Webex WFO and Webex Contact Center Integration Guide

For Deployments with New WFM

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Audience

The *Webex WFO and Webex Contact Center Integration Guide Integration Guide* provides details on the following:

- The integration's available and unavailable features
- High-level architecture diagram(s)
- Configuration procedures
- Specific integration details such as data mappings

The *Webex WFO and Webex Contact Center Integration Guide Integration Guide* is primarily designed for Cisco implementation engineers and official Cisco partners who typically install and configure Webex WFO for customers. Additionally, support engineers, sales engineers, development, marketing, and customers 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 CMSv1 (legacy) APIs, CMSv2 APIs (transitional APIs), and Programmatic APIs. CMSv2 APIs, also called transitional APIs, are used to transition CWCC 1.0 customers to CWCC 2.0.

If you have CWCC version 1.0 then follow the Connecting to Cisco Webex Contact Center procedures to configure CWCC 1.0 in Webex WFO. If you have CWCC version 2.0 follow the Connecting to Cisco Webex Contact Center 2.0 procedures to configure CWCC 2.0 in Webex WFO.

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

View the tables below to learn about what products, features, and APIs are compatible and available.

Version and API compatibility

Version	CWCC 1.0 with legacy CMSv1 APIs	CWCC 1.0 to 2.0 with CMSv2 APIs	CWCC 2.0 with legacy CMSv1
Webex WFO QM	Yes	Yes*	
Webex WFO Classic WFM	Yes	Yes*	
Webex WFO New WFM	Yes**	n/a	Yes

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 Programmatic APIs
Webex WFO QM	available	available	available	

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 Programmatic APIs
and Classic WFM				
Webex WFO New WFM	available**	n/a	available	
Stereo recording	n/a	available	available	available
Screen recording pause and resume	available	n/a	n/a	
Audio pause and resume	available	available	available	

*CMSv2 APIs are used to transition CWCC 1.0 customers to CWCC 2.0.

** Available via the New WFM integration with CWCC 1.0.

All other aspects of the integration between Webex WFO and CWCC are the same for version CWCC 1.0 and 2.0. This includes the following.

- Core Configuration Data
- QM Data
- WFM Data

Introduction

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

> **NOTE** Available 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	Available	Currently Unavailable
Webex WFO records audio		X Detection of silence and talkover events in the Media Player is not supported
Webex WFO screen recording	X	
Webex WFO imports audio recording	X Two-hour delay before import	
Webex WFO storage required for storing audio in the cloud	X	

Feature	Available	Currently Unavailable
Cloud-to-cloud integration for data transfer	X Data transfer via APIs is built into the integration	
Audio recording pause and resume	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.	
Screen recording pause and resume		
Stereo recording		
Agent web recording controls and recording controls API		X***
SAML authentication via a third-party identity provider (IdP)	X	
Recordings encrypted	X	
Speech energy events		X Detection of silence and talkover events in the Media Player is not supported.
Live monitor voice	X Available via Call Monitoring in Webex CC	
Live monitor screen		X
Sync supported	X Users, Teams, and Queues	
Contact metadata imported	X	
Supports multichannel integration		X*
CRM integration	X**	

**Cisco supports the import of text contacts from other sources with additional Cisco Technical Support involvement; however, Cisco Webex Contact Center currently does not have an API for access to text contact content. Chat and other text contacts handled in Cisco Webex Contact Center cannot be imported into Webex WFO.*

***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.*

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		X
Smart Desktop for screen recording	X	
Smart Desktop for all other features		X
Smart Desktop on Windows OS	X	
Smart Desktop on Mac OS		X

Workforce Management (WFM)

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	Available	Currently Unavailable
Real-time adherence data feed	X	
Real-time adherence data feed (omni-channel)		X
Historical data feed - queue statistics	X	
Historical data feed - agent statistics	X	
Historical data feed - agent queue statistics	X	
Forecasting (voice)	X	
Forecasting (chat)	X	
Forecasting (email)		X
Forecasting (omni-channel)		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 interaction into actionable insights.

Available Features

Feature	Available	Currently Unavailable
Speech Analytics (Phonetics)	X***	
Speech Analytics (Speech-to-Text)	X***	
Desktop Analytics	X* Not synced with recordings	

Feature	Available	Currently Unavailable
Text Analytics	X**	
Dashboards with drill-down	X	
Predictive Evaluation Score	X	
Predictive NPS	X	
Sentiment Analysis	X	
Agent Smart Benchmarking	X	
Advanced Speech Search	X	

**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.*

***Cisco supports the import of text contacts from other sources with additional Cisco Technical Support involvement; however, Cisco Webex Contact Center currently does not have an API for access to text contact content. Chat and other text contacts handled in Cisco Webex Contact Center cannot be imported into Webex WFO.*

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

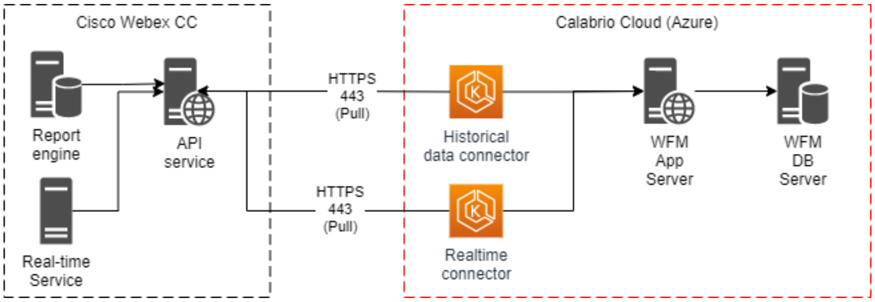
Advanced Reporting

Whether your data lives in silos due to structural issues or simply because your organization's growth has resulted in multiple, incompatible systems, Advanced Reporting allows you to break down data silos and end the headaches of patching together vendor-, vertical-, or data type-specific reporting products.

Available Features

Feature	Available	Currently Unavailable
Cisco Advanced Reporting	Available via custom connector	

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


Cisco Webex CC
Report engine
API service
Real-time Service
HTTPS 443 (Pull)
HTTPS 443 (Pull)
Calabrio Cloud (Azure)
Historical data connector
Realtime connector
WFM App Server
WFM DB Server

Connecting to Cisco Webex Contact Center

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

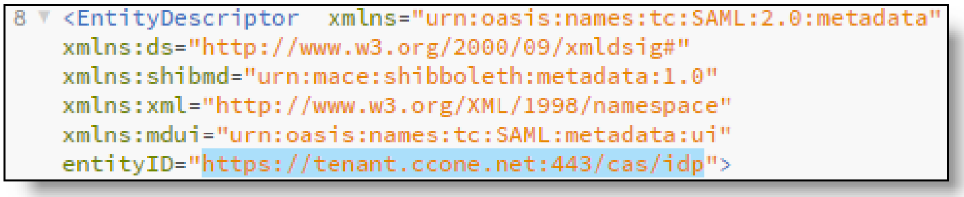
When you configure the ACD connection with Webex Contact Center in Webex WFO, you will need this information to complete the Webex Contact Center API section.

If you are planning to use Webex Contact Center as an identity provider (IdP) for SAML authentication, also gather the following information from the SAML metadata file (provided by Webex Contact Center) and save it in the same easy-to-access location:

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.

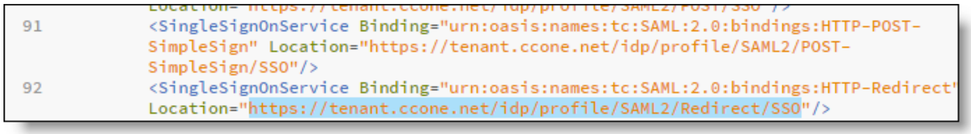


```
<EntityDescriptor  xmlns="urn:oasis:names:tc:SAML:2.0:metadata"
xmlns:ds="http://www.w3.org/2000/09/xmldsig#"
xmlns:shibmd="urn:mace:shibboleth:metadata:1.0"
xmlns:xml="http://www.w3.org/XML/1998/namespace"
xmlns:mdui="urn:oasis:names:tc:SAML:metadata:ui"
entityID="https://tenant.ccone.net:443/cas/idp">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

- Single sign-on redirect URL

EXAMPLE

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

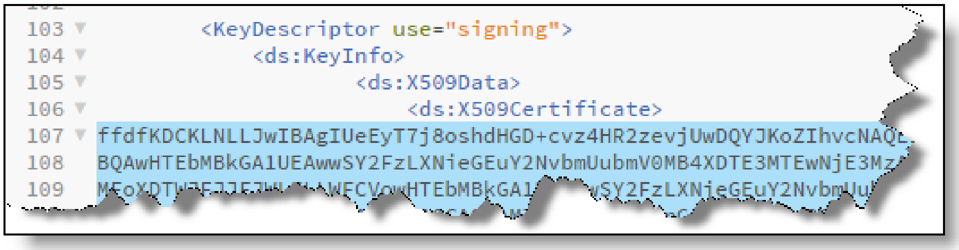


```
<SingleSignOnService Binding="urn:oasis:names:tc:SAML:2.0:bindings:HTTP-POST-
SimpleSign" Location="https://tenant.ccone.net/idp/profile/SAML2/POST-
SimpleSign/SSO"/>
<SingleSignOnService Binding="urn:oasis:names:tc:SAML:2.0:bindings:HTTP-Redirect"
Location="https://tenant.ccone.net/idp/profile/SAML2/Redirect/SSO"/>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

- Identity provider certificate

EXAMPLE

The identity provider certificate is highlighted in the following image.



```
        <KeyDescriptor use="signing">
            <ds:KeyInfo>
                <ds:X509Data>
                    <ds:X509Certificate>
ffdfKDCKLNLLJwIBAgIUeEyT7j8oshdHGD+cvz4HR2zevjUwDQYJKoZIhvcNAQ
BQAwHTEbMBkGA1UEAwwSY2FzLXNieGEuY2NvbmUubmV0MB4XDTE3MTEwNjE3Mz
```

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.

To 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**.

To configure the Webex Contact Center ACD:

1. In the ACD Servers table, select your Webex Contact Center ACD.
2. (Optional) Configure the ACD Filtering section.

Field	Description
Filters	If you want to limit the users who are synced from the ACD, add an ACD filter. For example, you might configure a Team Name filter that allows the sync of users who belong to a team that matches a certain naming pattern. You can configure multiple ACD filters.

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** 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/cri/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.

Field	Configuration
API Key	Enter the API key for the Webex Contact Center API and Webex Contact Center Media API that you saved in Step 1.
Cisco Webex Contact Center 1.0	Select if you are using Webex Contact Center 1.0 or newer. This enables API requests specific to Webex Contact Center 1.0.
Cisco Tenant ID	Enter the alphanumeric identifier of the Webex Contact Center tenant account.

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. 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.
7. Click **Save**.

Step 3: Configure the Data Server

Configure the Data Server to capture and process data from Webex Contact Center.

To 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. 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**.

Connecting 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 if you are using CMSv2 APIs.

Prerequisites

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

- Client ID
- Client Secret
- Username
- 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
- Tenant ID

Configure Webex Contact Center 2.0 as an ACD in Webex WFO

Configure Webex Contact Center 2.0 as an ACD

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.
Client ID	Enter the client ID, which is a set of access credentials used to retrieve the token code.
Client Secret	Enter the client secret, which is a randomized secret value only known to the OAuth client and the authorization server.
Username	Enter your Cisco Webex Contact Center username.
API URL	Enter the complete base URL of the Webex Contact Center API, including the protocol identifier.
Tenant ID	Enter the alphanumeric identifier of the Webex Contact Center tenant account.
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. For more information about syncing with Webex Contact Center, see Core Configuration Data.
Capture Delay (minutes)	Sets the amount of time you want WFM to wait before it imports ACD statistics after an interval ends.
Enable Data Recapture	(Optional) Select this check box if you want to recapture data from the entire previous day
Enable RTE Messaging for Screen Recording	(Optional) 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.

5. Click **Save**.

Integration Details

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

Core Configuration Data

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

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

Change in Webex CC	Resulting Change in Webex WFO
	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.

QM Data

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

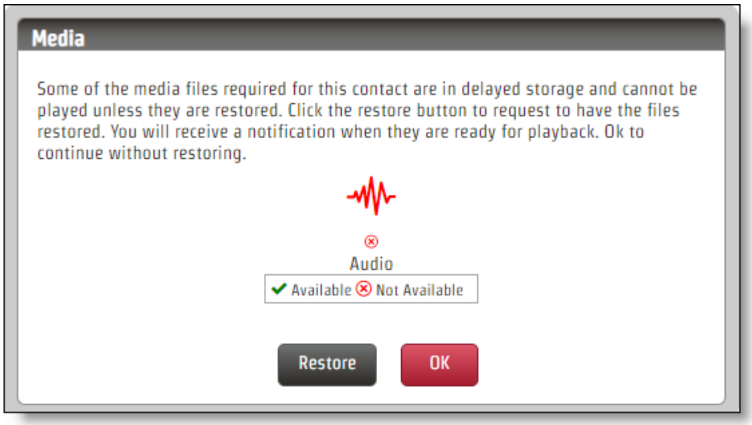
Audio Recording

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:
>
> 
>
> Some of the media files required for this contact are in delayed storage and cannot be played unless they are restored. Click the restore button to request to have the files restored. You will receive a notification when they are ready for playback. Ok to continue without restoring.
>
>

> 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.

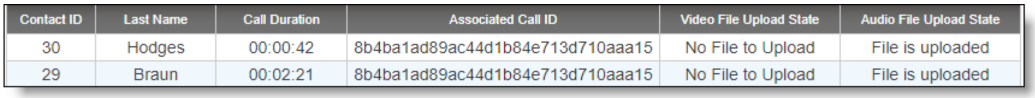
Consultations

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

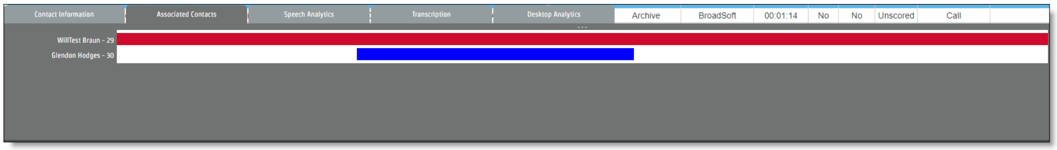
During consultation, Webex Contact Center records the customer only, not the agents.

> **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 call ID.



Contact ID	Last Name	Call Duration	Associated Call ID	Video File Upload State	Audio File Upload State
30	Hodges	00:00:42	8b4ba1ad89ac44d1b84e713d710aaa15	No File to Upload	File is uploaded
29	Braun	00:02:21	8b4ba1ad89ac44d1b84e713d710aaa15	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 29 is selected. From the Associated Contacts tab, contact 30 can also be selected and played back.


Contact Information
Associated Contacts
Speech Analytics
Transcription
Desktop Analytics
Archive
BroadSoft
00:01:14
No
No
Unscored
Call
WillTest Braun - 29
Glendon Hodges - 30

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.

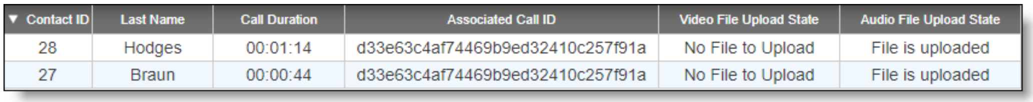
All segments of a transferred call have the same associated call ID.

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.

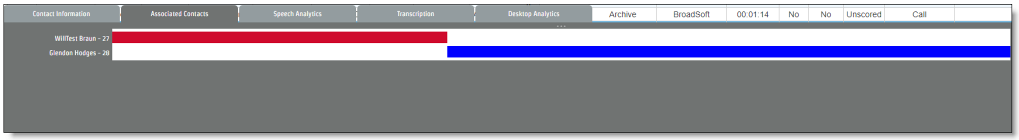
Both recordings have the same associated call ID.



▼ Contact ID	Last Name	Call Duration	Associated Call ID	Video File Upload State	Audio File Upload State
28	Hodges	00:01:14	d33e63c4af74469b9ed32410c257f91a	No File to Upload	File is uploaded
27	Braun	00:00:44	d33e63c4af74469b9ed32410c257f91a	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 27 is selected. From the Associated Contacts tab, contact 28 can also be selected and played back.


Contact Information
Associated Contacts
Speech Analytics
Transcription
Desktop Analytics
Archive
BroadSoft
00:01:14
No
No
Unscored
Call
WillTest Braun - 27
Glendon Hodges - 28

Conferences

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

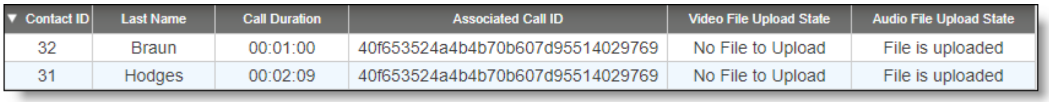
During the consultation, Webex Contact Center records the customer only, not the agents. During the conference call, Webex Contact Center records both the customer and the agents.

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.

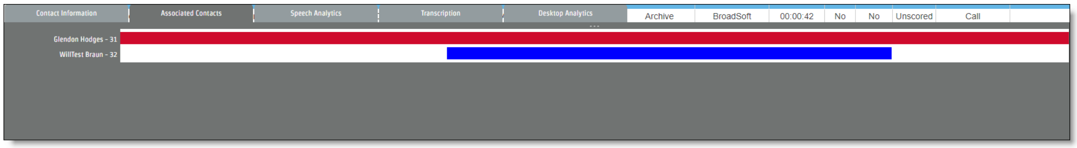
Both recordings have the same associated call ID.



▼ 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.



Screen Recording

Screen recording is captured through Smart Desktop, not Cisco Webex Contact Center.

Prerequisites

Webex WFO must be connected to Webex Contact Center. This connection is configured on the ACD Configuration and Data Server Configuration pages. See Connecting to Cisco Webex Contact Center.

In addition, 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 Contact Center, 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 Contact Center. RTE messaging enables connected Smart Desktop clients to record screen recordings in ten-minute segments when a correctly-configured user logs on to Webex Contact Center.
Webex WFO Users	When Webex WFO syncs with Webex Contact Center, it imports Webex Contact Center agents as Webex WFO users who have Webex Contact Center user profiles. To be recorded by Smart Desktop, these users must have the following additional configurations on the Users page: ▪ Activate this user—Must be selected. ▪ Roles—Must be assigned to a role that is associated with the Record Screen permission. ▪ Windows Login—Must be the same as the Windows login that the Webex Contact Center 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 Contact Center agents.

1. Agent logs on to Webex Contact Center—When a user who is correctly configured in Webex WFO logs on to Webex Contact Center on 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. Webex WFO 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
   ```

2. Agent handles the contact in Webex Contact Center—This handling can include consultation, transfers, and conferences. Webex Contact Center must be configured to record calls.
3. Webex WFO imports the contact—Webex WFO imports contact metadata first, then the audio recording. If multiple agents handled the contact, Webex WFO uses contact metadata to segment it into a matching number of contacts that it associates with the individual agents involved.
4. Webex WFO extracts and uploads the screen recording from the agent's PC—Once Webex WFO uploads and (if necessary) segments contacts from Webex Contact Center, it begins the process of extracting and uploading matching screen recordings from the agent PCs. Webex WFO does this by relaying the Start and End timestamps of each contact to the appropriate agent PC.

   When Smart Desktop receives these Start and End timestamps, it crops and splices the screen recording segments into a single matching screen recording. Then, it uploads screen recording to Webex WFO, and Webex WFO associates the screen recording with the contact. Once this is completed, the video file upload state changes from "File not yet uploaded" to "File is uploaded." If an agent pauses and resumes an audio recording the agent's screen continues to record throughout the duration of the paused audio.

   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 Contact Center 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 off of Webex Contact Center—When the agent logs off of Webex Contact Center, Smart Desktop stops recording screen segments.

Contact Metadata

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

- Call-associated data
- Wrap-up codes

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

Webex CC	QM
Agent	Last Name, First Name
ANI	Calling Number
DNI	Called Number
Date	Date, Time
User TID	Agent ACD ID
Session ID	Associated Call ID

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: ■ Activate this user — Must be selected. ■ Roles — Must be assigned to a role that is associated with the Record Screen permission. ■ 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\Webex WFO\Desktop
   ```

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.