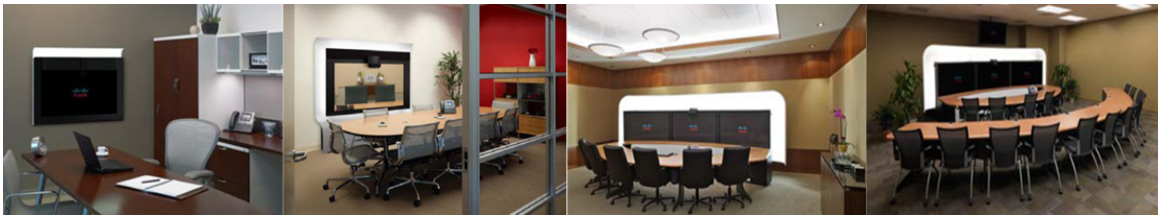

CHAPTER 8

Troubleshooting the Cisco TelePresence System Main Display

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Contents

This chapter contains information about troubleshooting the Cisco TelePresence System (CTS) and includes the following sections:

Troubleshooting CTS Displays

Use the information in Table 8-1 to troubleshoot issues with CTS displays.

Table 8-1 Troubleshooting Your CTS Display

Problem	Possible Cause or Description	Action
Blank screen with solid green LED.	Possible appcode corruption during firmware upgrade/downgrade.	1. If it is determined that the appcode or bootcode is corrupted, force a display upgrade by entering the following admin CLI commands: a. **set upgrade display** b. **utils system restart** (to reboot the codec) 2. If a forced upgrade from the admin CLI does not help, contact TAC for assistance. See the Cisco TelePresence Administration Software Command References home page on Cisco.com for information about CLI commands.
Display cycles through different states or appears solid blue while in the idle state; everything else looks normal during a call.	Cycle or bluescreen issues. Display is in manufacturing mode.	1. Factory reset the display: a. CTS 500 Multicast Descriptor Block (MDB) display—Remove the small panel at the back of the unit and press the button on the right side twice to take it out of factory mode. b. CTS 1300 (65” screen)—The reset button is placed below the VGA port inside the back panel on the left side of the display (oriented top to bottom). Power cycle display. 2. If the display cycle or bluescreen issue remains unresolved, contact TAC for assistance.

Table 8-1 Troubleshooting Your CTS Display (continued)

Problem	Possible Cause or Description	Action
Flickering, static lines, unexpected hue, and other display issues.	Local display or codec issue.	1. Check to see if the problem is local by doing a display loopback test. 2. If the display loopback fails, perform a cable swap test to rule out a codec issue: a. Swap cables between a known working display and the suspected display, see if problem follows the display or the codec. b. In single-screen systems, use a laptop with a docking station and DVI-HDMI cable to plug into the main display. **Note** If there is no issue with display loopback, most likely it is not a display issue. A camera loopback test is recommended for further troubleshooting. 3. Collect the LED status of display while the issue is occurring. 4. Power cycle the display while the issue is occurring. 5. If the issue persists after trying the steps above, collect your system logs along with video or picture captures and contact TAC for assistance. See the Cisco TelePresence System Administration Guide for more troubleshooting information.
Endpoints perceive a brief quality flicker.	Flickering can occur when initialization frames (IDRs or GDRs) are sent to endpoints that switch to a new source. This new source sends the initialization frame to that endpoint, and to any endpoint that may already have been viewing that source. These initialization frames are of lower quality than the P-frames that are used at all other times. Because of this, endpoints that were already viewing that source will perceive a brief quality flicker from that source.	No action necessary: This is expected behavior with 720p. See the "Understanding Flicker on Triple-Screen Systems" section on page 8-6.

Table 8-1 Troubleshooting Your CTS Display (continued)

Problem	Possible Cause or Description	Action
Display color/brightness is off.	Temperature issues: The temperature needs to be tuned.	1. Change temperature in one of two ways: • From the admin Web graphical user interface (GUI) Or • Use the following admin CLI command: **diag display temperature set** **Note** adjusting is performed on each display. See the Cisco TelePresence Administration Software Command References home page on Cisco.com for information about CLI commands.
No image on the display.	Display is broken.	1. Check power connections and switches on each display. 2. If you are certain that the cabling is correct, power is applied, and you have run a display test but no image is seen on the display, contact TAC for assistance.
CTS 500 shroud light does not turn on automatically.	In some cases, the CTS 500 lights do not turn on automatically when the Lights field is set to "On All the Time" in the Cisco Unified CM Administration interface.	The lights will turn on and off with the work time hours that were set in the "Display On Time" field. If you want the lights to be on all the time, be sure that you enter the following: 1. Light field is set to "On All the Time." 2. Display On Duration field is set to 23:59. See the *Cisco Unified Communications Manager Configuration Guide for the Cisco TelePresence System* on Cisco.com.

Table 8-1 Troubleshooting Your CTS Display (continued)

Problem	Possible Cause or Description	Action
CTS system lights do not turn off immediately after the Cisco Telepresence call disconnects.	Power reboot of the primary codec or the codec might have lost power during a call. After a codec loses power, it loses the ability to control the lights using the Auxiliary Control Unit. If the system was in a call when the codec lost power, the lights remain on, even after a call completes. When the codec regains power, it initializes, automatically checks the status of the lights, and powers them off.	Wait for the codec to reboot. The codec sends the commands to the Auxiliary Control Unit to turn off the lights after the codec reboots.
The following message appears when initializing a Cisco LCD-100-PRO-40N using the CLI: "Failed to connect to presentation device"	The RS-232 cable is plugged into the back of the display but the system does not recognize the display.	There are two serial ports on the back; plug the RS-232 serial cable into the port closest to the front panel.

Meeting Participant Main Display On-Screen Status Messages

Table 8-2 describes meeting status information messages that appear on the main display screen. These messages appear while the screen is dark (not showing video meeting images).

Table 8-2 Main Display Screen Messages

On-Screen Message	Description
Please wait for meeting to start	You have dialed into the meeting before the scheduled start time and are on hold.
Please wait, you are the first meeting participant	You are the first endpoint in the meeting.
Please wait for meeting host to join	The meeting host has not yet joined the meeting. This only applies to static meeting instances. An administrator can configure a room as host. If the host does not join, then all other rooms dialed in will be put on hold. When host joins, they will all be resumed. When the host leaves, the meeting will be stopped by the Cisco TelePresence Multipoint Switch (CTMS).
Please wait, temporarily at maximum number of callers Unable to join, now at maximum number of callers	There are not enough CTMS slots available for your endpoint to join the meeting. Depending on your configuration, you will remain on hold until resources are available.

Table 8-2 Main Display Screen Messages

On-Screen Message	Description
Please wait, remote user on hold	All participants are on hold except this endpoint. Only this endpoint sees the “hold” message. When multiple endpoints both secure and non-secure join a meeting at the same moment, in a best-effort ad hoc meeting for instance, some of the endpoints will see “Remote user on hold” momentarily displayed on the main display.
Please wait, the participant list will be available momentarily	Occurs in large meetings as the system adds in audio participants.
Unable to join secure call. Please wait, converting to non-secure	Occurs when the screen goes dark because of a security difference between meeting endpoints. Screen remains dark for approximately three or four seconds while security is downgraded. A lock icon that is unlocked may appear to indicate non-secure status.
Unable to join, required feature not available	When an incompatible endpoint joins a multipoint meeting, the incompatible endpoint cannot join the call.
Unable to show the presentation due to capability mismatch	The presenter is sending a higher resolution presentation stream than the receiver can handle.
Please press **End Call** if your meeting has ended	You are the last endpoint in the meeting.
Call has been dropped because resources are not available. Contact Live Desk for assistance	Occurs during static meetings and there are not enough resources available.

Understanding Flicker on Triple-Screen Systems

In a multipoint meeting, if one of the screens in a triple-screen CTS has been receiving video from a CTS already, when that CTS becomes the active speaker for another endpoint, you might perceive a brief flicker on that segment.

For example, there are three CTS endpoints in a meeting. CTS endpoints A and B are single-screen systems, and CTS endpoint C is a triple-screen system. CTS A appears on CTS C’s left screen. CTS B appears on CTS C’s center screen. CTS C's left screen is the active speaker, so both CTS A and CTS B see CTS C’s left screen. If CTS A becomes the active speaker, CTS A appears on CTS B. CTS A already appears on CTS C’s left screen, but this screen experiences a brief flicker when CTS A switches to active speaker.

When CTS A becomes the active speaker, it sends an initialization frame to CTS B and CTS C. An initialization frame is of a lower quality than P-frames that transmit video at other times. P-frames are predictive video frames that reference previous frames. CTS A cannot send a P-frame when it becomes active speaker because CTS B has no previous frames to reference.

Receiving the initialization frame, which requires a longer refresh time, causes the brief flicker on CTS C’s left screen. This flicker might be noticeable only at lower bandwidth resolutions and on high latency links. In most cases, the flicker is cleared up in less than a second.

Related Information

For more information about setting up, testing, and troubleshooting the CTS, see the following documentation on Cisco.com:

- *Cisco TelePresence System Administration Guide*
- *Cisco Unified Communications Manager Configuration Guide for the Cisco TelePresence System*
- Cisco TelePresence Administration Software Error and System Messages
- Cisco TelePresence Administration Software Command References