



# Integration Specification

## Cisco UCCE

For CommunityWFM Software Version 4.4+/ 5.0+

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3400 Waterview Parkway, Suite 325  
Richardson, Texas 75080

phone 877-668-6870  
web [CommunityWFM.com](https://CommunityWFM.com)

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## About this Document

The objective of this document is to outline the method and details of the CommunityWFM integration to Cisco Unified Contact Center Enterprise (UCCE). The document assumes that the reader has some basic understanding of the Cisco database layout and a working understanding of SQL query syntax.

## CommunityWFM and Cisco Enterprise Integration

CommunityWFM integrates with the Cisco UCCE Enterprise platform using direct queries against two primary Cisco databases. Tables within each database satisfy the data collection requirements to fully integrate the CommunityWFM application with the Cisco Enterprise platform.

Each component of data collection and the required databases and tables are described below.

## Historical Data Collection

CommunityWFM collects historical contact volume data from the **hds** database to be used in volume and handle time reports and for future forecasting. The Community Historical Data Collection Service (a .NET Windows service) executes the query for each defined data collection point every 15 minutes and loads the results into vendor-neutral tables inside the CommunityWFM product database.

Historical data can be collected by CommunityWFM using either Skill IDs or Call Types as the primary contact focus.

### Skill Group Historical Collection

For **Skill Group** based data collection, the query runs against the `t_Skill_Group_Half_Hour` table and is implemented as follows:

```
SELECT DateTime AS 'Slot', SkillTargetID AS 'Skill', SUM(CallsHandledToHalf) +  
SUM(RouterCallsAbandQToHalf) + SUM(AbandonRingCallsToHalf) +  
SUM(RedirectNoAnsCallsToHalf) AS 'CallVolume', SUM(RouterCallsAbandQToHalf) AS  
'Abandoned', SUM(HandledCallsTimeToHalf) AS 'HandleTime' FROM t_Skill_Group_Half_Hour
```

```
WHERE DateTime >=#DtStart# AND DateTime < '#DtEnd#' AND SkillTargetID=#AcSkill#
GROUP BY DateTime, SkillTargetID
```

**Note:** This query implements replacement characters for the WHERE condition. The data collection service resolves these replacement tokens when it executes the query for individual Skill Groups.

### Call Type Historical Collection

For **Call Type** based data collection, the query runs against the Call\_Type\_Half\_Hour table and is implemented as follows:

```
SELECT DateTime AS 'Slot', CallTypeID AS 'Skill', SUM(CallsOfferedHalf) AS 'CallVolume',
SUM(CallsOfferedHalf) - SUM(CallsHandledHalf) AS 'Abandoned', SUM(HandleTimeHalf) AS
'HandleTime' FROM Call_Type_Half_Hour WHERE DateTime >= '#DtStart#' AND DateTime <
'#DtEnd#' AND CallTypeID=#AcSkill# GROUP BY DateTime, CallTypeID
```

**Note:** This query implements replacement characters for the WHERE condition. The data collection service resolves these replacement tokens when it executes the query for individual Call Types.

## Agent State Transaction Data Collection

CommunityWFM collects agent state transactions from the **awdb** database to compare against schedule intervals in order to provide agent schedule adherence reporting. The Community Adherence Collection Service (a .NET Windows service) executes the query on a user-defined interval (typically between 5 and 30 seconds) and loads the results into vendor-neutral tables inside the CommunityWFM product database.

The state transaction collection service executes the following query against the T\_Agent\_Real\_Time table:

```
select CONVERT(varchar, A.SkillTargetID, 20) AS 'SkillTargetID', CASE WHEN (ART.AgentState IS
NULL) THEN 0 ELSE ART.AgentState END AS 'AgentState', CASE WHEN (ART.AgentState IS
NULL) THEN GETDATE() ELSE ART.DateTimeLastStateChange END AS
'DateTimeLastStateChange', A.EnterpriseName AS 'EnterpriseName' FROM t_Agent A LEFT JOIN
t_Agent_Real_Time ART ON A.SkillTargetID = ART.SkillTargetID ORDER BY A.SkillTargetID,
DateTimeLastStateChange
```

**Note:** No replacement characters are used here; the query is fully formed by the m\_last\_dt date formatting statement executed in the data collection service.

## Importing Configuration Data

CommunityWFM supports the ability to import agent and Skill Group (or Call Type) data directly from the Cisco Enterprise database into CommunityWFM. Configuration data is retrieved from the **awdb** database using the DSN provided by the end user.

## Agent Profile Data

CommunityWFM imports the agent profile data using the following query:

```
SELECT P.FirstName AS 'First_Name', P.LastName AS 'Last_Name', A.SkillTargetID AS  
'Employee_Id' FROM Person P JOIN Agent A ON A.PersonID = P.PersonID
```

## Skill Group Data

For Skill Groups, CommunityWFM imports the data using the following query:

```
SELECT SkillTargetID AS 'ACDSkillId', Description AS 'Name' FROM Skill_Group
```

## Contact Types Data

Finally for Call Types, CommunityWFM imports the data using the following query:

```
SELECT CallTypeID AS 'ACDSkillId', EnterpriseName AS 'Name' FROM Call_Type
```