



Cisco Unified Workforce Optimization Quality Management

Administrator Guide Version 11.0

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Administrator Guide

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Introduction

This document explains how to configure Cisco Unified Workforce Optimization Quality Management 11.0 in a Cisco Unified Contact Center Express (Unified CCX) environment.

Quality Management is a comprehensive recording solution that addresses the common needs for recording customer interactions—whether it is for compliance, quality management, or both.

The *Quality Management Administrator Guide* contains the information you need to successfully configure Quality Management Administrator, including:

- Assigning user roles
- Setting up groups
- Creating evaluation forms, manage evaluation forms
- Setting up workflows for recording customer contacts
- Setting up recording archiving
- Maintaining the Quality Management system

Quality Management Administrator controls how devices are configured, calls are recorded, and who has access to Recording and Quality Management.

Call Recording provides a solution to record all calls—commonly done to meet regulatory compliance requirements or to handle customer disputes. Call Recording makes the task of recording, archiving, and retrieving 100% of customer calls more manageable in the following ways:

- An organization can choose to record all calls for everyone, or for specific teams of agents and knowledge workers configured in the system
- Archive parameters are flexible and storage is secure
- Advanced query options let users find recordings quickly and easily among thousands of logged interactions

Quality Management helps businesses refine their processes and improve their bottom line in the following ways:

- Increase revenue by improving customer satisfaction and increasing customer loyalty
- Provide consistent, high-quality customer experiences

- Identify customer needs and expectations
- Reduce labor costs for agent identifications

Getting Started

To get started, you need to access Quality Management Administrator. Quality Management Administrator is installed on the Quality Management Web Base server by default during a normal install. You can also install it on a desktop, the *Desktop Quick Deployment Guide* for more information.

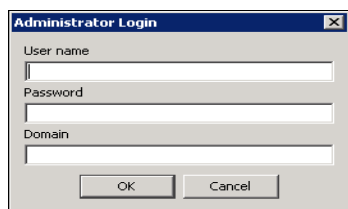
This topic provides the essential information for logging in to Quality Management Administrator, changing your password, and synchronizing the databases.

Logging into Quality Management Administrator

To log in to Quality Management Administrator:

1. Choose Start > All Programs > Cisco > WFO > Quality Management Administrator.

The Administrator Login dialog box appears.



2. Complete the dialog box as follows, and then click OK or press the Enter key.
 - In a non-Active Directory environment, type administrator in the User Name field and the password that was set up during system installation in the Password field.

Note: The username, administrator, is a default username. You cannot change it. The Username field is not case sensitive and the Password field is case sensitive.

- In an Active Directory environment, type an AD Account username in the User Name field, the password associated with the AD Account user in the Password

field, and the domain that is associated with AD Account user in the Domain field.

Note: The Username field is not case sensitive but the Password and Domain fields are case sensitive.

Quality Management Administrator validates your login credentials.

Changing the Administrator Password

The administrator password must be between 1 and 32 alphanumeric characters long. The password is case sensitive. The password should remain confidential. If your password is no longer confidential, change the password.

Note: You can only change the administrator password in a non-Active Directory environment.

To change the administrator password:

- From the menu bar, choose Settings > Change Administrator Password, complete the fields in the Change Password dialog box, and then click OK.

Synchronizing Databases

To ensure the Quality Management database synchronize correctly with the ACD database, follow these guidelines:

- Unified CCX: set up teams, agents, supervisors, and devices in Unified CCX before you synchronize the Unified CCX database with the Quality Management database.

Quality Management automatically synchronizes the following databases at 10-minute intervals.

- ACD database
- Quality Management database

To manually synchronize the databases:

- On the menu bar, choose File > Synchronize Databases.

The synchronization process starts. While the process is running, Quality Management changes the menu option from Synchronize Databases to Synchronize Databases (Running) and disables the option.


Note: You might see a Microsoft Windows Security Alert saying that the Windows Firewall blocked Java(TM) 2 Platform Standard Edition (SE) binary. To add an exception for this binary, click Unblock and try again.

When the process is complete, Quality Management returns the menu option to Synchronize Databases and enables the option.

Logging Out of Quality Management Administrator

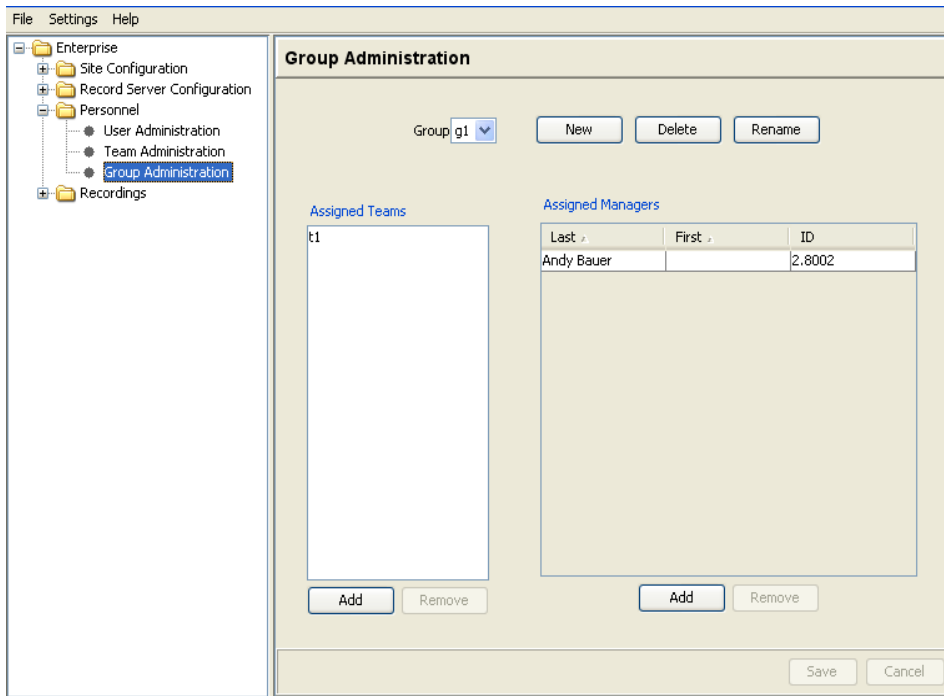
- To log out and leave Quality Management Administrator running, choose File > Log Off, and then click OK.

You are logged out of Quality Management Administrator and the application remains available.

- To log back in when Quality Management Administrator is running, choose File > Administrator Login, type administrator in the User Name field and the administrator password in the Password field, and then click OK.
- To log out and close Quality Management Administrator, choose File > Exit or click the Close  in the upper right corner of the window.

Administrator Interface

The Quality Management Administrator interface has two panes. The left pane is a navigation tree. The right pane displays the node that you selected in the left pane.



The administrator responsibilities are partitioned into hierarchical roles. For more information on these administrator roles and the scope for each role, see [Administrator](#).

Moving Within the Navigation Tree

Use the following methods to move within the navigation tree.

- Mouse actions:
 - Double-click an icon/node name to expand or collapse the tree.
 - Click the plus sign (+) to the left of the folder icon to expand the tree.
 - Click the minus sign (-) to the left of the folder icon to collapse the tree.
- Keyboard actions:

- Press the Up and Down arrow keys to move from one node to the next.
- Press the Left arrow key to collapse the tree.
- Press the Right arrow key to expand the tree.

Sorting Tables

Data that appears in a table can be sorted by as many columns as there are in the table. The sort can be ascending or descending.

The small triangles at the right of the column heading display the direction of the sort. These arrows also change size depending on the column's position in the sort. The triangle in the primary sort column is biggest, the one in the secondary sort column is slightly smaller, and so on.

To sort a table by one column:

- To sort a table by one column, click the column heading.
- To reverse the sort order, click the column heading again.

To sort a table by multiple columns:

1. Press the Ctrl key and click the primary sort column heading.
2. Continue holding down the Ctrl key and click any other column headings you want to sort the table by.

System Configuration

The System Configuration node allows you to configure and modify the Quality Management environment. There are two ways to access the System Configuration node:

- **System Configuration Setup (PostInstall.exe)**—use the System Configuration Setup when installing or upgrading Quality Management. The steps you see in the System Configuration Setup tool depend on the environment in which you install Quality Management and the options that you choose to configure.

Note: The Inclusion List does not appear in the System Configuration Setup tool. It is located under the System Configuration node in Quality Management Administrator.

- **System Configuration in Quality Management Administrator**—use System Configuration when modifying or changing Quality Management.

If you are running Quality Management Administrator on a desktop, some features are disabled under System Configuration. You can only modify these features from Quality Management Administrator or System Configuration Setup on the Web Base server.

Modifying the System Configuration

To modify the system configuration information:

1. Choose one of the following options:
 - Start System Configuration Setup from the executable PostInstall.exe in C:\Program Files\Cisco\WFO_QM\bin, and then select the window you want to modify.
 - From Quality Management Administrator, expand the System Configuration node in the navigation tree, and then select the window you want to modify.

The selected window appears in the right pane.

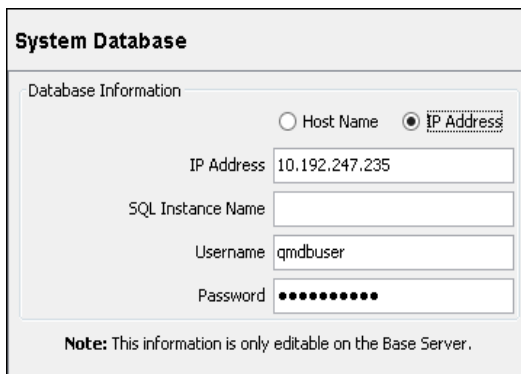
2. Complete the fields.

3. Click Save.

Modifications take effect after you save your changes.

System Database

Use the System Database window to configure connection information for the Quality Management system database (system database).



The screenshot shows a window titled "System Database". Inside, there is a section labeled "Database Information". At the top of this section are two radio buttons: "Host Name" and "IP Address". The "IP Address" radio button is selected. Below the radio buttons are four text input fields: "IP Address" (containing "10.192.247.235"), "SQL Instance Name" (empty), "Username" (containing "qmdbuser"), and "Password" (containing ten dots). At the bottom of the window, there is a note: "Note: This information is only editable on the Base Server."

Note: You can only change the information in the System Database window from the System Configuration Setup (PostInstall.exe) or Quality Management Administrator on the Web Base server. The System Database window in Quality Management Administrator on a desktop is read-only.

System Database fields

Field	Description
Host Name/IP Address	<p>The hostname or IP address of the system database server (the server on which SQL Server is installed).</p> <p>If you need to specify a configured port on the system database server, choose Host Name and use the following format in the IP Address field:</p> <p><IP address or hostname>:<port number></p> <p>where <IP address or hostname> is the IP address or hostname and <port number> is the configured port number of the system database server.</p> <p>Example: 10.188.252.11:1455</p>
SQL Instance Name	The SQL instance name of the SQL Server. Leave this field blank if you want to use the default instance.
Username	The username used by the DB Proxy service to access the system database. See “Microsoft SQL Server” in the <i>Installation Guide</i> for more information.
Password	The password used by the DB Proxy service to access the system database. See “Microsoft SQL Server” in the <i>Server Installation Guide</i> for more information.

Configuration Settings Used By Services

If you change the settings on the System Database window, the following table shows when your changes take effect.

When services start using the changed configuration settings

Service	Configuration settings applied when...
Data API Service	Restart the service.
DB Proxy Service	Restart the service.

Service	Configuration settings applied when...
Sync Service	No restart required. The next sync period (every 10 minutes) applies the configuration settings.

Update IP Address or Hostname

When updating Quality Management, you will be prompted to update the IP addresses or hostnames for the servers.

To modify an the IP address or hostname for a server:

1. Click Modify, complete the fields, and then click OK.
2. Repeat step 1 for each additional server.
3. Click Continue with These Changes.

To continue without making any changes to the IP address or hostname:

- Click Continue without Making Changes.

Cisco Unified CC Database

Use the Cisco Unified CC Database window to configure connection information to the Microsoft SQL server for the UnifiedUnified CCX database. Quality Management uses this information to sync agents and teams from UnifiedUnified CCX.

The following image displays the Unified CC Database window for Unified CCE.

The following image displays the Unified CC Database window for Unified CCX.

The screenshot shows the 'Cisco Unified CC Database' configuration window. At the top, a note states: 'Note: This information is only editable on the Base Server.' The window is divided into sections for 'Side A' and 'Side B'. 'Side A' contains fields for 'Server Name' (qmuccx105) and 'IP Address' (10.192.247.231). 'Side B' contains empty fields for 'Server Name' and 'IP Address'. Below these are fields for 'DB Instance Name' (qmuccx105_uccx), 'Port' (1504), 'User' (uccxworkforce), and 'Password' (masked with asterisks). At the bottom left is an 'ACD Filters' section with a 'Filters' button. At the bottom right are 'Save' and 'Cancel' buttons.

Cisco Unified CC Database

Note: This information is only editable on the Base Server.

Side A

Server Name

IP Address

Side B

Server Name

IP Address

DB Instance Name

Port

User

Password

ACD Filters

Sync, Data API, and MANA uses the settings in the Cisco Unified CC Database window.

Note: You can only change the information in the Cisco Unified CC Database window from the System Configuration Setup (PostInstall.exe) or Quality Management Administrator on the Web Base server. The Cisco Unified CC Database window in Quality Management Administrator on a desktop is read-only.

If you modify the information in the Cisco Unified CC Database window after the initial installation and configuration, you must restart the Sync services before your changes take effect.

Cisco Unified CC Database fields and buttons

Field	Description
Side A Server Name	<p>The name of the Unified CCX server for the Side A (primary) Cisco Unified CC database.</p> <div>Note: The server name must match the case of the name on the Unified CCX server. If the server name is all lowercase on the Unified CCX server, you must enter it as all lowercase in this field.</div> <p>If the server name contains a hyphen (-), replace the hyphen with an underscore (_) when you enter the server name in this field. This ensures the correct configuration of the file name.</p> <p>System Configuration Setup appends _uccx to the name that appears in this field the next time you run System Configuration Setup.</p> <div>Note: Do not remove _uccx from the name.</div>
Side B Server Name	<p>The name of the Unified CCX server for the Side B (secondary) Cisco Unified CC database, if one exists.</p> <div>Note: The server name must match the case of the name on the Unified CCX server. If the server name is all lowercase on the Unified CCX server, you must enter it as all lowercase in this field.</div> <p>If the server name contains a hyphen (-), replace the hyphen with an underscore (_) when you enter the server name in this field. This ensures the correct configuration of the file name.</p> <p>System Configuration Setup appends _uccx to the name that appears in this field the next time you run System Configuration Setup.</p> <div>Note: Do not remove _uccx from the name.</div>

Field	Description
Side A IP Address	The IP address for the Unified CCX server for the Side A (primary) Cisco Unified CC database.
Side B IP Address	The IP address for the Unified CCX server for the Side B (secondary) Cisco Unified CC database, if one exists.
DB Instance Name	The name of the Cisco Unified CCX database. The name is <side A server name>_uccx and the field is disabled by default.
Port	The port number used by the Cisco Unified CCX database. The port number is 1504 and the field is disabled by default.
User	<p>Login ID used to access the Cisco Unified CC database and synchronize users in a Unified CCX environment. This user must have write permission to the database. The login ID is uccxworkforce by default.</p> <div> <p>Note: If you are using Cisco MediaSense, use uccxhruser for the login ID. This login ID has the permissions required to synchronize users and reconcile contacts. The uccxworkforce login ID does not have permission to use contactcalldetail and agentconnectiondetail tables that are required for reconciliation.</p> </div>
Password	Password used by uccxworkforce to access the Cisco Unified CC database in a Unified CCX environment.
Filters	Allows you to determine what data is synced and determines which devices are available in a telephony implementation. See Touch-Point Filtering for more information.

Configuration Settings Used By Services

If you change the settings on the Cisco Unified CC Database window, the following table shows when your changes take effect.

When services start using the changed configuration settings

Service	Configuration settings applied when...
Sync Service	<p>No restart is required:</p> <ul style="list-style-type: none">■ After the initial installation■ After you fix incorrect sync information <p>The next sync period applies the configuration settings without restarting the Sync service.</p> <p>When there are substantial changes to the database, best practice recommends updating the settings in the Cisco Unified CC Database in the following order:</p> <ol style="list-style-type: none">1. Stop the Sync service and the Upload Controller service.2. Back up the SQMDB catalog.3. Change the configuration settings on the Cisco Unified CC Database window.4. Start the Sync service.5. Verify the data by looking for mass deactivations.6. Restart the Upload Controller service. Restarting the Upload Controller services adds new calls to the database.
MANA Service	The next polling period applies the configuration settings.
Data API service	Restart the Data API service.

Touch-Point Filtering

Touch-Point Filtering allows you to determine what data is synced and determines which devices are available in a telephony implementation. A “touch point” is a 3rd party system that has data that can be synced with Quality Management for recording purposes. The ability to filter this data so that Quality Management sees only a subset of the touch point’s data is useful in the following environments:

- Multi-tenancy environments where a single ACD/telephony implementation is used by multiple customers and each customer has their own Quality Management installation.
- Environments where an ACD/telephony implementation has more data than Quality Management requires. For example:
 - Only a subset of all extensions are assigned to agents and therefore required for recording purposes.
 - Quality Management will only be used by a subset of the call center.

By default, all teams and users are synced and available to be configured in Quality Management Administrator. Touch-Point Filtering allows you to you to configure filters so that Quality Management only has access to the ACD/Telephony data that matches the filter. The available filters depend on the ACD and telephony implementations.

When you add a filter, the ACD Filter dialog box appears. The fields associated with this dialog box are described in the following table.

ACD Filter fields

Field	Description
Name	The name of the ACD filter.
Prefix Type	The type of prefix that Touch-Point Filtering will use to filter the data. In this instance, the data is filtered by Team Name.
Prefix Value	<p>The name of the team. No wildcards are allowed.</p> <p>Example: If you enter Team1, both Team1 and Team10 will be synced.</p>
Trim Prefix	<p>Remove the prefix before adding synced information to the Quality Management database. Your options are as follows:</p> <ul style="list-style-type: none"> ■ True—removes the prefix. True is the default value. ■ False—keeps the prefix <p>Example: QM_TeamA becomes TeamA.</p>

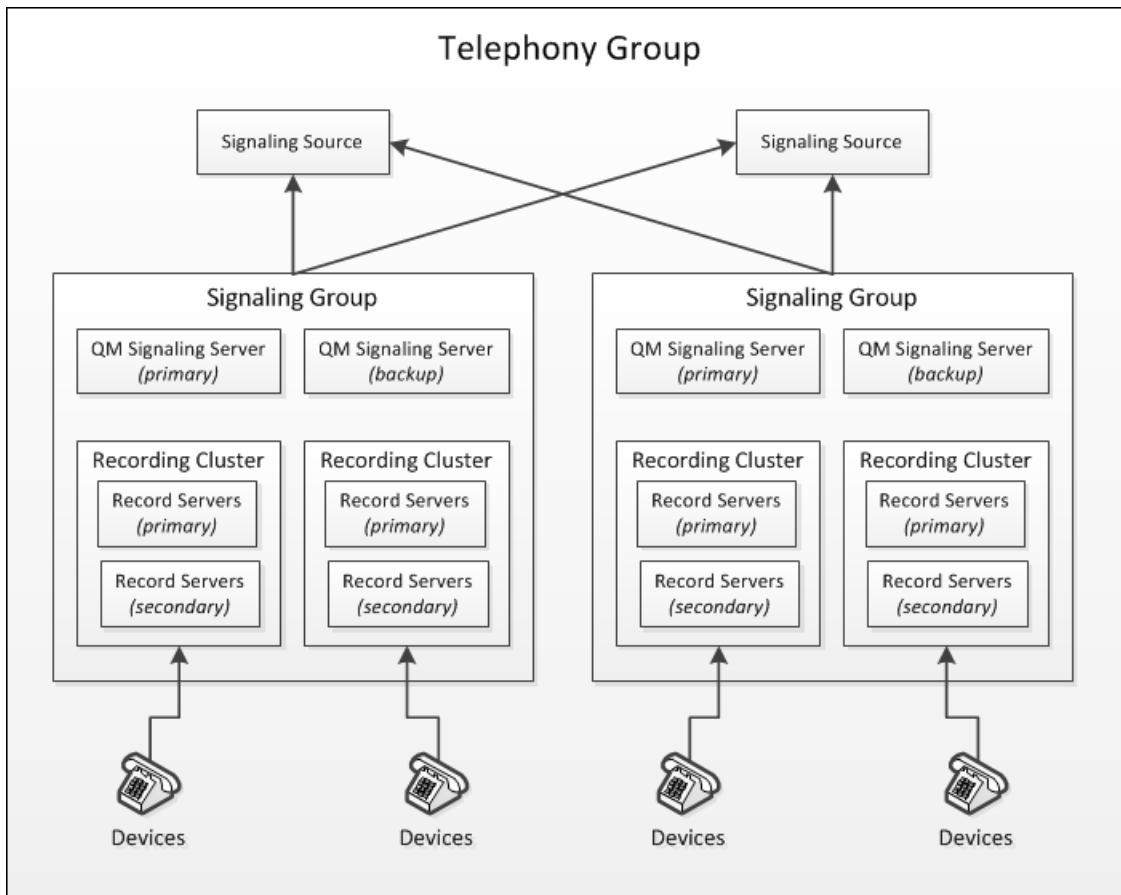
Field	Description
Extension Range	The range of device extensions that you want to include in the sync. An extension range comparison is done numerically. Pluses are limited from the numbers and compared mathematically. In this case, a range of 1 to 1000, would find the extension 500 in range.
Device Name Range	The range of device names that you want to include in the sync. Device names are compared alphabetically and/or lexicographically. So a range of 1 to 1000 would not find 500, instead you would have to specify the range as 0001 to 1000. This is because device names can be any string and are not limited to mostly being numbers as extension are.

Telephony Groups

A telephony group consists of at least one signaling source, one signaling group, one signaling server, one recording cluster, and devices.

Quality Management allows you to add backups for the signaling source, signaling group, signaling server, recording cluster, and devices. Adding any one of these backups is optional. However, Cisco recommends using backups for resiliency purposes.

Note: Some telephony group types do not support a backup signaling source.



The Telephony Groups window allows you to add, modify, and delete the following telephony group types:

- Cisco MediaSense clusters
- Recording CUBE SIP CTI services
- Unified CM clusters

Telephony Groups fields and buttons

Field	Description
Add	Add a telephony group.
Rename	Rename the selected telephony group.
Delete	Delete the selected telephony group.

Field	Description
Revert Recent Changes	Reverts changes made after the last save to previously committed configuration settings.
Show Gateway Recordings Prior to Reconciliation	When selected, this check box allows archive users in a Unified CCX environment to view root calls in the Recordings application before the calls are reconciled, including all PCI events. When cleared, calls do not appear in the Recordings application until reconciliation is complete and all PCI events are excluded. This check box is clear by default.

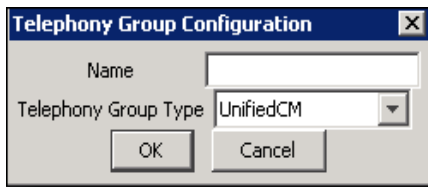
Telephony Group Considerations

The following table describes what is supported based on telephony group type.

Telephony Group Type	Changes
Unified CM	<p>A telephony group can have any number of signaling groups.</p> <p>Each CTI service in a signaling group can have a separately administered list of Unified CM CTI Managers to connect to for JTAPI.</p> <p>A signaling group can have any number of Recording Clusters.</p>
All Others	<p>All other telephony group types can support multiple telephony groups, but they are restricted to a single signaling group and Recording Cluster per telephony group. CUBE supports primary and backup signaling services, but MediaSense supports only a single signaling service.</p>

Telephony Group Configuration

The Telephony Group Configuration dialog box appears when you add a telephony group. It allows you to assign a name to the telephony group and associate it with a telephony signaling method.



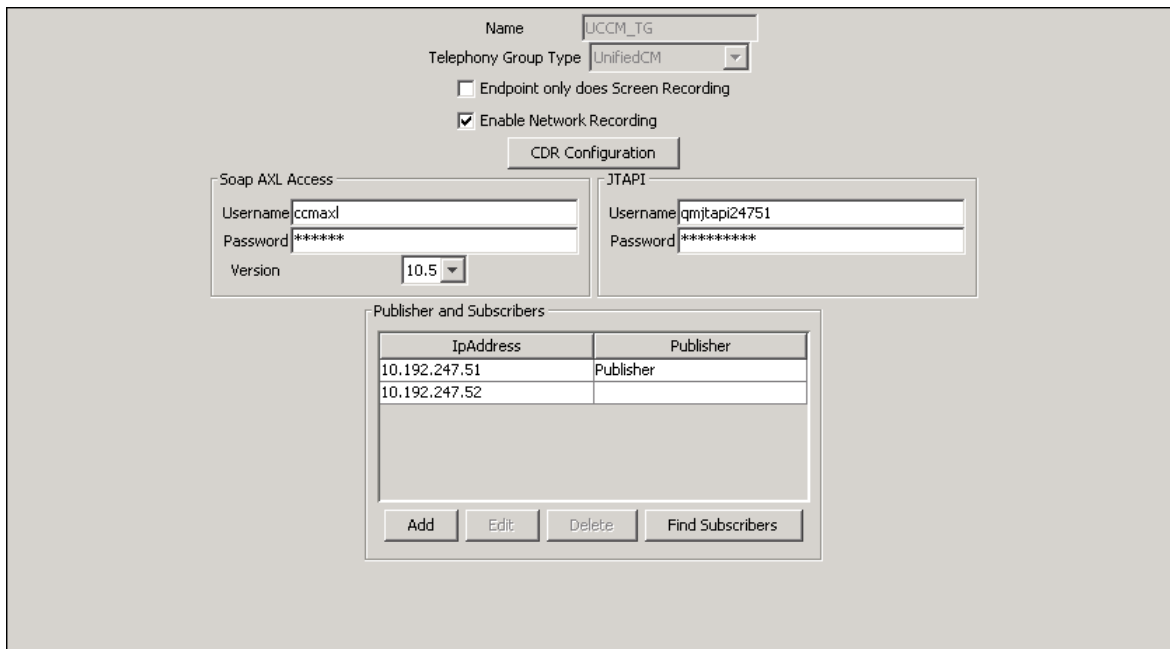
A small dialog box titled "Telephony Group Configuration". It contains a "Name" text field, a "Telephony Group Type" dropdown menu set to "UnifiedCM", and "OK" and "Cancel" buttons at the bottom.

Telephony Group Configuration fields

Field	Description
Name	The name of the telephony group. The name must be unique.
Telephony Group Type	<p>The telephony signaling method associated with the telephony group. The available telephony types are as follows:</p> <ul style="list-style-type: none"> ■ CUBE—no additional configuration is required after you add this telephony group. ■ Unified CM—see Unified CM Configuration for more information. ■ MediaSense—see MediaSense Configuration for more information.

Unified CM Configuration

The Unified CM Configuration dialog box appears when you add or edit a telephony group with a Unified CM telephony type. It allows you to configure a Cisco Unified CM cluster.



A large configuration dialog box for Unified CM. It includes the following sections:

- Top Section:** "Name" (UCCM_TG), "Telephony Group Type" (UnifiedCM), and checkboxes for "Endpoint only does Screen Recording" (unchecked) and "Enable Network Recording" (checked).
- CDR Configuration:** A button labeled "CDR Configuration".
- Soap AXI Access:** Fields for "Username" (ccmaxl), "Password" (*****), and "Version" (10.5).
- JTAPI:** Fields for "Username" (qmjtapi24751) and "Password" (*****).
- Publisher and Subscribers:** A table with two columns: "IpAddress" and "Publisher".

IpAddress	Publisher
10.192.247.51	Publisher
10.192.247.52	

 Below the table are buttons for "Add", "Edit", "Delete", and "Find Subscribers".

The Cisco Unified CM window also allows you to configure the following users:

- Simple Object Access Protocol (SOAP) Administrative XML Layer (AXL) user
- Unified CM Java Telephony Application Programming Interface (JTAPI) user

These users are used by the Computer Telephony Integration (CTI) service to log in to Unified CM.

A Unified CM cluster comprises a set of Unified CM servers that share the same database and resources and has one or more CTI Managers. The CTI Manager is a service that runs on Unified CM and handles JTAPI events for every Unified CM in the cluster. For more information on CTI Managers, see [Signaling Groups](#).

You can specify one or more Unified CM telephony groups.

Note: A Unified CM telephony group requires at least one CTI Manager.

You enter each Unified CM in the Unified CM telephony group in System Configuration Setup so that the Desktop Recording service can find the location of the Recording CTI service. Quality Management stores an association between the Recording CTI service and the Unified CMs in the cluster. If a Unified CM is not in the list, the Desktop Recording service will not know where to register for events.

Note: Adding a new Unified CM telephony group here does not actually add a Unified CM cluster. It creates the association between the Recording CTI service and the Unified CMs in the cluster.

Unified CM Configuration fields and buttons

Field	Description
Name	The name of the telephony group.
Telephony Group Type	The telephony signaling method for Unified CM. The field displays Unified CM by default.

Field	Description
Endpoint only does Screen Recording	<p>When selected this check box indicates that the Unified CM telephony group is being used for screen recording only. The Desktop Recording service will not record audio when this box is selected. This only applies when you are using one of the following recording methods:</p> <ul style="list-style-type: none"> ■ Network Recording ■ Cisco CUBE Recording via SIP Recording ■ Cisco MediaSense Recording
Enable Network Recording	<p>When selected this check box indicates that the Unified CM telephony group is using Network Recording and the Recording CTI service will listen for SIP messages. The Recording CTI service will not listen for SIP messages when the check box is cleared.</p> <p>You can install the Recording CTI service and CUBE SIP CTI service on the same machine if you clear the Enable Network Recording check box.</p> <p>Example: You are recording voice through Gateway Recording (using the CUBE SIP CTI service) and recording screen from a single server.</p> <p>Note: The Recording CTI service and CUBE SIP CTI service will interfere with each other while listening for SIP messages if the Enable Network Recording check box is selected.</p>
CDR Configuration	Allows you to enable the Unified CM's Call Detail Records (CDR) Report. See CDR Configuration for more information.
SOAP AXL Access Username	The AXL (Administrative XML Layer) authentication username on the publisher for this cluster. The SOAP AXL account is used to access devices in Unified CM from the VoIP Devices window. This username is created when you configure Unified CM.
SOAP AXL Access Password	The AXL authentication password on the publisher. This password is created when you configure Unified CM.

Field	Description
SOAP AXL Access Version	<p>The Unified CM version on the publisher.</p> <p>Note: An error message will appear if the Version field is not configured.</p>
JTAPI Username	<p>The JTAPI username for CTI. All phone devices, used for recording are associated with this application user (end user). The Recording CTI service logs into the Unified CM with this user. The username must be between 1 and 32 alphanumeric characters. This field is enabled when you choose CTI or Mixed from the Telephony Signaling Method drop-down list.</p>
JTAPI Password	<p>The JTAPI user's password for CTI. This must be between 1 and 32 alphanumeric characters. This field is enabled when you choose CTI or Mixed from the Telephony Signaling Method drop-down list.</p>
IP Address	<p>The host name or IP address of the subscriber (if any) Unified CMs. You can enter one publisher Unified CM, and one or more subscriber Unified CMs.</p> <p>Note: When using hostnames, verify the server can resolve the name of the subscribers. If the hostname cannot be resolved, the Recording CTI service cannot log in.</p>
Publisher	<p>The field indicates whether or not the provided Host Name/IP address is associated with the publisher CTI Manager. If the field is blank, the Host Name/IP address is associated with a subscriber CTI Manager.</p>
Add	<p>Add a new publisher or subscriber. See Subscriber Configuration for more information.</p>
Delete	<p>Remove the selected publisher or subscriber.</p>
Find Subscribers	<p>Use the AXL user to locate subscribers associated with the publisher entered. This is a good way to validate the AXL user and to populate the list of subscribers, if any are found.</p>

CDR Information Formats for the QM3002 Notification Trigger

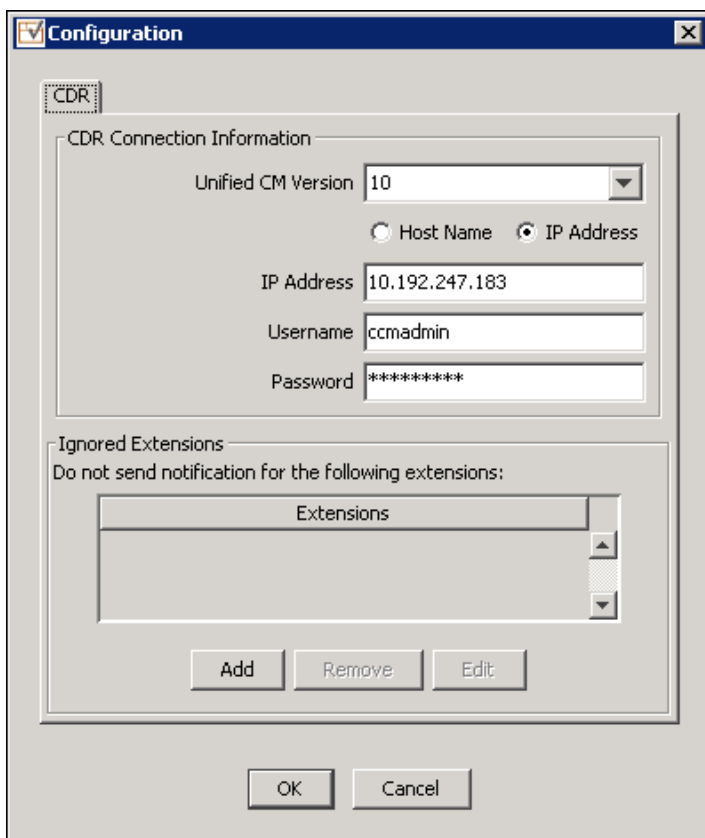
You can specify in which format you want to display the CDR information in the CDR Configuration dialog box. Examples of the available formats are listed here.

In these reports, call durations are expressed in milliseconds.

If the agent is listed as “Unknown” it means the agent has not successfully logged in to a PC that has the Desktop Recording service. It is probable that the agent was not configured correctly. Notifications for unknown agents are filtered out if the “Notify on users configured in QM” check box is enabled.

CDR Configuration

CDR Configuration allows you to enable the Unified CM's Call Detail Records (CDR) Report.



The screenshot shows the 'Configuration' dialog box with the 'CDR' tab selected. The 'CDR Connection Information' section contains the following fields:

- Unified CM Version: 10 (dropdown menu)
- Host Name: ☐ (unselected)
- IP Address: ☒ (selected)
- IP Address: 10.192.247.183 (text field)
- Username: ccmadmin (text field)
- Password: ***** (password field)

The 'Ignored Extensions' section contains the following elements:

- Do not send notification for the following extensions:
- Extensions: (empty list box with up/down arrows)
- Add, Remove, Edit (buttons)

At the bottom of the dialog box are the OK and Cancel buttons.

CDR Configuration dialog box fields

Field	Description
Unified CM Version	Select the version of the Cisco Unified CM you are using.
Host Name/IP Address	Choose host name or IP address, and then enter the information for the Unified CM.
Username	The name of the user with rights to access the CAR reports.
Password	The password of the user with rights to access the CAR reports.
Ignored Extensions	<p>Displays the list of ignored extensions. Quality Management does not send notifications about extensions that appear in this list. Select one of the following options to modify the extensions that appear in this list.</p> <ul style="list-style-type: none">■ Add—add a new extension to the list■ Remove—delete an extension from the list■ Edit—modify a selected extension in the list

Summary Only

Status Report

Start Time: 01/11/2008 15:25:53

End Time: 01/11/2008 16:25:53

Extensions with Missed Calls:

Ext	Agent	Found	Missed	% Missed
1545	JonesM	0	8	100%
2201	SmithB	0	15	100%

Detail (Tab Delimited)

Status Report

Start Time: 01/11/2008 15:23:41

End Time: 01/11/2008 16:23:41

Extensions with Missed Calls:

Ext	Agent	Found	Missed	% Missed
1545	JonesM	0	8	100%

2201	SmithB	0	16	100%
------	--------	---	----	------

Missed Calls (all times in GMT):

CallID	Agent	Ext	ANI	DNIS	StartTime	Duration
16778554	JonesM	1545	2671	1545	01/11/2008	03:29:3613000
16778560	JonesM	1545	2671	1545	01/11/2008	03:29:5214000
16778561	JonesM	1545	2671	1545	01/11/2008	03:30:097000
16778594	JonesM	1545	2671	1545	01/11/2008	03:36:0112000
16778596	JonesM	1545	2671	1545	01/11/2008	03:36:1811000

Detail (Plain Text)

Status Report

Start Time: 01/11/2008 15:24:57

End Time: 01/11/2008 16:24:57

Extensions with Missed Calls:

Ext	Agent	Found	Missed	% Missed
1545	JonesM	0	8	100%
2201	SmithB	0	16	100%

Missed Calls (all times in GMT):

Call ID = 16778554

Agent = JonesM

Ext = 1545

ANI = 2671

DNIS = 1545

Start = 01/11/2008 03:29:36

End = 01/11/2008 03:29:49

Duration= 13 sec

Call ID = 16778560

Agent = JonesM

Ext = 1545

ANI = 2671

DNIS = 1545

Start = 01/11/2008 03:29:52

End = 01/11/2008 03:30:06

Duration= 14 sec

Managing Ignored Extensions

Select a Unified CM telephony group from the list of telephony groups in the Telephony Groups window, click CDR Configuration, and choose one of the following options:

- To add an ignored extension, click Add in the Ignored Extensions section, enter the extension in the field, and then click OK.
- To edit an ignored extension, select the extension from the Ignored Extensions list, click Edit, make the necessary changes in the Edit Extension dialog box, and then click OK
- To remove an ignored extension, select an extension from the Ignored Extensions list and click Remove.

Configuring the QM3002 Notification Trigger

This task describes how to configure the QM3002 notification trigger.

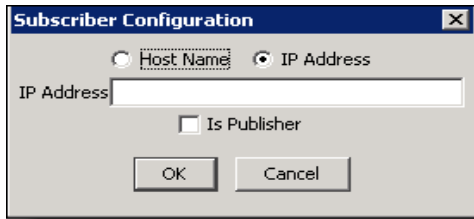
1. Click CDR Configuration in the Unified CM Configuration window for a Unified CM telephony group type.
The Configuration dialog box appears.
2. Select the version of the Cisco Unified CM you are using from the Unified CM drop-down list.
3. Choose Host Name or IP Address, and then enter the information for the Unified CM.
4. Type the Unified CM username and password.

Enter the name and password of the user with rights to access the CAR reports.

5. Add the extensions that you do not want to receive notifications. See [Managing Ignored Extensions](#) for more information
6. Configure the properties for the notification.
7. Click OK.

Subscriber Configuration

Use the Subscriber Configuration dialog box to add a Unified CM server to the Cisco Unified CM cluster.

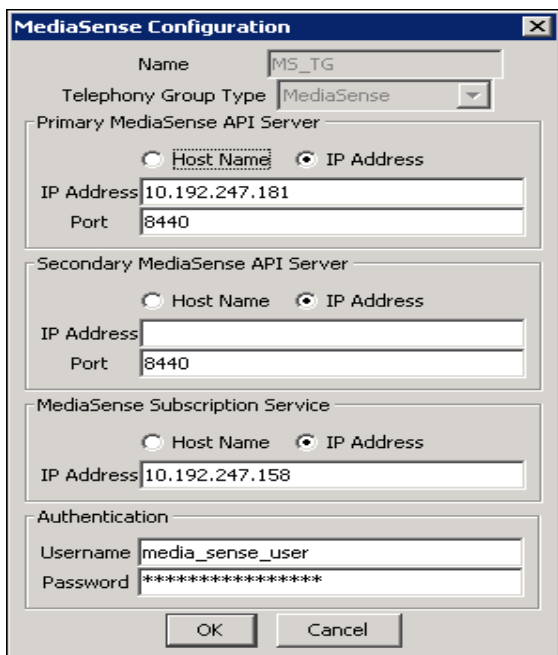


Subscriber Configuration fields

Field	Description
Host Name/IP Address	<p>The host name or IP address of the publisher or subscriber (if any) Unified CMs. You can enter up to 8 subscriber Unified CMs.</p> <p>Note: When using hostnames, verify the server can resolve the name of the publisher or subscribers. If the hostname cannot be resolved, the Recording CTI service cannot log in.</p>
Is Publisher	<p>Select this check box if the provided Host Name/IP address is associated with the publisher CTI Manager. Only one publisher CTI Manager is allowed. This check box is disabled when a publisher CTI Manager is configured.</p> <p>Note: A publisher CTI Manager must be configured before you can add subscriber CTI Managers.</p>

MediaSense Configuration

The MediaSense Configuration dialog box appears when you edit a telephony group with a MediaSense telephony type. It allows you to configure the Cisco MediaSense cluster associated with the telephony group. Quality Management uses this information to download call recordings from Cisco MediaSense.



The image shows a 'MediaSense Configuration' dialog box. It contains several sections: 'Name' with a text field 'MS_TG'; 'Telephony Group Type' with a dropdown menu 'MediaSense'; 'Primary MediaSense API Server' with radio buttons for 'Host Name' and 'IP Address' (selected), and text fields for 'IP Address' (10.192.247.181) and 'Port' (8440); 'Secondary MediaSense API Server' with similar radio buttons and text fields for 'IP Address' and 'Port' (8440); 'MediaSense Subscription Service' with radio buttons for 'Host Name' and 'IP Address' (selected), and a text field for 'IP Address' (10.192.247.158); and 'Authentication' with text fields for 'Username' (media_sense_user) and 'Password' (masked with asterisks). At the bottom are 'OK' and 'Cancel' buttons.

MediaSense Configuration fields

Field	Description
Name	The name of the telephony group.
Telephony Group Type	The telephony signaling method for Cisco MediaSense. The field displays MediaSense by default.
Primary MediaSense API Server IP Address or Hostname	The hostname or IP address of the primary Cisco MediaSense API server.
Secondary MediaSense API Server IP Address or Hostname	The hostname or IP address of the secondary Cisco MediaSense API server.
MediaSense Subscription Service IP Address or Hostname	The hostname or IP address for the MediaSense Subscription service.
MediaSense Subscription Service Port	The MediaSense port number used by the MediaSense Subscription service. Default = 8440.
Authentication Username	The username for the Cisco MediaSense API server.
Authentication Password	The password for the Cisco MediaSense API server.

Signaling Groups

A signaling group consists of one or more signaling services.

See [Telephony Group Considerations](#) for additional information on signaling groups.

For the Unified CM telephony group, you can specify a primary and backup CTI Manager through Quality Management. Any Unified CM that has the CTI Manager running on the subscriber can be your primary or backup CTI Manager.

Note: You can configure any machine as the primary CTI Manager, but it is a good idea to avoid using the publisher, because it already has the highest load. Using another server as the primary CTI Manager helps avoid decreasing the Unified CM performance.

Signaling Group fields and buttons

Field	Description
Primary Signaling Details	
Host Name/IP Address	<p>The hostname or IP address of the primary signaling service. A primary hostname or IP address is required.</p> <p>This signaling service can belong to more than one signaling group.</p>
CUCM CTI Managers for JTAPI	<p>The IP address of one or more primary CTI Managers. The CTI Manager is a service that runs on Unified CM and handles JTAPI events for every Unified CM in the cluster.</p> <p>This option only appears for the CTI service.</p>
Backup Signaling Details	
Host Name/IP Address	<p>The hostname or IP address of the backup signaling service. A backup hostname or IP address is optional.</p> <p>This signaling service can belong to more than one signaling group.</p> <div> <p>Note: The signaling service remains on the backup server until you manually initiate fail back to the primary server.</p> </div> <p>This option is not available for the Cisco MediaSense Subscription service.</p>

Field	Description
CUCM CTI Managers for JTAPI	The IP address of one or more backup CTI Managers. The CTI Manager is a service that runs on Unified CM and handles JTAPI events for every Unified CM in the cluster. This option only appears for the CTI service.
Additional Associated Servers	IP addresses for the remaining subscribers that are not associated with the primary and backup CUCM CTI Manager for JTAPI.
Up Arrow ▲ or Down Arrow ▼	Use the Up or Down arrow buttons to move the CUCM CTI Managers to the desired location. This button only appears for the CTI service.
Add +	Allows you to add a CUCM CTI Manager. This button only appears for the CTI service.
Delete -	Allows you to delete a selected CUCM CTI Manager. This button only appears for the CTI service.

Recording Clusters

Quality Management supports Recording Clusters. A Recording Cluster is a group of one or more Recording servers. A Recording server indicates which Recording Cluster it belongs to when it connects to a signaling service.

You can assign a Recording servers to a Recording Cluster. When configuring a Recording Cluster remember the following points:

- If you have knowledge workers in a CUBE or MediaSense Recording environment who require screen recording, you need to create a Recording Cluster that connects to a CTI server and has no Recording servers assigned to it.
- You can assign one or more Recording servers to a Recording Cluster. A Recording Cluster requires at least one primary Recording server. See [Telephony Group Considerations](#) for additional information on recording clusters.

A primary signaling service will exhaust the capacity of all primary Recording servers before sending calls to secondary Recording servers. A backup signaling service will exhaust the capacity of all secondary Recording servers before sending calls to primary

Recording servers. This allows primary/backup signaling services and primary/secondary Recording servers to be split geographically while keeping the traffic as local as possible. Significant traffic should only traverse the WAN in specific failure scenarios.

- A Recording server can only belong to one Recording Cluster.
- You can move Recording servers between Recording Clusters.

Important: You must run System Configuration Setup (PostInstall.exe) on all Recording servers before you can assign a Recording server to a Recording Cluster. If you do not run System Configuration Setup on the Recording servers the Select Record Servers dialog box will be empty.

Recording Clusters fields and buttons

Field	Description
Primary Record Servers	The primary Recording server assigned to this recording cluster.
Secondary Record Servers	The secondary Recording server assigned to this recording cluster.
Left Arrow < or Right Arrow >	Use the left or right arrow buttons to move the selected Recording server to the desired location.
Add	Allows you to add one or more Recording server as primary or secondary record servers.
Remove	Allows you to delete a selected Recording server.

Managing Telephony Groups

To add a telephony group:

1. From the Telephony Groups window, select the Telephony Groups node, click Add, complete the fields, and then click OK to create a telephony group.
2. If there are fields associated with the new telephony group, complete the fields.

Note: You cannot continue to the next step until you complete the fields.

3. Expand the new telephony group node, click Signaling Groups, click Add, complete the field, and then click OK to create a signaling group.
4. Complete the fields for the signaling group.

Note: You cannot continue to the next step until you complete the fields.

5. Expand the new signaling group node, click Recording Clusters, click Add, complete the field, and then click OK to create the new recording cluster.
6. Complete the fields for the Recording Cluster and then click Save.

Configuration Settings Used By Services

If you change the settings for a telephony group, the following table shows when your changes take effect.

When services start using the changed configuration settings

Telephony Group Type	Service	Configuration settings applied when...
CUBE	CUBE SIP CTI Service	Restart the service.
MediaSense	Monitoring and Recording MediaSense Subscription service	Restart the service.

Telephony Group Type	Service	Configuration settings applied when...
Unified CM	Recording CTI Service	Restart the service.
	Quality Management Administrator (VoIP Devices)	Reload the VoIP Device window.
	Desktop Recording service	Restart the service.
	Network Recording service	Restart the service. Note: If you add a backup Recording CTI Service from the System Configuration Setup utility while in Update Mode, you must restart the Network Recording service.

Enterprise Settings

Use the Enterprise Settings window to configure Quality Management.

Enterprise Settings

Share Login Fields
☒ Share login fields with other products.

Locale
English

Storage Configuration

Audio Format

☐ SPEEX
☒ WAV-8
☐ WAV-16
[More Information](#)

Cleanup
Cleanup Time 00:05

License

10 - Advanced Quality Management (AQM) Users

Upload License

Active Directory

Domain	Host/IP Address	Display Name
p3	10.192.252.119	rd ldap

Add Remove Edit

☐ Enable Kerberos Authentication for Recording Controls.

Integration Configuration

SMTP Configuration
SNMP Configuration
Report Logo Configuration
☒ Allow emailing of reports.

Session Timeout Options

Desktop (min) 10 ☒ Unlimited

Administrator (min) 10 ☒ Unlimited

Service Security Mode
☐ Allow only secure / encrypted connections.

* SMTP and SNMP connection and Service Security information may only be configured on the Operations Base Server

Note: The Active Directory section appears in the Enterprise Settings window only if your system is configured to use Active Directory.

You can use Enterprise Settings window to do the following:

- Share login fields with other products. See the following topics for more information:
 - [Sharing Unified Workforce Optimization with Multiple Products](#)
 - [Share Login Fields](#)
- Configure the locale for your system if your version of Quality Management supports other languages in addition to English. See [Locale](#) for more information.
- Choose the default audio format for your recordings. See Audio Format for more information.

- Specify when the DB Cleaner service runs. See Cleanup for more information.
- View license information and update software licenses, if you are not using an ACD, by importing a new software license file. See [License](#) for more information.
- Configure Microsoft Active Directory domains (in an Active Directory system only). See [Active Directory](#) for more information.
- Enable Kerberos Authentication for Recording Controls. When enabled, a user must enter their AD credentials to access Recording controls. This check box is enabled only when Active Directory is enabled.

Note: You will be prompted to restart the Jetty service. Changes to Kerberos Authentication goes into effect after the Jetty service is restarted.

- Configure the method (SMTP or SNMP) used to notify administrators or supervisors of a system problem and decide if emailing reports will be allowed. See Integration Configuration for more information.
- Configure the report logo that appears in reports generated in the Reporting application. See [Report Logo Configuration](#) for more information.

Note: The Report Logo Configuration button is only enabled from System Configuration Setup (PostInstall.exe) or Quality Management Administrator on the Web Base server.

- Configure session timeouts for Recording and Quality Management and Quality Management Administrator. See [Session Timeout Options](#) for more information.
- Configure the security mode to allow only secure and encrypted connections. See [Service Security Mode](#) for more information.

Configuration Settings Used By Services

If you change the settings on the Enterprise Settings window, the following table shows when your changes take effect.

When services start using the changed configuration settings

Service	Configuration settings applied when...
Quality Management Administrator (AD Authentication and Administrator session timeout change)	Log into Quality Management Administrator.
Unified Workforce Optimization (AD Authentication and localization changes)	Start the Data API service.
Kerberos Authentication for Recording Controls	Restart the Jetty service

Sharing Unified Workforce Optimization with Multiple Products

Unified Workforce Optimization allows you to access several different products from a single login page. You can choose to access all products with a single password or separate passwords for each product when you run the System Configuration Setup tool.

Share Login Fields

You can choose to allow access to one or more of the following products from Unified Workforce Optimization:

- Quality Management
- WFM

You can also choose to share common login fields for these products by selecting the Share Login Fields with Other Products check box. If you select this option for each product, users are prompted for a single set of common login credentials.

If a user is not configured for multiple Cisco products or the user wants to log into both of the Cisco products with different login credentials, the user can select the Separate Product Logins check box in the Login window.

If you do not select the Share Login Fields with Other Products check box, users are prompted for separate login credentials for each Cisco product.

Cisco recommends using shared login fields when the users use the same username and password for both products.

See the *User Guide* for more information on single-user login authentication.

Locale

Use the Locale section to enable the default language in the Unified Workforce Optimization interface. Users can change the default language when they log in to Unified Workforce Optimization.

Note: The Locale section only appears when multiple locales are available.

To change the default locale for the Unified Workforce Optimization interface:

- Select the desired language from the Locale drop-down list.

Storage Configuration

Use Storage Configuration to manage the storage of recordings, including: the default audio format and the database cleanup time.

Choose the default audio format. Your options are as follows:

- SPEEX—provides the smallest file size. Choose this option if your greatest concern is to maximize storage space. When upgrading from 9.1 or lower, the default is SPEEX.
- WAV-8—files are approximately four times larger than SPEEX files. Choose this option if you want to compromise between greater audio fidelity and storage space.
- WAV-16—files are approximately twelve times larger than SPEEX files. Choose this option if you want the maximum audio fidelity and you are not concerned with storage space.

The Database Cleanup Time field specifies when the DB Cleaner utility runs. This utility deletes expired recordings from the database. The value provided must be between 00: and 23:59 in 1-minute increments. Choose a time when no uploads are occurring to reduce the load on the system. Default = 00:05.

License

This section displays the available licenses and allows you to import licenses.

What appears in the License section after the initial installation depends on whether the Synchronize Users with ACD check box is cleared or selected. If you select the Synchronize Users with ACD check box, you are running Quality Management with Unified CCX with

mixed-mode licensing enabled. Quality Management obtains the licenses from the Cluster View Daemon (CVD) in Unified CCX and then displays the active license information in the License section. Your licenses can be updated through Unified CCX Licensing.

Note: If a connection to the CVD cannot be made when initially running System Configuration Setup, Quality Management will continue to try connecting to the CVD. You will not be able to go to the next window until Quality Management can successfully connect to the CVD.

Note: If you add new license types (for example, change from only the QM license type to QM and AQM license types), you must ensure Quality Management Administrator is configured to support the new license types (for example, add a quality management workflow and assign users to the AQM license).

Contact your sales representative to obtain a new license file.

Licensing Rules

The license type determines what Quality Management records.

When you log into Unified Workforce Optimization, you have access to all Quality Management applications allowed by the license and roles assigned to you.

The license determines what is recorded, not what is viewed, in Unified Workforce Optimization.

Example: If Agents X and Y use AQM or AQMA license, they can record their screens. If the supervisor for these agents only has a QM or QMA license, the supervisor can still view the screen recordings made by these agents. For more information on Licensing, see "Mixed Mode Licensing" in the *Integration Guide*.

Importing a License File

To import a Cisco CR license file:

1. Click the Upload License button.

The Upload License File dialog box appears.

2. Navigate to the folder where your updated Cisco CR license file is stored, and select

the file.

If you are fixing a corrupted license, upload your existing license file.

3. Click Upload File.

The Licensing Server uploads the Cisco CR license file.

Active Directory

The Active Directory section appears in the Enterprise Settings window only if your system is configured to use Active Directory. Use the Active Directory section to configure Active Directory domains.

- There must be at least one domain configured
- Each domain must have at least one user path configured

Domain Information

The connection information that you enter for Active Directory in the Domain Information dialog box is verified using the entered credentials, and the user paths are validated when you click OK in the Domain Information dialog box.

Domain Information

Active Directory Connection

Base DN: DC=domain,DC=company,DC=com

Domain Name: domain

Host Name ☐ IP Address ☒

IP Address:

Port: 389

Active Directory User Credential With Read Access

Display Name:

User Password:

User Search Base:

Use SSL ☐

Add Certificate View Certificate

Admin User Group

Admin Group: QMAdministrator

User Records (OUs)

Path:

Add Remove Edit

OK Cancel

Domain Information fields and buttons

Field	Description
Base DN	The location of all Active Directory users in the directory server tree. This field is autofilled with a sample format with variable names that you replace with the domain information. Maximum number of characters allowed = 1000. If your hostname has more than 3 parts, add additional DC= <i>domain</i> statements to the beginning of the Base DN field.
Domain Name	Defaults to the first part of the string entered in the Base DN field. In most cases this is the domain name, but in some cases you must edit the default.
Host Name/IP Address	The host name or IP address of the Active Directory server.

Field	Description
Port	<p>The port used to access the Active Directory server. The field is autofilled with the default port 389, or 636 if you are using SSL (Secure Socket Layer).</p> <div>Note: If you change the port to anything other than 389 or 636, clearing or selecting the Use SSL check box will not change the port.</div> <p>The Quality Management server must allow socket communication on this port to be able to access the Active Directory server for user authentication.</p>
Display Name	<p>The name (not the login name, but the display name as configured in Active Directory) of a user with read access to the Active Directory database. Maximum number of characters allowed = 1000.</p>
User Password	<p>The user's password.</p>
User Search Base	<p>The node in the Active Directory folder under which the user resides. Maximum number of characters allowed = 1000.</p>
Use SSL	<p>Select this check box to use SSL for connection to Active Directory. The check box is clear by default and indicates SSL is not enabled. Clearing or selecting this check box changes the default port number in the Port field.</p>

Field	Description
Admin Group	<p>The name of the security group in Active Directory. The users assigned to this security group will be allowed to log in to Quality Management Administrator and Unified Workforce Optimization as an business administrator by default.</p> <p>The users in this Admin Group can be promoted to system administrator in System Configuration Setup (PostInstall.exe). PostInstall.exe reconciles users against the Admin Group.</p> <p>Note: All users in the Admin Group must belong to the same domain specified in the Base DN field.</p> <p>Note: AD Account users associated with the Security Group setting are not given an administrator role by default.</p> <p>To assign the system administrator role to a user in this security group, see Administrator Configuration.</p> <p>Best practice: Create a security group with a unique name in Active Directory and add the users who you want to have system administrator privileges in Quality Management Administrator and Unified Workforce Optimization. Specify the name of that security group in this field. This prevents any conflict with default security groups in Active Directory.</p> <p>Note that adding users to the Domain Admins group is not appropriate in this instance because the users in the Domain Admins group also have permission to make changes in Active Directory.</p>

Field	Description
Add Certificate	<p>Locate the Certificate Authority (CA) certificate for Active Directory. Active Directory with SSL requires this certificate. The certificate provides the Active Directory identity and public key for SSL communication.</p> <p>Contact your Active Directory administrator for the location of the CA certificate for Active Directory. In many cases, the Certificate Authority on the Active Directory machine issues the CA certificate for Active Directory. If this is the case, you can access the certificate from:</p> <pre>http://<Active Directory server IP address or hostname>/<certsrv></pre> <p>You can use certificate enrollment tools other than certsrv in this command.</p> <div>Note: Quality Management can only import Distinguished Encoding Rules (DER) encoded binary X.509 or Base-64 encoded X.509 formatted certificates. These files typically have one of the following extensions: der, pem, or cer.</div> <p>Download the certificate from this website by clicking Download a CA certificate, Certificate Chain, or CRL and save it to a folder. Then click Add Certificate to import the certificate.</p> <div>Note: After you import the certificate and save your changes, log out of Quality Management Administrator and log back in to verify the certificate works.</div>
View Certificate	View the certificate associated with Active Directory.

Field	Description
User Records (OUs)	<p>One or more paths to user records (OUs). Click Add to add at least one path, or Remove to remove an existing path. Maximum number of characters allowed = 1000.</p> <p>You must specify Active Directory paths from the most specific to the least specific (from left to right in the path statement). For example, if the Active Directory tree is:</p> <pre>ou=US ou=Minnesota ou=Minneapolis ou=Users</pre> <p>Then the user record appears as follows:</p> <pre>ou=Users,ou=Minneapolis,ou=Minnesota,ou=US</pre> <p>Quality Management will search subtrees by default. For example, you could write the user record path as follows, and Quality Management will search all the subtrees under Minnesota.</p> <pre>ou=Minnesota,ou=US</pre>
Add	Add a user record.
Remove	Remove a user record.
Edit.	Modify a user record.
OK	Save your changes.
Cancel	Exit without saving changes.

Managing Active Directory Domains

To add or delete an Active Directory domain from the Enterprise Settings window:

- To add an Active Directory domain, click Add in the Active Directory section. The Domain Information window appears. Complete the fields and click OK.
- To delete an Active Directory domain, select the Active Directory domain you want to delete from the list in the Active Directory section, and then click Remove.

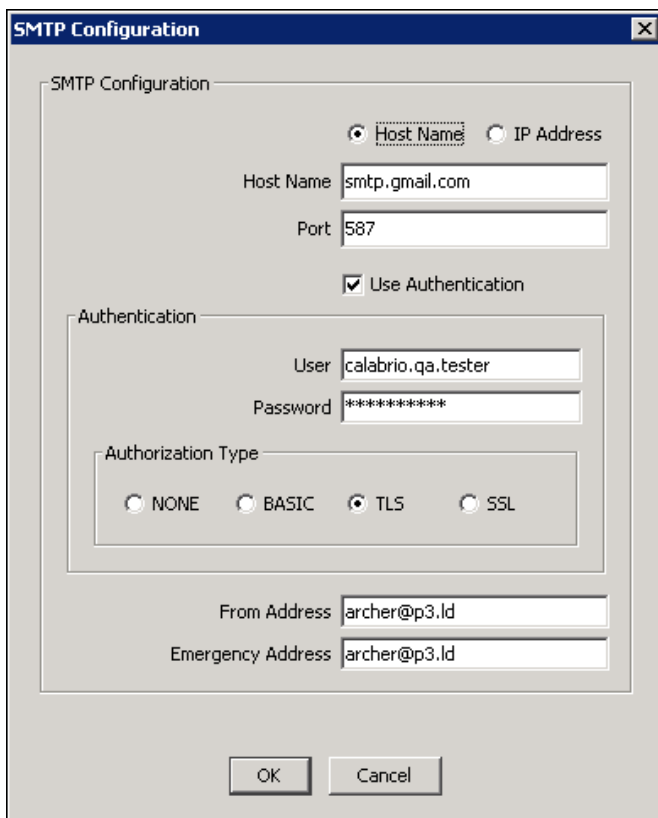
SMTP Configuration

SMTP Configuration allows you to configure the SMTP email connection.

Note: This feature is only enabled on the Web Base server.

Notifications can be sent to the Event Viewer or in emails to specified recipients. To use email notification, enable the Use Email Notification check box and then configure up to 5 email addresses.

Notification emails will be sent from the sender email address configured in the SMTP Configuration dialog box. If you are using email notification, you must configure SMTP. This can be done only from the Quality Management Web Base server.



The image shows a screenshot of the "SMTP Configuration" dialog box. The dialog has a title bar with the text "SMTP Configuration" and a close button. Inside the dialog, there is a section titled "SMTP Configuration" which contains two radio buttons: "Host Name" (selected) and "IP Address". Below these are text boxes for "Host Name" (containing "smtp.gmail.com") and "Port" (containing "587"). There is a checked checkbox labeled "Use Authentication". Below this is a section titled "Authentication" which contains text boxes for "User" (containing "calabrio.qa.test@") and "Password" (containing "*****"). Below the "Authentication" section is a section titled "Authorization Type" which contains four radio buttons: "NONE", "BASIC", "TLS" (selected), and "SSL". At the bottom of the dialog are two text boxes: "From Address" (containing "archer@p3.ld") and "Emergency Address" (containing "archer@p3.ld"). At the very bottom are two buttons: "OK" and "Cancel".

SMTP Configuration fields

Field	Description
Host Name/IP Address	Choose Host Name or IP Address, and then enter the hostname or IP address of the SMTP server.
Port	The port used by the MANA service to communicate with the SMTP server.
Use Authentication	Select this check box if authentication is needed to access the SMTP server.
User	The username needed to access the SMTP server.
Password	The password needed to access the SMTP server.
Authorization Type	The type of authorization required. Your options are as follows: <ul style="list-style-type: none">■ NONE■ BASIC■ TLS■ SSL
From Address	The email address from which all notifications will come.
Emergency Address	<p>The email address where notification will be sent if the Quality Management database is down when the MANA service attempts to get its initial configuration. The notification email addresses configured in the Monitoring and Notification window are stored in the Quality Management database, and thus will not be functional in the event that the Quality Management database is unavailable when the MANA service first starts.</p> <p>If the MANA service has already obtained a valid configuration from the Quality Management database, and the Quality Management database goes down while the MANA service is running, the MANA service will use the valid configuration it already has. As a result, the notification that the Quality Management database is down will go to the configured email address, not to the emergency address.</p>

To configure SMTP settings for email:

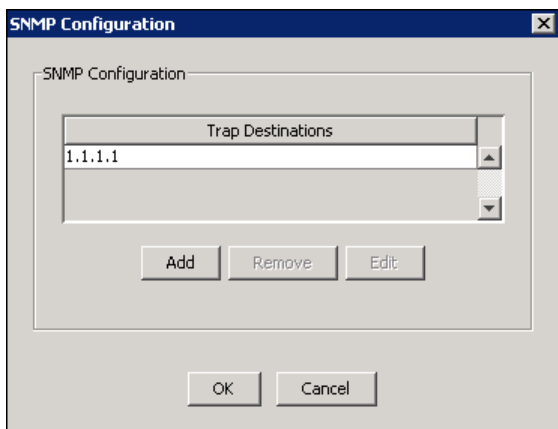
- Click SMTP Configuration, complete the fields, and then click OK.

SNMP Configuration

SNMP Configuration allows you to configure the SNMP connection.

Note: This feature is only enabled on the Web Base server.

Notifications can be sent by Simple Network Management Protocol (SNMP). SNMP is an application-layer protocol that provides a message format for communication between Quality Management and a trap destination.



SNMP Configuration fields and buttons

Field	Description
Trap Destinations	The available trap destinations.
Add	Add a trap destination.
Remove	Remove a trap destination.
Edit	Edit a trap destination.

To configure SNMP settings for notification:

- Click SNMP Configuration, choose one of the following options, and then click OK.
 - Click Add to add a new trap destination.
 - Select a listed trap destination and then click Edit to change the IP address.
 - Select a listed trap destination and then click Remove to delete IP address.

Restart the Windows SNMP service to enable your changes.

Note: You must restart the SNMP service any time you make a change in trap destinations.

Report Logo Configuration

Report Logo Configuration allows you to customize the logo that appears in reports generated by the Reporting application in Unified Workforce Optimization.

Custom logos must conform to the following specifications:

- The logo must be 60 × 60 pixels
- It must be in PNG format
- The file must be named "logo.png"

To replace the default logo with your own custom logo:

1. Navigate to the C:\Program Files\Cisco\WFO_QM\Jetty\report_solutions\reports folder, copy the original logo.png and save it to a backup folder.
2. Copy and replace the custom logo.png to the following folders:
 - C:\Program Files\Cisco\WFO_QM\Jetty\report_solutions\reports
 - C:\Program Files\Common Files\QM\config

Note: By copying your custom logo file into the Common Files folder, it will be available even if you upgrade to a new version. PostInstall automatically copies it from the Common Files folder to the correct folder within the Quality Management file structure every time it is run.

3. Start System Configuration Setup (PostInstall.exe) or Quality Management Administrator.
4. On the Enterprise Settings window, click Report Logo Configuration.
5. Click Select New Logo, browse to the location of your logo, and then click Select Image.
6. Click Save.
7. Restart the Jetty service.

To restore the default logo:

1. On the Enterprise Settings window, click Report Logo Configuration.
2. Click Use Default Logo and then click Save.
3. Restart the Jetty service.

Allow Emailing of Reports

When selected, the Allow Emailing of Reports check box allows you to email a report to a specific person or distribution list. For more information on creating a distribution list, see [Notification Distribution](#).

Session Timeout Options

You can configure Quality Management Administrator or Recording and Quality Management in Unified Workforce Optimization for one of the following options:

- Close all open popup windows and log off the user after a specified number of minutes of inactivity (session timeout)
- Allow a user to remain logged in indefinitely (default setting)

To configure the session timeout period, enter the desired number of minutes of inactivity before timeout occurs in the minutes field.

Note: When you change the Session Timeout value for Quality Management Administrator, you must restart Quality Management Administrator before the changes can take effect.

If a user accessed one or more Recording and Quality Management applications, each application displays a Timeout Warning dialog box 30 seconds before the application actually times out. If the user does not respond to the Timeout Warning dialog box, the dialog box and the application are closed and an alert is sent to the user stating that the application timed out and was closed.

When you are playing a customer conversation, the session remains in an active state. Unified Workforce Optimization does not time out when you are playing a customer conversation.

Service Security Mode

If you configured the servers to run with Secure Socket Layer (SSL) and plan to use Hypertext Transfer Protocol Secure (HTTPS), some traffic will continue through non-secure transport. Specifically, voice and screen uploads will continue over non-secure transport as the data is already encrypted.

Select the Allow secure / encrypted connections check box to enable secure (HTTPS) connections for traffic other than voice and screen upload. When this check box is selected, you must use HTTPS when connecting to Unified Workforce Optimization. Once enabled, you will not be allowed to play back recordings or live monitor a user if you are using HTTP to connect to Unified Workforce Optimization.

When the check box is selected, the useSSL flag for web, voice, and screen servers will be set to true and their httpPort setting will use the statically defined value of 7001.

Note: You will need to manually block port 80 if required. See the [Quality Management Port Usage](#) for more information on port usage.

When the check box is cleared, the useSSL flag for web, voice, and screen servers will be set to false, and their httpPort setting will use port 80.

Gamification Metrics

Use the Gamification Metrics window to configure the connection settings to allow the retrieval or posting of gamification metrics. Additional configuration options are provided in Recording and Quality Management when you log in to Unified Workforce Optimization.

Gamification Metrics

Metric Name	Data Pushed	Server
Quality	Yes	N/A
adherence	No	N/A

Update Connection Details

Gamification Metrics fields and buttons

Field or Button	Description
Metric Name	<p>The name of the metric. The available metrics are as follows:</p> <ul style="list-style-type: none"> ■ Adherence—the agents' adherence data. This metric is pulled from WFM and requires additional configuration. Once configured, Quality Management will retrieve the nightly, as well as historical performance data from WFM. ■ Quality—the agents' performance data from evaluations. This metric is pushed from Recording and Quality Management and required no additional configuration.
Data Pushed	<p>Indicates how the data is collected. The options are as follows:</p> <ul style="list-style-type: none"> ■ Yes—the data is pushed (or posted) ■ No—the data is retrieved (or pulled)

Field or Button	Description
Server	The hostname or IP address of the server.
Update Connection Details	Configure the connection details for the selected metric.

Gamification Configuration

Use the Gamification Configuration dialog box to configure the connections settings for a selected metric.

The screenshot shows a dialog box titled "Gamification Configuration" with a close button (X) in the top right corner. The dialog is divided into three main sections: "Metric Configuration", "Server Configuration", and "Connection Configuration".

- Metric Configuration:**
 - Name:** A text field containing the value "adherence".
 - Data Push:** A checkbox that is currently unchecked.
- Server Configuration:**
 - Two radio buttons: "Host Name" (unchecked) and "IP Address" (checked).
 - IP Address:** A text field.
 - Port:** A text field.
- Connection Configuration:**
 - Fetch Resource Address:** A text field containing the value "/api/rest/scheduling/gamification/adherence".
 - Schedule:** A text field containing the value "*****".

At the bottom of the dialog, there are two buttons: "OK" and "Cancel".

Gamification Metrics fields and buttons

Field or Button	Description
Name	<p>The name of the metric. The available metrics are as follows:</p> <ul style="list-style-type: none"> ■ Adherence—the agents' adherence data. This metric is pulled from WFM and requires additional configuration. Once configured, Quality Management will retrieve the nightly, as well as historical performance data from WFM. ■ Quality—the agents' performance data from evaluations. This metric is pushed from Recording and Quality Management and required no additional configuration.
Data Push	When this check box is selected, the data is pushed (or posted) specified server. When this check box is cleared, the data is retrieved or pulled the specified server.
Server Configuration Hostname or IP Address	<p>The hostname or IP address of the server container for the gamification metric. This field is enabled when you clear the Data Push check box.</p> <p>For the adherence metric, specify the hostname or IP address of the WFM container.</p>
Server Configuration Port	The port number for the server for the gamification metric. This field is enabled when you clear the Data Push check box.
Connection Con- figuration Resource Address	<p>The location of the API where the performance data will be retrieved from. When you choose the Adherence metric, this field is prepopulated with the path to the performance data and cannot be changed.</p>
Connection Con- figuration Schedule	<p>The schedule for retrieving the performance data. By default the value is * * * * *.</p> <p>*. You can adjust the retrieval schedule to suit your needs.</p> <p>This field accepts a free form text value of the cron formatted (http://www.nncron.ru/help/EN/working/cron-format.htm) schedule.</p>

Managing Gamification Metrics

To update connection details for a metric:

- Click Update Connection Details, complete the fields in the Gamification Configuration dialog box, and then click OK.

Administrator Configuration

Note: When you upgrade from 9.2 or earlier, the only administrator that exists will be the default administrator. The default administrator is a system administrator. Users who were assigned the administrator role in the previous release will require additional configuration. After upgrading to 11.0, you need to assign your administrator users based on the new hierarchical administrative roles.

The Administrator Configuration window allows you to assign the system administrator role to users who belong to the Admin Group. See the [Domain Information](#) for a description of the Admin Group and [Administrator](#) for a description of the administrator roles.

Important: Once you assign the system administrator role to a user in a non-Active Directory environment, the default administrator user becomes obsolete and you can no longer log in as a default administrator.

Note: You can only promote users to system administrator from System Configuration Setup (PostInstall.exe) on the Web Base server.

If you are using Active Directory, the Administrator Configuration window will only display users in the security group that have a complete configuration (including a Last Name).

If you are not using Active Directory, the Administrator Configuration window will display users configured in the User Administration window.

Administrator Configuration

Last Name	First Name	User ID	Admin Role	Windows Login	Domain
Administrator		0.1	None	administrator	
Wolff	Greg	5000.54729	System	wolffg	p3
user	QM1	5000.47483663	None	QM1	p3
user	QM5	5000.47483667	None	QM5	p3
user	QM2	5000.47483664	None	QM2	p3
User	End1	5000.47483655	None	end1	p3
user	QM7	5000.47483669	None	QM7	p3
User	End3	5000.47483679	None	end3	p3
User	End2	5000.47483678	None	end2	p3
user	QM6	5000.47483668	None	QM6	p3
Laehn	Taylor	5000.1045	None	taylor.laehn	p3
Chok	Oishong	5009.4900	None	oishong.chok	p3
Kadrie	Brett	5000.3031	System	brett.kadrie	p3
user	QM8	5000.47483670	None	QM8	p3
user	QM3	5000.47483665	None	QM3	p3
user	QM4	5000.47483666	None	QM4	p3
Evaluator	QM	0.360	None	evaluator	p3
user	KW1	0.361	None	kw1	p3
Supervisor	QM	0.362	None	supervisor	p3
Evaluator1	QM	0.363	None	evaluator1	p3
Manager	QM	0.364	None	manager	p3
Supervisor1	QM	0.365	None	supervisor1	p3
Manager1	QM	0.366	None	manager1	p3
Lor	Kou	0.367	None	kou.lor	p3
ArchiveUser	QM	0.368	None	archive	p3

Note: Admin System Role administration is only allowed through Post Install on the base server.

Change Admin Role

Administrator Configuration fields and buttons

Field or Button	Description
Last Name	The user's last name.
First Name	The user's first name.
User ID	The user ID assigned to the user. The format of an ACD user ID is <agent's PG>.<agent's ICM Peripheral Number>.

Field or Button	Description
Admin Role	<p>The administrator role assigned to the user. The options are as follows:</p> <ul style="list-style-type: none">■ System—the user is promoted to the system administrator role.■ None—the user is not a system administrator. The default is None. <p>To assign the business or telephony administrator role to a user, see "User Administration" in the <i>Administrator Guide</i> User Administration.</p>
Windows Login	The user's Windows user name.
Domain	The user's domain name.
Change Admin Role	Select one or more users and click the Change Admin Role button to change the administrator role assigned to the users.

Managing Administrators

- To promote one or more users to system administrators, select the users with the Admin Role of None, click Change Admin Role, and then click Yes.
- To demote one or more system administrators to users, select the users with the Admin Role of System, click Change Admin Role, and then click Yes.

Site Settings

Use the Site Settings window to configure one or more sites and associate teams and Recording Clusters with each site.

Site Settings

Delete Selected Site Default Site: Default Site

Default Site: 10.192.100.80

Site Name: Default Site

Peak Uploads

Peak Hours Begin: 09:00

Peak Hours End: 17:00

Max Peak Hour Uploads: 5

Max Off Hour Uploads: 100

Storage Location

IP Address: 10.192.100.74 Cache Location

☐ Local Storage Location ☒ External Storage Location

Path: \\10.192.247.174/c\$/Banana-CTI Browse

Username: p3\qmupload

Password: ••••••••

☒ Enable Two Stage Upload Configure Two Stage Upload

Associations

Team	Encoding Server	Recording Cluster
QM8_Team	10.192.100.74	UCCM_RC74
QM4_Team		
Team01		
Team02		
QM3_Team		
Team14		
CASTeam		
ZWfm_ZTeam		
Team16		
Team15		
QM5_Team		
QM1_Team		
Team10		
Team21		
QM2_Team		
Team03		

Edit Edit Edit

When you install the Site Upload Server on a server, this is the first screen to appear in System Configuration Setup (PostInstall.exe).

Note: The Site Settings window only appears when you install the Site Upload Server.

You can use the Site Settings window to do the following:

- View the current site configuration
- Modify or remove a site
- Add or remove teams from a site
- Add or remove Encoding Servers from a site
- Add or remove Recording Clusters from a site
- Change the default site
- Specify when, where, and how many uploads can occur

- Schedule uploading of peak and off-peak recordings from the agent desktops to the Site Upload servers
- Configure storage locations
- Enable and configure two stage upload

Site Settings fields and buttons

Field	Description
Delete Selected Site	Remove an existing site.
Default Site	The default site is assigned to new teams that have not been associated with a site. In rare circumstances, it also becomes the default site when a service cannot find a site for a recording.
Site Name	The name of the site.
Peak Hours Begin	The time, in 24-hour format, when peak hours in the contact center begin. Must be between 00:00 and 23:59 in 1-minute increments. Default = 09:00.
Peak Hours End	The time, in 24-hour format, when peak hours in the contact center end. Must be between 00:00 and 23:59 in 1-minute increments. Default = 17:00.
Max Peak Hour Uploads	The maximum number of recordings that can upload simultaneously during peak hours. Must be a value from 1 to 100. This limit is set to conserve bandwidth on the network. When one upload completes, another takes its place, but there can be no more than the configured number uploading at any one time. Default = 5.
Max Off Hour Uploads	The maximum number of recordings that can upload simultaneously during off hours (the hours not specified as peak hours as defined by the Peak Hours Begin and Peak Hours End fields). Must be a value from 1 to 200. This limit is set to conserve bandwidth on the network. When one upload completes, another takes its place, but there can be no more than the configured number uploading at any one time. Default = 100.

Field	Description
Storage Location	<p>You can change the storage location to any local or external folder. You do not have to store recordings on the machine that hosts the Site Upload Server.</p> <p>If you change the storage location, you must run the Set Recording Home Directory tool to restart the services.</p> <div> <p>Note: If you are using remote storage, the Media API that is part of the Site Upload Server must run as a user who has access to the location you choose for recordings.</p> </div>
IP Address	The IP address of the machine that hosts the Site Upload Server and the voice recordings, and the path where voice recordings are stored.
Cache Location	<p>(Cloud-based storage only) The location where unencrypted voice and screen recordings are stored. These files are used for playback. The specified directory must be accessible by the local system users and each of the Encoding servers. External location credentials must be shared with the permanent storage location.</p> <p>A cache location is required if you are using cloud-based storage. Unencrypted files must be stored separate from the permanent storage location for performance reasons. Note that the Jetty service must be restarted when you change the cache location for the changes to go into effect.</p>
Local Site Cache Location	<p>Choose this option to store the unencrypted voice and screen recording in a local site cache location.</p> <div> <p>Best Practices: If there is only one configured Media Encoder and it is local, choose the Local Site Cache Location for best performance.</p> </div> <p>This field appears in the Choose Site Location dialog box.</p>

Field	Description
External Site Cache Location	<p>Choose this option to store the unencrypted voice and screen recording in an external site cache location.</p> <div>Best Practices If there are one or more Media Encoders and they are not local, choose the External Site Cache Location. You can specify any network location accessible to the Jetty services and all Media Encoder services configured for this site.</div> <p>This field appears in the Choose Site Location dialog box.</p>
Local Site Cache Location Path	<p>The path where voice and screen recordings are stored. Click Browse and navigate to the storage folder.</p> <p>This field appears in the Choose Site Location dialog box.</p>
Site Cache Location Username	<p>Enter the username required to access the site cache location. This user must meet these requirements:</p> <ul style="list-style-type: none">■ The site cache location must know the user (the user is a trusted domain user).■ If the user is a domain user, the domain specified must be trusted by the site cache location. This means the site cache location that you are configuring has to be on a domain that trusts or is trusted by the domain you are entering.■ The user must be able to log on as a service.■ The user must have read and write access to both the site cache drive location entered AND the location where Quality Management is installed on the local server. <div>Note: The Jetty and Media Encoder services must be running as this user.</div> <p>This field appears in the Choose Site Location dialog box.</p>

Field	Description
Site Cache Location Password	Enter the password required to access the site cache location. This field appears in the Choose Site Location dialog box.
Local Storage Location	Choose this option to store the voice and screen recordings on the Quality Management server.
External Storage Location	Choose this option to store the voice and screen recordings on an external server. <div> <p>Note: If you change the storage location from local to external storage in update mode, you must first uninstall the PROXY Pro Gateway service on the server that hosts the Site Upload Server (in the Control Panel's Add or Remove Programs, remove PROXY Pro Gateway). When you run the Set Recording Home Directory tool, the PROXY Pro Gateway service is reinstalled automatically. See "Entering Configuration Data in Update Mode" in the <i>Installation Guide</i> for more information.</p> </div>
Storage Location Path	The path where voice and screen recordings are stored. Click Browse and navigate to the storage folder. <div> <p>Note: The default path is C:\Program Files\Common Files\QM\Recordings. If you need to change the path, do not specify the root directory (for example, D:\ or E:\). Always include at least one folder in the path (for example, D:\Cisco).</p> </div>
Browse	Locate a folder.

Field	Description
Storage Location Username	<p>If you selected an external storage location, enter the username required to access that location. If the user is a domain user, enter the name with the format <domain>\<username>.</p> <p>For external screen storage and playback to work, you must provide a domain user that has read and write access to the local server and the external storage system.</p> <p>This user must meet these requirements:</p> <ul style="list-style-type: none">■ The local server must know the user (the user is a trusted domain user).■ If the user is a domain user, the domain specified must be trusted by the local server. This means the Recording server that you are configuring has to be on a domain that trusts or is trusted by the domain you are entering.■ The user must be able to log on as a service.■ The user must have read and write access to both the external drive location entered AND the location where Quality Management is installed on the local server.
Storage Location Password	<p>If you selected an external storage location, enter the password required to access that location.</p>

Field	Description
Enable Two Stage Upload	<p>When selected, two stage upload is enabled. Two stage upload immediately uploads screen and audio recordings to a temporary storage location. You can then configure a workflow to upload files from the temporary storage location to the permanent storage location at the End of Day.</p> <p>Two stage upload functions in one of two manners:</p> <ol style="list-style-type: none">1. If you are using Desktop Recording (or Gateway Recording), the Desktop Recording service will round robin through all Recording Servers associated with the site. This will happen regardless of the location of the Recording Servers. If you are using Desktop Recording and need to limit your uploads to a local Recording Server, you will need to configure a site for that location.2. If you are using Server Recording, the Desktop Recording service will round robin through Recording Servers that are in the same cluster as the agents. All recordings will go to your local Recording Cluster. If no configuration information is available for your local Recording Cluster, no recordings will upload from those agents. <p>Enable two stage upload when:</p> <ul style="list-style-type: none">■ Your contact center has multiple sites that are separated by a WAN and you want to use the Immediate Upload feature but you have limited bandwidth.■ You are using Desktop Recording and your contact center requires the agents to shut down their desktop at the end of a shift. Shutting down the desktop interrupts the scheduled upload based on the agent's workflow. Two stage upload ensures the recordings are immediately uploaded to the temporary storage location after a call. <p>On startup, the Desktop Recording service retrieves all site information, including all two stage upload locations. When a call ends, recordings are moved to a temporary storage location</p>

Field	Description
	<p>and then uploaded to the permanent storage location. The files are moved in the following order: voice, screen, ini. If there are no two stage upload locations, two stage uploads are turned off.</p> <p>Recordings are uploaded using the round-robin method to the available storage locations.</p> <div>Note: When two stage upload is enabled, it is possible that voice and screen recordings for a call might be stored in different storage locations.</div> <p>When cleared, recordings are uploaded directly to the central storage location. When the upload occurs is determined by the workflow assigned to the agent.</p> <p>This check box is only enabled when at least one Recording Cluster is assigned to the site.</p>
Configure Two Stage Upload	<p>Click this button if you want to configure a temporary storage location. The Two Stage Upload Configuration dialog box will display the Recording Servers associated with the Recording Clusters assigned to the site. Click the Modify button associated with the selected server to configure the UNC path, username, or password to that server.</p> <p>This button is enabled when you select Enable Two Stage Upload and at least one Recording Cluster is assigned to a site.</p>
Two Stage Upload Configuration Server	<p>The IP address or hostname of the of the Recording server that hosts the temporary storage location.</p> <p>This field appears in the Two Stage Upload Configuration dialog box.</p>

Field	Description
Two Stage Upload Configuration UNC	<p>The storage location path to the TwoStageLocation folder on the Recording server where voice and screen recordings are temporarily stored. The path must be in UNC format. The default path is as follows:</p> <p>\\<server>\TwoStageLocation</p> <p>where <server> is the IP address or host name of the Recording server that host the temporary storage location.</p> <p>The TwoStageLocation folder is automatically created the first time the Recording server is started. The default path is as follows on the Recording server:</p> <p><temporary recording storage location>\TwoStageLocation</p> <p>where <temporary recording storage location> is the path to the temporary recording directory. See Set Temporary Recording Directory for more information.</p> <div style="background-color: #d9ead3; padding: 10px; border: 1px solid #ccc;"> <p>Important: The TwoStageLocation folder properties must be shared using Advanced Sharing and a username and password must be configured to access this folder. The user must be allowed the following permissions: Full Control, Change, and Read. Quality Management uses this path and the specified user name and passwords to access the TwoStageLocation folder.</p> </div> <p>This field appears in the Two Stage Upload Configuration dialog box.</p>
Two Stage Upload Configuration Username	<p>Enter the username required to access the TwoStageLocation folder on the Recording server .</p> <p>This field appears in the Two Stage Upload Configuration dialog box.</p>
Two Stage Upload Configuration Password	<p>Enter the password required to access the TwoStageLocation folder on the Recording server .</p> <p>This field appears in the Two Stage Upload Configuration dialog box.</p>

Field	Description
Modify	Click this button to modify the fields in the selected row. This button appears in the Two Stage Upload Configuration dialog box.
Team	A list of assigned teams.
Encoding Server	A list of assigned Encoding Servers.
Recording Cluster	A list of assigned Recording Clusters
Edit	Modify the assigned teams, Encoding Servers, or Recording Clusters.

Configuration Settings Used By Services

If you change the settings on the Site Settings window, the following table shows when your changes take effect.

When services start using the changed configuration settings

Service	Configuration settings applied when...
Upload Controller service	The next End of Day applies the configuration settings. If you want the changes to take effect immediately, restart the Upload Controller service.
DB Cleaner service	The next cleanup time applies the configuration settings. If you want the changes to take effect immediately, restart the DB Cleaner service.
Media webapp (Jetty service)	Restart the Jetty service.
Network Recording service	If two stage upload is enabled and you move a Recording Cluster from one site to a different site, you must restart the Network Recording service for that Recording Cluster for the changes to take effect.

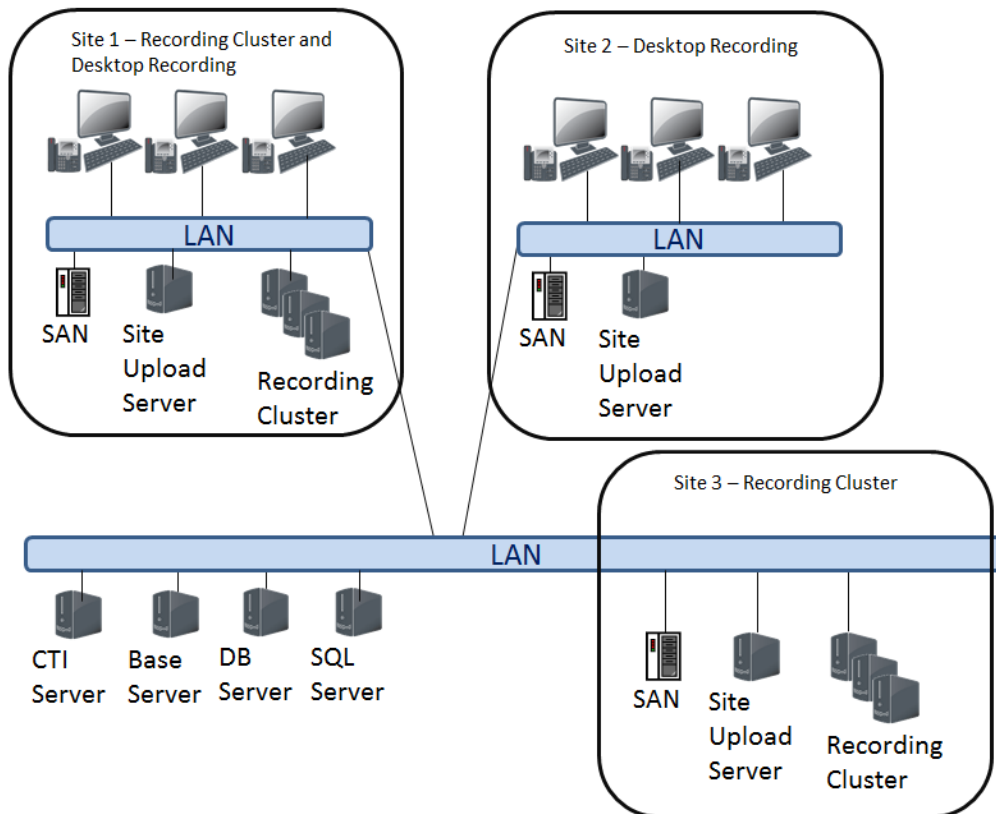
Site Considerations

If you plan to use multiple recording storage locations, you can associate each recording storage location to a site.

When configuring sites, consider the following:

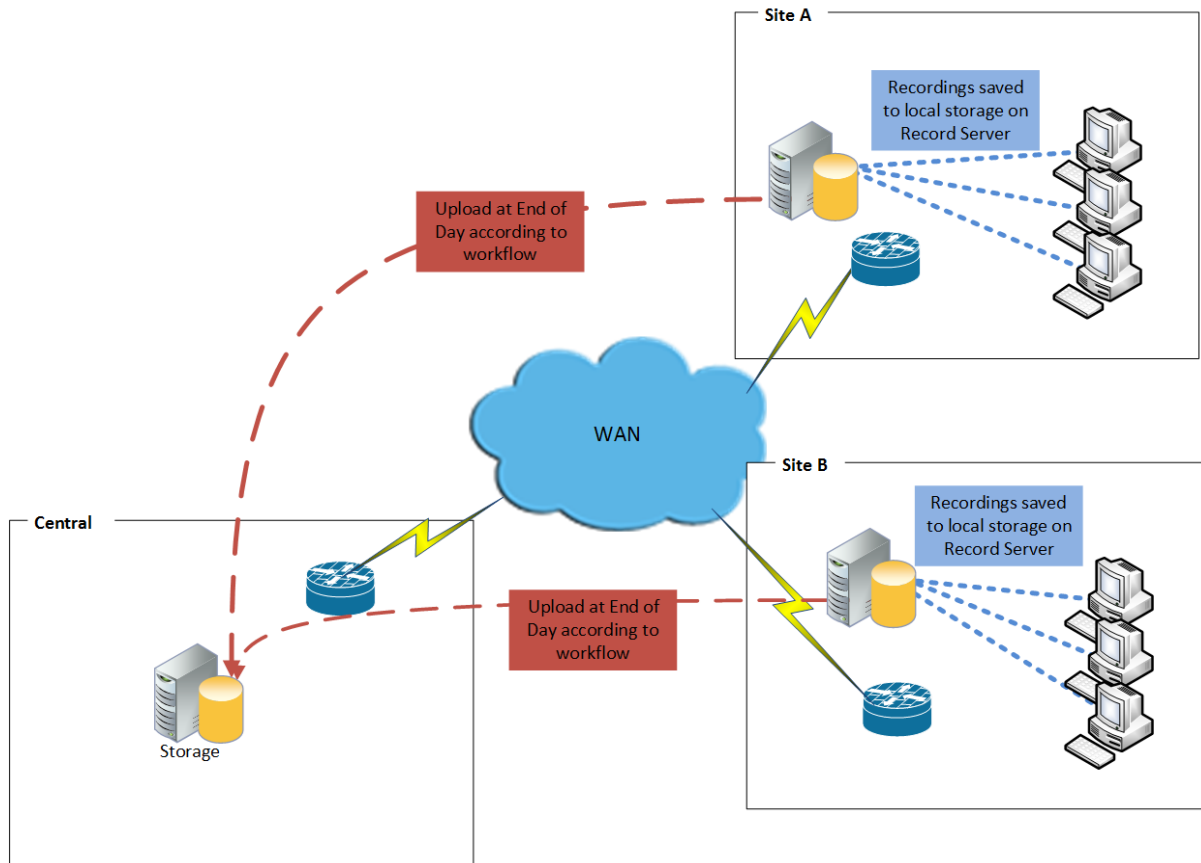
- A site is a single Site Upload server associated with a set of teams. A site can be configured to be the system's default site. The default site is used for teams that have not been associated with a site or whenever a recording service cannot find a site for a recording (this can happen in rare circumstances).
- You can configure one or more sites for a Quality Management system and define the teams that are assigned to each site.
- When a site is taken down for maintenance or failure, the recordings created by the agents while the site was down will be uploaded when the site recovers.
- When upgrading from 9.0 8.8 or earlier, Quality Management will create a single site and assign the Site Upload server, Upload Controller service, and all defined teams to that site. Peak and off-peak settings will also be moved to the site. Once Quality Management is installed, you can add more sites.
- When an agent plays a recording from the Recordings application, the Recordings application will play back the recording from the Site Upload server that is associated with the agent's team.
- For Desktop Recording, Quality Management records the agent's calls while the agent is logged in to the desktop. When the agent logs out, the recordings are uploaded to the Site Upload server that is associated with the agent's team. It is possible to have two different agents using the same computer at different times and have their recordings uploaded to different Site Upload servers.

The following figure shows three sites—two external sites that communicate with the rest of the system over a WAN and one site that communicate over a LAN. Each site has a Site Upload server with an Upload Controller and a Recording Cluster. Each site has one or more teams assigned to it and the users in those teams will upload to the proper site.



Site recording storage location example: The Web Base server is located in the United States (site 3) and a Site Upload server is located in Germany (site 1) and all the German teams or groups are assigned to the German site. When a German agent records a call, the recording is uploaded to the German site recording storage location in Germany. When the agent plays back the recording, the recording is retrieved locally and avoids wide area network (WAN) traffic.

The following figure shows two sites using two stage upload feature.



Two stage upload example: Immediately after a call, Site A and Site B upload the recordings to their Recording server that hosts the temporary storage location. At the End of Day, the recordings are then uploaded to the permanent storage location.

Patches

When you install a patch on the server that includes patches for the desktop, the patch installs a webpage called Patches.htm on the server. If the automatic update feature is disabled, you can download the patch for the desktop from <http://<Web Base server>/TUP/QM/Patches.htm>.

Managing Site Settings

- To view the existing site configuration, click Site Settings.
The Site Settings window appears.
- To view a different site, click the tab associated with the site.

New sites appear in Site settings when you install Quality Management on the server associated with the new site and configure the new site in the Site Settings window.

- To remove a site, click the tab for the site you want to remove, click Delete Selected Site, click Yes in the Confirm Delete dialog box, choose where you want to move recordings from the deleted site, and then click OK.

The Manually Move Recordings dialog box appears. You need to manually move the existing recordings from the server associated with the old site to the server associated with the new site. The teams from the old site are now assigned to the new site and future recordings for those teams will now be stored on the server for the new site.

- To modify a site, select the site's tab, complete the fields, and then click Save.
- To change the default site, select a site from the Default Site drop-down list, and then click Save.
- To modify the current upload settings for a site, click the site's tab, complete the fields under Peak Uploads, and then click Save.
- To change the recording storage location:
 - a. Complete the fields under Storage Location and then click Save.
 - b. Select Tools > Set Recording Home Directory to restart the services.
- To enable two stage upload:
 - a. Select Enable Two Stage Upload.
 - b. Click Configure Two Stage Upload.
 - c. Click Modify and complete the fields.
 - d. Click OK.
- To modify the list of assigned teams, Encoding Servers, or Recording Clusters to a site, select the site's tab, click Edit under Team, Encoding Server, or Recording Cluster, and choose one of the following options: select one or more teams, Encoding Servers, or Recording Clusters from the Teams, Encoding Servers, or Recording Clusters list and click the > button to move the teams to the Assigned Teams or Assigned Recording Clusters list. To move all teams or Recording Clusters to the Assigned Teams or Assigned Recording Clusters list click the >> button, and then click Save.
 - Add teams, Encoding Servers, or Recording Clusters. Click Edit under the option that you want to modify, select one or more items from the available list and click the > button to move the selected items to the assigned list, or click the >> button

to move all items to the assigned list, and then click OK.

- Remove teams, Encoding Servers, or Recording Clusters. Click Edit under the option that you want to modify, select one or more items from the assigned list and click the < button to move the selected items to the available list, or click the << button to move all items to the available list, and then click OK.

Inclusion List

Quality Management uses the Inclusion List window to determine which calls to record and which calls to ignore. Quality Management only records calls that match the extension patterns in the Patterns to be Recorded list.

Inclusion List

Telephony Group: UCCM105_TG Telephony Group: MS105_TG

Patterns to be Recorded

Pattern	Type	Direction
*	Any	Either

^

v

Add

Remove

Modify Type

Modify Direction

Patterns to be Excluded from Recording

Pattern	Type
---------	------

^

v

Add

Remove

Modify Type

Import/Export

Import

Export

A tab appears in the Inclusion List window for each configured telephony group. You can configure extension patterns for inclusion or exclusion for each telephony group.

The Patterns to be Recorded list contains extension patterns that will be recorded. By default, the Patterns to be Recorded list displays an asterisk (*) in the Pattern column, Extension in the Type column, and Either in the Direction column. This indicates that all incoming and outgoing calls on all extensions in the telephony group will be recorded. As soon as specific extension patterns are configured in the Patterns to be Recorded list, recording is limited to those extension patterns only.

The Pattern column lists the extension pattern that will be filtered in the Patterns to be Recorded or Patterns to be Excluded from Recording lists. You can use the following wildcards to configure ranges:

- The asterisk (*) in a string can represent any quantity of any character, as long as the other characters in the string match.
- The question mark (?) in a string can be replaced by any character, but the length of the string must be exactly as represented.

Extension patterns can be further filtered by selecting:

- The direction of the call (for recorded calls only). Your options are:
 - Inbound—filters all inbound calls that match the extension pattern
 - Outbound—filters all outbound calls that match the extension pattern
 - Either—filters all inbound and outbound calls that match the extension pattern

See [Gateway Recording Considerations](#) and [Cisco MediaSense Recording Considerations](#) for more information.

- The type of call. Your options are:
 - Any—filters all called, calling, and extensions calls that match the extension pattern
 - Called—filters all calls received by the phone numbers that match the extension pattern
 - Calling—filters all calls made by the phone numbers that match the extension pattern
 - Extension—filters all extensions that match the extension pattern
 - Excluded—excludes all inbound or outbound calls that match the extension pattern.

To rearrange the order of extension patterns that appear in the Patterns to be Recorded list, select an extension pattern from the list and use the Up or Down arrow buttons to move the extension pattern to the desired location. Extension patterns are filtered starting at the top of the list and continues down to the bottom of the list.

The Patterns to be Excluded from Recording list displays extension patterns that will not be recorded. Extension patterns that appear in the Patterns to be Excluded from Recording list are filtered before any extension patterns that appear in the Patterns to be Recorded list. Only extension patterns found in the Patterns to be Recorded list will be recorded.

You can also import or export an inclusion/exclusion list for a single telephony group. Changes to the inclusion/exclusion list take effect the next time the CTI service polls for configuration (five minutes at most). Importing or exporting a large inclusion/exclusion list is quick (Less than five seconds). However, it might take up to 30 seconds to save a large inclusion/exclusion list to the database.

Any changes you make to the Inclusion List take window take effect at the next recording client login.

Inclusion List buttons

Field	Description
Add	Add an extension pattern.
Remove	Remove an extension pattern.
Modify Type	Change the call type associated with an extension pattern.
Modify Direction	Change the direction associated with an extension pattern.
Import	<p>Allows you to select the location and name of an inclusion/exclusion file to import. The file must be in CSV format (see CSV Format for more information). Importing an inclusion/exclusion list overwrites the existing file. An import does not merge changes.</p> <div>Note: If the CSV file has errors in it, the import will fail and the existing data will remain unchanged. An error message will indicate why the import failed and identify the record that failed if applicable.</div> <p>After importing a CSV file, you must click Save to save your changes.</p>
Export	Allows you to select the location and specify a name for the exported inclusion/exclusion list. The file must be in CSV format. Once exported, you can open the file in Microsoft Excel.

CSV Format

The CSV file containing the inclusion/exclusion list must use the following format:

Pattern	Type	Bounds
A number pattern with optional * and ? wild-cards	One of the following types: <ul style="list-style-type: none"> ■ Extension ■ Calling ■ Called ■ Any 	One of the following directions: <ul style="list-style-type: none"> ■ Inbound ■ Outbound ■ Either ■ Excluded

When creating an inclusion/exclusion list, remember the following points:

- Exclusions are matched before inclusions, but exclusions can appear anywhere in the CSV.
- Within each group (inclusions and exclusions), patterns are matched starting from the top and working down the list.
- Additional columns after Pattern, Type, and Bounds are allowed in an imported CSV. However, the additional columns will be ignored.

Gateway Recording Considerations

The considerations in this topic apply to the following Gateway Recording method:

- Cisco CUBE Recording via SIP Recording

When the call direction cannot be determined, the Inclusion List will only match a Direction with a value of Either. All calls, both inbound and outbound, appears as inbound. Cisco recommends setting the value of the Direction to Either when creating an exclusion for a Gateway Recording method.

Cisco MediaSense Recording Considerations

If you are using Cisco MediaSense Recording, the Inclusion List affects which recordings are uploaded to Quality Management. Initial recording decisions are based on the Cisco MediaSense configuration.

When configuring the Inclusion List for Cisco MediaSense Recording, consider the following:

- The entire call is recorded and saved on the Cisco MediaSense Recording cluster.
- Quality Management only downloads Cisco MediaSense recordings that appears in the Patterns to be Recorded list.
- Quality Management does not download Cisco MediaSense recordings that appear in the Patterns to be Excluded from Recording list.
- When the call direction cannot be determined, the Inclusion List will only match a Direction with a value of Either. Cisco recommends setting the value of the Direction to Either when creating an exclusion for Cisco MediaSense Recording.

Managing Extension Patterns

To manage extension patterns:

1. Select the appropriate telephony group cluster tab in the Inclusion List window.
2. Choose one of the following options:
 - Add an extension pattern. Click Add beneath the Patterns to be Recorded or Extensions to be Excluded, type a number in the Add Pattern dialog box, click OK, and then complete the remaining fields in the table.

You can enter the exact number or use the * or ? wildcards plus numbers to configure a range of numbers. For example:

Enter This:	To Record:
6124	Number 6124.
61*	Any number that start with 61 and are of any length. <div>EXAMPLE: 6124, 61555, 613</div>
61??	Any number that start with 61 and are 4 digits long. <div>EXAMPLE: 6124, 6125, 6126</div>

- Modify a call type. Select an extension pattern, click Modify Type, select the different type from the drop-down list, and then click OK.

- Modify a call direction. Select an extension pattern, click Modify Direction, select a different direction from the drop-down list, and then click OK.
- Remove an extension pattern. Select the extension pattern in Patterns to be Recorded or Extensions to be Excluded, click Remove, and then click OK.
- Import an inclusion/exclusion list. Click Import, select the location, the file name of the inclusion/exclusion list, click OK, and then click Save.
- Export an inclusion/exclusion list. Click Export, select the location, type the file name of the inclusion/exclusion list, and then click OK.

3. Click Save.

Excluding Extension Patterns

If you have a limited number of extension patterns you want to exclude from being recorded, you can configure the Inclusion List to ignore only those extension patterns and record all others.

Example: If you want to record all extension patterns except for extensions 3411, 3412, and 3413, configure your inclusion list so that there is an asterisk in the Patterns To Be Recorded list, and extensions 3411, 3412, and 3413 listed in the Patterns To Be Excluded From Recording list.

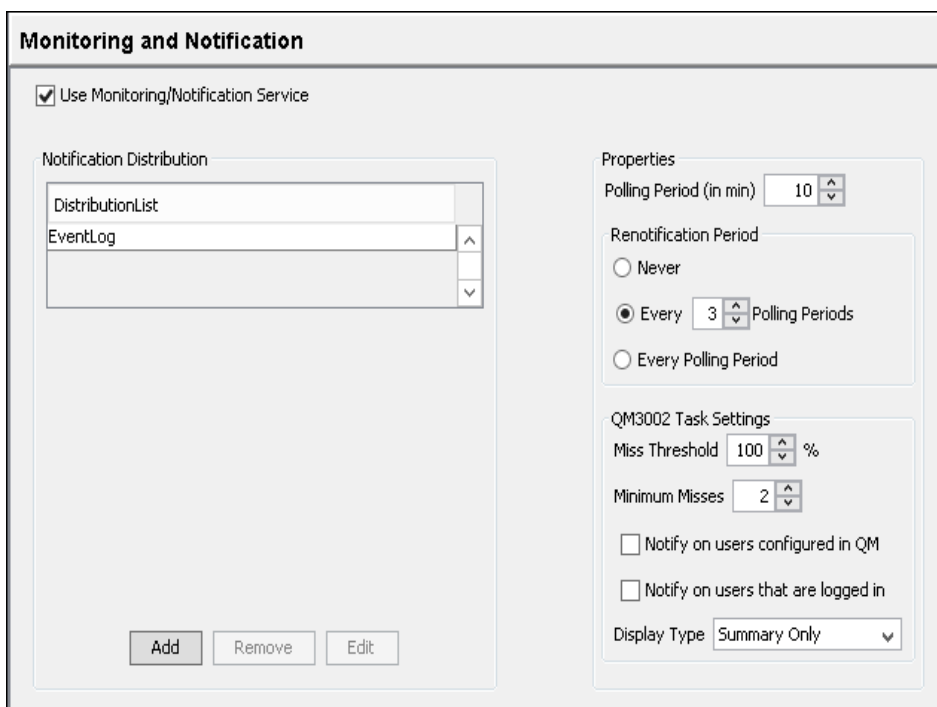
Extension patterns listed in the Patterns To Be Excluded From Recording list always take precedence over extension patterns listed in the Patterns To Be Recorded section. You cannot use the same extension pattern (specifically or through the use of wildcards) in both lists.

Example: 12* cannot appear in both lists.

Monitoring and Notification

Use the Monitoring and Notification window to enable the Monitoring and Notification (MANA) service.

The following image displays the Monitoring and Notification window for Unified CCX.



The image shows a 'Monitoring and Notification' configuration window. It has a title bar and a main content area. At the top left, there is a checkbox labeled 'Use Monitoring/Notification Service' which is checked. Below this, on the left side, is a section titled 'Notification Distribution'. It contains a list box with two items: 'DistributionList' and 'EventLog'. Below the list box are three buttons: 'Add', 'Remove', and 'Edit'. On the right side, there is a section titled 'Properties'. It contains several settings: 'Polling Period (in min)' set to 10, 'Renotification Period' with radio buttons for 'Never', 'Every 3 Polling Periods' (which is selected), and 'Every Polling Period'. Below this is a section titled 'QM3002 Task Settings'. It contains 'Miss Threshold' set to 100%, 'Minimum Misses' set to 2, two unchecked checkboxes for 'Notify on users configured in QM' and 'Notify on users that are logged in', and a 'Display Type' dropdown menu set to 'Summary Only'.

Only one notification trigger requires configuration: Problem ID QM3002 under QM Task Settings. This trigger compares data in the Unified CM's Call Detailed Records (CDR) Report (for Unified CM versions 8.x and 9.x) with the Quality Management database. Specifically, it compares the call records in the Unified CM with the call records in Quality Management. If there is a discrepancy, notification is sent.

Note: The MANA CDR Report (QM3002 notification trigger) does not support devices that are recorded by Cisco MediaSense. If your site is a mixed-recording environment where Server Recording, Network Recording, or Desktop Recording and Cisco MediaSense Recording are used together, the CDR Report will not be accurate since Cisco MediaSense devices result in false positives.

By default, Problem ID QM3002 is disabled. The notification trigger does not have to be configured unless you enable that problem ID in the Notification Distribution dialog box.

You can create multiple distribution lists. For each distribution list, you can choose to specify the events that trigger notification.

Example: You can set up a distribution list for global outages (all QM1000 level errors) and all "JTAPI not associated with a device" (specific QM2002 error).

You can also configure the following information:

- Distribution list of persons receiving notification, if you configure email as a means of notification
- Email address of the person(s) receiving notification, if you configure email as the means of notification
- Trap destinations receiving notification, if you configure SNMP as the means of notification
- If and how often a renotification of the problem should be sent out
- Types of problems that will trigger notification

Note: You can only change the information in the Monitoring and Notification window from the System Configuration Setup (PostInstall.exe) or Quality Management Administrator on the Web Base server. The Monitoring and Notification window in Quality Management Administrator on a desktop is read-only.

Connection information is saved locally to the Web Base server so the emergency user can still be notified using email if a major component (for example, the database) is down, and the other email addresses are not available. This allows the Quality Management Administrator to edit the emails and allows Monitoring and Notification to notify one user when the configuration is not accessible.

Monitoring and Notification fields and buttons

Field or Button	Description
Use Monitoring/ Notification Service	Select this check box to enable the MANA service. If enabled, at least one notification method (event viewer, SNMP, or email) must be enabled as well. This check box is selected by default.
Distribution List	The available distribution lists.
Add	Add a distribution list.
Remove	Remove a distribution list.
Edit	Edit the selected distribution list.

Field or Button	Description
Polling Period	<p>Sets the interval at which the MANA service checks for the selected notification triggers. Default = 10 minutes, Minimum = 0 minutes, Maximum = 1440 minutes (1 day). The timer starts when the last polling task is complete.</p> <div>Note: When you change the polling period, it takes one polling cycle before the new polling period goes into effect.</div>
Never	Choose this option if you do not want to be renotified of a problem after the initial notification.
Every <i>N</i> Polling Periods	Choose this option if you want to specify how frequently you want renotification to occur after the initial notification and specify the number of polling periods. For example, if you choose to be notified every 3 polling periods, you receive the initial notification on the first polling period the problem is detected, no notification the next two polling periods, and then another notification on the next polling period. This pattern will continue as long as the problem is detected.
Every Polling Period	Choose this option if you want renotification to occur every polling period after the initial notification.
QM Task Settings	The fields listed in the QM Task Settings section are used to configure QM3002.
Miss Threshold	Percentage of missed CDRs required to trigger notification.
Minimum Misses	Lowest number of missed CDRs required to trigger notification.
Notify on users configured in QM	When you select this option, Quality Management only generates notifications about users who are configured in Quality Management.

Field or Button	Description
Notify on users that are logged in	When you select this option, Quality Management only generates notifications about users who are currently logged in to a desktop where the Desktop Recording service is installed. This only applies to the Desktop Recording service.
Display Type	<p>Choose one of the following options.</p> <ul style="list-style-type: none"> ■ Summary Only—displays 1 row per agent with missed CDR that meet the above criteria. See Summary Only for an example. ■ Details (Tab Delimited)—displays each missed CDR in tab delimited format. See Detail (Tab Delimited) for an example. ■ Details (Plain Text)—displays each missed CDR in text format. See Detail (Plain Text) for an example.

Configuration Settings Used By Services

If you change the settings on the Monitoring and Notification window, the following table shows when your changes take effect.

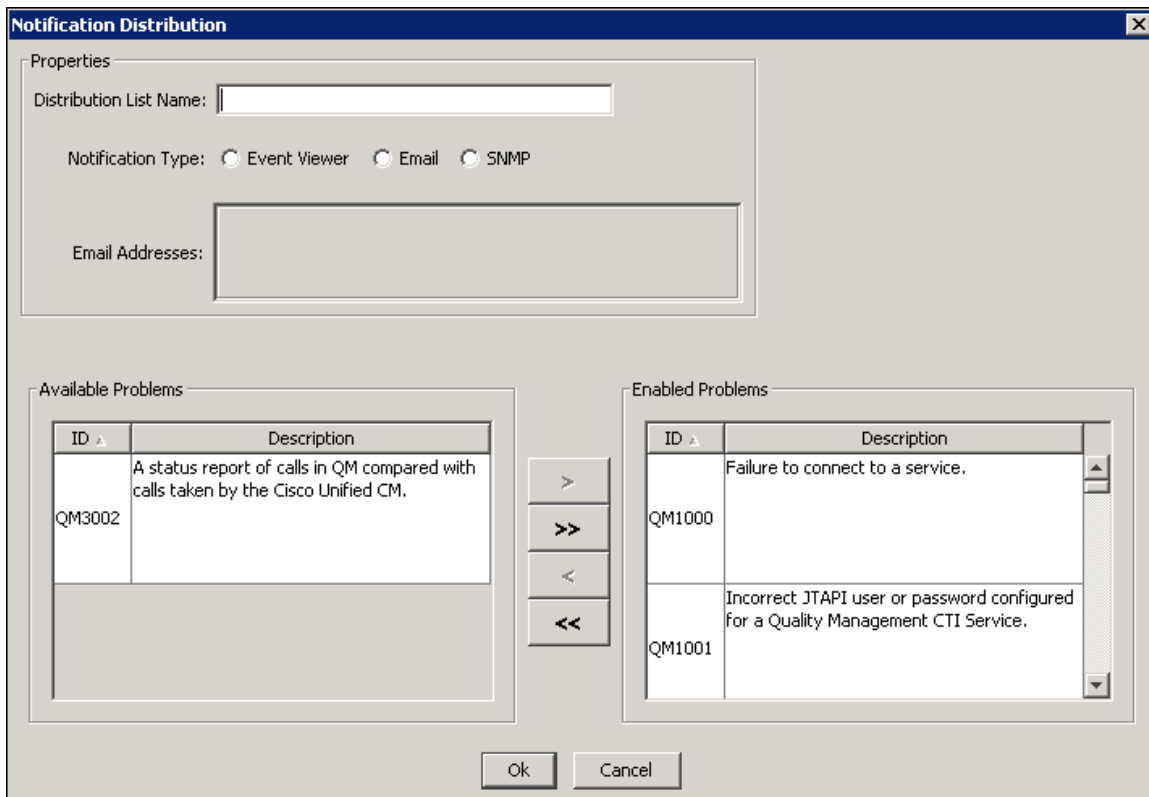
When services start using the changed configuration settings

Service	Configuration settings applied when...
MANA service	The next polling period applies the configuration settings.

Notification Distribution

The Notification Distribution dialog box allows you to create a distribution list, specify the notification type for the distribution list, and assign the type of MANA messages that are sent to the distributions list.

The following image displays the Notification window for Unified CCX.



The dialog box is titled "Notification Distribution". It contains a "Properties" section with a "Distribution List Name" text field, "Notification Type" radio buttons for "Event Viewer", "Email", and "SNMP", and an "Email Addresses" text area. Below this are two list boxes: "Available Problems" and "Enabled Problems". The "Available Problems" list contains one item: ID QM3002, Description "A status report of calls in QM compared with calls taken by the Cisco Unified CM." The "Enabled Problems" list contains two items: ID QM1000, Description "Failure to connect to a service." and ID QM1001, Description "Incorrect JTAPI user or password configured for a Quality Management CTI Service." Between the lists are four arrow buttons: a single right arrow, a double right arrow, a single left arrow, and a double left arrow. At the bottom are "Ok" and "Cancel" buttons.

The MANA messages are classified as follows:

- QM1xxx—indicates a global outage that might affect recording for the entire system.
- QM2xxx—indicates individual outages that might affect recording for individual users.
- QM3xxx—indicates a possible configuration problem. The notifications might not point to an actual issue, so you might want to turn these notifications off to avoid unnecessary notifications.
- QM4xxx—indicates a problem with MANA that prevents it from reporting problems.

Notification Distribution fields

Field	Description
Distribution List Name	The name of the distribution list.

Field	Description
Notification Type	<p>The type of notification you want to use to send notification messages. Your options are:</p> <ul style="list-style-type: none"> ■ Event Viewer—use the Event Viewer for displaying notification messages ■ Email—use email for sending notification messages ■ SNMP—use SNMP for sending notification messages
Email Addresses	<p>The list of email addresses to which notification is sent. Maximum = 5 email addresses. A comma is required to separate two or more email addresses.</p> <p>Example: jane.doe@acme.com, john.smith@acme.com, robert.dee@acme.com</p> <p>Note: This field is enabled when you select Email as your notification type.</p>
Available Problems	<p>The list of problems that will not trigger notification. Move any problem that does not require notification to the Available Problems list. QM3002 appears in this list by default.</p>
Enabled Problems	<p>The list of problems that will trigger notification. By default, all problems are enabled, except for QM3002. You must configure QM3002 under QM Task Settings in the Monitoring and Notification window before you can enable this Call Detail Record (CDR) task.</p> <p>Note: QM3002 is not supported with Cisco MediaSense Recording.</p> <p>See Configuring the QM3002 Notification Trigger for more information.</p>

Managing Notification Distribution Lists

To manage notification email addresses:

- To add a distribution list, perform the following steps.
 - Click Add in the Notification Distribution section.
 - Type the name of the distribution list in the Distribution List Name field.
 - Type the email addresses that are included in the distribution list in the Email Addresses field.
 - Move the type of problems you want sent to this distribution list to the Enabled Problems list.
 - Click OK.

The new distribution list appears in the Distribution List.

- To remove a notification distribution list, select the distribution list from the Distribution List, click Remove, and then click OK.

The distribution list is removed from the Distribution List.

- To edit a notification distribution list, select the distribution list from the Distribution List, and click Edit. In the Notification Distribution dialog box, modify the distribution list that you want to change, and then click OK.

Status

The Status window reports the version of the installed Quality Management components and displays the status of the signaling servers by telephony group. Click refresh to see the latest signaling server information.

Status

Server Component Versions

Base Server	9.2.1.549
DB Server	9.2.1.549
Storage (Voice/Screen) Server	9.2.1.549
System Version	9.2.1.549

Signaling Server State

Refresh

Telephony Group	Signaling Group	Primary	Status	Backup	status
CUBE_TG: CUBE	Default Signaling G...	10.192.247.162:5...	ACTIVE	10.192.247.163:5...	STANDBY
UCCM_TG: CUCM	SG1	10.192.247.160:5...	ACTIVE	10.192.247.161:5...	STANDBY
UCCM_TG: CUCM	SG2	10.192.0.71:52102	ACTIVE	10.192.0.72:52102	STANDBY
LHSR_TG: CUCM	Default Signaling G...	10.192.247.162:5...	ACTIVE	10.192.247.163:5...	STANDBY
ACME_TG: AcmeP...	Default Signaling G...	10.192.247.178:5...	ACTIVE		
MS_TG: MediaSense	MS_SG	10.192.247.158:5...	ACTIVE		

Save

Cancel

Configuration Settings Used By Services

If you change the product version, the following table shows when your changes take effect.

When services start using the changed configuration settings

Service	Configuration settings applied when...
Upload Controller service	Periodically check for a version mismatch.

System Configuration Setup Tools

System Configuration Setup provides a number of tools you can use to update your site information. These tools are available through the Tools menu. These tools normally run during the initial installation of Quality Management.

The Tools menu, in System Configuration Setup, only enables tools when the tools are available on the server where you are running the System Configuration Setup tool.

The following table displays the available tools and the servers on which they are located.

Tool availability in the System Configuration Setup tool

Tool	Web Base Server	Operations Server	Database Server	Site Upload Server	CTI Server	Voice Record & Monitor Server	Media Encoding Server
Start Local Services	x		x	x	x	x	x
Create Database Catalogs	x		x				
Generate Info for MSI Clients	x						
Download/Install JTAPI					x		

Tool	Web Base Server	Operations Server	Database Server	Site Upload Server	CTI Server	Voice Record & Monitor Server	Media Encoding Server
Encrypt Audio Files				x			
Set Recording Home Directory				x			
Show Proxy Networks Administrator	x						
Generate SSL Certificates	x			x			
Test CTI Service (s)	x		x	x	x	x	
Test MediaSense Subscription Service	x		x	x	x	x	
Display Metadata Encryption Key	x		x	x	x	x	x
Choose Monitor Adaptor						x	
Remove Recording Services	x		x	x	x	x	x
Set Temporary Recording Directory						x	

Tool	Web Base Server	Operations Server	Database Server	Site Upload Server	CTI Server	Voice Record & Monitor Server	Media Encoding Server
Set Temporary Encoding Directory							x
SIP Trunk Certificate						x	
Change IP Addresses or Host Names				x		x	x
Configure High Availability	x	x					

Start Local Services

This tool offers a convenient way to start all the Quality Management that are on the local computer. You can run this tool any time. However, you should notify users because restarting services might cause outages.

Create Database Catalogs

This tool creates a new Quality Management database if one does not exist or updates an existing database to the latest schema version without overwriting any existing data. You can use this tool to recreate your Quality Management database if you have no backup database and your database was corrupt and you deleted it. This tool populates a fresh database when the Unified CCX and Data API sync with it.

Generate Info for MSI Clients

This tool updates the information required by the MSI client installation programs to successfully install the Desktop Recording service, Recording Thin Client, and Quality Management Administrator.

Download/Install JTAPI

Use this tool when you upgrade Unified CM. This tool downloads and installs JTAPI.

Encrypt Audio Files

This tool enables you to encrypt any unencrypted audio files. Run this tool only after you upgrade all desktops to the latest version of Quality Management. All audio files are encrypted after you run this tool.

Encryption Keys

Quality Management allows you to encrypt voice and screen recordings to protect sensitive information (for example, Social Security numbers and credit card numbers). This feature complies with Payment Card Industry Data Security Standard (PCI DSS). When a voice or screen recording is encrypted, a user cannot copy the REC file stored on the agent's computer (or storage server), and play back a screen that contains sensitive information.

Quality Management provides a set of default encryption keys. These default keys are global (not customer specific). These keys do not require backup, because they can be restored when you reinstall the Site Upload Server bundle.

The Monitoring and Recording Administrator must manually generate a new set of customer-specific keys by running System Configuration Setup on the server where Site Upload Server bundle is installed. This provides a higher level of security for your contact center by ensuring that the encryption keys are unique.

The Site Upload Server bundle automatically detects new keys and uses these new keys within ten minutes of your generating the keys.

System Configuration Setup includes the ability to export and import keys. You can use this ability for backup and restoration purposes.

Note: You must ensure that your customer-specific keys are not lost. If you lose these keys, any recording encrypted with those keys become unusable.

The keys are stored locally on the Site Upload server under Common Files folder. This ensures the keys are not modified or lost during an upgrade.

Quality Management places voice and screen recordings in a queue for encryption after the recording ends. The time it takes to complete the encryption depends on the system's volume and load.

Voice and screen recordings are uploaded through an encrypted connection to the storage server.

When you play back a screen recording located on the storage server, Quality Management decrypts the screen recording when streaming the file during playback.

Quality Management supports voice and screen recording encryption for Server Recording, Network Recording, and Desktop Recording.

Files remain encrypted when they are uploaded to the storage server.

Set Recording Home Directory

This tool allows you to restart services after you update the Site Settings window. Run this tool when upgrading from the Basic license to the Advanced license.

Show Proxy Network Administrator

This tool displays the Gateway Administrator. Use this tool when you need to modify the Screen Playback Gateway information.

Generate SSL Certificate

This tool generates a security certificate for the Media webapp and Unified Workforce Optimization-generated reports. Use this tool if your certificate is corrupt or if the IP address of the server changes (the user sees a Security Alert dialog box whenever the Media webapp or Reports runs). This tool is available only when you run System Configuration Setup on the Quality Management server (for reporting) and the Site Upload server (for Media webapp).

When you run the tool, you see a Security Alert dialog box. Click View Certificate to display the Certificate dialog box, and then Install Certificate to install a new certificate.

Test CTI Services

This tool verifies that the local Recording CTI service or CUBE SIP CTI service has the correct JTAPI and accepts connections. The tool makes a request to each running Recording CTI service or CUBE SIP CTI service and, if all succeed, returns a success message. If any

requests fail, Quality Management reports the failure and lists which succeed. The reports are available in Unified Workforce Optimization.

Note: This tool is not required for Cisco MediaSense Recording.

If you made any changes to the Recording CTI service or CUBE SIP CTI service in System Configuration Setup, you must restart the Recording CTI service or CUBE SIP CTI service before you run this test.

Test MediaSense Subscription Service

This tool verifies that the running MediaSense Subscription Service has the correct connection and authentication information and accepts connections. This tool makes a request to the MediaSense Subscription Service and, if it succeeds, it returns a success message. If the request fails, Quality Management reports the failure.

If you made any changes to the MediaSense Subscription Service in System Configuration Setup, you must restart the MediaSense Subscription service before you run this test.

Display Metadata Encryption Key

This tool displays the customer-specific key used for Advanced Encryption Standard (AES) encryption. This key can be used by external applications to access encrypted user-defined metadata directly from the Quality Management database. You must provide the administrator's user name and password to access this information.

Choose Monitor Adaptor

This tool displays a dialog that asks for the IP address of the NIC card used for the Monitor service and server-based monitoring. This might be different from the network IP address you entered during System Configuration Setup.

The monitor adapter dialog pops up automatically during System Configuration Setup if multiple NIC cards are on the box and the box hosts the Monitor service. You should choose the IP address of the NIC card that you connected to the SPAN port on the switch.

Note: This tool is not required for Cisco MediaSense Recording.

Remove Recording Services

Use this tool to finalize the removal of Network Recording service and Monitor service servers by removing them from database. Uninstall the services from the server before you use this tool.

Set Temporary Recording Directory

This tool allows you to choose a temporary storage location for recordings before they are uploaded. You can change the temporary storage location at any time. When you change the temporary storage location, System Configuration Setup moves the recordings to the new location.

Set Temporary Encoding Directory

This tool allows you to choose a temporary storage location for encodings before they are uploaded. You can change the temporary encoding location at any time. When you change the temporary encoding location, System Configuration Setup moves the encodings to the new location.

SIP Trunk Certificate

Use this tool to generate, upload, or download a SIP trunk certificate. A SIP trunk certificate is required when your system is configured for Network Recording with Cisco Unified CM 8.0 or later.

Note: This tool is not required for Cisco MediaSense Recording.

Generate SIP Trunk Certificate

Use this tool to generate a SIP trunk certificate. The SIP trunk certificate is saved to the C:\Program Files\Common Files\QM\Certificates folder.

Upload SIP Trunk Certificate

Use this tool to upload a SIP trunk certificate from a flash drive or folder.

Download SIP Trunk Certificate

Use this tool to download the SIP trunk certificate to a flash drive or folder. Follow the upload instructions in the Cisco Unified Communications Manager Administration Guide to upload the certificate to Cisco Unified CM.

If you are using multiple Recording servers, copy the Certificates directory containing both privacy-enhanced mail (PEM) files to the same location on the other Recording servers.

Change IP Addresses or Hostnames

This tool allows you to change the IP address or hostname for the Site Upload server (Site Services), Recording server, Monitor server, and Media Encoding server (Encoding Server). During an upgrade, this feature runs automatically after the Quality Management Quality Management database is initialized.

Record Server Configuration

Use the Record Server Configuration node in the Quality Management Administrator application to configure devices for Cisco MediaSense Recording, Server Recording, Network Recording, and Network Based Recording.

Note: You do not need to configure devices if you are only using Desktop Recording (Endpoint).

Recording Considerations

You can enable Server Recording, Network Recording, and Network Based Recording for a device from the Record Server Configuration node for the following types of agents:

- Agents who work different shifts and share a desk (Hot Desking)
- Agents who log into a phone (Extension Mobility) in a
- Agents using Citrix or Microsoft Terminal Services thin clients (audio and screen recording)
- Agents using just a phone, and no PC (audio recording only)

If an agent's phone is configured for Server Recording, Network Recording, and Network Based Recording,

- The agent can be recorded
- Supervisors and managers can monitor a live call

Note: You cannot monitor the default user, even if the default user is recorded using Network Recording or Network Based Recording.

Server Recording, Network Recording, and Network Based Recording have the following limitation: a device cannot be simultaneously registered for Server Recording and Network Recording or Network Based Recording. You can, however, change the configuration from Server Recording to Network Recording or Network Based Recording, or from Network Recording or Network Based Recording to Server Recording.

VoIP Devices

The VoIP Devices window supports VoIP devices in the telephony groups (Unified CM clusters) for Server Recording (SPAN), Network Recording, or Network Based Recording.

The first time you access the VoIP Devices window, it is empty. You must search the devices configured in Unified CM for the ones you want to enable. See [Enabling VoIP Devices for Recording](#) for more information.

The VoIP Devices window allows you to search for the devices configured in Unified CM and enable the devices for Server Recording, Network Recording, or Network Based Recording. You can then associate an agent, a Monitor service server (Server Recording only), and a Recording Cluster with those devices.

VoIP Devices

Agent List Filter: Users assigned to site: All Sites

Device Search: Find devices of type: All Types in telephony group: All Groups where Device Name matches *

Device Name	Device Type	Telephony Group	Extension	Agent	Monitor Server	Signaling Group	Recording Cluster	Recording Type
SEP8BAC6F39D-403	Cisco Phone	UCOM_TG (10.192.247.51)	247515114, 5114	CAS4, QA (QACAS4)	No Configuration	Default Signaling Group	UCOM_RC	Network Recording
SEP8BAC6F39D-404	Cisco Phone	UCOM_TG (10.192.247.51)	247515113, 5113	CAS3, QA (QACAS3)	No Configuration	Default Signaling Group	UCOM_RC	Network Recording
SEP001AA0E4334C	Cisco Phone	LHRS_TG (10.192.247.38)	385112, 5112	CAS2, QA (QACAS2)	No Configuration	Default Signaling Group	LHRS_RC	Event Notification
SEP8BAC6F20A-46D	Cisco Phone	LHRS_TG (10.192.247.38)	385111, 5111	CAS1, QA (QACAS1)	No Configuration	Default Signaling Group	LHRS_RC	Event Notification

Bulk Configuration

- Configure Monitor Server
- Configure Recording Cluster
- Configure Recording Type
- Configure Agent
- Remove From Configuration

Enable Unified CM Devices for Recording Synchronize Devices With Clusters Create/Edit Default Hoteling Agent

Save Cancel

VoIP Devices window fields and buttons

Field	Description
Users Assigned to Site	<p>The site's IP address. You can filter knowledge workers by site. You can choose from the following:</p> <ul style="list-style-type: none"> ■ All Sites ■ <site's IP address or hostname>
Of Type	<p>The type of device. You can choose from the following:</p> <ul style="list-style-type: none"> ■ All Types ■ Cisco Phone ■ User Profiles ■ Remote Agent Port
In Telephony Group	<p>The IP address for the telephony group. Your options are as follows:</p> <ul style="list-style-type: none"> ■ All Groups ■ <telephony group's IP address or hostname>
Where	<p>The name of the device or extension for the device. You can choose from the following:</p> <ul style="list-style-type: none"> ■ Device Name—search devices by the name of the device. ■ Extension—search devices by the extension associated with the device.
Matches	<p>A string of text used to narrow the search for the device name or extension. You can use wildcards * and question marks ? in this field, in addition to a specific string.</p> <p>Note: This field is case sensitive.</p>
Find	<p>When clicked, locates every device that matches the search criteria.</p> <p>Note: The VoIP Devices window must be populated before the Find button can display search results. See Enabling VoIP Devices for Recording for more information.</p>

Field	Description
Device Name	<p>The name of the device.</p> <p>If the device is a Cisco IP Communicator, type the MAC address for the user's PC. This text field is case-insensitive. The Device Name must match the MAC address that packets travel through.</p>
Device Type	<p>The type of device. The device types are:</p> <ul style="list-style-type: none">■ All Types■ Cisco Phone■ User Profiles■ Remote Agent Port
Telephony Group	<p>The IP address for the telephony group (Unified CM cluster).</p>
Extension	<p>The extension associated with the device. If a device has two extensions associated with it, two entries appear in the search results table. If you select the Enabled Check box for one extension, Quality Management also selects the other extension.</p>
Agent or Configure Agent	<p>Allows you to assign one of the following login options to a device.</p> <ul style="list-style-type: none">■ User Login Required—choose this option to configure the device for Hot Desking. If you choose this option, the device will not be recorded until an agent or knowledge worker logs in using the Recording API.■ Default Hoteling Agent—an agent logs into the device using the login information for the default hoteling agent.■ <Last name, first name, (user ID)>—choose this option to assign a specific agent or knowledge worker or the default hoteling agent to the device. <p>You can double-click the Agent field or click the Configure Agent button when you want to associate a login option with a device. Before you click Configure Agent, you must select one or more devices.</p> <p>See Considerations when Assigning Devices to Agents for more information.</p>

Field	Description
Monitor Server or Configure Monitor Server	<p>Allows you to associate the IP address for the Monitor server with this device. If a Monitor server is not applicable, the field displays No Configuration.</p> <div>Example: You cannot associate a Monitor server with a Remote Agent Port or User Profile.</div> <p>You can double-click the Monitor Server field or click the Configure Monitor Server button when you want to associate a Monitor server with a device. Before you click Configure Monitor Server, you must select one or more devices.</p>
Signaling Group	<p>Displays the signaling group associated with this device.</p>
Recording Cluster or Configure Recording Cluster	<p>Allows you to assign the Recording Cluster to a device. If a Recording Cluster is not applicable, the field displays No Configuration.</p> <div>Example: You cannot associate a Recording Cluster with a User Profile.</div> <p>You can double-click the Recording Cluster field or click the Configure Recording Cluster button when you want to assign a Recording Cluster to a device. Before you click Configure Recording Cluster, you must select one or more devices.</p>

Field	Description
Recording Type or Configure Recording Type	<p>Allows you to assign recording type to a device.</p> <p>You can double-click the Recording Type field or click the Configure Recording Type button when you want to select a recording type for a device. Before you click Configure Recording Type, you must select one or more devices.</p> <p>You can choose from the following options:</p> <ul style="list-style-type: none"> ■ Event Notification—Choose this option when you are not using Server Recording, Network Recording, or Network Based Recording but you would like to use Live Monitoring and/or Screen Recording: ■ Server Recording—choose this option to use Server Recording (SPAN). ■ Reconciliation—choose this option when the only type of recording you are doing is reconciliation. You do not need to choose this option to enable reconciliation, all calls are reconciled. Choose this option when you are not using Event Notification, Server Recording, Network Based Recording, or Network Recording. This option is appropriate for MediaSense or Gateway Recording. ■ Network Recording—choose this option to use Network Recording. <p>Example: Assign Event Notification to a device configured for Cisco MediaSense Recording to allow Live Monitoring and Screen Recording.</p> <p>You cannot configure the recording type for a User Profile device.</p>
Remove From Configuration	<p>When clicked, Remove from Configuration allows you to remove one or more devices from the VoIP Devices table.</p> <p>Note: You must select one or more devices before clicking the button.</p>
Enable Unified CM Devices for Recording	<p>When clicked, Enable Devices for Recording allows you to search for devices in Unified CM and enable those devices for recording in Quality Management.</p>

Field	Description
Synchronize Devices With Clusters	When clicked, Synchronize Devices With Clusters allows you to synchronize device changes from Unified CM with the list of devices in the VoIP Devices window. It removes any devices that were deleted in Unified CM and updates extensions for modified devices.
Create/Edit Default Hoteling Agent	<p>When clicked, Create/Edit Default Hoteling Agent allows you to create or modify the following information for the default hoteling agent:</p> <ul style="list-style-type: none"> ■ First Name—the hoteling agent's first name ■ Last Name—the hoteling agent's last name ■ Windows Login—the login ID for the hoteling agent ■ Teams—the team assigned to the hoteling agent <p>This is a generic user profile. The agent does not log into the phone using this user profile. It is assigned to a device in case an agent does not log in.</p>

Associations by Recording Type

The following items must be associated with each recording type.

Recording Type	Associated Items
Server Recording	Agent Monitor server IP address Recording Cluster name Recording type of "Server Recording"
Network Recording	Agent Recording Cluster name Recording type of "Network Recording"
Network Based Recording	Agent Recording type of "Reconciliation"

Agent Considerations for Gateway Recording

When configuring VoIP devices using Gateway Recording for agents, consider the following:

- Unified CM telephony group:
 - The Endpoint only Does Screen Recording check box must be selected in the Unified CM Configuration dialog box (see [Unified CM Configuration](#)).

Note: If the Endpoint only Does Screen Recording check box is cleared, the phone device will default to Desktop Recording (Endpoint).

- ACD agent:
 - If the agent's phone is daisy-chained you do not need to configure the device in the VoIP Devices window.
 - If the agent's phone is not daisy-chained the device must be configured in the VoIP Devices window.
- Knowledge worker:
 - The agent's phone must be configured in the VoIP Devices window.
 - If the agent requires screen recording in a CUBE or MediaSense Recording environment, you need to assign Event Notification to the device and a Recording Cluster that connects to a CTI server and has no Recording servers assigned to it.

Recording Controls Considerations for Gateway Recording

When configuring VoIP devices using Gateway Recording, consider the following if you plan to use Recording Controls:

- The Endpoint only Does Screen Recording check box must be selected in the Unified CM Configuration dialog box (see [Unified CM Configuration](#)) when you configure the Unified CM telephony group.
- Recording Type must be set to either Event Notification or Reconciliation

Licensing and VoIP Device Configuration Considerations

When configuring VoIP devices and assigning licenses to users, note the following:

- The CTI service checks for valid licenses every sync.
- If a license becomes invalid or a user's license is added, removed, or changed, the change will take effect the next time the CTI service syncs.
- If the license server is unavailable, the CTI service will use the last licensing state that it successfully received.

Considerations when Assigning Devices

When using the Agent drop-down list or the Configure Agent button to assign a device to a knowledge worker, consider the following:

- Recording and Quality Management is licensed by the number of named users. Named users are users who are configured and licensed.

Example: knowledge workers, supervisors, managers, evaluators, and archive workers

The total number of devices that you can assign to Default Hoteling Agent is equal to the total number of licenses for your system.

- Assigning a device to Default Hoteling Agent does not use or consume a license, it just puts a limit to the number of devices that can be assigned to Default Hoteling Agent. This prevents a situation where Login commands are not processed when the Web Base server is not available or there is an error when a user tries to log into the system. It ensures the device is recorded no matter what the situation is.
- Do not assign the Default Hoteling Agent to Extension Mobility profiles.
- If you do not assign the device to Default Hoteling Agent and intend to use Hot Desking you must choose User Login Required from the Configure Agent drop-down list. This ensures that the device will be recorded when someone logs into the device using Extension Mobility or the Login API command.

Guidelines for Configuring VoIP Devices

Consider the following when you configure a VoIP device for Server Recording, Network Recording, or Network Based Recording.

The VoIP Devices window only allows 64 characters in the fields. This affects the number of extensions you can configure for a VoIP device. You can configure up to 12 extensions of 4 digits each for a VoIP devices and not exceed the 64 character limitation.

Example: 5555,5556,5557,5558,5559,5560,5561,5562,5563,5564,5565,5566

Hot Desking

Hot Desking is a situation where one desk is shared between several people who use the desk at different times. This work surface can be an actual desk or just a terminal link. Companies use Hot Desking when not all the employees are in the office at the same time, or employees are not regularly in the office for very long.

Hot Desking includes the following scenarios:

- Using Extension Mobility
- Sharing the same extension
- Logging into the Recording API—see the *API Programmer Guide* for more information on the Recording API

Points to Remember

Remember the following points when you configure a device for Hot Desking:

- When configuring Hot Desking for an agent with a Quality Management license or Call Recording license, you must use the Login and Logout commands for the Recording Controls API.
- If an agent is already logged in to a different device, Quality Management logs the agent out of the old device when the agent logs into the new device.
- If you assign a device to an agent by selecting an option in the Agent column from the VoIP devices window:
 - The agent cannot use the Recording Controls API to log into the device (the login will be ignored).
 - The agent can use the Recording Controls API to log into a different device. Quality Management records both devices for the agent.

- If an agent is on a call when another login request comes in, that call is ended. Quality Management logs the agent out, creates a new user for that extension, registers the device with the CTI, and records all subsequent calls for that extension.
- If an agent issues a logout command using the Recording Controls API and there is an active call for that extension, Quality Management ends the call, and logs out the user.
- If an agent issues a login command using the Recording Controls API, and the user-name and extension matches the username and extension for an agent who is currently logged in, Quality Management ignores the request.
- The Desktop Recording service supports Hot Desking, provided the agents use their own accounts to log in and log out of their client machine.

Synchronization Issues

The following list describes the synchronization issues with the devices listed in the VoIP Devices window.

- An agent configured for a device could be deactivated, lose the agent or knowledge worker role, or become unlicensed. In these cases, the agent can no longer be recorded, and Quality Management removes their association with their device. Every time the VoIP Devices window appears and loads the data, the agents are automatically synchronized. The VoIP Devices window displays a list of the invalid agents that will be removed from their associated devices.
- Someone modifies or removes a configured device in the Unified CM cluster. When you click the Synchronize Devices with Clusters button, it updates the modified devices and then displays a list of devices configured for Server Recording but no longer configured in a cluster. You can choose to remove the devices from the VoIP Devices list.

Enabling VoIP Devices for Recording

To enable VoIP devices for recording:

1. On the VoIP Devices window, click Enable Devices for Recording.

You must click this button before you do anything else on this window to populate the list of VoIP devices.

2. Choose one of the following options.

- To find all the devices in the available cluster, click Find.

Note: By default, the search criteria are set up to return every device in a selected cluster when you click Find.

- If the cluster has many devices, you can search for devices that match a certain criteria. You can search by a combination of device type (Phone, Remote Agent Port, User Profile, or All Types), cluster IP address, device name, or extension.

Note: You can type wildcard characters (* or ?) or specific numbers in the Matches field. This field is case sensitive.

A list of all of the devices that are in the cluster appears.

If a device has two extensions associated with it, two entries appear in the search results table. If you select the Enabled check box for one extension, Quality Management Administrator also selects the other extension.

3. To sort by a particular column, click the column heading.

4. Choose one of the following options:

- To select a specific device, click its row.
- To select additional devices, press and hold the Ctrl key while clicking the other rows.

5. When you are done selecting devices, click Check Selected, and then click OK.

The devices you selected appear on the list of VoIP devices

Configuring Devices for VoIP

To configure a device for VoIP monitoring:

Note: To configure multiple devices, see [Managing VoIP Devices](#).

1. Enable the devices for recording.

See [Enabling VoIP Devices for Recording](#) for more information.

2. Find the devices to be configured.
See [Filtering VoIP Devices](#) for more information.
3. Assign a device to a Recording Type.
4. Assign a device to an agent, the default hoteling agent, or User Login Required.
5. Assign a device to a Recording Cluster.
The Recording Cluster is not required for User Profiles.
6. Assign a device to a Monitor server.
7. Assign a device to a recording type.
8. Click Save.

Filtering by Site

To filter agents or knowledge workers by site:

- Choose a site from the Users Assigned to Site drop-down list.

The agents or knowledge workers associated with the selected site appear in the VoIP Devices window.

Filtering VoIP Devices

To filter VoIP devices:

1. On the VoIP Devices window, choose a site from the Users Assigned to Site drop-down list.
2. Choose the type of device you want to locate from the Find Devices of Type drop-down list in the Device Search pane.
3. Choose the IP address for the cluster from the In Cluster drop-down list.
4. Enter the name of the device or extension for the device in the Where drop-down list
You can use wildcards * and question marks ? in this field, in addition to a specific string.
5. Click Find.

The VoIP Devices window displays a list of devices that match the search criteria.

Extension Mobility

When configuring agents for extension mobility in a Network Recording, Network Based Recording, or Server Recording environment, you need to ensure the following:

- A user profile is associated with each agent
- Every phone an agent can log in to is associated with a Recording Cluster

When an agent logs in to a phone, their calls are recorded by the Recording Cluster assigned to their phone.

When configuring agents for Extension Mobility, consider the following:

- If the user is on a phone call when they log out of a device, the recording will stop.
- If you change the user profile (for example, the extension) in Unified CM, you must click the Synchronize Devices with Clusters button in the VoIP Devices window for the change to take effect.
- If you change the user profile in Unified CM and synchronize the databases in Quality Management Administrator, current calls on that device might be stopped and restarted.

Configuring a User for Extension Mobility

1. From the VoIP Devices window, select a device assigned to the Extension Mobility profile (Device Type is User Profile) created in Cisco Unified CM, and then click Configure Agent.

The Configure Agent dialog box appears.

2. Choose Default Hoteling agent or User Login Required from the Configure Agent drop-down list.

To ensure all calls are recorded on the phone, choose the default Hoteling agent from the Configure Agent drop-down list.

3. Assign the device to a Recording Cluster.
4. Assign the device to a Monitor server.
5. Assign the device to a recording type.
6. Click Save.

Managing VoIP Devices

Before you configure VoIP devices, follow the steps as described in [Enabling VoIP Devices for Recording](#) to populate the list of VoIP Devices.

To manage VoIP devices :

- To synchronize device changes from Unified CM with the list of devices in the VoIP Devices window, click Synchronize Devices With Clusters, and then click OK.

Whenever you modify a VoIP device in Unified CCX, the modifications do not go into effect until the Unified CCX and Quality Management databases synchronize.
- To assign multiple devices to a Monitor Server, select the devices from the list, click Configure Monitor Server, select the IP address for the Monitor Server from the drop-down list, click OK, and then click Save.
 - Use Shift + Click to select contiguous rows in the list of devices.
 - Use Ctrl + Click to select non-contiguous rows in the list of devices.
- To assign multiple devices to a recording type, select the devices from the list, click Configure Recording Type, select the appropriate recording type from the drop-down list, click OK, and then click Save.
- To assign a device to a Monitor Server, double-click the device's Monitor Server field, choose the IP address for the Monitor Server from the drop-down list, and then click Save

When configuring a Monitor Server, note the following:

- The Recording Type must be Server Recording (SPAN)
- You cannot associate a Monitor server with a Remote Agent Port (CTI port) device because the server for the Monitor service must be found at run-time.
- To assign a device to a recording type, double-click the device's Recording Type field, select the appropriate recording type from the drop-down list, and then click Save.
- To remove one or more devices, select the devices from the list, click Remove From Configuration, click Yes, and then click Save.
- To assign multiple devices to a Recording Cluster, select the devices from the list, click Configure Recording Cluster, select the name of the Recording Cluster from the drop-down list, click OK, and then click Save.

- To assign the agent association for multiple devices, select the devices from the list, click Configure Agent, choose the agent association from the drop-down list, click OK, and then click Save.

You can only assign the following agents association to multiple devices.

- Default Hoteling Agent—all recordings on the device will be associated with the Default Hoteling Agent until another agent or knowledge worker logs into the device.
 - User Login Required—the knowledge worker logs into the device using their own login information.
- To assign a device to an agent, double-click the device's Agent field, select the knowledge worker from the drop-down list, and then click Save.

You can type text in the drop-down field to filter the list of knowledge workers to show only agents whose first name, last name, or Windows login begins with the entered text.

If that knowledge worker is already assigned to a device, you are asked if you want to switch the association to the current device.

- If you select Yes, the knowledge worker will be assigned to this device and removed from the other device.
 - If you select No, no association is made and you can select another knowledge worker to assign to this device.
- To assign a device to a Recording Cluster, double-click the device's Recording Cluster field, select the name of the Recording Cluster from the drop-down list, and then click Save.
 - To create or edit the default hoteling agent, click Create/Edit Default Hoteling Agent, complete the fields and then click OK.

Personnel

The Personnel node allows you to assign roles, groups, teams, and licenses to users.

Use the Personnel node to:

- Create groups
- Create knowledge worker teams
- Assign teams to groups
- Assign groups to managers
- Link AD users to ACD users and non-ACD users (in Active Directory systems)
- Configure ACD users
- Create non-ACD users
- Assign business administrator, telephony administrator, manager, evaluator, and archive user roles to ACD users
- Assign business administrator, telephony administrator, knowledge worker, supervisor, manager, evaluator, and archive user roles to non-ACD users

User Roles and Privileges

Scope refers to the data (such as recordings and evaluations) that a user can view.

Example: The scope of a supervisor who has one team of knowledge workers consists of the recordings and evaluations for those knowledge workers. The scope of a manager who has several groups of teams of agents and knowledge workers consists of the data for all of those agents and knowledge workers

A role is a collection of privileges. A user can have one or many roles. When the user logs into Unified Workforce Optimization, the user can access all roles and privileges assigned to that user.

Example: If a user is assigned to both the evaluator and manager roles, the user has access to all privileges assigned to the evaluator and manager roles.

A privilege is the permission to perform a transaction. For example, managers have the ability to access archive recordings for their groups.

Quality Management defines a user's scope by roles and privileges.

Administrator

The administrator responsibilities are partitioned into the following hierarchical roles: system administrator, telephony administrator, business administrator.

You can configure system administrators when you run System Configuration Setup (PostInstall.exe). Configuring system administrators is a two-step process:

1. Create users in Quality Management Administrator.

Note: If you are using Active Directory, the users must be assigned to the Admin Group. See the description of Admin Group in [Domain Information](#) for additional information.

2. Assign users to the system administrator role in Administrator Configuration under System Configuration Setup (PostInstall.exe).

Important: Once you assign the system administrator role to a user in a non-Active Directory environment, the default administrator user becomes obsolete and you can no longer log in as a default administrator.

The system administrator is primarily responsible for server configuration, IP changes, integration points, and passwords. The system administrator can configure telephony and business administrators.

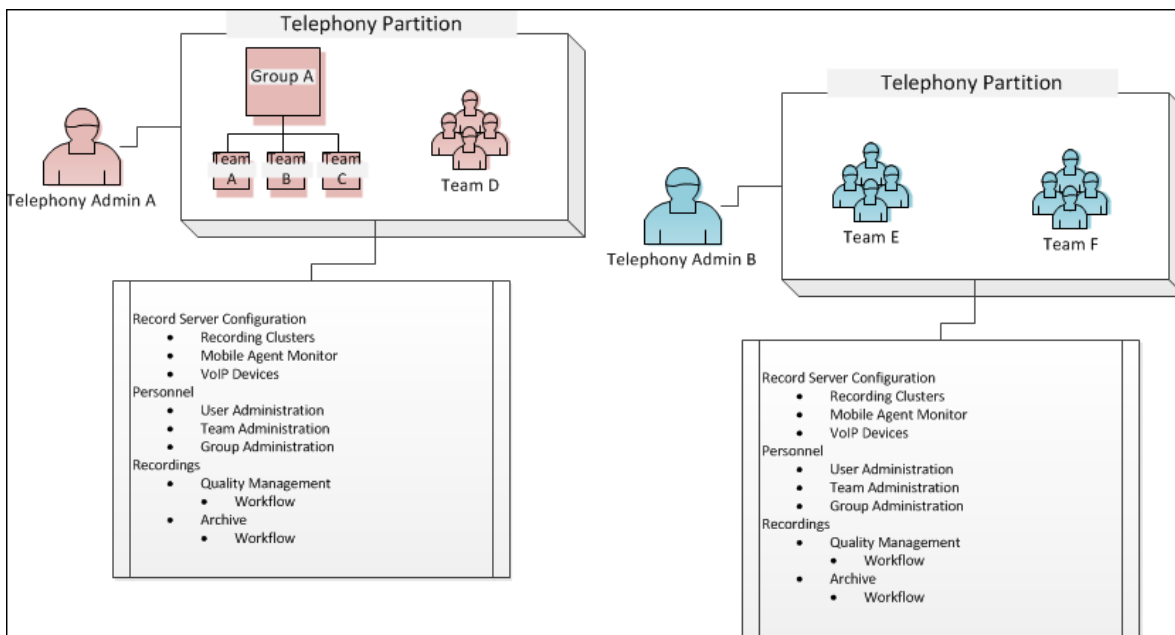
A telephony partition is a group and/or team to which a telephony administrator is assigned. If you want the telephony administrator to administer a specific set of groups or teams, you must assign the manager or supervisor role to the telephony administrator, and then assign the groups or teams.

Example: If you want a manager to be responsible for administering a specific group, assign the telephony administrator role to the manager.

The telephony administrator is primarily responsible for who is configured and/or recorded, the workflows, and the type of devices and recording methods used in the assigned groups and teams within the telephony partition. The telephony administrator can also determine who has the following privileges in Unified Workforce Optimization.

- Accessing recordings
- Evaluating recordings
- Reporting on recordings
- Exporting of recordings

The telephony administrator can configure business administrators within the telephony partition.



The business partition is a group and/or team to which a business administrator is assigned. If you want the business administrator to administer a specific set of groups or teams, you must assign the manager or supervisor role to the business administrator, and then assign the groups or teams.

Example: If you want a supervisor to be responsible for creating and configuring evaluation forms and templates for assigned teams, assign the business administrator role to the supervisor.

The business administrator is primarily responsible for creating and configuring evaluation forms and templates for assigned groups and teams within the business administrator partition.

When managing administrators, consider the following points:

- In an Active Directory environment, the system, telephony, or business administrator must have an AD Account user associated with the Security Group security setting.
- In a non-Active Directory environment, the system administrator is created when you installed/upgraded Quality Management.
- Telephony and business administrators can be promoted to system administrators.
- System, telephony, and business administrators can log in to Quality Management Administrator.
- Only the system administrator and telephony administrator can log in to Unified Workforce Optimization. The system administrator does not require a license to log into Recording and Quality Management. However, a Recording and Quality Management license is required if you want the system administrator to manage the Dashboard application in Unified Workforce Optimization. The telephony administrator can access all System Reports in the Reporting application, except Audit Trail.

The scope for each administrator role is shown in the following table.

Area	Window or feature	System Administrator	Telephony Administrator	Business Administrator
System Configuration or PostInstall.exe	System Database	X		
	Data Synchronization	X		
	Telephony Groups	X		
	Enterprise Settings	X	X	
	Gamification Metrics	X		
	Administrator Configuration	X		
	Site Settings	X		
	Recording Clusters	X		
	Mobile Agent Monitor	X		
	Inclusion List	X	X	
	Monitoring and Notification	X	X	
	Status	X	X	
Record Server Configuration	Mobile Agent Monitor	X	X	
	VoIP Devices	X	X	
Personnel	User Administration	X	X	
	Team Administration	X	X	
	Group Administration	X	X	

Area	Window or feature	System Administrator	Telephony Administrator	Business Administrator
Recordings	Quality Management Workflows	X	X	
	Quality Management Survey Forms	X	X	X
	Evaluation Forms	X	X	X
	Templates	X	X	X
	Forms	X	X	X
	Archive Workflows	X	X	
	Metadata	X	X	
	Export	X	X	
	Call Events Administration	X	X	
	Recording Visibility Administration	X	X	
	Interface Configuration	X	X	

Area	Window or feature	System Administrator	Telephony Administrator	Business Administrator
Unified Workforce Optimization	Dashboard: configuring dashboards by role	X		
	Dashboard: lock down dashboard	X		
	Recordings	X		
	Live Monitoring	X		
	Recording Monitoring	X		
	Application Management	X		
	Reporting: Recording Access by User	X	X	
	Reporting: Recording Access by Contact	X	X	
	Reporting: User Recording Status	X	X	
	Reporting: System Status	X	X	
	Reporting: Audit Trail	X		

Agents and Knowledge Workers

Agents and knowledge workers have the following privileges:

- View their own quality scores and the aggregate quality scores for their team and group on a dashboard
- Export recordings within their scope, if enabled
- Review evaluation results on their own scored contacts
- Enter comments on their scored evaluations.

- View their own historical reports
- Access recordings of their own contacts, if enabled

Note: Agents who are not assigned to a team can still log into Unified Workforce Optimization and access their customer conversations.

- Access all recordings marked as Training

Supervisors

Supervisors have the following privileges:

- View dashboard with their team's and group's quality scores and details of individual agents within their team
- Enter comments on their team's scored evaluations
- Evaluate contacts for their team, when an evaluation form is enabled for supervisors
- Update their previously-scored evaluations
- Export recordings within their scope, if enabled
- Approve evaluations for agents in their teams, if required
- Designate recordings in their teams to be retained as Training or HR recordings
- View agent and team-level historical reports
- Access customer conversations for their team

Managers

Managers have the following privileges:

- View dashboard with their group's quality scores and details of individual teams within their group
- Review evaluation results on all of their group's scored contacts
- Enter comments on their group's scored evaluations
- Evaluate contacts for their group, when an evaluation form is enabled for managers
- Approve evaluations for agents in their groups, if required
- Update their previously-scored evaluations

- Export recordings within their scope, if enabled
- Designate contacts for retention as Training contacts
- View agent, team, group, and enterprise-level historical reports
- Access customer conversations for their group

Evaluators

Evaluators have the following privileges:

- Select, review, and evaluate customer conversations for all groups
- Review recordings and add comments to evaluations for agents and knowledge workers in all groups
- Approve evaluations, if required
- Export recordings within their scope, if enabled
- Update your previously-scored evaluations
- Designate contacts for retention as Training or HR contacts

Archive Users

Archive users can view all archived call contacts made by all active and inactive groups, teams, and agents. Archive users have the following privileges:

- Search and review customer conversations for all of the agents and knowledge workers across the enterprise
- Export customer conversations, if enabled
- Access customer conversations for deleted users

User Administration

The User Administration window allows you to:

- Create and configure users.
- Assign the telephony administrator, business administrator, knowledge worker, supervisor, manager, evaluators, and archive user roles.

- Make group and team assignments.
- License the users using the license added from Site Configuration.

The User Administration window displays one of two versions, depending on whether or not you configure your system to interface with Microsoft Active Directory.

Active Directory Systems

In an Active Directory system, there are three types of users:

- **Active Directory Account.** A user set up in Microsoft Active Directory. All users in Quality Management must be in Active Directory. You can only configure a user in Quality Management if that user has a last name in Active Directory.
- **ACD User.** A user set up as an agent and/or supervisor and assigned to a team in the ACD. You can assign an ACD user to manager, evaluator, and archive user roles in Quality Management.
- **Non-ACD User.** A user created in Quality Management.

Note: Whenever you modify a user in the ACD (for example, change a user's name), the modifications do not appear in Quality Management until synchronization occurs. The synchronization process runs automatically at 10-minute intervals. If necessary, you can manually synchronize these databases (see [Synchronizing Databases](#) for more information).

You must link an ACD user to an Active Directory account within Quality Management to assign roles to that user in Quality Management.

The User Administration window has tabs that sort users into categories according to their roles and status within Quality Management. You can use Shift+click or Ctrl+click to select items in a tab's table and then copy and paste the results to other applications. When more than one user is selected, the User Properties panel and bulk modifications are disabled.

The following image displays the User Administration window for Unified CCX.

User Administration

Number Licensed Users: 36

Last Name First Name Group Team Windows Login Extension Search

License	Last Name	First Name	User ID	Assigned Team	Assigned Group	Windows Login	Admin Role	Extension	Domain
AQM	Administrator		0.1			administrator	None		
AQM	agent	qa1	0.1116	KW_Team	Grp1	qa1	None		p3
AQM	ArchiveUser	QM	0.51			archive	None		p3
AQM	ArchiveUser1	QM	0.52			archive1	None		p3
AQM	Chok	Oishong	0.1080			oishong.chok	None		p3
AQM	Comstock	Bryan	0.61	KW_Team	Grp1	bryan.comstock	None		p3
AQM	Dahlman	June	0.1063			June.Dahlman	None		p3
AQM	Evaluator	QM	0.45			evaluator	None		p3
AQM	Evaluator1	QM	0.46			evaluator1	None		p3
AQM	Gong	Zhuo	0.59	KW_Team	Grp1	gong2	None		p3
AQM	gong23	zhao23	5000.220723	QA_Team	Grp1	220723	None		p3
AQM	gong53	zhao53	5000.220753	Team1	Grp1	220753	None		p3
AQM	gong9	zhao9	0.57			22079	None		p3
AQM	hotel	agent	0.1062	KW_Team	Grp1	hotel	None		

User Properties
 License
 First Name
 Last Name
 Assigned Team
 User ID
 Windows Login
 Administrator Role
 Domain

Roles
☐ Agent
☐ Supervisor
☐ Evaluator
☐ Manager
☐ Archive User

Supervisor's ACD Teams

Supervisor's QM Teams

Manager's Groups

The following table describes the buttons.

User Administration buttons

Tab	Description
Link AD to ACD Users	Assign an ACD user to an Active Directory account. <div> Note: Once you link an Active Directory to an ACD account, you can only unlink the Active Directory account by deleting the user from the ACD system. </div>
Create Users	Add a non-ACD user. Non-ACD users are users that exist only in Quality Management and Active Directory. Non-ACD users do not exist in the ACD. Like ACD users, you must link non-ACD users to an Active Directory Account to be part of the Quality Management system.
License Users	Assign a user with a license. See License/Unlicense Users for more licensing information.

Tab	Description
Delete User	Remove a non-ACD user. See Deleting an ACD User for information on deleting an ACD user.
Search	When clicked, locates every user that match the search criteria.
Add	Add an ACD team, QM team, or group to a list.
Remove	Delete an ACD team, QM team, or group from a list.
Save	Saves your changes.
Cancel	Cancels your current changes.

The following table describes the search fields. The search fields are disabled until you click the Search tab. Use one or more filters when running a search. A search with no filters returns all users.

The following filters can use the * wildcard at the beginning or end of a search string: Last Name, First Name, Windows Login, and Extension. If the search string does not contain an *, the results will display all results that contain the specified search string.

User Administration search fields

Tab	Description
Last Name	Filters the search by the user's last name.
First Name	Filters the search by the user's first name
Group	Filters the search by the name of the group.
Team	Filters the search by the name of the team.
Windows Login	Filters the search by the user's Windows login,
Extension	Filters the search by the user's extension.

The following table describes the tabs.

User Administration tabs

Tab	Description
Linked Users	Active Directory users linked to an ACD or non-ACD users. This includes the administrator.
Managers	ACD and Non-ACD users assigned to the manager role.
Evaluators	ACD and Non-ACD users assigned to the evaluator role.
Archive Users	ACD and Non-ACD users assigned to the archive user role.
Supervisors	ACD users assigned to the supervisor role or non-ACD users assigned to the supervisor role.
Agents	Users assigned to the agent role in the ACD.
Knowledge Worker	Non-ACD users assigned to the knowledge worker role.
Unlinked ACD Users	ACD users who are not linked to an Active Directory user.
Unassigned Users	Non-ACD users not assigned to the manager, evaluator, knowledge worker, supervisor, or archive user roles. This tab only lists non-ACD users, because ACD users always have at least one role.
Administrators	Users assigned to the administrator role.
Search	Users found by the search feature.

The following table describes the information that appears about the users on each tab.

User Administration tab columns

Column	Description
License	<p>The license assigned to the user. The possible licenses are:</p> <ul style="list-style-type: none">■ CR■ CRA■ QM■ QMA■ AQM■ AQMA <p>A user must be licensed to be able to log into Unified Workforce Optimization and be recorded.</p>
Last Name	<p>The user's last name, as set up in the ACD or Quality Management. The name appears as it is configured in Active Directory.</p> <p>For Active Directory authentication, the first and last names are displayed in their respective columns after you link a user. A report that normally displays a user's first and last name will display the Active Directory first and last name.</p>
First Name	<p>The user's name appears as it is configured in Active Directory.</p>
User ID	<p>The user ID assigned to the user. The format of an ACD user ID is <agent's PG>.<agent's ICM Peripheral Number>.</p>
Assigned Team	<p>The team assigned to the agent.</p>
Assigned Group	<p>The group assigned to the agent.</p>
Windows Login	<p>The user's Windows user name.</p>

Column	Description
Administrator Role	<p>The administrator role assigned to the user. Use the Admin Role drop-down list to assign the business or telephony administrator role to a user. The possible values are as follows:</p> <ul style="list-style-type: none"> ■ None—no administrator roles are assigned to the user. ■ Business—assigns the business administrator role to the user. <p>Note: Only a system administrator or telephony administrator can assign the business administrator role to a user.</p> <ul style="list-style-type: none"> ■ System—indicates the user is a system administrator. <p>Note: The Administrator Role drop-down list is disabled when the user is a system administrator. See Administrator Configuration for more information on assigning users to the system administrator role.</p> <ul style="list-style-type: none"> ■ Telephony—assigns the telephony administrator role to the user. <p>Note: Only a system administrator can assign the telephony administrator role to a user.</p>
Domain	The domain assigned to the Active Directory user.
Extension	The extension associated with the Active Directory user.

When you select a user listed in any of the tabs, that user's properties are displayed in the lower section of the window. User properties are described in the following table.

User Properties fields

Column	Description
License	The license assigned to the user.
First Name	The user's first name, as set up in the ACD or Quality Management.
Last Name	The user's last name, as set up in the ACD or Quality Management

Column	Description
Assigned Team	The team assigned to the agent or knowledge worker.
User ID	The user ID assigned to the user. If the user is an ACD user, the format is <agent's PG>. <agent's ICM Peripheral Number>. If the user is a Quality Management user, the Quality Management system assigns a number.
Roles	The roles assigned to the user. The available check boxes are as follows: <ul style="list-style-type: none">■ Agent (available for ACD users only and disabled by default)■ Knowledge Worker (available for non-ACD users only)■ Supervisors (disabled by default for ACD users)■ Evaluator■ Manager■ Archive User
Supervisor's ACD Team	Lists the ACD teams assigned to the supervisor in a Unified CCX environment.
Supervisor's QM Team	Lists the QM teams assigned to the supervisor.
Manager's Groups	Lists the groups assigned to the manager.

Using Bulk Linking

To link ACD users to Active Directory accounts when you initially set up Quality Management:

1. From the User Administration window, click Link AD to ACD Users.
The Link AD to ACD Users dialog box appears.
2. Select the Active Directory domain that your users are in from the Domain drop-down list.
3. Select the path to your users from the UserPath list
You can select one or more user paths from this list.

4. Click Find.

The users who exactly match the search query appear in the list. The first five columns display information from Active Directory. The last three columns display information from the ACD.

5. Select the Active Directory accounts that you want to link to your ACD users, and then click OK.

To link all users in the list, click Select All.

Note: If some ACD users have names that don't exactly match their Active Directory accounts, you have to link them individually.

The following figure displays selected users in the Link Active Directory to ACD Users dialog box.

Link AD to ACD Users

Filters

Domain: All

UserPath:

Last Name:

First Name:

Windows Login Name:

Find

Active Directory				ACD				
Link	ADLast Name	ADFirst Name	Windows Lo...	Domain	ADUser Path	ACDLast...	ACDFirst...	Use
<input type="checkbox"/>	Almquist	Mike	almquim	p3	ou=R&D,ou...	Almquist	Mike	3
<input type="checkbox"/>	Caron	Melanie	Melanie.Caron	p3	ou=R&D,ou...	Caron	Melanie	30
<input type="checkbox"/>	Chok	Oishong	oishong.chok	p3	OU=Product...	Chok	Oishong	24
<input type="checkbox"/>	Chok2	Oishong2	1859	p3	OU=Product...	Chok2	Oishong2	14
<input type="checkbox"/>	Chok3	Oishong3	oschok	p3	OU=Product...	Chok3	Oishong3	16
<input type="checkbox"/>	Gong	Zhuo	gongz	p3	ou=R&D,ou...	Gong	Zhuo	9
<input type="checkbox"/>	gong13	zhua13	220713	p3	OU=CAD,O...	Gong13	Zhuo13	29
<input type="checkbox"/>	gong16	zhua16	220716	p3	OU=CAD,O...	Gong16	Zhuo16	13
<input type="checkbox"/>	gong19	zhua19	220719	p3	OU=CAD,O...	Gong19	Zhuo19	8
<input type="checkbox"/>	gong23	zhua23	220723	p3	OU=CAD,O...	Gong23	Zhuo23	36
<input type="checkbox"/>	gong26	zhua26	220726	p3	OU=CAD,O...	Gong26	Zhuo26	35
<input type="checkbox"/>	gong29	zhua29	220729	p3	OU=CAD,O...	Gong29	Zhuo29	38
<input type="checkbox"/>	gong3	zhua3	22073	p3	OU=CAD,O...	Gong3	Zhuo3	6

Select All Select

Unselect All Unselect

OK Cancel

The ACD users that you linked to Active Directory accounts appear on the Linked Users tab.

Linking an ACD User to an Active Directory account

To link an ACD user to an Active Directory account:

1. From the User Administration window, click the Unlinked ACD Users tab.
2. Select the user you want to link, and then click Link User.

The Link Selected User dialog box appears with the user's last name and first name already filled in with the first two letters (plus an asterisk, which is a wildcard).

Important: If the Active Directory account you are trying to link to an ACD user is already assigned to the system administrator role, the following message appears:

AD user <Doe, John> is already designated as a QM user. Delete user <Doe, John> first.

Delete the user as instructed (see [Deleting a Non-ACD User](#)), create a new non-ACD user (see [Creating a non-ACD User using Active Directory](#) or [Creating a Non-ACD User without Active Directory](#)) and then reassign the system administrator role to the user (see [Managing Administrators](#)).

In a non-Active Directory environment, you must ensure that there is a replacement non-Active Directory user assigned to the system administrator role because the default administrator role in a non-Active Directory environment is no longer available the moment you assign a user to the system administrator role in [Administrator Configuration](#).

3. Optional: Select the Active Directory domain that your users are in from the Domain drop-down list.
4. Optional: Select the path to your users from the UserPath list.
5. Enter your search criteria in one or more of the following fields:
 - Last Name
 - First Name
 - Windows Login Name

You can use an asterisk as a wildcard character. The asterisk matches any number of characters.

6. Click Find.

The users who match the search query appear in the list.

7. Select the Active Directory account you want to link your ACD user with from the search results, and then click OK.

The user you just linked now appears under the Linked Users tab.

Assigning User Roles to an ACD User

You can assign an ACD user to the following roles: manager, evaluator, and archive user.

To assign Quality Management user roles to an ACD user:

1. Select the ACD user from the Linked Users tab in the User Administration window.

The user's properties appear in the User Properties section of the window.

2. Select the desired role check box in the Roles section.

- If you assigned the Manager role, you can now assign a group to the manager.
Click Add under the Manager's Groups section and select the appropriate group.

You cannot assign the agent role to an ACD user from Quality Management Administrator. You can only assign agent and supervisor roles in Unified CCX.

You cannot assign the supervisor role to an ACD user from Quality Management Administrator. You can only assign supervisor role in Unified CCX.

3. Optional. To assign an business or telephony administrator role to the user, click Administrator Role and choose Telephony or Business.

Note: To assign the system administrator role, see [Administrator Configuration](#).

4. Click Save.

Switching Active Directory-ACD Links

Once you link an ACD user to an Active Directory account, you cannot unlink the ACD user.

You can switch a link from one Active Directory account to another Active Directory account by following the procedure for linking an ACD user to an Active Directory account and selecting a new Active Directory user to link to.

If that Active Directory account is already linked to an ACD user, the links will be switched. For example, if:

- ACD User 1 is linked to Active Directory Account 1
- ACD User 2 is linked to Active Directory Account 2

and you want to link ACD User 1 to Active Directory Account 2, you can do so. The end result is that the links will be switched:

- ACD User 1 is linked to Active Directory Account 2
- ACD User 2 is linked to Active Directory Account 1

There are other linking/unlinking situations that can exist. When you attempt to link or unlink various combinations of ACD, Active Directory, and Quality Management users, popup messages appear telling you what you must do to accomplish the task, or if it is allowed in Quality Management.

Creating a Non-ACD User using Active Directory

To create a non-ACD user:

1. From the User Administration window, click Create Users.
The Link New Users dialog box appears.
2. Optional: Select the Active Directory domain that your user is in from the Domain drop-down list.
3. Optional: Select the path to your user from the UserPath list.
4. Enter your search criteria in one or more of the following fields:
 - Last Name
 - First Name
 - Windows Login Name

You can use an asterisk as a wildcard character. The asterisk matches any number of characters.

5. Click Find.

The users who match the search query appear in the list.

Link New Users

Filters

Domain:

UserPath:

Last Name:

First Name:

Windows Login Name:

Link	Last Name	First Name	Windows Login	Domain	User Path
<input type="checkbox"/>	1000	mana	mana1000	p3	ou=QM,ou=Product Users,ou=R&D,ou=Users by Department,ou=L
<input type="checkbox"/>	2000	mana	mana2000	p3	ou=QM,ou=Product Users,ou=R&D,ou=Users by Department,ou=L
<input type="checkbox"/>	3000	mana	mana3000	p3	ou=QM,ou=Product Users,ou=R&D,ou=Users by Department,ou=L
<input type="checkbox"/>	ACDAgent1	QM	qmacd1	p3	ou=QM,ou=Product Users,ou=R&D,ou=Users by Department,ou=L
<input type="checkbox"/>	ACDAgent2	QM	qmacd2	p3	ou=QM,ou=Product Users,ou=R&D,ou=Users by Department,ou=L
<input type="checkbox"/>	ACDAgent3	QM	qmacd3	p3	ou=QM,ou=Product Users,ou=R&D,ou=Users by Department,ou=L
<input type="checkbox"/>	ACDAgent4	QM	qmacd4	p3	ou=QM,ou=Product Users,ou=R&D,ou=Users by Department,ou=L
<input type="checkbox"/>	ACDAgent5	QM	qmacd5	p3	ou=QM,ou=Product Users,ou=R&D,ou=Users by Department,ou=L
<input type="checkbox"/>	ACD-Agent7	QM	qm-acd7	p3	ou=QM,ou=Product Users,ou=R&D,ou=Users by Department,ou=L
<input type="checkbox"/>	brown	tom	tom.brown	p3	ou=QM,ou=Product Users,ou=R&D,ou=Users by Department,ou=L
<input type="checkbox"/>	CAS1	QA	qacas1	p3	ou=QM,ou=Product Users,ou=R&D,ou=Users by Department,ou=L
<input type="checkbox"/>	CAS10	QA	qacas10	p3	ou=QM,ou=Product Users,ou=R&D,ou=Users by Department,ou=L
<input type="checkbox"/>	CAS11	QA	qacas11	p3	ou=QM,ou=Product Users,ou=R&D,ou=Users by Department,ou=L

6. Select the specific Active Directory account that you want to link, and then click OK.

The non-ACD user you created appears in the Linked Users tab.

Assigning User Roles to an ACD User

You can assign an ACD user to the following roles: manager, evaluator, and archive user.

To assign Quality Management user roles to an ACD user:

1. Select the ACD user from the Linked Users tab in the User Administration window.

The user's properties appear in the User Properties section of the window.

2. Select the desired role check box in the Roles section.

- If you assigned the Manager role, you can now assign a group to the manager. Click Add under the Manager's Groups section and select the appropriate group.

You cannot assign the agent role to an ACD user from Quality Management Administrator. You can only assign agent and supervisor roles in Unified CCX.

You cannot assign the supervisor role to an ACD user from Quality Management Administrator. You can only assign supervisor role in Unified CCX.

3. Optional. To assign an business or telephony administrator role to the user, click Administrator Role and choose Telephony or Business.

Note: To assign the system administrator role, see [Administrator Configuration](#).

4. Click Save.

Non-Active Directory Systems

In a non-Active Directory system, there are two types of users:

- **ACD User.** A user set up as an agent and/or supervisor and assigned to a team in the ACD. You can assign an ACD user to manager, evaluator, and archive user roles in Quality Management.
- **Non-ACD User.** A non-agent user set up in Quality Management.

Note: Whenever you modify a user in the ACD (for example, change a user's name), the modifications do not appear in Quality Management until synchronization occurs. The synchronization process runs automatically at 10-minute intervals. If necessary, you can manually synchronize these databases (see [Synchronizing Databases](#) for more information).

The User Administration window has tabs that sort users into categories according to their roles and status within Quality Management. You can use Shift+click or Ctrl+click to select items in a tab's table and then copy and paste the results to other applications. When more than one user is selected, the User Properties panel and bulk modifications are disabled.

The following image displays the User Administration window for Unified CCX.

User Administration

Create User License Users Delete User Number Licensed Users: 69

Configured Users | Managers | Evaluators | Archive Users | Supervisors | Agents | Knowledge Worker | Not Configured Users | Unassigned Users | Administrators

License	Last Name	First Name	User ID	Assigned Team	Assigned Group	Windows Login	Admin Role
AQM	Ager	Manny	0.47			manager	None
AQM	Ahmed	Rashid	0.4	Dubai	UAE	dubai1	None
AQM	Alemeida	Barry	0.25	Omaha	Nebraska	omaha9	None
AQM	Archwald	Kendall	0.39	Sydney	Australia	sydney2	None
AQM	Bagley	Red	0.40	Sydney	Australia	sydney4	None
AQM	Baldwin	Buddy	0.37	Anchorage	Alaska	anchorage4	None
AQM	Barbars	Luzon	0.43	Manila	Philippines	manila4	None
AQM	Binjay	Zachary	0.42	Manila	Philippines	manila2	None
AQM	Cao	Tam	0.45	Bangkok	Thailand	bangkok2	None
AQM	Cattley	Jerome	0.38	Sydney	Australia	sydney1	None
AQM	Conboy	Andrew	0.61	Omaha	Nebraska	omaha7	None
AQM	Connors	Tom	0.10	Halifax	NovaScotia	halifax1	None
AQM	Coombs	Ernie	0.12	Halifax	NovaScotia	halifax4	None
AQM	Cote	Jean	0.21	Quebec City	Quebec	quebec4	None

User Properties

License

First Name

Last Name

Assigned Team

User ID

Windows Login

Administrator Role

Edit User

Roles

☐ Agent

☐ Supervisor

☐ Evaluator

☐ Manager

☐ Archive User

Supervisor's ACD Teams

Add Remove

Supervisor's QM Teams

Add Remove

Manager's Groups

Add Remove

Save Cancel

The following table describes the buttons.

User Administration buttons

Tab	Description
Create Users	Add a non-ACD user. Non-ACD users are users that exist only in Quality Management and Active Directory. Non-ACD users do not exist in the ACD. You must link non-ACD users to an Active Directory Account to be part of the Quality Management system.
License Users	Assign a user with a license. See License/Unlicense Users for more licensing information.
Delete User	Remove a non-ACD user. See Deleting an ACD User for information on deleting an ACD user.
Edit User	Configure the user properties.
Search	When clicked, locates every user that match the search criteria.
Add	Add an ACD team, QM team, or group to a list.

Tab	Description
Remove	Delete an ACD team, QM team, or group from a list.
Save	Saves your changes.
Cancel	Cancels your current changes.

The following table describes the search fields. The search fields are disabled until you click the Search tab. Use one or more filters when running a search. A search with no filters returns all users.

The following filters can use the * wildcard at the beginning or end of a search string: Last Name, First Name, Windows Login, and Extension. If the search string does not contain an *, the results will display all results that contain the specified search string.

User Administration search fields

Tab	Description
Last Name	Filters the search by the user's last name.
First Name	Filters the search by the user's first name
Group	Filters the search by the name of the group.
Team	Filters the search by the name of the team.
Windows Login	Filters the search by the user's Windows login,
Extension	Filters the search by the user's extension.

The following table describes the tabs.

User Administration tabs

Tab	Description
Configured Users	All non-ACD users who have been set up in Quality Management. This includes the administrator.
Managers	Non-ACD users assigned to the manager role.
Evaluators	Non-ACD users assigned to the evaluator role.
Archive Users	Non-ACD users assigned to the archive user role.

Tab	Description
Supervisors	Non-ACD users assigned to the supervisor role.
Agents	Non-ACD users assigned to the agent role in the ACD.
Knowledge Worker	Non-ACD users assigned to the knowledge worker role.
Not Configured Users	Non-ACD users who have not yet been set up in Quality Management.
Unassigned Users	Non-ACD users not assigned to the manager, evaluator, knowledge worker, supervisor, or archive user roles.
Administrators	Users assigned to the administrator role.
Search	Users found by the search feature.

Each tab displays information about the users that fall into its category, as shown in the following table.

User Administration tab columns

Column	Description
License	<p>The license assigned to the user. The possible licenses are:</p> <ul style="list-style-type: none"> ■ CR ■ QM ■ AQM <p>A user must be licensed to be able to log into Unified Workforce Optimization and be recorded.</p>
Last Name	<p>The user's last name, as set up in the ACD or Quality Management.</p> <p>When syncing users from the ACD, this field displays the user's entire name (first and last name), and the First Name field remains empty. If you are using QM authentication, a report that normally displays a user's first and last name only syncs the information from the agent's name field and displays the entire name in the Last Name field.</p>
First Name	The user's first name, as set up in the ACD or Quality Management.

Column	Description
User ID	<p>The user ID assigned to the user.</p> <p>If the user is an ACD user in a Unified CCX environment, the format is <agent's PG>.<agent's ICM Peripheral Number>.</p> <p>If the user is a Quality Management user, the Quality Management system assigns a number.</p>
Assigned Teams	The team assigned to the agent or knowledge worker.
Assigned Groups	The group assigned to the agent.
Windows Login	The user's Windows user name.
Administrator Role	<p>The administrator role assigned to the user. Use the Admin Role drop-down list to assign the business or telephony administrator role to a user. The possible values are as follows:</p> <ul style="list-style-type: none"> ■ None—no administrator roles are assigned to the user. ■ Business—assigns the business administrator role to the user. <p>Note: Only a system administrator or telephony administrator can assign the business administrator role to a user.</p> <ul style="list-style-type: none"> ■ System—indicates the user is a system administrator. <p>Note: The Administrator Role drop-down list is disabled when the user is a system administrator. See Administrator Configuration for more information on assigning users to the system administrator role.</p> <ul style="list-style-type: none"> ■ Telephony—assigns the telephony administrator role to the user. <p>Note: Only a system administrator can assign the telephony administrator role to a user.</p>

Column	Description
Extension	The extension associated with the user.

When you select a user listed in any of the tabs, that user's properties are displayed in the lower section of the window. User properties are described in the following table.

User Properties fields

Column	Description
License	The license assigned to the user.
First Name	The user's first name, as set up in the ACD or Quality Management.
Last Name	The user's last name, as set up in the ACD or Quality Management.
Assigned Team	<div>The team assigned to the agent or knowledge worker. Note: The Assigned Team drop-down list only displays teams containing knowledge workers.</div>
User ID	The user ID assigned to the user. Quality Management assigns a number to the user ID.
Windows Login	The user's Windows user name.
Admin Role	<div>The administrator role assigned to the user. The possible values are as follows:<ul style="list-style-type: none">■ None—no administrator roles are assigned to the user.■ Business—assigns the business administrator to the user.■ Telephony—assigns the telephony administrator to the user.</div>

Column	Description
Roles	<p>The roles assigned to the user. The available check boxes are as follows:</p> <ul style="list-style-type: none"> ■ Agent (available for ACD users only and disabled by default) ■ Knowledge Worker (available for non-ACD users only) ■ Supervisors (disabled by default for ACD users) ■ Evaluator ■ Manager ■ Archive User
Supervisor's ACD Team	Lists the ACD teams assigned to the supervisor.
Supervisor's QM Team	Lists the QM teams assigned to the supervisor.
Manager's Groups	Lists the groups assigned to the manager.

Configuring an ACD User

An ACD user can only be assigned the agent role or supervisor role in Unified CCX. You can only assign ACD teams to a supervisor in Unified CCX.

Note: An ACD user is not a part of Quality Management system until you configure the ACD user in Quality Management Administrator.

To configure the ACD user for Quality Management:

1. On the Not Configured Users tab, locate and select the user you want to configure.
2. In the User Properties section, click Edit User and enter the user's Windows Login and Quality Management Password.

The Windows login name must be unique, but users can have the same first and last names. It must be between 1 and 64 characters long, cannot consist entirely of spaces, and cannot include these characters: / \ [] : ; " | = , + * ? < > ()

3. If necessary, assign the user the Evaluator, Archive User, and/or Manager role by selecting the check boxes next to those roles.

- If you assigned the Manager role, you can now assign a group to the manager by clicking Add under the Manager's Groups section and selecting the appropriate group.
 - If you assigned the Supervisor role in a CCX environment, you can now assign a team to the supervisor by clicking Add under the Supervisor's ACD Teams section and/or Supervisor's QM Team and selecting the appropriate team.
4. Click Save.

The ACD user is removed from the Not Configured User tab and appears under the tab for each role that you assigned to the ACD user. For instance, if you assigned the ACD user to the evaluator role, the ACD user appears under both the Agents tab and the Evaluators tab.

Note: The ACD users initially appear under the Agents and/or Supervisors tabs and non-ACD users under the Unassigned Users tab.

Creating a Non-ACD User without Active Directory

A non-ACD user exists only in Quality Management. The non-ACD user does not exist in the ACD. A non-ACD user can be an evaluator, manager, supervisor, knowledge worker, and/or archive user, but not an agent.

To create a non-ACD user:

1. Click Create User.
The Create User dialog box appears.
2. Complete the fields, and then click OK.

The Windows login name must be unique, but users can have the same first and last names.

The Roles section is enabled. You can assign a role to the new user at this time, or do it later.

A user ID (Windows Login) is assigned to the new user and the user appears under the tab for each role that you assigned the user, or under the Unassigned Users tab if you did not assign any roles to the user.

Assigning Roles to a Non-ACD User

You can assign non-ACD users to the following roles: knowledge worker, supervisor, manager, evaluator, and archive user.

To assign roles to a non-ACD user:

1. Select the non-ACD user from the Unassigned Users tab.

The user's properties appear in the User Properties section of the window.

2. Select the desired role check box in the Roles section.
 - If you assigned the Knowledge Worker role, you can now assign the knowledge worker to a team using the enabled Assigned Team field. Select the appropriate team from the drop-down list. The team can consist only of knowledge workers.

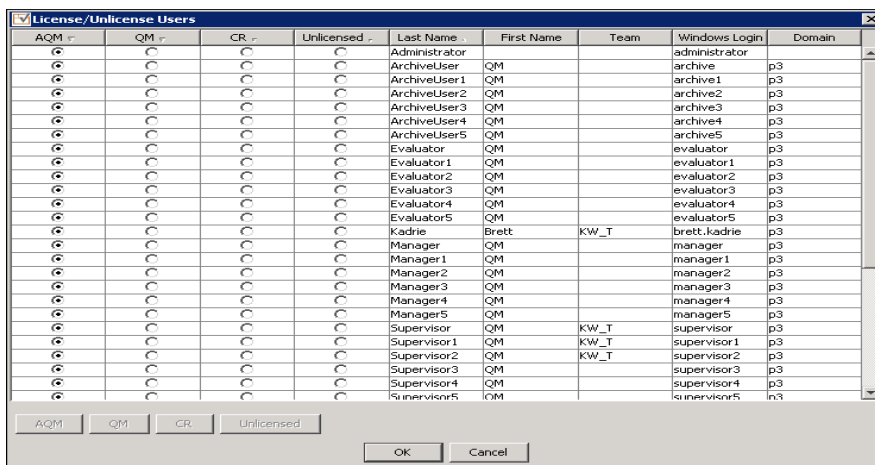
Note: Quality Management does not record the knowledge worker until you assign that user to a team.

- If you assigned the Manager role, you can now assign a group to the manager. Click Add under the Manager's Groups section and select the appropriate group.
 - If you assigned the Supervisor role, you can now assign a team to the supervisor. Click Add under the Supervisor's ACD Teams and/or Supervisor's Quality Management Teams sections and select the appropriate team(s).
3. Optional. To assign an administrator role to the user, click Administrator Role and choose Telephony or Administrator.
 4. Click Save.

License/Unlicense Users

The License/Unlicense Users dialog box displays a list of users and available licenses. You can use this dialog box to:

- Assign a license to one or more users.
- Unlicense one or more users.



Users must be licensed to log into Unified Workforce Optimization and to be recorded. A user's license status is displayed in the User Administration window.

The total number of licensed users is displayed on the User Administration interface to the right of the Delete User button. The number displayed updates as soon as the users are licensed or unlicensed.

Users' license status can be changed only after they have been linked to an AD user (in AD systems) or configured (in non-AD systems).

The number of licenses you have is configured when your system is installed. More information about managing your licenses can be found in [License](#).

Changing a User's License Status

To change a user's license status:

1. From the User Administration window, click License Users.

The License/Unlicense Users dialog box appears. It displays a list of all linked users and the available licenses.

2. Select the users whose license status you want to change.
 - Use Shift + Click to select contiguous rows in the list of users.
 - Use Ctrl + Click to select non-contiguous rows in the lists of users.

Use Ctrl + Click to select non-contiguous rows in the list of users.

3. Select the license type you want to assign to the selected users and click OK. The possible recording types are:

- AQM
- AQMA
- QM
- QMA
- CR
- CRA
- Unlicensed—removes a license from a user.

The license is assigned to the users. The users can log into Unified Workforce Optimization and the users can be recorded.

Note: Changes in license status go into effect the next time the user attempts to log in.

Deleting an ACD User

You cannot delete the ACD user from Quality Management Administrator. You can only delete the ACD user from the ACD system. However, you can change the ACD user to unlicensed, which means that the user cannot log in to Unified Workforce Optimization and the user will not be recorded.

Deleting a Non-ACD User

To assign roles to a non-ACD user:

1. Select the non-ACD user you want to delete on one of the tabs in the User Administration window.
2. Disable all roles assigned to the non-ACD user, remove any team associations and group associations, and then click Save.
3. Click Delete User.

A dialog box asks you to confirm that you want to delete the selected non-ACD user.

4. Click Yes.

The non-ACD user is deleted.

Team Administration

The Team Administration window enables you to:

- View the agents, supervisors, and group belonging to a selected team.
- Assign non-ACD supervisors to a team of ACD agents.
- Create, rename, and remove non-ACD teams.
- Assign knowledge workers, ACD supervisors, and non-ACD supervisors to teams.

The screenshot shows the 'Team Administration' window. At the top, there is a 'Team' dropdown menu set to 'KW_T', and three buttons: 'New', 'Delete', and 'Rename'. Below this, the window is divided into two main sections. The left section, titled 'Assigned Knowledge Workers', contains a table with columns 'Last', 'First', and 'ID'. The right section, titled 'Assigned ACD Supervisors', also contains a table with columns 'Last', 'First', and 'ID'. Below the 'Assigned Knowledge Workers' table are 'Add' and 'Remove' buttons. Below the 'Assigned ACD Supervisors' table are 'Add' and 'Remove' buttons. At the bottom right of the window are 'Save' and 'Cancel' buttons.

Last	First	ID
Hotel	Agent	0.71
Kadrie	Brett	0.2
Supervisor	QM	0.56
Supervisor1	QM	0.54
Supervisor2	QM	0.49
user	KW1	0.46
user	KW2	0.55
user	KW3	0.58
VM	End1	0.70

Last	First	ID
Supervisor	QM	0.56

Assign agents and ACD supervisors to teams in Unified CCX. You cannot change team assignments in Quality Management Administrator.

You cannot assign knowledge workers to the same team as agents. Knowledge workers must belong to a non-ACD team made up only of knowledge workers.

You can assign non-ACD supervisors to an ACD team and ACD supervisors to a non-ACD team.

You cannot create, rename, or remove an ACD team. Create and maintain ACD teams in Unified CCX.

Managing Teams

- To configure an ACD team in a Unified CCX environment, choose an ACD team from the Team drop-down list, add or remove QM supervisors, and then click Save.

When a team is created in Unified CCX, you can only change the QM Supervisors assigned to the team.

- To add a non-ACD-team, click New, type the team's name in the field, and then click OK. Click Add under the each role and select the desired names from the list, and then clicking OK. When the new team is complete, click Save.

The team's name must conform to the following rules.

- The team's name must be unique.
- A team's name cannot be longer than 32 characters.

- To assign people to a non-ACD team, choose the team from the Team drop-down list under the each role and select the desired names from the list, and then clicking OK. When the update is complete, click Save.

Use Shift + Click to select adjacent people and Ctrl + Click to select non-adjacent people.

- To remove people from a team, select the people you want to remove from a section, click Remove underneath the section, and then click OK.
- To rename a team, select the team you want to rename from the Team drop-down list, click Rename, type the new name in the field, and then click OK.
- To delete a team, select the team you want to delete from the Team drop-down list, click Delete, and then click Yes.

Remove the team from the quality management workflow before you delete the team.

Note: You cannot delete a team if the team is assigned to a quality management workflow. You can delete a team if the team is assigned to an archive workflow.

Group Administration

Groups contain teams and managers assigned to the groups. From the Group Administration window, you can:

- Create, rename, and delete a group.
- Add and remove teams from a group.
- Add and remove managers from a group.

The Group Administration window has a title bar 'Group Administration'. Below it, there is a 'Group' dropdown menu showing 'G1', and three buttons: 'New', 'Delete', and 'Rename'. The window is divided into two main sections. The left section is titled 'Assigned Teams' and contains a list box with the following items: QM1_T, QM2_T, QM3_T, QM4_T, QM5_T, QM6_T, QM7_T, and QM8_T. Below this list are 'Add' and 'Remove' buttons. The right section is titled 'Assigned Managers' and contains a table with three columns: 'Last', 'First', and 'ID'. The table has three rows of data. Below the table are 'Add' and 'Remove' buttons. At the bottom right of the window are 'Save' and 'Cancel' buttons.

Last	First	ID
Manager	QM	0.45
Manager1	QM	0.66
Wolff	Greg	5000.54729

Managing Groups

- To add a group, click New, type the group's name in the field, and then click OK. Add teams and managers to the group by clicking Add underneath each section, selecting the desired names from the list, and then clicking OK. When the new group is complete, click Save.

The group's name must conform to the following rules.

- The group's name must be unique.
 - A group's name cannot be longer than 32 characters.
- To add teams to a group, select the group from the Group drop-down list, click Add under the Assigned Teams section. Select the team or teams you want to assign to the group from the list of available teams, and then click OK. When the group is complete, click Save.

Use Shift + Click to select adjacent teams and Ctrl + Click to select non-adjacent teams.

Note: A team can belong to only one group. If you assign a team to a group and it already belongs to another group, Quality Management will ask you to confirm moving the team from one group to another group.

- To remove teams from a group, select the group from the Group drop-down list, select the teams you want to remove from the group, and then click Remove. When the group is complete, click Save.
- To add managers to a group, select the group from the Group drop-down list, click Add under the Assigned Managers section. Select the manager or managers you want to assign to the group from the list of available managers, and then click OK. When the group is complete, click Save.
- To remove managers from a group, select the group from the Group drop-down list, select the managers you want to remove from the group, and then click Remove. When the group is complete, click Save.
- To rename a group, select the group you want to rename from the Group drop-down list, click Rename, type the new name in the field, and then click OK.
- To delete a group, select the group you want to delete from the Group drop-down list, click Delete, and then click Yes.

Remove teams assigned to the group, from the quality management workflow before you delete the group.

Note: You cannot delete a group if any teams in that group are assigned to a quality management workflow. You can delete a group if the teams in that group are assigned to an archive workflow.

Recordings

The Recordings node allows you to configure when a customer conversation is recorded.

There are two types of recordings: those made for quality management purposes, and those made for archiving purposes. Quality management recordings can include voice and screen recordings. Archive recordings are voice only.

Quality management recordings and archive recordings use workflows to determine which recordings of inbound and/or outbound calls (“calls of interest”) to save for evaluation or archival purposes. You can assign teams to a workflow. Some examples of why you would record calls of interest are:

- Tracking the performance of specific agents
- Helping train new agents
- Monitoring calls during a sale period
- Monitoring calls during specific times of day
- Monitoring calls from specific customers or specific phone numbers

Quality Management saves recordings that are at least 5 seconds long. Quality Management does not consider a recording of less than 5 seconds a valid recording. For quality management purposes, you can change the minimum duration in the WHAT rule for the quality management workflow classifier. You cannot change the minimum duration for an archive workflow.

Quality Management does not support voice or screen recordings that are longer than 12 hours. If you think a call will last longer than 12 hours, you need to stop recording the call before the call reaches the 12 hour mark, and then start a new recording.

Quality Management displays the time associated with a contact as the time the contact occurred at the agent’s location, expressed in 24-hour HH:MM:SS format.

Example: If the agent is located in Chicago, the time associated with any recorded contacts made by that agent is Chicago local time.

The contact also displays the abbreviation for the local time zone. If the time zone associated with the contact is unknown to Quality Management, then Quality Management displays the time in Greenwich Mean Time (GMT).

Use the Recordings node to:

- Configure recording retention periods for a workflow
- Create quality management workflows for a team
- Create and maintain evaluation forms
- Create archive workflows for a team
- Configure and manage user-defined metadata
- Configure thresholds for talkover and silence events in the Unified CCX environment

Cisco MediaSense Recording Considerations

A workflow is configured to save recordings based on certain rules as they apply to individual contacts (sessions). Using Cisco MediaSense Recording might result in more than one contact for a single call.

Example: If an agent places a call on hold, two contacts are created that will be evaluated individually for a workflow. In this instance, a single call could produce a “shortest call” contact (before the hold) and a “longest call” contact (after the hold). Alternatively, a single call recorded by Cisco MediaSense Recording might result in one of multiple contacts (sessions) being uploaded. It is also possible that some sessions in a single call might not be uploaded based on the rules configured for the quality management workflow.

For this reason, Cisco recommends you choose the 100% QM Logging option when you configure quality management workflows to guarantee the entire call appears in the Recording application for Unified Workforce Optimization.

Recording Retention

The administrator determines the amount of time contacts are retained for quality management workflows and archive workflows.

Recording Retention Periods and Workflow

The retention period for recorded calls is specified at the workflow level. The age of a call is based on the day the call was recorded. This value is not updated by any actions performed on the recorded call. The expiration date is the last day of the retention period.

Teams assigned to a workflow will share the same retention period.

Example: Two teams associated with one workflow might handle calls that require call recordings to be kept for 7 years. A team associated with another workflow might handle calls that require call recordings to be kept for only a year.

The length of time that quality management recordings are retained and configured is under the Quality Management > Workflows node and the length of time archive recordings are retained and configured is under the Archive > Workflows node.

Recording Retention Rules

Quality Management observes the following rules when determining retention time.

- Every quality management workflow has individual retention periods for HR, Scored, Tagged, Training, and Unscored calls.
- Every archive workflow has individual retention periods for Archive and Tagged calls.
- Different calls might be retained for different retention periods, depending on the workflow retention period assigned to the call.
- If a call is marked as Tagged, the screen recording file will be deleted at the end of the quality management Tagged retention time. The audio file will be deleted at the end of the longer retention time for the quality management Tagged or archived Tagged retention time. Quality Management deletes metadata associated with a call when the longest of the quality management Tagged, archived Tagged, or metadata retention times is reached. By default, call data is stored for 13 months.

The following example shows how Quality Management handles Tagged retention when both archive and quality workflows exist:

- A contact is recorded for both quality management and archiving. It is also marked as Tagged by the user.

- Quality management Scored retention time is two months
- Quality management Tagged retention time is 6 months
- Archive retention time is one year
- Metadata retention time is thirteen months
- Archive Tagged retention time is ten years
- After 6 months, the screen recording is deleted and is no longer available.
- After ten years, the audio recording and metadata are deleted and no longer available.

Time	Data	Applications in Unified Workforce Optimization where you can access the data
For 6 months	Screen recording	Recordings
For 10 years	Audio recording	Recordings
For 13 months	Metadata	Recordings

- A quality management workflow retention period is assigned at the End of Day (EOD).
- Once the retention period is assigned to a call, the call's retention period can only be changed by changing the retention times in the workflow in which the retention periods were originally assigned.

Note: Remember that reducing a retention period after it has been initially set can result in the deletion of recordings, and that increasing a retention period will result in a larger use of storage space. Changing these values should be considered carefully.

- Once the retention period is assigned to a call, the call's retention period will not be changed if a team is moved from one workflow to another workflow. Subsequent calls associated with the new workflow will use the retention period assigned to the new workflow.
- When you delete a workflow, any calls assigned to that workflow retains the last known

retention times for the deleted workflow.

Quality Management Workflow Retention

Quality management contacts are retained according to the limits shown in the following table.

Recording retention periods for quality management workflows

Recording Type	Retention Period
Scored	1 day—unlimited (default = 30 days)
Unscored	1 day—unlimited (default = 30 days)
HR	1 month—unlimited (default = 6 months)
Training	1 month—unlimited (default = 6 months)
Tagged	1 month—unlimited (default = 120 months)
Contact InformationMetadata	13 months ¹ for contacts in the Dashboard and Reporting applications

Archive Workflow Retention

Archive workflow contacts are retained according to the limits shown in following table.

Contact retention periods for archive workflows

Recording Type	Retention Period
Archive ²	1 month—Unlimited (default = 84 months)
Tagged	1 month—Unlimited (default = 120 months)
Contact Information	13 months minimum in both the Dashboard and Reporting applications

¹You cannot change the recording retention period for metadata.

²Audio recordings only.

About Workflows

A workflow allows you to specify rules and classifiers to designate the types of contacts you want to record. There are two types of workflows:

- quality management workflow—specifies the types of calls you want to save for quality management recordings
- archive workflow—specifies the types of calls you want to save for archive recordings

Changes to a workflow take effect immediately.

The following list describes when workflow processing occurs:

- Beginning of Call (BOC)—this occurs when Voice Recording services get a message that recording has started.

Note: This does not occur for screen recordings or Cisco MediaSense Recordings. They only insert contacts after the recording is complete (EOC).

- End of Call (EOC)—this occurs when the Recording Services are complete and the recording has been converted, and the duration and derived metadata has been discovered.
- Non-Call Evaluation—this occurs when a user creates a non-call evaluation from the Recordings application in Unified Workforce Optimization.
- Metadata Reconciliation—this occurs when metadata is sent to the Server API to assign metadata to a contact.
- Quality Workflow Processing—This occurs after EOD for each configured quality workflow.

Workflow Prerequisites

Before you create a workflow, you need to:

- Set up users and groups
- Assign teams to a group (required for quality management workflow; not required for an archive workflow)
- Create an active evaluation form (quality management workflow only)

How Multiple Classifiers in a Workflow are Executed

You can set up multiple classifiers for a workflow. They are executed in the order they are listed (from top to bottom) in the workflow navigation tree. This enables you to create classifiers that are subsets of more general classifiers.

To change the order of classifiers in the navigation tree, select the classifier and use the Up and Down arrow buttons to move it up or down in the navigation tree.

Classifiers and Rules Example for a Quality Management Workflow

Classifier 1:

- Called number = 20??
- Inbound
- Rule 1: record new employee J. Smith
- Rule 2: record random calls for Team A

Classifier 2:

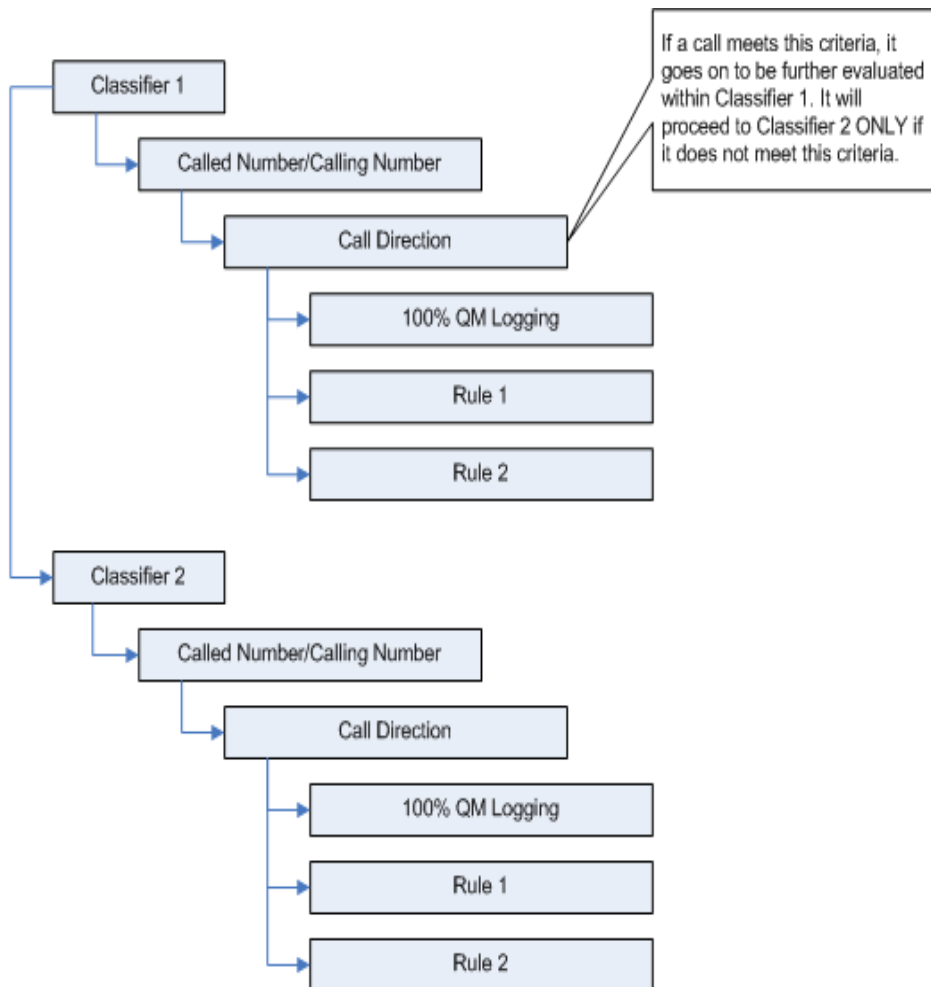
- Called number = * (all)
- Outbound
- Rule 1: record longest call of the day and shortest call of the day for Team B

In this example, a call must meet the called number condition and then the call direction condition of Classifier 1 to go on to evaluate the rules. If the call does not meet the called number condition, the workflow moves on to Classifier 2.

If the call meets the called number and call direction condition of Classifier 1, the workflow then goes on to evaluate the rules in top-down order. If none of the rules are met, the call will not be marked for quality management (although it might be uploaded for archiving if an archive workflow is configured).

Once a contact matches a classifier (and does or does not match any of those classifier's rules), the workflow will not move on to another classifier.

Classifier execution order in a quality management workflow



Qualifiers Example for an Archive Workflow

Classifier 1:

- Called number = 20??
- Inbound

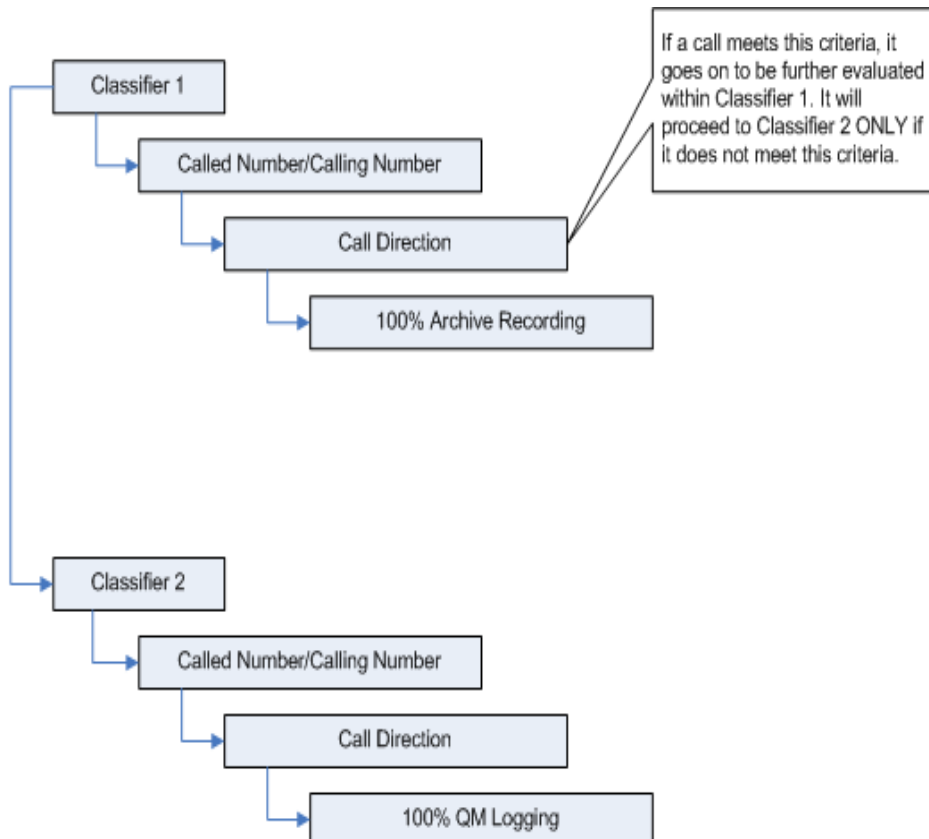
Classifier 2:

- Called number = * (all)
- Outbound

In this example for an archive workflow, a call must meet the called number condition and then the call direction condition of Classifier 1. If the call does not meet the called number condition, the workflow moves on to Classifier 2.

Once a contact matches a classifier, the workflow will not move on to another classifier.

Classifier execution order in an archive workflow



Configure a Classifier to Allow Agents to Selectively Tag Calls

When you configure archive or quality management workflows, calls are automatically recorded from the beginning. To allow agents to selectively tag calls for recording using the Tag command, choose the Don't Record option to disable uploading of recorded calls when configuring a classifier for the workflow.

Configure a Do Not Record Classifier

You can exclude specific phone numbers or area codes from recording by choosing the Don't Record option.

Example: You can choose to exclude outbound calls to California.

Quality Management Workflows

This topic describes the Workflow Administration window and provides tasks to create and maintain quality management workflows.

Note: Quality Management workflows are only available if you have quality management licenses.

Points to Remember

When a non-contact call is created or an Archive contact is marked for quality in Unified Workforce Optimization, the contact assumes the retention times for unscored and scored contacts configured in the quality management workflow for that agent's team. If you plan to use the Create Contact or Mark for Quality features, Cisco recommends placing all users under a quality management workflow in order to set the retention periods for these contacts. If no additional quality recordings are required the quality management workflow classifier can be set to exclude recording on all numbers so the quality management workflow will not cause any additional recording.

Workflow Administration

Use the Workflow Administration window to create quality management workflows based on team. The quality management workflow includes specific rules and classifiers to designate the types of contacts you want to record. These calls will be recorded for evaluation and review.

Workflow Administration

Workflows

Name	State ▾
Logging	Active
DNR	Active
wf1	Active
CleanerTest	Active
Default Quality	Inactive

New
Rename
Delete

Settings

End of Day: Hour: 0 ▾ Minutes: 00 ▾

Immediate Voice Upload ☐

Immediate Screen Upload ☐

Allow Evaluators to Change Form ☐

Extend Screen Recording (in seconds) 0

Recording Retentions

Scored Unlimited <input type="checkbox"/> Days: 0 <input type="text"/>	Unscored Unlimited <input type="checkbox"/> Days: 0 <input type="text"/>	Tagged Unlimited <input type="checkbox"/> Months: 0 <input type="text"/>	HR Unlimited <input type="checkbox"/> Months: 0 <input type="text"/>	Training Unlimited <input type="checkbox"/> Months: 0 <input type="text"/>
--	--	--	--	--

Teams Assigned to Groups

Id	Team	Workflow ▾
----	------	------------

>
>>
<
<<

Assigned Teams

Id	Team ▾
----	--------

Save Cancel

Field	Description
Workflows	<p>Lists the existing workflows. To modify the workflows that appear in this list, choose one of the following options.</p> <ul style="list-style-type: none"> ■ New—add a new workflow to the list ■ Rename—change the name of an existing workflow ■ Delete—remove a workflow from the list <p>Rename and Delete are enabled when you select an active archive workflow from the list.</p>
Name	The name of the quality management workflow.

Field	Description
State	<p>The status of the workflow. The Possible states are as follows:</p> <ul style="list-style-type: none">■ Active—The entire workflow can be modified.■ Inactive—The modifiable parts of the workflow are limited to the fields under Settings and Recording Retentions. An inactive workflow is a default workflow that is not associated with any agent. That is, the columns (Agent, Team, and so on) remain blank in the search results.
End of Day	<p>The workflow is uploaded at the end of the selected day. Recording still continues, but those recordings are uploaded after the next EOD. Enter the time for the end of the work day in 24-hour format.</p> <p>If the EOD is changed, the new EOD goes into effect immediately and the Data API service will process calls using the new EOD time. If the EOD changes after the Upload Controller gets the original EOD, the Upload controller might wait to upload recordings until after the original EOD time has passed.</p>
Immediate Voice Upload	<p>When this check box is selected, audio recordings associated with this workflow are immediately uploaded after the recording completes. When the check box is clear, the normal upload setting rules are in effect. This option applies to all recording types.</p> <p>If you change the Immediate Voice Upload option during the day, the change does not go into effect until the quality management workflow is reloaded after the End of Day.</p> <p>For Desktop Recording, it is possible that audio recordings waiting for upload can be lost if an agent's PC crashes. Enabling immediate uploading prevents this problem.</p> <p>If you enabled two stage upload, audio recordings are uploaded immediately using the two stage upload process.</p> <div><p>Best Practices: In a Web Server Redundancy environment, enable Immediate Voice Upload and Immediate Screen Upload. This ensures recordings are available after a failover. If these features are not enabled, recordings are not uploaded until the next scheduled upload.</p></div>

Field	Description
Immediate Screen Upload	<p>When this check box is selected, screen recordings associated with this workflow are immediately uploaded after the recording completes. When the check box is clear, the normal upload setting rules are in effect. This option applies to all recording types.</p> <p>If you change the Immediate Screen Upload option during the day, the change does not go into effect until the quality management workflow is reloaded after the End of Day.</p> <p>For Desktop Recording, it is possible that screen recordings waiting for upload can be lost if an agent's PC crashes. Enabling immediate uploading prevents this problem.</p> <p>If you enabled two stage upload, screen recordings are uploaded immediately using the two stage upload process.</p>
Allow Evaluators to Change Form	Choose this option if you want to allow evaluators to select the evaluation form they want to use.
Extend Screen Recording (in seconds)	<p>The number of seconds screen recording continues to record after-call work after a call is dropped.</p> <p>If another call starts before the configured time period is over, the recording for the current call stops automatically so that recording for the new call can start.</p>
Recording Retentions	Set the length of time you want the various types of recordings to be retained.
Teams Assigned to Groups	Teams assigned to groups appear in this list.
Assigned Teams	Teams assigned to this quality management workflow appear in this list. A team can belong to only one quality management workflow at a time.

Classifier Configuration

Use the Classifier Configuration: <workflow name> window to create, rename, or delete classifiers for a quality management workflow.

Field/Option	Description
Evaluation Form	Select the form you want to use to evaluate the recorded calls.
Record	Select this option to record calls, and then choose from the following options: <ul style="list-style-type: none"> ■ 100% Recording Logging ■ Inbound ■ Outbound
100% QM Logging	Select this option if you want to configure a classifier that does not use rules, but rather records all calls defined by the classifier. If you clear this check box, you must configure at least one rule for a Ringing Event. See Setting up Rules for a Classifier's Ringing Event for more information.

Field/Option	Description
Inbound and/or Outbound	Select which calls to be recorded—inbound, outbound, or both. You must select at least one call direction.
Don't Record	<p>Use this option if you want agents to selectively tag calls for recording using the Tag command.</p> <p>This option allows you to exclude specific phone numbers or area codes from recording. For example, a workflow for a team has 2 classifiers in the following order:</p> <ul style="list-style-type: none"> ■ Do not record a call for this workflow if the Calling Number begins with 612* because the area has rules against recording calls. ■ Record all calls with a Calling Number of *. <p>The first classifier excludes all calls that originate from a number that starts with 612* from recording. The second classifier records all calls that are not excluded by the first classifier.</p>
Numbers	<p>Select the type of number you want to use to filter the calls, Called Number or Calling Number.</p> <p>If the call is inbound, the Called Number is the route point number if the call was routed, or the agent extension if the call was direct dial. The Calling Number is the original number from which the caller is dialing.</p> <p>If the call is outbound, the Calling Number is the agent's extension, and the Called Number is the number of the customer/client.</p> <div> <p>Note: If you add phone numbers to the Called Number section, then select Calling Number from the Numbers drop-down list, the phone numbers you added will be deleted. The reverse is also true. If you add phone numbers to the Calling Number section, then select Called Number from the Numbers drop-down list, the phone numbers you added will be deleted.</p> </div>

Field/Option	Description
Called/Calling Number	<p>Click Add to specify the phone numbers you want to filter for in the Numbers field. You can enter:</p> <ul style="list-style-type: none">■ Specific numbers <div>Example: 6125551212</div> <ul style="list-style-type: none">■ Number ranges using wildcards <div>Example: 612*, where the * wildcard stands for any number of digits, or 612555????, where the ? wildcard stands for 1 digit</div> <ul style="list-style-type: none">■ The * wildcard to record all calls <p>The numbers you enter cannot contain dashes or parentheses, and must be between 1 and 16 characters long.</p>

Creating a Quality Management Workflow

You must assign a team to a group before you can assign that team to a quality management workflow. If you did not assign that team to a group, the team does not appear in the Teams Assigned to Groups section.

Note: A team can belong to one archive workflow and one quality management workflow.

To create a new quality management workflow:

1. In the navigation tree, select Recordings > Quality Management > Workflows.
The Workflow Administration window appears.
2. Next to the Workflows section, click New.
The Workflow Name dialog box appears.
3. Enter a unique name for the new quality management workflow, and then click OK.
The quality management workflow now appears in the Workflows section.
4. Select the quality management workflow from the Workflows list.

5. Enter the time for the end of the work day in 24-hour format.

If the options are changed during the day, they do not go into effect until the quality management workflow is reloaded just before the End of Day.
6. Select Immediate Voice Upload if you want to upload an audio recording immediately after the recording is completed.
7. Select Immediate Screen Upload if you want to upload an audio recording immediately after the recording is completed.
8. Select the Allow Evaluators to Change Form check box if you want to allow evaluators to choose the evaluation form they want to use.
9. Specify the time, in seconds, the screen recording should continue after the call ends.
10. Set the length of time you want the various types of recordings to be retained.

If you want recordings to be retained indefinitely, select the Unlimited check box associated with the recording type. The minimum amount of time a recording can be retained is one day for Scored and Unscored recordings and 1 month for Tagged, HR, and Training recordings.
11. Assign teams to the quality management workflow.

A team can belong to only one quality management workflow at a time. If a team that you want to assign to this quality management workflow already belongs to another quality management workflow, it will automatically be reassigned to this quality management workflow. Quality Management Administrator displays a warning message telling you that it reassigned the team from another quality management workflow.
12. When you finish configuring the quality management workflow in this window, click Save.

Setting up Classifiers for a Quality Management Workflow

To set up classifiers for a quality management workflow:

1. Under the Quality Management > Workflows node, select the workflow you just created.

The Classifier Configuration: <workflow name> window appears.
2. In the Classifiers section, click New to create a new classifier.

The Classifier Name dialog box appears.

3. Enter a name for your new classifier, and then click OK.

The new classifier is now listed in the workflow navigation tree.

4. Select the new classifier in the workflow navigation tree.
5. In the Classifier Settings section, select one of the following options.
 - Record—Select this option to upload recorded calls and then choose from the following options: 100% QM Logging, Inbound, or Outbound. Then choose the type of number (Called Number or Calling Number) you want to include from the Numbers drop-down list and then click Add and enter the included numbers.

Note: You must select at least one call direction (Inbound or Outbound).

- Don't Record—Select this option to exclude specific phone numbers or area codes from recording. Choose the type of number (Called Number or Calling Number) you want to exclude from the Numbers drop-down list and then click Add and enter the excluded numbers.
6. Click Save to save the classifier settings.

If you did not select 100% QM Logging, you must now configure at least one rule for a Ringing Event. See [Setting up Rules for a Classifier's Ringing Event](#) for more information.

Note: The following message appears if a rule is not configured or you do not choose 100% QM Logging:

Classifier <name> must have at least one rule or 100% QM logging enabled.

Configuring Actions for the Ringing, Answered, and Dropped Events

Each event in the workflow navigation tree is associated with one or more optional actions as follows.

- Ringing event: Screen Recording Upload
- Answered event: Start Voice Recording
- Dropped event: Stop Voice Recording

Quality Management Administrator enables action settings by default.

To configure actions for ringing, answered, and dropped events:

1. Under Ringing Event, choose Actions and select the Screen Recording Upload check box if you want to upload screen recordings after the call ends.

Screen Recording Upload is not available at the CR or QM license level.
2. Under Answered event, choose Actions, and select the Start Voice Recording check box if you want to start voice recording when the call is answered.
3. Under Dropped Event, choose Actions and select the Stop Voice Recording check box if you want to stop audio recording when a call is dropped:
4. Click Save to save the action settings.

Modifying a Quality Management Workflow

To modify a quality management workflow:

1. Select Recordings > Quality Management > Workflows in the navigation tree.

The Workflow Administration window appears.
2. Choose one or both of the following options.
 - Select the workflow from the Workflows section to modify the assigned teams or the workflow settings.
 - Select the workflow under the Workflow node in the navigation tree to modify the workflow's classifiers, rules, and actions.
3. When you finish your changes, click Save.

Quality Management Administrator saves the changes to the modified workflow.

Note: The modified workflow goes into effect after the agents assigned to the workflow log out and log back in to their Windows session, or after the configured End of Day. The quality management workflow information is updated before upload occurs so that any changes during the day will take effect.

Setting up Rules for a Classifier's Ringing Event

You must set up at least one rule for a Ringing Event if you have configured the classifier without 100% QM Logging.

Rules do not apply to classifiers that are configured with 100% Recording Logging.

To set up rules for a classifier's ringing event:

1. In the workflow navigation tree, under the classifier, select Ringing Event.

The Rule Configuration window appears.

2. Click New to add a new rule.

The Rule Name dialog box appears.

3. Enter a name for the new rule, and then click OK.

Quality Management Administrator adds the new rule to the workflow navigation tree underneath the Ringing event and the What, Who, and When tabs appear (see the following figure).

Workflow Administration: Logging

Logging

- InOut
 - RINGING Event
 - test
 - Actions
 - ANSWERED Event
 - Actions
 - DROPPED Event
 - Actions

Rule Configuration: test

Rule

New Rename Delete

What Who When

Calls of Interest

Reason	Minimum Duration	Calls/Day
First Call of Day	00:05	0
Last Call of Day	00:05	0
Longest Call of Day	00:05	0
Shortest Call of Day	00:05	0
Random Call	00:05	0

New Employee

Reason	Minimum Duration	Calls/Day

Performance

Reason	Minimum Duration	Calls/Day

Period Start Stop

Add Delete

Press F2 or double-click to edit Random Call Start or Stop.

Save Cancel

Note: As with classifiers, multiple rules may be set up and ordered from least to most specific.

- On the What tab, select the calls you want to record.
- Click the Who tab.
The Who tab on the Rule Configuration window appears.
- Select Agent or Team from the Select Who drop-down list.
- In the Available Agents/Available Teams section, select the agent or team you want the workflow to apply to, and use the arrow buttons to move those agents or teams to the Assigned section.

8. Click the When tab.

The When Tab on the Rule Configuration window appears.

9. Select when the workflow runs from the Select When drop-down list. Your choices are:
 - Set of Dates—select specific dates
 - Weekly—select the days of the week
 - Date Range—select a start and stop date
10. When you are finished configuring the workflow rules, click Save.

Deleting a Quality Management Workflow

Before you delete a quality management workflow, please consider the following information:

- Once a workflow is deleted, you cannot adjust the retention times for calls associated with the workflow or reactivate the workflow.
- Quality management workflow settings are updated before upload. If you delete a quality management workflow, the calls associated with the quality management workflow are not uploaded.

To delete a quality management workflow:

1. Select the workflows node under Recordings > Quality Management > Workflows in the navigation tree.

The Workflow Administration window appears.

2. Select the workflow from the Workflows pane and click Delete.

The Confirm Deletion dialog box appears.

3. Click Yes to confirm the deletion.

Quality Management Administrator deletes the quality management workflow and the status of the workflow changes to Inactive. The deleted workflow goes into effect after the agents assigned to the workflow log out and log back in to their Windows session, or after the configured End of Day.

Evaluation Forms

This topic described evaluation forms.

Note: Evaluation forms are only available if you have quality management licenses.

The Evaluation Forms node allows you to:

- Create and maintain evaluation forms
- Configure who can evaluate contacts that use a specific form
- Configure who can approve evaluations that use a specific form

New forms are created based on one of the read-only templates that come with Quality Management Administrator.

When you create a new evaluation form, you specify one of the following evaluation types:

PERCENTAGE-BASED SCORING (PERCENTAGE)

The evaluation is scored based on a percentage. Sections and Questions are weighted (0-100%) and the final score is a percentage.

Example: If an agent scores 4 out of 5 questions correctly and the questions are evenly weighted, the agent's final score is 80%.

POINT-BASED SCORING (POINTS)

The evaluation is scored based on a point system. Point-based scoring is often used in incentive-based performance. Agents accumulate points and when they have enough points they can cash the points in for tangible rewards (much like credit card points). In this environment, 0 is the normal score and points are awarded for going above and beyond the normal expected outcome. Points can also be subtracted for poor service. The evaluation form allows you to assign positive or negative scores to questions.

Example: If an agent positively demonstrates understanding during a call, the value is 10 points. If the agent fails to demonstrate understanding during a call, the value is -5 points.

Best Practices for Agent Evaluations

This section describes best practices for agent evaluations using Quality Management.

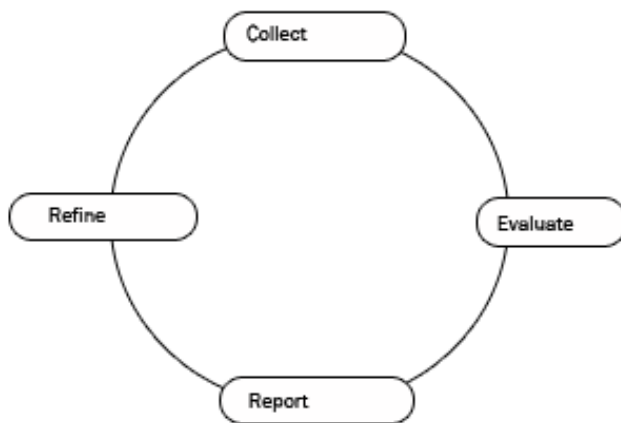
Goal of Quality Management

The goal of quality management is to establish consistency throughout the contact center. So no matter what agent a customer calls on any given day, they get a consistently excellent user experience. This allows you to:

- Reduce labor costs through efficiencies
- Identify customer needs and expectations
- Improve customer satisfaction

Quality Management Training Process

The quality management training process is a continuous improvement cycle.



The quality management training process requires you to:

- Collect call recordings—Quality Management selects and processes phone calls identified in the workflow.
- Evaluate the call recordings—Supervisors or evaluators review and score the selected recordings against Key Performance Indicators (KPIs).
- Create reports based on evaluations that:
 - Compare the performance of agents, teams, and the entire organization
 - Identify initiatives for quality improvements and training
- Refine agents' performance by:
 - Using quality calls for training

- Reevaluate agents to gauge training effectiveness and measure skills
- Repeat or select the next quality management initiative

Determining Type of Calls to Record or Evaluate

Quality Management provides a two-level filter: you decide what calls you want to record, and from those recorded calls, you then decide what calls you want to evaluate.

Quality Management has a unique workflow-based recording decision process that allows you to create sophisticated criteria or triggers so that you can sort through all calls in the contact center and identify those calls determined most likely to provide value when evaluated.

Quality Management:

- Eliminates time sifting through irrelevant calls—using workflows allows you to eliminate the time required to choose which calls to evaluate from a long list of unsorted calls. An evaluator might spend an inordinate amount of time choosing calls to evaluate at random. The workflow process allows you to identify relevant calls for evaluation.
- Manages storage use—using workflows also allows you to manage your storage use. The Advanced license includes the screen recording feature, which takes up significant recording space at a rate of one megabyte per minute of recorded material. So you need to be judicious when choosing which calls you want to record to manage storage space on your Recording server.

The following list provides examples of criteria you can build into your workflow criteria.

- First call of the day—you can base your criteria on time management.

Example: You can choose to record the first call of the day, or the first two calls of the day. Or you can choose to record the first call after lunch.

- Longest or shortest call—you can choose to record the two or three longest calls or shortest calls of the day for each agent. This allows you to understand some of the components of long calls, or simply understand why the call handle times exceed the norm. You can also set up a workflow to record three or four of the shortest calls of the day to determine why you get 15 or 20 second calls.
- Peak hour—you can choose to record several calls during peak hours.

Example: You could choose to record 3 calls at random during your peak hour period between 1-2pm, so you can get a good assessment of how agents are handling callers. Are they providing the same quality while there are callers in queue?

- Specific (new) agents—if you are concerned about an agent's performance, or you have a new agent, you can record 100% of the agent's calls for a specified period (for example, two weeks). This allows you to understand their activities and get them up to speed with the rest of your agents.

Specific customer or account ID—you can choose to add custom metadata fields at the time of the recording. The information can include a customer ID, account ID, or transaction code. The metadata field allows you to provide data like:

- Did this call result in a sale? Yes/No.
- What was the dollar value of the sale?
- The date can come from the IVR data or the Enterprise data managed through CAD.

Identifying KPIs

You need to identify the business goals for the contact center for the current year and incorporate those goals into the Key Performance Indicators (KPIs).

Example: Your contact center's business goals could be to increase revenue, improve customer satisfaction, or reduce overall cost.

A KPI can have a positive or negative impact on your contact center's business goals.

Example: If an agent turned an unhappy customer into a happy customer, the agent had a positive impact on the your contact center's business goals. If another agent lost a potential sale, that would have a negative impact on your contact center's business goals.

When you know what your business goals are you can incorporate those goals as answers to questions in the evaluation form and assign KPIs to those questions. This allows you to align your agents' goals with the business goals for the contact center. You can then use the evaluation forms to measure your agent's performance against your contact center's business goals.

When you break down the business goals, you need to identify the areas of challenges and the metrics you have for success in meeting those business goals. For example, you can break the business goals into:

- First Contact Resolution (FCR)
- Sales process and skills
- Product knowledge—you can use call evaluation to identify agents who do not have sufficient product knowledge, and then provide training to improve their product knowledge. For example, you might want to consider the following questions when evaluating an agent:
 - Does the agent have deep product knowledge?
 - Is this a critical indicator or a challenge area?
- Agent proficiency with tools—agents sometimes have to deal with a wide variety of tools when they deal with a customer. For example, order entry tools, agent productivity tools, database tools, or custom software tools designed for the organization. You can use the evaluation to monitor agent proficiency with your contact center’s tools, and then provide training to improve their tool proficiency.
- Average call duration—some calls are longer than others. You can use the evaluation to understand what impact factors result in longer calls, and then provide solutions that result in fewer long calls, and improve the average call duration.

Guidelines for Evaluation Forms

Consider the following when you create an evaluation form:

- Identify the activity type you want to evaluate, and create an evaluation form for that specific contact.

Example: Call recording, live monitor of voice or screen, counter work, chat, or other social media

This allows Quality Management to accurately report non-call activities in the Dashboard and Reporting applications.

- Clearly outline factors to rate performance.

Example: How does the agent perform when greeting a customer, handling an application, empathizing with a caller, using tools during order entry, or closing a call? You can rate an agent's performance for each action.

- Align the evaluations with the contact center's business goals and available training.
 - Do not create an evaluation form that covers every possible scenario.
 - Focus on a few critical areas, like how an agent resolves a customer issue or implements new initiatives.

Example: If your call center's focus is on capitalizing up-sell opportunities, then make that the focus of your evaluation.

An evaluation that is aligned with the contact center's business goals provides quantitative measurements of agents while related training and incentive programs are rolled out.

- Do not go overboard when creating an evaluation.
 - Try to limit your evaluation to three or four measurements.
 - Identify the top three or four KPIs you want to evaluate for this quarter or year.
 - Limit the total number of questions to 20 to 30 in the evaluation form so you can quickly complete the form.

You can always add additional sections in the form, or better yet, replace existing questions when you resolve issues like greeting customers or handling an application.
 - Identify the key categories. Allow no more than 10 categories.
 - Identify questions associated with each category. Allow no more than 10 questions per section. Yes/No questions are preferred.
 - Organize your form for ease of evaluation. Match the questions to the call flow to enable evaluations on the fly.
 - When using percentage-based scoring, apply weighting and scoring where relevant.
 - Identify key points of "failure." If the question fails, the entire evaluation fails.
- Ensure the areas you are measuring have corresponding training materials or actions.

Establish a training or mentoring program to improve agent performance and address inadequacies.

The goal is to improve the proficiency for the entire contact center and help agents struggling in specific areas to gain a level of proficiency.

Guidelines for Evaluation Form Questions

Consider the following tips when writing evaluation form questions.

- Avoid long or complex questions, and do not include questions within a question.
 - Limit the scope of a question to a single measurable event.
- Example:** Did the agent greet the customer with their first and last name?
- Make the question clear to both the evaluator and the agent on how the agent performed.
 - Simple questions allow managers and supervisors to investigate the root cause of an agent's low score.
- Use questions that require a yes or no answer whenever possible.
 - Yes or no questions provide clear and concise answers.
 - Yes or no questions require less documentation and collaboration efforts to get consistent evaluation measurements. These types of answers are less subjective.

Numerical ranges require documentation criteria for each number in the range. This makes collaboration efforts between multiple evaluators difficult.

- Organize your questions by placing them into distinct categories or sections.
 - Categorizing questions allows you to produce detailed reports about agent and team performance in each category.
 - Match questions and sections to the flow of a typical call to make it easier for evaluators to score agent performance.

Example: You could create three sections named Greeting, Order Entry, and Closing.

- When using percentage-based scoring, indicate the relative importance of

questions and sections by assigning them different weights.

- Use no more than 10 sections in an evaluation form.
- Use no more than 10 questions in a section.
- Decide whether there are any key points of “failure.”
 - Mark questions that address critical behavior (such as courtesy) as KPIs. If such a question is scored negatively, the entire evaluation fails.

Maximizing Quality Management Value through Effective Evaluations

The evaluation is the net result you get out of a quality management recording solution. It starts with the recording but it is really the evaluation where you can separate the excellent agent behavior and identify the areas where agents need improvement.

- Prioritize your initiatives—start with the highest value/highest priority.
- Establish a level of success—this is the desired behavior.
- Create a log of measurements and compare scores over time—pick an evaluation form and stay with it for at least a quarter so you can measure improvement over time and verify if your training and coaching is improving performance over this time period.
- Review agent evaluations and play back calls to determine root cause—find out where you are having problems and improve training through root cause analysis.
- Make agent, team, and organizational comparisons—measure progress at all levels.
- Move on when you have established success—when you no longer have problems in one section of the evaluation, for example agent greetings, you can remove it from the evaluation. As your contact center’s business goals change you can add new sections to the form to continually improve the performance of your agents.

Evaluation Form Templates

The Evaluation Form Templates window lists the templates that you can use to create an evaluation form in the Evaluation Form Administration window.

Evaluation Form Templates

Name ▾	Status ▾	Original Author	Last Author	Created	Modified	Form Type
Blank Template	Template	Administrator	Administrator	Aug 8, 2005	Aug 8, 2005	Percentage
Template 0-5	Template	Administrator	Administrator	Aug 8, 2005	Aug 8, 2005	Percentage
Template Mixed Qu...	Template	Administrator	Administrator	Aug 8, 2005	Aug 8, 2005	Percentage
Template Points Form	Template	Administrator	Administrator	Nov 25, 2013	Nov 25, 2013	Points
Template Yes-No	Template	Administrator	Administrator	Aug 8, 2005	Aug 8, 2005	Percentage

Details Settings Sections Questions KPI Order

Description

Original Author

Last Author

Needs Improvement Percentage: 0 to

Meets Expected Percentage: 75 to

Exceeds Expected Percentage: 90 to

Status

☐ Editable
☐ Active
☐ Inactive

The following table describes the default templates.

Evaluation form templates

Template Name	Description
Blank Template	<p>Configured for mixed question types that are scored on a scale of 0 to 5 or answered with Yes or No. The template has no pre-existing sections or questions.</p> <p>Use this template for percentage-based scoring.</p>

Template Name	Description
Template 0-5	Configured for questions that are scored on a scale of 0 to 5. The template comes with pre-existing sections and questions. Use this template for percentage-based scoring.
Template Mixed Questions	Configured for mixed question types that are scored on a scale of 0 to 5 or answered with Yes or No. The template comes with pre-existing sections and questions. Use this template for percentage-based scoring.
Template Points Form	Allows you to choose the question types as either scored on a scale of 0 to 5, answered with Yes or No, or customized. Use this template for point-based scoring.
Template Yes-No	Configured for questions that are answered with Yes or No. The template comes with pre-existing sections and questions. Use this template for percentage-based scoring.

Evaluation Form Administration

The Evaluation Form Administration window lists available evaluation forms. From this window you can create, rename, delete, and copy evaluation forms. An evaluation can be based on an existing template or a blank form.

Evaluation Form Administration

Name	Status	Original Author	Last Author	Created	Modified	Form Type
Call Evaluation	Active	Administrator	Administrator	Feb 3, 2010	Jul 16, 2013	Percentage
Chat email Eval	Active	Administrator	Administrator	Dec 29, 2011	Jan 8, 2012	Percentage
Rock Coast Eval II	Active	Administrator	Administrator	Jul 15, 2013	Jul 18, 2013	Percentage
Social Media Evalu...	Active	Administrator	Administrator	Feb 16, 2011	Feb 16, 2011	Percentage
92T-Mixed-Percent...	Editable	Administrator	Administrator	Nov 25, 2013	Nov 25, 2013	Percentage
Blank test	Editable	Administrator	Administrator	Dec 10, 2013	Dec 10, 2013	Percentage
Editable Evaluation...	Editable	Administrator	Administrator	Mar 3, 2010	Jan 3, 2012	Percentage
New Points Evaluat...	Editable	Administrator	Administrator	Dec 11, 2013	Dec 11, 2013	Points
Percentage Mixed ...	Editable	Administrator	Administrator	Dec 10, 2013	Dec 10, 2013	Percentage
Points Evaluation	Editable	Administrator	Administrator	Dec 10, 2013	Dec 10, 2013	Points

Description:

Original Author:

Last Author:

Needs Improvement Points: 0 to

Meets Expected Points: 2 to

Exceeds Expected Points: 3 to

Status:

☒ Editable

☐ Active

☐ Inactive

Creating an Evaluation Form

To create a new evaluation form:

1. In the navigation tree, select Recordings > Quality Management > Evaluation Forms > Forms.

The Evaluation Form Administration window appears.

2. Click New.

The Evaluation Form Configuration dialog box appears.

3. Select the type of score calculation that you want to use. Your options are:

- Percentage—Select this option if you want to use percentage-based scoring.
 - Points—Select this option if you want to use point-based scoring.
4. Choose an evaluation form template from the drop-down list. Your options are:
- Percentage: Template 0-5, Template Yes-No, Blank Template, or Template Mixed Questions
 - Points: Template Points Form
5. Type a unique name for the evaluation form and then click OK.

Quality Management adds the new evaluation form to the list of forms at the top of the Evaluation Form Administration window.

You can now configure the newly-created evaluation form by completing the information on each tab on the lower part of the window.

Details Tab

The Details tab displays a form's properties. It appears at the bottom of the Evaluation Form Templates window and the Evaluation Form Administration window.

Details tab fields

Field	Description
Description	A descriptive name of the form or template. The default description is the name of the template used to create the form.
Original Author	The name of the person who originally created the form or template. The default is Administrator.
Last Author	The name of the person who last modified the form or template. The default is Administrator.
Needs Improvement Percentage	<p>The evaluation score range that indicates the agent's performance needs improvement. The lowest value is 0. If you change the highest value, all other score ranges change accordingly.</p> <div>Example: A value from 0 to 74% is a below average score that indicates the agent needs additional coaching.</div> <p>This field only appears if the evaluation form uses percentage-based scoring.</p>

Field	Description
Meets Expected Percentage	<p>The evaluation score range that indicates the agent's performance meets expectations. If you change the highest and lowest value, all other score ranges change accordingly.</p> <p>Example: A value from 75 to 89% can be considered an adequate or average score.</p> <p>This field only appears if the evaluation form uses percentage-based scoring.</p>
Exceeds Expected Percentage	<p>The evaluation score range that indicates the agent's performance exceeds expectations.</p> <p>Example: A value from 90 to 100% is an above average score that indicates an agent performed beyond the normal expected outcome.</p> <p>This field is not editable. The value in this field it depends on the values set in the lower two score range fields. The maximum value is 100.</p> <p>This field only appears if the evaluation form uses percentage-based scoring.</p>
Needs Improvement Points	<p>The evaluation points range that indicates the agent's performance needs improvement.</p> <p>Example: Negative values are subtracted for poor service. In this instance, a value from -1 to -50 is a below average score that indicates the agent needs additional coaching.</p> <p>The minimum integer value can be less than 0. Note that the minimum value for this range is determined by the total of all minimum values that you assign to questions. If you change the highest value, the lowest value for Meets Expected Points changes accordingly.</p> <p>Note: You cannot change the value in this field until you create questions and assign maximum and minimum values to those questions.</p> <p>This field only appears if the evaluation form uses point-based scoring.</p>

Field	Description
Meets Expected Points	<p>The evaluation points range that indicates the agent's performance meets expectations.</p> <p>Example: A value from 0 to 2 can be considered an adequate or average score.</p> <p>If you change the value, all other score ranges change accordingly.</p> <p>Note: You cannot change the value in this field until you create questions and assign maximum and minimum values to those questions.</p> <p>This field only appears if the evaluation form uses point-based scoring.</p>
Exceeds Expected Points	<p>The evaluation score range that indicates the agent's performance exceeds expectations.</p> <p>Example: Positive values are awarded for exceptional service. In this instance, a value from 3 to 50 is an above average score that indicates an agent performed beyond the normal expected outcome.</p> <p>This field is not editable. Note that the maximum value for this range is determined by the total of all maximum values that you assign to questions.</p> <p>Note: The maximum value in this field does not change until you create questions and assign maximum and minimum values to those questions.</p> <p>This field only appears if the evaluation form uses point-based scoring.</p>
Status	<p>The default status is Editable. Do not change the status of an evaluation form to Active until you finished modifying the evaluation form. You can only change the status for an evaluation form listed in the Evaluation Form Administration window. You cannot change the status for an evaluation form template in the Evaluation Form Templates window. See Form Status for more information about statuses.</p>

Configuring an Evaluation Form's Details

To configure an evaluation form's details:

1. Select the form in the list of forms at the top of the Evaluation Form Administration window.
2. Select the Details tab, and complete the fields.

The form's properties appear in the tabbed section at the bottom of the window.

3. When done, click Save.

Form Status

A form's status determines if it is available for use and if it can be modified. The following table describes the possible states.

Status	Description
Editable	The form can be modified, renamed, and deleted. It is not yet available for evaluators to use.
Active	<p>The form is available for use by evaluators, supervisors, or managers. Everything that does not affect the score in the evaluation can be modified, including:</p> <ul style="list-style-type: none">■ Details tab (including ranges)■ Settings tab■ Sections tab (including names and chart results, but not weights or number of sections)■ Question tab (including text, description, and answer label, but not number of questions, KPI, or weights) <p>An active form cannot be deleted.</p>
Inactive	The form is no longer available for use by evaluators, supervisors, or managers. It will be deleted automatically as soon as all evaluations based on it are removed from the database.

The following figure displays normal life cycle of an evaluation form.



Once you have changed a status to the next in line, you cannot go back to the previous status. Also, you cannot skip a status.

Example: You cannot go from Editable to Inactive.

Changing a Form's Status

To change a form's status:

1. In the navigation tree, select Recordings > Evaluation Forms > Forms.
The Evaluation Form Administration page appears.
2. Select the form whose status you want to change from the list of forms at the top of the page.
3. On the Details tab, in the Status section, select the desired status (in accordance with the normal form lifecycle), and then click Save.

Settings Tab

The Settings tab displays the configuration settings for evaluation, approval, and alerts. It appears at the bottom of the Evaluation Form Templates window and the Evaluation Form Administration window.

Settings tab fields

Field	Description
Comments are Editable	<p>When selected, allows users to edit any existing comment created by a person within the user's scope.</p> <p>Example: An agent can only edit their own comments. A supervisor can edit the comments made by agents within the supervisor's scope and the supervisor's own comments.</p>
All Managers Evaluate	When selected, allows all managers to be able to evaluate contacts that use this evaluation form and that are made by agents in their group.
All Supervisors Evaluate	When selected, allows all supervisors to be able to evaluate contacts that use this evaluation form and that are made by agents in their team.
Evaluation Approval Needed	<p>Select one or more of the following roles if you want to require evaluation approval for contacts that use this evaluation form.</p> <ul style="list-style-type: none"> ■ Evaluator ■ Manager ■ Supervisor <p>Managers and supervisors can approve evaluations for agents in their teams or groups. Evaluators can approve evaluations for agents from all groups. Note that the user who triggers the alert does not receive the alert.</p> <p>When you select one or more of these roles, Quality Management Administrator enables the Alert when Evaluation Needs Approval check box.</p> <p>When you clear one or more of these check boxes, any evaluations in the Needs Approval state automatically changes to the Scored state for the selected roles.</p>

Field	Description
Alert when Evaluation is Scored	<p>When selected, an alert is sent when an evaluation is scored and Quality Management Administrator automatically selects the following options.</p> <ul style="list-style-type: none"> ■ Agent's Manager(s)—Quality Management sends an alert to the agent's manager(s) when an evaluation is scored. ■ Agent's Supervisor(s)—Quality Management sends an alert to the agent's supervisor(s) when an evaluation is scored. ■ Agent/Knowledge Worker—Quality Management sends an alert to the knowledge worker when their evaluation form is scored. <p>Example: If you only want Quality Management to send an alert to Agent's Supervisor(s), clear the Agent's Manager(s) and Agent/Knowledge Worker check boxes.</p>
Alert when Evaluation Needs Approval	<p>When selected, an alert is sent when an evaluation needs approval. When you select this check box, Quality Management Administrator automatically selects the following options.</p> <ul style="list-style-type: none"> ■ Evaluator(s)—Quality Management sends an alert to evaluator(s) when an evaluation needs approval. ■ Agent's Manager(s)—Quality Management sends an alert to an agent's manager(s) when an evaluation needs approval. ■ Agent's Supervisor(s)—Quality Management sends an alert to an agent's supervisor(s) when an evaluation needs approval. <p>Example: If you only want Quality Management to send an alert to the Agent's Supervisor(s), clear the Evaluator(s) and Agent's Manager(s) check boxes.</p>

Configuring an Evaluation Form's Settings

To configure an evaluation form's settings:

1. Select the form in the list of forms at the top of the Evaluation Form Administration window.
2. Select the Settings tab, and complete the fields as desired.

The form's settings appear in the tabbed section at the bottom of the window.

3. When done, click Save.

Sections Tab

The section tab allows you to specify the number of sections that appear in the evaluation form. There can be a maximum of 10 sections in a form. Sections are automatically numbered from 1 to 10.

You can use these default sections as they are in the evaluation form, or customize them to suit your needs by renaming them or deleting them.

You can also specify which sections appear in the chart results for point-based scoring.

If you are using percentage-based scoring, remember the following points when assigning weight to a section:

- You can assign a weight to each section that can affect how an evaluation is scored. The score weight percentages assigned to the sections must add up to 100 percent.
- You can assign zero (0) to a section weight if there is more than one section in the Evaluation form. All questions within the 0-weight section must add up to 100 percent. The questions scored in a 0-weight section are not included in the overall score. You might want to create a 0-weight section when you want to track questions that should not affect the overall score.

Sections tab fields and buttons

Field	Description
Weigh Sections Evenly	When you click this button, the values in the Score Weight Percentage columns are assigned the same weight. This button only appears if the evaluation form is associated with percentage-based scoring. The button is disabled when the form is Active.
Number	The number assigned to the section.
Name	The name of the section.

Field	Description
Chart Results	<p>Choose the starting gradient color that will be associated with this section in a chart for a point-based evaluation form. The ending gradient color is predefined based on the starting gradient color. If you choose None, the section will not appear in the chart.</p> <p>Note: This field can be changed on an active evaluation form.</p>
Score Weight Percentage	<p>Adjust the weight of each section. The weights of all the sections must add up to 100%. The weight for each section will show a percentage value that includes up to 2 decimal places.</p> <p>This field only applies to percentage-based scoring.</p>

Understanding How Sections are Weighted

Note: This topic only applies to percentage-based scoring.

Example: Assume the completed form has two sections called Greet and Assess. The Quality Management administrator who set up the evaluation form determined that the score of the Greet section would contribute 40% towards the overall score and the score of the Assess section would contribute 60%. A section weight is indicated on each section tab. The sum of all of the section weights must be 100.

These weights are applied after all sections are scored to arrive at the overall score (as a percentage) for the evaluation.

The overall score is calculated as follows:

- Section score (as a percentage) × section weight = weighted section score
- Sum of all weighted section scores = total score (as a percentage)

In this example:

- Greet section = 60% × 0.4 = 24%
- Assess section = 80% × 0.6 = 48%
- 24% + 48% = 72% overall score

Managing Sections

To manage sections:

1. Choose one of the following options:
 - To add a new section, click New under the Sections tab, type a name for the new section, and then click OK.

The Question tab appears the first time you add a new section.
 - To rename a section, select the section, click Rename, type the new name in the Section Name dialog box, and then click OK.
 - To delete a section, select the section and click Delete, click Yes to dismiss the Delete Section dialog box.
2. If this form uses percentage-based scoring, change the score weights for each section until they add up to 100% or click the Weigh Sections Evenly button.
3. Click Save.

Questions Tab

The Questions tab allows you to the questions and answers associated with a section. When configuring questions and answers, note that you can:

- Enter up to 100 questions per form with a limit of ten sections per form.
- Use a combination of answer of Yes/No or 0-5 scale, or custom answers on a question-by-question basis. A minimum of two answers per question is required.

Example: Your evaluation can include not only Yes/No questions about an agent's mandatory skills but also 0-5 scale questions about the agent's soft skills.

If you use the Template 0-5, Template Mixed Questions, or the Template Yes-No to create your new form, you already have questions set up. You can use these default questions as they are in the evaluation form, or customize them to suit your needs by adding, editing, or deleting questions.

If you used the Blank Template or Template Points Form, you must create your own questions.

The Questions tab appears at the bottom of the Evaluation Form Templates window and the Evaluation Form Administration window when you add a section.

Details	Settings	Sections	Questions	KPI Order					
Greeting	Verifica...	Product ...	Caller I...	Sales	System T...	Holds/Tr...	Communic...	Closing	FCR

Number	Question	Description	KPI	Type	Score Weight
1.1	Immediate attention of the customer		No	Options	20%
1.2	Proper identification of agent name		No	Options	20%
1.3	Proper identification of company name		No	Options	20%
1.4	Proper company greeting as per greeting policy		No	Options	20%
1.5	Respond appropriately to the customer and situation		No	Options	20%

Total 100 %

Click table cells to edit question settings.

The Questions tab displays up to ten subordinate tabs. The names of these tabs are defined in the Sections tab. See [Sections Tab](#) for more information.

Questions tab fields and buttons

Field	Description
Weigh Questions Evenly	<p>When you click this button, the values in the Score Weight columns are assigned the same weight.</p> <p>This button only appears if the evaluation form is associated with percentage-based scoring. The button is disabled when the form is Active.</p>
Number	The number assigned to the question.
Question	A question in the evaluation form. You can enter a combined maximum of 500 characters in the Question and Description fields.
Description	A comment associated with the question in the evaluation form. The text in this field should explain the scoring criteria so that evaluations are scored consistently. When a user moves the cursor over the question in the evaluation form in Unified Workforce Optimization, a popup dialog displays the text in this field to the user.
Type	Click the Options button to define the answers to the questions. See Configure Question Options for more information.

Field	Description
KPI	<p>Indicates whether or not the question has been marked as a Key Performance Indicators (KPI) question. The valid values in the KPI field are:</p> <ul style="list-style-type: none"> ■ Yes ■ No
Min	<p>The minimum score for this question determined when the question options were configured. Positive or negative numbers can appear in this field.</p> <p>This field only appears if the evaluation form is associated with point-based scoring.</p>
Max	<p>The maximum score for this question determined when the question options were configured. Positive or negative values can appear in this field.</p> <p>This field only appears if the evaluation form is associated with point-based scoring.</p>
Score Weight	<p>Adjust the weight of each question. The weights of all the questions in a section must add up to 100%. The weight for each question will show a percentage value that includes up to 2 decimal places.</p> <div style="background-color: #e6f2ff; padding: 10px; margin: 10px 0;"> <p>Example: 12.55%</p> </div> <p>See Understanding How Questions are Weighted for more information.</p> <p>This field only appears if the evaluation form is associated with percentage-based scoring.</p>

Understanding How Questions are Weighted

NOTE: This information applies only to percentage-based scoring.

The maximum score for a section is 100%, no matter how many questions it contains.

Example: In a section with 3 questions, question 1 has a weight of 50%. Questions 2 and 3 each have a weight of 25%. This means question 1 is worth a maximum of 50 points and questions 2 and 3 are each worth a maximum of 25 points.

If a 0-5 question has a weight of 50%, then points are given for each possible score as follows:

- 20 = 10 points
- 40 = 20 points
- 60 = 30 points
- 80 = 40 points
- 100 = 50 points

If a 0-5 question has a weight of 25%, then points are given for each possible score as follows:

- 20 = 5 points
- 40 = 10 points
- 60 = 15 points
- 80 = 20 points
- 100 = 25 points

If a Yes/No question has a weight of 50%, then points are given for each possible score as follows:

- No = 0 points
- Yes = 50 points

If a Yes/No question has a weight of 25%, then points are given for each possible score as follows:

- No = 0 points
- Yes = 25 points

The following tables show the results for several sections in a sample evaluation form.

Scored example for a 3 question section

Question	Weight	Type	Score	Weighted Score
1	50	0-5	80	40
2	25	0-5	60	15
3	25	Yes/No	Yes	25
Section Score				80%

Scored example for a 4 question section

	Weight	Type	Score	Weighted Score
1	60	0-5	60	36
2	15	0-5	80	12
3	20	Yes/No	No	0
4	5	Yes/No	Yes	5
Section Score				53%

Scored example with N/A as an answer to one of the questions

Question	Weight	Type	Score	Weighted Score
1	60	0-5	N/A	-
2	15	0-5	80	12
3	20	Yes/No	No	0
4	5	Yes/No	Yes	5
Section Score				42.5%

Note: An answer of N/A removes that question from the total possible. So for this example, Quality Management bases the score of 43% on a score of 17 out of a total of 40.

The formula used for weighting questions considers the underlying scoring system used today. The following example shows this scoring system.

Yes/No Question	No	Yes	N/A
Score	0	100	-
Possible	100	100	-

0-5 Question	0	1	2	3	4	5	N/A
Answer	0	20	40	60	80	100	N/A
Possible	100	100	100	100	100	100	-

In the current scoring system, the maximum score per question for a Yes/No question is 100 points. For a 0-5 question the maximum score per question is 100. N/A is ignored.

So the formula used to calculate the weighted score for a single question is:

$(\text{Actual score} / \text{Maximum score}) * \text{Weight} = \text{Weighted score}$

Here are some example calculations for weighted question scores:

Question type	Maximum score	Actual score	Weight	Formula	Weighted score
0-5	100	60	40%	$(60/100) * 0.40$	24%
0-5	100	40	17%	$(40/100) * 0.17$	6.8%
Yes/No	100	No	30%	$(0/100) * 0.30$	0%
Yes/No	100	Yes	45%	$(100/100) * 0.45$	45%

Managing Questions

To manage questions:

- Choose one of the following options:
 - To add a question, select a section tab under the Questions tab, click New, type the question in the New Question dialog box, and click OK.
 - To add a description to a question, double-click the Description field, and type an explanation of the question.
 - To define the possible answers to the question, double-click the Type field, complete the fields in the Configure Question Options dialog box, and then click Done.

The KPI Order tab appears the first time you define an answer type as KPI.

 - To delete a question, select the question you want to delete, click Delete, and

then click Yes to dismiss the Delete Question dialog box.

Quality Management Administrator removes the question from the list.

2. If this form uses percentage-based scoring, change the score weights for each question until they add up to 100% or click the Weigh Questions Evenly button.
3. Click Save.

Configure Question Options

The Configure Question Options dialog box allows you to configure the list of possible answers for a question by:

1. Choosing one of the question option templates. These templates define the type of answers that will be used for a specific question. You can choose from the following options:
 - Yes-No—answers to questions are either yes, no, or not applicable.
 - 0-5—answers to questions are based on a scale from 0-5 or not applicable.
 - Custom—allows you to create your own answers.
2. Adding or deleting questions.
3. Arranging the order in which answers appear by selecting an answer and using the up or down arrows to move the answer to the correct location. In Quality Management Workforce Optimization, the drop-down list for the question will display the answers in the order shown in the Configure Questions Options dialog box.

Configure Question Options fields

Template Name	Description
Question Option Template	<p>The template associated with this question. Your options are:</p> <ul style="list-style-type: none"> ■ Yes/No—The answer is in the form of yes, no, or N/A. ■ 0 - 5—The answer is scored on a scale of 0 - 5 or N/A. ■ Custom—You determine the answer and how it is scored. <p>See Configure Question Examples for examples.</p>
Label	The text for the answer.

Template Name	Description
Type	<p>The type of answer. The options are:</p> <ul style="list-style-type: none">■ Accumulative—Points for this option are added together to get the final score, assuming no Key Performance Indicator (KPI) options are selected. In Unified Workforce Optimization the accumulative total will appear in Section Scores. KPI and Not Applicable are excluded from this score in Sections Scores so you can see what the score would have been had a KPI answer not been selected.■ Not Applicable—Ignore this answer by not including it in any totals. For point-based scoring, this is similar to assigning a 0 point value. However, the Section Scores ignores this question. For percentage-based scoring, the question is removed from the total possible points.■ KPI—Changes the final score to be the value specified by this option. This type of answer is used for questions that have a negative or positive impact on the score. The KPI Order tab appears the first time you define a answer type as KPI. See KPI Order for more information.
Value	<p>The integer value associated with this answer. Essentially, this is how much the answer is worth.</p> <p>Percentage-based scoring—This is a whole number value. The valid range of whole numbers are from 0 to 100.</p> <div>Example: 20</div> <p>Point-based scoring—This is an integer value that consists of natural numbers (1, 2, 3...), zero (0), or the negatives of natural numbers (-1, -2, -3, ...).</p> <div>Example: -10</div>

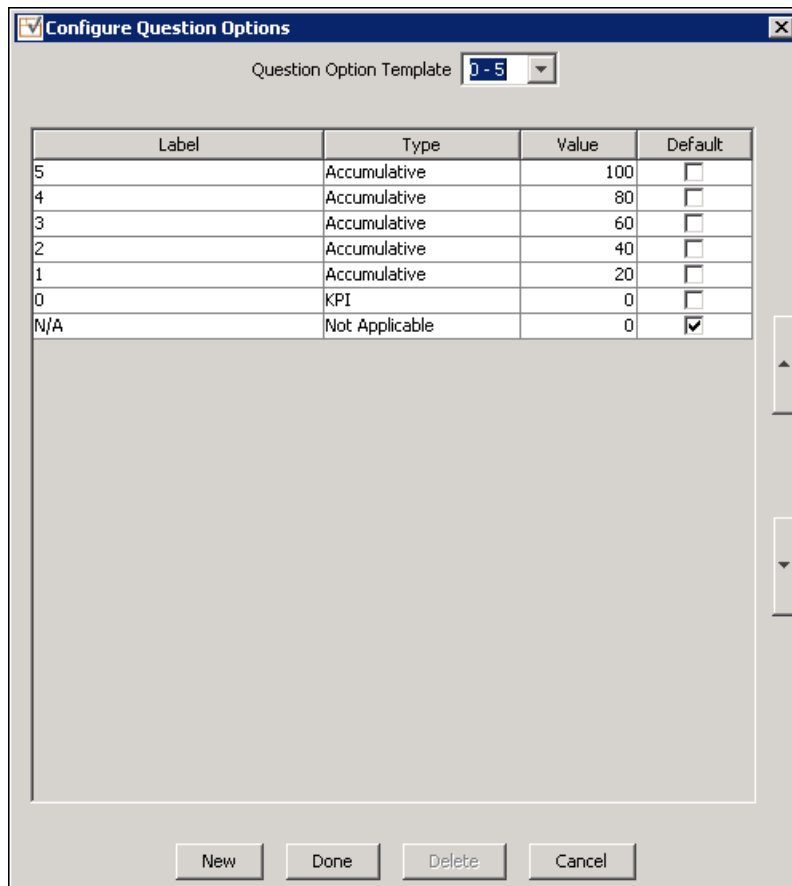
Template Name	Description
Default	<p>When selected, this check box indicates this is the default answer for the question on the evaluation form.</p> <div><p>Example: If an evaluator skips a question on the evaluation form and clicks Complete to submit the completed evaluation, the default answer for the skipped question appears in the completed evaluation form.</p></div> <p>A default answer is required.</p>

Configure Question Examples

The following examples show how to configure answers for each question option template.

In the following examples, any values that are greater than 100 or less than 0 apply only to point-based scoring. Note that when creating an evaluation form for percentage-based scoring, the range of values are limited to 0 to 100.

Example 1: If you want your answers to use a scale from 0-5 or Not Applicable (N/A), select 0-5 from the Question Option Template drop-down list.



The image shows a 'Configure Question Options' dialog box. At the top, there is a 'Question Option Template' dropdown menu set to '0 - 5'. Below this is a table with four columns: 'Label', 'Type', 'Value', and 'Default'. The table contains six rows of data. Below the table is a large empty rectangular area. At the bottom of the dialog are four buttons: 'New', 'Done', 'Delete', and 'Cancel'.

Label	Type	Value	Default
5	Accumulative	100	<input type="checkbox"/>
4	Accumulative	80	<input type="checkbox"/>
3	Accumulative	60	<input type="checkbox"/>
2	Accumulative	40	<input type="checkbox"/>
1	Accumulative	20	<input type="checkbox"/>
0	KPI	0	<input type="checkbox"/>
N/A	Not Applicable	0	<input checked="" type="checkbox"/>

Example 2: If you want answers to use Yes, No, or N/A, select Yes/No from the Question Option Template drop-down list. You can also assign a Key Performance Indicator (KPI) to one of the answers if the answer has a negative impact to your contact center's business goals.

Configure Question Options

Question Option Template: Yes/No

Label	Type	Value	Default
Yes	Accumulative	10	<input type="checkbox"/>
Not applicable	Accumulative	0	<input checked="" type="checkbox"/>
No	KPI	-10	<input type="checkbox"/>

New Done Delete Cancel

Example 3: You can create a Custom template with +, 0, and - labels.

Configure Question Options

Question Option Template: Custom

Label	Type	Value	Default
+	Accumulative	20	<input type="checkbox"/>
0	Accumulative	0	<input checked="" type="checkbox"/>
-	Accumulative	-20	<input type="checkbox"/>

New Done Delete Cancel

Example 4: You can use the Custom template to add Yes or No answers and then assign a KPI to the Yes answer and a value greater than 100 if you want to reward an agent for a positive KPI result.

Configure Question Options

Question Option Template: Custom

Label	Type	Value	Default
Yes	KPI	150	<input type="checkbox"/>
No	Accumulative	0	<input checked="" type="checkbox"/>

New Done Delete Cancel

Example 5: You can use the Custom template to add Yes or No answers and assign a KPI to one of the answers.

Configure Question Options

Question Option Template: Custom

Label	Type	Value	Default
Yes	Accumulative	0	<input checked="" type="checkbox"/>
No	KPI	-110	<input type="checkbox"/>

New Done Delete Cancel

Example 6: You can use the Custom template to add descriptive words in the Label column.

Configure Question Options

Question Option Template: Custom

Label	Type	Value	Default
N/A	Accumulative	0	<input checked="" type="checkbox"/>
Answer + 20 Seconds	Accumulative	-20	<input type="checkbox"/>
Hang Up + 20 Seconds	Accumulative	-10	<input type="checkbox"/>
Personal Information	Accumulative	-30	<input type="checkbox"/>
Innapropriate Time	Accumulative	-10	<input type="checkbox"/>
Excessive Time	Accumulative	-20	<input type="checkbox"/>
Unnecessary Conference	Accumulative	-40	<input type="checkbox"/>
No mention of the time of arrival	Accumulative	-50	<input type="checkbox"/>

New Done Delete Cancel

Example 7: You can use the Custom template to add descriptive words in the Label column and assign KPI to multiple answers.

Label	Type	Value	Default
N/A Deviations	Accumulative	0	<input checked="" type="checkbox"/>
Denial of Service	KPI	-150	<input type="checkbox"/>
Ending a Call Inappropriately	KPI	-150	<input type="checkbox"/>
Use of Sarcasm, Jokes, or Irony	KPI	-150	<input type="checkbox"/>
Innapropriate Language	KPI	-150	<input type="checkbox"/>

KPI Order

A KPI answer has an absolute impact on the final score. If multiple KPI answers are defined, the KPI answers will be prioritized to determine which KPI answer will be used to determine the final score. The KPI Order tab ranks KPI questions in order of priority.

Settings tab fields

Field	Description
Section	The name of the section where the KPI was found.
Question	The question in the evaluation form that has a KPI answer.
Option	The answer to the question that is associated with the KPI.

Field	Description
Order	<p>The order in which KPI answers are prioritized in the evaluation form. 1 is the highest priority.</p> <p>To change the priority order of a KPI question, select the KPI item from the list and use the up or down arrows to move the KPI item to the correct location.</p>

Archive Workflows

This topic describes the Archive Workflow Administration window and provides tasks to create and maintain archive workflows.

Allowing Access to Archived Recordings

To allow agents and knowledge workers access to their archived recordings:

1. In the navigation tree, select the Recordings > Archive node.
The Archive Recordings Administration window appears.
2. To allow knowledge workers access to their own archived recordings, select the Allow Agents To Access Archive check box.
3. Click Save.

The Recordings application appears in the Unified Workforce Optimization when agents and knowledge workers log on.

Archive Workflow Administration

Use the Workflow Administration window to create archive workflows based on team. The archive workflow includes specific rules and classifiers to designate the types of contacts you want to record. These calls will be recorded for archive purposes, unless later tagged as quality management calls.

Archive Workflow Administration

Archive Workflows

Name	State ▾
ALL	Active
DNR	Active
CleanerTest	Active
SingleTeam	Active
Default Archive	Inactive
ImmedUpload	Inactive

New
Rename
Delete

Archive Upload

End of Day: Hour: Minutes:

Immediate Voice Upload ☐

Recording Retentions

Tagged

Unlimited ☐
Months:

Archive

Unlimited ☐
Months:

Available Teams

Id	Team	Workflow ▾
----	------	------------

Assigned Teams

Id	Team ▾
----	--------

>
>>
<
<<

Save Cancel

Field	Description
Archive Workflows	<p>Lists the existing archive workflows. To modify the workflows that appear in this list, choose one of the following options.</p> <ul style="list-style-type: none"> ■ New—add a new workflow to the list. ■ Rename—change the name of an existing workflow. ■ Delete—remove a workflow from the list. <p>Rename and Delete are enabled when you select an archive workflow from the list.</p>
Name	The name of the archive workflow.

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Field	Description
State	<p>The status of the workflow. The Possible states are as follows:</p> <ul style="list-style-type: none"> ■ Active—The entire workflow can be modified. ■ Inactive—The modifiable parts of the workflow are limited to the fields under Archive Uploads and Recording Retentions.
End of Day	<p>The recordings are uploaded at the end of the selected day. Recording still continues, but those recordings are uploaded after the next End of Day. Enter the time for the end of the work day in 24-hour format.</p> <p>If the EOD is changed, the new EOD goes into effect immediately and the Data API service will process calls using the new EOD time. If the EOD changes after the Upload Controller gets the original EOD, the Upload controller might wait to upload recordings until after the original EOD time has passed.</p>
Immediate Voice Upload	<p>When this check box is selected, audio recordings associated with this workflow are immediately uploaded after the recording completes. When the check box is clear, the normal upload setting rules are in effect. This option applies to all recording types.</p> <p>If you change the Immediate Voice Upload option during the day, the change does not go into effect until the archive workflow is reloaded after the End of Day.</p> <p>For Desktop Recording, it is possible that audio recordings waiting for upload can be lost if an agent's PC crashes. Enabling immediate uploading prevents this problem.</p> <p>If you enabled two stage upload, audio recordings are uploaded immediately using the two stage upload process.</p> <div style="background-color: #f9e79f; padding: 10px; margin-top: 10px;"> <p>Best Practices: In a Web Server Redundancy environment, enable Immediate Voice Upload. This ensures recordings are available after a failover. If these features are not enabled, recordings are not uploaded until the next scheduled upload.</p> </div>
Recording Retentions	Set the length of time you want the various types of recordings to be retained.
Available Teams	Available teams appear in this list.

Field	Description
Assigned Teams	<p>Teams assigned to this archive workflow appear in this list. A team can belong to only one archive workflow at a time.</p> <div>Note: A team can belong to one archive workflow and one quality management workflow.</div>

Creating an Archive Workflow

To create a new archive workflow:

1. In the navigation tree, select Recordings > Archive > Workflows.
The Archive Workflow Administration window appears.
2. Next to the Archive Workflows section, click New.
The Archive Workflow Name dialog box appears.
3. Enter a name for the new archive workflow, and then click OK.
The workflow now appears in the Archive Workflows section.
4. Select the archive workflow in the Archive Workflows section.
5. In the Archive Upload section, enter the time for the end of the work day in 24-hour format.
6. To upload audio recordings as soon as a call is completed, select the Immediate Voice Upload check box in the Archive Upload section.
7. Set the length of time you want to retain recordings marked by agents.
 - Tagged—recordings that have been marked by an agent for retention.
 - Archive—all other recordings.
8. Assign teams to the archive workflow.

A team can belong to only one archive workflow at a time. If a team you want to assign to this archive workflow is already assigned to another archive workflow, it is automatically reassigned to this archive workflow. A warning message is displayed telling you that the team is being reassigned from another archive workflow.
9. When you are done configuring the archive workflow in this window, click Save.

Setting Up Classifiers for an Archive Workflow

Classifiers are filters that determine which calls are recorded.

To set up classifiers for an archive workflow:

1. Under the Archive > Workflows node, select the workflow you just created.
The Archive Workflow Classifier Configuration window appears.
2. In the Classifiers section, click New to create a new classifier.
The Classifier Name dialog box appears.
3. Enter a name for your new classifier, and then click OK.
The new classifier now appears in the classifier navigation tree.
4. In the Classifier Settings section, select one of the following options.
 - **Record**—select this option to upload recorded calls.
If you select Record, you must select the call direction you want to record (Inbound, Outbound, or both). You must select at least one call direction.
 - **Don't Record**—select this option to exclude specific phone numbers or area codes from recording.
5. Select the type of number you want to use to filter the calls.
 - **Called Number**—if the call is inbound, the Called Number is the route point number if the call was routed, or the agent extension if the call was direct call. If the call is outbound, the Called Number is the number of the customer/client.
 - **Calling Number**—if the call is inbound, the Calling Number is the original number from which the caller is dialing. If the call is outbound, the Calling Number is the agent's extension.

Note: If you add phone numbers to the Called Number section, then select Calling Number from the Numbers drop-down list, Quality Management Administrator deletes the phone numbers you added. The reverse is also true. If you add phone numbers to the Calling Number section, then select Called Number from the Numbers drop-down list, Quality Management Administrator deletes the phone numbers you

added.

- Line—The extension the agent used to answer the call.

6. Click Add to specify the phone numbers you want to filter.

The Number dialog box appears.

7. Enter the numbers you want to filter. You can enter:

- Specific numbers

Example: 6125551212

- Number ranges using wildcards

Example: 612*, where the * wildcard represents any number of digits, or 612555????, where the ? wildcard represents a single digit.

- The * wildcard to record all calls

The numbers cannot contain dashes or parentheses, and must be between 1 and 16 characters long.

8. Click Save to save the classifier settings.

Managing Archive Workflows

- To edit an existing archive workflow, select the workflow you want to modify under Archive > Workflows, complete your changes, and then click Save.

Quality Management Administrator saves the changes to the modified workflow.

The modified workflow goes into effect after the agents assigned to the workflow log out and log back in to their Windows session, or after the configured End of Day.

- To delete an archive workflow, select the workflow you want to delete under Archive > Workflows, click Delete, and then click Yes to dismiss the Confirm Deletion dialog box.

Quality Management Administrator deletes the archive workflow and the status of the workflow changes to Inactive. The deleted workflow goes into effect after the agents assigned to the workflow log out and log back in to their Windows session, or after the configured End of Day.

Note: Once a workflow is deleted, you cannot adjust the retention times for calls associated with the workflow or reactivate the workflow.

User-Defined Metadata

Metadata can be captured from Unified CCX, Cisco Agent Desktop (CAD), and other applications to pass the data to the Quality Management API.

The CAD HTTP Action can also be used to pass data to Quality Management. See the *Cisco CAD Desktop Administrator User Guide* for more information.

Use the User-Defined Metadata window to create and maintain metadata fields. You can define up to 30 metadata fields. Each metadata field can contain up to 25 characters.

These metadata fields appear in the Contact Information tab on the Media Player in Unified Workforce Optimization in the same order they appear in the User-Defined Metadata window. You can configure the order in which the metadata appears by selecting a row and using the Up and Down arrows to move the selected metadata.

The following image displays the Unified CC Database window for Unified CCX.

User-Defined Metadata

Display Name ▲	Key Name	Type	Encrypted	Exportable
text	Text	Text	<input type="checkbox"/>	<input checked="" type="checkbox"/>

The following image displays the Unified CC Database window for Unified CCE.

Field	Description
Display Name	The metadata field name appears in the search results and the contact information.

Field	Description
Key Name	<p>A unique identifier for the metadata field. APIs use the unique identifier for the metadata field.</p> <p>The unique identifier allows a maximum of 39 characters. The Key Name field does not allow the following characters.</p> <ul style="list-style-type: none"> ■ space ■ & (ampersand) ■ = (equal sign) <p>Important: The key name must be unique. If you create a key name for a metadata value that duplicates an existing field name, you will not be able to add a search filter for that key name under the Recordings application in Unified Workforce Optimization. See Reserved Words for a list of words that cannot be used as key names.</p>
Type	<p>Identifies the type of information contained in the metadata field. The available types are:</p> <ul style="list-style-type: none"> ■ Text ■ Number ■ Date ■ HyperLink
Encrypted	<p>When selected, this check box indicates Quality Management encrypts the metadata when stored. The Exportable check box is disabled if you select the Encrypted check box.</p> <p>Note: You cannot search for encrypted metadata in Unified Workforce Optimization.</p>
Exportable	<p>When selected, this check box indicates you can export the metadata via an API or Unified Workforce Optimization. This check box is selected by default.</p>
Read Only	<p>When selected, this check box indicates the metadata is read only.</p>

Reserved Words

Important: The key name must be unique. If you create a key name for a metadata value that duplicates an existing field name, you will not be able to add a search filter for that key name under the Recordings application in Unified Workforce Optimization.

The following words are reserved for Quality Management and cannot be used as a key name for a metadata value.

- acd_login_status
- agent_displayId
- ani
- approved_by
- assocCallIdCount
- call_duration
- call_line
- call_state
- called_number
- calling_number
- contact_type
- date
- direction
- dnis
- evaluation_calibration
- evaluation_date
- evaluation_form_name
- evaluation_score
- evaluation_state
- evaluator_name
- first_name

- from_address
- group_name
- hasScreen
- hasVoice
- hr
- id
- isInbound
- last_name
- license
- line
- pc_hostname
- phone_extension
- qm_login_status
- quality_reason
- recording_last_failed
- recording_last_failed_cause
- recording_last_screen_status
- recording_last_successful
- recording_last_voice_status
- recording_type
- screen_recording_ip
- silence_average_duration
- silence_max_duration
- silence_min_duration
- silence_percent_of_call
- silence_total_duration
- silence_total_events
- site_name

- subject
- talkover_average_duration
- talkover_max_duration
- talkover_min_duration
- talkover_percent_of_call
- talkover_total_duration
- talkover_total_events
- team_name
- testfield
- time
- to_address
- training
- tz
- voice_recording_ip

Managing Metadata Fields

- To add a metadata field, select the Recordings > Metadata node, click Add, complete the fields, and then click OK to dismiss the Add/Edit Metadata Information dialog box.
- To edit a metadata field, select the Metadata field you want to edit from the User-Defined Metadata window, click Edit, complete your changes, and then click OK to dismiss the Add/Edit Metadata Information dialog box.

Your changes appear in the list of metadata fields on the User-Defined Metadata window.

- To delete a metadata field, select the Metadata field you want to remove from the User-Defined Metadata window, click Remove, and then click Yes to dismiss the Confirm Deletion dialog box.

Quality Management Administrator deletes the metadata.

- To sort the order in which the metadata appears, select a row, use the Up or Down arrow to move the metadata row to where you want it to appear. Repeat this step until all metadata rows appear in the desired order.

Call Events Administration

The Call Events Administration window allows you choose the type of recording events you want Quality Management to mark in a recording. When enabled, a Unified Workforce Optimization user can search for recordings that have the specified silence or talkover events from the Recordings application.

Field	Description
Save TalkOver Events	<p>When selected, Quality Management saves information about talkover events. The Save TalkOver Events check box is clear by default.</p> <p>A talkover event is a time when both parties on the call are talking simultaneously.</p> <p>Changes to this event configuration take effect after the next End of Day.</p>
TalkOver Event Minimum Duration	<p>The minimum amount of time in seconds for a talkover event. Quality Management only saves information about talkover events with a duration that is equal to or greater than the number of seconds specified in this field. You can specify from 1 to 3600 seconds (1 hour). The default is 10 seconds.</p> <p>This threshold setting is used during after-call processing and applies to all calls. If you change this setting, all previously processed calls use the older threshold settings.</p> <p>Using a low threshold (for example, 3 seconds) stores more information about events than a high threshold (for example, 30 seconds). If you specify a 30 second threshold, a user cannot search for recordings with talkover events that are under 30 seconds. Quality Management does not save information about talkover events below the specified minimum duration.</p>
Save Silence Events	<p>When selected, Quality Management saves information about silence events. The Save Silence Events check box is clear by default.</p> <p>A silence event is a time when neither party on the call is talking.</p> <p>Changes to this event configuration take effect after the next End of Day.</p>

Field	Description
Silence Event Minimum Duration	<p>The minimum amount of time in seconds for a silence event. Quality Management only saves information about silence events with a duration that is equal to or greater than the number of seconds specified in this field. You can specify from 1 to 3600 seconds (1 hour). The default is 10 seconds.</p> <p>This threshold setting is used during after-call processing and applies to all calls. If you change this setting, all previously processed calls use the older threshold settings.</p> <p>Using a low threshold (for example, 3 seconds) stores more information about events than a high threshold (for example, 30 seconds). If you specify a 30 second threshold, a user cannot search for recordings with silence events that are under 30 seconds. Quality Management does not save information about silence events below the specified minimum duration.</p>

Improving Detection of Silence and Talkover Events

The adaptive Voice Activity Detector (VAD) algorithm uses is very robust and accurate under normal phone call situations. In this case, normal means:

- Minimal to no background noise for both parties on a call
- Good audio quality
- One party for each side of a call
- Each party speaks at normal volume

The adaptive VAD algorithm has been proven to be 90% accurate through testing under moderately noisy conditions. It can handle background noise (for example, white noise) quite well. Rapid changes in volume and frequency of any background noise can cause inaccuracies as the algorithm adapts to the noise. A constantly changing background noise (for example, a radio playing loudly) will prevent the adaptive VAD algorithm from working, and the results will be inaccurate.

Set minimum threshold values for silence and talkover events that are meaningful to your call center. The threshold values define the granularity of the searches you can run on recorded calls.

Example: If you set the minimum duration for a Save Talkover Event to 10 seconds, the user cannot search for recordings with any talkover events of 5 seconds or less because

Quality Management only saves talkover events that are 10 seconds or greater. If your users require greater granularity when searching for a silence or talkover event, then lower the value for the minimum duration of the event.

If your call center does not fit the definition of normal given above (for example, there is a lot of background noise), it might be better to use shorter minimum durations for silence events to account for the noise interfering with correctly identifying silence events. In a noisy environment, it might not be possible to have a 20-second silence event since a background noise will usually break a contiguous period of silence during a call. For a noisy call center, consider setting the minimum duration of a silence event to 3 seconds for better results. A noisy call center usually results in less overall accuracy for the identification of silence events.

Another tactic you can use to identify silence events in a noisy call center is to modify your search. For example, instead of searching for recordings with a single occurrence of a silence event that is 25 seconds or greater, consider searching for recordings with five or more occurrences of silence events that are 6 seconds or greater. This type of filtering takes into account the shorter, but more frequent silence events that can be found in a noisy environment.

Handling Pause and Hold when Searching for Silence or Talkover events

When a user searches for a silence or talkover event, Quality Management does not include pause and hold events in the search. If a silence event occurs just prior to a pause or hold event, Quality Management saves information about the silence event if the event meets or exceeds the minimum threshold for the event. Quality Management does not look for silence or talkover events when a call is paused or on hold.

Configuring Recording Events

To configure silence and talkover events:

1. In the navigation tree, select the Recordings > Call Events node.
The Call Events Administration window appears.
2. To save information about talkover events, select the Save TalkOver Events check box, and enter the duration of the event in seconds in the TalkOver Events Minimum Duration box.

3. To save information about silence events, select the Save Silence Events check box, and enter the duration of the event in seconds in the Silence Events Minimum Duration box.
4. Click Save.

The Recordings application in Unified Workforce Optimization allows users to search for recordings with silence and talkover events in a customer conversation.

Recording Visibility Administration

Recording Visibility Administration controls how long customer conversations are visible in the Recordings application by role. When the time expires for a customer conversation, that recording is no longer available to the user.

Note: Specifying how long customer conversations are visible does not affect retention time. The customer conversation is not deleted when the visibility setting expires. The customer conversation will still be available based on its retention time, but it will not be visible to the user for playback in the Recordings application.

When configuring visibility of customer conversations by role, note the following:

- The state of a recording has no impact on the visibility

Example: Scored, Unscored, In Progress, or Needs Approval

- Tagging a contact for HR or Training does not override the visibility setting
- If a user is assigned multiple roles, the longest visibility setting is used
- All references to the contact remains in reports, and dashboard widgets

Field	Description
Days	<p>The number of days the customer conversation is visible in the Recordings application by role. The time is defined by the date and time when the call was recorded and the date and time when user logged into Unified Workforce Optimization to view and play back the customer conversation. This field is enabled when the Unlimited check box is cleared. The defaults are as follows:</p> <ul style="list-style-type: none">■ Agent—7 days■ Knowledge Worker—7 days■ Supervisor—14 days■ Manager—21 days■ Evaluator—14 days■ Archive User—21 days
Unlimited	<p>When selected, the customer conversations are always visible. If you clear the check box, you must specify the number of days the customer conversations will be visible in the Recordings application.</p>

Interface Configuration

The Interface Configuration node allows you to control some of the features and information that appears in the Unified Workforce Optimization interface. Use the Interface Configuration node to:

- Configure the default time format at the global level
- Enable export of recordings for specific roles
- Control the columns that appear in the <user name> - ID tab in the Media Player under the Recordings application in Unified Workforce Optimization

Interface Settings

Interface settings allow you to configure the default time format at the global level and enable export permissions.

You can choose the default time format at the global level. Your options are 24 hour and 12 hour time format.

Quality Management Administrator enables the Live Screen Monitoring feature by default. You can choose to disable Live Screen Monitoring from the Interface Settings window.

Quality Management Administrator disables the recordings export feature by default. From the Interface settings window, you can enable the export of recordings by role.

Customer conversations are stored in a format that can be played only by Quality Management. When export of recordings is enabled, users can export recordings from the Recordings application in Unified Workforce Optimization. The recordings can be exported in the following formats:

- WAV format (uncompressed audio)
- MP4 (compressed audio/video)

These formats are playable in other playback software (such as Windows Media Player).

Recording Columns

Recording Columns controls the fields that appear in the Recordings application for Unified Workforce Optimization for all agents, knowledge workers, and supervisors.

The available fields appear under the following categories:

- Organization Fields
- Evaluation Fields
- Date Fields
- Contact Fields
- Analysis Fields
- User Defined Metadata Fields

When you add a new metadata field, it appears in the Show Columns list by default, unless modified by the Quality Management Administrator. On upgrade, the existing metadata files appear in the Available Columns list, unless modified by the Quality Management Administrator.

Field	Description
Available Columns	Lists the columns that will not appear in the Recordings table in Unified Workforce Optimization. Fields in the Available Columns list always appear in alphabetical order.
Show Columns	<div>Lists the columns that will appear in the Recordings Applications under Contacts table in Unified Workforce Optimization and the search fields. You can configure the order in which fields appear in this list using the arrow keys.</div> <div>Note: Agents, knowledge workers, and supervisors can only view and search columns that appear in the Show columns. Managers, evaluators, and archive users can search all columns.</div>

Organization Fields

The Organization Fields tab lists the available fields. All fields appear in the Show Columns list by default.

Field	Definition
Agent ID	The agent's ID. Only the Agent ID field can be moved between Available Columns and Show Columns.
First Name	The agent's first name. This field always appears in the Show Columns list.
Group Name	The name of the group. This field always appears in the Show Columns list.
Last Name	The agent's last name. This field always appears in the Show Columns list.
Team Name	The name of the team. This field always appears in the Show Columns list.

Evaluation Fields

The Evaluation Fields tab lists the available fields. All fields appear in the Show Columns list by default.

Field	Definition
% Score	The evaluation score given to the contact.
Approved By	The name of the manager or supervisor who approved the evaluation.
Date Evaluated	The date when the customer conversation was evaluated.
Evaluation Calibration	The contact evaluation is marked for calibration.
Evaluation Form	The name of the evaluation form used to score the customer conversation.
Evaluator Name	The name of the evaluator.

Date Fields

The Date Fields tab lists the available fields. All fields appear in the Show Columns list by default.

Field	Definition
Date	The contact date. This field always appears in the Show Columns list.
Time	The time of the contact. This field always appears in the Show Columns list.
Time Zone	The time zone where the contact was recorded. Only the Time Zone field can be moved between Available Columns and Show Columns.

Contact Fields

The Contact Fields tab lists the available fields. All fields appear in the Show Columns list by default.

Field	Definition
Associated Call Count	The number of associated contacts for this call.
Associated Call ID	The ID for the associated call.
Call Duration	The duration of the contact (length of time between call answered and call dropped) in HH:MM:SS.
Call Inbound	The call is inbound. The valid values in the Call Inbound field are: <ul style="list-style-type: none">■ Yes■ No
Called Number	The number of the phone that received the call. Displays “unknown” if the called number is unlisted or blocked. This field always appears in the Show Columns list.
Calling Number	The number of the phone that made the call. Displays “unknown” if the calling number is unlisted or blocked. This field always appears in the Show Columns list.
Contact Type	The type of contact. The valid values in this field are: <ul style="list-style-type: none">■ Call—a contact with a call recording■ Non-Call—a contact without call recording

Field	Definition
Has Screen	The contact has a screen recording. The valid values in the Has Screen field are: <ul style="list-style-type: none"> ■ Yes ■ No
Has Voice	The contact has a voice recording. The valid values in the Has Voice field are: <ul style="list-style-type: none"> ■ Yes ■ No
HR	The contact has been marked as an HR contact. The valid values in the HR field are: <ul style="list-style-type: none"> ■ Yes ■ No
ID	The contact's ID.
Line	The extension the agent used to answer the call. This field always appears in the Show Columns list.
Recording Type	The recording type associated with this device. The valid value in the Recording Type field are: <ul style="list-style-type: none"> ■ Server Recording—contact was recorded using Server Recording (SPAN). ■ Network Recording—contact was recorded using Network Recording. ■ Multiple Registration—contact was recorded using Multiple Registration method. This method allows you to programmatically add participants to an existing call. ■ Single Step Conference—contact was recorded using Single Step Conferencing method. This method allows you to choose up to three devices at a single, softphone-enabled extension. ■ Unknown—contact was recorded prior to 8.7 or the recording type could not be determined. ■ Endpoint—contact was recorded using Endpoint recording. ■ MediaSense Recording—contact was recorded using Cisco MediaSense Recording.

Field	Definition
Reason	The reason the contact was recorded as set in the recording rule (Archive, First, Last, Longest, Shortest, Random, Logging, Tagged, Performance, and New Employee).
State	<p>The current evaluation state of the recording. The valid values in the State field are:</p> <ul style="list-style-type: none"> ■ Scored—contacts that are claimed by an evaluator, fully scored, and, if approval is required, are approved. ■ Unscored—contacts that are as yet unclaimed by an evaluator and unscored. ■ In Progress—contacts that are claimed by an evaluator but which are not yet completely scored ■ Needs Approval—contacts that are claimed by an evaluator, are fully scored, and are awaiting approval. <p>This field always appears in the Show Columns list.</p>
Training	<p>The contact has been marked as a training contact. The valid values in the Training field are:</p> <ul style="list-style-type: none"> ■ Yes ■ No

Analysis Fields

The Analysis Fields tab lists the available fields.

Field	Definition
AVG Silence	The average silence time in HH:MM:SS.
AVG Talk Over	The average talkover time in HH:MM:SS.
MAX Silence	The duration of the longest silence event that was detected in HH:MM:SS.
MAX Talk Over	The duration of the longest talkover event that was detected in HH:MM:SS.
MIN Silence	The duration of the shortest silence event that was detected in HH:MM:SS.
MIN Talk Over	The duration of the shortest talkover time that was detected in HH:MM:SS.
PCT Silence	The percentage of detected silence time.

Field	Definition
PCT Talk Over	The percentage of detected talkover time.
Silence Events	The number of detected silence events.
Talk Over Events	The number of detected talkover events.
TOT DUR Silence	The total duration of silence time in HH:MM:SS.
TOT DUR Talk Over	The total duration of talkover time in HH:MM:SS.

User Defined Metadata Fields

The user-defined metadata fields appear in the Available Columns list by default. Text is the only metadata field that appears in the Available Columns list by default until you configure your own metadata fields. See [User-Defined Metadata](#) for information on adding your own metadata fields.

The Date field always appears in the Show Columns list.

Managing the Interface Configuration

- To change the hour format in Interface Settings, select one of the options under Hour Format.
- To enable the export of Quality Management recordings in Interface Settings, select the check boxes next to the roles you want under Export Permissions.

If you select the Enable Export of Recordings check box, Quality Management Administrator automatically selects all roles. If you clear the Enable Export of Recordings check box, Quality Management Administrator automatically clears all roles.

- To assign columns in Recording Columns, choose a tab and select the columns you want to move.
 - To move all columns to the Available Columns list, click <<.
 - To move all columns to the Show Columns list, click >>.
 - To move multiple contiguous columns to the Available Columns list, click the first column and shift-click the last column you want from the Show Column list and

then click <.

- To move multiple contiguous columns to the Show Columns list, click the first column and shift-click the last column you want from the Available Column list and then click >.
- To move multiple non-contiguous columns in the Available Columns list to the Show Columns list, use the Ctrl key to select each column, and then click >.
- To move multiple non-contiguous columns in the Show Columns list to the Available Columns list, use the Ctrl key to select each column, and then click <.

Columns in the Available Columns list always appear in alphabetical order.