the Webex Contact Center API, including the protocol.
- Complete base URL of the Webex Contact Center Media API, including the protocol.
- Email address of the Webex Contact Center user who is authorized to access both the Webex Contact Center API and the Webex Contact Center Media API.
- API key for the Webex Contact Center API and Webex Contact Center Media API.

When you configure the ACD connection with Webex Contact Center in Webex WFO, you will need this information to complete the Webex Contact Center API section.

NOTE The following example images show Cisco Webex Contact Center 1.0 APIs.

- Entity ID

EXAMPLE

The entity ID is highlighted in the following image.

```
8 <EntityDescriptor xmlns="urn:oasis:names:tc:SAML:2.0:metadata"
  xmlns:ds="http://www.w3.org/2000/09/xmldsig#"
  xmlns:shibmd="urn:mace:shibboleth:metadata:1.0"
  xmlns:xml="http://www.w3.org/XML/1998/namespace"
  xmlns:mdui="urn:oasis:names:tc:SAML:metadata:ui"
  entityID="https://tenant.cccone.net:443/cas/idp">
```

- Single sign-on redirect URL

EXAMPLE

The single sign-on redirect URL is highlighted in the following image.

```
91 <SingleSignOnService Binding="urn:oasis:names:tc:SAML:2.0:bindings:HTTP-POST-
SimpleSign" Location="https://tenant.cccone.net/idp/profile/SAML2/POST-
SimpleSign/SSO"/>
92 <SingleSignOnService Binding="urn:oasis:names:tc:SAML:2.0:bindings:HTTP-Redirect"
Location="https://tenant.cccone.net/idp/profile/SAML2/Redirect/SSO"/>
```

- Identity provider certificate

EXAMPLE

The identity provider certificate is highlighted in the following image.

```
103 <KeyDescriptor use="signing">
104 <ds:KeyInfo>
105 <ds:X509Data>
106 <ds:X509Certificate>
107 ffdFKDCKLNLJwIBAgIUeEyT7j8oshdHGD+cvz4HR2zevjUwDQYJKoZIhvcNAQ
108 BQAwHTEbMBkGA1UEAwSY2FzLXNjeGEuY2NvbUubmV0MB4XDTE3MTEwNjE3Mz
109 MCoXDTE3MTEwNjE3MzUwHTEbMBkGA1UEAwSY2FzLXNjeGEuY2NvbUubmV0
```

Step 2: Configure Webex Contact Center as an ACD in Webex WFO

Next, add and configure Webex Contact Center as an ACD in Webex WFO.

NOTE Webex WFO currently refers to Webex Contact Center as Cisco Customer Journey Platform.

Add Webex Contact Center as an ACD

1. In Webex WFO, navigate to Application Management > System Configuration > ACD Configuration.
2. Click **Add**.
3. In the ACD Details dialog box, configure the fields as follows.

Field	Configuration
Select ACD	Select Cisco Customer Journey Platform .
Name	Enter a unique name for the ACD.

4. Click **OK**.

Configure the Webex Contact Center ACD

1. In the ACD Servers table, select your Webex Contact Center ACD.
2. Skip the ACD Filtering section. This integration does not support ACD Filtering.
3. Configure the Cisco Customer Journey Platform API section as follows.

Field	Configuration
Cisco Customer Journey Platform API URL	Enter the complete base URL of the Webex Contact Center API that you saved in Step 1, including the protocol identifier. EXAMPLE <code>https://rest-tenant.ccone.net/aws/api</code>
Cisco Customer Journey Platform Media API URL	Enter the complete URL of the Webex Contact Center Media API that you saved in Step 1, including the protocol identifier. EXAMPLE <code>https://rd-tenant.ccone.net/cr/get-decrypted-recording</code>
User Name	Enter the email address of the Webex Contact Center user that you saved in Step 1. This user must be authorized to access the Webex Contact Center API and the Webex Contact Center Media API.
API Key	Enter the API key for the Webex Contact Center API and Webex

Field	Configuration
	Contact Center Media API that you saved in Step 1.
Cisco Webex Contact Center 1.0	Select only if you are using Webex Contact Center 2.0. This enables CMSv2 API requests.
Cisco Tenant ID	Enter the alphanumeric identifier of the Webex Contact Center tenant account. This is your Cisco OrgId.

4. Configure the Synchronization Interval section as follows.

Section	Description
Interval (Minutes)	Enter how often (in minutes) you want the Data Server to sync users, teams, and service queues in Webex WFO with their equivalents in Webex Contact Center. For more information about syncing with Webex Contact Center, see Core Configuration Data for 1.0 . Minimum = 10 minutes.

5. Configure the Capture Settings section as follows.

Field	Description
ACD Capture Delay	Select the amount of time that you want WFM to wait before it imports ACD statistics after an interval ends.
Enable Data Recapture	(Optional) Select the check box if you want to recapture data from the entire previous day. If you routinely handle calls that last longer than the maximum default delay, you can opt to recapture the entire previous day's data from midnight to midnight. The recaptured data overwrites what was captured during the day. This ensures that your statistics are correct and that the data for very long calls is in the correct interval.
Recapture Time	Enter the time of day that you want Webex WFO to recapture the previous day's data from the ACD.

6. (Optional) Select **Enable RTE Messaging for Screen Recording**. This allows you to record the screens of Webex Contact Center agents who are configured for screen recording in Webex WFO. For more information about screen recording, see [QM Data for 1.0](#).
7. Click **Save**.

Step 3: Configure the Data Server

Configure a Data Server for a Cisco Webex Contact Center ACD

1. In Webex WFO, navigate to **Application Management > System Configuration > Data Server Configuration**.
2. From the **Select Data Server Configuration** drop-down list, select the Data Server that you want to use for the Webex Contact Center ACD.
3. Configure the following settings.

Setting	Configuration
Regional Data Server ACD Sync Settings	Select the Enable Sync check box, and then move the Webex Contact Center ACD from Available to Assigned .
Regional Data Server ACD Capture Settings	Select the Enable Capture check box, and then move the Webex Contact Center ACD from Available to Assigned .
Regional Data Server Real-Time Event Settings	Select the Enable Real-Time Events check box, and then move the Webex Contact Center ACD from Available to Assigned .
Media Import Server Settings	Select the Enable Media Import check box, and then move the Webex Contact Center ACD from Available to Assigned .

4. Click **Save**.

Connect to Cisco Webex Contact Center using CMSv2 APIs

This section explains how to set up the connection between Cisco Webex Contact Center and Webex WFO for users transitioning from 1.0 using CMSv2 APIs.

Configure CWCC 2.0 using CMSv2 APIs

1. In Webex WFO, navigate to **Application Management>System Configuration>ACD Configuration**.
2. Click **Add**. The **ACD Details** window opens.
3. In the ACD Details window, configure the fields as follows.

Field	Configuration
Select ACD	Select Cisco Customer Journey Platform .
	NOTE Webex WFO currently refers to Webex Contact Center as Cisco Customer Journey Platform.
Name	Enter a unique name for the ACD.

4. Click **OK**.
5. In the **Select ACD** table, select the Cisco Webex Contact Center ACD you just created.
6. Skip the ACD Filtering section. This integration does not support ACD Filtering.
7. Configure the Cisco Customer Journey Platform API section as follows.

Field	Configuration
Cisco Customer Journey Platform API URL	Enter the complete base URL of the Webex Contact Center API that you saved in Step 1, including the protocol identifier.
	EXAMPLE https://rest-tenant.ccone.net/aws/api
Cisco Customer Journey Platform Media API URL	Enter the complete URL of the Webex Contact Center Media API that you saved in Step 1, including the protocol identifier.
	EXAMPLE https://rd-tenant.ccone.net/cr/get-decrypted-recording
User Name	Enter the email address of the Webex Contact Center user that you saved in Step 1. This user must be authorized to access the Webex Contact Center API and the Webex Contact Center Media API.
API Key	Enter the API key for the Webex Contact Center API and Webex

Field	Configuration
	Contact Center Media API that you saved in Step 1.
Cisco Webex Contact Center 1.0	Select the checkbox. This checkbox enables you to connect to CWCC 2.0 with CMSv2 APIs.
Cisco Tenant ID	Enter the alphanumeric identifier of your Webex Contact Center tenant account. This is your Cisco Organization ID.

8. Configure the Synchronization Interval section as follows.

Section	Description
Interval (Minutes)	Enter how often (in minutes) you want the Data Server to sync users, teams, and service queues in Webex WFO with their equivalents in Webex Contact Center. For more information about syncing with Webex Contact Center, see Core Configuration Data for 1.0 . Minimum = 10 minutes.

9. Configure the Capture Settings section as follows.

Field	Description
ACD Capture Delay	Select the amount of time that you want WFM to wait before it imports ACD statistics after an interval ends.
Enable Data Recapture	(Optional) Select the check box if you want to recapture data from the entire previous day. If you routinely handle calls that last longer than the maximum default delay, you can opt to recapture the entire previous day's data from midnight to midnight. The recaptured data overwrites what was captured during the day. This ensures that your statistics are correct and that the data for very long calls is in the correct interval.
Recapture Time	Enter the time of day that you want Webex WFO to recapture the previous day's data from the ACD.

10. (Optional) Select **Enable RTE Messaging for Screen Recording**. This allows you to record the screens of Webex Contact Center agents who are configured for screen recording in Webex WFO. For more information, see [Screen Recording](#).
11. Click **Save**.

QM Data for 1.0

QM allows you to monitor and evaluate how well your agents respond to the contacts that they receive.

Audio Recording

When QM is connected to Cisco Webex Contact Center, contacts are created and recorded in Webex Contact Center.

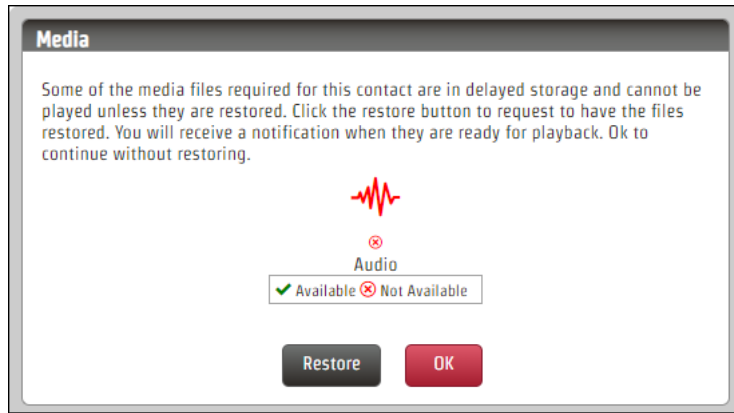
To import a contact, Webex WFO first imports contact metadata through an API request. Then, it imports the audio recording through another API request, matches the audio recording with the contact metadata, and associates the contact with the agent who handled it.

When multiple agents handle a contact in Webex Contact Center (for example, when one agent transfers the contact to another agent), Webex WFO uses metadata to segment the contact into a matching number of contacts that it then associates with the individual agents involved. Specifically, Webex WFO determines when agents were active on the call through Start and End timestamps and segments the contact accordingly. Each resulting contact in Webex WFO has its own metadata and audio recording.

It can take up to two hours for Webex Contact Center to make a contact available to Webex WFO. Sometimes, it can take longer for the audio recording associated with the contact to be uploaded.

NOTE

If you double-click a contact that does not yet have an uploaded audio recording, you receive the following message:



However, in this situation, the recording is not in delayed storage, and clicking “Restore” does not cause the recording to be restored. The recording is available for playback only once the audio file upload state changes from “File not yet uploaded” to “File is uploaded.”

The following sections describe how Webex WFO segments Webex Contact Center contacts that involve consultations, transfers, or conferences.

Consultations

Webex WFO segments the Webex Contact Center contact into two contacts that have the same associated contact ID.

The first contact is associated with the agent who answered the customer’s call, and the second contact is associated with the agent who was brought into the call for a consultation. The recording for the first contact spans the entire length of the customer’s call. The recording for the second contact spans only the length of time that the agents were consulting.

During consultation, Webex Contact Center records the customer only, not the agents.

EXAMPLE

Webex WFO imports a contact where Agent Braun consulted with Agent Hodges for 42 seconds. Webex WFO segments this contact into two contacts, 29 and 30.

The recording associated with contact 29 has a duration of 00:02:21, which is the entire length of time that Agent Braun was connected to the customer. The recording associated with contact 30 has a duration of 00:00:42, which is only the length of time that Agent Hodges was consulting with Agent Braun.

Both recordings have the same associated contact ID.

These contacts can be selected and played back one by one with the Media Player. All associated contacts appear in the Associated Contacts tab, where they can also be selected and played back.

Transfers

Webex WFO segments the Webex Contact Center contact by the number of times that it was transferred. For each transfer, Webex WFO creates a separate contact, and it associates each contact with the agent who handled that segment of the transferred call.

All segments of a transferred call have the same associated contact ID.

EXAMPLE

Webex WFO imports a contact where Agent Braun transferred the contact to Agent Hodges.

Webex WFO segments this contact into two contacts, 27 and 28. The recording for contact 27 has a duration of 00:00:44, which is the length of time that Agent Braun was connected to the customer before he transferred the contact to Agent Hodges. The recording for contact 28 has a duration of 00:01:14, which is the length of time that Agent Hodges was connected to the customer before the contact ended.

Both recordings have the same associated contact ID.

These contacts can be selected and played back one by one with the Media Player. All associated contacts appear in the Associated Contacts tab, where they can also be selected and played back.

Conferences

Webex WFO segments the Webex Contact Center contact into two contacts that have the same associated contact ID.

The first contact is associated with the agent who answered the customer's call, and the second contact is associated with the agent who was brought into the call for a consultation and then for a conference. The recording for the first contact spans the entire length of the customer's call. The recording for the second contact spans only the length of time that the agents were consulting and on the conference call.

During the consultation, Webex Contact Center records the customer only, not the agents. During the conference call, Webex Contact Center records both the customer and the agents.

EXAMPLE

Webex WFO imports a contact from Webex Contact Center where Agent Braun consulted with Agent Hodges and then brought Agent Hodges into a conference call.

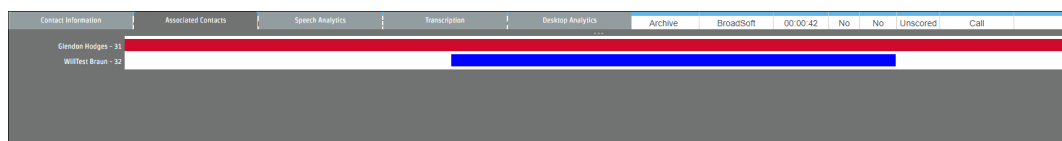
Webex WFO segments this contact into two contacts, 31 and 32. The recording for contact 31 has a duration of 00:02:09, which is the entire length of time that Agent Braun was connected to the customer. The recording for contact 32 has a duration of 00:01:00, which is only the length of time that Agent Hodges was consulting and then on a conference call with Agent Braun.

Both recordings have the same associated contact ID.

Contact ID	Last Name	Call Duration	Associated Call ID	Video File Upload State	Audio File Upload State
32	Braun	00:01:00	40f653524a4b4b70b607d95514029769	No File to Upload	File is uploaded
31	Hodges	00:02:09	40f653524a4b4b70b607d95514029769	No File to Upload	File is uploaded

These contacts can be selected and played back one by one with the Media Player. All associated contacts appear in the Associated Contacts tab, where they can also be selected and played back.

The following image shows the Media Player when contact 31 is selected. From the Associated Contacts tab, contact 32 can also be selected and played back.



Contact Metadata

Webex WFO does not import any custom metadata from Webex Contact Center 1.0, including the following:

- Call-associated data
- Wrap-up codes

The following table summarizes how contact metadata from Webex Contact Center 1.0 is mapped to equivalent contact metadata in QM.

Webex CC	QM
Agent	Last Name, First Name
ANI	Calling Number
DNI	Called Number

Webex CC	QM
Date	Date, Time
User TID	Agent ACD ID
Session ID	Associated Contact ID

Webex WFO supports custom metadata mapping for CWCC 2.0. See [Sync Metadata to Webex WFO](#) for more information.

WFM Data for 2.0

Historical Data Mapping

The following tables provide information on data from queue statistics reports, agent queue statistics reports, and Webex WFO WFM real-time fields. The tables detail the values each Webex WFO data point maps to in Cisco Webex Contact Center 2.0 (CWCC).

NOTE Tasks that do not have an ID or name (as in, null or empty string) are filtered out in the statistics calculation.

Queue Statistics Report

Webex WFO WFM Queue Statistics	CWCC 2.0	Description
Date/Interval*	—	The selected date and time.
*	—	The unique queue ID as it is defined in CWCC 2.0. This metric does not appear in reports, but it is important for queue mapping.
Queue*	task.Queues.Last().Id – for Offered, overflowOut (this is the first leg of the contact) task.LastQueue.Id – for Answered, abandoned, overflowIn	The queue name as defined in CWCC 2.0.

Webex WFO WFM Queue Statistics CWCC 2.0 Description		
Queue Name	task.Queues. Last ().Name – for Offered, overflowOut task.LastQueue.Name - for Answered, abandoned, overflowIn	—
Offered contacts	Registered on the first queue and on the interval of task.CreatedTime Counted as offered when there is a queue and the ID and name are not null or empty and termination type is not rejected	The total number of incoming contacts to the queue.
Answered contacts	Registered on the task.lastQueue and on the interval task.CreatedTime + task.QueueDuration When TerminationType is not short_contact or abandoned and is assigned to a queue and an agent (owner)	The total number of answered contacts for the queue.
Answered within service level	Registered on the task.lastQueue and on the interval task.CreatedTime + task.QueueDuration When TerminationType is not short_contact or abandoned and has an agent (owner)	The total number of answered contacts in the queue that are within CWCC 2.0's configured service level. Registered on the task.lastQueue and on the interval task.CreatedTime + task.QueueDuration TerminationType = Cannot be one of the abandoned termination types (short_contact or abandoned) and must have an owner

Webex WFO WFM Queue		
Statistics	CWCC 2.0	Description
Abandoned contacts	Registered on the task.lastQueue and on the interval task.CreatedTime + task.QueueDuration When TerminationType is short_contact or abandoned	The total number of abandoned contacts in the queue. Registered on the task.lastQueue and on the interval task.CreatedTime + task.QueueDuration TerminationType = Must be in one of the abandoned termination types (short_contact or abandoned)
Abandoned within service level	Registered on the task.lastQueue and on the interval task.CreatedTime + task.QueueDuration When TerminationType is abandoned The QueueDuration is <= Service Level defined for this queue	The total number of contacts abandoned where the answer time is between the defined “short contact threshold in seconds” and “service level in seconds” parameters.
Abandoned short contacts	Registered on the task.lastQueue and on the interval task.CreatedTime + task.QueueDuration When TerminationType is short_contact	The total number of contacts abandoned where the answer time is less than the defined “short contact threshold in seconds” parameter. Registered on the task.lastQueue and on the interval task.CreatedTime + task.QueueDuration TerminationType = Must be short_contact

Webex WFO WFM Queue Statistics	CWCC 2.0	Description
Overflow out	Registered on the first queue and on the interval of task.CreatedTime The task is considered as overflowed out when the first and last queue are different and task.transferCount = 0	The total number of contacts for the queue that were sent to another queue or to a third party.
Overflow in	Registered on the last queue and on the interval of task.CreatedTime The task is considered overflowed out when the first and last queue are different and task.transferCount = 0	The total number of contacts in the queue that were in another queue first.
Contact time	Task.ConnectedDuration Registered on the last queue and on the interval of task.EndedTime	The total contact duration for contacts put in this queue and subsequently answered. This value appears in a hh:mm:ss format.
After contact work	Task.WrapUpDuration Registered on the last queue and on the interval of task.EndedTime	The total wrap-up duration, or administrative time after a contact, for contacts answered in the queue. This value appears in a hh:mm:ss format.
Total delay in queue, answered	Task.QueueDuration Registered on the task.lastQueue and on the interval task.CreatedTime + task.QueueDuration When TerminationType is not short_contact or abandoned and has an agent (owner)	The total time of contacts put on queue and subsequently answered. This value appears in a hh:mm:ss format.

Webex WFO WFM Queue Statistics	CWCC 2.0	Description
Total delay in queue, abandoned	Task.QueueDuration Registered on the task.lastQueue and on the interval task.CreatedTime + task.QueueDuration When TerminationType is short_contact or abandoned	The total queue time for contacts put on queue and subsequently lost. A contact is considered lost when the caller hangs up before the call is answered. This value appears in a hh:mm:ss format.
Longest delay in queue, answered	Max of Task.QueueDuration Registered on the task.lastQueue and on the interval task.CreatedTime + task.QueueDuration When TerminationType is not short_contact or abandoned and has an agent (owner)	The longest queue time for a contact that was in a queue and then subsequently answered. This value appears in a hh:mm:ss format.
Longest delay in queue, abandoned	Max of Task.QueueDuration Registered on the task.lastQueue and on the interval task.CreatedTime + task.QueueDuration When TerminationType is short_contact or abandoned	The longest queue time for a contact that was in a queue and then subsequently lost. A call is considered lost when the caller hangs up before the call is answered. This value appears in a hh:mm:ss format.

* Indicates the metric is part of the historical data feed's unique identification.

Agent Queue Statistics

Webex WFO WFM Agent Queue Statistics	CWCC 2.0	Description
Date/Interval*	—	The selected date and time.
*	—	The unique queue ID as it is defined in CWCC 2.0. This metric does not appear in reports, but it is important for queue mapping.
Queue*	—	The queue name as defined in CWCC 2.0. QueueId = task.LastQueue.Id QueueName = task.LastQueue.Name
Agent*	N/A	The agent name as defined in Webex WFO WFM's People module.
*	CiUserId in User API through Task.Owner.Id	The unique agent ID as defined in CWCC 2.0. This metric does not appear in reports, but it is important for agent mapping. Agent id =
ACD Login*	Task.Owner.Name	The agent's login as defined in Cisco Webex Contact Center 2.0.
Answered Contacts	Registered on the task.lastQueue and on the interval task.CreatedTime + task.QueueDuration When TerminationType is not short_contact or abandoned and is assigned to a queue and an agent (owner)	The total number of answered contacts for the queue.

Webex WFO WFM Agent		
Queue Statistics	CWCC 2.0	Description
Transferred Contacts	Registered on the task.lastQueue and on the interval task.CreatedTime + task.QueueDuration When TerminationType is not short_contact or abandoned and is assigned to a queue and an agent (owner) Calculated if Task.transfercount > 0	The total number of transferred contacts.
Contact Time	Task.ConnectedDuration Registered on the last queue and on the interval of task.EndedTime	The total talking time for ACD contacts.
After Contact Work	Task.WrapUpDuration Registered on the last queue and on the interval of task.EndedTime	The total wrap-up time.

* Indicates the metric is part of the historical data feed's unique identification.

Real-time Adherence Data Mappings

Webex WFO Real-time field	CWCC 2.0	Mandatory Y/N	Description
LogOn	CiUserId	Y	The agent's login defined in Cisco Webex Contact Center 2.0.
AgentName	—	N	The agent's login defined in Cisco Webex Contact Center 2.0.
StateCode	currentState Combined with	Y	The state code as defined by Cisco Webex Contact Center 2.0.

Webex WFO Real-time field	CWCC 2.0	Mandatory Y/N	Description
	idleCodeId och wrapUpAuxCodeId (if applicable)		
StateDescription	currentState Combined with idleCodeId och wrapUpAuxCodeId (if applicable)	N	The state name as defined by Cisco Webex Contact Center 2.0.
TimeInState	N/A	N	Time (in seconds) that the agent has been in this state.