



# Cisco Unified Workforce Optimization

Quality Management Quality Management Troubleshooting Guide  
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Quality Management Troubleshooting Guide

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# Introduction

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This document provides basic troubleshooting information for Cisco Quality Management.

The troubleshooting information in this document includes:

- How to locate each service's configuration, log, and debug files.
- How to implement logging, which you can use to monitor your Quality Management environment and troubleshoot issues.
- How to recognize and resolve some of the most common error conditions.



# Event Timestamps

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Many features within Quality Management rely on timestamps of events to properly associate data with the correct person or call. Quality Management requires that all servers running Cisco software are configured to use the same Network Time Protocol (NTP) server as Cisco Unified Contact Manager. Windows Time Service is one method that can be used for this purpose.





# Service Names and Executables

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The following table lists the services installed with Quality Management.

Service Name	Description	Executable
Monitoring and Recording Data API Service	<p>The Monitoring and Recording Data API (Data API) service is the interface between the Jetty webserver and the Quality Management database.</p> <p>The Data API service evaluates a quality workflow based on current End of Day (EOD) time. If the EOD time changes, the Data API service is notified immediately and all calls will be processed using the new EOD time. See the <i>Administrator Guide</i> for more information on EOD.</p> <p>The Data API service will process quality workflow in 24-hour batches based on current EOD. (At most, it will process 10 days worth of unprocessed contacts per session.)</p> <p>The Data API service receives connection information when an agent logs into Recording and Quality Management. The information is used by the live screen monitoring feature.</p>	datapa.exe
Monitoring and Recording DB Cleaner Service	<p>The Monitoring and Recording DB Cleaner (DB Cleaner) service purges the following data on a daily basis:</p> <ul style="list-style-type: none"><li>■ Records from the Quality Management database</li><li>■ Media files from the Site Upload server</li></ul> <p>Errors in the DB Cleaner processes are included in the Eventlogging table and are reported on MANA .</p>	dbcleaner.exe

Service Name	Description	Executable
Monitoring and Recording Contact Reconciliation Service	The Monitoring and Recording Contact Reconciliation (Contact Reconciliation) service gathers all information for a call recording received through the Session Border Controller (SBC). It then stores the contact information for the call in the Quality Management database.	reconciliation.exe
Monitoring and Recording DB Proxy Service	<p>In a Quality Management deployment, the Monitoring and Recording DB Proxy (DB Proxy) service is the point of connection between the Upload Controller and the Quality Management database.</p> <p>The DB Proxy service tells the Upload Controller when to upload or delete a recording. If not enough information is known about a recording to indicate that it should be updated or deleted, the DB Proxy service tells the Upload Controller to ask again at EOD.</p>	dbproxy.exe
Monitoring and Recording File Observer Service	The Monitoring and Recording File Observer (File Observer) service watches a specific file location for post-call surveys. the default location is C:\Program Files\Common Files\QM\surveys. When a new survey file appears in this folder, the File Observer service imports the file into Recording and Quality Management.	fileobserver.exe
Monitoring and Recording Jetty Service	The Monitoring and Recording Jetty (Jetty) service webserver hosts the Quality Management Reports webapp, C1Surrogate webapp, Media webapp, Server API engine, and Licensing webapp.	jetty.exe

Service Name	Description	Executable
Monitoring and Recording Jetty Service	<p>The Media API manages:</p> <ul style="list-style-type: none"><li>■ The upload of recordings and call metadata from the recording clients to permanent storage.</li><li>■ The deletion of recordings and call metadata from permanent storage.</li><li>■ The status of recordings.</li><li>■ The load balancing of compliance requests to the least busy encoding service. The Media Encoder service gets a copy of the file from permanent storage, decrypts the recording, edits out the compliance events from the recording, encrypts the recording, and then updates the existing file on permanent storage.</li><li>■ The load balancing of playback requests to the least busy encoding service. The Media Encoder server gets a copy of the voice and screen files from permanent storage, combines them into a single media file and copies the recording to a shared temporary location where the user can play back the recording in the Media Player.</li><li>■ The load balancing of the</li></ul>	MediaEncoder.exe

Service Name	Description	Executable
	<p>energy bar request to the least busy encoding service. The energy bar data is specific to the audio recording and is displayed in the Media Player.</p> <ul style="list-style-type: none"> <li>■ The load balancing of an export request to the least busy encoding service. The Media Encoder service gets a copy of the voice or screen file from permanent storage, decrypts the recording, encodes the recording to the request file format, and then copies it to a shared temporary location. An alert is sent in Unified Workforce Optimization when the exported file is ready for download.</li> </ul> <p>You must install the Media Encoder service on at least one Media Encoder server. You can choose to install the Media Encoder service on multiple Media Encoder servers.</p>	
Monitoring and Notification Service	<p>The Monitoring and Recording Monitoring and Notification (MANA) service polls the Quality Management system for problems. When there are problems, the MANA service sends alerts to the administrators through the event viewer, email, or SNMP. You can select the problems that trigger the notification in Quality Management Administrator.</p>	mana.exe

Service Name	Description	Executable
Monitoring and Recording Monitor Service	The Monitoring and Recording Monitor (Monitor) service works in conjunction with the Network Recording service for Server Recording. The Monitor service filters the packets coming from a Switched Port Analyzer (SPAN) session and forwards the packets to the Network Recording service for recording.	MonitorServer.exe
Monitoring and Recording Network Recording Service	The Monitoring and Recording Network Recording (Network Recording) service records voice for agents who are configured for Server Recording, Network Recording, Network Based Recording, or Gateway Recording.	VoiceRecordServer.exe
Monitoring and Recording Retrieval Service	The Monitoring and Recording Retrieval (Retrieval) services obtains adherence results from WFM for the gamification feature.	retrieval.exe
Monitoring and Recording Sync Service	The Monitoring and Recording Sync (Sync) service synchronizes the following users every 10 minutes: <ul style="list-style-type: none"> <li>■ Agents and supervisors from Unified CCX</li> </ul>	sync.exe
Monitoring and Recording Upload Controller	The Monitoring and Recording Upload Controller (Upload Controller) service manages the upload of recordings and call metadata from the recording clients.	UploadController.exe

Service Name	Description	Executable
<p>Monitoring and Recording CTI Service</p>	<p>The Monitoring and Recording Computer Telephony Integration (CTI) service (Recording CTI service) creates a monitoring session using the Cisco Unified Communications Manager (Unified CM) Java Telephony Application Programmer Interface (JTAPI) to get call control events and status updates from monitored devices.</p> <p>The Recording CTI service sends events to the Network Recording service when there is a change in the status of monitored phones. The recording CTI service also sends screen recording start/stop signals to the recording clients.</p> <p>Install this service if you plan to use Desktop Recording, Network Recording, or Server Recording (SPAN).</p> <p>When you install the CTI service, remember that the CTI service cannot be coresident with the CUBE SIP CTI.</p>	<p>ctiservice.exe</p>

Service Name	Description	Executable
Monitoring and Recording CUBE SIP CTI Service	<p>The Monitoring and Recording Cisco Unified Border Element (CUBE) Session Initiation Protocol (SIP) CTI service (CUBE SIP CTI service) creates a monitoring session by responding to SIP INVITEs from the CUBE. The CUBE SIP CTI service sends events to the Network Recording service when there is a change in the status of monitored phones.</p> <p>Install this service if you plan to use Cisco CUBE Recording via SIP Recording or Network Based Recording. When you install the CUBE SIP CTI service, remember the following points:</p> <ul style="list-style-type: none"> <li>■ The CUBE SIP CTI service is required for CUBE Recording or Network Based Recording.</li> </ul>	cubeservice.exe
Monitoring and Recording MediaSense Subscription Service	<p>The Monitoring and Recording MediaSense Subscription (MediaSense Subscription) service registers Cisco MediaSense events. When a call is recorded on the Cisco MediaSense cluster for a registered device, this service receives an event with information related to the call recording and sends it to the Network Recording service that is associated with the VoIP device that was recorded. The Network Recording service downloads the raw data files, stores them in the Recordings folder, and writes the data associated with the call to the database.</p> <p>Install this service if you plan to use Cisco MediaSense Recording or Network Based Recording.</p>	mssubservice.exe

The following table lists the services for Quality Management that appear in the Windows Services utility on the client desktop.

Service Name	Description	Executable
Desktop Recording service	<p>The Desktop Recording service is responsible for:</p> <ul style="list-style-type: none"> <li>■ Screen recording and upload for Gateway Recording, Network Recording, Network Based Recording, Server Recording</li> <li>■ Voice recording, screen recording, and upload for Desktop Recording (Endpoint)</li> <li>■ Live Screen Monitoring for all recording types.</li> </ul> <p>The Desktop Recording service must be installed on:</p> <ul style="list-style-type: none"> <li>■ All Endpoint voice recording client desktops and screen recording client desktops in a Cisco environment</li> </ul> <p>If a user is configured for Network Recording, Network Based Recording, or Server Recording and the agent's desktop is daisy-chained to a phone, voice recording occurs on the server.</p>	DesktopRecordServer.exe
Windows Media Player Network Sharing Service		WMPNetwk.exe



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# Ident Setup Registry

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The location of ident setup registry is:

```
HKEY_LOCAL_MACHINE\SOFTWARE\Cisco\QM\Ident
```

The ident registry entries for Quality Management are as follows.

## Ident registry entries

Key	Value	Type	Description
Admin	(default)	string	1 if the services/applications associated are installed; key is absent otherwise
Playback	(default)	string	1 if the services/applications are installed; key is absent otherwise
Record	(default)	string	1 if the services/applications associated are installed; key is absent otherwise
CTI	(default)	string	1 if the services/applications associated are installed; key is absent otherwise.
DB	(default)	string	1 if the services/applications are installed; key is absent otherwise
LDAP	(default)	string	1 if the services/applications associated are installed; key is absent otherwise
Screen	(default)	string	1 if the services/applications associated are installed; key is absent otherwise
Monitor	(default)	string	1 if the services/applications associated are installed; key is absent otherwise



# Logs and Debugging

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The default settings are usually sufficient for debugging issues in your Quality Management environment. However, Cisco Technical Support occasionally encounters issues that require more scrutiny. Understanding how Quality Management implements logging will help you work with Cisco Technical Support to resolve your issues more quickly and easily.

The logging and debugging information provided in this section applies to Quality Management.

You can pick and choose which log statements are written and where these statements are written. The logging level, or threshold, defines the log statements you want to see. You can also identify the destination where the log statements are written.

Every log statement is associated with a specific threshold, which has to do with the severity of the event the statement describes and the amount of information the statement contains.

These thresholds are organized in order of their severity.

**Example:** The WARN threshold is higher than the INFO threshold, which in turn is higher than the DEBUG threshold.

Applications and services use logging to report their current status, including problems. Each application and service creates two files:

- **Log files** (LOG file extension): The log files contain status messages and, if problems occur, warning and other error messages. A log file associates each message with an error code. See the *Error Code Dictionary* for more information on error codes.
- **Debugging files** (DBG file extension): The debugging files are empty when you disable debugging. When you enable debugging (the default setting), the files contain diagnostic information that can help resolve issues.

The following table shows the location of the log and debugging files.

Where Used	Folder Location
<b>Quality Management</b>	
Server Computer	C:\Program Files\Cisco\WFO_QM\log
Desktop	C:\Program Files (x86)\Cisco\WFO_QM\log (for Windows 7)
	C:\Program Files (x86)\Cisco\WFO_QM\log (for Windows XP)
<b>CRX</b>	
CRX install machine	C:\Program Files\Cisco\Cisco Recording Export\log

Where Used	Folder Location
<b>Cisco Recording Controls</b>	
Recording Controls	C:\Program Files\Cisco\WFO_QM\log

The default configuration settings limit each log and debugging file to a maximum of 10 MB and 20 rolling files for services and 5 MB and 5 rolling files for applications.

**Example:** When a service’s log or debug file reaches 10 MB, it is closed and renamed, and a new debug file.

## C++ Configuration Files

C++ configuration files (CFG extension) produce logs using the following number scheme:

```
<name>0001.log
<name>0002.log
```

Quality Management and CRX initially creates the <name>0001.log. When the <name>0001.log is full, Quality Management or CRX creates the <name>0002.log. When the <name>0002.log is full, Quality Management or CRX clears the <name>0001.log and reuses it. The process repeats as Quality Management or CRX fills each log. Only one of the two logs is active at any given time.

Debug logs follows the same numbering scheme, but it uses the \*.dbg file extension.

**Important:** There is no preservation method for changes to CFG files on a software upgrade. If you need to make a log change to the following files, they must be made directly to the installed files.

The following files will be overwritten with new software upgrades:

- Voice Record Service (VoiceRecordServer.cfg)
- Screen Record Service (ScreenRecordServer.cfg, ScreenRecordProcess.cfg)
- Desktop Service (DesktopRecordServer.cfg, DesktopRecordProcess.cfg)
- Upload Controller (UploadController.cfg)
- Media Encoder (MediaEncoder.cfg)

## Java Configuration Files

Java configuration files (properties extension) produce logs using the following number scheme:

<name>.log  
 <name>.log.1

Quality Management and Cisco Recording Controls create the <name>.log file. When the log file is full, Quality Management and Cisco Recording Controls save it as the <name>.log.1 file. The <name>.log file is always the active file.

Debug logs follows the same numbering scheme, but it uses the \*.dbg file extension.

Changes to the properties files in the C:\Program Files\Cisco\WFO\_QM\config directory will be overwritten by software upgrades.

**To preserve changes to Java configuration files across upgrades:**

- Create a properties file with the same name as properties file you want modified in the following directory:

C:\Program Files\Common Files\QM\config

**Important:** Do not put properties that you do not want overridden in this file. Do not copy the original properties file and change one item. Doing so could override a required configuration change from a software upgrade.

**Example:** If you want to increase the heap size for MANA to 1024 MB, you should create a manaservice.properties file in the C:\Program Files\Common Files\QM\config directory with the following line:

```
service4j.jvmOptions=-Xmx1024M
```

## Log Message Formats

The various log and debug file messages use the following message formats. An example follows each message format.

Message Type	Format
C++ and Java LOG file messages	<pre>&lt;timestamp&gt; &lt;level&gt; &lt;error code&gt; &lt;error text&gt;</pre> <div style="background-color: #e0f0f0; padding: 5px; margin-top: 10px;"> <p><b>Example:</b> 2007-02-28 09:29:11.723 INFO                      ABCD1234 Successfully launched update.</p> </div>

Message Type	Format
C++ DBG file messages	<pre>&lt;timestamp&gt; &lt;level&gt; [&lt;thread ID&gt;] &lt;text&gt;</pre> <p><b>Example:</b> 2007-02-28 14:51:13.723 DEBUG [0xaa8]</p> <p>CSqmcApiBase::_doRecovery: Connected to QM Controller.</p>
Java DBG file messages	<pre>&lt;timestamp&gt; &lt;level&gt; [&lt;thread name&gt; &lt;class&gt;#&lt;method&gt;:&lt;line&gt; ] &lt;text&gt;</pre> <p><b>Example:</b> 2007-04-07 15:04:31.954 STACK [Thread-2 Init#run:113] Started.</p>
Java (log4j) LOG file messages	<pre>&lt;timestamp&gt; &lt;level&gt; [&lt;thread name&gt; [&lt;class&gt;] &lt;text&gt;</pre> <p><b>Example:</b> 2007-04-07 14:54:00,0670 INFO [Thread-2] [com.cisco.morepackages.Init] Started.</p>

## Configuration Files

Each Quality Management application, service, or CRX has an associated configuration file that controls logging and debugging. You can edit these files in a text editor such as Windows Notepad to change the logging and debugging parameters.

**Caution:** Edit the configuration file only as described in this section. Improper changes can result in logging and/or program failure, including the possible loss of data. It is recommended that you make a safety backup of any file you edit before you make changes to it.

## Configuration Files for Quality Management

Most of the configuration files for Quality Management are located in the C:\Program Files\Cisco\WFO\_QM\config folder on the client or base server except where noted in the following tables.

Quality Management configuration files and log files on the server

Service / Application	Configuration File	Log File
<b>Base Services</b>		
Data API service	datapa.properties	datapa.log datapa.dbg.N
Jetty service	jetty.properties	jetty-request-YYY_MM_DD.-log.N jetty.dbg
	C1Surrogate.properties	C1SurrogateNNNN.log C1SurrogateNNNN.dbg
	exportedRecordingServlet.properties.	exportedRecordings.log exportedRecordings.dbg
Media service	media.properties	media.log media.dbg
MANA service	manaEmergency.properties	mana.log
	manaservice.properties	mana.dbg.N
Sync service	DirAccessSynSvr.cfg	DirAccessSynSvrNNNN.log, DirAccessSynSvrNNNN.dbg
	sync.properties	sync.log sync.dbg
ContactDelete utility	contactdelete.properties	ContactDelete.log ContactDelete.dbg
Configuration Setup	postinstall.properties	postinstall.log
	sitedefaults.properties	postinstall.dbg
	platform.properties <b>Note:</b> Do not edit this file.	
Quality Management Administrator	admin.properties	admin.log admin.dbg
<b>Database Services</b>		

Service / Application	Configuration File	Log File
DB Cleaner service	dbcleaner.properties	dbcleaner.log dbcleaner.dbg
DB Proxy service	dbproxy.properties	dbproxy.log dbproxy.dbg
<b>Site Upload Server</b>		
Jetty service	jetty.properties	jetty-request-YYY_MM_DD.-log.N jetty.dbg
	C1Surrogate.properties	C1SurrogateNNNN.log C1SurrogateNNNN.dbg
	exportedRecordingServlet.properties.	exportedRecordings.log exportedRecordings.dbg
Media service	media.properties	media.log media.dbg
Upload Controller service	dbupload.properties	dbUpload.log dbUpload.dbg
	UploadController.cfg	UploadControllerNNNN.log, UploadControllerNNNN.dbg
<b>Signaling Services</b>		
CTI service	ctiservice.properties	ctiservice.log.N ctiservice.dbg.N
	CTIservice.cfg	CTIserviceNNNN.log CTIserviceNNNN.dbg
CUBE SIP CTI service	cubeservice.properties	cubeservice.log.N cubeservice.dbg.N
MediaSense Subscription service	mssubservice.properties	mssubservice.log mssubservice.dbg
<b>Reconciliation Services</b>		



Service / Application	Configuration File	Log File
Contact Reconciliation service	reconciliation.properties	reconciliation.log reconciliation.dbg
ICM Reconciliation service	icmrecon.properties	icmrecon.log icmrecon.dbg
<b>Recording Services</b>		
Network Recording service	RecordServer.cfg	RecordServerNNNN.log RecordServerNNNN.dbg
Voice Record server	VoiceRecordServer.cfg	VoiceRecordServerNNNN.log VoiceRecordServerNNNN.dbg
<b>Monitoring Services</b>		
Monitor service	MonitorServer.cfg	MonitorServerNNNN.log MonitorServerNNN.dbg
<b>Media Encoding Services</b>		
Media Encoding Service	MediaEncoder.cfg	MediaEncoderNNNN.log MediaEncoderNNNN.dbg
<b>Additional Services / Applications</b>		
License Servlet	licensing.properties	licensing.log licensing.dbg
Locale	locale.properties	
Quality Reports	qmr.properties	SQMR.log SQMR.dbg
Quality Reports	reportConfig.properties	SQMR.log

The following table displays the Quality Management configuration files and log files on the client.

**Quality Management configuration files and log files on the client**

Service / Application	Configuration File	Log File
Quality Management Administrator	admin.properties	admin.log admin.dbg
Configuration Setup	postinstall.properties	postinstall.log, postinstall.dbg
Desktop Recording	DesktopRecordServer.cfg	DesktopRecordServerNNNN.log DesktopRecordServerNNNN.dbg
Recording Thin Client	ScreenRecordServer.cfg	ScreenRecordServerNNNN.log ScreenRecordServerNNNN.dbg  <div style="border: 1px solid black; background-color: #e1f5fe; padding: 5px; margin: 5px 0;"> <p><b>Note:</b> These logs are located in one of the following locations:</p> <ul style="list-style-type: none"> <li>■ %HOMESHARE%\QM\log\</li> <li>■ %HOMEDRIVE%%HOMEPATH%\QM\log\</li> </ul> </div> <p>To determine the exact path on your machine to HOMESHARE, HOMEDRIVE, or HOMEPATH, open the Command window (cmd.exe), type SET HOME, and then press the Enter key.</p>

## Configuration File for CRX

The configuration file for CRX is called QMExport.cfg. The QMExport.cfg file is located in the C:\Program Files (x86)\Cisco\Cisco Recording Export folder.

The QMExport.cfg file contains settings under [Config] that allow you to change CRX behavior. These settings are as follows:

- MaxExports—the maximum number of rows displayed to the user when running automated or manual contact searches is 10,000. This is also the maximum number of contacts that can be exported for a single search or task. The value is commented out by

default. To change the value remove the hash (#) and enter the appropriate value.

```
Example: MaxExports=5000
```

- **ThreadPoolSize**—the number of threads uses to process the export filter. The more threads specified, the faster the export process will run. Do not set the number of threads to a value greater than the number of CPU cores on your machine

```
Example: ThreadPoolSize=4
```

The default value for the ThreadPoolSize depends on your CRX license type:

- Export Basic uses a single thread.
- Export Advanced uses multiple threads. The default is 4.

**Note:** Be careful when changing these settings because they might affect the CRX results and performance. Cisco recommends changing these settings only when requested by Cisco Technical Support.

## About Debugging

You can configure the debugging thresholds for Quality Management, Recording Controls , and CRX . Debugging thresholds that help you diagnose problems. Quality Management, Recording Controls , and CRX enable debugging by default. When enabled, note that the more detail the debugging threshold provides, the slower the performance of your server and the bigger the size of the debug file.

The following table shows the location of the configuration files.

Where Used	Folder Location
<b>Quality Management</b>	
Server Computer	..\Cisco\WFO_QM\config
Desktop	..\Program Files\Common Files\QM\config
<b>Cisco Recording Controls</b>	
Server Computer	..\Cisco\WFO_QM\config
CRX	

Where Used	Folder Location
CRX install machine	..\Cisco\Cisco Recording Export\log
CRX install machine	..\Program Files\Cisco\Cisco Recording Export\QMExport.cfg

Quality Management uses the following configuration files:

- C++ files that use the \*.cfg extension
- Java files that use the \*.properties extension
- Java files whose file names begins with “log4j”

Cisco Recording Controls uses the following configuration files:

- Java files that use the \*.properties extension
- Java files whose file names begins with “log4j”

CRX uses the QMExport.cfg file.

Each type of file uses a different syntax to enable and disable debugging.

**Note:** Disable debugging when it is no longer needed for diagnostic purposes. Debugging can affect the performance of other applications running on your PC when enabled.

The following table describes the available debugging thresholds.

Threshold	Debugging
DEBUG	Usually sufficient for diagnosing a problem. Does not affect system performance.
CALL	Tracks function entry and exit.
TRACE	Provides a large amount of diagnostic information. May affect system performance.
STACK	Provides only stack traces, which give more debugging information when errors and warnings occur.
DUMP	Provides a very large amount of detailed diagnostic information. Likely to affect system performance.
OFF	Turns off debugging.

## Enabling Debugging in Files with a CFG Extension

1. In a text editor, open the desired configuration file.
2. Under the section headed [Debug Log], set the debugging threshold to DEBUG, CALL, TRACE, DUMP, or OFF.

**Example:** `Threshold=DEBUG`

The threshold value must be all caps and there should be no spaces on either side of the equal sign (=).

The line might already exist or you might have to add a new line.

3. Save the configuration file.

The change takes effect immediately. You do not have to restart the application or service.

## Disabling Debugging in Files with a CFG Extension

1. In a text editor, open the desired configuration file.
2. Under the section headed [Debug Log], set the debugging threshold to OFF.

**Example:** `Threshold=OFF`

The threshold value must be all caps and there should be no spaces on either side of the equal sign (=).

3. Save the configuration file.

The change takes effect immediately. You do not have to restart the application or service.

## Enabling Debugging in Files with a PROPERTIES Extension

1. In a text editor, open the desired configuration file.
2. Locate the line that starts with:  

```
log4j.rootLogger=<threshold>#com.cisco ...
```
3. Replace `<threshold>` with DEBUG, TRACE, STACK, or DUMP.
4. Locate the line that starts with:

```
log4j.appender.DBG.Threshold=<threshold>#com.cisco ...
```

5. Replace <threshold> with the same value you used in Step 2.
6. Save the configuration file.

The change takes effect according to the `splk4j.watch.check` setting (by default, within 90 seconds). You do not have to restart the application or service.

### Disabling Debugging in Files with a PROPERTIES Extension

1. In a text editor, open the desired configuration file.
2. Locate the line that starts with:

```
log4j.rootLogger=<threshold> ...
```

3. Replace <threshold> with `STACK`.
4. Locate the line that starts with:

```
log4j.appender.DBG.Threshold=<threshold> ...
```

5. Replace <threshold> with `OFF`.
6. Save the configuration file.

The change takes effect according to the `splk4j.watch.check` setting (by default, within 90 seconds). You do not have to restart the application or service.

### Enabling Debugging in log4j Files

1. In a text editor, open the desired configuration file.
2. Locate the line that starts with:

```
log4j.rootLogger=<threshold>
```

3. Replace <threshold> with `DEBUG` or `TRACE`.
4. Save the configuration file.

Restart the application or service for the new setting to go into effect.

### Disabling Debugging in log4j Files

1. In a text editor, open the desired configuration file.
2. Locate the line that starts with:

```
log4j.rootLogger=<threshold>
```

3. Replace <threshold> with `OFF`.

4. Locate the line that starts with:

```
log4j.appender.DBG.Threshold=<threshold>
```

5. Replace <threshold> with OFF.
6. Save the configuration file.

Restart the application or service for the new setting to go into effect.

## Collecting Log and Debugging Files

Cisco provides the following tools to collect logs and debugging files:

- **Log Tool (Log Tool)**—use this tool to collect logs and debugging files from the agent and server machines. See [Log Tool](#) for more information.
- **Recording Client Console (RECON)**—use this tool to set the logging levels on agent desktops, gather logs from agent desktops, and track the version of the recording client installed on the agent desktop. See [RECON](#) for more information.

### Log Tool

Log and debugging files can be collected from agent and server machines and copied to one location using the Cisco Log Tool (Log Tool). The Log Tool is a self-contained executable that can be added to any server within your network. It makes compiling logs for troubleshooting and for sending to Cisco Technical Support easier and faster.

The Log Tool is added to a single server within your network and can operate using one of two methods, depending on your contact center environment.

- **Running the Log Tool from a Central Server (Method 1):** This method might be used in environments with less stringent security. The Log Tool is set up on a central network server. The command to execute the Log Tool occurs on this server and log collection is run concurrently on designated agent and server machines. The log and debugging files are collected and copied to a designated location.
- **Running the Log Tool from Agent Machines (Method 2):** This method might be used in environments with tighter security. Some security environments prevent Method 1 from working due to operating system features being disabled or ports being closed. The Log Tool is set up on a central network server and a shortcut to the Log Tool is placed on each agent or server machine from which you want to collect logs. The command to execute the Log Tool comes from each agent machine, and the Log Tool is launched from the central server. The log and debugging files are collected and copied to a designated location.

The Log Tool can be setup as a scheduled task in conjunction with either method.

No installer is required to execute the Log Tool. You simply copy and paste the appropriate files to a designated server in your network. The files to copy depend on what method of operation you want to use.

The steps to configure the Log Tool are the same for both methods of operation. You can save your settings at any point by clicking the Save Configuration button.

**To configure the Global tab:**

1. To launch the Log Tool on the network server, double-click CiscoLogTool.exe.

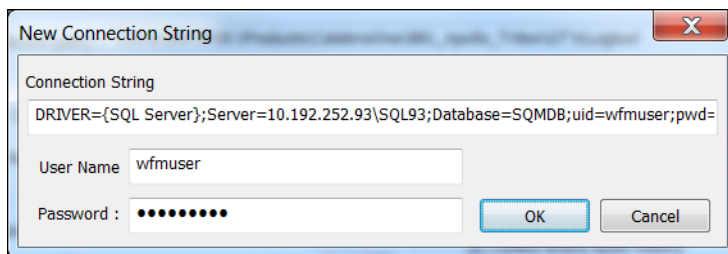
The Domain Logon Information dialogue box appears the first time you launch the Log Tool.

2. Enter your administrator credentials and domain name, and then click OK.

The Cisco Log Tool window appears.

3. From the Cisco Log Tool window, click the Global tab, and then click Configure.

The New Connection String dialog box appears.



4. Enter the connection string using the following format:

```
Example: DRIVER={SQL Server};Server=<database IP>\<instance>;Database=<database name>;uid=<username>;pwd=<password>;
```

where:

- <database IP> is the IP address of the SQL server.
- <instance> is the name of the SQL instance.
- <database name> is the name of the SQL database.

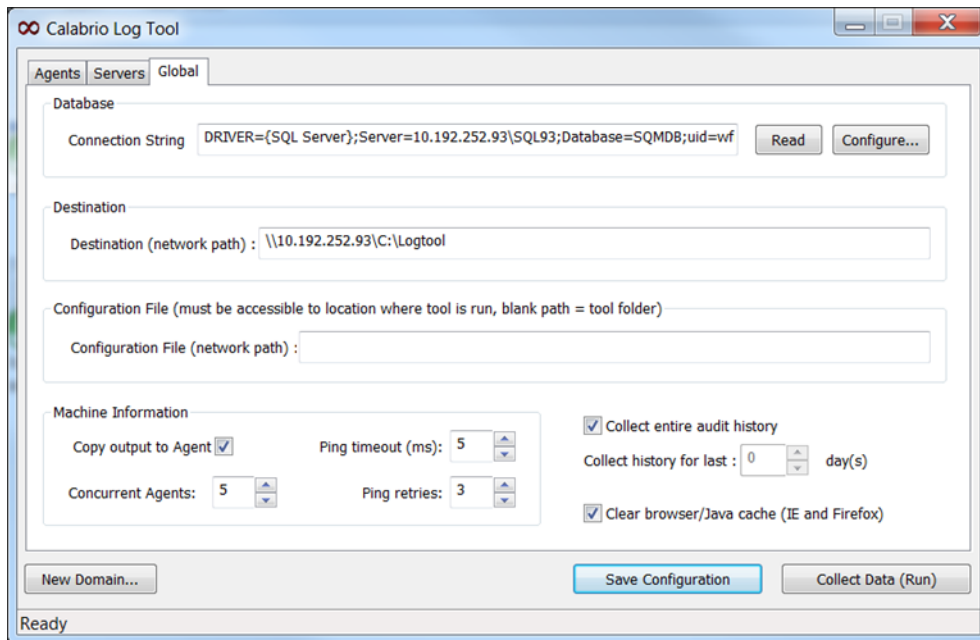


- <username> is the username required to access this database.
  - <password> is the password required to access the database.
5. Enter your username and password and then click OK to save your changes and dismiss the dialog box.
  6. Click Read.

The bottom left corner of the Log Tool window says Ready if you successfully accessed the database or Open Database Failed if you did not successfully access the database.

The Log Tool reads information from the database, and automatically populates the remaining Log Tool tabs.

### Global tab



7. In the Destination (network path) field, enter the location where you would like to save the collected logs and files in the following format:

`\\<server IP>\<share> or <drive:>\<path>`

where:

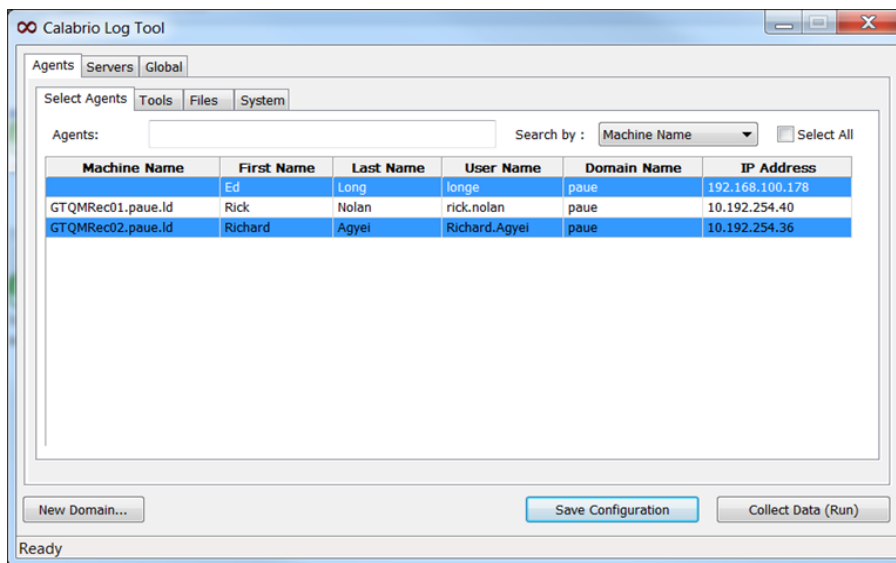
- <server IP> is the IP address of the server to which you want to copy the logs.
  - <share> or <drive:> is the share or drive where you want to save your collected logs. You must include the letter of the drive followed by a colon.
  - <path> is the path to the file where the collected logs are saved.
8. Under Machine Information, choose one or more of the following options:
- Create a copy of the collected logs on the agent machine by selecting the Copy output to Agent check box.
  - Specify the time between log collection attempts by entering a number in the Ping timeout (ms): field.
  - Specify the number of machines to collect from concurrently by entering a value in the Concurrent Agents field (installation method 1 only).
  - Specify the number of times to retry log collection by entering a value in the Ping attempts field.
  - Clear the internet browser and Java cache on the agent machine by selecting the Clear browser/Java cache (IE and Firefox) check box.

### ***To configure the Agents and Servers tabs:***

1. On the Cisco Log Tool window, select the Agents tab or the Servers tab.

The configuration steps are the same for both the Agents tab and the Servers tab.

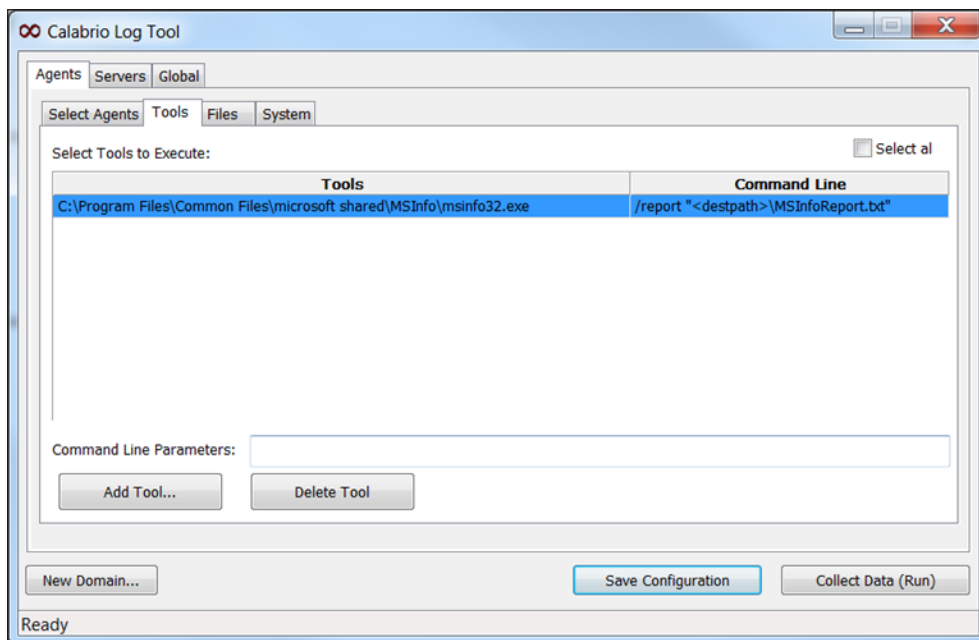
2. Click the Select Agents tab (see below) or the Select Servers tab, and select the machines from which you want to collect logs.
  - To select all the machines listed, select the Select All check box.
  - To search for a specific machine, choose a search parameter from the Search by drop-down list and type a query in the Agents field.



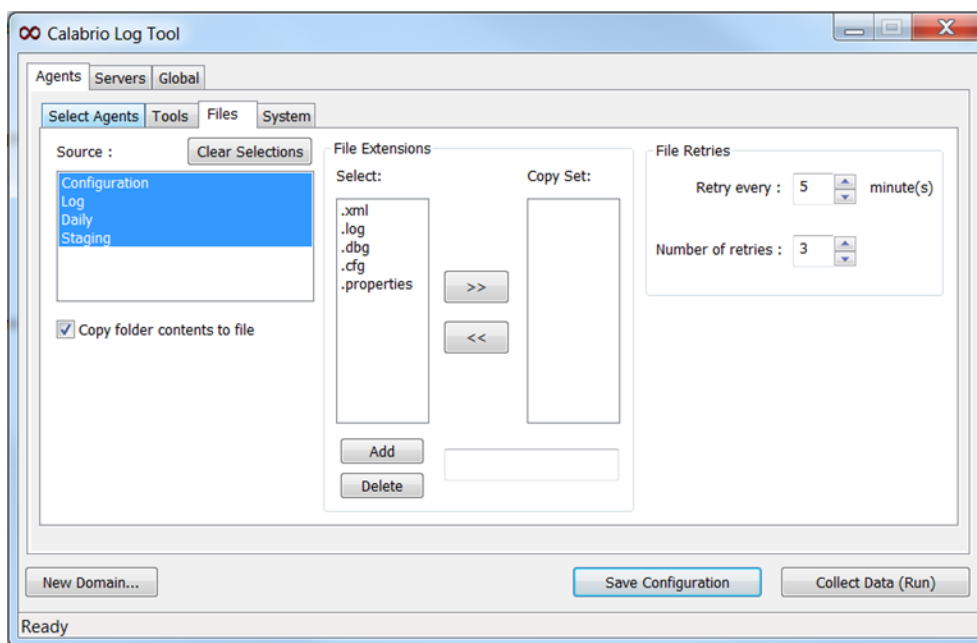
3. Click the Tools tab (see below), and then select the tools to run on each machine.

By default, msinfo32.exe with the correct command line appears in the Select Tools to Execute table.

The path for the report displayed on this tab is ignored. The report is saved to the destination you specified on the Global tab.



4. Click the Files tab (see below), and then select the types of files you want to collect.

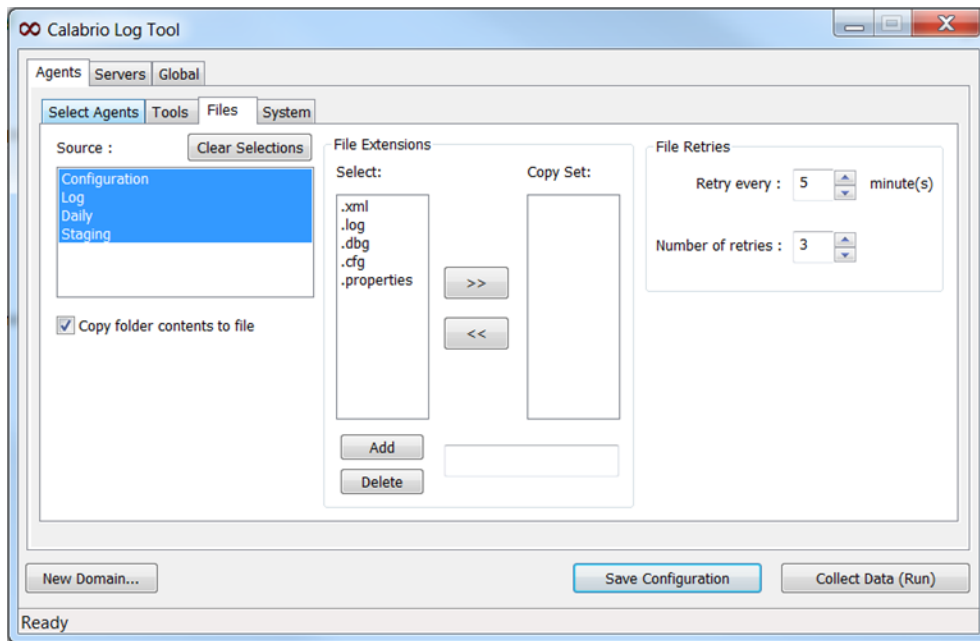


5. In the Source list, select one or more file source locations.

All files contained in the Configuration or Log source locations are copied to the destination you specified on the Global tab.

6. In the Source list, select one or more file source locations.

All files contained in the Configuration or Log source locations are copied to the destination you specified on the Global tab.



The Daily and Staging folders no longer appear in 9.1 or later. Files for these source locations will be copied from the Recordings folder.

7. In the File Extensions panel, select one or more file types you want to copy from the Select list and click >> to move the file types to the Copy Set list.

If no file types are listed in the Copy Set list, then all files contained in that source location are copied.

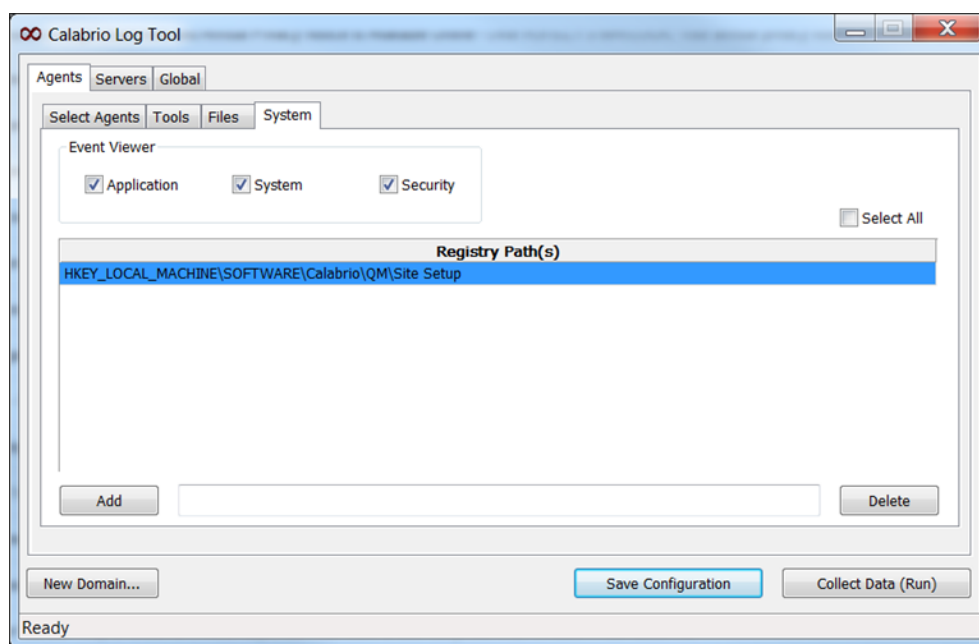
By default, only .xml files are copied from the Daily and Staging source locations. You can select additional file types by moving them to the Copy Set list.

To add a file type, enter the file extension in the field at the bottom of the File Extensions panel and then click Add. You can remove a file type by selecting from the Select list and then clicking Delete.

8. To create a list of all files copied from the selected sources in the output log file, select the Copy Folder Contents to File check box.
9. Specify the number of times the Log Tool will try to copy files in the Number of Retries field and the interval between attempts in the Retry Every field.

**Note:** The Log Tool might encounter files that cannot be copied because they are in use by the machine from which they are being collected. The number of times the Log Tool attempts to copy these files is determined by the value specified in the Number of Retries field.

10. Click the System tab (see below).



11. Select the one or more of the following event logs in Event Viewer panel:

- Application
- System
- Security

12. Choose one of the following options:

- To select all the registry entries listed under Registry Path(s), select the Select All check box.
- To add registry entries, enter the registry path in the field and then click Add.
- To remove registry entries, select one or more registry paths from the list and then click Delete.

The steps for running the Log Tool depend on which method of operation you are using.

**To run the Log Tool from a central server (Method 1):**

- On the Cisco Log Tool window, once configuration is completed, click the Collect Data (Run) button.

The Log Tool is launched and begins collecting log and debugging files undetected on the agent and server machines.

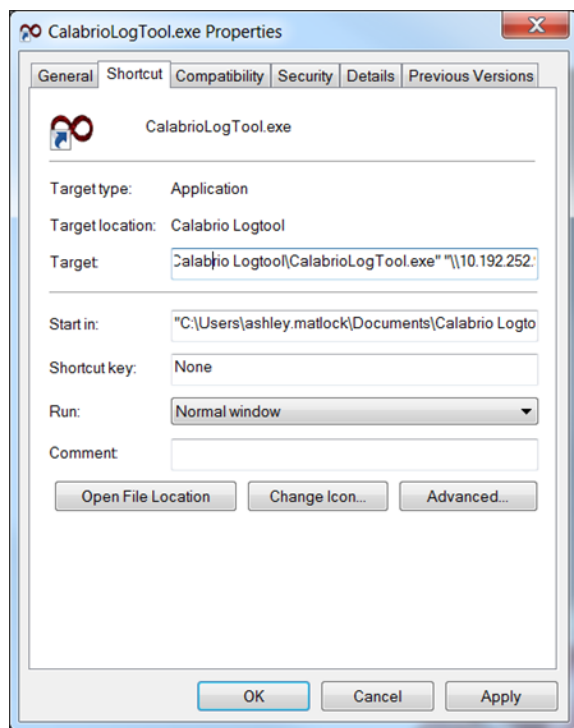
**To run the Log Tool from agent machines (Method 2):**

1. On the Cisco Log Tool window, once configuration is complete, save your settings by pressing the Save Configuration button. Close the Log Tool.
2. On an agent or server machine from which you want to collect logs, create a shortcut to the Log Tool using a network path that points to the Log Tool on the central network server. Use the following format:

`\\<server IP>\<share>\<path>\CiscoLogTool.exe`

3. Right-click the shortcut you just created, and choose Properties from the popup menu.

The CiscoLogTool.exe Properties dialog box appears.



4. On the Shortcut tab, in the Target field, after the final quote symbol, insert a space. Then enter a path to the Configuration.txt file on the network server like the following (including the quotes):

```
"\\<server IP>\<share>\<path>\Configuration.txt"
```

**Note:** Use quotes if the path contains spaces.

5. Click OK to save your changes and dismiss the window.

**Important:** You must create a shortcut and configure it on every machine from which you want to collect logs.

6. Run the Log Tool by opening the shortcut on the agent or server machines.

If the machine you run the Log Tool from was not selected on the Select Agents or Select Servers tabs during the configuration process, then the Log Tool automatically terminates.

#### ***To run the Log Tool as a scheduled task:***

The Log Tool can be run as a scheduled task for both methods of operation. This allows for log file collection to occur automatically at predetermined times.

The steps to create a scheduled task vary depending on which version of Windows you use.

#### **Windows XP**

For information on creating a scheduled task in Windows XP refer to the following Microsoft Support article (Article ID: 308569) at:

<http://support.microsoft.com/kb/308569>

#### **Windows Vista**

For information on creating a scheduled task in Windows Vista refer to the following Microsoft Windows article at:

<http://windows.microsoft.com/en-US/windows-vista/Schedule-a-task>

#### **Windows 7**

For information on creating a scheduled task in Windows 7 refer to the following Microsoft Windows article at:

<http://windows.microsoft.com/en-us/windows7/Schedule-a-task>

#### **Windows 8.1**



For more information on creating a scheduled task in Windows 8 refer to the following Windows 8 Forum tutorial:

<http://www.forumswindows8.com/tutorials/windows-8-tutorials-how-use-task-scheduler-6905.htm>

**Important:** In order for the Log Tool to run as scheduled task, you must set the command line parameter to /x.

## RECON

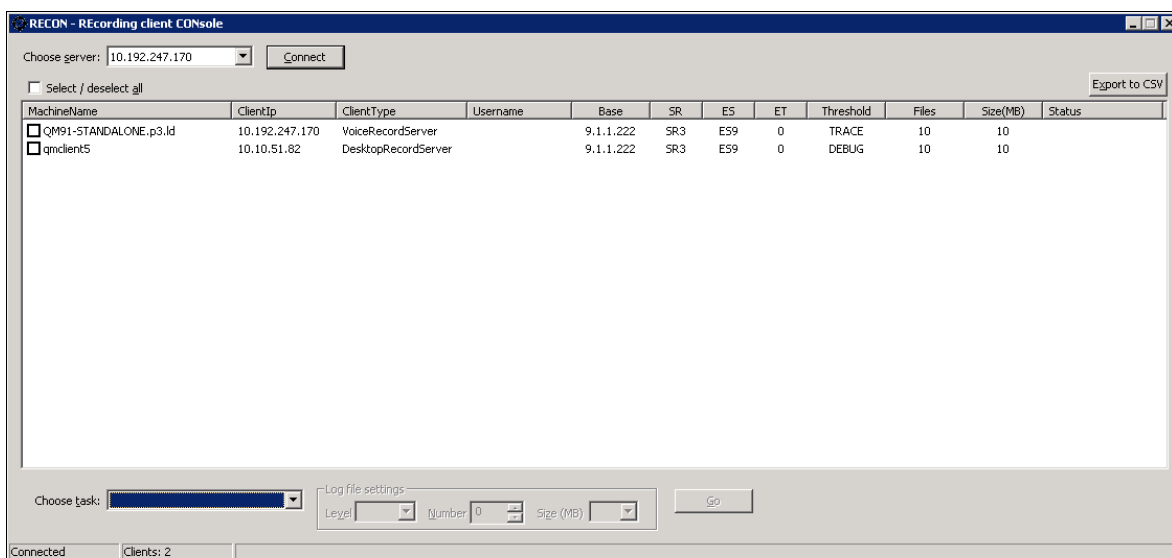
The RECON allows you to set the logging levels on agent desktops and gather logs from agent desktops.

**NOTE:** You must be a Quality Management administrator to access RECON. If you are using Active Directory, you must belong to the Admin User Group that is configured in the Active Directory Domain Information in Quality Management Administrator.

You can also use RECON to track the version of the recording client installed on the agent desktop.

The RECON.exe is located on the Web Base server in the following directory:

C:\Program Files\Cisco\WFO\_QM\bin



Field or Button	Description
Choose Server	Connects to the Upload Controller and populates the RECON table when successful. Once connected, RECON continues to receive DIAGNOSTIC_CLIENT_UPDATE_EVENT messages in real time as recording clients connect to and disconnect from the Upload Controller.
Select/Deselect All	Select this check box to select all agent desktops or clear the check box to deselect all agent desktops in the RECON Table.
Export to CSV	Exports the contents of the RECON table into a CSV file.
MachineName	The machine name of the agent desktop.
ClientIP	The IP address of the agent desktop
ClientType	<p>Identifies the client application type installed on the agent's desktop. The possible values are as follows:</p> <ul style="list-style-type: none"> <li>■ DesktopRecordServer</li> <li>■ VoiceRecordServer</li> <li>■ ScreenRecordServer</li> </ul>
Base	The version of the Quality Management base release on the agent desktop.
SR	The service release number on the agent desktop.
ES	The engineering special number on the agent desktop.
ET	The engineering test number on the agent desktop.
Threshold	<p>The current logging threshold on the agent desktop. The possible values are as follows:</p> <ul style="list-style-type: none"> <li>■ DEBUG</li> <li>■ CALL</li> <li>■ TRACE</li> <li>■ STACK</li> <li>■ DUMP</li> <li>■ OFF</li> </ul>
Files	The number of log files on the agent desktop.

Field or Button	Description
Size (MB)	The size of the log files in megabytes.
Status	<p>The status of the current task. The possible statuses are as follows:</p> <ul style="list-style-type: none"> <li>■ Upload in progress</li> <li>■ Upload pending</li> </ul> <div style="border: 1px solid black; background-color: #e0f0e0; padding: 5px; margin: 10px 0;"> <p><b>Note:</b> To cancel a pending upload, right click the row with the Upload pending status and then click Cancel.</p> </div> <ul style="list-style-type: none"> <li>■ Upload succeeded</li> </ul> <p>When you run a task, the status for each agent desktop updates one at a time.</p>
Choose Task	Select the machines you want to upload from and then choose from of the following tasks from this drop-down list: Update log settings fro checked Upload logs from checked
Level	<p>The debugging threshold level to assign to the agent desktop. The possible values are as follows:</p> <ul style="list-style-type: none"> <li>■ DEBUG</li> <li>■ CALL</li> <li>■ TRACE</li> <li>■ DUMP</li> </ul> <p>This field is enabled when you choose Update log settings for checked from the Choose Task drop-down list.</p>
Number	This field is enabled when you choose Update log settings for checked from the Choose Task drop-down list.
Size (MB)	This field is enabled when you choose Update log settings for checked from the Choose Task drop-down list.
Go	Run the selected task against each selected agent desktop. RECON uploads the results of the task one agent desktop at a time.

**Note:** Server and client RECON logs will be uploaded to one of these locations:

If the Site Setting *does* have a cache location defined, then server and client logs are uploaded to the Cache Location folder.

If the Site Setting *does not* have a Cache Location configured, then server and client logs are uploaded to the temp folder in the Local or External Storage Location.

# ContactDelete Utility

---

The ContactDelete utility (ContactDelete.exe) is a command line tool that resides on the Quality Management server.

The location of the ContactDelete utility is:

```
...\Cisco\WFO_QM\bin>ContactDelete.exe
```

Use the ContactDelete utility to permanently delete a specified contact from the database. Note that you must navigate to the bin folder in order to run the ContactDelete utility or it will fail.

When you run this utility on a record, the utility deletes the contact from the calculations and contact lists. Only the log file indicates the deletion of the record. The audit trail does not indicate the deletion of the record. The deletion is permanent—you cannot recover the contact.

A properties file contains the ContactDelete utility's logs. The location of the properties file is:

```
...\Cisco\WFO_QM\config>ContactDelete.properties
```

The log and debugging files are:

```
...\Cisco\WFO_QM\log>ContactDelete.log
```

```
...\Cisco\WFO_QM\log>ContactDelete.dbg
```

## ***To use the ContactDelete Utility:***

The syntax for this utility is as follows:

```
ContactDelete.exe <options> <contact ID>
```

where:

- <contact ID>—The contact ID of the contact you want to delete.
- <options>—Optional command parameters. The available command parameters are as follows.
  - -h or -help—Displays additional help information and any options.
  - -f or -force—Deletes contact without prompting for deletion confirmation



# Troubleshooting

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Use the information presented here to diagnose and resolve problems.

## Call Detail Record Problems

This topic explains how to diagnose and resolve problems that occur with the Call Detail Record (CDR).

### CDR does not report any missed calls when it should

Problem	The CDR does not appear to be reporting missed calls.
Cause	A call that matches the Do Not Record classifier might be reported as a missed call in CDR if it matches subsequent classifiers. The Do Not Record Classifier is ignored by CDR notifications.
Solution	No action is required.

## Installation Problems

Use the information presented here to diagnose and resolve installation problems.

### Port conflicts with the Jetty webserver

Problem	If IIS or Microsoft SQL Server 2008 Reporting Services is installed on the Quality Management server, it will create a port conflict with the Jetty webserver.
Cause	Quality Management builds the database and starts the Data API service when you run System Configuration Setup (PostInstall.exe) in Initial Mode. If IIS or Microsoft SQL Server 2008 Reporting Services is installed, an error message appears when starting the Data API service stating that the Data API service cannot be started or accessed because IIS or Microsoft SQL Server 2008 Reporting Services controls the Jetty port.
Solution	Check Microsoft Windows Services to see if IIS or Microsoft SQL Server 2008 Reporting Services is installed and running. If IIS or Microsoft SQL Server 2008 Reporting Services is installed, disable it. Verify the Jetty service is running, and then restart System Configuration Setup.

### Cannot download client applications

<p>Problem</p>	<p>The client applications do not download when you click the links on the installation web page.</p> <p>When you click the install program link, an “HTTP 404–File Not Found” error appears.</p>
<p>Cause</p>	<p>System Configuration Setup did not complete successfully on the Quality Management base server.</p>
<p>Solution</p>	<p>On the Quality Management base server, navigate to the C:\Program Files\Cisco\WFO_QM\bin folder and double-click PostInstall.exe to launch the System Configuration Setup utility.</p> <p>If the Tools menu is inactive, System Configuration Setup is running in Initial mode, and indicates it did not run to completion. If this occurs, navigate to each window and verify that you entered all required data, and then click Finish.</p> <p>If System Configuration Setup starts in Initial mode, it did not complete correctly. Go through each window and make sure that you entered all required data, and then click Finish.</p> <p>If System Configuration Setup is running in Update mode, choose Tools &gt; Generate Info for MSI Clients. This operation regenerates the client installation files in the default location. After the operation completes, try to install the client applications from the installation web pages again. If the problem persists, contact customer support.</p>

### Cannot install application while another installation is in progress

<p>Problem</p>	<p>The following message appears on a client desktop.</p> <p>Error 1500. Another installation is in progress. You must complete that installation before continuing with this one.</p>
<p>Cause</p>	<p>This message can appear when a user attempts to manually upgrade the Desktop Recording service after Automatic Updating has already initiated an upgrade. Because the upgrade is running in silent mode the user may not be aware that it is running.</p>
<p>Solution</p>	<p>Wait five minutes to allow the automatic upgrade to complete. Then check the Add or Remove Programs utility in Control Panel for the version of the installed application. If the version is not correct, manually install the upgrade.</p>



### Quality Management fails to connect to Microsoft SQL

Problem	When first installed, Quality Management fails to connect to Microsoft SQL when building the database for Microsoft SQL Server 2008 SR2.  The “Network error IOException: Connection refused: connect” message appears.
Cause	The TCP/IP protocol in SQL Server Configuration Manager is disabled.
Solution	Open SQL Server Configuration Manager, locate Protocols for MSSQLSERVER and enable TCP/IP.

## JTAPI Problems

This topic explains how to diagnose and resolve JTAPI problems.

### DNIS appears as “Conference”

Problem	Quality Management uses JTAPI for call events. The Calling Number shown in Unified Workforce Optimization is the unmodified calling number. It will stay the same throughout the call, no matter if the call is transferred or conferenced. The Called Number shown in Unified Workforce Optimization is the last route point it went through. If the call was a direct call (or the route points are not being monitored by the JTAPI user defined in Site Configuration in Quality Management Administrator) it will be the unmodified calling number. It will stay the same through transfers and conferences.  In a conference call, the DNIS appears as “Conference.”
Cause	There might be cases where the unmodified calling/called number is unknown due to devices being registered while the call is already in progress.
Solution	Refer to the JTAPI Guide for your version of Unified CM.

## Common Recording Problems

### Agents using Extension Mobility profiles are not recorded

Problem	Agents are not recorded if they are using Extension Mobility profiles.
Cause	The agents' Extension Mobility profiles are not synchronized with their devices.

Solution	Resynchronize the devices from the VoIP Devices window in Quality Management Administrator.
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**Archive call was tagged for quality, but is not visible in the Recordings application**

Problem	A call from today is viewable in the archive and tagged for quality. When you look for the call in the Recordings application, you cannot locate the call.  Cannot find the call in the Recordings application.
Cause	The call has not yet been uploaded.
Solution	The call will be available in the Recordings application if you play the recording from the Archive, or after the End of Day upload has occurred.

**Audio and video streams are out of sync**

Problem	When playing a contact recording for evaluation, audio and video streams are out of sync.
Cause	The audio and video streams are out of sync.
Solution	Stop and then restart the playback to resync the audio and video. If that does not work, click the Cancel button and exit the evaluation form, then open it again and start over.

**Cannot hear the audio recording without clicking the progress bar on a contact recording**

Problem	When playing a contact recording, the voice recording is not audible until you click the progress bar (slider bar).
Cause	The audio sound does not play.
Solution	Click the progress bar or open the contact recording a second time to hear the audio recording.

**Contact recordings are not uploaded**

Problem	Quality Management is not uploading contact recordings.
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<p>Cause</p>	<p>When Quality Management does not upload contact recordings, look for the following symptoms.</p> <ul style="list-style-type: none"> <li>■ The start time is off by an hour. This can happen when a time zone changes its rules</li> </ul> <div style="border: 1px solid #ccc; background-color: #e6f2ff; padding: 5px; margin: 10px 0;"> <p><b>Example:</b> DST is changed to another date and/or time.</p> </div> <ul style="list-style-type: none"> <li>■ The dbproxy.log contains the following message.</li> </ul> <p style="padding-left: 40px;">Unknown Java Timezone ID: null. Endpoint Timezone</p> <p>Unable to update time zone in the data because the time zone is not in the tzmappings file</p> <div style="border: 1px solid #ccc; background-color: #e6f2ff; padding: 5px; margin: 10px 0;"> <p><b>Example:</b> Pakistan Standard Time</p> </div> <p>The Java version shipped with Quality Management does not include the Windows time zone specified in the dbproxy.log.</p>
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<p>Solution</p>	<p>If the problem persists, contact customer support.</p> <p>To update the tz database for Java to include your time zone:</p> <ol style="list-style-type: none"> <li>Go to the following website: <a href="http://www.oracle.com/technetwork/java/javase/downloads/index.htm">http://www.oracle.com/technetwork/java/javase/downloads/index.htm</a></li> <li>Scroll down to JDK DST Timezone Update Tool (tzupdater) and click Download.  The tool is bundled in a zip file.</li> <li>Extract the files from the zip file to a known directory.  You can choose to extract the file to the Java\bin folder. <ul style="list-style-type: none"> <li>If you installed Quality Management in the default location, the directory path is C:\Program Files\Cisco\WFO_QM\Java\bin.</li> <li>If you do not know where Quality Management is installed, the HKEY_LOCAL_MACHINE\SOFTWARE\Cisco\QM\Site Setup\INSTALL DIRECTORY in the Windows registry provides the installation location.</li> </ul> </li> <li>Select Start &gt; Run, type cmd in the Open field, and then click OK.</li> <li>Enter the following command.  <code>cd &lt;directory path&gt;</code>  Where &lt;directory path&gt; is the location of the Java\bin folder.</li> <li>Enter the following command to check the current Java version against the downloaded tzupdater.jar version.  <code>java -jar &lt;known directory path&gt;tzupdater.jar -V</code>  Where &lt;known directory path&gt; is the location of the tzupdater.jar file. If the tzupdater.jar is in the Java\bin directory, you do not need to specify the known directory path.</li> </ol> <div style="background-color: #e1f5fe; padding: 10px; border-radius: 5px; margin-top: 10px;"> <p><b>Note:</b> These commands are case sensitive.</p> </div>
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	<p>7. Enter the following command to update the JRE's timezone version.</p> <pre>java -jar &lt;known directory path&gt;tzupdater.jar -u</pre> <p>8. Enter the following command to verify the current Java version is the same as the downloaded tzupdater version.</p> <pre>Java -jar &lt;known directory path&gt;tzupdater.jar -V</pre>
--	---

### Conversion from raw to spx failed

Problem	The message, "Conversion from raw to spx failed" appears multiple times in the System Status report, but all the recordings for the specified agent for that day were uploaded correctly.
Cause	<p>If the staging process that occurs after the configured End Of Day is interrupted before it completes, you might see this error message in the System Status report.</p> <p>Part of the staging process involves converting the *.raw files to *.spx files. If the staging process is interrupted after some files have been converted and the *.raw files have been deleted, when the staging process resumes, it starts from the beginning so that it appears to fail converting the files that it already processed correctly before the interruption.</p> <p>Examples of interruption include rebooting the PC or restarting the Desktop Recording service during the staging process. In these scenarios, no recordings are lost.</p>
Solution	No action is required.

### Desktop recording fails

Problem	No recording files are in the C:\Program Files\Common\QM\Recordings folder on the desktop where recording is failing.
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Cause	<p>Check the following list for possible causes and solutions:</p> <ul style="list-style-type: none"> <li>■ Verify that the DNS is configured to resolve IP addresses and host names. From the PC where desktop recording is failing, run the command <code>ping -a &lt;Unified CM IP address&gt;</code>. If the ping cannot resolve the IP address, then neither can the Desktop Recording service. Configure the DNS so that host names and IP addresses are resolved.</li> <li>■ Verify that the Desktop Recording service is running.</li> <li>■ Verify that the phone and PC is correctly daisy-chained. You must directly connect the IP phone to the Ethernet jack. Connect the PC to the phone's PC port. Enable the phone's PC port.</li> <li>■ Verify that the client PC is connecting to SQL database. The DesktopRecordServer.dbg has a statement should contain the following statement:  Connected to service at Quality Management SQL server IP address&gt;.</li> <li>■ Verify that you entered the correct information for Unified CM in the Cisco Unified CM or window of the System Configuration Setup tool.</li> <li>■ Verify the following messages appear:             <ul style="list-style-type: none"> <li>● In the ctiservice.dbg log—MAC not in domain. &lt;MAC address&gt;.com.Cisco.sqm.ctiservice.CtiException: Specified MAC not in domain: &lt;MAC address&gt;.</li> <li>● In the DesktopRecordServer.dbg on the agent's PC—The MAC address &lt;phone's MAC address&gt; is not associated with the JTAPI user.</li> </ul> </li> <li>■ Verify that you connected the CTI service to the Unified CM CTI Manger by looking in cti.dbg for the following message:  SQM CTI Service ready.</li> <li>■ Verify that the phone is configured in Unified CM according to the</li> </ul>
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	<i>Installation Guide.</i>
Solution	<p>If the phone is configured correctly and the problem still exists, try the following.</p> <ul style="list-style-type: none"> <li>■ Use a packet capture tool (for example, Wireshark) to verify that the phone is forwarding RTP and phone protocol (SCCP or SIP) traffic to the NIC card on the client PC.</li> <li>■ Verify the Inclusion List node under Site Configuration in Quality Management is configured correctly. See the <i>Administrator Guide</i> for more information.</li> </ul>

**Desktop Recording service momentarily fails after placing desktop in sleep mode**

Problem	When using Windows sleep mode with the desktop recording client installed, you may experience a few minutes where recording does not work immediately after your PC wakes up.
Cause	When a PC is in sleep mode, the network adapter is turned off. When the PC wakes from sleep mode, the desktop recording client needs to reconnect to servers and re-detect the connected phone.
Solution	Wait a few moments; when the PC detects the phone again, recording will restart.

**Desktop Recording service fails to start on reboot in rare instances**

Problem	The Desktop Recording service failed after a reboot.
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Cause	<p>The Desktop Recording service might fail to start after a reboot for the following reasons:</p> <ul style="list-style-type: none"> <li>■ User logs in over Virtual Private Network (VPN) and there is a delay in the startup time.</li> <li>■ Some computers, especially older systems, have slow startup times.</li> <li>■ The computer uses a large startup script that requires time to start up.</li> </ul> <p>The Desktop Recording service has a dependency on System Event Notifications which delays the startup attempt. On some computers this dependency occurs before some long running task that prevents the Desktop Recording service from starting.</p> <div style="border: 1px solid #ccc; background-color: #e6f2ff; padding: 10px; margin-top: 10px;"> <p><b>Example:</b> A computer might require over 10 minutes for startup and Service Control Manager does not start the Desktop Recording service.</p> </div>
Solution	<p>Make sure the computer starts up quickly (under ten minutes). If your computer requires more than 10 minutes to startup, add a dependency for the Desktop Recording Service to start after a service that is common to every login script for your site. More information on delaying the loading of specific services is available at the following website:</p> <p><a href="http://support.microsoft.com/?kbid=193888">http://support.microsoft.com/?kbid=193888</a></p>

**“Error writing Audit Trail” message appears when trying to open a contact**

Problem	<p>The following message appeared when trying to play a contact recording:</p> <pre>QMREC2009 Error writing audit trail</pre> <p>You cannot play back a contact recording.</p>
Cause	<p>An error occurred while writing the audit trail.</p>
Solution	<p>Log out of Unified Workforce Optimization, log in to Unified Workforce Optimization, and then play the contact recording again.</p>



### Generic memory error icon appears when trying to play back a screen recording

<p>Problem</p>	<p>The generic memory error icon appears when you try to play back a contact recording that includes a screen recording.</p> <p>The generic memory error icon appears in the Screen window and the screen recording will not play back.</p> 
<p>Cause</p>	<p>The generic memory error icon appears when you try to play back a contact recording that includes a screen recording.</p> <p>The generic memory error icon is displayed by Adobe Flash Player when running in a very low memory environment. It indicates that the web browser does not have much memory available. For more information on the generic memory icon, go to:  <a href="http://blogs.adobe.com/dekesmith/2012/06/07/what-is-the-gray-circle-with-an-exclamation-mark-or-bang/">http://blogs.adobe.com/dekesmith/2012/06/07/what-is-the-gray-circle-with-an-exclamation-mark-or-bang/</a></p>
<p>Solution</p>	<p>Close the web browser, then reopen the web browser and try again.</p>

### If client desktop cannot connect to the server, contact recordings assigned to the quality management workflow fail to upload

<p>Problem</p>	<p>If the recordings belong to the quality management workflow and the client desktop cannot connect to the server, the recordings fail to appear in the Recordings application after End of Day.</p>
<p>Cause</p>	<p>The files moved to the staging folder and uploaded to the server, but the recordings do not appear as quality recordings in the Recordings application. The contact recordings appear as archive recordings in the Recordings application.</p> <p>Because the desktop client could not connect to the server, the files were marked for the archive workflow by default because the Quality Management Base Services server could not find an entry for the agent and verify the agent's workflow information.</p>
<p>Solution</p>	<p>Search for the archive recordings in the Recordings application and mark the contact recording for quality scoring. When you mark the contact recording for quality scoring, the contact appears as a quality recording in the Recordings application.</p>

**Media Player is unable to play this video. Please consult the Troubleshooting Guide for a solution**

<p>Problem</p>	<p>The following message appears when you try to play a screen recording:  The Media Player is unable to play this video. Please consult the <i>Troubleshooting Guide</i> for a solution.</p>
<p>Cause</p>	<p>There are several issues that can result in this error:</p> <ul style="list-style-type: none"> <li>■ You are running an older web browser (for example, Internet Explorer 8) that does not use ActiveX Controls and Plug-ins to natively play audio and video</li> <li>■ ActiveX Controls and Plug-ins are not enabled</li> <li>■ The video could not be found on the Record Server (the server returns a 500 error message)</li> <li>■ The Record Server encountered an error while trying to encode the video</li> <li>■ The Record Server is not available.</li> </ul>
<p>Solution</p>	<p>To resolve the issue, choose one of the following options:</p> <ul style="list-style-type: none"> <li>■ If you are using Internet Explorer 8, install the latest Adobe Flash Player and ensure ActiveX Controls and Plug-ins are enabled.</li> <li>■ If you are using Internet Explorer 9, ensure ActiveX Controls and Plug-ins are enabled.</li> </ul> <p>Try playing the screen recording again. If it fails again, contact customer support.</p>

**Network Recording service stopped**

<p>Problem</p>	<p>The Network Recording service stopped while an agent is on a call, and then restarted before the call ends. The call recording only goes until the Network Recording service stops. It does not include time through end-of-call.</p>
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Cause	<p>When the Network Recording service stops, it drops the connection to the Recording CTI service, which in turn drops the connection to JTAPI. The Recording CTI service discards all history associated with that client.</p> <p>When a new connection is established, the JTAPI provides a snapshot of call events (ringing, established, and so on), but does not include RTP events. In the case of the Desktop Recording service (the endpoint recording client), it begins to record again since that service uses only call events. However, the Network Recording service (SPAN and Network Recording) requires RTP events to begin recording. It starts recording on the next RTP event (this could be after a hold on the same call).</p>
Solution	No action is required.

### No export files are generated

Problem	No export files are generated.
Cause	No export files are generated when using the Server API exportRecording operation to perform server-based exporting.
Solution	<p>Try the following solutions:</p> <ul style="list-style-type: none"> <li>■ Restart the Jetty Service.</li> <li>■ Use Unified Workforce Optimization to export recordings to WAV or MP4 files.</li> </ul> <p>If the problem persists, contact customer support. For more information, see the <i>Administrator Guide</i>.</p>

### Playing a recording fails

<p>Problem</p>	<p>A user cannot play a recording. This situation only applies to Network Recording configurations with a primary Record Server and a backup Record Server.</p> <p>An agent is configured for Network Recording on the primary backup server. If the primary Record Server fails, SIP messages are then sent to the backup Record Server and the agent's recordings are captured and stored on the backup Record Server. If the primary Record Server recovers and the backup Record Server fails or loses connectivity with the Upload Controller, the call information will not be sent to the Upload Controller. Download on Demand fails because the Upload Controller does not know about the calls received by the agent while the primary Record Server was down. Playing a recording fails because the Upload Controller does not know about the calls received by the agent when the agent was configured for the backup Record Server.</p>
<p>Cause</p>	<p>A recording failover occurred.</p>
<p>Solution</p>	<p>The recordings on these servers will not be available for playing until after they are uploaded to the Upload Controller.</p>

### Recording CTI service creates one huge recording file for all subsequent calls

<p>Problem</p>	<p>The Recording CTI service does not appear to be recording individual calls. All calls appear in one huge recording file.</p> <p>No recordings appear on the client desktop.</p>
<p>Cause</p>	<p>The Recording CTI service starts recording a call and does not end recording when the call ends. The recording continues through subsequent calls and appears like it is not recording. The recordings folder contains one large .raw file that continues to record all subsequent calls once this event triggers.</p>
<p>Solution</p>	<p>Restart the Recording CTI service.</p>

### Recording is associated with the wrong agent and might be missing the beginning or end of the recording

<p>Problem</p>	<p>The beginning or ending of an agent's recording is missing.</p>
<p>Cause</p>	<p>A recording is associated with Supervisor or Manager X, but the actual recording is for a call handled by Agent Y. Additionally, the beginning or end of the call is missing.</p>

Solution	You can avoid this situation by configuring a second extension on the supervisor's or manager's phone and adding it to the exclusion list. See the <i>Administrator Guide</i> for more details on configuring the exclusion list.
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**Record Servers do not reconnect after restarting the base server**

Problem	The Record Servers do not reconnect to the Quality Management base server after you restart it.  One or more Record Servers are not recording calls.
Cause	Restarting the base server in a multiple record server environment can cause race conditions within the Record Servers as they disconnect and reconnect to the base server. As a result, a Record Server might fail.
Solution	When restarting the base server, perform the following task. <ol style="list-style-type: none"> <li>1. Schedule the base server for maintenance when agents are not recording calls.</li> <li>2. Stop the Network Recording service on all Record Servers.</li> <li>3. Stop the Monitor service on all Monitor Servers.</li> <li>4. From the base server, choose Start, then select Restart from the Shut Down Windows dialog box, and click OK.</li> <li>5. log in to the base server and verify the services are running.</li> <li>6. Start the Monitor service on all Monitor Servers.</li> <li>7. Start the Network Recording services on all Record Servers.</li> <li>8. Log in as a test user and record some calls. Repeat this test for each Record Server in your environment.</li> <li>9. log in to Unified Workforce Optimization, and verify the recordings are available and playable.</li> </ol>

**Screen recording export fails when the operating system for the base server is Windows Server 2008**

Problem	Screen recording export fails when the baser server is running Windows Server 2008.
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Cause	<p>Desktop Experience was not installed on Windows Server 2008.</p> <p>Desktop Experience must be installed on Windows Server 2008 if you are going to use it as a Quality Management base server. Desktop Experience allows the end users to export screen recordings or MP4 from the Unified Workforce Optimization interface.</p>
Solution	<p>Install Desktop Experience on Windows Server 2008. The instructions are provided in the <i>Installation Guide</i>.</p>

### Screen recording fails on the second call

Problem	<p>A 1K file appears for the screen recording of the second call in an interleaved call scenario.</p>
Cause	<p>On an interleaved call, the screen recording on the second call results in a 1K file. The screen recording portion is not captured.</p>
Solution	<p>No action is required.</p>

### Screen recording playback fails when storage folder is in the wrong location

Problem	<p>Screen recording playback fails when the storage folder is in the wrong location. Voice recordings are unaffected. The system suffered a power failure but restarted successfully.</p>
Cause	<p>The path of the video folder on the Screen server changed to an incorrect location.</p> <div data-bbox="475 1230 1385 1430" style="border: 1px solid #ccc; background-color: #e6f2ff; padding: 10px; margin-top: 10px;"> <p><b>Example:</b> System Configuration Setup displays the screen recording storage path as C:\Program Files\Common Files\QM\recordings\video when they are actually located at E:\Program Files\Common Files\QM\recordings\video.</p> </div>
Solution	<p>Correct the folder path to the true location in System Configuration Setup and screen recordings will play back. If you configured the path correctly and the problem still exists, map a drive to the recording storage location from the client running Desktop Recording service. If this fails, there might be a policy restriction on the user's Windows account.</p>

### Voice and screen recordings are out of sync

Problem	The voice and screen recordings are out of sync when you play back the recording.  The audio might be slightly delayed when you play back a recording.
Cause	The SQM service stopped while a call was being recorded.
Solution	No action is required.

### Unable to load energy data

Problem	When you try to play back a recording in the Recordings application after a failover, the following message appears:  Unable to load energy data. Unable to playback the recording.  The energy data for the recording does not appear in the energy bar and you cannot play back the recording.
Cause	When the failover switched to the backup server, the Media Encoder service continued to point to the primary server.
Solution	To resolve this issue, restart the Media Encoder server.

## Recording Problems for Cisco MediaSense

### Calling Number displays UNKNOWN on a segment of a Cisco MediaSense conference call

Problem	When you look at a Cisco MediaSense recording for a conference call in the Recordings application, the Calling Number field displays UNKNOWN.
Cause	When the other participant in a segment of a Cisco MediaSense recording is a conference bridge, the ANI and DNIS is unavailable and the Calling Number field displays UNKNOWN.
Solution	No action is required.

### MediaSense Subscription service lost connection to the Cisco MediaSense Record server

Problem	The MediaSense Subscription service lost connection to the Cisco MediaSense Record server and cannot retrieve recordings.
Cause	The Cisco MediaSense Subscription service lost connection to the Cisco MediaSense Record server
Solution	Once the connection from the MediaSense subscription service is reestablished to the MediaSense Record server, Quality Management will check for any calls to be retrieved during the outage every 10 minutes.

## Recording Problems for Cisco Unified CCX

### Calls continue to be recorded after the Extension Mobility agents log out

Problem	Calls continue to be recorded after the Extension Mobility agent log out when the same extension is assigned to the device and the user profile.
Cause	The same extension is assigned to the device and the user profile.
Solution	Do not assign the same extension to the device and the user profile.

### Calls for devices configured for Network Recording are not recorded

Problem	Calls for devices configured for Network Recording are not recorded. No raw files or 1K raw files appear in the recordings folder.
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Cause	<p>Possible causes are as follows:</p> <ul style="list-style-type: none"> <li>■ The device is not configured in Quality Management Administrator for Network Recording.</li> <li>■ The extension is not configured in Cisco Unified CM for Network Recording. All extensions on the device that you want to record need to be configured for recording. In this instance, the Cisco Unified CM is not sending a SIP INVITE to the Network Recording service to initiate a recording.</li> <li>■ The call is not using a supported codec. Supported codecs are G.711, G.722, and G.729.</li> <li>■ The SIP trunk for the recorder is not configured properly in Cisco Unified CM. The SIP trunk needs to point to the Network Recording service IP address and port 5060.</li> </ul>
Solution	<p>Correct the misconfiguration based on the above possible causes.</p> <p>Use a packet sniffer to check if the Cisco Unified CM is sending a SIP INVITE to the Network Recording service. The Cisco Unified CM should send a SIP INVITE to recording-enabled extensions every time a call is answered or retrieved from a held state. SIP INVITE messages should be sent from a Cisco Unified CM IP address to the Network Recording service server IP address on port 5060. The IP protocol used can be either UDP or TCP.</p> <p>If no SIP INVITE messages appear, then engage the Cisco Unified CM administrator or support team to verify the Cisco Unified CM configuration.</p> <p>In some cases, the Cisco Unified CM configuration might appear to be correct for the phone, yet no SIP INVITE messages are sent to the recorder. Deleting and recreating the phone in Cisco Unified CM might resolve the issue.</p>

**Calls for devices configured for Network Recording drop when you try to conference or transfer a call**

Problem	<p>When you try to transfer or conference a call and one or more devices on the call configured for Network Recording, the transfer or conference fails and parties drop off of the call.</p>
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Cause	Cisco Unified CM does not support codec changes for devices that are configured for call recording. The codec must remain the same throughout the life of the call. For conference calls, the conference bridge must support the codec used before the conference completes.
Solution	Update the Cisco Unified CM configuration to ensure that no codec changes occur for network recorded devices. See the Cisco Unified CM documentation for more information.

**Cannot play back a recording when logged into Quality Management using the Separate Product Logins check box**

Problem	When you double-click the recording, the Media Player might display the energy bar but you will be prompted to log back in to Recording and Quality Management. When you enter your login credentials in the Login window the login fails.
Cause	When you select the Separate Product Logins check box on the Login window and log in to Recording and Quality Management, you cannot play back a recording.
Solution	Go to the Login window. Clear the Separate Product Logins check box on the Login window. Complete the fields in the Login window and click Login.

**Garbled speech appears in the contact recording**

Problem	Garbled speech appears in the Quality Management contact recording when you use Cisco Unified CM-based monitoring.  The garbled speech occurs when trying to silently monitor a conversation.
Cause	This type of silent monitoring sends an extra stream from the phone. The recording software for Quality Management, Desktop Recording (Endpoint), and Server Recording captures the extra stream and stores it in the call recording file. You can only use this type of silent monitoring with Cisco-supported hard phones.
Solution	Do not use this method of silent monitoring.

**Recording drops 5–10 seconds of audio**

Problem	Recording drops 5-10 seconds of audio near the beginning of a call.
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Cause	When CAD and Quality Management are running on the same machine, the recording is missing audio near the beginning of a call and the recording quality might also be garbled.
Solution	<p>Verify the DNS is configured to resolve host names of the CAD Record Servers. From the PC where desktop recording is failing, open a command window and enter the following command:</p> <pre>ping -a &lt;CAD Record Server hostname&gt;</pre> <p>If the ping cannot resolve the CAD Record Server hostname, then neither can the Desktop Recording service. Configure the DNS so that host names are resolved.</p>

### Screen recording playback fails when CAD is installed on the client machine

Problem	Playback of screen recording fails when CAD is installed on the client machine.
Cause	Either CAD or a policy restriction is preventing screen recording playback.
Solution	Map a drive to the recording storage location from the client running Desktop Recording service. If this fails, there might be a policy restriction on the user's Windows account.

### Unable to record calls

Problem	Unable to record calls from a SIP phone right after rebooting the PC.
Cause	To detect the connected IP phone, the Desktop Recording service monitors the heartbeat messages between the Unified CM and the IP phone. It may take up to 6 minutes after the Desktop Recording service starts to properly identify a SIP phone.
Solution	Allow time for the Desktop Recording service to detect the connected IP phone before taking calls.

## System Configuration Setup Issues

This topic explains how to diagnose and resolve problems that occur when running the System Configuration Setup tool (PostInstall.exe).

### Historical data is lost

Problem	User cannot find historical data for Quality Management. Historical data that was present is no longer in Quality Management.
Cause	The location of the Enterprise database was changed through System Configuration Setup (PostInstall.exe). All information that was contained in that database is no longer available for Quality Management to access.
Solution	Restore the original settings in the Cisco Unified CC Database window in System Configuration Setup. If problems persist, contact customer support.

### A Linux server name containing hyphens breaks the ODBC connection

Problem	User entered the Linux server name in the Server Name field on the Cisco Unified CC Database window. The Linux server name contained one or more hyphens.  <b>Example:</b> linux-ccx-server
Cause	The Linux server name broke the ODBC connection.
Solution	Replace each hyphen in the server name with an underscore when you enter the server name in the System Configuration Setup utility. This ensures the correct configuration of the file name.

## Upgrade Problems

This topic explains how to diagnose and resolve problems that occur during upgrade.

### The screen portion of a recording does not play back after an upgrade.

Problem	After you upgrade Quality Management, the screen portion of a recording doe not play back while the audio recording plays back.
Cause	The client desktop browser cache is not cleared after the upgrade. This occurs with the applet because after the upgrade, the server has newer jar files than those cached on the user’s desktop. To correct the problem, clear the browser cache and the Java cache.

Solution	<p><i>To clear the browser cache:</i> In Microsoft Internet Explorer, choose Tools &gt; Internet Options &gt; Delete Browsing History. Select the Temporary Internet files and Cookies check boxes, and then click Delete.</p> <p><i>To clear the Java cache:</i> Open the Windows Control Panel. Double-click Java to open the Java Control Panel. In the Temporary Internet Files section, click Settings, and then click Delete Files. In the resulting dialog box ensure that both check boxes are selected, and then click OK. It might take several minutes to clear the Java cache.</p> <p>After you have cleared both the browser and Java cache, restart your browser.</p>
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## Common Quality Management Administrator Issues

### Buttons appear cut in half

Problem	On some windows in Quality Management Administrator (for instance, the questions area on the Evaluation Form Templates window), buttons appear cut in half and buttons do not display correctly.
Cause	The Display DPI setting is set to something other than Normal.
Solution	In the Windows Control Panel, start the Display utility. On the Settings tab, click Advanced. In the resulting Plug and Play Monitor Properties dialog box, select the General tab and make sure the DPI setting is set to Normal size (96 dpi). Click OK twice to save and apply your settings.

### Cannot find Active Directory users

Problem	<p>In Quality Management Administrator (Personnel &gt; User Administration &gt; Link Selected Users), you cannot find Active Directory users if the domain is identified by the host name.</p> <p>When you select a user, the Link Selected Users dialog box appears and displays domain information. However, when you click Find, an error message appears indicating that no data is available.</p>
Cause	In Site Configuration, you added the Active Directory domains and the host name to identify the Active Directory connection. The connection was validated and the domain configuration was saved.

Solution	<p>Edit the domain configuration to change the host name to an IP address. Once changed, Active Directory data can be found in the Link Selected Users window. If you want to continue using host names, add the host names to the DNS path to ensure that the host name is reachable by all computers.</p>
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### Cannot log in to Quality Management Administrator

Problem	<p>The following message appears when the administrator tries to log in to Quality Management Administrator:</p> <p>Invalid login. Please try again.</p>
Cause	<p>This message might indicate one of the following issues:</p> <ul style="list-style-type: none"> <li>■ The password was entered incorrectly—enter the correct password.</li> <li>■ The password changed—ensure the user has the correct password</li> <li>■ There is an Active Directory issue—consult the Active Directory documentation to resolve this problem.</li> </ul>

Solution	<p>Reenter the login information and then try again. If the error persists, contact your administrator.</p> <p>The administrator should check the following items to verify if the Windows account the user is logging in with is the correct account:</p> <ul style="list-style-type: none"><li>■ Check the <code>datapa.dbg</code> file. If the username or password is invalid, the <code>datapa.db</code> file will contain the following error: <pre>javax.naming.AuthenticationException: [LDAP: error code 49 - 80090308: LdapErr: DSID-0C090334, comment: AcceptSecurityContext error, data 525, vece</pre></li><li>■ Verify that you configured the Active Directory path correctly in Quality Management Administrator under Enterprise Settings.</li><li>■ Verify the Quality Management server is in the user's domain, or in a trusted domain.</li><li>■ Verify the administrator is included in the admin group in Active Directory. Administrators require this security setting if they are using Active Directory so that they can log into Quality Management Administrator and Unified Workforce Optimization. If the administrator is not in the admin group, the <code>admin.dbg</code> file will contain the following error: <pre>"Caused by: 401 UNAUTHORIZED at com.cisco .qm.datapa.chap.QmAuthenticationHandler.authenticate AdUser (QmAuthenticationHandler.java:317)</pre><p>The name of admin group and the OUs that were searched for this group will appear under to "Searching for groupName:" immediately above the error.</p><p>If the administrator is not in the correct admin group, perform the following steps:</p><ol style="list-style-type: none"><li>1. Verify the administrator is in the correct admin group in Active Directory.</li><li>2. Verify the defined admin group exists within the provided domain.</li><li>3. Verify the OUs defined for the domain can access the defined admin group.</li></ol></li></ul>
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### Duplicate Sites

Problem	One tab displays the site's IP address and another tab displays the site's hostname.
Cause	If you create a site using the IP address (or hostname) and then change it to hostname (or IP address, Site Settings displays the same site twice.
Solution	Delete the duplicate site. Ensure the appropriate teams are assigned to the remaining site.

### Not enough calls are saved

Problem	Not enough calls are saved for quality management workflows.
Cause	Calls saved for quality management workflows only appear in the Recordings application in Unified Workforce Optimization when an agent shuts down or restarts their machine at the end of the day.
Solution	Either set the End of the Day time to a later time in Quality Management Administrator or ensure that the agent's machine does not shut down or restart at the end of the day.

### Errors appear when running Quality Management Administrator]

Problem	Error messages appear when you run Quality Management Administrator and you have configured Quality Management to use the web server redundancy feature.
Cause	The Web Base server is not pointing to the Network Load Balancer.



Solution	<p>To resolve this issue, perform the following steps.</p> <ol style="list-style-type: none"> <li>1. On the server that hosts the Quality Management database, launch and log in to Microsoft SQL Server Management Studio.</li> <li>2. Click the database name (SQMDB) under the Databases node.</li> <li>3. Run the following SQL query: <pre>UPDATE [dbo].[Server] SET [ipHostName] = '&lt;IP of Load Balancer&gt;' WHERE serverTypeFK = 5 GO</pre> <p>where &lt;IP of Load Balancer&gt; is the IP address of the Network Load Balancer.</p> </li> </ol>
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## Quality Management Administrator Problems for Cisco Unified CCX

### Changing a recording profile mid-call causes recording to stop working

Problem	The recording ends abruptly.
Cause	If you change the recording profile for a device in Cisco Unified CM from one server to another server while Quality Management is recording a call for that device, Quality Management stops recording the call.
Solution	Update the Record Server for the device in Quality Management Administrator, then wait 5 minutes or restart the Record Server.

### Sync service does not deactivate agents

Problem	Agents who are inactive in Unified CM Administration appear as active in Quality Management Administrator.
Cause	Sync service does not deactivate agents in Quality Management Administrator when you set an agent to inactive in Unified CM Administration.
Solution	If you do not want the inactive agent in Unified CM Administration to be able to log in to Unified Workforce Optimization or record contacts, you must unlicense the agent in Quality Management Administrator.

## Login Issues

### A security warning appears when you click Validate my PC Configuration

Problem	The following message appears when you click Validate my PC Configuration in Unified Workforce Optimization:  The application's digital signature cannot be verified. Do you want to run the application?
Cause	The digital signature cannot be verified by a trusted source.
Solution	Click the Always Trust Content from this Publisher check box, and then click Run.

### Quality Management administrator cannot log in to Unified Workforce Optimization

Problem	The Quality Management administrator cannot log in to from Unified Workforce Optimization.
Cause	The Quality Management administrator password was defined in Quality Management. In a combined system, the Quality Management administrator should be able to log in to and access the features under Application Management and System Setup.
Solution	To resolve this issue, perform the following steps: <ol style="list-style-type: none"> <li>1. Verify that the Quality Management administrator password is correct.</li> <li>2. If the password is correct and the Quality Management administrator cannot log in to , log in to as cassetup and test the connection to the Quality Management database in QM Configuration under System Setup.</li> <li>3. If the connection to the Quality Management database fails, ensure that the QM database is properly configured.</li> </ol>

### and Microsoft Internet Explorer does not support hostnames that contain underscores

Problem	The hostname for the base server must not contain underscores if you are using Microsoft Internet Explorer to access the Unified Workforce Optimization Container.
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Cause	There are underscores in the hostname for the base server.
Solution	Remove underscores in the hostname for the base server.

### Unified Workforce Optimization server is currently offline

Problem	<p>A dialog box appears with the following message:</p> <pre>We're sorry, but the Unified Workforce Optimization server is currently offline. When the server returns you will be automatically redirected to the login page. See your Unified Workforce Optimization administrator for assistance if this problem persists.</pre>
Cause	The Unified Workforce Optimization server is offline.
Solution	Verify the services on the Quality Management server are running.

### Cannot access applications in Unified Workforce Optimization

Problem	User cannot access applications in Unified Workforce Optimization.
Cause	<p>If the username and password are correct, but the user does not have permission to access the applications, the following message appears.</p> <p>You do not have permission to access any Quality Management applications. The Apps list is empty. Contact your administrator to correct the problem.</p>
Solution	Contact your administrator to correct the problem.

### Cannot log in to all products on Unified Workforce Optimization

Problem	<p>User tried to log in to multiple products on Unified Workforce Optimization, and partially succeeded in logging into only one of the products.</p> <p>If the information entered is incorrect for one of the products, the following message appears.</p> <p>Credentials are not correct for &lt;Product Name&gt;. Click Logout and try again.</p>
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Cause	<p>Splkzilla bug: 23390. This message might indicate one of the following issues:</p> <ul style="list-style-type: none"> <li>• The password changed—ensure the user has the correct password</li> <li>• The user is unlicensed—assign a license to the user in Quality Management Administrator to resolve this problem</li> <li>• There is an Active Directory issue—consult the Active Directory documentation to resolve this problem.</li> </ul>
Solution	<p>Reenter the login information and then try again. If the error persists, contact your administrator.</p> <p>The administrator should check the following items to verify if the Windows account the user is logging in with is the correct account:</p> <ul style="list-style-type: none"> <li>• Check the DesktopRecordServer.dbg file for the credentials the user is using to log in.</li> <li>• Verify that you configured the Active Directory path correctly in Quality Management Administrator under Enterprise Settings.</li> <li>• Verify the Quality Management server is in the user’s domain, or in a trusted domain.</li> <li>• Verify the user is synchronized in Quality Management, linked, and licensed.</li> <li>• Verify the user account in Quality Management was not deactivated and the agent was not removed from Unified CCX.</li> </ul>

**Cannot log in to Unified Workforce Optimization**

Problem	<p>User cannot log in to Unified Workforce Optimization.</p> <p>The following message appears when the user tries to log in to Unified Workforce Optimization:</p> <p>Credentials are not correct. Try again.</p>
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Cause	<p>This message might indicate one of the following issues:</p> <ul style="list-style-type: none"><li>■ The password was entered incorrectly—enter the correct password.</li><li>■ The password changed—ensure the user has the correct password</li><li>■ The user is unlicensed—assign a license to the user in Quality Management Administrator to resolve this problem</li><li>■ There is an Active Directory issue—consult the Active Directory documentation to resolve this problem.</li></ul>
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<p>Solu- tion</p>	<p>Reenter the login information and then try again. If the error persists, contact your administrator.</p> <p>The administrator should check the following items to verify if the Windows account the user is logging in with is the correct account:</p> <ul style="list-style-type: none"> <li>■ Check the DesktopRecordServer.dbg file for the credentials the user is using to log in.</li> <li>■ Verify that you configured the Active Directory path correctly in Quality Management Administrator under Enterprise Settings.</li> <li>■ Verify the Quality Management server is in the user’s domain, or in a trusted domain.</li> <li>■ Verify the user is synchronized in Quality Management, linked, and licensed.</li> <li>■ Verify the user account in Quality Management was not deactivated and the agent was not removed from Unified CCX.</li> <li>■ If the user is an administrator, verify the administrator is included in the admin group in Active Directory. Administrators require this security setting if they are using Active Directory so that they can log into Quality Management Administrator and Unified Workforce Optimization. If the administrator is not in the admin group, the admin.dbg file will contain the following error:             <pre style="margin-left: 20px;">"Caused by: 401 UNAUTHORIZED at com.cisco             .qm.datapa.chap.QmAuthenticationHandler.authenticate             AdUser(QmAuthenticationHandler.java:317)</pre> <p>The name of admin group and the OUs that were searched for this group will appear under to “Searching for groupName:” immediately above the error.</p> <p>If the administrator is not in the correct admin group, perform the following steps:</p> <ol style="list-style-type: none"> <li>1. Verify the administrator is in the correct admin group in Active Directory.</li> <li>2. Verify the defined admin group exists within the provided domain.</li> <li>3. Verify the OUs defined for the domain can access the defined admin group.</li> </ol> </li> </ul>
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### Login page does not appear

Problem	When you try to access Unified Workforce Optimization, the Login page does not appear.
Cause	The files in the Jetty work folder are stale.
Solution	<p>To resolve this issue, perform the following steps:</p> <ol style="list-style-type: none"> <li>1. Log in as administrator on the server where the Jetty service is installed.</li> <li>2. Stop the Jetty service.</li> <li>3. Delete the contents of the Jetty\work folder. This file is located at C:\Program Files\Cisco\WFO_QM\Jetty\work.</li> <li>4. Start the Jetty service.</li> <li>5. Open a web browser and go to the Unified Workforce Optimization and verify the Login page appears.</li> </ol>

### There is a Problem with this Website's Security Certificate

Problem	<p>The following error message appears when you try to access the Unified Workforce Optimization interface using an https:// URL.</p> <pre>There is a problem with this website's security certificate.</pre>
Cause	There is no certificate for this website.

<p><b>Solution</b></p>	<p>To correct the problem, do the following:</p> <ol style="list-style-type: none"> <li>1. Enter the following URL in your web browser, where &lt;base server&gt; is either the IP address or the hostname of the Unified Workforce Optimization interface.   <pre>https://&lt;base server&gt;</pre> <p>where &lt;base server&gt; is the IP address or hostname of the user interface.</p> </li> <li>2. When the error message appears, click Continue to this Website.</li> <li>3. From Microsoft Internet Explorer, choose Tools &gt; Internet Options, click the Security tab, select Trusted Sites, click Sites, click Add in the Trusted Sites dialog box, click close, and then click OK.</li> <li>4. Click Certificate Error in the Address bar, click View Certificate, click Install Certificate in the Certificate dialog box, click Next, choose Place All Certificates in the following Store, click Browse, select Trusted Root Certification Authorities, click OK, click Next, and then click Finish.</li> <li>5. Click Yes on the Security Warning dialog box, and then click OK.</li> </ol>
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**There is a Problem with this Website's Security Certificate**

<p><b>Problem</b></p>	<p>The following error message appears when you try to access the Unified Workforce Optimization interface using an https:// URL.</p> <pre>There is a problem with this website's security certificate.</pre>
<p><b>Cause</b></p>	<p>There is no certificate for this website.</p>



<p><b>Solution</b></p>	<p>To correct the problem, do the following:</p> <ol style="list-style-type: none"> <li>1. Enter the following URL in your web browser, where &lt;web base server&gt; is either the IP address or the hostname of the Unified Workforce Optimization interface.   <pre>https://&lt;web base server&gt;</pre> <p>where &lt;web base server&gt; is the IP address or hostname of the user interface.</p> </li> <li>2. When the error message appears, click Continue to this Website.</li> <li>3. From Microsoft Internet Explorer, choose Tools &gt; Internet Options, click the Security tab, select Trusted Sites, click Sites, click Add in the Trusted Sites dialog box, click close, and then click OK.</li> <li>4. Click Certificate Error in the Address bar, click View Certificate, click Install Certificate in the Certificate dialog box, click Next, choose Place All Certificates in the following Store, click Browse, select Trusted Root Certification Authorities, click OK, click Next, and then click Finish.</li> <li>5. Click Yes on the Security Warning dialog box, and then click OK.</li> </ol>
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## Web Browser Issues

### Error appears when choosing any menu item

<p><b>Problem</b></p>	<p>The following error appears when choosing any menu item:           Can't move focus to the control because it is invisible, not enabled, or of a type that does not accept the focus</p>
<p><b>Cause</b></p>	<p>This problem is due to a Microsoft Internet Explorer issue.</p>

Solution	<p>To prevent this error from appearing, edit the Microsoft Internet Explorer options as follows.</p> <ol style="list-style-type: none"> <li>1. In Microsoft Internet Explorer, choose Tools &gt; Internet Options, and select the Advanced tab.</li> <li>2. Under the Browsing section, ensure that the “Display a notification about every script error” option is cleared; select the “Disable script debugging (Internet Explorer)” and “Disable script debugging (Other)” options.</li> <li>3. Click OK.</li> </ol>
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**The message, "Stop running this script" appears.**

Problem	The following message appears when using Microsoft Internet Explorer to access Unified Workforce Optimization.
Cause	This problem is due to a Microsoft Internet Explorer issue.
Solution	<p>For information on correcting this issue, see Microsoft Support Article ID 175500 available at:</p> <p><a href="http://support.microsoft.com/kb/175500">http://support.microsoft.com/kb/175500</a></p>

**This website wants to install the following add-on: 'TODO: <File description>' from 'TODO: <Company name>'**

Problem	<p>When you access Live Screen Monitoring from Internet Explorer, the following message appears:</p> <p>This website wants to install the following add-on: 'TODO: &lt;File description&gt;' from 'TODO: &lt;Company name&gt;'</p> <p>The message does not explain what add-on needs to be installed.</p>
Cause	Unified Workforce Optimization requires the installation of the ScreenViewer.cab from Cisco, Inc.

Solution	<p>To resolve this issue, choose one of the following options:</p> <ul style="list-style-type: none"> <li>■ Click Allow and follow the prompts to install the ScreenViewer.cab.</li> <li>■ To change the prompt and install the ScreenViewer.cab:             <ol style="list-style-type: none"> <li>1. On the desktop, remove ScreenViewer.dll and ScreenViewer.inf from C:\Windows\Downloaded Program Files.</li> <li>2. From Internet Explorer, choose Tools &gt; Manage Add-ons.</li> <li>3. Verify that the Screen View Control Class does not appear under Manage Add-ons.</li> <li>4. Enter the IP address for your Unified Workforce Optimization system and then click Validate my PC configuration. The following message will appear at the bottom of Internet Explorer:  This website wants to install the following add-on: 'ScreenViewer.cab' from Cisco, Inc.</li> <li>5. Click Install and follow the prompts.</li> </ol> </li> </ul>
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### Unified Workforce Optimization “bounces” when navigating through the interface

Problem	When viewed in Internet Explorer, the Unified Workforce Optimization interface “bounces” or the screen moves when attempting to enter data.
Cause	The Internet Explorer smooth scrolling option is enabled.
Solution	Disable smooth scrolling. In Internet Explorer, open Internet Options. On the Advanced tab, locate Browsing > Use smooth scrolling, clear the check box, and click OK.

## Dashboard Issues

### Java script errors appear in the Dashboard application

Problem	Java script errors appear when you are using the Dashboard application.
Cause	These errors can appear when you add the Web Link widget to your dashboard and configure it to display a specific website. The Java script errors are related to the associated website.

Solution	To stop the Java script errors, remove the Web Link widget associated with the website that is generating the Java script errors.
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## Recordings Issues

### A security warning appears when you click Recordings

Problem	The following message appears when you click Recordings in Unified Workforce Optimization:  The application's digital signature cannot be verified. Do you want to run the application?
Cause	The digital signature cannot be verified by a trusted source.
Solution	Click the Always Trust Content from this Publisher check box, and then click Run.

### Agent cannot view quality management calls

Problem	An agent cannot view quality management recordings for call, but can view archive recordings for calls in the Recordings application.
Cause	An agent cannot view calls when any of the following has occurred: <ul style="list-style-type: none"> <li>■ The agent's team is not in a group.</li> <li>■ The agent is deleted from Unified CM.</li> </ul>
Solution	To see the quality management calls in the Recordings application, do one of the following (as appropriate to the individual situation): <ul style="list-style-type: none"> <li>■ Add the team to a group in Quality Management Administrator.</li> <li>■ Add the agent in Unified CM.</li> </ul>

### Encrypted metadata appears as sortable in a table, but does not sort

Problem	A sort triangle appears in a metadata column. When you click the sort triangle, the metadata in the column does not sort.
Cause	The sort is ignored.
Solution	No action is required.

## Recording Type drop-down list displays options that are not recording types

Problem	In the Recordings application, if you are using the Expand Search and click the Recording Type drop-down list, the Recording Type drop-down list will display the following options in addition to the available recording types: <ul style="list-style-type: none"> <li>■ Server</li> <li>■ Reconciliation</li> <li>■ Events</li> <li>■ Unknown</li> </ul>
Cause	These options are not recording types. If you click one of these options, nothing will appear in the Recordings table.
Solution	To get useful search results, do not choose the options listed above.

## Media Player Issues

### Error appears when retrieving an evaluation form

Problem	When loading a recording from the Recordings application, the following message appears: <code>Error Retrieving Evaluation Form</code>
Cause	The administrator cleared the Evaluation For Name Check box in Quality Management Administrator. As a result, the evaluation form name does not appear in the Evaluation Form field on the Evaluation pane in the Evaluation and Review application. The recording does not load, and the user cannot playback the recording.
Solution	To resolve this problem, select the Evaluation Form Name check box in Quality Management Administrator. <ol style="list-style-type: none"> <li>1. From Quality Management Administrator, choose Recordings &gt; Quality Management &gt; Evaluation Forms &gt; Forms. The Evaluation Form Administration window appears.</li> <li>2. Click the Header tab and then select the Evaluation Form Name check box.</li> <li>3. Click Save.</li> </ol>

## Media Player fails to initialize

Problem	The Loading pop up for the Media Player appears when you access the Recordings application and hangs.
Cause	The Java cache needs to be cleared.
Solution	<p>To clear the Java cache, perform the following steps:</p> <ol style="list-style-type: none"> <li>1. Close your web browser.</li> <li>2. Choose Start &gt; Control Panel, and then double-click Java. The Java Control Panel appears.</li> <li>3. From the General tab, click Settings. The Temporary Files Settings dialog box appears.</li> <li>4. Click Delete Files, and then click OK. The Delete Temporary Files dialog box appears.</li> <li>5. Click OK to dismiss the dialog box.</li> </ol> <div style="background-color: #e1f5fe; padding: 10px; margin: 10px 0;"> <p><b>Note:</b> It may take several minutes to clear your Java cache.</p> </div> <ol style="list-style-type: none"> <li>6. Click OK to dismiss the Temporary Files Settings dialog box.</li> <li>7. Click OK to dismiss the Java Control Panel.</li> <li>8. Log into Unified Workforce Optimization, and try again.</li> </ol>

## Live Monitoring Issues

### The client PC flashes when Live Screen Monitoring is initiated

Problem	When you initiate Live Screen Monitoring, the client PC will flash black for a few seconds before establishing the connection.
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Solution	<p>To disable the flash:</p> <ol style="list-style-type: none"> <li>1. Click Start, type services.msc in the search field, and then press Enter.</li> <li>2. From the Services window, double-click Desktop Window Manager Session Manager.</li> <li>3. Choose Disabled from the Startup type drop-down list and then click Apply. You will need to restart your client PC.</li> <li>4. Optional: Disable the Desktop Windows Manager Session Manager if you do not want to restart your client PC.</li> </ol>
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### Windows Aero theme is not supported by the Desktop Recording service

Problem	<p>Live screen monitoring is based off the Microsoft Windows Desktop Sharing API. This same API is used by Microsoft Windows Remote Assistance. One limitation of the Microsoft Windows Desktop Sharing API is that it does not support the Windows Aero theme for the PC running the Desktop Recording service. Every time the Desktop Recording Service starts, Windows will automatically switch your PC to the Windows Basic theme. The Windows Basic theme will remain until the Desktop Recording service is stopped.</p>
Solution	<p>If this is not the desired behavior, choose one of the following work arounds:</p> <ul style="list-style-type: none"> <li>• Configure your PC to always use the Windows Basic theme. Then when the QM Desktop Recording service starts it does not have to change to that theme since it is already in place.</li> <li>• Disable the live screen monitoring feature in Monitoring and Recording Administrator by clearing the Enabled check box under Live Screen Monitor in the Interface Settings window under Recordings. This will disable live screen monitoring for all users. When live screen monitoring is disabled, it will not switch to the Windows Basic theme.</li> </ul>

### Unable to connect to the PC using Windows Remote Assistance if Live Screen Monitoring is enabled

Problem	Cisco uses Windows Remote Assistance to provide the live screen monitoring session. You are only allowed to have a single incoming session per PC, so while the Live Monitoring service is in use, any attempts to connect to the PC will be denied.
Solution	To workaround this issue, disable Live Monitoring or change it to only start the service when a Live Monitoring session is requested. If you are using the Windows Aero theme, every time a Live Monitoring session is requested, the agent's screen will change from Aero to Basic causing a screen flash.

## Reporting Issues

### Accented characters are garbled when you open a report in CSV format in MS Excel

Problem	When you open a report containing accented characters in CSV format in Microsoft Excel, the accented characters are garbled.
Solution	Open the CSV report with Notepad.

### Accented characters do not appear in PDF reports

Problem	When you generate a report containing accented characters, the accented characters are missing from the PDF.
Solution	Run the report in HTML format.

### Asian characters are garbled when you open a report in CSV format in MS Excel

Problem	When you open a report containing Asian characters in CSV format in Microsoft Excel, the Asian characters are garbled.
Solution	Open the CSV report with Notepad.

### Asian characters do not appear in PDF reports

Problem	When you generate a report containing Asian characters, the Asian characters are missing from the PDF.
Solution	Run the report in HTML format.



### Format errors appear in the form and section comments for the Agent Scored Evaluation report

Problem	<p>When you generate an Agent Scored Evaluation report, you might see one or more of the following issues.</p> <ul style="list-style-type: none"> <li>■ Section comments do not wrap.</li> <li>■ Section comments appear to wrap in a saved report, but the first word in the first sentence appears on a line by itself.</li> <li>■ Form comments are truncated.</li> </ul>
Solution	Save the report to PDF.

### It takes 30 seconds to open Reporting after the server is booted

Problem	The first person to access the Reporting application might have to wait up to 30 seconds for the Reporting application to respond after the server is booted.
Cause	When the server is booted, only the first person who accesses the Reporting application experiences this delay. Some time is required when the first user accesses the Reporting application. The Reporting application connects to the database, establishes privileges, and displays a menu based on the user's role. After the connection is established you can quickly access reports.
Solution	No action is required.

### Report does not correctly display data in locale language

Problem	<p>Data in a specific locale language does not appear correctly in a Quality Report when you generate a PDF form. The data appears correctly when you generate a Quality Report in CSV or HTML.</p> <div style="border: 1px solid #ccc; background-color: #e6f2ff; padding: 10px; margin-top: 10px;"> <p><b>Example:</b> If you generate a PDF for a Quality Report from a client machine running the English locale and a question in the report is written in Japanese, the data does not appear correctly. The client machine must run in the Japanese locale for the report to display the Japanese text.</p> </div>
Cause	The locale on the client machine might not match the locale in the report.

Solution	Verify that you are running the correct locale for the supported language on the client machine.
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### Reporting application does not load

Problem	The Reporting application does not load when you click Reporting. The window is blank and a Microsoft Internet Explorer dialog box displays the following message:
Cause	Errors on this webpage might cause it to work incorrectly. Could not load 'dojo.gfx.vml';last tried ../dogox/gfx/vml.js'
Solution	Stop the Jetty service, delete the QMDesktop folder from C:\Program Files (x64)\Cisco\WFO_QM\Jetty\work, and then restart the Jetty service.

### Reports do not open in Microsoft Internet Explorer 9

Problem	Reports in CSV, PDF, and XLS format do not open in Microsoft Internet Explorer 9.
Cause	A dialog box to save the report opens but closes again very quickly.

<p>Solution</p>	<p>Choose one of the following solutions.</p> <ul style="list-style-type: none"> <li>■ Clear the Confirm open after download check box for the CSV, PDF, and XLS file types. To do this, follow these steps for each file type.             <ol style="list-style-type: none"> <li>1. Double-click My Computer.</li> <li>2. On the Tools menu, choose Folder Options.</li> <li>3. Select the File Types tab.</li> <li>4. Under Registered File Types, select the file type, and then click Advanced.</li> <li>5. Clear the Confirm open after download check box, and then click OK.</li> </ol> </li> </ul> <div style="background-color: #d9ead3; padding: 10px; margin: 10px 0;"> <p><b>Note:</b> This solution might not work. In that case, try the following solution.</p> </div> <ul style="list-style-type: none"> <li>■ Enable automatic prompting for downloads in Microsoft Internet Explorer.             <ol style="list-style-type: none"> <li>1. In Microsoft Internet Explorer, choose Tools &gt; Internet Options. The Internet Options dialog box appears.</li> <li>2. Click the Security tab, and then click Custom level. The Security Settings - Internet Zone dialog box appears.</li> <li>3. Scroll down to Downloads and click the Enable option for Automatic prompting for file downloads.</li> <li>4. Click OK to save your changes.</li> <li>5. Click OK to dismiss the Internet Options dialog box.</li> </ol> </li> </ul>
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**Unable to print report in Adobe PDF or Microsoft Excel**

<p>Problem</p>	<p>User can successfully print a report to Adobe PDF or Microsoft Excel on the first attempt from Microsoft Internet explorer. When the user tries to print the same report again (two or more times), the report does not print.</p>
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Solution	<p>Update the Microsoft Internet Explorer settings. To update the Microsoft Internet Explorer settings, perform the following steps:</p> <div data-bbox="475 300 1383 428" style="background-color: #d9ead3; padding: 5px;"><p><b>Note:</b> You need administrative or elevated privileges on your desktop to perform this task.</p></div> <ol style="list-style-type: none"><li>1. From Microsoft Internet Explorer, choose Tools &gt; Internet Options. The Internet Options - Security at Risk dialog box appears.</li><li>2. Click the Advanced tab, scroll down to Security, and clear the Do Not Save Encrypted Pages to Disk check box.</li><li>3. Click OK to save your changes.</li></ol>
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## MANA Problems

Use the information presented here to diagnose and resolve MANA problems.

## CDR Polling failed due to MANA OutOfMemory Error

<p><b>Problem</b></p>	<p>The following OutOfMemory error appears in the MANA logs.</p> <pre> 2012-02-07 08:58:28,573 ERROR QMMN2016 [pool-2-thread-1 CmPollingTask#requestProblems:49] Unexpected error while getting call data for CM task.2012-02-07 08:58:28,573 STACK QMMN2016 [pool-2-thread-1 CmPollingTask#requestProblems:49] com.cisco.qm.mana.cmtask.CallDataException: Unspecified error comparing CDR and system data. See MANA log for details:at com.cisco.qm.mana.cmtask.CmTask.perform (CmTask.java:172)at com.cisco.qm.mana.tasks.CmPollingTask.requestProblems (CmPollingTask.java:45)at com.cisco.mana.diagnostic.PollingDiagnostic\$StatusFuture\$1.run (PollingDiagnostic.java:139)at java.util.concurrent.Executors\$RunnableAdapter.call (Unknown Source)at java.util.concurrent.FutureTask\$Sync.innerRun (Unknown Source)at java.util.concurrent.FutureTask.run (Unknown Source)at java.util.concurrent.ThreadPoolExecutor\$Worker.runTask (Unknown Source)at java.util.concurrent.ThreadPoolExecutor\$Worker.run (Unknown Source)at java.lang.Thread.run (Unknown Source)Caused by: java.lang.OutOfMemoryError: Java heap space                 </pre>
<p><b>Solution</b></p>	<p>Open the manaservice.properties file in the C:\Program Files (x86)\Cisco\WFO_QM\config folder and change the following line:</p> <pre> service4j.jvmOptions=- Dsplk4j.configuration=manaservice.properties   -Xmx256M   -Xrs                 </pre> <p>to:</p> <pre> service4j.jvmOptions=- Dsplk4j.configuration=manaservice.properties   -Xmx1024M   -Xrs                 </pre>

## Service Problems

This topic explains how to diagnose and resolve problems that occur with the services for Quality Management.

### Sync service is not synchronizing databases

Problem	The Sync service is not synchronizing databases.
Solution	<p>Ensure that the IP address for both Side A and Side B are correct. The IP address and “side” are tied together and are not interchangeable.</p> <div style="border: 1px solid #ccc; background-color: #e6f2ff; padding: 10px; margin: 10px 0;"> <p><b>Example:</b> You cannot specify the IP address for Side B in the Side A field.</p> </div> <p>Ensure the password is correct for the uccxworkforce login ID.</p> <p>Verify that you configured the user correctly according to the <i>Installation Guide</i>.</p>

### Unable to stop the service

Problem	When the Jetty service restarts or stops, the process gives a warning error message that the system is unable to stop the service.
Cause	In fact, the Jetty service really stops at that point. It was shut down before it was fully initialized.
Solution	Restart the Jetty service cleanly.

## Web Server Issues

### Error appears in Unified Workforce Optimization

Problem	When you access Unified Workforce Optimization or switch applications in Unified Workforce Optimization, an error might appear.
Cause	If your site is using web server redundancy, the web server used by Unified Workforce Optimization might be in the process of switching over to the backup web server.
Solution	The backup web server should be available momentarily. To resolve this problem, refresh your browser. Note that you might be prompted to log in again.

# Troubleshooting a Call Flow by Symptoms

The following table describes at a high level the most important logs to gather for various call flow symptoms. The logs are listed in priority order. It is recommended that you gather all logs from all services.

In general, if you are having problems with the creation of RAW files, the log for the signaling service is the most important log to gather. Once files are recorded and converted the problems are more likely to be related to upload or workflows, so the logs for the Data API, Upload Controller, and Recording services become more important.

High-level Symptom	Logs to Gather	Possible Cause
No RAW files are being created	<ol style="list-style-type: none"><li>1. Signaling service</li><li>2. Recording service</li></ol>	<ol style="list-style-type: none"><li>1. No SIP invite (check the signaling service log)</li><li>2. The device is not configured for a Recording Cluster (check the VoIP Devices window in Quality Management Administrator)</li></ol>
RAW or SPX files are stuck on the client machine	<ol style="list-style-type: none"><li>1. Recording service</li><li>2. Upload Controller service</li><li>3. DB Proxy service</li><li>4. Data API service</li></ol>	<ol style="list-style-type: none"><li>1. The connection to the Upload Controller might be down</li><li>2. Database connection or queries might have an issue</li><li>3. File might not currently be set for upload or deletion (check the Upload Controller log for the recording ID)</li><li>4. File might not currently be reconciled</li></ol>

High-level Symptom	Logs to Gather	Possible Cause
INI files are not being removed (recording files are not being renamed)	<ol style="list-style-type: none"> <li>1. Example of the INI file  <div style="border: 1px solid black; background-color: #d9ead3; padding: 5px; margin: 5px 0;"> <p><b>Important:</b> Do not remove the INI file.</p> </div> </li> <li>2. Recording service</li> <li>3. Upload Controller service</li> </ol>	<ol style="list-style-type: none"> <li>1. The connection to the Upload Controller might be down</li> <li>2. Database connection or queries might have an issue</li> <li>3. File might not currently be set for upload or deletion (check the Upload Controller log for the recording ID)</li> </ol>
Workflow problems	<ol style="list-style-type: none"> <li>1. Data API service</li> <li>2. Recording service</li> </ol>	
Hot Desking problems	<ol style="list-style-type: none"> <li>1. Data API service</li> <li>2. Recording Controls (if it is being used)</li> <li>3. Recording service</li> </ol>	
Extension Mobility problems	<ol style="list-style-type: none"> <li>1. Signaling service</li> <li>2. Data API service</li> </ol>	
General Upload problems	<ol style="list-style-type: none"> <li>1. Recording service</li> <li>2. Upload Controller service</li> <li>3. DB Proxy service</li> <li>4. Data API service</li> </ol>	
General Recording Problems	<ol style="list-style-type: none"> <li>1. Signaling service</li> <li>2. Recording service</li> </ol>	