Troubleshoot EDID and Camera Connection Issue on an Endpoint

Contents

 Introduction

 Prerequisites

 Requirements

 Components Used

 EDID Basic Explanation

 Description of the Exact Scenario

 How to Proceed with Troubleshooting

 How to Resolve the Issue

 How to Perform This Procedure from the Endpoint's GUI

 Scrial Number of a Camera in the Endpoint's GUI

 Scrial Number of a Camera in the Endpoint's GUI

 Scrial Number of a Camera in the Endpoint's GUI

 Scrial Number of a Camera in the Endpoint's GUI

 Scrial Number of a Camera in the Endpoint's GUI

 Scrial Number of a Camera in the Endpoint's GUI

 Scrial Number of a Camera in the Device Logs

 Codec Pro vs Room Kit Pro

 Related information

Introduction

This document describes how to troubleshoot issues with cameras connected to a cloud-registered endpoint that is caused by EDID.

Prerequisites

Requirements

It is recommended that you have some familiarity with these topics:

- Control Hub Platform
- Endpoint Administration via the Graphical User Interface (GUI) of the endpoint and Control Hub "Devices" section
- RoomOS
- HDMI Cabling

Components Used

The equipment listed here has been used to make the tests and produce the results described in this document:

- Codec Pro endpoint
- 2 PTZ 4K cameras mounted on the wall (one of the cameras is mounted on normal orientation while

the second one is upside-down).

- Cameras are connected via LAN to the endpoint but no ethernet cables are directly connected from the endpoint to the camera. A transmitter/receiver device has been used.
- Control Hub Organization

The information in this document was created from the devices in a specific lab environment. All of the devices used in this document started with a cleared (default) configuration. If your network is live, ensure that you understand the potential impact of any command.

EDID Basic Explanation

EDID or Extended Display Identification Data is a digital handshake used when you connect two devices (a media device and a display device) using an HDMI cable. This handshake is used from the connected devices to negotiate parameters like framerate, resolution, and audio standards that they support. The negotiation results in a mutually supported list of parameters that are going to be used for transmitting the video and audio content between each other over the HDMI cable. The handshake initiates once both devices have fully booted-up and they both attempt to achieve the best possible results (best resolution, framerate, and other parameters that can be mutually supported from both sides). This handshake is done in the background. It takes place very fast and has no visible results to the user while it is happening. It is practically instantaneous for a 1-2 meter HDMI cable with no intermediate devices in between.

Description of the Exact Scenario

In a modern conference room setup, there is a variety of different devices that can be used to achieve the best possible result. Parameters like room size, view angles, and the number of cameras and microphones affect the final setup and the result you can get from the utilization of the endpoint. In cases, where the room size is considerable, placing the cameras and other peripherals next to or near the endpoint is not always possible as this type of setup cannot offer the optimal meeting experience for all the users that can occupy the room at the same time.

For this reason, there are cases that the cameras need to be placed at a relatively large distance from where the endpoint is setup. For the cameras to be able to be connected back to the endpoint HDMI input ports, many different alternatives can be used, some of which are:

- Using a longer HDMI cable than the standard 1 or 2 meter.
- Connecting multiple HDMI cables, using HDMI splitters or extenders to cover the distance to the endpoint.
- Using HDMI switches.

Certain issues come up in the scenario described. When using longer HDMI cables exceeding 2 meters or when extenders and splitters are used, the longer distance that the EDID signals have to travel along the cable introduces loss. This can result in the negotiation of EDID not being successful or not giving the expected outcome. In addition to this, intermediate devices sometimes, depending on the device type, configuration, and capabilities, do not pass the EDID information correctly or at all to the other side of the connection. PTZ cameras, along with other cameras connected via HDMI to the endpoints can be directly affected, thus having the EDID passing to the endpoint the wrong parameters.

This is not always fully visible to the end user, but in the example examined in this article, you are assuming that you have two PTZ 4K cameras on opposite sides of a room and you want to mount Camera 1 with normal orientation and Camera 2 upside-down, mounted on the ceiling of the room (shown here):



Connection Diagram



Note: The power supply cables for the cameras in this diagram have been omitted for simplicity.

For Camera 2 to be able to show video footage in the proper orientation and not upside down, you need to utilize the feature "Cameras Camera [n] Flip" (this feature is not supported by all cameras, but it is supported by specific models of PTZ 4K). With this specific setup, depending on how EDID is negotiated, notice that both cameras are providing upside-down video. Your immediate thought is that the "Cameras Camera [n] Flip" feature is not working but the issue is a bit more complicated.



Note: In this article, it is used the naming of the endpoint features in this form: "Cameras Camera [n] Flip" feature. This is because on the official RoomOS Administration Guide for cloud-registered devices, you can locate these features by searching them in this form. They are documented in this exact way. This form represents the path that the administrator has to follow in the Control Hub Configuration settings or the configuration settings on the device GUI to locate and change each feature. For example, for the "Cameras Camera [n] Flip" feature we see the path followed in the settings in the picture here (administration guide page 212):

	O Con	figure — O Review — O Summary		
Select configuration	ons			
Select one or more configu	rations to apply to the selected device.			
All > Cameras > Camera	Th	is is the path follo	wed in	
	tl se	he device configur ttings to find this fe	ation eature.	
Flip	(1) > Filp Flip	he device configur ttings to find this fe	eature.	^
Flip	Flip Device type	ne device configur ttings to find this fe on Configuration value	Factory default	Clear

Cameras Camera [n] Flip feature Configuration in Control Hub

In the RoomOS admin guide for endpoints running RoomOS 11.9 you can see the feature described in this manner:

Cameras Camera [n] Flip

Applies to: RoomBarPro RoomKitEQX CodecEQ CodecPlus CodecPro Room70/Room55D Room70G2 RoomPanorama/Room70Panorama BoardPro

Requires user role: ADMIN, INTEGRATOR

With Flip mode (vertical flip), you can flip the image upside down. Flipping applies both to the self-view and the video that is transmitted to the far end.

This setting is not supported by the Quad Camera, the PTZ-12 camera, or the integrated camera of Board Pro, Room 55 Dual, Room 70, Room 70 G2, Room 70 Panorama, or Room Panorama.

Default value:

Auto

Value space:

Auto/Off/On

Auto: If the camera detects that it is mounted upside down, the image is automatically flipped. If the camera cannot auto-detect whether it is mounted upside down or not, the image is not changed. As an example, the Sony PTZ 4K camera cannot auto-detect that it's upside down. If you mount it upside down, you must set this parameter to On.

Off: Display the image on screen the normal way.

On: Display the image flipped upside down. This setting is used when a camera is mounted upside down, but cannot automatically detect which way it is mounted.

n: Unique ID that identifies the camera.

Range: 1..3 [RoomKitEQX CodecEQ CodecPlus Room70/Room55D]

Range: 1..7 [RoomBarPro CodecPro Room70G2 RoomPanorama/Room70Panorama]

Range: 2..7 [BoardPro]

Cameras Camera [n] Flip feature description in the Administration Guide

The "Cameras Camera [n] Flip" feature can be found on a Codec Pro device that is cloud-registered by going to the "Devices" section under Management in your Control Hub Organization and choosing the Codec Pro device from the list of devices.

Malytics	Devices					
	Devices					
Reports	Devices 🗎 Templa	ates 🗇 XOD Devices 🕺 Setti	ings 🖆 Software	⊟ Resources		
MANAGEMENT	Q codec × pro ×	*	t ∨ 5 devices			Add device
A Users	Filter by Online (3) Ex	pired (0) Offline (1) Issues (1)				
🕰 Groups	Select one or more devices for	bulk actions				
O Locations						
& Workspaces	Пуре	Product	Status	Platform ©	Belongs to	
Devices	Rooms & Desks	Cisco Room Kit Pro	 Issues 	circe	Hades - KRK EVENT [Codec Pro]	
88 Apps	Accessories	Cisco Codec Pro Cisco Touch 10	 Online 	sibidh cuce	Hades - KRK EVENT [Codec Pro]	
Organization Settings	Camera	Cisco Codec Pro Cisco Precision 60	 Online 	-diada cesce	Hades - KRK EVENT [Codec Pro]	
SERVICES	Display	Cisco Codec Pro Samsung QM55B	 Offline 	-dudu. cuce	Hades - KRK EVENT [Codec Pro]	
C Updates & Migrations	Camera	Cisco Codec Pro Cisco Precision 60	 Online 	-dudu cuce	Hades - KRK EVENT [Codec Pro]	
O Messaging						
📋 Meeting						
% Calling						

Control Hub Devices section

Then navigate to the "Configurations" section and select "All Configurations" as seen in this picture:

Configurations

_		
<u></u>	All configurations 980	>
	Configuration templates	>
	Digital signage Disabled	>
	Navigator persistent web app Disabled	>
	Macros 0	>

Endpoint Configuration section in Control Hub

In the search bar in the new window, search for the feature's name:

Device configurations Cisco Room Kit Pro •	Hades - KRK EVENT [Codec Pro] • Issues		×
	O Configure O Review O Summary		
Select configurations Select one or more configurations to app 981 configurations ③ Q flip	ly to the selected device.	0	
Cameras > Camera[1] > Flip Cameras > Camera[2] > Flip Cameras > Camera[3] > Flip Cameras > Camera[4] > Flip Cameras > Camera[5] > Flip Cameras > Camera[6] > Flip Cameras > Camera[7] > Flip			
L'Haaro	Default Volume	~	
	Ethernet	>	
	Input	>	
	Microphones	>	
	Output	>	
	Sounds And Alerts	>	
	Ultrasound Max Volume	~	
		Nex	t

Individual Device Configurations menu in Control Hub

From the list in the drop-down menu, choose the camera that is deployed upside-down. In the scenario described in the article, it is Camera 2 (See the connection diagram presented previously). Then turn the feature On and click "Next":

Select one or more configurations	to apply to the selected device.			
All > Cameras > Camera[2] >	Flip This	is the "path" when this feature in the ofiguration menu f	re you can find Device's for Camera 2	
Flip	Flip	On		^
	Device type	Configuration value	Factory default	Clear
	Cisco Room Kit Pro	(On ~	Default ① Value: Auto	\otimes
	Cisco Room Kit Pro	On v	Value: Auto	×

Then verify the change you are making is correct and click "Apply":

Device configura	ations Cisco Room Kit Pro	Hades - KRK EVENT [Codec Pro] e Issues			
		Configure — O Review — O St	ummary		
	Review configurations Review selected configurations.				
	Configuration		Value	Actions	
	Cameras Camera[2] Flip		Auto (Default) → On	0	
				P	revious Apply

Cameras Camera [n] Flip feature Review in Control Hub

How to Proceed with Troubleshooting

Based on the connection diagram, the cables are physically connected to the endpoint as:

- Camera 1 (Horizontal camera) => Connected to HDMI Input Connector 1
- Camera 2 (Upside-down camera) => Connected to the HDMI Input Connector 2

Based on the configuration done up to this point, it is logical to assume that the "Cameras Camera [n] Flip" feature is not working as expected. If you collect the endpoint logs, you can see:

```
*s Cameras Camera 1 DetectedConnector: 2
*s Cameras Camera 2 DetectedConnector: 1
```

Camera 1 is detected at Connector 2, but it is physically connected to Connector 1. Camera 2 is detected at Connector 1, but it is physically connected to Connector 2.



Tip: A simple way to tell if the cameras are recognized from the endpoint in reverse than the way you have connected them to it, without any logs, is to try and control the cameras from the Navigator or Touch 10 device connected to the endpoint. When you try to control Camera 1, Camera 2 is responding. When you try and Control Camera 2, Camera 1 is responding. This way you know that something is not working as expected.

This means that the "Cameras Camera [n] Flip" feature change has been enforced on Camera 1 (with Horizontal orientation), and this is the reason why it shows us the upside-down footage. Camera 2 on the other hand is upside-down itself with no modification to its settings, thus it is showing us the image as is. So at this stage, both cameras show the video footage upside-down.

This is happening because the EDID information used to identify where each camera is connected is not propagated correctly from each of the HDMI connections that initiate from the cameras to the endpoint. Intermediate devices used to connect the cameras to the endpoint via HDMI usually play a role in this result.

How to Resolve the Issue

To resolve this issue you need to properly configure the "AssignedSerialNumber" feature on the Codec Pro settings. This feature allows you to manually configure the Serial Number of each camera to its camera id (Camera 1 must have a camera id equal to 1, and Camera 2 must have a camera id equal to 2). The camera ID is the number n in Camera [n]. By default, the camera ID is assigned automatically to a camera. If EDID information is not passed on from the camera to the video device, there is a chance that the camera ID does not match the actual way that the cameras are physically connected on the endpoint. Because of this, when trying to apply a configuration to Camera 1, Camera 2 is affected one, and vice versa.



Caution: The configuration of the "AssignedSerialNumber" feature is persistent after the endpoint reboots. However, it is not persistent if you factory reset the device, and in this case, you need to reconfigure it again, as the issue is going to re-emerge.

This is the "AssignedSerialNumber" feature description as described in the <u>administration guide</u> on page 209 for RoomOS 11.9:

Cameras Camera [n] AssignedSerialNumber

Applies to: RoomBarPro RoomKitEQX CodecEQ CodecPlus CodecPro Room70/Room55D Room70G2 RoomPanorama/Room70Panorama BoardPro

Requires user role: ADMIN, INTEGRATOR

The camera ID is the number n in Camera [n]. By default, the camera ID is assigned automatically to a camera. If EDID information is not passed on from the camera to the video device, the camera ID is not persistent after a reboot. This means that a camera may get a new camera ID when the video device is restarted.

You should use the Cameras Camera AssignedSerialNumber setting to cater for configurations where the video device does not receive EDID information from multiple cameras. This setting allows you to manually assign a camera ID to a camera by associating the camera ID with the camera's serial number. The setting is persistent until the video device is factory reset.

A typical situation where the video device doesn't receive EDID information is when using an HDMI repeater that doesn't pass on such information.

Default value:

....

Value space:

String (0, 20)

The camera's serial number.

n: Unique ID that identifies the camera.

- Range: 1..3 [RoomKitEQX CodecEQ CodecPlus Room70/Room55D]
- Range: 1..7 [RoomBarPro CodecPro Room70G2 RoomPanorama/Room70Panorama]
- Range: 2..7 [BoardPro]

Cameras Camera [n] AssignedSerialNumber in the Administration Guide

To find the "AssignedSerialNumber" feature, you need to access the device configurations from Control Hub as described earlier in this article for the "Cameras Camera [n] Flip" feature. Search for the feature's name in the search bar:

Device configurations Cisco Room Kit Pro	Hades - KRK EVENT [Codec Pro] • • Issues	
	O Configure — O Summary	
Select configurations Select one or more configurations to ap 981 configurations ①	ply to the selected device.	
Q AssignedSerialNumber Cameras > Camera[1] > Assigned Se Cameras > Camera[2] > Assigned Se Cameras > Camera[3] > Assigned Se Cameras > Camera[4] > Assigned Se Cameras > Camera[5] > Assigned Se Cameras > Camera[6] > Assigned Se	rial Number rial Number rial Number rial Number rial Number rial Number	0
Comeras > Comera(1) > Assigned of	Default Volume	×
	Ethernet	>
	Microphones	>
	Output	>
	Sounds And Alerts	>
	Ultrasound Max Volume	~
		Nex

Cameras Camera [n] AssignedSerialNumber Configuration in Control Hub

At this stage, you need to select the cameras affected. For the scenario of this article, it is Camera 1 and Camera 2. It does not matter which camera you choose first. Camera 1 is detected at Connector 2, but it is physically connected to Connector 1. Camera 2 is detected at Connector 1 but it is physically connected to Connector 2. You need to know which camera is physically connected to which HDMI Input port. Select Assigned Serial Number for Camera 1 (The serial Number seen in this picture is not valid, it is a random number for demonstration purposes). Then input the serial number of Camera 1 that is connected to HDMI Input port 1 of the endpoint, and click "Next".

Device configurations Cisco Room K	it Pro • Hades - KRK EVENT [Codec Pro	b] • • Issues			
	O Configu	re — O Summary			
Select configurations Select one or more configuration All > Cameras > Camera[1]	ns to apply to the selected device.	Select Cam	nera 1		
Assigned Serial Number	Assigned Serial Number	KERGTISITJKL		^	
	Device type	Configuration value	Factory default	Clear	
	Cisco Room Kit Pro	KER6TI5ITJKL 0 - 20 characters	X Default ① Value: Empty	\otimes	
	1				
					N

Cameras Camera [n] AssignedSerialNumber Configuration in Control Hub

Then, click "Apply" in the "Review Configurations" page:

Device configura	tions — Cisco Room Kit Pro • Hades - KRK E	VENT [Codec Pro] • • Issues		
		• Configure O Review O Summary		
	Review configurations Review selected configurations.			
	Configuration	Value	Actions	
	Cameras Camera[1] Assigned Serial Number	Empty (Default) → KER6TI5ITJKL	0	
			P	revious Apply

Cameras Camera [n] AssignedSerialNumber Review in Control Hub

Perform the same procedure for Camera 2 using the Serial Number of Camera 2, but make sure to select the Assigned Serial Number for Camera 2 from the device configurations page.

Select configural Select one or more confi All > Cameras > Camera	tions igurations to apply to the selected device.	Select Carr	iera 2	
Assigned Serial Number	Assigned Serial Number	HBRTUY786SWE		^
	Device type	Configuration value	Factory default	Clear
	Cisco Room Kit Pro	HBRTUY786SWE X	Default O Value: Empty	\otimes

Cameras Camera [n] AssignedSerialNumber Configuration in Control Hub



Caution: Codec Pro supports up to 7 cameras, and the Assigned Serial Number feature is distinct for each camera. So you need to manually set the serial number for each camera when facing this issue.

At this stage, your issue is resolved and Camera 1 is mapped correctly to HDMI Input port 1, where it is physically connected. Camera 2 is mapped to HDMI Input port 2, where it is physically connected.

If the issue is still present, you must check the "Cameras Camera [n] Flip" feature on Camera 1 and Camera 2 and make sure that it is enabled only for the camera that is set up upside-down, which in the scenario examined here is Camera 2. Also, you can try to reboot the endpoint. Your configuration remains unaffected. If you Factory reset the endpoint, all configurations need to be performed again.

How to Perform This Procedure from the Endpoint's GUI

Access your endpoint's GUI either by Control Hub or by typing the device's IP address on a browser tab and log in with admin user credentials. Then navigate to "Settings" under "Setup" section and choose the "Configurations" tab. On the search bar within the page type "flip". The configurations for the "Cameras Camera [n] Flip" feature can be performed for the camera needed (Camera 2 for the example presented in this article). Then click "Save".

Cisco Webex Local Device Controls						Q Find pag	e	0	8
Codec Pro	Settings								
G Home	© Configurations	Statuses Room Types	♀ Audio and Video						
% Call	flip	Configuration				🐟 Revert 🕞 Sav	Collapse All	Expand	All
SETUP	Apps	Cameras							
Settings	Audio	Camera 1 Flip		0	Auto	~			
A Users	Bookings	Camera 2 Flip		()	On	v	\$		
Security	CallHistory	Camera 3 Flip		(i)	Auto	~			
CUSTOMIZATION	Q 🗹 Cameras	Camera 4 Flip		0	Auto	~			
Personalization	Conference	Camera 5 Flip		Ū	Auto	~			
↓ Audio Console	FacilityService	Camera 6 Flip		0	Auto	~			
UI Extensions Editor	Files	Camera 7 Piip		U	Auto	· ·			
Macro Editor	GPIO								
2 Developer XFI	HttpClient								
SYSTEM MAINTENANCE	HttpFeedback								
G Software	Logging								
 Backup and Recovery 	Macros								
	MicrosoftTeams								

Cameras Camera [n] Flip Configuration in Endpoint GUI

For the "AssignedSerialNumber" feature, Navigate in the same exact menu, and in the search bar type "assigned" instead. Assign manually the Serial number to each camera and click "Save".

Cisco Webex Local Device Controls				Q Find page	<u> </u>
Codec Pro	Settings				
	© Configurations	Statuses M Room Types Q Audio and Video			
℅ Call	assigned	Configuration		🐟 Revert 🔚 Save	Collapse All Expand All
SETUP	Apps	Cameras			
Settings	Audio	Camera 1 AssignedSerialNumber	0		(0 to 20 characters)
은 Users	Bookings	Camera 2 AssignedSerialNumber	0		(0 to 20 characters)
B Security	CallHistory	Camera 3 AssignedSerialNumber	0		(0 to 20 characters)
CHETTALIZATION	O IZ Cameras	Camera 4 AssignedSerialNumber	0		(0 to 20 characters)
COSTOMIZATION		Camera 5 AssignedSerialNumber	0		(0 to 20 characters)
Personalization	Conference	Camera 6 AssignedSerialNumber	0		(0 to 20 characters)
d# Audio Console	FacilityService	Camera 7 AssignedSerialNumber	0		(0 to 20 characters)
UI Extensions Editor	Files				
Macro Editor Control Macro Editor	GPIO				
	HttpClient				
SYSTEM MAINTENANCE	HttpFeedback				
G Software	Logging				
 Backup and Recovery 	Macros				
	MicrosoftTeams				

Cameras Camera [n] AssignedSerialNumber Configuration in Endpoint GUI

How to Locate the Serial Number of a Camera Connected to an Endpoint

In this last section, it is shown how the serial number of a camera connected to a cloud-registered endpoint can be found. There are 3 ways to find the camera serial number:

- In the endpoint's GUI
- In Control Hub
- In the device logs

Serial Number of a Camera in the Endpoint's GUI

Access your endpoint's GUI either by Control Hub or by typing the device's IP address on a browser tab and log in with admin user credentials. Then navigate to "Settings" under "Setup" section and choose the "Audio and Video" tab. Then, select the first tab called "Cameras":

Cisco Webex Local Device Controls					Q Find page	0	8
Codec Pro	Settings © Configurations	Statuses M Room Types	R Audio and Video				
∿ Call	Cameras Video Inp	outs and Outputs Microphones Pres	senter Track All Peripherals				
SETUP	Camera	Model	Software ID	Serial number	IP address		
은 Users	Camera 1	Cisco Precision 60 Camera	3	FD			
🖰 Security	Camera 2	Cisco Precision 60 Camera	3	FD			
CUSTOMIZATION							
Personalization A Audio Console							
UI Extensions Editor							
J Macro Editor							
% Developer API							
SYSTEM MAINTENANCE							
G Software							
✤ Issues and Diagnostics ⑤ Backup and Recovery							

Endpoint Peripheral details on Endpoint GUI

Under this menu, you can see information about your cameras (in the picture shared previously, all IPs and Serial Numbers have been hidden on purpose, on your endpoint's GUI this information is going to be present) along with the Serial numbers. Copy and paste each number and use it in your Control Hub or endpoint GUI when setting up the Assigned Serial Number feature for each camera.



Note: A question that can arise at this stage is that if the cameras are recognized in reverse than the way they are connected, then the Serial Numbers of each camera must be mapped in the GUI, and Control Hub, in reverse order too. However, you can not be sure about that. Serial numbers can be transferred successfully from the cameras to the endpoint and another EDID parameter can be the one missing leading to the mapping of the devices not being the expected one. Due to this fact, you need to first try to copy-paste the Serial Number from Camera 1 to the AssignedSerialNumber of Camera 1 and the Serial Number from Camera 2 to the AssignedSerialNumber of Camera 2. If it does not work, then copy-paste the Serial Number of Camera 1 to AssignedSerialNumber of Camera 2 and vice versa.

Serial Number of a Camera in Control Hub

Login to your Control Hub Organization and navigate to "Devices" under the Management section. Select your device from the device list and navigate to "Connected Peripherals".

< Devices		¢
Cisco Room Kit Pro Issues * Rooms & Desks * Idle * Device platform: ****	Actions V Occupied: No • Oc	[Codec Pro] >
Overview History		
Details	Connected Peripherals	
Wired Network connectivity IP address	Gisco Touch 10	>
	Cisco Precision 60	>
MAC address Serial number	Cisco Precision 60	>
SIP address	ら SAM SyncMaster	>
None Lines	Issues & Information	
	△ Ultrasound pairing may fail	~

Endpoint Peripheral details in Control Hub

Select one of your cameras. You land on this menu where you can see the serial number of the camera:

< Devices			Ø
Cisco Precision 60 Online * Camera *) Idle • Device platform: 🚓	Actions V Hades - KRK EVENT [Codec Pro] Occupied: No * Occupants: Off	>
Overview History			
Details Camera Type	None Verification	Connected To Cisco Codec Pro	
FD Serial number	Unknown Connection Type	Issues & Information © Everything is looking fine	
Software Cisco Platform			
RoomOS Release	Version		



Copy and paste the serial number and use it in your Control Hub or endpoint GUI when setting up the Assigned Serial Number feature for this camera. Perform the same to find the serial number of the second camera.

Serial Number of a Camera in the Device Logs

Access your endpoint's GUI either by Control Hub or by typing the device's IP address on a browser tab and log in with admin user credentials. Navigate to "Issues and Diagnostics" and select the "System Logs" tab.

Then, click on the down arrow next to the "Download Logs" button and select "Full Logs". A log file is then downloaded.

Cisco Webex Local Device Controls			Q Find page (2)		
Codec Pro	Issues and Diagnostics				
G Home		G User Interface Screenshots			
% Call	System Logs		Extended Logging		
SETUP Settings A Users Security	A full archive of the logs on the device is useful for d This archive includes all current and historical logs, in configuration, system status, packet captures and dia Download logs* Full logs (recommended)	iagnosing problems. n addition to current system agnostics information.	To help diagnose network issues and problems during call setup, the system can enter a timed extended logging mode. This mode is resource intensive, and populates the existing logs with more detailed information. The extended logging mode can optionally include a full or partial capture of all network traffic. A rolling, full-capture mode is also available. Start		
CUSTOMIZATION	Anonymized logs				
 ✓ Audio Console ✓ UI Extensions Editor 	Current Logs (5)				
Jacro Editor	File Name	Size	Last modified		
% Developer API	auth.log	21 kB			
SYSTEM MAINTENANCE	dhclient.log	4 kB			
✓ Issues and Diagnostics	dmesg	76 kB			
S Backup and Recovery	eventlog/airplay.log	9 kB			

Log Collection from Endpoint GUI

Decompress the Log file and locate the file named "peripherals". Open the file in your preferred note application. The lines shown in the picture contain the Serial number of the cameras connected to the endpoint (All other information has been omitted on purpose).

*r	PeripheralsListResult	Device	1130	ConnectionMethod: Other	
*r	PeripheralsListResult	Device	1130	HardwareInfo: ""	
*r	PeripheralsListResult	Device	1130	ID: "	
*r	PeripheralsListResult	Device	1130	LastSeen: "	
*r	PeripheralsListResult	Device	1130	Name: "Precision 60 Camera"	
*r	PeripheralsListResult	Device	1130	NetworkAddress: "	"
*r	PeripheralsListResult	Device	1130	SerialNumber: "FD"	
*r	PeripheralsListResult	Device	1130	SoftwareInfo: "	"
*r	PeripheralsListResult	Device	1130	Type: Camera	
*r	PeripheralsListResult	Device	1129	ConnectionMethod: Other	
*r	PeripheralsListResult	Device	1129	HardwareInfo: ""	
*r	PeripheralsListResult	Device	1129	ID: ""	
*r	PeripheralsListResult	Device	1129	LastSeen: "	
*r	PeripheralsListResult	Device	1129	Name: "Precision 60 Camera"	
*r	PeripheralsListResult	Device	1129	NetworkAddress: "	"
*r	PeripheralsListResult	Device	1129	SerialNumber: ""	
*r	PeripheralsListResult	Device	1129	SoftwareInfo: "	"
*r	PeripheralsListResult	Device	1129	Type: Camera	

Peripheral Log file inspection

Copy and paste each number and use it in your Control Hub or endpoint GUI when setting up the Assigned Serial Number feature for each camera.



Note: Sometimes the Serial number of the camera is identical to the MAC address it is assigned to it. This is not a bug. It is expected to happen for specific types of cameras and is by design.

Codec Pro vs Room Kit Pro

You can notice that in this article, it is mentioned that a Codec Pro is used, but in the pictures shared from Control Hub you can see a Room Kit Pro. This is because Room Kit Pro is a device bundle that contains Codec Pro (sold also separately as a single unit) along with peripheral devices like Cameras, Navigator touch panel and so on. The endpoint unit in the Room Kit Pro bundle is the Codec Pro and this is why it is mentioned as such. The Room Kit Pro Data Sheet explaining this in more detail can be found in the link <u>here</u>

Related information

PTZ 4K Camera installation guide

Administration Guide for Cisco collaboration devices running RoomOS 11.9

Cisco Room Kit Pro Data Sheet