



## **Webex WFO and Unified CCE Integration Guide**

### **For Deployments with New WFM**

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# Audience

The *Webex WFO and Unified CCE Integration Guide Integration Guide* provides details on the following:

- The integration's supported and unsupported features
- High-level architecture diagram(s)
- Configuration procedure(s)
- Specific integration details such as data mappings

The *Webex WFO and Unified CCE 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.



# Introduction

Webex WFO is a unified workforce optimization (WFO) software suite, which integrates with Cisco Unified Contact Center Enterprise (Unified CCE) to provide call recording, quality management, workforce management, voice-of-the-customer (VoC) analytics, and reporting. The details on the supported integration are listed below.

**IMPORTANT** When you select Webex WFO WFM as your WFM solution, Professional Services handles the full implementation process. This includes the design and discovery, execution, testing and validation, and trainings phases.

## Data Integrations

This document describes the integration information for the following Cisco Contact Center platforms (also referred to as ACDs).

- Cisco Unified CCE – Unified Contact Center Enterprise
- Cisco Unified CCE with ECE – Unified Contact Center Enterprise with enabled Enterprise Chat and Email
- Cisco PCCE – Package Contact Center Enterprise
- Cisco PCCE with ECE – Package Contact Center Enterprise with enabled Enterprise Chat and Email

For simplicity all the products in this document are referred as Cisco Unified CCE.

## 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	
Webex WFO imports audio recording		x
Webex WFO storage required for storing audio in the Cloud	X	
	Amazon S3 storage	
Webex WFO screen recording supported	x	
Audio pause/resume supported	x	
Screen recording pause/resume supported	x	
Agent web recording controls and recording controls API	x	
Recordings encrypted	x	
Stereo recording	x	
Live monitor voice	x	
Live monitor screen	x	
Sync supported	x	
Type of sync	Users, Teams, and Queues	
Contact metadata imported	x	
Windows OS	x	
Mac OS		x
Supports multichannel integration	*, **	
CRM Integration	**	

\*Import via API



\*\* Open product integration review

## Edge Components

Component	Required	Not Required
Data Server	x	
Smart Desktop for screen recording	x	
Smart Desktop for all other features		x

See “Installing Smart Desktop” in the *Webex WFO Installation Guide* for more information.

## 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 ECE is required	
Forecasting (email)	X ECE is required	

Feature	Available	Currently Unavailable
Real-time adherence data feed	X	

## Cisco Analytics

Cisco 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	
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	

## Data Management

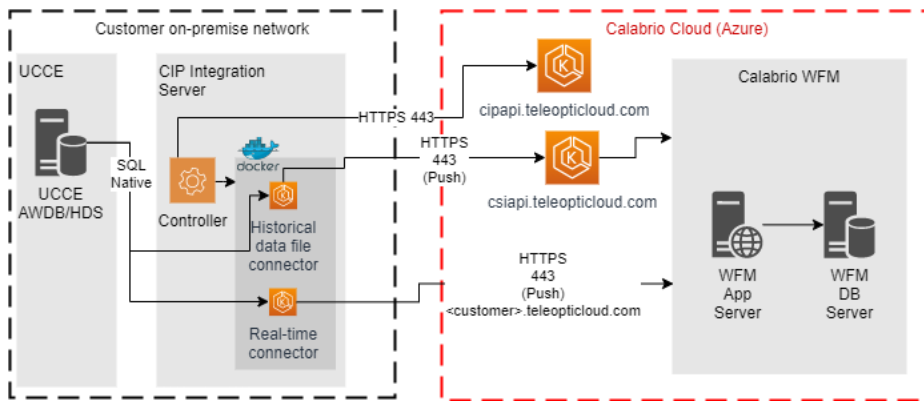
Whether your data lives in silos due to structural issues or simply because your organization's growth has resulted in multiple, incompatible systems, Data Management allows you to break down data silos and end the headaches of patching together vendor-, vertical-, or data type-specific reporting products.

## Available Features

Feature	Available	Currently Unavailable
Data Management	x	

## Webex WFO and Cisco Unified CCE Architecture

The architecture diagram below shows the connection between Cisco Unified CCE and Webex WFO WFM only.





# Configure Cisco Unified Contact Center Enterprise

Follow the steps detailed below to set up and configure Cisco Unified CCE.

**NOTE** See [Set up Webex WFO WFM](#) for set up information specific to WFM.

- [Step 1: Add Cisco Unified CCE as an ACD](#)
- [Step 2: Configure a Data Server](#)
- [Step 3: Customize Your Configuration](#)

## Step 1: Add Cisco Unified CCE as an ACD

### Prerequisites

- The Administer ACD permission
- A System Administrator license
- A Data Server installed and configured. See “Installing Webex WFO Data Server” in the *Webex WFO Installation Guide* for hybrid or on-premises deployments for more information.
- Customers need to provide database credentials for a user with permissions to query the database tables.

### Page Location

Webex WFO > Application Management > Global > System Configuration > ACD Configuration

## Procedures

### Add Cisco Unified CCE as an ACD

1. Click **Add**.
2. Select **Cisco Unified CC Enterprise** from the **Select ACD** drop-down list. Cisco Unified CCE appears as **Cisco Unified CC Enterprise** in the ACD drop-down list.
3. Enter a unique name for the Cisco Unified CCE ACD in the **Name** field.
4. Click **OK**.
5. Configure the fields. See Field Descriptions below for more on the available fields.
6. Click **Test Connection** to ensure your entries are correct and Webex WFO is connected to the ACD.
7. Click **Save**.

### Field Descriptions

The following fields appear when you select Cisco Unified CC Enterprise as your ACD.

Section	Description
Historical Reporting Interval	<p>The historical data reporting interval that is configured in your Unified CCE system.</p> <p>If your ACD is configured to a 15-minute interval, you must select the 15-minute option to ensure that Webex WFO is compatible with your ACD and that all data is imported into Webex WFO. If the reporting intervals do not match, then the historical ACD data will not be captured correctly.</p>
ACD Filtering	<p>Use an ACD filter to limit the users who are synced from the ACD. For example, you might configure a Team Name filter that allows you to sync users who belong to a team that matches a certain naming pattern. You can configure multiple ACD filters.</p> <p><b>IMPORTANT</b> If you only select the <b>Service Name</b> in the <b>Prefix Type</b> drop-down list, no teams or agents sync over. Any teams or agents already synced over are deactivated.</p> <p>If you change a filter that uses the <b>Service Name</b> in the <b>Prefix Type</b> drop-down list, all previously synced service queues stay</p>

Section	Description
	<p>active, even if they are not captured by the changed filter.</p> <p><b>NOTE</b> If you only select the <b>Team Name</b> in the <b>Prefix Type</b> drop-down list, related service queues still sync over. If you change a filter that uses the <b>Team Name</b> in the <b>Prefix Type</b> drop-down list, any agents or teams no longer captured by the filter are deactivated.</p>
<p>IP Configuration</p>	<p>This is used to get historical data.</p> <p>HDS Primary IP Address or Hostname—The IP address or host name of the primary historical database server (HDS).</p> <p>HDS Secondary IP Address or Hostname— (Optional) The IP address or host name of the secondary historical database server.</p> <p>AWDB Primary IP Address or Hostname—The IP address or host name of the primary Admin Workstation database server (AWDB).</p> <p>AWDB Secondary IP Address or Hostname— (Optional) The IP address or host name of the secondary Admin Workstation database server.</p> <p>Unified CC Instance—The instance name of the Microsoft SQL Server for the Unified CCE database.</p>
<p>Authentication</p>	<p>This is used to get historical data. Select the authentication method the database login uses:</p> <p>NT—If you select NT Authentication, the following fields appear:</p> <ul style="list-style-type: none"> <li>▪ Username</li> <li>▪ Password</li> <li>▪ Domain</li> <li>▪ Peripheral ID—The ICM peripheral ID for the system.</li> </ul> <p>SQL—If you select SQL Authentication, the following fields appear:</p> <ul style="list-style-type: none"> <li>▪ SQL User—The login name of the Webex WFO SQL user.</li> <li>▪ Password—The password of the Webex WFO SQL user.</li> </ul>

Section	Description
	<ul style="list-style-type: none"> <li>■ Peripheral ID—The ICM peripheral ID for the system.</li> </ul>
<p>CTI Servers</p>	<p>This is used to get agent real-time data.</p> <p>Primary CTI IP Address or Hostname—The IP address or host name of the primary CTI server associated with the system.</p> <p>Primary CTI Port—The port of the primary CTI server associated with the system.</p> <p>Secondary CTI IP Address or Hostname—The IP address or host name of the secondary CTI server associated with the system.</p> <p>Secondary CTI Port—The port of the secondary CTI server associated with the system.</p>
<p>Departments</p>	<p>Enterprise Name—The name of the department or departments by the enterprise name. An enterprise name represents a tenant in a Cisco Hosted Collaboration Solution (HCS).</p>
<p>CDR Reconciliation Configuration</p>	<p>(Read only) CDR (call-detail record) Base—The folder on the Data Server where the Data Server imports CDR files from the Unified CCE ACD and uploads them to Webex WFO.</p> <p>Webex WFO creates a directory with an ACD-specific subdirectory that contains the cdrBase and uploadDir directories when the Regional Data Server Reconciliation Settings feature is enabled on a Data Server and the Unified CCE ACD is assigned to that feature. The base directory path that you enter along with the ACD unique identifier display below the field. The following subdirectories are created:</p> <ul style="list-style-type: none"> <li>■ ACD-specific directory—This directory is named with a unique ACD server ID number. Because users can configure multiple ACD servers to use the same directory, a folder with a unique identifier is needed to make sure CDR files are uploaded to the correct ACD. The ACD-specific directory contains the following directories: <ul style="list-style-type: none"> <li>■ cdrdir—The Data Server places incoming CDRs from the</li> </ul> </li> </ul>



Section	Description
	<p>Unified CM billing server in this folder.</p> <p>When configuring the Unified CM Billing Application Server, you must use the following name for the Directory Path parameter: /cdr/</p> <ul style="list-style-type: none"> <li>▪ CdrFailures</li> <li>▪ uploaddir—The Data Server places reconciled CDR and Unified CCE data in this folder until the data is uploaded.</li> <li>▪ UploadFailures</li> </ul> <p><b>NOTE</b> This field is used for Quality Management purposes only.</p>
Synchronization Interval	<p>Interval (Minutes)—The length of the interval at which the ACD is synchronized with the Data Server. This is how often the Data Server attempts to synch the user, team, and service queue to Webex WFO.</p>
Capture Settings	<p>ACD Capture Delay—Select the amount of time WFM waits before pulling ACD statistics after an interval ends. The default delay is 15 minutes.</p> <p>Enable Data Recapture—Select this check box to recapture the entire previous day. If the agent routinely handles calls that last more 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.</p> <p>Recapture Time—Select the time to recapture the previous day's data from the ACD. The default is 03:00.</p>

## Step 2: Configure a Data Server

### Prerequisites

- A Cisco Unified Contact Center Enterprise (Cisco Unified CCE) ACD configured.
- Webex WFO Data Server downloaded and installed.

## Page Location

Application Management > Global > System Configuration > Data Server Configuration

## Procedures

### Configure the Data Server

1. Select the Data Server you want to use from the **Select Data Server Configuration** drop-down list.
2. Configure the fields as described.

**Display Name** — Enter the display name of the Data Server you selected.

**Regional Data Server ACD Sync Settings** — Select the **Enable Sync** check box and then move the Cisco Unified CCE ACD you configured from **Available** to **Assigned**.

3. Configure the remaining fields as desired. See the “Configure the Data Server” topic in the *Webex WFO User Guide* for more on the available fields.
4. Click **Test Connection** to ensure your entries are correct and the Data Server is properly configured.
5. Click **Save**.

## Step 3: Customize Your Configuration

After completing steps one and two, data has successfully synced from your Cisco Unified CCE ACD to Webex WFO. You can do much more to use Webex WFO to its fullest potential. The topics listed below can be found in their entirety in the *Webex WFO User Guide*. You can also find the topics listed below by navigating to the page locations in Webex WFO (for example, Location: Application Management > QM > QM configuration > Metadata Manager). Then click the **Help** button in the top right corner of the page.

### Quality Management

- **Manage Associations with ACD Devices** — (Location: Application Management > QM > QM Configuration > Device Associations) After you sync devices through the Data Server, you can use the **Device Associations** page to associate devices from your ACD with Webex WFO users, recording groups, and recording types.
- **Configure Telephony Groups** — (Location: Application Management > QM > QM Configuration > Telephony Groups) Telephony Groups provide the structure used to create the recording infrastructure. Telephony groups consist of at least one signaling source, one signaling group, one signaling server, one recording group, and your contact center devices. Learn more about

telephony groups and their configuration procedures on this page.

- **Configure Cisco Unified Communication Manager (Unified CM)** — You can configure SOAP Administrative XML Layer (AXL) users and JTAPI users. The CTI service makes use of the users to log in to Unified CM. A CTI Signaling service from your Webex WFO Signaling server is used for edge server recording environments to track start and stop events and capture CTI metadata for call recordings. A Unified CM cluster is composed of a set of Unified CM servers that share the same database and resources and have one or more CTI Managers.

## Analytics

- **Transcription Search** — (Location: Analytics > Transcription Search) Use the Transcription Search page to mine data in your transcribed calls for phrases and specific terms in calls using search queries and result filters .
- **Predictive Evaluation Scores** — (Location: Application Management > Analytics > Task Manager )Allows you to use a variety of factors to determine a likely evaluation score for a contact.
- **Predictive Net Promoter Scores** — (Location: Application Management > Analytics > Task Manager) Creates a model using customer interactions, agent performance, and other factors to determine a likely Net Promoter Score for a contact .

## Users

- **Manage Users** — (Location: Application Management > Global > User Configuration) See this section to learn more about editing and configuring users and teams after they have been synced from your ACD. When users are synced from the ACD, Webex WFO creates a new user and associates an ACD user profile with that user. Users must have one or more roles assigned to them and each role can have various permissions enabled. A role is a collection of permissions, and a permission controls which applications and actions are available to a user who has been assigned a role.

## Set up Webex WFO WFM

This section explains, at a high-level, the set up procedures for Webex WFO WFM.

### Prerequisites

During the implementation project's technical discovery sessions, the professional services team presents the intended solution and distribution of the components included in the Webex WFO WFM delivery. At this stage, a decision on the location of the integration services is to be agreed upon by the customer and the

professional services team. The agreed server hosting the integration services is referenced as the “integration server.”

## Setting up Cisco Unified CCE

### Step 1: Set up Unified CCE

Historical and real-time data is stored within a MS SQL database, on the Unified CCE server.

1. Create the SQL login on the Cisco Unified CCE databases AWDB and HDS.
2. Assign the SQL login with Read-Only permissions.
3. Provide the following information to your professional services contact person.
  - Database name of AWDB
  - SQL login
  - SQL password

It is the customer’s responsibility to test the database connectivity from the server to make sure that the user account is set up correctly.

### Step 2: Configure the integration server

To avoid internet traffic to hit resources on your local network, the Webex WFO WFM solution requires an integration server to be hosted in the customer’s network. After the customer and professional services engineers agree to the location of the integration services, the engineers configure the integration server.

### Step 3: Configure Cisco WFM

This step is handled by professional services.

## Integration Details - WFM Data

Webex WFO WFM allows you to schedule agents and forecast agent scheduling requirements, as well as monitor if agents are following their schedules.

Call types is the recommended choice for Webex WFO WFM forecasts if the customer's routing strategies (routing scripts) are configured correctly. There is no clear connection between call types and skill groups. Therefore, if you need to pull agent queue statistics reports you always need to use "Not Defined" queues, because the relationship between call types and skill groups is not always one-to-one or one-to-many. This is also why skill groups do not need to be added to Webex WFO WFM workloads.

Precision queues are a set of attributes assigned to agents, not to call routing. It is an agent-based routing that reflects the receiving agent's capability to respond to the callers' questions, rather than the type of call the callers are asking for (the skill).

Skill groups group agents and the destination of a call routed by a call type. If no agents are logged on to the skill group or if the call type strategy decides to route the call to another skill group due to, for example, a lack of available agents, then the skill group will never know that the call even took place, but the call type will.

Forecasts are completely independent of agents' activities. Webex WFO WFM forecasts work with skill-based routing that analyzes the callers' behavior, which in Cisco Unified CCE is call types (where the routing strategy is defined).

For Queue statistics, Webex WFO WFM prefers call type-based integrations, rather than the use of precision queues or skill groups.

Dialed numbers are mapped to call types, which are in turn mapped to routing scripts. Call types are used for granular tracking of how a call flowed through a routing script. Examples include after hours, holidays, or emergencies. This, together with the option to track the selected menus by callers, is very important for reporting and for Webex WFO WFM forecasts, as the skill setup is based on the callers' behavior patterns.

## Queue Statistics

Call type is the preferred choice because call type is the highest level of the reporting entities. Reporting entities are call type, precision queues, and skill groups. Call type reports provide the most insight into call treatment and a caller's overall experience with the system.

## Integration Details - WFM Data | Queue Statistics report

A call type is a category of incoming call and is used to select a routing script for a call. Administrators can create call types that correlate to the type of service the caller wants and can change the call type during a routing script to direct the call to a new routing script or to gather report metrics for different legs or transactions.

For example, your system may have call types configured for the following situations:

- Transfers and conferences, to direct the call to a different routing script and gather call type report metrics for transfers and conferences.
- Individual transactions in CVP (Customer Voice Portal) Self-Service and Information Gathering applications, to be able to report on those transactions.
- Queuing, to separate Information Gathering and queue metrics. For example, you might change the call type when a call completes an Information Gathering script and enters a queue.
- CVP Ring No Answer (RONA), to direct calls to a routing script designed for this situation, and to use call type reports to see how calls that experience CVP RONA are eventually handled.
- Supervisor and Emergency Assist, to direct the assistance request to a routing script that assigns the request to the team's primary or secondary supervisor, and to use call type reports to view data about supervisor assistance requests.

Key call type metrics include the following.

- Average speed of answer.
- Number of calls received and handled.
- Number of calls abandoned while being routed to CVP, at CVP, while being routed to an agent, or while being offered to an agent.

## Queue Statistics report

(\*) Indicates the value is part of a unique identification from the historical data feed.

## Queue statistics report based on call types

Webex WFO WFM	Unified CCE – AWDB (view Call_Type_Interval if not specified)	Description
Date/Interval (*)	DateTime (date part) DateTime (time part)	Date and time according to selection.
(*)	CallTypeID	Unique queue ID in the ACD. Not shown in the reports but important for the queue mapping.
Queue (*)	Call_Type.EnterpriseName	Queue name as defined in the ACD.
Offered calls	CallsOffered	Total number of incoming calls to this queue.
Answered Calls	CallsAnswered	Total number of answered calls on this queue.
Answered within service level	ServiceLevelCalls	Total number of answered calls on this queue within the ACD's configured service level.
Completed Calls	CallsHandled	Total number of calls that have been answered and have completed wrap-up on this queue.
Abandoned Calls	TotalCallsAband + IncompleteCalls	Total number of abandoned calls on this queue.
Abandoned within service level	ServiceLevelAband	Total number of calls abandoned where the time of answer is between the defined "short call threshold in seconds" and the defined "service level in seconds."
Abandoned short calls	IncompleteCalls + AbandInterval	Total number of calls abandoned where the time of answer is less than the defined "short call threshold in seconds."

Integration Details - WFM Data | Queue Statistics report

Webex WFO WFM	Unified CCE – AWDB (view Call_Type_Interval if not specified)	Description
Overflow Out	OverflowOut	Total number of calls to this queue that were sent to another queue or to a third party.
Overflow In	n/a	Total number of calls to this queue that first went to another queue.
Talk time	TalkTime + HoldTime	Total call duration for calls put in this queue and subsequently answered (in hh:mm:ss).
Hold time	HoldTime	Total on-hold duration for calls put in this queue and subsequently answered (in hh:mm:ss).
After call work	HandleTime – TalkTime – HoldTime	Total wrap-up duration (administrative time after a call) for calls answered in this queue (in hh:mm:ss).
Total delay in queue, answered	AnswerWaitTime	Total queue time for calls put in this queue and subsequently answered (in hh:mm:ss).
Total delay in queue, abandoned	CallDelayAbandTime	Total queue time for calls put in this queue and subsequently lost (in hh:mm:ss).
Longest delay in queue, answered	MaxCallWaitTime	Longest queue time for calls put in this queue and subsequently answered (in hh:mm:ss).
Longest delay in queue, abandoned	MaxCallWaitTime	Longest queue time for calls put in this queue and subsequently lost (in hh:mm:ss).
Agents Ready (reports service	n/a	Average available agents for the



Webex WFO WFM	Unified CCE – AWDB (view Call_Type_Interval if not specified)	Description
level & agent ready)		specified queue.

### Queue statistics report based on precision queues

Webex WFO WFM	Unified CCE – AWDB (view Call_Type_SG_Interval if not specified)	Description
Date/Interval (*)	DateTime	Date and time according to selection.
(*)	PrecisionQueueID	Unique queue ID in the ACD. Not shown in the reports but important for the queue mapping.
Queue (*)	Precision_Queue.EnterpriseName	Queue name as defined in the ACD.
Offered calls	CallsOfferedRouted	Total number of incoming calls to this queue.
Answered Calls	CallsAnswered	Total number of answered calls in this queue.
Answered within service level	ServiceLevelCalls	Total number of answered calls on this queue within the ACD's configured service level.
Completed Calls	CallsHandled	Total number of calls that have been answered and have completed wrap-up in this queue.
Abandoned Calls	RouterCallsAbandToAgent + RouterCallsAbandQ + RouterCallsAbandDequeued	Total number of abandoned calls in this queue.

Integration Details - WFM Data | Queue Statistics report

Webex WFO WFM	Unified CCE – AWDB (view Call_Type_SG_Interval if not specified)	Description
Abandoned within service level	ServiceLevelCallsAband	Total number of calls abandoned where the time of answer is between the defined “short call threshold in seconds” and the defined “service level in seconds.”
Abandoned short calls	ShortCalls	Total number of calls abandoned where the time of answer is less than the defined “short call threshold in seconds.”
Overflow Out	n/a	Total number of calls to this queue that were sent to another queue or to a third party.
Overflow In	n/a	Total number of calls to this queue that first went to another queue.
Talk time	TalkTime + HoldTime	Total call duration for calls put in this queue and subsequently answered (in hh:mm:ss).
Hold time	HoldTime	Total on-hold duration for calls put in this queue and subsequently answered (in hh:mm:ss).
After call work	HandleTime -TalkTime - HoldTime	Total wrap-up duration (administrative time after a call) for calls answered in this queue (in hh:mm:ss).
Total delay in queue, answered	AnswerWaitTime	Total queue time for calls put in the queue and subsequently answered (in hh:mm:ss).
Total delay in queue, abandoned	n/a	Total queue time for calls put in the

Webex WFO WFM	Unified CCE – AWDB (view Call_Type_SG_Interval if not specified)	Description
		queue and subsequently lost (in hh:mm:ss).
Longest delay in queue, answered	n/a	Longest queue time for calls put in the queue and subsequently answered (in hh:mm:ss).
Longest delay in queue, abandoned	n/a	Longest queue time for calls put in the queue and subsequently lost (in hh:mm:ss).
Agents Ready (reports service level & agent ready)	n/a	Average available agents for the specified queue.

### Queue statistics report based on skill groups

Webex WFO WFM	Unified CCE – AWDB (view Skill_Group_Interval if not specified)	Description
Date/Interval (*)	DateTime	Date and time according to selection.
(*)	SkillGroupID	Unique queue ID in the ACD. Not shown in the reports but important for the queue mapping.
Queue (*)	Skill_Group.EnterpriseName	Queue name as defined in the ACD.
Offered calls	CallsAnswered + RedirectNoAnsCalls + RouterCallsAbandToAgent + RouterCallsAbandQ + RouterCallsAbandDequeued + RouterError	Total number of incoming calls to this queue.

Integration Details - WFM Data | Queue Statistics report

Webex WFO WFM	Unified CCE – AWDB (view Skill_Group_Interval if not specified)	Description
Answered Calls	CallsAnswered	Total number of answered calls in this queue.
Answered within service level	ServiceLevelCalls	Total number of answered calls in this queue within the ACD's configured service level.
Completed Calls	CallsHandled	Total number of calls that have been answered and have completed wrap-up in this queue.
Abandoned Calls	RedirectNoAnsCalls + RouterCallsAbandToAgent + RouterCallsAbandQ + RouterCallsAbandDequeued + RouterError	Total number of abandoned calls in this queue.
Abandoned within service level	ServiceLevelCallsAband	Total number of calls abandoned where the time of answer is between the defined "short call threshold in seconds" and the defined "service level in seconds."
Abandoned short calls	n/a	Total number of calls abandoned where the time of answer is less than the defined "short call threshold in seconds."
Overflow Out	n/a	Total number of calls to this queue that were sent to another queue or to a third party.
Overflow In	n/a	Total number of calls to this queue that first went to another queue.

Webex WFO WFM	Unified CCE – AWDB (view Skill_Group_Interval if not specified)	Description
Talk time	TalkInTime	Total call duration for calls put in this queue and subsequently answered (in hh:mm:ss).
Hold time	IncomingCallsOnHoldTime	Total on-hold duration for calls put in this queue and subsequently answered (in hh:mm:ss).
After call work	WorkReadyTime + WorkNotReadyTime	Total wrap-up duration (administrative time after a call) for calls answered in this queue (in hh:mm:ss).
Total delay in queue, answered	AnswerWaitTime	Total queue time for calls put in the queue and subsequently answered (in hh:mm:ss).
Total delay in queue, abandoned	n/a	Total queue time for calls put in the queue and subsequently lost (in hh:mm:ss).
Longest delay in queue, answered	n/a	Longest queue time for calls put in the queue and subsequently answered (in hh:mm:ss).
Longest delay in queue, abandoned	n/a	Longest queue time for calls put in the queue and subsequently lost (in hh:mm:ss).
Agents Ready (reports service level & agent ready)	n/a	Average available agents for the specified queue.

## Agent Queue Statistics

(\*) Indicates the value is part of a unique identification from the historical data feed.

### Agent queue statistics report based on precision queues

Webex WFO WFM	Unified CCE – AWDB (view Agent_Skill_Group_Interval if not specified)	Description
Date/Interval (*)	DateTime	Date and time according to selection.
(*)	PrecisionQueueID	Unique queue ID in the ACD. Not shown in the reports but important for the queue mapping.
Queue(*)	Precision_Queue.EnterpriseName	Queue name as defined in the ACD.
Agent (*)	n/a	Agent name as defined in Webex WFO WFM People.
(*)	Person.LoginName	Unique agent ID in the ACD. Not shown in the reports but important for the agent mapping.
Acid Login (*)	Agent.EnterpriseName	The agent's login as defined in the ACD.
Answered Calls	CallsAnswered	Total number of answered calls in this queue.
Completed Calls	CallsHandled	Total number of calls that have been answered and have completed wrap-up in this queue.
Transferred Calls	TransferredOutCalls	Number of transferred calls.
Talk Time	TalkInTime + IncomingCallsOnHoldTime	Total talking time for ACD calls.
Hold time	IncomingCallsOnHoldTime	Total on-hold duration for calls put in this queue and subsequently answered (in hh:mm:ss).

Webex WFO WFM	Unified CCE – AWDB (view Agent_Skill_Group_Interval if not specified)	Description
After Call Work	WorkReadyTime + WorkNotReadyTime	Total wrap-up time.

### Agent queue statistics report based on skill groups

Webex WFO WFM	Unified CCE – AWDB (view Agent_Skill_Group_Interval if not specified)	Description
Date/Interval (*)	DateTime	Date and time according to selection.
(*)	SkillGroupID	Unique queue ID in the ACD. Not shown in the reports, but important for the queue mapping.
Queue(*)	Skill_Group.EnterpriseName	Queue name as defined in the ACD.
Agent (*)	n/a	Agent name as defined in Webex WFO WFM People.
(*)	Person.LoginName	Unique agent ID in the ACD. Not shown in the reports, but important for the agent mapping.
Acid Login (*)	Agent.EnterpriseName	The agent's login as defined in the ACD.
Answered Calls	CallsAnswered	Total number of answered calls on this queue.
Completed Calls	CallsHandled	Total number of calls that have been answered and have completed wrap-up in this queue.

Webex WFO WFM	Unified CCE – AWDB (view Agent_Skill_Group_Interval if not specified)	Description
Transferred Calls	TransferredOutCalls	Number of transferred calls.
Talk Time	TalkInTime + IncomingCallsOnHoldTime	Total talking time for ACD calls.
Hold time	IncomingCallsOnHoldTime	Total on-hold duration for calls put in this queue and subsequently answered (in hh:mm:ss).
After Call Work	WorkReadyTime + WorkNotReadyTime	Total wrap-up time.

## Agent Performance Statistics

(\*) Indicates the value is part of a unique identification from the historical data feed.

(\*\*) If Unified CCE (Webex CCE/PCCE) is configured to report in 30 minute intervals and Webex WFO WFM is configured to report in 15 minute intervals, then the agent performance calculation metrics will be based on the Agent\_Event\_detail view.

Agent Statistics report in Webex WFO WFM	Unified CCE – AWDB (view Agent_Interval if not specified)	Description
Date/Interval (*)	DateTime	Date and time according to selection.
Agent (*)	n/a	Agent name as defined in Webex WFO WFM People.
(*)	Person.Login	Unique agent ID in the ACD. Not shown in the reports but important for the agent mapping.
Acad Login (*)	Agent.EnterpriseName	The agent's login as defined in the ACD.
Logged In Time	LoggedOnTime	Total logged-in time during the



Agent Statistics report in Webex WFO WFM	Unified CCE – AWDB (view Agent_Interval if not specified)	Description
	or (**) Sum(Agent_Event_Details.Duration) when Event = 2	interval(s).
Ready Time	See Description	Total available time during the interval (logged in time – not ready time).
Not Ready Time	NotReadyTime or (**) Sum(Agent_Event_Details.Duration) when Event = 3	Total pause duration excluding wrap-up duration.
	<p><b>NOTE</b> In blended/overlapping medias scenarios (more than one MRDomain), a calculated not ready time for the interval is shown.</p>	
Idle Time	SUM(AvailTime) for the agent in all the skill groups	Total time that the agent is ready and waiting for calls.
Admin Time	n/a	n/a
Direct Outbound Calls	Agent_SkillGroup_Interval.InternalCalls + Agent_SkillGroup_Interval.AgentOutCalls (on SkillGroup=5000)	Number of outgoing direct calls.
Direct Outbound	Agent_SkillGroup_Interval.InternalCallsTime + Agent_SkillGroup_Interval.	Total call duration for outgoing calls (including parked time).
Calls Talk Time	AgentOutCallsTime (on SkillGroup=5000)	n/a

Agent Statistics report in Webex WFO WFM	Unified CCE – AWDB (view Agent_Interval if not specified)	Description
Direct Incoming Calls	Agent_SkillGroup_Interval. InternalCallsRcvd (on SkillGroup=5000)	Number of incoming calls to this extension (not calls to this queue).
Direct Incoming Calls Talk Time	Agent_SkillGroup_Interval. InternalCallsRcvdTime (on SkillGroup=5000)	Total call duration for incoming calls to this extension.

## Real-Time Data

### State logic

Webex WFO WFM field	Unified CCE	Mandatory	Description
TimestampValue	Agent.SkillTragetID or Person.LoginName (depending on the designed integration)	No	The event date and time.
LogOn	n/a	Yes	ACD login, as defined in 0.
StateCode	n/a	No	ACD login, as defined in 0.
StateDescription	n/a	No	State name, as defined by the ACD.
TimeInState	Agent.SkillTragetID or Person.LoginName (depending on the designed integration)	No	Time (in seconds) that the agent has been in this state.

Unified CCE/PCCE AWDB (Agent_Real_Time)	State name as defined in Unified CCE
0	Logged Off
1	Logged On
2	Not Ready
3	Ready
4	Talking
5	Work Not Ready
6	Work Ready
7	Busy Other
8	Reserved
9	Unknown Call Initiated
10	Calls on Hold
11	Active
12	Paused
13	Interrupted
14	Not Active