Cisco Unified Workforce Optimization

Quality Management Recording Controls User Guide Version 11.0

Contents

Introduction

Cisco Unified Workforce Optimization Quality Management allows you to record, store, score, and review agent calls in a contact center. The system administrator configures how to control the recording of calls. The workflows decide which recorded calls to store in the system for archive or review.

Because there are always special cases that you cannot anticipate or handle by creating a simple quality management workflow, Quality Management (Recording Controls) software provides commands that you can use to override the business logic found in the quality management workflows. The Recording Controls software allows you to control which recorded calls are stored, the content of the recorded calls, and even the data associated with the calls. This is sometimes called "record on demand", but the Recording Controls software allows you to do more than force the recording and storage of a call. Recording Controls allows you to:

- Tag an active call or the most recent call recording

- Record calls

- Pause and resume the recording of audio

- Restart or start the recording of a call

- Discard previously recorded audio and screen for a call and restart a new recording

- Delete the recording for the active call—once a call is over you cannot delete the recording

- Login or logout for hot desk recording

- Add metadata to an active call or the most recent call

Quality Management software includes the following user applications:

- Recording Controls IP Phone service

- Recording Controls Browser application

This guide describes how to use these user applications. For information on installing and configuring Recording Controls refer to the *Quality Management API Programmer Guide*.

For additional information on logs and debugging, see the *Quality Management Troubleshooting Guide.*

Recording Controls User Applications

There are two Recording Controls user applications that offer the same functionality but run on different platforms.

The two user applications are as follows:

- Recording Controls IP Phone Service

  Note: This feature is only available on Cisco IP phones.

- Recording Controls Browser Application

Supported recording types include:

- Agent Recording:
  - Desktop Recording
  - Network Recording
  - Server Recording (SPAN)
- Gateway/MediaSense Recording:
  - Acme Packet Gateway Recording
  - Cisco CUBE Recording via SIP
  - Cisco MediaSense Recording

  Note: The following recording commands are supported with Gateway/MediaSense Recording: Record Tag, Pause, Resume, Delete, and Metadata.

  Note: For Gateway/MediaSense Recording, the use of recording commands is not supported for extensions in the exclusion list.

Recording Controls IP Phone Service

The Recording Controls IP Phone Service is an IP phone service application available on a hard or soft IP phone. Any Quality Management users (agents or knowledge workers) who are configured for Desktop Recording, Network Recording, or Server Recording (SPAN) on their supported hard or soft IP phone can use the Recording Controls IP Phone Service. The Recording Controls IP Phone Service only sends recording commands to the configured Quality Management Recording Cluster.

Accessing the Recording Controls IP Phone Service

1. From your Cisco IP phone or Cisco IP Communicator soft phone, press the Services button.

   The Services menu appears.

2. Select the IP phone service for the Recording Controls.

   In this example, the name of Recording Controls IP Phone Service application is Recording Control.

   The Cisco Recording Controls base screen appears.
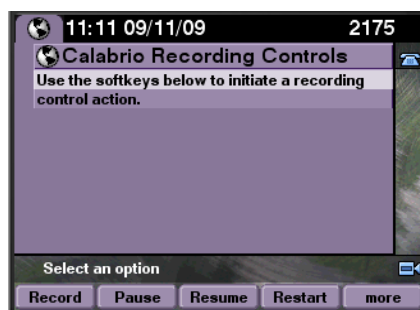
3. Press the button for the command you want to use.

   To see additional commands, press the More button.

   The base screen displays additional recording control commands.

Recording Controls Commands

The Recording Controls base screen is the launching pad for recording control commands. The recording control commands appear at the bottom of the screen. To see additional commands, press the More button.

The Recording Controls commands are simple one-button commands. When you press a command button, it sends the command to the configured Network Recording service for processing. Because the Network Recording service does not reply to these commands with success or failure messages, the Recording Controls application cannot report this information to you. The Recording Controls application can only report whether the command was sent successfully or not. This information appears on the Command results screen.
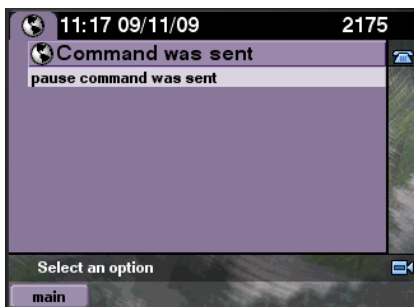
The previous figure indicates that the Recording Controls successfully sent the pause command. If Recording Controls could not send the command, an error message appears. If Recording Controls could not send the command, try sending the command again. If the command fails again, there might be a

networking or configuration issue that is preventing the Recording Controls application from sending the command. You must correct the problem to resolve the issue before the Recording Controls application can work properly.

The Metadata button initiates the Add Metadata command. This differs from the other recording control commands because it requires additional information. You must select the defined metadata field you want to attach to the call recording, and then assign a value to the field.

When you press the Metadata button, the Metadata menu screen appears.
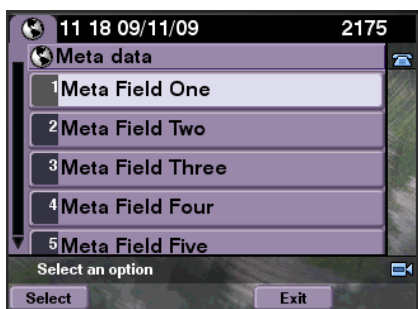
The metadata fields that appear in the menu are defined in Monitoring and Recording Administrator. Up to ten metadata fields can be defined in Quality Management.

Use the Up and Down buttons to scroll up and down the list to see all defined metadata fields. Select a metadata item and highlight it, and then press the Select button, or press the number button on the IP phone keypad that matches the menu item number shown on the screen.

When you have selected a metadata item, the Recording Controls IP Phone Service Metadata value screen appears. This screen displays the name of the selected metadata item and provides an interface for you to input a value for the selected item.

Use the IP phone keypad to enter numbers and letters in the Value field. Then press Submit.

Each metadata value is associated with a metadata type. The metadata type determines the type of characters you can enter in the metadata field. The valid metadata types are text, date, and number. The Monitoring and Recording administrator assigns the metadata type to the metadata in Monitoring and Recording Administrator.

If the metadata field is assigned the text metadata type, you can enter alphanumeric characters from the keypad. To choose a letter or number, press the key associated with the character repeatedly until the character appears on the screen.

Example 1: Key 2 allows you to choose from the following characters: a b c 2 A B C. To select A, press key 2 five times. Repeat for each character you want to include in the metadata field.

If the metadata field is assigned the date or number metadata type, you can enter numbers from the keypad.

Example 2: Press key 1 to enter 1 in the metadata field. The * and # keys provide additional symbols, including the dash/minus symbol and the decimal point.

Note: The metadata field does not allow the following characters: & < >

> **Example 3:** The user typed Gold in the value field for metafield1 and pressed Submit to send the command. The Metadata Results screen appears with a message.
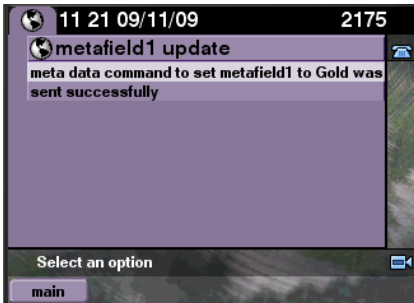
The Metadata Results screen indicates whether the sent metadata command succeeded or failed. The message includes the name of the metadata field and the value entered for the metadata command.

While you accept and make phone calls using a hard or soft IP phone, the Recording Controls IP Phone Service screen might be replaced with other screens from the system or other services. In these cases, you can simply press the Services button again and select the Recording Controls IP Phone Service to continue sending recording commands.

Press the Exit button to return to the Recording Controls IP Phone Service base screen.

Press the Services button to exit the Recording Controls IP Phone Service and return to the phone's base screen. Press the More button to return to the Recording Controls base screen.

> **Note:** Some hard IP phones might display the Cancel button instead of the Exit button. The screen examples in this document use the Cisco IP Communicator soft phone.

Recording Controls Browser Application

The Recording Controls Browser application is a web-based application. You can access it from a Windows desktop using Internet Explorer. See the

Installation Guide for the supported browsers.

The Programmer Guide window is the launching pad for recording control commands.
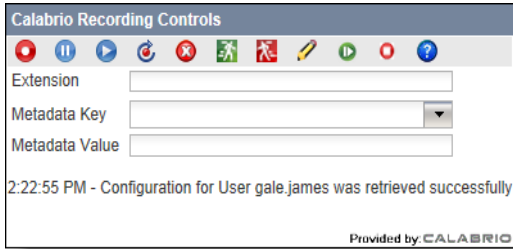
The following table lists the command buttons that can appear in the Recording Controls window.

Label	Icon
Record Tag	
Pause	
Resume	
Restart	
Delete	
Login	
Logout	
Metadata	
Start Segment	
Stop Segment	
Start Screen	
Stop Screen	

The Start Screen and Stop Screen commands are not displayed by default. They must be configured to appear by your administrator.

The Metadata Key and Metadata Value fields are associated with the Metadata button. For more information on how these fields are used, see Sending Metadata Commands.

The Programmer Guide window also provides a Help (🔵) button. Click this Help button to access the *Recording Controls User Guide*.
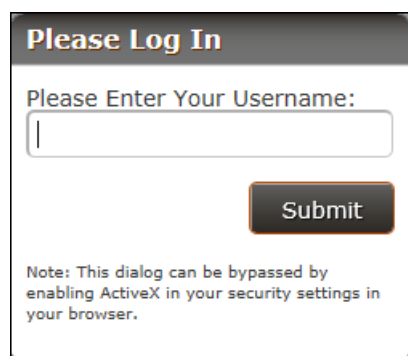
Accessing the Recording Controls Browser Application

1. Enter the following URL in Internet Explorer:

   ```
   http://<Web Base server>/recordingcontrols
   ```

   Where <Web Base server> is the IP address or hostname for the Cisco Quality Management Web Base server.

2. Depending on how your system is configured by your administrator, you might be prompted to enter your username. This is the same username you use to log in to Recording and Quality Management.

If there is more than one domain, you also must select the domain from the Choose Domain drop-down menu.

The Cisco Recording Controls window appears.
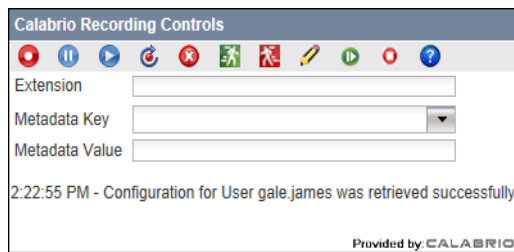
Sending Metadata Commands

1. From the Cisco Recording Controls window, choose a metadata key from the Metadata Key drop-down list box.

2. Enter a value in the Metadata Value field or leave it blank and then press the Metadata button.

   If the metadata type is text, enter one or more alphanumeric characters.

   If the metadata type is date or number, enter an integral number or calendar date. The valid characters are 0-9, the dash/minus symbols, and the decimal point used when entering integral numbers.

   Note: The Metadata Value field does not allow the following characters: & < >

   Recording Controls sends the metadata command.

   Note: Metadata sent after the call is completed might take up to an hour or more to display in the database.

Recording Commands

This section explains the following concepts:

- Syntax of recording commands
- Function of each recording command

- Active and last calls

- Using commands with an outbound dialer

Command Functions

Recording commands allow you to control a recording.

> **Example:** You can use recording commands to record a call, pause the recording, and attach metadata to a recording.

The following table describes how the recording commands interact with each other and the Quality Management components.

Recording commands

Command	Function
Record	Records a call and uploads the call to the Quality Management server at the end of the day. The Record command behaves as follows: ■ Agent Recording—marks a call for recording, even if archiving is not enabled and the call does not meet the workflow criteria. The Record command overrides both the Don't Record list and the workflow classifiers. ■ Gateway/MediaSense Recording—marks a recording as tagged if archiving is enabled and the call meets the workflow criteria. The Record overrides the workflow, but does not override an exclusion list in the Exclusion List window because the root contact does not know the agent's identity when recording. See "Recording Controls Considerations for Gateway Recording" in the *Administrator Guide* for more information. Quality Managementstores agent-tagged calls with the Agent Tagged reason code, and saves them for the retention time configured in Monitoring and Recording Administrator. Agent Recording: ■ The Record command is valid for the active call and the last call. ■ If Quality Management is not recording the active call, Quality Management starts recording the call when you invoke the command and adds the Agent Tagged reason code. ■ If Quality Management is recording two active calls (for example, an inbound ACD call and an outbound consultation call), Quality Management tags the call that triggered the recording to begin. ■ If Quality Management is not recording two active calls (for example, an inbound ACD call and an outbound consultation call), Quality Management begins recording the first call sent to the agent, based on the call start times, and tags the first call

Command	Function
	when you invoke the Record command.
	Gateway/MediaSense Recording and Agent Recording:
	■ When Quality Management actively recording a call, the Tag command adds the Agent Tagged reason code to the data associated with the call.
	■ When Quality Management is not actively recording a call, the Tag command changes the reason code associated with the last recorded call to the Agent Tagged reason.
	■ If Quality Management did not record the last call, nothing happens. Quality Management cannot update the reason code when no recording is available.

Command	Function

Pause	Temporarily halts the recording of:
	
	■ Audio—the audio recording is silent for the duration of the pause in the final recording where an agent discussed sensitive information.
	
	■ Screen—the screen recording displays the following message for the duration of the pause in the final recording where an agent typed sensitive information on the screen.
	
	`Screen recording paused`
	
	When you cannot record sensitive information (such as Social Security numbers) for security or liability reasons, use the Pause command. The Pause command allows you to omit sensitive information from the final recording. This command adheres to the Payment Card Industry Data Security Standard (PCI DSS) for protecting consumer data.
	
	Calls are available for playback prior to reconciliation with silence where an agent used the Pause command. These calls are accessible by anyone with the archive user role.
	
	When using the Pause command, note the following:
	
	■ Agent Recording:
	
	    ● The pause command is valid for active calls only.
	
	    ● If you send a pause command for a call currently in the paused state, the pause command has no effect.
	
	    ● The pause command does not affect live monitoring.
	
	■ Gateway/MediaSense Recording delays the pause. The pause will appear in the recording after the recording is uploaded.
	
	Issue the Resume command when you want to start recording after a pause.

Command	Function
Resume	Resumes recording after you issued a Pause command to stop the recording. Agent Recording: ■ The Resume command affects voice and screen recording. ■ If the call is not currently paused, the Resume command has no effect. ■ The Resume command is valid for active calls only. ■ If you do not use the Resume command, the point at which you paused the recording is the end of the audio recording. ■ A Resume command does not appear as a mutual silence event or talkover event during post-call processing.

Command	Function
Restart	Restarts or starts the recording of a call.
	Note: The Restart command is not supported with Gateway Recording and will be removed in a future release.
	Agent Recording:
	• If Quality Management is currently recording an active call, the Restart command stops the audio and screen recording, deletes that recording, and restarts recording the call from the point when you issued the Restart command.
	• If Quality Management s not currently recording an active call, the Restart command starts audio and screen recording.
	• The Restart command is valid for active calls only.
	• Quality Management assigns an Agent Tagged reason code to calls recorded using the Restart command. Quality Management saves the agent tagged calls even if archiving is not enabled and the call does not meet workflow criteria.
	Gateway/MediaSense Recording does not support the Restart command.
	Use this command if you call someone and you are immediately placed on hold for a long time. Issue the Restart command you leave the hold queue and begin speaking to a person. This eliminates the period when you are on hold (for example, 20 minutes of recorded on-hold music).

Command	Function
Delete	Marks a recording for deletion, even if archiving is enabled, the call meets workflow criteria, the extension is in the inclusion list, or it is tagged for retention. The Delete command deletes the recorded files and any metadata, and uploads the basic contact data to Quality Management to maintain accurate call counts. ■ The Delete command is valid for the active call only. ■ The Delete command has precedence over all other commands. ■ Once you delete a call you cannot record it by issuing the Record command. ■ Deleted calls are not available for archive purposes or quality management purposes. ■ You cannot view deleted calls in Cisco Unified Workforce Optimization. ■ For Gateway/MediaSense Recording, the recording is deleted for the person who sends the command, but the audio recording might continue to exist in the root call or in other calls associated with this call.
Login	Sends a login request that associates an agent with the specific extension for hot desking. The Recording Controls IP Phone Service does not have login/logout capabilities. Use Cisco's Extension Mobility IP Phone application to log in by phone. This command is not supported if you are using Gateway/MediaSense Recording.
Logout	Sends a logout request that associates an agent with the specific extension for hot desking. This command is not supported if you are using Gateway/MediaSense Recording.

Command	Function
Metadata	The Metadata command attaches metadata to an active call. If Quality Management does not upload the current call (or previous) for archiving because of workflow criteria, then the metadata will be uploaded to the database but will not appear in the interface. ■ The Metadata command is valid for the active call and the last call. ■ You can associate maximum of 30 metadata items with a call. You can accomplish this with 30 Metadata commands containing one key/value pair each, or one Metadata command containing up to 30 key/value pairs. ■ You can only attach metadata defined in Monitoring and Recording Administrator (Recordings > Metadata) to a call. If you add an unknown key to a Metadata command, Quality Management ignores the unknown key. The Metadata command interacts with the active call, including the time up until the next call starts. If you invoke the Metadata command during a call, Quality Management uploads the metadata to the database at the same time as the rest of the call data. If you invoke the Metadata command after the call but before the next call, Quality Management uploads the metadata separately at the time you invoke the command and Quality Management stores the metadata with the last known call. Calls that occur after a recorded call that do not match the inclusion list are not counted as the next call. **Note:** Quality Management resets the last known call at login, so Quality Managementcannot attach metadata to the last known call before logout or shutdown after the next login occurs. Quality Management attaches metadata to calls that span the configured end of day/upload time. Successive calls to the Metadata command using the same key name update the existing metadata for that call. Specifying an empty value for a key removes that metadata field

Command	Function
	association for the call. Valid formats for metadata are as follows. ■ Dates—Dates must be in yyyy-mm-dd format (for example 2009-09-24). ■ Numbers—Numbers can start with and contain a decimal point (for example, valid numbers are .30, 10.7, and 2500). Numbers cannot end with a decimal point or contain a comma (for example, invalid numbers are 30. and 2,500). ■ Text—Text key values cannot contain the reserved characters. **Example:** & or = All other alphanumeric characters are valid. You can find the decimal point in the * key menu and the dash in the zero key menu on your phone.

Command	Function
Start Segment	Starts the audio and screen recording of an active call. This command allows you to override the automatic exclusion lists to start recording their current call and treat it as a normal contact. Agent Recording: • If Quality Management is not currently recording an active call, the Start Segment command starts audio and screen recording. • If Quality Management is currently recording an active call, the Start Segment command has no effect. • If the active call ends before the recording is stopped by the agent, the recording is saved according to workflow criteria. • The Start Segment command does not override the workflow. • The Start Segment command does override the exclusion list in the Exclusion List window, because the root call does not know the agent's identity when recording. **Example:** If you are using an Outbound Dialer, you can add the Outbound Dialer to the exclusion list to prevent recording from starting when an agent logs in. The agent can use the Start Segment and Stop Segment commands to override the exclusion list and record each outbound call. For more information, refer to Using Commands with an Outbound Dialer. Gateway/MediaSense Recording does not support the Start Segment command.

Command	Function
Stop Segment	Stops the audio and screen recording of an active call. The recording is then saved according to workflow criteria as a new contact. ■ Agent Recording supports the Stop Segment command only during active calls. ■ Gateway/MediaSense Recording does not support the Stop Segment command. The agent can use the Stop Segment command to stop the recording after a sale has been made and before payment information is taken in order to omit customer data in adherence with PCI DSS.

Command	Function
Start Screen	Starts screen recording regardless of whether or not you are participating in an active call. Use this command to record chat or email interactions with a customer.
	Voice contact recordings and screen only contact recordings can be bracketed or interleaved.
	Example: You can send the Start Screen command to record your screen while not participating in an active call. If you receive a phone call or make a call during this time, a separate voice and screen contact might be created according to workflow (or you can send the Start Segment and Stop Segment commands to create the contact). After the active call has ended, another screen only contact is created and will continue until you send the Stop Screen command.
	Agent Recording:
	■ The Start Screen command is only supported with the Advanced bundle.
	■ If Quality Management is not currently recording an active call, the Start Screen command starts screen only recording.
	■ If Quality Management is currently recording an active call, the Start Screen command has no effect on the current recording. The screen only recording will begin after the active call has ended (if the Stop Screen command has not been issued). The call recording and the screen only recording are saved as separate contact recordings.
	Gateway/MediaSense Recording does not support the Start Screen command.
	After issuing the Start Screen command, you can send other commands. The following list contains the commands that are supported with screen only recording and the expected behavior.
	■ Pause—Pauses the current screen only recording

Command	Function
	■ Resume—When sent after the Pause command, resumes the screen only recording
	■ Restart—Stops the screen only recording, deletes that recording, and restarts the screen only recording from the point when you issued the Restart command.
	Note: The Restart command is not supported with Gateway Recording and will be removed in a future release.
	■ Delete—Deletes the screen only recording. You must send the Stop Screen command either before or after the Delete command in order to be able to send the Start Screen command again to start another screen only recording.
	■ Metadata—Attaches metadata to the active screen only recording
	All other commands have no affect on the current screen only recording.
	Issue the Stop Screen command to stop screen only recording.
Stop Screen	Stops screen recording.
	Agent Recording:
	■ The Stop Screen command is only supported with the Advance bundle.
	■ If Quality Management is currently recording screen only, the Stop Screen command stops the screen recording. The Stop Screen command only has an effect if you previously issued the Start Screen command.
	■ If the Stop Screen command is not sent after the Start Screen command, the maximum contact recording length is 4 hours.
	Gateway/MediaSense Recording does not support the Stop Screen command.

Command	Function
Config	Displays configuration information for the specified user. A user is configured for desktop recording if no serverHost is returned. In this case you need to send commands via the applet, not the server.

Effects of Issuing Recording Control Commands

The following table indicates the effect of issuing a recording command when the call is currently being recorded, and when the call is not being recorded.

Effect of issuing recording control commands on calls

Command	Currently Recording	Not Currently Recording
Record	Sets Reason Code to TAGGED.	Call recording starts. Sets Reason Code to TAGGED.
Pause	Recording paused.	None.
Pause URL	Recording paused.	None.
Resume	Recording resumes (if previously paused).	None.
Restart	Recording restarts. Sets Reason Code to TAGGED.	Recording starts. Sets Reason Code to TAGGED.
Delete	Call deleted.	None.
Start Segment	None.	Recording starts.
Stop Segment	Recording stops and is saved according to workflow criteria.	None.

Command	Currently Recording	Not Currently Recording
Start Screen	If there is a current voice and screen recording, the Start Screen command has no effect on the current recording. The screen only recording will begin after the active call has ended (if the Stop Screen command has not been issued) and will be created as a separate contact recording. If there is a current screen only recording, the Start Screen command has no effect.	Screen only recording starts.
Stop Screen	If there is a current screen only recording, screen recording stops. The Stop Screen command only has an effect if you previously issued the Start Screen command.	None.

Active and Last Call

You must understand the difference between the terms *active call* and *last call*. Some commands can apply to either one of these call types. Some commands can apply to a single call type.

An active call occurs when the Quality Management user is on a call with one or more parties. A call on hold is still an active call. The active call starts when the Quality Management user receives the call (phone is ringing) or makes a new call. The active call ends when the user hangs up the phone.

The last call is the previously recorded call. Any valid recording commands sent after a call ends, and until another call, that matched the inclusion list, is received or made by the user, apply to the last call.

The following table indicates whether the recording command applies to the active call, the last call, or both.

Recording commands that support Active Calls or Last Calls

Command	Active Call	Last Call
Pause	Yes	No
Pause URL	Yes	No
Resume	Yes	No
Record	Yes	No
Restart	Yes	No
Delete	Yes	No
Login	No—The recording command applies to the next active call.	No
Logout	Yes—An active call stop recording.	No
Metadata	Yes	Yes
Metadata and &active_call_only=true	Yes	No
Start Segment	Yes	No
Stop Segment	Yes	No
Start Screen	Yes—And when there is no active call.	No
Stop Screen	Yes—And when there is no active call.	No

Using Commands with an Outbound Dialer

An outbound dialer creates a single "nailed up" call for the entire time you are logged in. This results in all of your outbound calls being combined into one large recording, even though you might make numerous outbound calls during your session. Use the Start Segment and Stop Segment commands to break this large nailed up call into multiple contact recordings.

Send the Start Segment command at the beginning and the Stop Segment command at the end of each outbound call to create a unique contact recording

for each outbound call. The Start Segment command starts the audio and screen recording of an active call. The Stop Segment command stops the recording. The recording is then saved according to workflow criteria as a new contact. Send the Start Segment command again at the beginning of your next outbound call to start another unique contact recording.

You can also add the Outbound Dialer to the exclusion list to prevent recording from starting when an agent logs in. The agent can use the Start Segment and Stop Segment commands to override the exclusion list and record each outbound call.
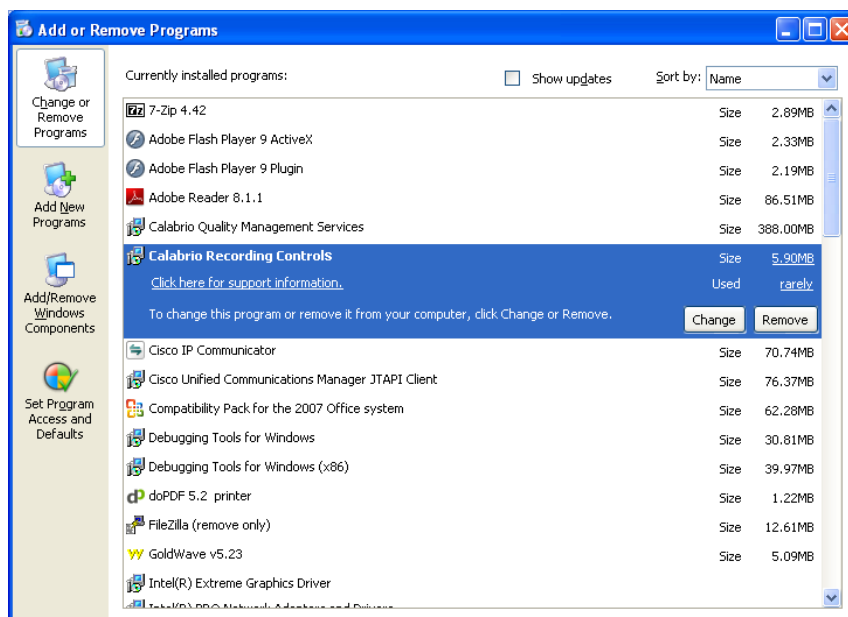
For information about commands, refer to Command Functions.

Removing Recording Controls

Use this procedure to remove the Recording Controls application from the Quality Management Web Base server.

1. Open the Windows Control Panel.

2. Double-click Add or Remove Programs.

   The Add or Remove Programs window appears.

3. From the list, select Cisco Recording Controls and click Remove.

   Windows removes the Recording Controls application.