CommunityWFM

Integration Specification ShoreTel

For CommunityWFM Software Version 4.4+/5.0+

March 2024

3400 Waterview Parkway, Suite 325
Richardson, Texas 75080

phone 877-668-6870
web CommunityWFM.com

Table of Contents

About this Document

The objective of this document is to outline the method and details of the CommunityWFM integration to ShoreTel Contact Center. The document assumes that the reader has some basic understanding of the Contact Center database layout and a working understanding of MYSQL query syntax.

CommunityWFM and Shoretel Contact Center Integration

CommunityWFM integrates with the ShoreTel Contact Center platform using direct queries against the ShoreTel Contact Center via a .net native MYSQL provider. Tables within the database satisfy the data collection requirements to integrate the CommunityWFM application with the ShoreTel Contact Center for historical data. The ShoreTel Web Service interface is used to integrate Real-time agent state information.

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

Historical Data Collection

CommunityWFM collects historical contact volume data from the Contact Center 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 Community product database.

Contact Queue Historical Collection

For queue-based data collection, the query runs against the GRPO table and is implemented as follows:

Default contact historical query

```
select DATE(CCD.startDateTime)::datetime year to second +
floor(CCD.startDateTime::datetime minute to minute::char(2)::int/15) * 15 units minute +
(CCD.startDateTime::datetime hour to hour::char(2)::int units hour) as Slot,
CSQ.contactServiceQueueId AS Skill, CQD.profileID, COUNT(*) AS CallVolume from
ContactQueueDetail CQD JOIN ContactCallDetail CCD ON CCD.sessionID =
CQD.sessionID AND CCD.sessionSeqNum = CQD.sessionSeqNum AND
```

```
CCD.profileID=CQD.profileID AND CCD.nodeID=CQD.nodeID JOIN ContactServiceQueue
CSQ ON CSQ.recordId = CQD.targetID WHERE CQD.targetType = 0 AND
CCD.startDateTime >= DATETIME(#StartDateTime#) year to second - 1 units hour AND
CCD.startDateTime < '#EndDateTime#' AND CSQ.contactServiceQueueId = #Skill#
GROUP BY 1, CSQ.contactServiceQueueId,CQD.profileID ORDER BY Slot
```

Default not handled historical query

```
select date(CCD.startDateTime)::datetime year to second +
floor(CCD.startDateTime::datetime minute to minute::char(2)::int/15) * 15 units minute +
(CCD.startDateTime::datetime hour to hour::char(2)::int units hour) as Slot,
CSQ.contactServiceQueueId AS Skill, CQD.profileID,COUNT(*)  AS Abandoned FROM
ContactQueueDetail CQD JOIN ContactCallDetail CCD ON CCD.sessionID =
CQD.sessionID AND CCD.sessionSeqNum = CQD.sessionSeqNum AND
CCD.profileID=CQD.profileID AND CCD.nodeID=CQD.nodeID JOIN ContactServiceQueue
CSQ ON CSQ.recordId = CQD.targetID WHERE CQD.targetType = 0 AND
CQD.disposition=1 AND CCD.startDateTime >= datetime(#StartDateTime#) year to
second - 1 units hour AND CCD.startDateTime < '#EndDateTime#' AND
CSQ.contactServiceQueueId = #Skill# GROUP BY 1,
CSQ.contactServiceQueueId,CQD.profileID ORDER BY Slot
```

Default handling time historical query

```
select date(ACD.startDateTime)::datetime year to second +
floor(ACD.startDateTime::datetime minute to minute::char(2)::int/15) * 15 units minute +
(ACD.startDateTime::datetime hour to hour::char(2)::int units hour) as Slot,
CSQ.contactServiceQueueId AS Skill, SUM(ACD.talkTime) + SUM(ACD.holdTime) +
SUM(ACD.workTime) AS HandleTime FROM AgentConnectionDetail ACD JOIN
ContactQueueDetail CQD ON CqD.sessionID=ACD.sessionID AND CqD.sessionSeqNum
= ACD.sessionSeqNum AND CqD.profileID = ACD.profileID AND CqD.nodeID =
ACD.nodeID AND CqD.qIndex = ACD.qIndex JOIN ContactServiceQueue CSQ ON
CSQ.recordID = CQD.targetID WHERE CQD.targetType = 0 AND CQD.disposition=2 AND
ACD.startDateTime >= datetime(#StartDateTime#) year to second - 1 units hour AND
ACD.startDateTime < '#EndDateTime#' AND CSQ.contactServiceQueueId = #Skill#
GROUP BY 1, CSQ.contactServiceQueueId ORDER BY Slot
```

Note: The historical collection service implements replacement characters for the WHERE condition (not included above). The data collection service resolves these replacement tokens when it executes the query for individual queues.

Agent State Transaction Data Collection

CommunityWFM collects agent state transactions from either the JSON Web Service's *Real-time Agent Activity Feed or Real-time Group Activity feed* to compare against schedule intervals in order to provide agent schedule adherence reporting. The Community Adherence Collection Service (a .NET Windows service) continuously monitors the feed from the Web Service and loads the results into vendor-neutral tables inside the Community product database.

ShoreTel customers are required to license the JSON Web Service in order to enable Real-Time Adherence.

Importing Configuration Data

CommunityWFM supports the ability to import queue information and agents directly from the ShoreTel Contact Center database into CommunityWFM. Configuration data is retrieved from the database using the database credentials provided by the end user.

Queue Data Collection

SELECT DISTINCT CSQName AS Name, contactServiceQueueId AS ACDSkillId FROM ContactServiceQueue WHERE dateInactive IS NULL and active ORDER BY CSQName

Agent Information

SELECT resourcelastname AS Last_Name, resourcefirstname AS First_Name, extension AS Employee_Id FROM informix.resource WHERE Active = "t" ORDER BY Last