



CHAPTER 4

Troubleshooting Cisco Unified Video Advantage

- [How to Resolve Problems With Video](#), page 4-1
- [How to Use Cisco Unified Communications Manager Diagnostic Tools](#), page 4-5
- [How to Collect Diagnostic and Log Information for Cisco Unified Video Advantage](#), page 4-8

How to Resolve Problems With Video

- [No Video on Multi-Party Conferences](#), page 4-1
- [Poor Audio and Video Lip Synchronization](#), page 4-2
- [No Video in the Video Windows; No-Video Icon Appears](#), page 4-2
- [Video Bandwidth Unavailable Message Appears on Cisco Unified IP Phone LCD Screen](#), page 4-3
- [Video Problem Icon Appears in the System Tray](#), page 4-3
- [Video Icon Does Not Appear on the Phone Screen and Cisco Unified Video Advantage Is Not Associating With the Cisco Unified IP Phone](#), page 4-3
- [Bandwidth Issues for Mobile Workers or Telecommuters](#), page 4-4
- [Disconnected Calls on H.323 Endpoints](#), page 4-4
- [PC CPU Utilization at 100 Percent](#), page 4-5

No Video on Multi-Party Conferences

Problem No video on multi-party conferences.

Solution In Cisco Unified Communications Manager ((formerly known as Cisco Unified CallManager) check that the Media Resource Groups and Media Resource Group Lists include an MCU.

Make sure that a video conference bridge has been allocated and not an audio conference bridge.

Related Topics

- *Cisco Unified Communications Manager Administration Guide*, Media Resource Group List, Configuration Settings section
- *Cisco Unified Communications Manager System Guide*, Media Resources section

Poor Audio and Video Lip Synchronization

Problem Poor audio and video lip synchronization.

Solution This problem can be caused by, but not limited to, these conditions:

- Quality of service issues. Verify that quality of service is properly configured throughout the network.
- High CPU utilization on the PC. Tell the user to close some applications during a video call.
- Network congestion.

Related Topics

- Quality of Service design guide: <http://www.cisco.com/warp/public/779/largeent/it/ese/srnd.html>
- [PC CPU Utilization at 100 Percent, page 4-5](#)

No Video in the Video Windows; No-Video Icon Appears

Problem No video in the video windows, no-video icon appears.

Solution Try these solutions:

- See the *User Guide for Cisco Unified Video Advantage* to troubleshoot no-video issues for users: http://www.cisco.com/en/US/products/sw/voicesw/ps5662/products_user_guide_list.html
- Make sure that Regions have been configured correctly for video. See “Related Topics.”
- Make sure that Locations have sufficient video bandwidth. See “Related Topics.”
- Make sure that a Media Termination Point (MTP) or Transcoder has not been allocated for video calls because they do not support video capabilities.
- If you are using Cisco Unified Communications Manager Release 5.0, adjusting the video quality settings below a certain value will cause Cisco Unified Video Advantage to display no video. Upgrade to Cisco Unified Communications Manager Release 5.0(4) or higher to resolve this problem.
- Cisco Unified Video Advantage uses port 5445. If your firewall blocks this port, users will receive no video. You will need to configure your firewall to allow access to Port 5445 and enable video.
- Upgrade to Cisco VPN Client 4.0. Earlier versions of Cisco VPN Client do not support video.
- Make sure that Cisco Unified IP Phone is running on the SCCP protocol. Cisco Unified Video Advantage is not supported in a SIP environment.

Related Topics

- [Configuring Cisco Unified Communications Manager, page 1-4](#)
- [No Video on Multi-Party Conferences, page 4-1](#)
- [Video Problem Icon Appears in the System Tray, page 4-3](#)

Video Bandwidth Unavailable Message Appears on Cisco Unified IP Phone LCD Screen

Problem The message “Video bandwidth unavailable” displays on the Cisco Unified IP Phone LCD screen.

Solution There is not enough bandwidth available to make a video call. In this situation, the Cisco Unified IP Phone falls back to an audio-only call.

Related Topics

- [Configuring Cisco Unified Communications Manager, page 1-4](#)
- *Cisco Unified Communications Manager Administration Guide*, Location Configuration section

Video Problem Icon Appears in the System Tray

Problem The video problem icon appears in the system tray on the PC.

Solution Cisco Unified Video Advantage cannot associate with the Cisco Unified IP Phone or Cisco IP Communicator. Cisco Unified Video Advantage might not be sending CDP properly. Try these solutions:

- For the Cisco Unified IP Phone, make sure the client computer is plugged into the PC port on the phone.
- The Ethernet cable might be faulty. Try a known good replacement cable.
- For Cisco IP Communicator, make sure Cisco IP Communicator Release 2.0 or later is running.

Related Topics

- [Video Bandwidth Unavailable Message Appears on Cisco Unified IP Phone LCD Screen, page 4-3](#)

Video Icon Does Not Appear on the Phone Screen and Cisco Unified Video Advantage Is Not Associating With the Cisco Unified IP Phone

Problem Video icon does not display on the Cisco Unified IP Phone LCD screen. Cisco Unified Video Advantage is not associating with the Cisco Unified IP Phone.

Solution Try these solutions:

- Verify the version of Cisco Unified IP Phone firmware; the firmware version must support video.
- Verify that the Cisco Unified IP Phone model is supported.
- Verify that these parameters are properly set in Cisco Unified Communications Manager for the Cisco Unified IP Phones:
 - Video Capabilities is enabled
 - PC Port is enabled
- Verify that you can ping between the PC and the Cisco Unified IP Phone.
- Verify that you are not using a phone configured for SIP. Cisco Unified Video Advantage is currently supported only on SCCP.

Related Topics

- [Configuring Cisco Unified IP Phones, page 1-5](#)

Bandwidth Issues for Mobile Workers or Telecommuters

Problem In most cases when working over a LAN, users will not need to adjust the bandwidth setting. If you have mobile workers or telecommuters, they may need to cap their bandwidth settings at a maximum rate.

Solution Try these solutions:

- Tell the user to adjust video quality settings from the Cisco Unified Video Advantage console (**Settings > Video Quality**). Deselect **Automatic**, and ask the user to move the slider to adjust the bandwidth setting. A popup tooltip displays the bandwidth rate.
- Users can contact their respective Internet service providers, or if they are advanced users, they can use the DSL Reports internet site (<http://www.dslreports.com/stest>), and follow the instructions for obtaining the upload and the download speeds. Selecting a bandwidth is usually a factor of the uplink speed, which can range from a low of 50 kbps up to perhaps 500 kbps.

After the uplink speed is determined, leave some headroom between the selected bandwidth setting and the capacity of the channel (Location and Region settings in Cisco Unified Communications Manager).

**Note**

If users are limited to a low rate, for example 50 kbps, they might not be able to participate in video conferences.

Related Topics

- [Configuring Cisco Unified Communications Manager, page 1-4](#)

Disconnected Calls on H.323 Endpoints

Problem Calls are disconnecting on H.323 endpoints.

Solution When an H.323 endpoint is placed on hold by Cisco IP Communicator, Cisco Unified Communications Manager utilizes a procedure referred to as the Empty Capabilities Set (ECS), sometimes also referred to as the Null Capabilities Set or TCS=0. The H.323 endpoints must support ECS to respond properly when placed on hold. If they do not, the call is disconnected when it is placed on hold because the H.323 endpoint does not understand the ECS message from Cisco Unified Communications Manager and disconnects the call.

Transfer, conference, and park operations also exhibit this behavior because there is an implicit hold operation that takes place in these scenarios as well (for example, when a call is transferred, the call is first placed on hold by Cisco Unified Communications Manager before completing the transfer).

Try these solutions:

- Verify that the H.323 endpoint you are using supports ECS.

**Note**

Some ECS implementations do not allow audio calls to become video calls after a transfer, conference, or park operation.

- If an endpoint does not support ECS:
 - A Media Termination Point (MTP) can be added to provide supplementary support so that hold, transfer, conference, and park are available, ensuring that calls are not dropped. In this case, video is not supported for these calls.
 - To preserve video over the features (hold, transfer, conference, and park), configure the H.323 endpoint to require an MTP. But, make sure that the Media Resource Group List (MRGL) and the default MRGL do not include MTPs or Transcoders. Then hold, transfer, conference, and park will be disabled when calling this device, and Cisco Unified Communications Manager knows that the H.323 endpoint does not support these features.

PC CPU Utilization at 100 Percent

Problem The PC CPU utilization is at 100 percent.

Solution Try these solutions:

- Make sure you are using a supported release:

Cisco Unified Communications Manager Release 4.1(3), Service Release 2 is the minimum release required for Cisco Unified Video Advantage to operate with Cisco IP Communicator or with a Cisco Unified IP Phone. For a list of the supported releases, see the Cisco Unified Video Advantage release notes:

http://www.cisco.com/en/US/products/sw/voicesw/ps5662/prod_release_notes_list.html
- To free up some PC CPU resources, close any applications that are not being used while on a video call.
- Make sure the client computer meets the hardware requirement for Cisco Unified Video Advantage. For details, see the release notes:

http://www.cisco.com/en/US/products/sw/voicesw/ps5662/prod_release_notes_list.html

How to Use Cisco Unified Communications Manager Diagnostic Tools

- [Using Serviceability Troubleshooting Traces](#), page 4-6
- [Using the Real-Time Monitoring Tool \(RTMT\)](#), page 4-6
- [Using CDR Analysis and Reporting \(CAR\)](#), page 4-7

Using Serviceability Troubleshooting Traces

Before You Begin

Depending on your release of Cisco Unified Communications Manager, the navigation to the serviceability pages might vary.

Procedure

-
- Step 1** Log in to Cisco Unified Communications Manager Administration.
- Step 2** From the Navigation drop-down list in the upper right corner, choose the “Serviceability” option, and click **Go**.
- Step 3** Choose **Trace > TroubleShooting Trace Setting**.
-

For details about setting up and using Cisco Unified Communications Manager Serviceability Traces, see the serviceability system guide (Trace section) or the serviceability administration guide (Troubleshooting Trace Setting Configuration section) at this URL:

http://www.cisco.com/en/US/products/sw/voicesw/ps556/prod_maintenance_guides_list.html

Related Topics

- [Using the Real-Time Monitoring Tool \(RTMT\), page 4-6](#)
- [Using CDR Analysis and Reporting \(CAR\), page 4-7](#)

Using the Real-Time Monitoring Tool (RTMT)

You can use the Cisco Unified Communications Manager Real-Time Monitoring Tool to monitor real-time information (video active calls, video completed calls, and so on).

Before You Begin

Depending on your release of Cisco Unified Communications Manager, the navigation to the serviceability pages might vary.

Procedure

-
- Step 1** Log in to Cisco Unified Communications Manager Administration.
- Step 2** From the Navigation drop-down list in the upper right corner, choose the “Serviceability” option, and click **Go**.
-

For more information about setting up and using this tool, see these guides:

- For Cisco Unified Communications Manager Release 6.0 — *Cisco Unified Communications Manager Real-Time Monitoring Tool Administration Guide*
- For Cisco Unified Communications Manager Release 5.x:
 - *Cisco Unified Communications Manager Serviceability System Guide*, “Real-Time Monitoring Tool” section
 - *Cisco Unified Communications Manager Serviceability Administration Guide*, “Real-Time Monitoring Configuration” section

These guides are available at this URL:

http://www.cisco.com/en/US/products/sw/voicesw/ps556/prod_maintenance_guides_list.html

Related Topics

- [Using Serviceability Troubleshooting Traces](#), page 4-6
- [Using CDR Analysis and Reporting \(CAR\)](#), page 4-7

Using CDR Analysis and Reporting (CAR)

You can use CAR to view Call Details Records and generate reports on video conference bridge information.

Before You Begin

Depending on your release of Cisco Unified Communications Manager, the navigation to the serviceability pages might vary.

Procedure

-
- Step 1** Log in to Cisco Unified Communications Manager Administration.
- Step 2** From the Navigation drop-down list in the upper right corner, choose the “Serviceability” option, and click **Go**.
-

For more information about setting up and using this tool, see these guides:

- For Cisco Unified Communications Manager Release 6.0 — *Cisco Unified Communications Manager CDR Analysis and Reporting Administration Guide*
- For Cisco Unified Communications Manager Release 5.x:
 - *Cisco Unified Communications Manager Serviceability System Guide*, “CDR Analysis and Reporting” section
 - *Cisco Unified Communications Manager Serviceability Administration Guide*

These guides are available at this URL:

http://www.cisco.com/en/US/products/sw/voicesw/ps556/prod_maintenance_guides_list.html

Related Topics

- [Using Serviceability Troubleshooting Traces](#), page 4-6
- [Using the Real-Time Monitoring Tool \(RTMT\)](#), page 4-6

How to Collect Diagnostic and Log Information for Cisco Unified Video Advantage

- [Collecting Diagnostics Information, page 4-8](#)
- [Capturing Detailed Logs for Other Application Problems, page 4-9](#)
- [Capturing Logs Automatically When the Applications Crashes, page 4-10](#)

Collecting Diagnostics Information

The Diagnostics Tool provides some technical details about the current state of the Cisco Unified Video Advantage software that is running on the PC:

- Connectivity information about Cisco IP Communicator or the Cisco Unified IP Phone
- Information about the performance of the Cisco VT Camera, including video delay issues due to low-memory conditions
- Packet statistics at the end of each call, including the total number of packets (sent or received), packets lost or discarded, average and maximum jitter, and average and maximum delay

All information in the diagnostics window is logged in the application log.

When troubleshooting some Cisco Unified Video Advantage problems with the assistance of the Cisco Technical Assistance Center (TAC), TAC representatives might ask you to provide them with the information displayed in the diagnostics window.

Procedure

- Step 1** Launch Cisco Unified Video Advantage.
- Step 2** Double right-click any where on the console to display the diagnostics window.
- Step 3** Click the options in the navigation pane on the left to see specific diagnostics information.
-

Related Topics

- [Log File Locations, page 2-6](#)
- [Capturing Detailed Logs for Other Application Problems, page 4-9](#)
- [Capturing Logs Automatically When the Applications Crashes, page 4-10](#)

Capturing Detailed Logs for Other Application Problems

Sometimes, you need detailed log files to help troubleshoot problems with Cisco Unified Video Advantage. Detailed logs have these characteristics:

- By default, detailed logging is disabled, and logs are collected at the information level (3).
- Detailed logs are collected at the verbose level (5).
- Detailed logs remains enabled until the user changes the setting.

The log files are stored in the Application Data folder.

Restrictions



Caution

You should ask users to enable detailed logging only when you are trying to resolve a specific issue. Detailed logging will cause degraded performance especially in lower-end computers. Make sure to instruct users to disable detailed logging when your troubleshooting activities are completed.

Procedure

-
- Step 1** Tell users to follow the user guide instructions for capturing log files:
- Enable detailed logging (Cisco Unified Video Advantage console window **Settings > Enable Detailed Logs**).
 - If possible, restart Cisco Unified Video Advantage to clear the logs and to put the application in a known state. If the problem is intermittent or unexpected, capture the logs without restarting the application.
 - Recreate the problem, if possible.
 - Manually launch the Problem Reporting Tool and send the report to you.
- Step 2** Provide the Zip file to the Cisco Technical Assistance Center (TAC) representative, if requested.
-

Related Topics

- [Log File Locations, page 2-6](#)
- [Collecting Diagnostics Information, page 4-8](#)
- [Capturing Logs Automatically When the Applications Crashes, page 4-10](#)

Capturing Logs Automatically When the Applications Crashes

If Cisco Unified Video Advantage unexpectedly crashes, the Problem Reporting Tool automatically collects installation, application, and client computer system information to automate the trace and crash-dump collection process on the client computer.

Procedure

Step 1 Tell users to follow the user guide instructions for capturing log files:

- Locate the automatically generated Zip file on their desktop.
- Send the Zip file from their desktop to you through e-mail.

If you set up an e-mail support alias at the time the application was deployed or installed, the file is automatically sent there. For details, see the “Related Topics.”

Step 2 Provide the Zip file to the TAC representative, if requested.

Related Topics

- [Customizing the Deployment with Command-Line Options, page 2-5](#)
- [Collecting Diagnostics Information, page 4-8](#)
- [Capturing Detailed Logs for Other Application Problems, page 4-9](#)