



Cisco Unified Workforce Optimization

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Quality Management Integration Guide for CAD and Finesse

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Introduction

You can integrate Cisco Agent Desktop (CAD) and Cisco Finesse with Cisco Unified Workforce Optimization Quality Management via the Recording Controls API. CAD does this via its Hypertext Transfer Protocol (HTTP) action. HTTP actions pass information in the form of HTTP requests from the agent desktop to a third-party application (in this case, the Recording Controls API) using HTTP methods.

Quality Management can record an agent's calls from the agent's desktop or from a server. It supports the following recording scenarios.

- Gateway Recording, which includes:
 - Cisco MediaSense Recording
- Agent Recording, which includes:
 - Desktop Recording
 - Network Recording
 - Server Recording (SPAN)

Web Base Server Requirements

You need the following information when sending a recording command.

- Web Base server IP address
- Port number for the Web Base server—the Web Base server listens on port 80 for recording commands.
- sender_id—when sending recording commands to a Web Base server, you need to identify the Quality Management user associated with the command. You need to pass an additional parameter called “sender_id” and give it the value of the user’s ID as known to the Quality Management Administrator. There is a variable available in the CAD system that you can use for this purpose. CAD cannot send the sender_id and the peripheral_id at the same time. You need to send each as separate values.
- QM workflow—Assign CAD agents to a team in Quality Management, assign the team to a workflow, assign the team to a site, then assign recording clusters to the site.

Record Servers are available, to use the APIs. These recording clusters are not associated with any Record Servers.

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 Syntax

The Recording Controls API supports the following HTTP methods:

- GET

```
http://<Web Base server  
IP>/recordingcontrols/rest/<command>?<agent  
identifier>&<variable>=<variable value>
```

- POST

```
http://<Web Base server IP>/recordingcontrols/rest/<command>  
{  
  "<agent identifier>": "<agent identifier>",  
  "metadata": {  
    "<variable>": "<variable value>"  
  }  
}
```

where:

- <Web Base server IP> is the IP address of the Web Base server.
- <command> is the recording controls command you want to send. Valid commands are record, pause, resume, restart, delete, login, logout, metadata, start, stop, start_screen, and stop_screen.
- <agent identifier> is the peripheral_id and sender_id or the username or userdomain of the agent. For more information on agent identifiers, see [Agent Identifiers](#).
- <variable> and <variable value> (optional) are additional information you want to attach

to the command.

Example: `<key>=<value>` or `<key>:<value>`

Commands that require variables are login, logout, metadata, start_screen, and stop_screen.

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
Tag	<p>Records a call and uploads the call to the Quality Management server at the end of the day.</p> <p>Adds a reason code of TAGGED to the active call or call segment. The processing of the call based on this reason code will be performed by the services in the cloud.</p> <p>In the Recording Controls API, the <command> is record.</p> <p>The Tag command behaves as follows:</p> <ul style="list-style-type: none"> ■ Agent Recording—marks a call for recording, even if archiving is not enabled and the call does not meet the workflow criteria. The Tag 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 Tag 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 <i>Administrator Guide</i> for more information. <p>Quality ManagementSaaS stores agent-tagged calls with the Agent Tagged reason code, and saves them for the retention time configured in Quality Management AdministratorSaaS.</p> <p>Agent Recording:</p> <ul style="list-style-type: none"> ■ The Tag 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

Command	Function
	<p>consultation call), Quality Management tags the call that triggered the recording to begin.</p> <ul style="list-style-type: none"> ■ 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 when you invoke the Tag command. <p>Gateway/MediaSense Recording and Agent Recording:</p> <p>:</p> <ul style="list-style-type: none"> ■ The Tag command is valid for the active call and the last call. ■ When Quality ManagementSaaS actively recording a call, the Tag command adds the Agent Tagged reason code to the data associated with the call. ■ When Quality ManagementSaaS 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	<p>Temporarily halts the recording of:</p> <ul style="list-style-type: none"> ■ 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. <p style="text-align: center;"><code>Screen recording paused</code></p> <p>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.</p> <p>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.</p> <p>When using the Pause command, note the following:</p> <ul style="list-style-type: none"> ■ Agent Recording: <ul style="list-style-type: none"> • 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. <p>Issue the Resume command when you want to start recording after a pause.</p>

Command	Function
Resume	<p>Resumes recording after you issued a Pause command to stop the recording.</p> <p>Agent Recording:</p> <ul style="list-style-type: none">■ 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	<p data-bbox="586 268 1078 296">Restarts or starts the recording of a call.</p> <div data-bbox="586 317 1382 478" style="background-color: #e1f5fe; padding: 10px;"><p data-bbox="630 348 1268 447">Note: The Restart command is not supported with Gateway Recording and will be removed in a future release.</p></div> <p data-bbox="586 506 1305 533">In the Recording Controls API, the <command> is restart.</p> <p data-bbox="586 562 808 590">Agent Recording:</p> <ul data-bbox="618 625 1365 1287" style="list-style-type: none"><li data-bbox="618 625 1365 825">■ 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.<li data-bbox="618 867 1365 982">■ If Quality Management is not currently recording an active call, the Restart command starts audio and screen recording.<li data-bbox="618 1024 1268 1052">■ The Restart command is valid for active calls only.<li data-bbox="618 1087 1365 1287">■ 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. <p data-bbox="586 1318 1365 1388">Gateway/MediaSense Recording does not support the Restart command.</p> <p data-bbox="586 1419 1386 1587">Use this command if you call someone and you are immediately placed on hold for a long time. Issue the Restart command when 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).</p>

Command	Function
Delete	<p>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.</p> <p>In the Recording Controls API, the <command> is delete.</p> <ul style="list-style-type: none">■ 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 Tag command.■ Deleted calls are not available for archive purposes or quality management purposes.■ You cannot view deleted calls in Quality Management.■ 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	<p>Sends a login request that associates an agent with the specific extension for hot desking.</p> <p>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.</p> <p>In the Recording Controls API, the <command> is login. You must include the unique extension of the phone that the agent is logging into.</p> <p>This command is not supported if you are using Gateway/MediaSense Recording.</p>

Command	Function
Logout	<p data-bbox="586 264 1385 331">Sends a logout request that associates an agent with the specific extension for hot desking.</p> <p data-bbox="586 348 1300 382">In the Recording Controls API, the <command> is logout.</p> <p data-bbox="586 407 1170 474">This command is not supported if you are using Gateway/MediaSense Recording.</p>

Command	Function
Metadata	<p>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.</p> <p>In the Recording Controls API, the <command> is metadata. You must include at least one key/value pair (<key>=<value> or <key>:<value>).</p> <ul style="list-style-type: none">■ 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 Quality Management Administrator (Recordings > Metadata) to a call. If you add an unknown key to a Metadata command, Quality ManagementSaaS ignores the unknown key. <p>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 ManagementSaaS 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 ManagementSaaS uploads the metadata separately at the time you invoke the command and Quality ManagementSaaS 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.</p> <div data-bbox="589 1478 1383 1749" style="background-color: #e6f2e6; padding: 10px;"><p>Note: Quality ManagementSaaS resets the last known call at login, so Quality ManagementSaaS cannot attach metadata to the last known call before logout or shutdown after the next login occurs. Quality ManagementSaaS attaches metadata to calls that span the configured end of day/upload time.</p></div> <p>Successive calls to the Metadata command using the same key</p>

Command	Function
	<p>name update the existing metadata for that call.</p> <p>Specifying an empty value for a key removes that metadata field association for the call.</p> <p>Valid formats for metadata are as follows.</p> <ul style="list-style-type: none">■ 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. <div data-bbox="651 932 1365 1031" style="border: 1px solid #ccc; border-radius: 10px; background-color: #e6f2ff; padding: 10px; text-align: center;"><p>Example: & or =</p></div> <p>All other alphanumeric characters are valid.</p> <p>You can find the decimal point in the * key menu and the dash in the zero key menu on your phone.</p>

Command	Function
Start Segment	<p data-bbox="586 264 1385 365">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.</p> <p data-bbox="586 386 1279 415">In the Recording Controls API, the <command> is start.</p> <p data-bbox="586 443 812 472">Agent Recording:</p> <ul data-bbox="613 506 1370 1102" style="list-style-type: none"><li data-bbox="613 506 1370 627">■ If Quality Management is not currently recording an active call, the Start Segment command starts audio and screen recording.<li data-bbox="613 659 1370 730">■ If Quality Management is currently recording an active call, the Start Segment command has no effect.<li data-bbox="613 762 1370 884">■ If the active call ends before the recording is stopped by the agent, the recording is saved according to workflow criteria.<li data-bbox="613 915 1370 987">■ The Start Segment command does not override the workflow.<li data-bbox="613 1018 1370 1102">■ The Start Segment command does override the exclusion list in the Exclusion List window. <div data-bbox="651 1136 1365 1541" style="border: 1px solid #ccc; padding: 10px; background-color: #e6f2ff;"><p data-bbox="691 1167 1325 1507">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.</p></div> <p data-bbox="586 1566 1338 1633">Gateway/MediaSense Recording does not support the Start Segment command.</p>

Command	Function
Stop Segment	<p>Stops the audio and screen recording of an active call. The recording is then saved according to workflow criteria as a new contact.</p> <p>In the Recording Controls API, the <command> is stop.</p> <p>Desktop Recording supports the Stop Segment command only during active calls.</p> <ul style="list-style-type: none">■ Agent Recording supports the Stop Segment command only during active calls.■ Gateway/MediaSense Recording does not support the Stop Segment command. <p>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.</p>

Command	Function
Start Screen	<p>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.</p> <p>Voice contact recordings and screen only contact recordings can be bracketed or interleaved.</p> <div data-bbox="591 485 1383 863" style="border: 1px solid #ccc; padding: 10px; background-color: #e6f2ff;"> <p>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.</p> </div> <p>In the Recording Controls API, the <command> is start_screen.</p> <p>Agent Recording:</p> <ul style="list-style-type: none"> ■ The Start Screen command is only supported with the Advanced bundle. ■ If Quality ManagementSaaS is not currently recording an active call, the Start Screen command starts screen only recording. ■ If Quality ManagementSaaS 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. <p>Gateway/MediaSense Recording does not support the Start Screen command.</p> <p>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</p>

Command	Function
	<p>behavior.</p> <ul style="list-style-type: none">■ Pause—Pauses the current screen only recording■ 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. <div data-bbox="651 636 1369 821" style="border: 1px solid black; background-color: #e1f5fe; padding: 10px;"><p>Note: The Restart command is not supported with Gateway Recording and will be removed in a future release.</p></div> <ul style="list-style-type: none">■ 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 <p>All other commands have no affect on the current screen only recording.</p> <p>Issue the Stop Screen command to stop screen only recording.</p>

Command	Function
Stop Screen	<p>Stops screen recording.</p> <p>In the Recording Controls API, the <command> is stop_screen.</p> <p>Agent Recording:</p> <ul style="list-style-type: none"> ■ The Stop Screen command is only supported with the Advanced bundle. ■ If Quality ManagementSaaS 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. <p>Gateway/MediaSense Recording does not support the Stop Screen command.</p>
Config	<p>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.</p>

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.

Command	Currently Recording	Not Currently Recording
Tag	Sets Reason Code to TAGGED.	Call recording starts. Sets Reason Code to TAGGED.
Pause	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.

Command	Currently Recording	Not Currently Recording
Delete	Call deleted.	None.
Start Segment	None.	Recording starts.
Stop Segment	Recording stops and is saved according to workflow criteria.	None.
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.

HTTP Status Codes

The Recording Controls API returns HTTP status codes that indicate whether a command was successfully executed. These status codes are as follows.

Status Code	Description
200 OK	The command was executed successfully.
400 Bad Request	The command did not execute due to a configuration issue or invalid parameters.
401 Unauthorized	The command did not execute due to permission issues.
500 Internal Server Error	The command did not run due to an internal server error.

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 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 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.

Command	Active Call	Last Call
Pause	Yes	No
Resume	Yes	No
Tag	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
Segment and Save	Yes	No
Segment and Delete	Yes	No
Start Screen	Yes—And when there is no active call.	No
Stop Screen	Yes—And when there is no active call.	No

Command Examples

Login command examples:

- GET

```
http://<Web Base server IP>
/recordingcontrols/rest/login?sender_id=1234&peripheral_
id=5000&extension=1234
```

- POST

```
http://<Web Base server IP>/recordingcontrols/rest/login
{
  "sender_id": "1234"
  "peripheral_id": "5000"
  "extension": "1234"
}
```

Metadata command examples:

- GET

```
http://<Web Base server IP>
/recordingcontrols/rest/metadata?userdomain=acme&username=jan
edoe&<key>=<value>&<key>=<value>
```

- POST

```
http://<Web Base server IP>/recordingcontrols/rest/metadata
{
  "userdomain": "acme"
  "username": "janedoe"
  "metadata": {
    "<key>": "<value>",
    "<key>": "<value>"
  }
}
```

Pause command examples:

- GET

```
http://<Web Base server
IP>/recordingcontrols/rest/pause?sender_id=1234&peripheral_
id=5000
```

- POST

```
http://<Web Base server IP>/recordingcontrols/rest/pause
{
  "sender_id": "1234"
  "peripheral_id": "5000"
}
```

Resume command examples:

- GET

```
http://<Web Base server IP>
/recordingcontrols/rest/resume?userdomain=acme&username=janed
oe
```

- POST

```
http://<Web Base server IP>
/recordingcontrols/rest/resume
{
  "userdomain": "acme"
  "username": "janedoe"
}
```

Start segment command examples:

- GET

```
http://<Web Base server
IP>/recordingcontrols/rest/start?sender_id=1234&peripheral_
id=5000
```

- POST

```
http://<Web Base server IP>/recordingcontrols/rest/start
{
  "sender_id": "1234"
  "peripheral_id": "5000"
}
```


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 Segment and Save and Stop Segment Segment and Delete 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.

Integrating Recording Commands with CAD and Finesse

For more information on integrating CAD and Finesse with the Recording Controls API, refer to the *Quality Management Integration Guide for CAD and Finesse*.

Integrating CAD with the Recording Controls API Commands

This section provides examples on how to integrate CAD with the Recording Controls API commands. The examples provided in this section include:

- Tasks for configuring an HTTP Send Action to invoke the Metadata command to the Web Base server
- Task for configuring an HTTP Send Action to invoke the Stop command

Enabling the Integrated Browser

Before you can use HTTP actions, you must configure the Cisco Desktop Work Flow Administrator to support an integrated browser.

To enable the integrated browser in Cisco Desktop Work Flow Administrator:

1. From Cisco Desktop Work Flow Administrator, drill-down to CAD Agent > User Interface.
2. Clear the Enable Integrated Browser check box and then click Apply.

Configuring an HTTP Request for the Metadata Command Example

Before configuring an HTTP Request for the Metadata command in CAD, configure the user-defined metadata in Quality Management Administrator. See the *Quality Management Administrator User Guide* for more information. This example uses the following metadata: agentname.

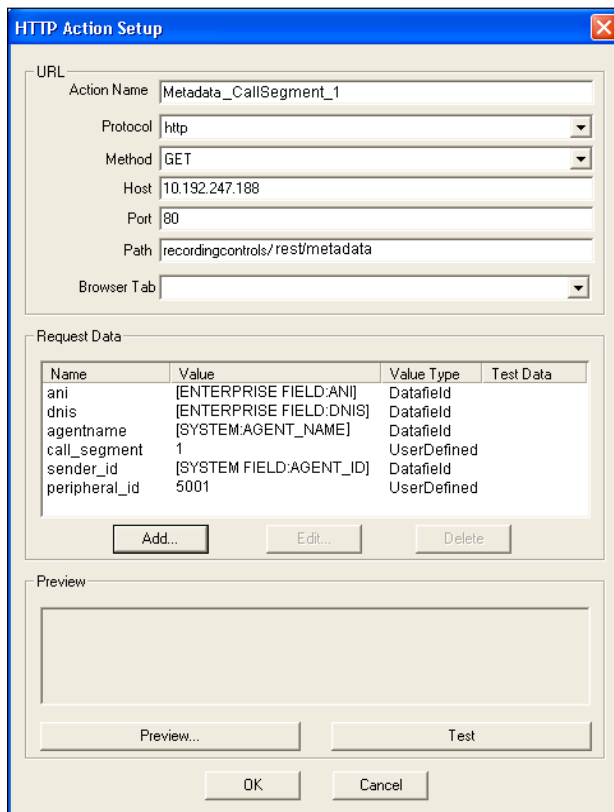
Use the following example to configure an HTTP request for the Metadata command. The HTTP request command sends the Metadata command to the Cisco Recording Controls on the Web Base server.

1. In Cisco Desktop Work Flow Administrator, create a new HTTP request in the HTTP Action Setup dialog box by completing the fields as follows:
 - Action Name: `Metadata_CallSegment_1`
 - Protocol: `http`
 - Host: `<Web Base server IP address>`

where <Web Base server IP address> is the IP address or hostname for the Web Base server. Note that this address is case sensitive.

- Port: 80
- Path: recordingcontrols/rest/metadata

The following figure shows an example of a completed HTTP Action Setup dialog box.



2. In the Request Data section, click Add.

The HTTP Request Data Dialog box appears.

3. Complete the fields and then click OK to close the HTTP Request Data Dialog box. For example:

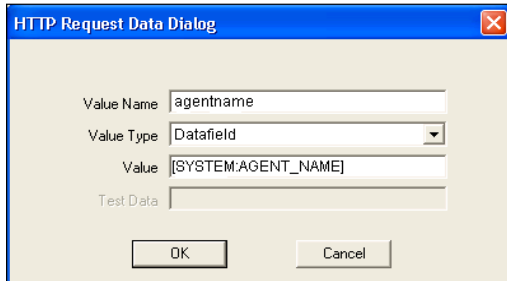
- Value Name: <key name>

where <key name> is the Key Name configured in Quality Management Administrator

Example: agentname

- Value Type: UserDefined
- Value: [SYSTEM:AGENT_NAME]

The following figure shows an example of a completed HTTP Request Data Dialog box for the “agentname” metadata field.



4. Continue adding HTTP request data for each metadata field configured in Quality Management (up to a total of 10 fields). The HTTP Request data also requires the sender_id and the peripheral_id (in this order).

All commands require the sender_id and peripheral_id.

5. Click OK to save HTTP Action Setup.

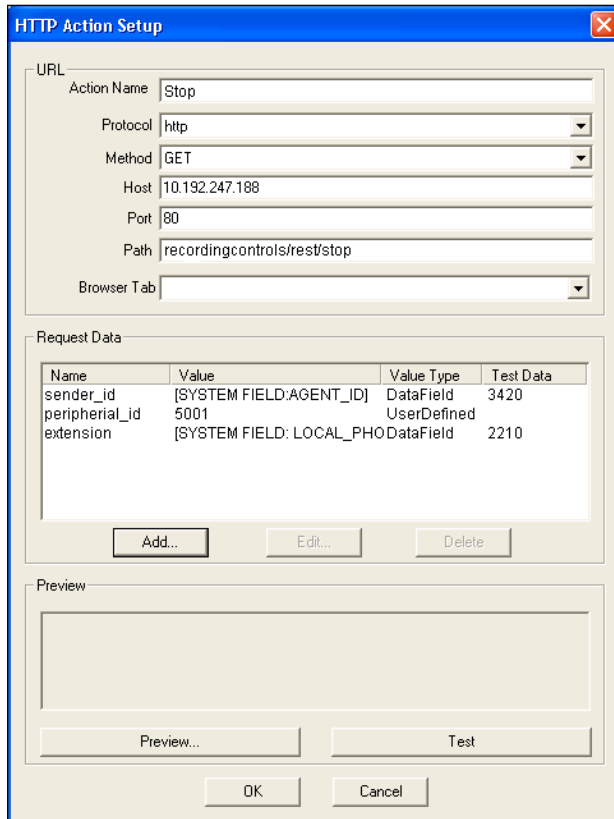
Configuring an HTTP Request for the Stop Command Example

Use the following example to configure an HTTP request for the Stop command. The HTTP request command sends the Stop command to the Cisco Recording Controls on the Web Base server.

1. In Cisco Desktop Work flow Administrator, create a new HTTP request in the HTTP Action Setup dialog box by completing the fields as follows:
 - Action Name: Stop
 - Protocol: http
 - Host: <Web Base server IP address> where <Web Base server IP address> is the IP address or hostname for the Web Base server. Note that this address is case sensitive.

- Port: 80
- Path: recordingcontrols/rest/stop

The following figure shows an example of a completed HTTP Action Setup dialog box.



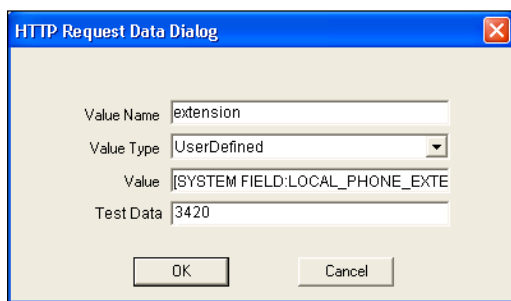
2. In the Request Data section, click Add.

The HTTP Request Data Dialog box appears.

3. Complete the fields and then click OK to close the HTTP Request Data Dialog box. For example:

Field Name	Value
Value Name	<key name> where <key name> is the Key Name configured in Quality Management Administrator Example: agentname
Value Type	UserDefined
Value	[SYSTEM FIELD:LOCAL_PHONE:EXTENSION]
Test Data	3420

The following figure shows an example of a completed HTTP Request Data Dialog box for the “extension” field.



4. Add the HTTP Request data for the sender_id and the peripheral_id (in this order).

All commands require the sender_id and peripheral_id.

5. Click OK to save HTTP Action Setup.

Integrating Finesse with Recording Controls API Commands

This section provides examples on how to configure Quality Management Recording Controls API commands from the Cisco Finesse Administrator. To do this, you must perform the following steps:

1. Create an HTTP Request workflow action. See “Add HTTP Request Workflow Action” in the *Cisco Finesse Administration Guide*.
2. Assign the action to a workflow that will trigger on “When a Call is answered”. See “Edit Workflow” in the *Cisco Finesse Administration Guide*.
3. Assign the workflow to a team of agents. See “Assign Workflows to Team” in the *Cisco Finesse Administration Guide*.

Once the workflow action is configured, the Recording Controls API commands are invoked from the Cisco Finesse Desktop when an agent answers a call.

Configuring an HTTP Request Action to Start Recording in Cisco Finesse Example

Use the following example to configure an HTTP request action to start recording in Cisco Finesse.

- In Cisco Finesse Administrator, create a new HTTP request action that will start a call recording by completing the fields as follows:
 - Name: `QM Record Start`
 - Type: `HTTP Request`
 - Handled by: `Finesse Desktop`
 - Method: `POST`
 - Location: `Other`

Note: Do not specify Finesse.

- Content Type: `text/json`
- URL: `http://<Web Base server IP address>/recordingcontrols/rest/start`

where <Web Base server IP address> is the IP address or hostname of the Quality Management Web Base server.

- Body: { "peripheral_id": "1", "sender_id": "\${loginId}" }

Note in the Unified CCX Body example that the peripheral ID is always 1.

Configuring an HTTP Request Action for Metadata in Cisco Finesse Example

Use the following example to configure an HTTP request action for metadata in Cisco Finesse.

Note: Workflow and Actions are configured in Cisco Finesse Administration Console. The workflows must be performed when the Dialog (call) ends. Otherwise, the metadata is tagged to the recording of the agent's previous call, not the current call.

- In Cisco Finesse Administrator, create a new HTTP request action that will invoke the Quality Management metadata command to set the account number and agent first name for the call by completing the fields as follows:
 - Name: QM Meta Data
 - Type: HTTP Request
 - Handled by: Finesse Desktop
 - Method: POST
 - Location: Other

Note: Do not specify Finesse.

- Content Type: text/json
- URL: http://<Web Base server IP address>/recordingcontrols/rest/metadata

where <Web Base server IP address> is the IP address or hostname of the Quality Management Web Base server.

■ Body:

```
{
  "peripheral_id": "1",
  "sender_id": "{loginId}",
  "metadata": {
    "account" : "callVariable1"
    "active_call_only":false
  }
}
```


Creating Cisco Gadgets in Finesse

This section explains how to install the Cisco gadgets on a Finesse server. The following gadgets are available:

- Cisco Recording Controls gadget—a Finesse URL gadget wrapper for Cisco Recording Controls
- Cisco Quality Management Playback gadget—a Finesse URL gadget wrapper for playing back recordings from Cisco

Installing a Gadget

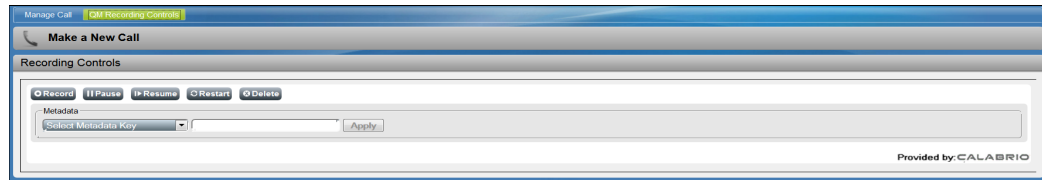
To install a gadget:

1. Log in to the Quality Management Web Base server and copy one of the following folders to a safe location:
 - For the Cisco Quality Management Playback gadget:
`C:\Program Files\Cisco\WFO_QM\Jetty\work\cone_ui\webapp\gadgets\PlayBackGadget_10.0.1`
2. Open the RecordingControls.xml or FinessePlayBackGadget.xml and make the following changes:
 - a. (Recording Controls and Finesse Playback) Change the IP address passed to the `finesse.modules.EmbeddedWebAppGadget.init` function in this XML file to match your Quality Management Web Base server address.
 - b. (Recording Controls only) Change the `peripheral_id` passed to the `finesse.modules.EmbeddedWebAppGadget.init` function to match your Quality Management system. That is 1 for Unified CCX.
3. Log in to the Finesse server.
4. Upload all the files from your safe location to the Finesse 3rdpartygadget folder on the Finesse server as described in the [Cisco Finesse Web Services Developer Guide](#) on the Cisco DevNet website. When uploading the files, note the following:
 - You will need to create a RecordingControls or PlayBackGadget folder for the gadget files that avoids naming conflicts with other third-party gadget files.
 - You will need to add the gadget to your Finesse layout as follows:

For the Cisco Recording Controls gadget:

```
<gadget>/3rdpartygadget/files/RecordingControls/RecordingC  
ontrols.xml</gadget>
```

The gadget will appear as follows within the Finesse Agent Desktop.



For the Cisco Quality Management Playback gadget:

```
<gadget>/3rdpartygadget/files/FinessePlayBackGadget/Finess  
ePlayBackGadget.xml</gadget>
```

Once you enter you Cisco Quality Management username and password, the gadget will appear as follows within the Finesse Agent Desktop.

A screenshot of the Cisco Quality Management Playback gadget interface. It displays a table titled 'Recordings' with columns for Contact ID, First Name, Last Name, Date, Callout Number, Calling Number, Call Duration, and Extensions. The table contains 20 rows of data, with the 15th row highlighted in yellow. The interface also includes a 'View in WFO' button and a '1 of 42' indicator.

Contact ID	First Name	Last Name	Date	Callout Number	Calling Number	Call Duration	Extensions
396738	QA	CAS3	Dec 4, 2014 12:02:20 AM	5003	11100	00:03:00	5003
396741	QA	CAS3	Dec 4, 2014 12:09:39 AM	5003	11100	00:03:00	5003
396744	QA	CAS3	Dec 4, 2014 12:18:24 AM	5003	11100	00:03:00	5003
396747	QA	CAS3	Dec 4, 2014 12:25:43 AM	5003	11100	00:03:00	5003
396750	QA	CAS3	Dec 4, 2014 12:33:02 AM	5003	11100	00:03:00	5003
396753	QA	CAS3	Dec 4, 2014 12:40:22 AM	5003	11100	00:03:00	5003
396756	QA	CAS3	Dec 4, 2014 12:47:41 AM	5003	11100	00:03:00	5003
396759	QA	CAS3	Dec 4, 2014 12:55:00 AM	5003	11100	00:03:00	5003
396762	QA	CAS3	Dec 4, 2014 01:02:20 AM	5003	11100	00:03:00	5003
396765	QA	CAS3	Dec 4, 2014 01:09:39 AM	5003	11100	00:03:00	5003
396768	QA	CAS3	Dec 4, 2014 01:18:24 AM	5003	11100	00:03:00	5003
396771	QA	CAS3	Dec 4, 2014 01:25:43 AM	5003	11100	00:03:00	5003
396774	QA	CAS3	Dec 4, 2014 01:33:02 AM	5003	11100	00:03:00	5003
396777	QA	CAS3	Dec 4, 2014 01:40:22 AM	5003	11100	00:03:00	5003
396780	QA	CAS3	Dec 4, 2014 01:47:41 AM	5003	11100	00:03:00	5003
396783	QA	CAS3	Dec 4, 2014 01:55:00 AM	5003	11100	00:03:00	5003
396786	QA	CAS3	Dec 4, 2014 02:02:20 AM	5003	11100	00:03:00	5003
396789	QA	CAS3	Dec 4, 2014 02:09:39 AM	5003	11100	00:03:00	5003
396792	QA	CAS3	Dec 4, 2014 02:18:23 AM	5003	11100	00:03:00	5003